Agenda Item No: 4

Ancillary development; construction of a dry anaerobic digestion (AD) facility, pellet fertilizer facility, healthcare waste energy recovery facility, waste transfer station, vehicle re-fuelling station, biomass storage building, surface water storage lagoons, extension to concrete pad and ancillary development including car park

At: Envar Composting Ltd, St Ives Road, Somersham, PE28 3BS

Applicant: Envar Composting Limited

Application Number: CCC/21/088/FUL

To:	Planning Committee
Date:	19 April 2023
From:	Assistant Director, Planning, Growth and Environment
Electoral division(s):	Somersham & Earith
Purpose:	To consider the above planning application
Recommendation:	That planning permission be granted subject to the conditions set out in paragraph 23.1

Officer contact
Name: Helen Wass
Post: Development Management Officer (Strategic & Specialist Applications)
Email: helen.wass@cambridgeshire.gov.uk
Tel: 01223 715522

Structure of the report

Links to documents referred to in this report are provided within the text or at the end of the report.

1. Introduction and background

1.1 The Envar Composting Ltd (Envar) site has for many years composted green waste both “in vessel” in composting tunnels and buildings and on concrete pads in open windrows. When the applicant company took over the site in 2016, they wished to better use the land by broadening the types of wastes that would be handled; increasing the annual throughput; extending the hours of operation and improving the access arrangements. These changes were the subject of planning applications submitted and approved in 2017 (see section 4 for waste planning history).

1.2 In July 2020 Envar sought pre-application advice from the waste planning authority (WPA) on the development of a dry anaerobic digestion (AD) facility and a clinical waste incinerator. Recognising that because the proposed development included the incineration of waste it would fall within Schedule 1 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (the 2017 Regulations) and therefore be Environmental Impact Assessment (EIA) development, Envar also at that time asked the WPA for a scoping opinion.

1.3 "The aim of Environmental Impact Assessment is to protect the environment by ensuring that a local planning authority when deciding whether to grant planning permission for a project, which is likely to have significant effects on the environment, does so in the full knowledge of the likely significant effects, and takes this into account in the decision making process." (Planning Practice Guidance (PPG) Paragraph: 002 Reference ID: 4-002-20140306). Scoping is determining the extent of issues to be considered in the assessment and reported in the Environmental Statement (ES). "This allows the local planning authority to clarify what it considers the main effects of the development are likely to be and, therefore, the aspects on which the applicant's Environmental Statement should focus." (PPG Paragraph: 036 Reference ID: 4-036-20170728). Informed by advice from the Environment Agency, Natural England, the local (district) planning authority (Huntingdonshire District Council (HDC)), the environmental protection officer (at HDC) and the lead local flood authority the WPA's scoping opinion identified the following aspects of the proposed development as potentially having a significant effect on the environment: Air quality (including odour and dust); Human health (including noise); and Landscape and visual impact.

1.4 The planning application which was received in June 2021 was accompanied by an ES which covered the following: Air quality assessment; health impact assessment; noise assessment; and landscape and visual impact assessment. Other matters covered in the Planning Statement and its appendices were: need assessment for healthcare waste; traffic statement and traffic management plan; flood risk assessment and surface water drainage; Phase 1 ecology survey and ecological appraisal report; and ecology and landscape enhancement scheme.

1.5 The WPA appointed an independent consultant, Air Quality Consultants (AQC) to assess the air quality and health impacts of the planning application. The outcome of their assessment is discussed in section 11 of this report.

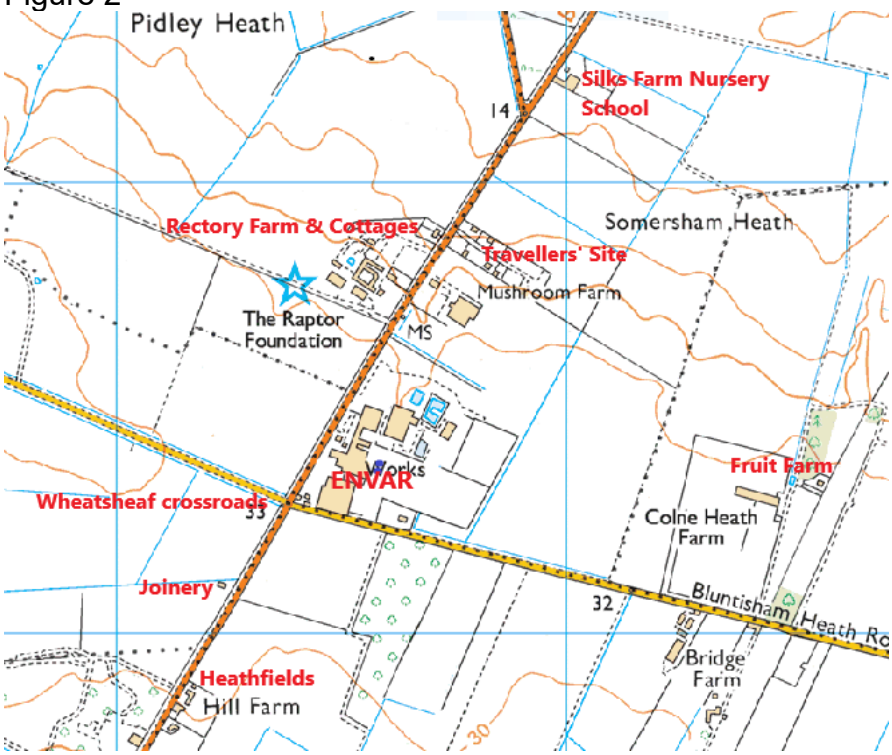
2. The site and surroundings

2.1 The Envar site is in the south-westernmost part of the parish of Somersham, some 3 kilometres south west of the village. Bluntisham is 2.5 kilometres to the southeast; Woodhurst 1.5 kilometres to the northwest and Pidley-cum-Fenton 2.5 kilometres to the north (see Figure 1 below). Immediate neighbours are a new warehouse (on the site of the former mushroom farm) to the northeast and agricultural land to the southeast. The northwestern boundary is the B1086 St Ives Road and the southwestern boundary is The Heath, part of a class C road which runs between Woodhurst and Bluntisham. The Raptor Foundation which includes residential and business premises is immediately to the north, on the opposite side of St Ives Road. There is a travellers' site immediately to the north of the former mushroom farm and 3 residential properties (Rectory Farm and Rectory Farm

Cottages) close to the Raptor Foundation. A joinery business is located 230 metres and Heathfields 470 metres to the southwest of the Envar site on Somersham Road. There are no other occupied properties within 500 metres of the Envar site. Silk Farm Nursery School is approximately 600 metres north of the Envar site on the B1086 St Ives Road. The orchards of Heath Fruit Farm are 430 metres and the farm house 630 metres southeast of the Envar site. These properties are shown on Figure 2 below.

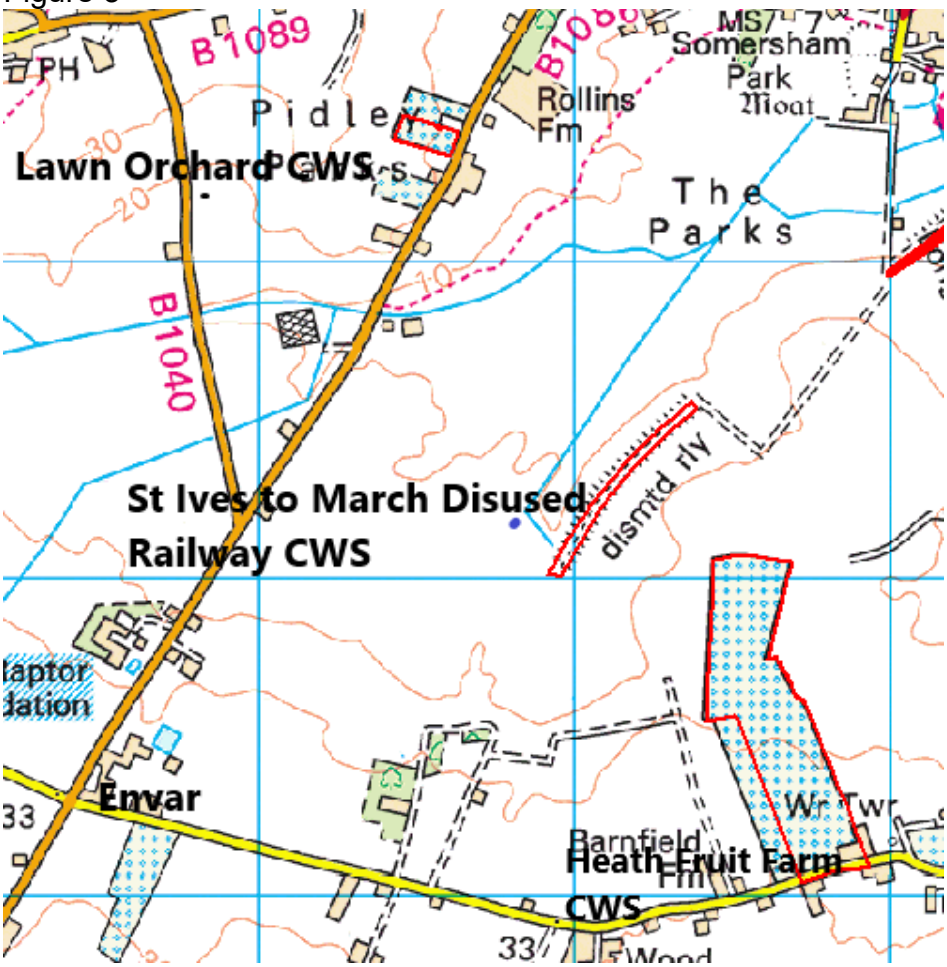
Figure1

Figure 2



2.2 The Envar site is in flood zone 1 and is not in a groundwater protection zone. There are no scheduled monuments within 2.5 kilometres and no listed buildings within 1.5 kilometres other than 2 mile stones on the B1086. The designated heritage assets are shown in Figure 12 in section 17 of this report. There are no Sites of Special Scientific Interest (SSSI) within 3 kilometres of the Envar site but it is within an SSSI Impact Risk Zone for which consultation with Natural England is required. The St Ives to March Disused Railway (The Parks South) County Wildlife Site (CWS) is 1 kilometre north east of the Envar site; Heath Fruit Farm CWS is 1.4 kilometres to the east and Lawn Orchard CWS is 1.7 kilometres to the north shown on Figure 3 below. No public rights of way are affected by the Envar site.

Figure 3



2.3 The Envar site covers approximately 18.5 hectares, most of which has planning permission for and is in use for in vessel and open windrow composting. It is identified in the Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) (the MWLP) as a Waste Management Area (WMA). The site is served by two accesses from the B1086 St Ives Road which are used for the delivery of unprocessed waste and the despatch of processed material (Entrances 1 and 3). Heath Top House and the staff car park are accessed from The Heath (Entrance 5). Entrances 2 and 4 are for emergency access only. Two former entrances between the Dutch barn and Heath Top House have been blocked up. Entrances 1 – 5 are shown on the Proposed Site Layout Plan (Appendix 1B).

2.4 The principal element of the current waste management operations is composting green waste and food waste in tunnels with a biofilter. Once treated ‘in vessel’ the compost is

matured in open windrows on the hardstanding areas. The site also operates as a waste transfer station where small loads of various waste streams are bulked up for transfer to specialist waste management facilities for treatment or disposal. There are also two small-scale biomass boilers with a thermal capacity of 999kW and which use wood as a feedstock. Surface water from the waste processing and compost maturation areas is collected in a series of attenuation lagoons. A waste water treatment plant processes the surface water to enable it to be discharged to the local watercourse in accordance with a discharge consent issued by the Environment Agency. See Existing Site Layout Plan (Appendix 1A).

2.5 The current planning permissions limit the quantity of waste that may be accepted at the site to 200,000 tonnes per annum (tpa) by condition. The number of vehicle movements is not directly controlled by the planning conditions. However, the throughput limit does in effect limit the amount of traffic that would be generated. The permitted hours of operation are:

Vehicle access	05:00 – 22:00 daily
Plant and machinery outside buildings	05:00 – 22:00 daily
Shredding outside buildings	07:00 – 18:00 daily

3. The Proposed Development

3.1 The planning application relates to 8.91 hectares, approximately half of the Envar Composting Ltd site, and is for the following main elements of development which are shown on the Proposed Site Layout Plan in Appendix 1B.

i. Dry anaerobic digestion (AD) facility;
ii. Waste transfer station;
iii. Healthcare waste energy recovery facility (ERF);
iv. Pellet fertilizer production facility;
v. Woodchip biomass fuel storage building;
vi. Vehicle refuelling station;
vii. Four replacement surface water storage lagoons;
viii. Extension to concrete pad; and
ix. Car park extension.

i. Dry AD facility (Items 34 – 43 on Proposed Site Layout Plan, Appendix 1B)

3.2 This would be developed on the site of some of the existing in vessel composting infrastructure at the centre of the site. Four of the existing buildings would be retained and the tunnels would be demolished and replaced by digesters and a biofilter. The existing buildings are 9 and 10 metres high and the proposed digesters (combined) would measure 37 x 24.5 metres x 11.09 metres high. Dry AD uses only minimal mechanical sorting, and the digestion process takes place from waste in its solid form whereas in wet AD the waste is first turned into a pulp prior to being processed. The proposed AD plant would biologically process approximately 70,000 tpa of co-mingled food and green waste through the introduction of anaerobic bacteria. Heat from the proposed ERF would power the biological processes. Electricity would be provided by two 1MW combined heat and power units. The outputs would be bio-methane and digestate. The bio-methane would be pressurised,

cleaned and fed into the gas grid via an underground pipeline or used on site as a fuel for road-going vehicles, see paragraph 3.14 below. Approximately 50,000 tpa of dry nutrient-rich digestate would be dried using heat from the proposed ERF to create a product for use as a fertilizer and soil improver.

3.3 The green and food waste would be delivered daily between 05:00 and 22:00 and deposited in the reception building. The dewatering, drying and storage would be within a sealed and enclosed building. Other infrastructure would be a biomethane storage tank, three liquid waste tanks, two emergency flares, a biogas upgrade unit and a grid entry unit. The process would be continuous i.e. the plant would operate 24 hours per day, 7 days per week.

ii. Waste transfer station (Item 28 on Proposed Site Layout Plan)

3.4 This would relocate the existing waste transfer operations to a new building in the northwest sector of the site. The steel portal framed building would be 70 metres by 40 metres and 8 metres to the eaves and 10 metres to the ridge of a gently pitched roof with solar panels. The box profiled cladding would be dark green and the roof light grey.

3.5 Waste would be offloaded in the reception bay then moved to separate storage bays within the building. Cardboard, paper and packaging would be baled. When sufficient material has been accumulated it would be loaded into HCVs in a covered bay at the side of the building for export off site for processing. Suitable wood would be used in the biomass boilers and green and food waste in the proposed dry AD plant. The throughput would be 20 – 25,000 tpa of commercial and industrial waste (including cardboard, plastics, metal, paper and wood) and construction and demolition waste (including rubble, hardcore and general municipal waste streams). It is proposed that waste would be drawn from the catchment area specified in condition 5 of planning permission H/5005/17/CW i.e. Not less than 40% by weight from the East of England region. The hours of operation would be 05:00 to 22:00 daily.

iii. Healthcare waste energy recovery facility (ERF) (Item 46 on Proposed Site Layout Plan)

3.6 This would comprise a new steel framed building measuring 53 metres x 39 metres and 8.7 metres to the eaves and 10 metres to the ridge of a gently pitched roof. The box profiled cladding would be dark green and the roof dark grey. The stack would be 26 metres high and 1.07 metres diameter and coloured light grey. It would be located to the north of the proposed dry AD facility, partially on the site of an existing surface water lagoon.

3.7 The design capacity of the plant would be 2 tonnes per hour and inputs would be up to 12,000 tpa of the following waste types as described in the applicant's Planning Statement (June 2021):

Health care – produced by organisations providing health and social care or in a person's own home where health and social care is provided.

Hazardous – includes waste matter that can cause harm to the environment or human health e.g. medicines, needles, dressings.

Hygiene – non-clinical but contains body fluids such as outer dressings and gowns; medicines that can no longer be used or items contaminated with medicines.

Law enforcement confiscated material – such as tobacco, alcohol, firearms and prohibited drugs.

The applicant states that the waste would be sourced as far as possible from within Cambridgeshire and Peterborough and 40% from the East of England region.

3.8 The waste would be delivered predominantly in light goods vehicles and vans at a rate of 1 – 2 per hour. Bulk loads in articulated lorries would be unlikely to exceed 2 per day. The waste would be in sealed bags or containers which would be manually loaded into the container management system within the building using a forklift or grab. It would then be emptied into the feed hopper then mechanically fed into the primary combustion chamber. The containers would be transferred to the container wash for disinfection. Liquid waste would be injected into the treatment process. Throughput would be up to 2 tonnes of waste per hour. Within the primary combustion chamber the waste would pass over two hydraulically driven hearths. Approximately 2 tonnes per day of incinerator bottom ash (IBA) would be collected, quenched and stored in a sealed skip for export off site for disposal or recycling if the relevant criteria are met. As well as IBA, air pollution control residues would be collected (approximately 28 tonnes per month). Like the IBA it would be placed in a sealed skip for export off site for disposal.

3.9 The hot gases produced from the primary combustion chamber would be transferred to the secondary combustion chamber for thermal oxidisation at the necessary temperature and residence time. Hot gases would be transferred to the waste heat boiler. The steam from the waste heat boiler is used to generate electricity for use on site and export. Heat would be used in the proposed dry AD plant as set out in paragraph 3.2 above and in the proposed pellet fertilizer production facility, see paragraph 3.12 below.

3.10 Deliveries of waste would be between 05:00 and 22:00. The combustion process would be continuous i.e. the plant would operate 24 hours per day, 7 days per week.

iv. Pellet fertilizer production facility (PFPF) (Item 47 on Proposed Site Layout Plan)

3.11 This would be undertaken within a steel portal framed building measuring 70 metres by 40 metres and 9 metres to the eaves and 11 metres to the ridge of a gently pitched roof with solar panels. The box profiled cladding would be dark green and the roof light grey. It would be located at the centre of the site, between the proposed healthcare ERF building and the existing biomass boiler and dry product storage building, on the footprint of two surface water lagoons.

3.12 Some of the organic output of the dry AD plant would be taken to the PFPF where it would be combined with ammonia and CO_2 to produce a fertilizer in a more useful granular form. The process would capture CO_2 from sources such as combustion flue gases and biogas separation and use it to stabilise ammonia. The heat that would be used would be sourced from other on-site processes.

v. Woodchip biomass fuel storage building (Item 49 on Proposed Site Layout Plan)

3.13 The 20 – 25,000 tpa biomass (wood chip) that is used to fuel the existing biomass boilers is currently stored outside where its quality can deteriorate. It is proposed to construct a storage building to the north of the proposed PFPF. It would be steel portal framed measuring 70 metres by 40 metres and 8 metres to the eaves and 10 metres to the ridge of a gently pitched roof with solar panels. The box profiled cladding would be dark green and the roof light grey. Delivery of wood chip would take place between 05:00 and 22:00 daily and shredding would take place between 07:00 and 18:00 daily.

vi. Vehicle refuelling station (Item 29 on Proposed Site Layout Plan)

3.14 It is proposed to install a compressed natural gas (CNG) refuelling station to the northeast of Entrance 1. The biogas produced by the proposed dry AD plant would be capable of being used as an alternative to diesel in the applicant's fleet of commercial vehicles. It would be stored in a vessel situated close to the dry AD facility. A small-scale compressor would be located close to the proposed refuelling station.

vii. Four replacement surface water storage lagoons (Items 25 on Proposed Site Layout Plan)

3.15 As noted in paragraphs 3.6 and 3.11 the sites of three of the existing surface water lagoons would be built over to construct the proposed healthcare waste ERF and the proposed PFPF. It is proposed that 4 new lagoons would be constructed at the north of the site, parallel with the boundary with the former mushroom farm. One would be for 'clean' water collected from the roofs and roads and three would be for 'dirty' water from waste treatment areas for subsequent treatment for reuse on site or discharge off site under licence. It is proposed that a replacement water treatment plant would be installed between two of the new lagoons (un-numbered on the Proposed Site Layout Plan in Appendix 1B).

viii. Extension to concrete pad

3.16 This is included within the applicant's description of the proposed development but is not mentioned further in the Planning Statement nor is it apparent from the Existing Site Layout Plan (drawing no. GPP/E/CWH/20/02 dated 27 Jul 2020 – Appendix 1A) or Proposed Site Layout Plan (drawing no. GPP/E/CWH/21/03 Rev 015 dated 08/12/21 – Appendix 1B). It is, however, shown on drawing no. 0001 Rev P01 dated 26.11.21 presented as Appendix D of Drainage Strategy for Surface Water at enVar (EPG-9651-DS-01 26.11.21) (Planning Statement Addendum Appendix 5 01 March 2022) and has been taken into account in the flood risk assessment. The proposed new hardstanding would be on the land immediately to the southeast of the proposed surface water storage lagoons and the adjoining north-easterly offshoot of the Envar holding shown in pink on the map extract, Figure 4 below. It has not been stated what the additional hardstanding would be used for but it is assumed that it would be for the maturation of compost.

Figure 4

ix. Car park extension (Item 52 on Proposed Site Layout Plan)

3.17 It is proposed that the car park at Heath Tops, accessed from Entrance 5, would be extended. The application as originally submitted showed 85 car parking spaces including four for disabled users, motorcycle parking and cycle racks. Taking into account the likely increase from 30 to 52 employees and the amount of existing car parking at the southwest corner of the site accessed via Entrance E3, it was considered that this would be over-provision and could generate more vehicle movements through the Wheatsheaf crossroad junction. There are 52 car parking spaces at the southwest corner of the site (2 being for disabled users) and the current proposal is for 13 parking spaces at Heath Tops (including 2 for disabled users).

Landscaping and biodiversity

3.18 It is proposed that the following would be carried out (see Appendix 1C – Landscape & Ecological Enhancement Plan and Appendix 1D Proposed Car Park Landscaping):

i. the existing bunds on the east, southeast, north and northwest boundaries of the site would be improved with planting of 1073 linear metres of native trees on the top and outer slopes;
ii. 121 metres of hedge with native hedgerow trees planted around the proposed clean water storage lagoon;
iii. 160 linear metres of native privet hedge on St Ives Road boundary;
iv. 150 native trees in a belt between the proposed surface water storage lagoons and the proposed waste transfer and PFPF buildings;
v. 133 linear metres of native privet hedge and trees at Heath Tops car park; and
vi. Wildflower mix around clean water storage lagoon.

Traffic

3.19 The total quantity of waste that would be handled at the site would not exceed the currently permitted maximum of 200,000 tpa. According to the applicant's Planning Statement it would be made up as follows:

Green and food waste dry AD	70,000
Biomass	20,000
Waste transfer station	20,000
Healthcare ERF	12,000

Leaving an assumed balance of 78,000 tpa that would be green and food waste for in vessel and open windrow composting. The figures for the waste transfer station and biomass vary slightly between the submission documents.

3.20 The predicted total traffic movements to the Envar site are 189 HCVs, 58 light commercial and vans and 110 staff cars per day. This matter is discussed in detail in section 12 of this report.

Construction

3.21 It is anticipated that the proposed development would take 2 – 3 years to construct. It would be undertaken between 07:00 and 18:00 Mondays to Fridays and 07:00 and 13:00 on Saturdays. In the planning application it is stated that it would be phased as follows:

Phase 1 – Waste transfer station and biomass woodchip storage buildings
Phase 2 – Surface water storage lagoons
Phases 3 & 4 – Dry AD plant and healthcare ERF
Phase 5 – Pellet fertilizer production building.

3.22 The developer has subsequently suggested that they may erect all the buildings at the same time, acknowledging that the replacement surface water storage lagoons would need to be constructed and operational before the existing ones are decommissioned and infilled to allow work to start on the PFPF and healthcare ERF buildings.

4. Planning History

4.1 H/1011/92/CW - Composting to produce a peat substitute from organic vegetable waste (Granted 08/12/1993 – not implemented)

4.2 H/0739/94/CW - Extension to composting building (Granted 11/10/1994)

4.3 H/5023/02/CW - Concrete apron for the preparation of green waste (Granted 07/11/2002 – not implemented)

4.4 H/5005/04/CW - Extension of an existing building to enclose 8 existing composting tunnels; composting of organic feedstocks to produce compost for agriculture, horticulture and landscaping; establishment of ADAS Composting Research Project (Granted 15/07/2004

subject to S106 agreement dated 14/07/2004 restricting the catchment area from which waste may be drawn)

4.5 H/5021/05/CW - Change of use of Heath Tops from residential to part residential and part educational facility and offices (Granted 12/12/2005)

4.6 H/5003/06/CW - Replacement building to contain four enclosed composting tunnels (Granted 22/05/2006)

4.7 H/5000/07/CW - Erection of semi-permanent office building (Granted 12/06/2006; temporary permission expired 30/04/2012)

4.8 H/5001/07/CW - Plant to treat waste water from composting site (Granted 26/03/2007)

4.9 H/5002/07/CW - Cladding of open barn to provide enclosed composting building (Granted 26/03/2007)

4.10 H/5005/07/CW - Extension of concrete pad for maturation of compost (Granted 11/04/2007 – not implemented)

4.11 H/5015/09/CW - Erection of three composting tunnels and waste reception building (Granted 14/09/2009 – not implemented)

4.12 H/5037/09/CW - Variation of condition 7 of H/05005/04/CW to state "No vehicle shall enter or leave the site except between the hours of 0700 and 1800 Mondays to Fridays except Public Holidays and 0700 and 1330 on Saturdays. Working on site shall take place between the hours of 0700 and 1800 on any day of the week" (Granted 04/01/2010)

4.13 H/5021/11/CW - Demolition of old composting tunnels and ancillary structures; extension to waste reception building; new building to house new composting tunnels, bio-filters & manoeuvring area; covered link to connect buildings; relocation of weighbridge & office; alteration of access to B1086 (Granted 19/04/2012)

4.14 H/5003/12/CW - Extension of concrete pad for maturation of compost with drainage balancing lagoons, reed bed; perimeter earth bunds screening (Granted 07/06/2012)

4.15 H/5000/14/CW - Erection of four metre high litter-net fencing (Granted 16/05/2014)

4.16 H/5001/14/CW - Construction of a waste water lagoon, additional discharge tank to waste-water treatment plant and buffer tank for rainwater harvesting (part retrospective) (Granted 11/09/2014)

4.17 H/5004/17/CW - Section 73 planning application to develop land without complying with condition 7 of planning permission H/05037/09/CW (Variation of Condition 7 of planning permission H/5005/04/CW: Extension of an existing building to enclose 8 existing composting tunnels; composting of organic feedstocks to produce compost for agriculture, horticulture and landscaping; establishment of ADAS Composting Research Project) to extend the hours of operation including vehicle movements to 0500 to 2200 hours daily (Granted 08/11/2017)

4.18 H/5005/17CW - Change of use of existing building (no. 16 on Existing Site Layout Plan) and adjacent land from composting and maturation of compost to recovery of waste in biomass boilers, drying waste, storage of biomass and drying material and bulking up and shredding waste wood (part retrospective). Erection of two external flue stacks and two biomass feed hoppers (retrospective). Extension of concrete hardstanding (retrospective). Erection of storage bays and two drying material hoppers. Change of use of existing building (no. 11 on Existing Site Layout Plan) from composting to composting and waste transfer. Change of use of part of existing building (no. 10 on Existing Site Layout Plan) from composting to food waste transfer. Extension of perimeter earth bund. Installation of an internal roadway. Installation of two weighbridges and a weighbridge office (Granted 08/11/2017)

4.19 H/5006/17/CW - Section 73 planning application to develop land without complying with condition 2 of planning permission H/05003/12/CW (Extension of concrete pad for maturation of compost with drainage balancing lagoons, reed bed; perimeter earth bunds [for] screening) to extend concrete pad into area of balancing lagoon office (Granted 08/11/2017)

4.20 H/5007/17/CW - Section 73 planning application to develop land without complying with conditions 2 and 5 of planning permission H/05021/11/CW (Demolition of old composting tunnels and ancillary structures; extension to waste reception building; new building to house new composting tunnels, biofilters & manoeuvring area; covered link to connect buildings; relocation of weighbridge & office; alteration of access to B1086) to allow alternative access arrangements office (Granted 08/11/2017)

4.21 H/5005/17/CW/N1 – Non-material amendment to the site layout plan to allow changes to the position of the internal access road, earth bund, weighbridges and weighbridge office (Granted 04/05/2018)

5. Publicity

5.1 The application has been advertised in accordance with the Town and Country Planning (Development Management Procedure) (England) Order 2015 (as amended) and the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended). The application became valid on 19 July 2021 and the statutory 30 day consultation period was extended until 10 September 2021. The application was advertised in the Hunts Post on 4 August 2021, notices were put up at Entrance 1 and Entrance 3 on St Ives Road and at Entrance 5 to Heath Top House on 29 July 2021 and individual residential and business premises within 1 kilometre of the site were notified by post.

5.2 It was apparent from the volume and nature of the responses received that there was a great deal of concern within the local community about the proposed healthcare waste incinerator in particular and the WPA appointed an independent specialist, Air Quality Consultants Ltd (AQC) to provide advice on this aspect of the proposed development. Consultation responses from statutory consultees and other interested parties indicated that further information was required to determine the application and the WPA formally requested this under Regulation 25 of the 2017 Regulations on 21 October 2021. Further information was sought on the air quality impact assessment, the health impact assessment, the noise assessment and the landscape and visual impact assessment. The applicant’s response was received on 1 March 2022 and advertised by means of a notice in

the Hunts Post on 9 March 2022 and at site Entrances 1, 3 and 5 on 8 March 2022. The consultation period was until 19 April 2022.

5.3 The WPA made a second formal request for further information under Regulation 25 of the 2017 Regulations on 8 June 2022. Further information was sought on the air quality impact assessment, the health impact assessment including noise and the landscape and visual impact assessment. The applicant's response was received on 17 August 2022 and was advertised by means of a notice in the Hunts Post on 31 August 2022 and at the site Entrances 1, 3 and 5 on 1 September 2022. The consultation period was until 30 September 2022. The revised biodiversity net gain information and plume visibility briefing note received 30 and 29 November 2022 respectively were advertised by means of a notice in the Hunts Post on 6 December 2022 and notices at site Entrances 1, 3, and 5 on 8 December 2022. The consultation period was until 8 January 2023.

5.4 There has been criticism from parish councils and many individuals that engagement with the public by Envar before the application was submitted and by the council thereafter was inadequate. In the Cambridgeshire Statement of Community Involvement (January 2019) (SCI) the proposed development falls within Category A where "High Level" community involvement is recommended because the application would be accompanied by an ES, the development would include a tall structure and potentially raise concerns on air quality and health.

5.5 As noted in paragraph 1.2 above Envar sought pre-application advice and an EIA scoping opinion from the WPA in July 2020. The advice referred to the SCI and recommended consultation with statutory consultees and presentation of the proposals to the site liaison group. In February 2021 the applicant sought advice from the WPA on the scope of pre-application publicity. Their suggested audience was residents and businesses in the parishes of Somersham, Bluntisham and Woodhurst and the WPA queried whether this had been informed by work on air quality impacts for example and pointed out that some premises in Pidley and St Ives that were nearer the site than the main village centres of Somersham and Bluntisham. The WPA also pointed out that when it notifies people about the planning application the same criteria won't necessarily be applied.

5.6 The applicant's statement of community involvement is Appendix 2 of the ES. The Covid-19 restrictions and precautions which were still in place in 2021 influenced the methods of pre-application engagement and its timing by local elections. An on-line meeting of the liaison group was held on 10 May 2021 and attended by representatives of Bluntisham, Somersham and Woodhurst parish councils. Apologies were received from Pidley Parish Council. Envar distributed pre-application information to 24 premises within an approximately 1 mile radius of the site and invited comments between 11 and 28 May 2021. A website was launched on 11 May 2021 explaining the proposed development.

5.7 Planning authorities' statutory consultation and notification obligations are set out in the Town and Country Planning (Development Management Procedure) (England) Order 2015 (as amended). For applications accompanied by an ES the planning authority must place notices in at least one place on or near the land to which the application relates and publish a notice in a newspaper circulating in the locality. Had the application not been EIA development but "only" major development the requirements would have been site notice(s) *or* serving notice on adjoining owners or occupiers *and* a notice in the local newspaper. It is the WPA's practice for all applications to notify adjoining owners/occupiers and properties

within a wider area where it is considered relevant. In this case, informed by the specific receptors used in the applicant's air quality assessment, the WPA notified premises within 1 kilometre of the site.

5.8 It is considered that Envar's pre-application engagement with the community was reasonable given the restrictions in place at the time – it would have been difficult to hold public exhibitions for example. The virtual liaison group meeting gave parish council representatives information to disseminate to their members and parishioners. It is considered that the notification undertaken by the WPA went beyond the statutory requirements and was consistent with its usual practice.

6. Consultation Responses

6.1 As set out in section 5 above, there have been four rounds of consultation. A summary of the most recent comments is provided below and where previous comments are still relevant, they are included. Representations from consultees and other organisations have been published on the county council's website where they may be read in full. Simple Search (cambridgeshire.gov.uk) using reference number CCC/21/088/FUL.

Huntingdonshire District Council (Landscape) – **No objection**

6.2 It is considered that the landscape impact on static features has been addressed. However, further information is required in respect of the size and frequency of plumes. A series of visualisations illustrating the changes would be useful; without such visualisations it is difficult to infer how visible a particular width or height of plume might appear in any one location as the heights involved are not ones typically dealt with (i.e. they are not relatable to nearby structures). It would be useful to understand how the worst-case scenario and a "typical" case scenario would appear within visual receptors that have been identified as either the most sensitive, or as receiving the greatest magnitude of change. To enable further assessment on this point, the overall significance would need to be better understood which takes into account the magnitude from the plumes, in a manner that officers, and other decision makers, such as members, are able to interpret.

Huntingdonshire District Council (Environmental health) – **No objection**

6.3 It is considered that subject to pre-commencement conditions for a Noise Impact Assessment and Construction Environmental Management Plan, and subject to correct controls being in place for site operations which will be covered by the environmental permit, there are not sufficient grounds to recommend refusal in respect of unacceptable impacts from noise or pollution.

Environment Agency – **No objection**

6.4 Irrespective of planning approval, an application would need to be submitted for a substantial variation to the existing environmental permit. The operator would need to submit, amongst other things a revised Odour Management Plan (OMP) and a Fire Prevention Plan; a Noise Management Plan may also be required. Appropriate dust suppression measures must also be incorporated.

6.5 The heat from the incinerator will be utilised to dry the AD waste (post digestion). This heat exchange between the incinerator and the dry AD plant as well as the pellet fertilizer facility would be treated as a Directly Associated Activity. It is assumed that the heat exchange will take place via ductwork (or equivalent) from the incinerator prior to entering the AD. The height of the incinerator emission stack should be determined by, but not limited to, plume dispersion modelling and the surrounding topography.

6.6 All activities including, but not limited to, waste acceptance and treatment must take place in appropriately sealed and contained buildings and infrastructure. Negative air pressure or air extraction systems must be in place where applicable with all extracted air treated and abated accordingly. A minimum of three air changes must take place within all waste reception and treatment areas in accordance with best available techniques (BAT). A new purpose-designed and engineered odour abatement system will be required such as a biofilter of appropriate capacity to serve the new AD plant. Any new biofiltration system must have appropriate and representative sample points installed. An appropriate irrigation system must also be installed to maintain a healthy media environment for filtration to take place and treat odour emissions to the required standard.

6.7 Suggestions to the operator are made in respect of water and effluent storage and treatment and the odour abatement system.

Natural England – **No objection**

6.8 Natural England welcomes the applicant's submission of additional information and addendums to the ES to provide further consideration of the air quality effects of the proposed scheme. The additional information confirms that there will be no significant air quality effect on statutorily designated sites including the Ouse Washes SSSI, SAC, SPA and Ramsar site. Natural England therefore has no objection to the proposed development. The County Ecologist's request that the applicant should seek to reduce emissions, or mitigate their effects as far as possible, to minimise air quality effects on the wider environment including a nearby County Wildlife Site is supported.

6.9 To meet the requirements of the Habitats Regulations it is recommended that it is recorded that a likely significant effect can be ruled out on the basis that:

- Contributions of Nitrogen Dioxide, Ammonia, and SO2 from the development were below the 1% critical level screening threshold at the Ouse Washes SAC, SPA and Ramsar;
- Contributions of nutrient Nitrogen and acid deposition from the development were below the 1% critical load screening threshold at the Ouse Washes SAC, SPA and Ramsar; and
- No other developments in the local area were identified that can be considered in-combination with the development.

6.10 Generic advice was provided on designated sites/landscapes and advice on other natural environment issues in an appendix.

UK Health Security Agency (first response 13/09/2021 made as Public Health England (PHE)) – **No objection**

6.11 Regulatory context: The operator will require a variation of the existing environmental permit (EP) to cover the proposed activities. Operators of waste incinerators are required to monitor emissions to ensure that they comply with the emission limits stated in the EU Industrial Emissions Directive 2010/75/EU (IED). This Directive has been implemented in England and Wales by the Environmental Permitting (England and Wales) (Amendment) Regulations 2016 ('EP' Regulations), which is regulated by the Environment Agency (EA) and includes Emission Limit Values (ELVs) for a range of pollutants and requires monitoring to ensure compliance during operation. The EP will set out operating requirements which must be complied with to protect the environment and public health. The EP application will have to demonstrate that the proposed plant will use Best Available Techniques (BAT) in order to control emissions to air, land and water. The EA consults organisations including PHE; the local authorities and the Food Standards Agency (FSA) on EP applications. PHE assesses the potential public health impact of a proposed installation and makes recommendations based on a critical review of the information provided for the EP application. PHE will request further information at the environmental permitting stage if it believes that this is necessary to be able to fully assess the likely public health impacts. This is separate to this planning consultation response.

6.12 Air Quality: There will be demolition and construction activities associated with the development, which have the potential to generate fugitive emissions of dust/particulate matter and products of combustion from vehicles and construction plant. The applicant intends to produce a construction environmental management plan (CEMP) which will detail proposed control and mitigation measures. A draft CEMP has been submitted which outlines some generic mitigation measures. We would recommend that the final CEMP plan and detailed mitigation measures are submitted and approved in writing by the local authority environmental health team prior to commencement of any demolition or construction works on site.

6.13 During the operational phase of the development, there will be point source emissions of products of combustion from the healthcare ERF stack and combined heat and power unit; emissions from the biofilter of the AD plant, fertilizer pellet production facility and the biogas upgrade facility. There is also the potential for fugitive emissions of dust/ particulate matter from the receipt, storage and handling of waste at the healthcare ERF and waste transfer facility and traffic emissions due to traffic to and from the site. The potential traffic emissions don't appear to have been specifically included within the applicants modelling and assessment.

6.14 The applicant proposes abatement technologies to reduce combustion emissions such that ELVs will be achieved. As detailed above the operational aspects will be required to have an EP which will put conditions in place on the emissions to air. PHE will provide detailed comments on the potential public health hazards of the operational phase of proposed facility to the EA, as part of the requirements of the EP regime.

6.15 PHE has reviewed research undertaken to examine the suggested links between emissions from municipal waste incinerators and effects on health. PHE's risk assessment is that modern, well run and regulated municipal waste incinerators are not a significant risk to public health. While it is not possible to rule out adverse health effects from these

incinerators completely, any potential effect for people living close by is likely to be very small. This view is based on detailed assessments of the effects of air pollutants on health and on the fact that these incinerators make only a very small contribution to local concentrations of air pollutants.

6.16 [Comments made as the UK Health Security Agency 08/04/2022] There will be demolition and construction activities associated with the development, which have the potential to generate fugitive emissions of dust/particulate matter and products of combustion from vehicles and construction plant. A draft CEMP has been submitted which outlines some generic mitigation measures. It is recommended that the final CEMP plan and detailed mitigation measures are submitted and approved in writing by the local authority environmental health team prior to commencement of any demolition or construction works on site.

Cambridge City Airport – **No objection**

6.17 The proposed development does not conflict with aerodrome safeguarding criteria.

6.18 Health and Safety Executive – **No comments to make**

Cambridgeshire Fire and Rescue Service – **No objection**

6.19 Adequate provision needs to be made for fire hydrants, which may be by way of Section 106 agreement or a planning condition. The number and location of Fire Hydrants will be determined following Risk Assessment. Access and facilities for the Fire Service should be provided. If there are any buildings that are over 11 metres in height (excluding blocks of flats) not fitted with fire mains, then aerial (high reach) appliance access is required.

Cambridgeshire County Council – Highway Authority and Transport Assessment Team – **No objection**

6.20 From the information submitted the proposal will generate an increase of 40 vehicle movements above the existing, of which 6 would be HGVs and the rest LGVs and staff (car) trips. The increase will be associated with the healthcare ERF. In terms of HGV and LGV movements, it is noted that the transport assessment which supported planning application H/5005/17/CW predicted a higher volume of HGV traffic (240 two-way movements per day) than has actually been recorded (215 HGV/LGV two-way movements). This means that despite the increase in HGVs and LGVs proposed in the current application, the overall total from the site would not exceed that previously proposed. In terms of staff movements there would be an increase in these movements above that previously proposed in the assessment for the site under application H/5005/17/CW. This increase would be 44 vehicles per weekday with the majority being ‘off-peak’ trips. Given that the HGV/LGV trips would not exceed theoretical levels under the previous application and the LGV/car trips would not have a significant impact in peak hours there would be no justification to object to this application on the grounds of highway capacity.

6.21 As there have been safety concerns about the crossroads junction, consideration must be given to whether any increase in staff vehicle trips is likely to exacerbate any safety issues. The applicant has provided information showing where staff currently live and this gives an indication of the type of movements that staff are undertaking at the crossroads. If it were to

be assumed that the additional staff followed the same travel pattern, there would be a minimal increase in turning movements as a result of new staff trips. Given the above and the accident history at the junction, there would be no justification for an objection to this application on the grounds of impact on highway safety.

6.22 The Transport Statement Addendum has addressed the initial comments made by the Transport Assessment Team. A cap on the number of HGV vehicle movements should be imposed on the site given the sensitivity of the road network in the vicinity of the crossroads junction. It is recommended that this should be dealt with by means of a Section 106 obligation and that limit should be set to 190 two-way movements per day.

Cambridgeshire County Council - Local Lead Flood Authority (LLFA) – **No objection**

6.23 The submitted drainage strategy demonstrates that surface water from the proposed development can be managed through the use of a series of lagoons with sufficient volume to contain several months of rainfall along with a freeboard to contain the 1 in 100+40% storm event. Surface water will be discharged at the Greenfield runoff rate of 56.3l/s for the 1 in 100 year storm event should the lagoons become full. A detailed surface water drainage scheme should be secured by condition.

Cambridgeshire County Council - Public Health – **No objections**

6.24 The submission of the HUDU (Healthy Urban Development Unit) Health Impact Assessment is welcomed and is consistent with good practice; the methodology used is sound.

6.25 Active travel and road safety – The applicant has given no commitment to provide cycle parking or deliver any other initiatives to promote active travel. The proximity of the site to the national cycle network and other local cycling routes in the area has been overlooked. Owing to the rural location of the site the HUDU HIA should have considered measures that have the potential to become a barrier to active travel and illustrate how these will be mitigated.

6.26 Air quality, noise and neighbourhood amenity – The HUDU HIA recognises the potential impact on health as negative. During construction these impacts are to be mitigated by measures contained in a construction environment management plan (CEMP). Impacts during the operational phase are to be controlled via the environmental permit and will be enforced by the Environment Agency. Public Health has no comments to make at this time and would defer on any technical response on air quality and noise to the District Council Environmental Health Officer and the UK Health Security Agency. Public Health are consultees to the environmental permit application and would give comments at that time.

6.27 Conclusions - There are still concerns that the exact type of waste and where it will be coming from are not clear in the application or the Health Impact Assessment. However, these will need to be clarified and confirmed at the environmental permit application stage of the process which is outside the planning system. There are concerns that the application has not adequately mitigated the impacts of road safety on the ability to use active travel measures.

Cambridgeshire County Council – Ecology Officer **- No objection**

6.28 (19/08/2021) Holding objection identifying the need for further information relating to the potential air quality impacts of the proposed development on SSSIs and CWSs and failure to demonstrate biodiversity net gain (BNG). The protection of bats from demolition and lighting should be secured by conditions.

6.29 (29/04/2022) Is satisfied that there will be no air quality impact to SSSIs or the Heath Fruit Farm and Lawn Orchard CWSs. Concerns remain about the potential for nitrogen deposition to worsen the impact of air quality on the St Ives – March Disused Railway (The Parks South) CWS. BNG has not yet been demonstrated. The draft construction environmental management plan is noted; a more detailed one should be secured by condition as well as a separate condition to require further bat surveys prior to the demolition of the buildings.

6.30 (21/10/2022) The further information on the air quality impact on the St Ives – March Disused Railway (The Parks South) CWS is welcomed. If the recalculations are correct (this should be confirmed by the council's air quality adviser) the objection is removed. It is still not possible to determine whether or not the development will result in BNG. There is insufficient information in the revised Landscape and Maintenance Summary Scheme (August 2022) to demonstrate that the BNG conditions identified in the assessment would be delivered.

6.31 (28/12/2022) From the information submitted on 30 November 2022 the applicant has demonstrated that the scheme has the potential to deliver a measurable BNG proportionate to the scale of development proposed. There are still minor inconsistencies between the Landscape and Maintenance Summary Scheme (drawing KB-Sti006d) and the Biodiversity Net Gain Metric Assessment Nov 2022 (e.g. drawing BMD.21.0072.DRE.902.C Post development habitats) but they will not significantly affect the BNG assessment. The applicant's proposal is that a more accurate BNG assessment will be undertaken at the detailed design stage. This approach is supported and should be produced as part of a BNG Plan, which sets out how net gain in biodiversity will be achieved through a combination of on-site and / or off-site mitigation, which includes long-term management (30 years). Therefore, the production of and implementation of a BNG Plan should be secured through a suitably worded condition. The BNG Plan should be based on a detailed landscape scheme. A detailed soft / hard landscape scheme for both on-site and off-site habitats should also be secured through condition.

6.32 (20/03/2023) Notes that AQC agrees with the applicant's statement that the proposed scheme will result in an overall reduction in air pollution from the Envar site (when compared to the current operations). Therefore, whether or not the background air quality figures have / haven't changed, it is considered that the scheme will have no adverse impact on the CWS (above the current situation).

Cambridgeshire County Council – Carbon and Energy Manager – **No objection**

6.33 The data in the applicant's note on energy use is pre-detailed design and subject to change. If their figures are correct, they would certainly save carbon from electricity and diesel. The applicant claims that these changes would lead to an estimated 9,663 tonnes CO_2e [carbon dioxide equivalent] savings per annum, the vast majority (96%) from avoided

emissions from natural (fossil) gas, due to the new export of renewable gas. Whilst burning carbon from biological sources is undoubtedly better than burning it from fossil sources, this does still release carbon into the atmosphere and so still contributes to climate change. However, the equivalent amount of carbon would be absorbed during the growth phase of the plant matter and so it can be regarded as 'carbon neutral' in standard carbon accounting. As the claimed carbon savings are largely due to avoided use of natural (fossil) gas, it needs to be considered whether the equivalent quantity of natural fossil gas will definitely be displaced (as opposed to the new renewable gas export being additional gas used, for example to meet increasing demand). If the renewable gas was additional, or if it was uncertain, then no avoided carbon emissions from fossil gas could be claimed.

6.34 These calculations have also not accounted for the future decarbonisation of the UK electricity grid. The quantity of carbon savings from electricity will depend on when the project will go live, as the UK grid gets greener each year, so the electricity displaced is greener and hence the annual carbon savings will be smaller as the years go by. The current carbon conversion factors for electricity will therefore not be appropriate in assessing emissions for future changes in electricity usage but this will only make a small difference as electricity savings account for only 2% of the applicant's claimed total carbon savings.

6.35 In addition to emissions from changes in energy use on the site, there will be other sources of carbon associated with this application which do not appear to have been considered or calculated by the applicant. These include embodied carbon from materials used for construction of the new facility; transport emissions, from both the construction phase and the use phase; direct emissions from the waste processes carried out on site, such as emissions from waste breaking down in the composting, anaerobic digestion (AD) and incineration / energy recovery processes. Construction emissions can sometimes be large, particularly if any high carbon intensity materials (such as concrete or steel) are used. Good practice would be to carry out a whole life carbon assessment, including assessing the embodied carbon from materials used in construction, as well as carbon emitted/saved/avoided in the use phase.

6.36 Cambridgeshire County Council – Historic Environment Team (Archaeology) – **No objection** or requirements

Councillor Steve Criswell (CCC - Somersham & Earith Division and HDC Somersham Ward) - **Objects**

6.37
- Envar's lack of engagement with the community over a fire and the current proposal
- Inaccurate information about the surrounding land use and businesses
- The need for a healthcare waste facility is not identified in the Minerals and Waste Local Plan; there is no evidence of need for locally sourced waste
- Light commercial vehicles should be included in the routeing arrangements; no HCVs should go through Somersham, Pidley, Woodhurst or Bluntisham
- The Wheatsheaf crossroads is due to be signalised; traffic movements should be modelled on this basis
- Visual impact of large buildings and chimney
- Potential for pollution and associated risk to health
- Real or perceived impact of air and soil pollution on local businesses producing food or providing childcare and stress to residents who are already affected by odour from the site

- Cycling to the site is unrealistic in the absence of dedicate cycle routes
- Questions around the NHS Green Plan such as reducing disposable items and minimising the distance waste is transported for disposal

Somersham Parish Council – **Objects**

6.38 - Supports conversion to green energy and reduction in odours from in-vessel compost but does not support incineration of waste
- Risks to health from incinerators have not been entirely ruled out by Public Health England
- Questions need for healthcare waste incinerator in Cambridgeshire
- Number and routing of HCVs must be restricted with none to or from the Pidley or Somersham direction

Bluntisham Parish Council – **Objects**

6.39 - Not enough local need for healthcare waste incinerator
- Incineration exacerbates climate change, harms air quality, is a disincentive for recycling and moving waste up the hierarchy and there is UK over capacity
- Long term effects of emissions on human health not fully known
- Air quality data is based on modelling not the actual environment of the local food producers including heritage fruit farm
- Challenge applicant's transport assessment especially in respect of St Ives and Wheatsheaf crossroads junction, an accident blackspot
- Employee sustainable travel not promoted
- Noise and light impacts
- 8 new jobs will not benefit an area with high levels of employment
- Negative impact on existing local businesses and rural economy
- Insufficient biodiversity net gain
- Visual impact especially of 26 metre chimney which proposed landscaping will not mitigate
- Industrialisation of the site
- Risk of handling clinical waste during commissioning and trial operation; Disaster Recovery
- Nuisance from flies
- Lack of consultation by Envar with local residents and information misleading

Woodhurst Parish Council – **Objects**

6.40 - Effect of 26 metre high chimney on outlook from parts of Woodhurst Conservation Area
- Impact on wildlife in Woodhurst not provided; insufficient biodiversity net gain
- Lack of consultation by Envar with local residents
- Lack of need for a clinical waste incinerator for locally sourced waste
- Increase in traffic; light vehicles would cut through Woodhurst
- Wheatsheaf crossroads junction is an accident blackspot
- Impact of emissions on food production and human health
- Noise and light pollution
- Harm to local economy would outweigh the benefit of 8 new jobs
- Risk and disaster avoidance – where density of the site and nature of the proposed operations contain significant levels of risk

Pidley-cum-Fenton Parish Council - **Objects**

6.41
- Supports use of dry AD to manage organic waste
- No need for health care waste incinerator and would undermine recycling
- Overdevelopment of a small site in a rural location
- Should be within main town in accordance with MWLP Policy 4 closer to sources of waste
- Too close to homes and businesses including a visitor attraction and children's nursery
- Increase in vehicle movements affecting road congestion and safety; HGVs queue on the road to enter the site at night
- Weight limit requested on B1040 Pidley Sheep Land and A141 roundabout at Warboys or enforceable routing agreement
- Noise at night
- Impact of light pollution on occupants of the travellers' site and on night-flying insects
- Odour
- Adverse impact on air quality from HGVs, construction and emissions from the incinerator
- Visual impact of 23 metre twin chimney and buildings of low quality design
- Risk of bird strike at civil and military aerodromes
- Competence of site operator e.g. fire in 2018
- Lack of consultation

St Ives Town Council – **Recommend refusal**

6.42
- No need for the hazardous waste facility for locally sourced waste
- Risks to nearby food producers from the operation of the incinerator
- HGV traffic through St Ives before 05:00 – should not be permitted until later
- Construction delivery routes not stated
- Employee sustainable travel not promoted
- Crossroads junction us an accident blackspot; applicant should be required to fund improvements
- information not in accordance with CCC Design Guide for waste facilities
- information on external lighting is lacking
- should deliver 20% biodiversity net gain
- lack of consultation by CCC with local residents
- not justified in accordance with Policy 4 of the CCC minerals and waste plan
- risk of accidents involving gas and contaminants

Earith Parish Council – **Recommend refusal**

6.43
- Lack of consultation
- Height and visual impact of incinerator chimney
- Health impacts from medical waste transportation and emissions from combustion
- No need for locally sourced medical waste which is catered for elsewhere
- Increase in traffic and impact on road safety
- Pollution of agricultural land
- Noise and light pollution at night
- Council should commission an independent environmental report
- Lack of information on sustainability and biodiversity
- Will not contribute to achieving net zero CO_2, which is emphasised by the extract from the 6th carbon budget where CCC as a council has acknowledged the contribution that EfW processes and incineration in particular make towards CO_2 emissions.

- Acknowledge that Environment Agency permitting process would control emission levels
- Acknowledge the need for green energy generation
- Support for reduction in outdoor processes and potential for odour generation and fires

Colne Parish Council - **Object**

6.44 - Lack of consultation by Envar and reference to fire
- Lack of need for healthcare ERF for locally sourced waste
- Storage of propane and methane gas dangerous
- Change from agricultural to chemical process unacceptable in rural environment
- Need to see the Environment Agency's report on the healthcare ERF
- Impact on local traffic
- risk to human and animal health
- Impact on local economy and livelihood
- Monitoring should be by an independent party with costs met by Envar
- Live monitoring of emissions should be published on Envar's website
- Move from in vessel processing of green waste to dry AD would reduce smell and contribute energy to the national grid

Hemingford Grey Parish Council – **Objects**

6.45 - All commercial vehicles should only use the A14, A1096 and A1307 instead of village roads and be monitored by a tracker system
- Implications for traffic flow through the parish; the A1096 route includes a large residential area
- Strongly questions need for healthcare ERF

Holywell-cum-Needingworth Parish Council - **Objects**

6.46 - Lack of community involvement and poor public consultation
- Odour; if the dry AD plant would reduce this would be welcomed
- No discharges should be permitted so close to residential and business premises and agricultural land
- Acknowledge Environment Agency's role on controlling emissions but Public Health England has not ruled out adverse health effects from incinerators
- Visual impact of 26 metre high chimney
- Impact on road safety and infrastructure; Wheatsheaf crossroads is an accident blackspot
- No need for the healthcare ERF as there is capacity elsewhere

Warboys Parish Council – **Objects**

6.47 - Need for healthcare ERF has not been demonstrated
- Could result in importation of waste from outside Cambridgeshire
- Increase in traffic movements close to dangerous highway junction
- Visual impact of the chimney
- Emissions from incineration process effect on human health from inhalation or deposition on farmland producing crops for human consumption

Wyton on the Hill Parish Council - **Objects**

6.48 - Supports conversion to green energy and reduction of unpleasant odours but not incineration
- Increase in traffic on local area on roads already busy at peak periods

East Cambridgeshire Joint Villages HCV Group - **Objects**

6.49 - Increase of traffic through local villages
- Wheatsheaf crossroads is an accident blackspot
- Light pollution and noise impact to residents adjacent to the site, and in the area, as production will be 24 hours
- Impact on the local farmers, business and communities
- Not in accordance with local plan policies in relation to protecting local character, built and natural heritage, and conflict with landscape and historic environment policies and design policies covering renewable and low carbon
- Waste should be dealt with at the earliest possible time, not stored and transported around the country
- Incineration has adverse climate impacts contrary to the move towards a net zero circular economy
- Impact on natural heritage sites of Woodhurst Anglo-Saxon ring village and listed properties including churches at Somersham and Woodhurst
- Risks to habitats and farmland in the event of system breakdown
- Track record of operator
- Lack of need for a clinical waste processing plant in this area
- Third party contractors not controlled by traffic routing agreements
- Continuation of composting at the site is welcomed

Cambridge Friends of the Earth – **Objects**

6.50 - Air and soil pollution and CO_2, dioxins and related compounds from emissions from the incinerator
- Health impacts from emission from additional diesel-powered HGVs
- Question if sufficient clinical waste in the area to prevent importing from further afield
- Toxic properties of fly ash and incinerator bottom ash
- 24/7 noise, light and odour will affect residents and wildlife
- Lack of compliance within the waste industry on sorting into recycling and residual
- Question Environment Agency's emission monitoring standards
- Build-up of pollutants in the human body, farm animals and vegetation
- Especially concerned about cadmium and other heavy metals

Campaign to Protect Rural England (CPRE) Cambridgeshire and Peterborough – **Objects**

6.51 - The incinerator would emit significantly more CO_2 equivalent than sending the same quantity of waste to landfill; there would be further emissions from vehicles
- The modernisation of the bio-waste processing and composting is welcomed
- Burning waste [with energy recovery] is only one step up the waste hierarchy than landfill
- Incineration diverts from recycling; there are better waste management methods
- Does not comply with Minerals and Waste Local Plan policies 1 and 3

- Health hazards arising from emissions of fine particulates, toxic metals and polycyclic aromatic hydrocarbons to the community and crops
- Risk of major accident including fire
- Concerned about the site's drainage
- Significant impact on the local landscape due to prominence, scale and industrial nature especially the 28 metre high chimney and plume; no amount of mitigation would overcome this
- Effect of light pollution on the night sky and wildlife
- The site is close to a dangerous partially staggered crossroads
- Carbon emissions will add to the climate emergency and are not consistent with Government targets for Net Zero.

7. Representations

7.1 Across the four rounds of consultation a total of 1091 representations were received from individuals including 68 in the first consultation in the form of a standard response produced by Bluntisham Parish Council in which they registered their support for the parish council's comments. One of the representations is from Richard Buxton Solicitors on behalf of a local residents' group made up an unspecified number of people calling themselves People Opposing Woodhurst Incinerator (POWI) (and see paragraph 7.3 below). A summary of the themes of the objections, concerns and comments of all of the representations received is contained in Appendix 2 of this report. Where an individual commented on a number of themes each theme has been counted individually. Some of the reasons for objecting are not material planning considerations but have been recorded for completeness. It should be noted that some representors selected categories given as examples on the on-line submission form with no further explanation. All but 4 of the representations object to the application in whole or in part. Three support it and one has no objections.

7.2 It is clear that the aspects of the proposed development which concern local residents the most relate to air pollution and impact on health and to traffic and transport. Some representations provided comments relating to their own personal circumstances or those of their family or other potential receptors whom they consider to be particularly vulnerable to the impacts on air quality of the proposed development by reason of location and / or pre-existing conditions. Some provided references to technical documents and research. Some provided comments relating to specific traffic and highway related matters.

7.3 On 5 January 2023 Richard Buxton Solicitors asked why their last submission on behalf of POWI (a report by Air Pollution Services sent on 30 September 2021) had not been uploaded to the WPA's website. The WPA considered it to be, like their first comments on behalf of POWI (10/09/2021), a representation not a consultee response. It is the council's policy not to make representations on planning applications public on the website primarily because of the need to redact the personal information that they contain. This is made clear on the webpage entitled "Comment on a planning application" which says:

> "Please note that representations are not made public on the website, however documents will be provided to the applicant on request. They will also be made available for members of the Planning Committee to read before the meeting on which the application made is to be decided.

However, we do not routinely publish neighbour comments on our webpages and so, although all comments received are sent to the relevant case officer and taken into consideration, they will not show on the public access pages for the planning application."

A copy of the full representations has been shared with members of the Planning Committee for consideration prior to the Planning Committee meeting.

8. Policy considerations

8.1 Section 70(2) of the Town and Country Planning Act 1990 states that "in dealing with an application for planning permission the authority shall have regard to the provisions of the development plan, so far as material to the application and any other material considerations." Section 38(6) of the Planning and Compulsory Purchase Act 2004 states that "If regard is to be had to the development plan for the purpose of any determination to be made under the planning Acts the determination must be made in accordance with the plan unless material considerations indicate otherwise." The relevant development plan policies are listed in paragraph 8.18 below and set out in full in Appendix 3.

National policy context

8.2 There is a raft of legislation, policy and targets which seek to deliver more sustainable waste management and protect the environment. These include European Union (EU) legislation such as the Industrial Emissions Directive 2010/75/EU and revised Waste Framework Directive 2008/98/EC which have been transposed into English legislation through the Waste (England and Wales) Regulations 2011, as well as national policy on waste as set out within the Waste Management Plan for England (2021). The EU Withdrawal Act 2018 maintains established environmental principles and ensures that existing EU environmental law will continue to have effect in UK law, including the Industrial Emissions Directive (IED) and BAT Conclusion Implementing Decision made under it. See Appendix 4 – Environmental permit and the role of the Environment Agency. Elements of the Environment Act 2021 have come into force including Part 1: Environmental governance. This includes the requirement for a long term target to be set in the following priority areas: air quality, water, biodiversity and resource efficiency and waste reduction. Most of Part 3: Waste and resource efficiency is in force. Biodiversity net gain is expected to become a mandatory requirement of planning permission in November 2023.

8.3 The Waste Management Plan for England (2021) and its associated documents, together with local authorities' waste local plans ensure that waste management plans are in place for the whole of the UK. It focuses on waste arisings and their management. It is a high-level, non-site specific document, providing an analysis of the current waste management situation in England and evaluates how the Plan will support implementation of the objectives and provisions of Waste (England and Wales) Regulations 2011. It sets out the Government's ambition to work towards a more sustainable and efficient approach to resource use and management.

Proximity principle

8.4 The principle of self-sufficiency and proximity is set out in paragraph 4 of Part 1 of Schedule

1 to the Waste (England and Wales) Regulations 2011. This is within the context of the requirement to establish an integrated and adequate network of waste disposal installations for recovery of mixed municipal waste collected from private households including where such collection also covers waste from other producers. The network must enable waste to be disposed of and mixed municipal waste collected form private households to be recovered in one of the nearest appropriate installations, by means of the most appropriate methods and technologies, in order to ensure a high level of protection for the environment and public health. The network must be designed to enable the UK to move towards self-sufficiency in waste disposal and the recovery of mixed municipal waste from household taking into account geographical circumstances or the need for specialised installations for certain types of waste.

Waste hierarchy

8.5 In England, the waste hierarchy is both a guide to sustainable waste management and a legal requirement, enshrined in law through the Waste (England and Wales) Regulations 2011. The waste hierarchy, which ranks options for waste management, has driven some progress towards better use of our resources. Priority goes to preventing the creation of waste in the first place, followed by preparing waste for reuse, to recycling, and then recovery including by incineration where there is energy recovery. Disposal – in landfill for example or incineration without energy recovery – is regarded as the worst option.

8.6 The 2011 Regulations require everyone involved in waste management and waste producers in England (and Wales) to, on the transfer of waste, take all reasonable measures to apply the priority order in the waste hierarchy except where for specific waste streams departing from the priority order is justified by lifecycle thinking on the overall effects of generating and managing the waste. Regulators under the Environmental Permitting (England and Wales) Regulations 2016 must exercise their relevant functions (such as granting environmental permits) for the purpose of ensuring that the waste hierarchy is applied to the generation of waste by a waste operation. To aid people to apply the waste hierarchy duty, Defra produced guidance on its application. They have also published guidance on applying the waste hierarchy to hazardous waste but although the waste hierarchy applies to healthcare waste this is discussed elsewhere in the Department of Health's Health Technical Memorandum 07-01: Safe management of healthcare waste HTM_07-01_Final.pdf (england.nhs.uk) This document refers to focus on the waste hierarchy through procurement practices, and the elimination, minimisation, recycling and recovery of waste. Defra have produced statutory guidance specific to food waste: Food and drink waste hierarchy: deal with surplus and waste (updated 1 April 2021) Food and drink waste hierarchy: deal with surplus and waste - GOV.UK (www.gov.uk)

National planning policy

8.7 Defra's Energy from Waste Guide (2014) sets out more guidance on the delivery of energy from waste facilities. It highlights key environmental, technical and economic issues to raise the level of understanding and debate around energy from waste. The guide provides clear support for the further expansion of energy from waste to manage waste which cannot be recycled.

8.8 The Government's Overarching National Policy Statement for Energy (NPS EN-1) incorporates national policy for delivering energy infrastructure:

> "3.3.10 As part of the UK's need to diversify and decarbonise electricity generation, the Government is committed to increasing dramatically the amount of renewable generation capacity (see Section 3.4). In the short to medium term, much of this new capacity is likely to be onshore and offshore wind, but increasingly it may include plant powered by the combustion of biomass and waste and the generation of electricity from wave and tidal power."

Whilst NPS EN-1 is directed at larger nationally significant infrastructure projects, the underlying principles are relevant. It is acknowledged that NPS EN-1 is a few years old but it remains the Government's national energy policy.

> *"3.4.3 Energy from Waste* (EfW) – the principal purpose of the combustion of waste, or similar processes (for example pyrolysis or gasification) is to reduce the amount of waste going to landfill in accordance with the Waste Hierarchy and to recover energy from that waste as electricity or heat. Only waste that cannot be re-used or recycled with less environmental impact and would otherwise go to landfill should be used for energy recovery."

> "3.4.4 Biomass and EfW can be used to generate 'dispatchable' power, providing peak load and base load electricity on demand. As more intermittent renewable electricity comes onto the UK grid, the ability of biomass and EfW to deliver predictable, controllable electricity is increasingly important in ensuring the security of UK supplies."

8.9 National Policy Statement for Renewable Energy Infrastructure (EN-3) deals with the combustion of biomass and waste:

> "2.5.2 The recovery of energy from the combustion of waste, where in accordance with the waste hierarchy, will play an increasingly important role in meeting the UK's energy needs. Where the waste burned is deemed renewable, this can also contribute to meeting the UK's renewable energy targets. Further, the recovery of energy from the combustion of waste forms an important element of waste management strategies in both England and Wales."

> "2.5.9 EfW generating stations take fuel that would otherwise be sent to landfill. Waste can come from municipal or commercial and industrial sources. Some of the waste suitable for such plant may comprise biodegradable waste as described in the third bullet point of 2.5.5. This may also include solid recovered fuel (SRF) from waste. Where the proposed fuel is a prepared fuel, such as SRF, conformity of the waste / biomass with the waste hierarchy may have been considered by the Waste Authority from which the feedstock originated as part of their assessment of their waste management solution. The IPC [Infrastructure Planning Commission] should take account of any assessment in considering the application."

> "2.5.18 Waste combustion plants are unlike other electricity generating power stations in that they have two roles: treatment of waste and recovery of energy. The commercial rationale for waste combustion plants will include both the gate fee received per tonne of waste handled and income received from energy recovery."

> "2.5.19 Like any combustion generating station, operators secure fuel through

contracts. Local authorities issue municipal waste contracts which are often long term (up to 25 years). Contracts to manage private sector wastes are, generally, shorter. The operator may decide to focus on either public or private sector waste treatment contracts, or a combination of the two."

8.10 On 30 March 2023 the Government issued revised draft National Policy Statements (NPSs) inviting comments by 25 May 2023. The key policy changes relate to offshore wind; aviation and defence interests; and new electricity network infrastructure.

National Planning Policy Framework

8.11 The National Planning Policy Framework July 2021 (NPPF) sets out the Government's planning policies and how these are expected to be applied. At its heart is a presumption in favour of sustainable development (paragraph 11). It states that "For decision-taking this means:

c) approving development proposals that accord with an up-to-date development plan without delay; or

d) where there are no relevant development plan policies, or the policies which are most relevant for determining the application are out of date, granting permission unless:

i) the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or

ii) any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies of this Framework taken as a whole."

8.12 Paragraph 2 reminds us that "Planning law requires that applications for planning permission be determined in accordance with the development plan, unless material considerations indicate otherwise." Paragraph 8 sets out three interdependent overarching objectives of the planning system to achieve sustainable development: economic, social and environmental.

8.13 Other paragraphs of the NPPF considered to be relevant to the proposal are listed below and set out in full in Appendix 3.

Paragraphs 7, 8, 11 Achieving sustainable development
Paragraphs 38 & 47 Decision-making
Paragraph 56 & 57 Planning conditions and obligations
Paragraph 81 Building a strong, competitive economy
Paragraphs 84 & 85 Supporting a prosperous rural economy
Paragraphs 104, 105, 110 – 113 Promoting sustainable transport
Paragraphs 126, 130, 131 & 134 Achieving well-designed places
Paragraphs 152, 154 & 158 Planning for climate change
Paragraphs 167 & 169 Planning and flood risk
Paragraph 174 Conserving and enhancing the natural environment
Paragraph 180 Habitats and biodiversity
Paragraphs 185, 186 & 188 Ground conditions and pollution
Paragraph 189 Conserving the historic environment Heritage assets
Paragraphs 195 & 199 - 203 Proposals affecting heritage assets

8.14 Paragraph 4 states that the NPPF should be read in conjunction with the Government's planning policy for waste, the National Planning Policy for Waste (October 2014) (NPPW).

National Planning Policy for Waste

8.15 Paragraph 1 of the NPPW includes the following as playing a role in delivering the country's waste ambitions through:

- delivery of sustainable development and resource efficiency, including provision of modern infrastructure, local employment opportunities and wider climate change benefits, by driving waste management up the waste hierarchy;
- ensuring that waste management is considered alongside other spatial planning concerns, such as housing and transport, recognising the positive contribution that waste management can make to the development of sustainable communities;
- providing a framework in which communities and businesses are engaged with and take more responsibility for their own waste, including by enabling waste to be disposed of or, in the case of mixed municipal waste from households, recovered, in line with the proximity principle;
- helping to secure the re-use, recovery or disposal of waste without endangering human health and without harming the environment; and
- ensuring the design and layout of new residential and commercial development and other infrastructure (such as safe and reliable transport links) complements sustainable waste management, including the provision of appropriate storage and segregation facilities to facilitate high quality collections of waste.

Paragraph 7 states that "When determining planning applications, waste planning authorities should:

- only expect applicants to demonstrate the quantitative or market need for new or enhanced waste management facilities where proposals are not consistent with an up-to-date Local Plan. In such cases, waste planning authorities should consider the extent to which the capacity of existing operational facilities would satisfy any identified need;
- recognise that proposals for waste management facilities such as incinerators that cut across up-to-date Local Plans reflecting the vision and aspiration of local communities can give rise to justifiable frustration, and expect applicants to demonstrate that waste disposal facilities not in line with the Local Plan, will not undermine the objectives of the Local Plan through prejudicing movement up the waste hierarchy;
- consider the likely impact on the local environment and on amenity against the criteria set out in Appendix B and the locational implications of any advice on health from the relevant health bodies. Waste planning authorities should avoid carrying out their own detailed assessment of epidemiological and other health studies;
- ensure that waste management facilities in themselves are well-designed, so that they contribute positively to the character and quality of the area in which they are located;
- concern themselves with implementing the planning strategy in the Local Plan and not with the control of processes which are a matter for the pollution control authorities. Waste planning authorities should work on the assumption that the relevant pollution control regime will be properly applied and enforced;
- ensure that land raising or landfill sites are restored to beneficial after uses at the earliest opportunity and to high environmental standards through the application of appropriate conditions where necessary.

8.16 Appendix B of the NPPW states that in determining planning applications, waste planning authorities should consider the following factors:
a. protection of water quality and resources and flood risk management
b. land instability
c. landscape and visual impacts
d. nature conservation
e. conserving the historic environment
f. traffic and access
g. air emissions, including dust
h. odours
i. vermin and birds
j. noise, light and vibration
k. litter
l. potential land use conflict
Where relevant to the current proposal, these matters are covered later in this report.

Planning Practice Guidance (PPG) (live document)

8.17 This is a material consideration and the most relevant to the consideration of this planning application are the sections on Air quality, Climate change, Natural environment, Noise, Renewable and low carbon energy, Travel plans, Transport Assessments and Statements, and Waste.

The development plan

8.18 The development plan comprises the Cambridgeshire and Peterborough Minerals and Waste Local Plan (adopted July 2021) and the Huntingdonshire Local Plan (adopted May 2019).

Cambridgeshire and Peterborough Minerals and Waste Local Plan (MWLP)

Policy 1: Sustainable Development and Climate Change
Policy 3: Waste Management Needs
Policy 4: Providing for Waste Management Needs
Policy 10: Waste Management Areas (WMAs)
Policy 17: Design
Policy 18: Amenity Considerations
Policy 20: Biodiversity and Geodiversity
Policy 21: The Historic Environment
Policy 22: Flood and Water Management
Policy 23: Traffic, Highways and Rights of Way
Policy 24: Sustainable Use of Soils
Policy 25: Aerodrome Safeguarding
Appendix 3: The Location and Design of Waste Management Facilities

Huntingdonshire Local Plan (HLP)

LP2 Strategy for Development
LP5 Flood risk
LP10 The Countryside

LP11 Design Context
LP12 Design Implementation
LP14 Amenity
LP15 Surface Water
LP16 Sustainable Travel
LP17 Parking Provision and Vehicle Movement
LP19 Rural Economy
LP29 Health Impact Assessment
LP30 Biodiversity and Geodiversity
LP31 Trees, Woodland, Hedges and Hedgerows
LP34 Heritage Assets and their Settings
LP35 Renewable and Low Carbon Energy
LP36 Air Quality
LP37 Ground contamination and groundwater pollution

Other Planning Documents

8.19 Cambridgeshire Flood & Water Supplementary Planning Document (adopted 14 July 2016) (the FWSPD)

Huntingdonshire Landscape and Townscape SPD (March 2022)

9. The principle of the development

9.1 The purpose of one of the principal parts of the proposed development is to use waste, most of which would already be brought to the Envar site for composting, to generate energy (biogas) by means of dry AD. Clinical waste would be a new waste stream which would be disposed of by combustion with the heat energy captured and used within the proposed AD plant. The principle of recovering energy from waste would contribute towards addressing climate change and is supported by national and development planning policies. HLP policy LP35 supports renewable or low carbon (non-wind) energy generating schemes provided there are no unacceptable adverse impacts. Other elements of the proposed development such as the waste transfer building and biomass store would make existing waste management activities already carried out at the site more efficient.

9.2 NPPF paragraph 81 supports the investment in, expansion and adaptation of businesses and paragraph 84 states that planning decisions should “enable the growth and expansion of all types of business in rural areas, both through the conversion of existing buildings and well-designed new buildings.” One of the strategies for development in HLP policy LP2 is to “Support a thriving rural economy”.

9.3 The principle of the proposed development would be consistent with broad policy aims. It must now be considered in more detail whether to carry it out on the Envar site would comply with planning policy in respect of location and, if it does, whether any adverse impacts would be significant enough to outweigh the benefits of using waste to generate energy.

9.4 MWLP Policy 1: Sustainable Development and Climate Change, requires that mineral and waste management proposals will be assessed against the overarching principle of whether

the proposal would play an active role in guiding development towards sustainable solutions. The policy requires that an applicant should also demonstrate how the location, design, site operation and transportation related to the development will help reduce greenhouse gas emissions (including through the adoption of emission reduction measures based on the principles of the energy hierarchy); and take into account any significant impacts on human health and wellbeing and on air quality.

9.5 The policy requires that for waste management proposals an applicant should demonstrate how the principles of the waste hierarchy have been considered and addressed; and broadly quantify the reduction in carbon dioxide and other relevant greenhouse gases e.g. methane that should be achieved as part of the proposal, and how this will be monitored and addressed in future. This is covered in section 15 of this report.

Waste Management Needs - MWLP Policy 3

9.6 MWLP Policy 3 deals with waste management needs. No site-specific allocations for new waste management facilities have been identified in the MWLP. Paragraph 3.41 states that

> "However, the Plan's indicative capacity needs do not form a ceiling; where justified and in line with the wider aims and policies of this plan the Councils would be supportive of opportunities for additional capacity to be approved for a range of waste management methods where this will drive waste up the waste management hierarchy".

9.7 The table of waste management needs which is incorporated into Policy 3 of the MWLP states under the category of 'Treatment and energy recovery processes (AD, energy from waste and other physical /chemical treatment processes) that in respect of Mixed – Municipal Commercial and Industrial waste in the plan area (Cambridgeshire and Peterborough) the forecast arisings were 226,000 tpa in 2021 rising to 416,000 tpa in 2036. The table also shows that taking into account existing operational capacity there is a capacity surplus in 2021 of 124,000 tpa which would by 2031 become a capacity gap of 57,000 tpa and by 2036 80,000 tpa. Taking into account sites that have planning permission but are not operational there would be a capacity surplus for the entire plan period i.e. until 2036. The table in Policy 3 does not contain estimates for an additional requirement for the management of hazardous waste which is considered separately to the more common types of waste set out in the table of Policy 3. In the Plan it is explained that owing to the specialist nature of hazardous waste management, these facilities tend to treat waste from larger areas than non-hazardous waste management facilities. In the supporting text of Policy 3, paragraph 3.38 explains:

> "The plan area benefits from an existing network of waste management facilities, with this management capacity significantly contributing towards the identified future need. The difference between the existing capacity (including permitted sites yet to become operational) and identified need is referred to as the capacity gap, or future need. Overall, the plan area is relatively well placed in terms of moving towards achieving net self-sufficiency. Our evidence indicates that there is the potential need for materials recycling, hazardous recycling (recovery) and hazardous disposal capacity (see the WNA, June 2019) [Waste Needs Assessment June 2019]. Depending on individual site operations for sites undertaking transfer and materials recycling functions the capacity gap may be reduced (as only 25% of the operational

throughput has been assumed to contribute towards materials recycling capacity). Regarding hazardous wastes, these wastes tend to be generated in lower quantities and are managed at a wider scale to account for economies of scale and operational requirements. A capacity gap was also identified for treatment and other forms of recovery, however permitted sites that are not yet operational (considered likely to be operational within the first half of the plan period) will act to take up the capacity gap."

9.8 This additional requirement for hazardous waste management was identified in paragraph 177 of the Waste Needs Assessment 2019: "There is a potential need for hazardous waste recycling capacity (0.018Mtpa in 2017 increasing to 0.026Mtpa by 2036)." This was based on an assessment of existing types of hazardous waste that were being generated (arisings) at the time of the assessment. Paragraph 177 concludes by saying that "The Plan's policies will enable proposals for such development to come forward." Paragraph 183 states in relation to hazardous disposal (i.e. landfill): "Hazardous waste for disposal (apart from SNRHWs) [Stable Non-reactive hazardous wastes] is currently exported for disposal. For the reasons outlined earlier regarding hazardous waste it is not possible for every WPA to achieve self-sufficiency with respect to hazardous wastes." It should be noted that the waste needs assessment was based on wastes identified as hazardous under the European Waste Catalogue, and this does not always align with the wastes that waste management facilities are allowed to accept. For example, some larger energy from waste plants are allowed to take some non-hazardous clinical wastes, but not hazardous clinical waste. The proposed clinical EFW facility would accept both hazardous and non-hazardous clinical waste. It is considered that the figures presented in the table of Policy 3 serve as reliable estimate of the scale of the requirement for certain types of waste but cannot provide complete accuracy for reasons as set out in the WNA 2019.

9.9 The Envar site has planning permission to accept up to 200,000 tpa of waste. There is no restriction on how much of the 200,000 tpa of waste is made up of each waste stream other than the operational capacity of the plant and buildings. When the planning application for waste transfer and biomass boiler was being considered (ref. H/5005/17/CW) the split was approximately:

- Composting (in vessel and open windrow) 75% 150,000 tpa
- Waste transfer 25,000 tpa
- Biomass boiler (wood waste) 6,000 tpa
- Paper sludges (dried using heat from biomass boiler) 20,000 tpa

The transport statement (Lennon Transport Planning June 2021) appears to have used the quantities stated in the environmental permit as the permitted throughput:

- Green waste for composting 135,000 tpa
- Waste drying process 45,000 tpa
- Waste treatment and transfer 20,000 tpa

9.10 Policy 3 concludes stating that:

> "The net capacity figures in the table above are not ceilings for recycling, treatment or recovery of waste. As such, proposals will, in principle (and provided they are in accordance with Policy 4: Providing for Waste Management), be supported if any of the following scenarios apply:

(a) it would assist in closing a gap identified in the table, provided such a gap has not already been demonstrably closed; or
(b) it would assist in closing a new gap identified in the future, with such identification to be set out in the annual monitoring of the Plan; or
(c) it moves waste capacity already identified in the above table up the waste hierarchy."

9.11 A waste transfer station is an intermediary stage between the producers and collectors of waste and the sites that treat or dispose of it. The purpose is to enable small quantities of pre-segregated waste streams to be taken to a relatively local facility to be 'bulked up' into larger loads which are then sent to specialist facilities for treatment or disposal. One element of the current application is to relocate the existing waste transfer operation into a new building with a similar throughput of 20 – 25,000 tpa. There would, as now, be an element of waste treatment such as baling light waste and sorting mixed loads so it would probably be more accurate to describe the building as a waste transfer and treatment facility as in the environmental permit. The effect of the new waste transfer and treatment building would be neutral in terms of capacity and moving waste up the waste hierarchy.

9.12 Another element of the current proposal is the erection of a woodchip biomass fuel storage building. In 2017 it was envisaged that the heat generated by using waste wood as a fuel would be used to dry paper sludges. This did not happen and instead the heat is used to dry wood chip to produce a fuel-grade chip. The current application states that the biomass boilers are fueled by approximately 20,000 tpa wood chip although the environmental permit allows up to 45,000 tpa. The purpose of the proposed building is to protect the wood chip from the weather and maximise the amount of energy that can be produced. The capacity of the biomass boilers will not increase so the biomass fuel storage building would be neutral in that it would neither reduce nor increase capacity or move waste up the waste hierarchy.

9.13 The biomass boiler, proposed dry AD plant and proposed healthcare ERF would all use waste to generate energy. The applicant's planning statement states that proposed development would handle (tpa):

- Dry AD 70,000
- Waste transfer station 20,000
- Biomass 20,000
- Clinical waste 12,000

Assuming a maximum 200,000 tpa throughput this would leave 78,000 tpa capacity for green waste for composting.

9.14 The applicant's transport statement (June 2021) provides indicative estimates for the types of waste streams that Envar proposes to accept and is broadly consistent with the figures given in the planning statement although the total is 192,000 tpa.

- Green waste 135,000 (dry AD & composting)
- Biomass drying 25,000
- Waste transfer station 20,000
- Clinical waste treatment 12,000

Compared to the likely 2017 and current throughput the proposed development would effectively accept 12,000 tpa healthcare in place of other waste streams. The most significant waste stream would still be green and food waste but under the current proposal, approximately 50% i.e. 70,000 tpa annum would be treated by dry AD instead of being composted. The transport impacts of this are discussed later in this report.

9.15 Composting green waste in open windrows and green waste and food waste in vessel, has one useful output, the compost which is used as a soil improver. Composting is classed as recycling if the compost product meets quality protocols so is in the middle of the waste hierarchy. The proposed dry AD process can be regarded mainly as recycling; it would, as set out in paragraph 3.2 above have two principal outputs, bio-methane and the digestate which after conditioning is similar to a compost product. Some of the digestate would be further processed to produce fertilizer pellets. It is considered that the dry AD should be regarded as moving waste that is currently composted up the hierarchy which is consistent with Defra's approach to food waste AD.

9.16 As set out in paragraph 9.10 above, MWLP Policy 3 is supportive of proposals that meet one of criteria a to c provided they are in accordance with Policy 4. The proposed new buildings would not increase the capacity of the waste transfer and treatment operations, or the capacity of the existing biomass boilers so would not close any capacity gap or move waste up the waste hierarchy. The proposed dry AD plant would not increase the capacity of the site for green and food waste but 70,000 tpa or 35% of the total site throughput would be moved up the waste hierarchy as set out in paragraph 9.15 above. The overall capacity of the existing waste streams would be reduced by 12,000 tpa (6%) and replaced by healthcare waste. Using healthcare waste to generate energy by incineration would be at least neutral and has the potential to move waste up the waste hierarchy if it diverted waste from landfill or from incineration without energy recovery. This matter will be discussed in detail later in section 10 of this report. It is considered that the proposed development which comprises a number of interconnected and interdependent elements would, if taken as a whole, would move a significant proportion of the green and food waste accepted at the Envar site and already accounted for in the table in MWLP Policy 3 up the waste hierarchy so would be in accordance with criterion (c). Compliance with Policy 3 is dependent on the proposal also being in accordance with MWLP Policy 4.

Providing for Waste Management – MWLP Policy 4

9.17 MWLP Policy 4 states that:

> "In line with Objective 2 of this Plan, the Councils aim to actively encourage and will in principle support the sustainable management of waste, which includes encouraging waste to move as far up the waste hierarchy as possible, whilst also ensuring net self-sufficiency over the Plan area. In order to ensure this aim can be met, waste management proposals must demonstrably contribute towards sustainable waste management by moving waste up the waste hierarchy; and proposals for disposal must demonstrate that the waste has been pre-treated and cannot practically be recycled. Proposals which do not comply with this strategy for waste management development must also demonstrate the quantitative need for the development."

9.18 Policy 4 goes on to state that:

> "Unless otherwise supported by policy provision under one of the sub-headings in the second half of this Policy, the locational strategy of this Plan is that new or extended waste management facilities should be located within the settlement boundary* of the existing or planned main urban areas of: Cambourne, Cambridge, Chatteris, Ely, Huntingdon, Littleport, March, Northstowe, Peterborough, Ramsey, Soham, St. Ives, St. Neots, Waterbeach New Town, Whittlesey or Wisbech"
>
> "*a 'settlement boundary' is that which is defined on the relevant Policies Map for the area (e.g. a village envelope or urban area boundary). If no such boundary is identified on the Policies Map, it will constitute the edge of the built form of the settlement, or should an edge be defined in words (rather than map form) in a Local or Neighbourhood Plan, then that definition will be used in that local area."

9.19 The Envar site is outside any settlement which would under the HLP definition be a 'built up area'. It should therefore be considered to be a countryside location. It has been suggested by an individual objector that the following paragraph in part 2 of MWLP Policy 4 is applicable and that the proposed development would not comply with it:

> "Waste Management Facilities – Rural Areas:
> Only waste management facilities which are located on a farm holding, and where the proposal is to facilitate agricultural waste recycling or recovery (the majority of which is generated by that farm holding) will, in principle, be supported. Outdoor composting proposals which require the importation of waste material will be determined in accordance with wider policies of the Development Plan."

9.20 It is agreed that the current proposal would not comply with that part of Policy 4. Policy 4 provides support where a proposal falls within *one* of the subheadings in the second half of the policy and does not need to meet the criteria of another. It will be discussed later in this section of the report why the proposed development should be considered in the context of another paragraph within part 2 of Policy 4.

Development in the countryside

9.21 As noted above, the Envar site is in the countryside and HLP policy LP10 states that "Development in the countryside will be restricted to the limited and specific opportunities as provided for in other policies of this plan." HLP policy LP19: Rural Economy has two limbs which relate to the expansion of existing businesses. The first supports the expansion of established businesses within their existing operational sites and the second supports the expansion of established industrial or rural businesses on land outside of their existing operational site in the open countryside where four criteria are met. The current proposal falls mostly within and partly outside the existing operational site which is discussed below.

9.22 The main purpose of this section of the report is to establish the status of the existing operational site in the context of HLP policy LP19. Most of the Envar site is identified on the MWLP Policies Map as a Waste Management Area (WMA) shown hatched in black on the extract, Figure 5 below. WMAs identify existing or committed waste management facilities that make a significant contribution to managing any waste stream and for that reason is protected from being compromised by inappropriate non-waste development by MWLP Policy 16.

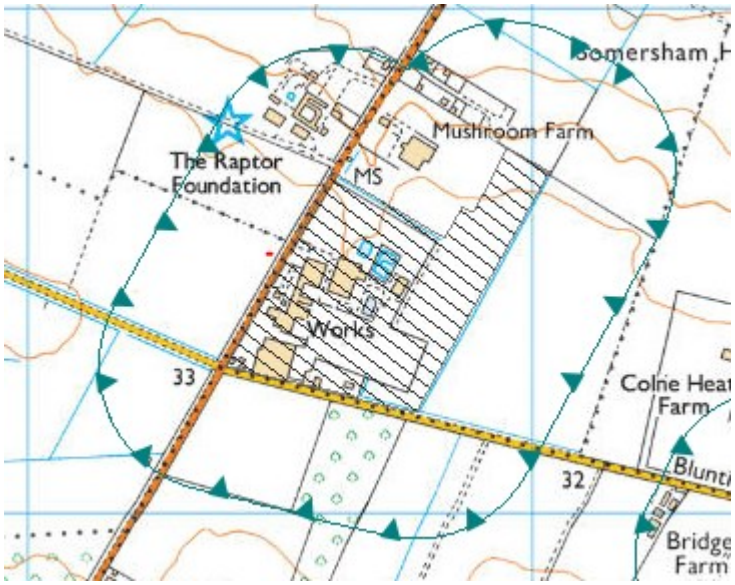


Figure 5

9.23 For the most part the WMA reflects the land that has planning permission for waste management uses. It is not wholly consistent in that the northeastern-most field does not have planning permission except for the bund around the northwest, northeast and south east boundaries with third party land shown on the extract from the layout plan approved by the WPA under planning permission H/5005/17/CW, Figure 6 below. The land immediately to the south of the former mushroom farm also only has planning permission for the perimeter bund as shown on the plan extract and is not included in the WMA.

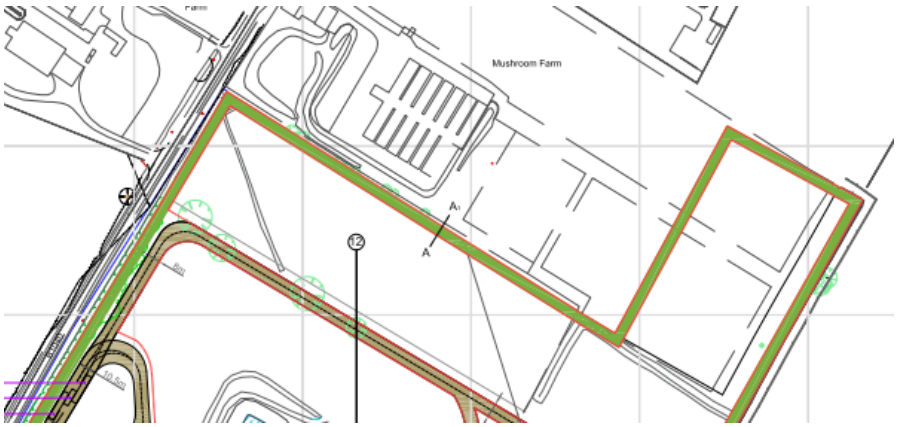


Figure 6

9.24 The reason for the position of the perimeter bund, the purpose of which was to improve the security of the site, was the status of the land in the Cambridgeshire and Peterborough Minerals and Waste Site Specific Proposals Development Plan Document (February 2012) which allocated the previously undeveloped land to the east and north of the then permitted site, as shown in pink on the plan extract, Figure 7 below, for waste recycling and recovery.

Figure 7

9.25 Most of the development proposed in the current planning application would be on land with planning permission for waste management use so would be within the existing operational site. Two elements of the proposed development would not: The four replacement surface water storage lagoons and waste water treatment plant referred to in paragraph 3.15 and part of the extension to the concrete pad referred to in paragraph 3.16 would be located on land within the perimeter bund but which does not have planning permission for waste management development so would be outside the current planning permission boundary.

9.26 Taking the proposed development as a whole it is considered reasonable to apply the first limb of HLP policy LP19 for the following reasons. First, the perimeter bunds were installed to secure the site and clearly define its limits although it is recognised that they enclose land that does not have planning permission for waste management use. Second, other than the waste water treatment plant all the proposed new built development would be on land within the current planning permission boundary. It is not considered reasonable to separate out these elements of the development and apply the second limb of the policy to them or to apply the second limb to the whole proposal when the vast majority of the development would be within the existing site. It is therefore considered that the proposed development would be supported by the first limb of policy LP19 and would comply with the first part of policy LP10 which refers to the “specific opportunities as provided for in other policies of this plan. However, if it is wrong to consider the proposal under the first limb of policy LP19 the proposal could be considered under the second limb as discussed below.

9.27 As noted in paragraph 9.21 above, HLP policy LP19 gives support to the expansion of established industrial or rural businesses on land outside of their existing operational sites where criteria are met. LP19 (e) requires opportunities for the reuse of existing buildings to be explored and replacement or new build only where no suitable reuse opportunities are available. The proposed dry AD plant would in part reuse existing composting buildings and the digesters and biofilter would replace redundant composting tunnels which would be demolished. None of the other existing buildings are redundant and it is considered that the proposal would comply with LP19 (e).

9.28 LP19 (f) requires proposals to make more efficient use of land within the existing site boundary unless it is not suitable for the proposed use. In principle two of the proposed

replacement lagoons could be located on the land immediately to the east which is within the area covered by planning permission H/5006/17/CW but is outside the permitted area of hardstanding. The other two could in principle be located in the northeastern-most field which forms part of the WMA in the MWLP but does not, apart from the perimeter bund have planning permission for waste management development. However, from an operational point of view this would be sub-optimal given their relationship to the other parts of the site including being on slightly lower land which would minimise the amount of excavation that would be required. The proposed extension of the concrete pad described in paragraph 3.16 above would be partly within land with planning permission for waste management use (ref. no. H/5006/17/CW) and partly without but would all be within the WMA referred to in paragraph 9.23 above.

9.29 HLP policy LP19 (g) requires development outside an existing operational site to avoid the irreversible loss of the best and most versatile agricultural land (Grade 1 to 3a) particularly Grade 1 where possible and use land of lower in preference to land of higher agricultural value. HLP policy LP10 (a) and MWLP Policy 24 have similar aims. Approximately 2.5 hectares of the 18.5 hectare Envar site does not have planning permission for waste management use and if the current proposal were to go ahead would result in the loss of approximately 2.5 hectares of Grade 2 land. Whilst the area where the extension to the concrete pad is proposed (approximately 1 hectare) could theoretically be farmed as an extension of the arable field to the east, the approximately 1.5 hectares where the new surface water lagoons would be developed would be isolated from any other agricultural land making it uneconomic to put to any highly productive agricultural use. The whole of the Envar site is within an area of Grade 2 agricultural land so it would not be possible to extend the site on land of lower grade.

9.30 HLP policy LP19 (h) requires the scale, character and siting of the proposal not to have a detrimental impact on its immediate surroundings and the wider landscape. HLP policy LP10 requires that development in the countryside must recognise the intrinsic character and beauty of the countryside. This will be discussed in detail in section 13 of this report where it is concluded that the proposed development, in particular the new buildings and healthcare ERF stack, would have an adverse landscape impact. For this reason, it is considered that the proposed development if considered as a whole would not comply with all criteria of the second limb of HLP policy LP19. Policy LP10 requires development in the countryside not to give rise to noise, odour or obtrusive light or other impacts that would adversely affect the use and enjoyment of the countryside by others. These matters are discussed in detail later in this report where it is concluded that adverse impacts would be mitigated.

Co-location

9.31 As set out in paragraph 9.20 MWLP Policy 4 provides support where a proposal falls within *one* of the subheadings in the second half of the policy and does not need to meet the criteria of another. One of those subheadings is co-location.

Paragraph 3.49 of the MWLP states:

“The benefits of co-location of waste management facilities is also acknowledged by the Councils, particularly where facilities can show why co-location would be beneficial or can complement existing waste streams e.g. where outputs of one recycling waste stream can

benefit further recycling or recovery from waste that is already taken to the original waste site or where the synergies of the operations can be understood and justified; which is why a locational criteria based assessment is not required in such instances by the second half of Policy 4. For the avoidance of doubt, such benefits will need to be considered on a case-by-case basis, and the policy should not be read as a blanket approval for further waste management extensions or new sites or facilities, just because a waste site already exists in the area."

Policy 4 states:

"Waste Management Facilities – Co-location
Opportunities to co-locate waste management facilities together, or with complementary activities, as explained within the supporting text for this policy will, in principle, be supported, particularly where relating to:
• employment sites;
• industrial estates;
• mineral extraction and processing sites (for temporary proposals for aggregate and/or inert recycling facilities associated with extraction and processing and, where benefits are demonstrated, to the restoration of a mineral site); or
• integrated waste management development that has specific links to the existing waste management operations already taking place on a site.

Proposals for co-location will not be supported if the benefits do not outweigh the harm when assessed against the wider policies of the Development Plan."

9.32 The proposed development would co-locate the proposed new waste management facilities (the dry AD plant and healthcare waste ERF) and the improved waste transfer and biomass operations together with the existing waste management development. The PFPF would be a complementary activity. Co-location of waste management facilities together is given support in principle in Policy 4. Policy 4 goes on to give particular support for co-location at the types of sites listed. As set out in section 3 above, some of elements of the proposed development would be inter-related and/or related to the existing waste management operations. The proposed dry AD plant would use the same waste stream as the existing in vessel and open windrow composting operations and some of its feedstock would come from the waste transfer station. It would replace in vessel composting and divert approximately half the green and food waste to a process that would generate renewable energy which would be fed into the gas grid and to fuel road-going vehicles which, as set out in paragraph 9.15 above, is considered preferable to composting. The dry AD plant would use heat from the proposed ERF to power the biological processes and to dry the digestate. Some of the digestate would be used in the proposed PFPF which would also use heat generated by the ERF. Some of the wood feedstock would come from the waste transfer station.

9.33 Each element of waste management described above would each be linked to another in terms of source of feedstock and/or energy. It is considered that the proposed development would represent 'integrated waste management development that has specific links to the existing waste management operations already taking place' and if developed, the Envar site would be a good example of the co-location of complementary and interdependent waste management processes. It is supported in general and in particular by the co-location subheading of the second half of Policy 4. As explained in paragraph 3.49 of the MWLP

and in Policy 4 itself, where a proposal is supported by the co-location provision in the second half of the policy, the locational criteria in the first half of the policy do not apply. It is considered that Policy 4 provides support for the principle of development, subject to consideration of whether the benefits outweigh any identified harm when assessed against wider Development Plan policies. Those policies will be analysed later in this report.

Conclusions on the principle of the proposed development

9.34 As set out in paragraphs 8.7 and 8.8 above, at a national level there is support in principle for using waste to generate energy: in Defra's Energy from Waste Guide (2014) which provides clear support for the further expansion of energy from waste to manage waste which cannot be recycled and in NPS EN-1 which recognises the contribution that combustion of biomass and waste can make to diversified and renewable electricity generation. HLP policy LP35 supports the principle of renewable energy generating schemes. HLP policy LPL10 seeks to restrict development in the countryside but policy LP19 supports the expansion of established businesses within their existing operational sites. As set out in paragraph 9.26 it is considered that the proposed development complies with the first limb of policy LP19. If it were to be considered against the second limb it would fail to comply with criterion (h) because of the adverse landscape impact.

9.35 The Envar site already undertakes a range of waste management operations, principally in terms of volume, green waste for composting. It is one of a few existing permanent waste management (non-landfill) sites within Cambridgeshire and Peterborough that is large enough to accommodate a range of waste management processes. It is considered that the Envar site has the potential to improve the means of handing existing waste streams and the outputs from them with new development within and with a small extension to its operational boundary. The proposed new waste transfer station, biomass storage would enable the more effective handling of existing waste streams. The proposed dry AD plant would enable approximately 50% of the green and food waste streams to generate energy as well as produce a soil improver. The proposed PFPF would enable some of the output from the dry AD plant to be converted into a fertiliser. The proposed healthcare ERF would replace up to 12,000 tpa (6%) of the site's throughput with a new waste stream. The heat generated would be used in the dry AD plant and the PFPF. It could move non-hazardous 'offensive' healthcare waste that is landfilled up the waste hierarchy and provide an alternative facility in the East of England for hazardous clinical waste which is currently being disposed of nationwide.

9.36 It is acknowledged that if the proposal was to be assessed under the second limb of HLP policy 19 the proposal would be supported in principle by MWLP policies 3 and 4 subject to the benefits outweighing any harm but not by HLP policies 10 and 19. Section 38 (5) of the Planning and Compulsory Purchase Act 2004 states that "If to any extent a policy contained in a development plan for an area conflicts with another policy in the development plan the conflict must be resolved in favour of the policy which is contained in the last document to become part of the development plan." For this reason, it is considered that MWLP policies 3 and 4 should carry the most weight and for the reasons set out in paragraph 9.32 it is considered that the proposed development would be a good example of co-location which would be in accordance with MWLP Policy 4 and would move waste up the waste hierarchy which so would be in accordance with MWLP Policy 3 and Policy 4 so should be supported in principle on this site.

9.37 However, MWLP Policy 4 states “Proposals for co-location will not be supported if the benefits do not outweigh the harm when assessed against the wider policies of the Development Plan.” The next sections of this report will consider the proposed development in the context of those wider policies. The support in principle for renewable energy generation schemes in HLP policy LP35 is qualified by the need for it to be demonstrated that all potential adverse impacts are or can be made acceptable.

10. The healthcare waste ERF

10.1 This part of the development is clearly of the most concern to local residents. As well as potential impacts on air quality and health, concern has been expressed that if contracts are not won to accept waste from local sources, the feedstock would be drawn from a wide area to meet a minimum operational capacity with the consequent impacts from long-distance haulage. It has also been raised that providing incineration capacity would deter the healthcare sector from using reusable or recyclable items. For these reasons it will be discussed in detail.

10.2 As set out at paragraph 9.9 the total quantity of waste that may be accepted at the Envar site is restricted by planning condition to 200,000 tpa. The planning permissions that were granted in 2017 also restrict the catchment area from which the waste may be drawn:

> “Not less than 40% by weight of wastes accepted at the waste management site outlined in blue on drawing no. GPP/E/H/17/01 Rev 4 The Heath, Woodhurst, Huntingdon PE28 3BS Existing Site Layout Plan in any 12 month period shall be sourced from the East of England Region. The East of England means the counties of Norfolk, Suffolk, Cambridgeshire, Essex, Hertfordshire, Bedfordshire and Northamptonshire together with the unitary authorities of Peterborough, Southend on Sea, Milton Keynes and Luton. The operator shall endeavour that within 5 years of the date of this permission at least 25% by weight of wastes shall be procured from a 40 kilometre catchment area of the site and the administrative areas of Cambridgeshire and Peterborough as shown on ‘Plan CCC1 - Waste Catchment Area’. Waste from a waste transfer station within the defined catchment area shown on ‘Plan CCC1 - Waste Catchment Area’ shall be regarded as arising from within the catchment area.
>
> *Reason: To ensure that the facility is managing a large percentage of local waste arisings in accordance with policy CS29 of Cambridgeshire and Peterborough Minerals and Waste Core Strategy (July 2011) and that the situation is kept under review to help meet the monitoring requirement of the Core Strategy.”*

10.3 The condition does not differentiate between the waste streams which, as already noted, were when the 2017 applications were considered approximately 75% green and food waste. In the current application the applicants have stated that they would source the feedstock for the healthcare ERF as far as possible from within Cambridgeshire and Peterborough (paragraph 4.5.29 Planning Statement). The Clinical Waste Market: Initial Assessment (12th November 2020) was based on sourcing 25% by weight from within a 40 km catchment area and Cambridgeshire and Peterborough and 40% from East of England (including Cambridgeshire and Peterborough) although in this document they appear to have assumed an annual throughput of 20,000 tonnes rather than the 12,000 tpa that is

proposed and is based on a throughput of around 2 tonnes per hour. The applicant has stated that if only a smaller quantity of feedstock is available the healthcare ERF could operate with a throughput of 1 tonne per hour
which would suggest an annual throughput of 6,000 tpa.

10.4 The requirement to "endeavour" to within 5 years procure at least 25% of waste from a 40 kilometre catchment area of the site and the administrative areas of Cambridgeshire and Peterborough is only an aspirational target. If planning permission were to be granted and the applicants' proportion of waste sourced from Cambridgeshire and Peterborough and from the East of England the subject of an absolute requirement in a planning condition this would make the sourcing of healthcare waste more restrictive than the other waste streams. As noted in paragraph 8.4 above the Waste Regulations 2011 recognises that specialised installations are needed for certain types of waste. Paragraph 3.38 of the MWLP states "Regarding hazardous wastes, these wastes tend to be generated in lower quantities and are managed at a wider scale to account for economies of scale and operational requirements." The nature and likely availability of the healthcare ERF feedstock from within Cambridgeshire and Peterborough and the East of England will be examined in the following section of the report.

10.5 The applicant's description of the waste streams is set out in paragraph 3.7 above. At this point it is considered necessary to establish what healthcare waste is and what elements of it would be the feedstock for the proposed ERF. According to 'Healthcare waste: appropriate measures for permitted facilities' (Environment Agency 8 December 2021):

> "Healthcare waste is waste produced during human or animal healthcare, or related research activities. It covers both clinical and offensive waste.
>
> Wastes produced by healthcare in the community, and similar types of waste produced by non-healthcare activities are included, for example:
> - cosmetic body piercing and body art
> - non-medicinal procedures in the hair and beauty sector
> - substance abuse
> - crime scene clean-up"

Clinical waste is defined in Schedule 1 of The Controlled Waste (England and Wales) Regulations 2012 as:

> "waste from a healthcare activity (including veterinary healthcare) that—
> (a)contains viable micro-organisms or their toxins which are known or reliably believed to cause disease in humans or other living organisms,
> (b)contains or is contaminated with a medicine that contains a biologically active pharmaceutical agent, or
> (c)is a sharp, or a body fluid or other biological material (including human and animal tissue) containing or contaminated with a dangerous substance within the meaning of Council Directive 67/548/EEC on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances,

and waste of a similar nature from a non-healthcare activity"

Offensive waste is defined as:

> "waste that—
> (a) is not clinical waste,

(b) contains body fluids, secretions or excretions, and
(c) falls within code 18 01 04, 18 02 03 or 20 01 99 in Schedule 1 to—
(i) the List of Wastes (England) Regulations 2005, in relation to England, or
(ii) the List of Wastes (Wales) Regulations 2005, in relation to Wales"

It is non-infectious and does not contain pharmaceutical or chemical substances but may be unpleasant to anyone who comes into contact with it. Examples from healthcare settings would be outer dressings and protective clothing like masks, gowns and gloves that are contaminated with body fluids and sterilised laboratory waste and from municipal waste, hygiene waste and sanitary protection like nappies and incontinence pads. Clinical and offensive waste is classed as industrial waste unless produced in a domestic property or residential home (household). Most clinical and offensive waste is produced by the healthcare sector, such as hospitals, GP surgeries, dental practices and nursing homes. Clinical waste can also come from zoological institutes, veterinary practices and research establishments.

10.6 Clinical and offensive waste is separated at source from the general waste stream and placed into colour-coded packaging or containers for transportation to the waste transfer, treatment or disposal facility. Waste is categorised with a 6 digit European Waste Catalogue (EWC) code. The first 2 digits are the chapter. Chapter 18 is "Wastes from human or animal health care and/or related research (except kitchen and restaurant wastes not arising from immediate health care)". 01 is waste from natal care, diagnosis, treatment or prevention of disease in humans and 02 is waste from research, diagnosis, treatment or prevention of disease involving animals. An asterisk means the waste is hazardous.

Orange containers - alternative treatment or clinical waste incineration
Infectious waste, not contaminated with chemicals or medicines:

- human healthcare (may contain sharps) -18 01 03*
- animal healthcare (may contain sharps) - 18 02 02*
- municipal, separately collected fractions, not from healthcare or research-related sources (may contain sharps) - 20 01 99
- commercial, separately collected fractions of absorbents, wiping cloths and protective clothing contaminated by infectious substances - 15 02 02*

Yellow containers – clinical waste incineration
Infectious waste, contaminated with chemicals:

- human healthcare - 18 01 03* and 18 01 06* or 18 01 07
- animal healthcare - 18 02 02* and 18 02 05* or 18 02 06

Infectious waste, medicinally contaminated (not cytotoxic or cytostatic):

- human healthcare (may contain sharps) - 18 01 03* and 18 01 09
- animal healthcare (may contain sharps) - 18 02 02* and 18 02 08

Red containers – clinical waste incineration
Infectious anatomical waste, chemically preserved:

- human healthcare - 18 01 03* and 18 01 06* or 18 01 07
- animal healthcare - 18 02 02* and 18 02 05* or 18 02 06

Infectious anatomical waste, not chemically preserved:

- human healthcare - 18 01 03*
- animal healthcare - 18 02 02*

Non-infectious anatomical waste, chemically preserved:

- human healthcare - 18 01 02 and 18 01 06* or 18 01 07
- animal healthcare - 18 02 03 and 18 02 05* or 18 02 06

Non-infectious anatomical waste, not chemically preserved:

- human healthcare - 18 01 02
- animal healthcare - 18 02 03

Purple containers – clinical waste incineration

Cytotoxic and cytostatic medicines:

- human healthcare - 18 01 08*
- animal healthcare - 18 02 07*
- municipal, separately collected fractions not from healthcare or research-related sources – 20 01 31*

Infectious waste, contaminated with cytotoxic and cytostatic medicines:

- human healthcare (may contain sharps) - 18 01 03* and 18 01 08* or 20 01 31*
- animal healthcare (may contain sharps) - 18 02 02* and 18 02 07* or 20 01 31*

Blue containers – clinical waste incineration

Other waste medicines, excluding cytotoxic and cytostatic medicines - 18 01 09, 18 02 08 or 20 01 32

Black and yellow stripes ('tiger bags') – landfill, municipal incineration, energy from waste, other authorised disposal or recovery

Non-infectious offensive waste:

- human healthcare - 18 01 04
- animal healthcare - 18 02 03
- municipal, separately collected fractions not from healthcare or research-related sources - 20 01 99

Commercial, separately collected fractions of absorbents, wiping cloths and protective clothing not contaminated by infectious substances - 15 02 03

Colour not specified – treatment, recovery or landfill

Non-infectious sharps, not contaminated with chemicals or medicines:

- human healthcare - 18 01 01
- animal healthcare - 18 02 01
- not from healthcare or research-related sources - 20 01 99

Water-based developer and activator solutions - 09 01 01*
Water-based offset plate developer solutions - 09 01 02*
Solvent based developer solutions - 09 01 03*
Fixer solutions - 09 01 04*
Bleach and bleach fixer solutions - 09 01 05*
Photographic film and paper containing silver or silver compounds - 09 01 07
Photographic film and paper free of silver or silver compounds - 09 01 08
Amalgam waste from dental care - 18 01 10*
Lead foils from dental care - 15 01 04
Non-infectious gypsum wastes* (for example, plaster casts and moulds) - 18 01 04 or 18 02 03
Infectious gypsum wastes (for example, plaster casts and moulds) - 18 01 03* or 18 02 02*

(Source: Healthcare waste: appropriate measures for permitted facilities - Definition of healthcare waste - Guidance - GOV.UK (www.gov.uk) and HTM 07-01 Management and disposal of healthcare waste

10.7 The NHS clinical waste strategy was published on 7 March 2023 B2159i-nhs-clinical-waste-strategy.pdf (england.nhs.uk). The aim of the strategy is to improve waste management practices to make them more efficient and sustainable in order to save on cost, improve hospital function, and reduce the impact on the environment in line with NHS net zero carbon commitments. It states that the NHS produces approximately 156,000 tonnes of clinical waste per year that is either sent to high temperature incineration or alternative treatment. This is expected to increase to 200,000 tonnes in 2029/30 and further increases in volumes of clinical waste and a shortfall in infrastructural capacity to treat it. Limited processing capacity on NHS sites has seen a sharp rise in costs associated with clinical waste management over the last 25 years.

10.8 The strategy is promoting the better segregation of waste to reduce high temperature incineration needs by up to 35%, alternative treatment needs by up to 61% and an increase in offensive waste demand by up to 229%. It is proposed that a target ratio of 20% high temperature incineration, 20% alternative treatment and 60% offensive waste be achieved by all NHS providers and trusts by 2026. A further aim of the strategy is to establish a new commercial model to help stabilise the waste market and to drive NHS ownership and control over its own processing assets, with 25% of large and acute teaching hospitals owning their processing capacity thereby improving regional and national resilience.

10.9 As noted above, a number of objectors are of the opinion that the proposed healthcare ERF would reduce the incentive to move away from single use items and to recycle waste. The purpose of setting out in detail the categories of clinical and offensive wastes is to show that because of their potentially harmful properties many types of clinical waste may only be disposed of by incineration. Some may be subject to an alternative form of treatment or recovery or be landfilled. An example would be autoclaving which sterilises waste using steam at high pressure. Part of the non-hazardous residues may be suitable for recycling with the rest going to incineration plants or landfill. Clinical, and to a lesser extent offensive waste requires specialist handling and disposal. Most of the waste streams set out in paragraph 10.6 would not be suitable for recycling and only some would include single-use items. For this reason, it is considered that the likelihood of diverting waste from recycling to fuel a clinical waste ERF is much less than may be the case with a municipal waste EfW plant which would accept a much wider range of waste which is generated in much greater quantities.

10.10 A report was presented to Cambridgeshire County Council's Adults and Health Committee (AHC) on 5 October 2022, the aim of which was to provide information on healthcare waste and disposal and an overview of the Integrated Care System green plan, actions to reduce healthcare waste, and collaborative working opportunities. It was requested following a discussion at Full Council in January 2022 which highlighted concerns about energy from waste plants as a solution to dealing with waste, including healthcare waste. It covered how the different types of healthcare waste in Cambridgeshire and Peterborough are handled and disposed of and will be drawn on to put into context the waste streams that could potentially be available to Envar and current clinical waste disposal capacity in and around Cambridgeshire.

10.11 A number of objectors have suggested that the county's clinical waste should be treated at the Cambridge University Hospitals NHS Foundation Trust (CUH) (Addenbrooke's) incinerator. This facility provides disposal of waste generated by Addenbrooke's and the Royal Papworth Hospital (RPH). The heat recovered provides part of the requirements of the hospital campus premises. Bluntisham Parish Council has referred to the Addenbrooke's incinerator having an environmental permit to incinerate 4,500 tpa. This is an upper limit and does not necessarily mean that the plant has that operating capacity. Clarification has been obtained from Addenbrooke's:

"CUH do have a contract in place for Royal Papworth Hospital (RPH) wastes (Offensive, infectious & any other wastes that require incineration – RPH do have a separate contract for reusable sharps with a different provider).
Aside from RPH, CUH do not have any other contracts in place for waste disposal. The incinerators are here for CUH and RPH wastes only, and we only sell capacity to third parties should we be in a position to do so. As we operate two clinical waste incinerators, this in effect gives us our own contingency as we are able to continue to incinerate CUH and RPH wastes without any issues.
If we sign and enter into contracts, then it would mean we would still be liable to accept wastes even if we only had one incinerator, and CUH does not have the space to store such wastes pending incineration."

They confirm that the environmental permit is for 4,500 tpa but realistically the capacity is 3,100 tpa depending on waste type /difficulty to burn. The tonnages treated over the last 4 years was:

2018 2197
2019 2296
2020 2521
2021 2641

10.12 Planning permission (ref. C/05009/12/CW) was granted in 2013 for an energy recovery centre at Addenbrooke's hospital. The permission has been implemented as far as necessary to keep the permission 'alive' but has not been developed any further. If it is, it would replace the existing gas/oil boilers, the gas-fired combined heat and power (CHP) unit and clinical waste incinerator with a new clinical waste incinerator, biomass boilers and two gas-fired CHP units. The new clinical waste incinerator throughput would be up to 350 kg/hour for a maximum of 7,300 hours per year i.e. 2,555 tonnes per year. A condition of the planning permission requires the operator to "endeavour to procure, in any 12 month period" not less than 70% (1,788.5 tonnes) of the clinical waste to be from the Addenbrooke's Hospital and Biomedical Campus; 10% (255.5 tonnes) from the wider Cambridgeshire area; 15% (383.25 tonnes) from the East of England; and 5% (127.75 tonnes) from the rest of the country. It would have a similar capacity to the existing incinerator and if built and the operator's endeavours were successful, up to 766.5 tonnes per annum would be available for waste produced off-site mostly from the Cambridgeshire area and East of England.

10.13 Table 2 of Appendix 1 to the report to the council's AHC sets out in a summary of the Cambridgeshire and Peterborough hospital trusts' current clinical and offensive waste disposal arrangements.

Cambridgeshire and Peterborough NHS Foundation Trust (CPFT) and Cambridgeshire Community Services NHS Trust (CCS) (same contract) (Cavell Centre, Peterborough; Fulbourn Hospital, Cambridge; and community locations)

- 20.5% (CPFT) incineration at Tyesley, Birmingham (Veolia) or Sandwich, Kent (WasteCare)
- 15.1% (CPFT) alternative treatment at Waterbeach, Cambs (Amey Cespa (East Ltd))
- 64.4% (CPFT) offensive waste to landfill at Milton, Cambs (FCC Environmental) or energy from waste at Benson, Oxfordshire (Grundon)

Cambridge University Hospitals NHS Foundation Trust (CUH) (Addenbrooke's and The Rosie hospitals)

- all incinerated on site (Addenbrooke's)

Royal Papworth Hospital NHS Foundation Trust (RPH) (Cambridge Biomedical Campus)

- all incinerated at CUH (Addenbrooke's) except re-usable sharps (see paragraph 10.11 above)

North West Anglia NHS Foundation Trust (NWAFT) (Peterborough City; Hinchingbrooke; Stamford & Rutland; Princess of Wales, Ely; Doddington; North Cambs, Wisbech hospitals)

- 34.64% Peterborough City Hospital (PCH) incineration at Rochester (Tradebe); other sites to Rainham (SharpSmart)
- 41.55% PCH alternative treatment at Rochester (Tradebe); other sites at Rainham (SharpSmart)*
- 23.81% offensive waste from PCH by Veolia and other sites by Biffa to energy from waste, Peterborough (Viridor)*

*expected to change 2022/23 following implementation of the offensive waste stream at Hinchingbrooke in March 2022.

10.14 From the information presented in paragraph 10.13 above it can be seen that whilst CUH and RPH deal with their clinical and offensive waste in the Addenbrooke's incinerator, the other trusts are in contracts with waste collection companies whose own treatment or disposal sites or sites which they are using are in some cases many miles from the origin of the waste. In the case of the CPFT offensive waste, use in an energy from waste plant would be higher up the waste hierarchy than landfill. Use at a local EfW plant would be preferable to one some 90 miles away in Oxfordshire. It is appreciated that the Cambridgeshire and Peterborough hospital trusts' waste disposal is subject to contracts and it is not known when these will come up for renewal. However, if an alternative is not available then the options at the time of renewal will be limited.

10.15 According to the Environment Agency's Waste Data Interrogator for 2021 the following incinerators in the East of England have received Chapter 18 waste. The capacity and throughput limits imposed by the environmental permit for each incinerator will be examined.

10.16 Addenbrooke's Hospital, Cambridge

This was summarised by the applicant in their Planning Need Addendum (11th January 2022) and clarification provided by the operator as set out in paragraph 10.11 above.

Total capacity 4,500 tpa made up of:

- Clinical waste
  - 2,500 tonnes hazardous;
  - 1,769 tonnes non-hazardous;
- Wastes seized by law enforcement agencies (15 tonnes);
- Municipal wastes (110 tonnes);
- Packaging wastes (7 tonnes);
- Wastes from agriculture, food processing etc. (12 tonnes); and
- Radioactive waste (5 tonnes).

10.17 Novus Environmental / Vetspeed Ltd, Thriplow (Permit no. MP3930BE, Variation Notice Number ZP3734XX)

Steam treatment in autoclaves and subsequent compaction - 34 tonnes per day (equivalent to 12,410 tpa)

18 01 03* Wastes whose collection and disposal is subject to special requirements in order to prevent infection
18 02 02* Wastes whose collection and disposal is subject to special requirements in order to prevent infection
20 01 99 Other fractions not otherwise specified
(with exclusions)

and subject to compliance with improvement measures:

18 01 01 Sharps (except 18 01 03)
18 01 04 Wastes whose collection and disposal is not subject to special requirements in order to prevent infection (for example dressings, plaster casts, linen, disposable clothing, diapers)
18 02 01 Sharps (except 18 02 02)
(plus waste from 14 other non-clinical categories)

Incineration of non-hazardous WID waste and hazardous clinical WID waste limited to 350 kg/hr in Incineration Line 2. Assuming 24 hour/day operation for 350 days per year this would give an operational capacity of 2,940 tonnes per year.

Incineration of non-hazardous waste from Chapters 02 (Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing), 04 (wastes from leather, fur and textile industries) and 20 (municipal wastes – household and similar industrial and institutional) in Incineration Lines 1, 3 and 4.

10.18 SRCL Limited, Ipswich (Permit number EP3530XY, Variation Notice Number TP3332XC Incineration of hazardous waste and non-hazardous waste in a facility with a capacity of 8500 tonnes per annum.

Clinical waste excluding dental amalgam – 8,500 tonnes per annum

- Specified pharmaceutical wastes - 850 tpa (10% throughput)
- Specified municipal and separately collected wastes – 425 tpa (5%)
- Waste packaging – 435 tpa (5%)
- Mixed confidential/ contaminated wastes – 425 tpa (5%)
- Biologically contaminated soils – 425 tpa (5%)
- Mixed agricultural / food wastes – 425 tpa (5%)
- Any waste authorised under the Radioactive Substances Act 1993

75% (6,373 tpa) of the throughput would be clinical waste

10.19 SUEZ, Great Blakenham, Ipswich (Permit number EPR/WP3438HZ; Variation number EPR/WP3438HZ/V007)

Total capacity	295,000 tpa non-hazardous waste
18 01 04	Wastes whose collection and disposal is not subject to special requirements in order to prevent infection (for example dressings, plaster casts, linen, disposable clothing, diapers)
18 01 09	Medicines other than those mentioned in 18 01 08

10.20 Viridor, Peterborough (Permit number EPR/NP3638ZS; Variation number EPR/NP3638ZS/V005

Total capacity	85,000 tpa non-hazardous waste
18 01 04	wastes whose collection and disposal is not subject to special requirements in order to prevent infection (for example dressings, plaster casts, linen, disposable clothing, diapers)
18 01 09	medicines other than those mentioned in 18 01 08
18 02 03	wastes whose collection and disposal is not subject to special requirements in order to prevent infection
18 02 08	medicines other than those mentioned in 18 02 07

10.21 The SUEZ and Viridor facilities at Great Blakenham and Peterborough principally handle municipal waste. They are only permitted to accept non-hazardous waste so are limited as to the types of healthcare waste they can accept, for example the offensive waste from the North West Anglia NHS Foundation Trust. The only permitted waste disposal facilities in the East of England for the hazardous elements of the clinical waste stream are at Addenbrooke's Hospital, SRCL at Ipswich and Vetspeed at Thriplow. Vetspeed principally use the autoclave process to pre-treat medical waste prior to disposal. High temperature steam under pressure is used to sterilise waste; the end product is rendered free from infection and bacteria and can be disposed of at a non-specialist energy from waste facility alongside non-hazardous waste or landfilled. WPA planning officers have used the Waste Data Interrogator to show that in 2021 Vetspeed accepted 8,226 tonnes of waste of which 8,039 tonnes was Chapter 18. Of this, 5,557 tonnes were treated (autoclaved), 2,245 tonnes were transferred and 237 tonnes were incinerated. In 2020 from a total of 5,722 tonnes accepted, 5,545 tonnes were Chapter 18 waste and of this, 3,510 tonnes were treated, 1,886 tonnes were transferred and 150 tonnes were incinerated. From the Waste Data Interrogator, in 2021 8,641 tonnes of waste were removed from the Vetspeed site of which 2,542 tonnes was Chapter 18. Of the Chapter 18 waste, 1,355 tonnes were landfilled in Cambridgeshire and Northamptonshire, 255 tonnes were treated, 49 tonnes were transferred and 883 tonnes were incinerated in Kent, the west of England and the midlands.

In 2020, 5,698 tonnes of waste were removed from the site of which 1,900 tonnes were Chapter 18 waste. Most of this (1,192 tonnes) was landfilled in Northamptonshire, 97 tonnes were treated, 40 tonnes were transferred and 571 tonnes were incinerated in Kent and Birmingham. This suggests that the output from the autoclave process is sent off site for further treatment or for the most part disposal in landfill sites.

10.22 According to the Waste Data Interrogator WPA planning officers have noted that the SRCL site in Ipswich accepted the following quantities of waste, nearly all of which was Chapter 18: 2018 - 408 tonnes; 2019 – 898 tonnes; 2020 – 905 tonnes; and 2021 – 1,130 tonnes. It all originated from Suffolk and was classed as transfer. Of the 1,292 tonnes of Chapter 18 waste that were removed in 2021, 510 tonnes were incinerated mostly in Ipswich, 100 tonnes landfilled in Ipswich, 397 tonnes sent to Kent and Shropshire for recovery and 283 tonnes transferred to London, Kent and Leeds. In 2020 of the 903 tonnes of Chapter 18 waste that were removed, 393 tonnes were incinerated in Ipswich, 303 tonnes were sent to Kent for recovery and 208 tonnes transferred to Kent and Leeds.

However, this information is not consistent with the annual incinerator reports published by the Environment Agency which state that in 2019 the SRCL incinerator received 7,111 tonnes of hazardous and 1,165 tonnes of non-hazardous waste and in 2020 7472 tonnes of hazardous and 916 tonnes of non-hazardous waste. It seems likely that the returns on which the WDI data were based were for waste accepted at the site as a transfer station of which some was subsequently incinerated on site. The operator has been asked to clarify the situation but has not responded.

10.23 The Waste Data Interrogator has been used by WPA planning officers to establish how much Chapter 18 healthcare waste was produced in Cambridgeshire and Peterborough and its means of disposal during the years 2018 – 2021 to give an indication of the quantity of locally sourced waste that would potentially be available to Envar, subject to contracts. It is summarised in the table below. Waste recorded as transfer has been excluded from the potentially available quantity because it is likely to be treated or disposed of elsewhere and may result in double counting. The amount incinerated at Addenbrooke's is shown and then excluded because this waste is unlikely to be available to third parties.

(tonnes)	2018	2019	2020	2021
Incineration – Total (Addenbrooke's) Excluding A'brooke's	2599 (2057) 542	4610 (2186) 2424	7824* (2353) 5471	7616** (2641) 4975
Treatment	2301	2188	307	461
Landfill	394	204	2564	2405
Potentially available	3237	4816	8342	7845

* includes 4659 to Peterborough ERF; ** includes 4913 to Peterborough ERF

	Origin EoE 2021	Destination Outside EoE 2021	Origin EoE 2020	Destination Outside EoE 2020	Origin EoE 2019	Destination Outside EoE 2019	Origin EoE 2018	Destination Outside EoE 2018
Transfer/storage	13,384	2785	13,331	4,182	13,547	3,765	16,376	7,478
Treatment	2,280	2258	1,704	1,664	4,075	4,032	4,589	3,724
Landfill	6,361	1985	4,690	894	2,751	228	3,906	502
Metal processing					83	83		
Incineration (all)	13,310	1844	13,047	2,888	9,769	1,703		
of which: Clinical	3,001	503	2,893	470	2,817	557		
Hazardous	712	712	356	356	181	181		
Municipal	9,597	629	9,798	2,062	6,771	965		
Recovery							2,375	1,725
Incineration							514	6
TOTAL	35,335	8,872 (25.11%)	32,772	9,628 (29.38%)	30,226	9,811 (32.46%)	27,761	13,435 (48.4%)

10.24 In summary, Addenbrooke's have confirmed that they do not have capacity to accept more third party clinical waste nor is the waste they handle likely to become available for incineration at another site; the outputs of autoclaving clinical waste at Vetspeed still need to be disposed of and much of this currently goes to landfill or incineration; the SRCL site at Ipswich appears to be operating close to capacity. Based on an annual throughput of 12,000 tonnes from the figures shown in the table above it is considered that it would not be unrealistic for Envar to be able to source 25% (3,000 tonnes) of the waste for the proposed healthcare ERF from Cambridgeshire and Peterborough. There would be potential sources of feedstock from the autoclave output from Vetspeed or the diversion of clinical waste away from Vetspeed removing the 'double handling' and the vehicle miles involved; offensive waste currently disposed of by landfill could be moved up the waste hierarchy by the recovery of energy; hazardous clinical waste sent to the midlands and south of England for incineration with energy recovery could be disposed of with energy recovery much closer to the point of production and therefore significantly reduce vehicle miles and better comply with the proximity principle.

10.25 Looking at data for the East of England from the Waste Data Interrogator and summarised in the table above, it can be seen that the quantity of Chapter 18 waste that originated in the region increased from 27,761 tonnes in 2018 to 35,335 tonnes in 2021. The amount consigned for transfer, treatment, landfill or incineration outside the East of England has reduced from 48.4% in 2018 to 25.11% in 2021 largely because of the Peterborough ERF receiving over 4,500 tonnes of non-hazardous Chapter 18 waste in 2020 and 2021. The data for 2018 was presented differently in the Waste Data Interrogator in respect of incineration. In 2021 clinical incinerators in Bolton, Leeds, Slough, Surrey and Malvern; hazardous incinerators in Bristol, Cheshire, Dover and Hampshire; and municipal incinerators in Birmingham and London were used for waste originating in the East of England with a similar range of destinations in 2018 – 2020. This demonstrates that Chapter 18 waste, especially that which would need to go to a clinical or hazardous incinerator frequently travels nationwide for disposal albeit in relatively small quantities as noted in paragraph 10.4 above. 40% of an annual throughput of 12,000 tonnes would be 4,800 tonnes. It is not considered unrealistic for Envar to be able to source this amount of healthcare waste from within the East of England. For the reasons given in paragraph 10.4 it is considered that if planning permission is granted, no catchment area restriction should

be applied to the healthcare waste. The other waste inputs would be existing waste streams therefore it is considered reasonable for the existing 40% from the East of England restriction to be carried forward and apply to them (see recommended condition 7).

10.26 It would be unlikely for a waste management company to be able to secure contracts to accept waste for treatment unless the facility was operational or would be by the time the contract started. An additional clinical waste ERF in the East of England would increase competition with the very limited alternatives within the region for hazardous Chapter 18 waste and those further afield which currently accept waste from Cambridgeshire and Peterborough. Greater choice should result in more competitive prices for clinical waste disposal and it could be borne in mind that a large proportion of clinical waste is generated by the NHS so the cost of its disposal falls to the public purse. Whilst the NHS has ambitions to reduce and better manage its waste as part of its 'Delivering a 'Net Zero' National Health Service' (July 2022) there will always be some hazardous waste for which incineration is the only safe disposal option.

Conclusions

10.27 As stated in paragraph 10.1 objectors to the application are concerned that waste for the healthcare ERF would be drawn from a wide area. As set out in paragraph 8.4 the proximity principle strictly applies to mixed municipal waste but it is acknowledged that it would generally be desirable to treat or dispose of waste close to where it is generated. However, as stated in paragraph 10.4 the Waste Regulations 2011 and paragraph 3.38 of the MWLP recognise the specialist nature of certain types of waste. Clinical waste is one such type in that it is generated in small quantities and needs to be managed at specialist facilities at a wider scale. As shown in paragraphs 10.13, 10.21 and 10.22 above, healthcare waste is frequently transported nationwide for treatment or disposal including from the East of England where there are few available options for the disposal of clinical waste. It is considered that for the reasons given in this section of the report and taking into account that it would represent only 6% of the site's total throughput, little weight should be given to the area from which the waste for the healthcare ERF is drawn. The NHS's aspiration to bring more of its waste processing 'in house', particularly at the largest hospitals is noted and the potential change in the market would be a commercial consideration for Envar.

10.28 Concern has also been raised that providing incineration capacity would deter the healthcare sector from using reusable or recyclable items. This section of the report has set out in detail the nature of clinical and offensive waste which it is considered makes clear that that the potentially harmful properties of many elements of the clinical waste stream render them unsuitable for recycling. As set out at paragraph 10.7 above, the NHS clinical waste strategy is largely relying on improved segregation to enable the proportion of waste being treated at specialist incinerators or alternative treatment to be reduced and effectively re-routed to disposal routes suitable for the less potentially harmful offensive waste. As already noted, these may be landfill or non-specialist energy from waste incinerators. It is considered that the successful implementation of the NHS clinical waste strategy by healthcare providers meeting the targets that have been set would have a greater influence on increasing the reuse or recycling than the single healthcare ERF proposed by Envar. The application should be considered as a whole and as stated in paragraph 10.27 the healthcare waste would be only 6% of the site's total throughput.

11. Air quality and heath

Air quality

11.1 The 2008 Ambient Air Quality Directive sets legally binding limits for concentrations in outdoor air of major air pollutants that affect public health such as particulate matter (PM_{10} and $PM_{2.5}$) and nitrogen dioxide (NO_2). The UK also has national emission reduction commitments for overall UK emissions of 5 damaging air pollutants: fine particulate matter ($PM_{2.5}$), ammonia (NH_3), nitrogen oxides (NOx), sulphur dioxide (SO_2) and non-methane volatile organic compounds (NMVOCs).

11.2 The Department for Environment, Food and Rural Affairs (Defra) carries out an annual national assessment of air quality using modelling and monitoring to determine compliance with relevant limit values. The potential impact of new development on air quality should be taken into account where the national assessment indicates that relevant limits have been exceeded or are near the limit, or where the need for emissions reductions has been identified. The local air quality management regime requires every local authority to regularly review and assess air quality in their areas. These reviews identify whether national objectives in the Air Quality (England) Regulations 2000 have been, or will be, achieved by an applicable date. If national objectives are not met, or at risk of not being met, the local authority concerned must declare an air quality management area (AQMA) and prepare an air quality action plan. This identifies measures that will be introduced in pursuit of the objectives and can have implications for planning. There are four AQMAs in Huntingdonshire, all because of their annual average levels of NO_2: those in Huntingdon, Brampton and Hemingford to Fenstanton reflect proximity to major transport routes. HDC is in the process of revoking the St Neots AQMA following continuous compliance with the air quality objectives and revocation of the Brampton and Hemingford to Fenstanton AQMAs is proposed (Air Quality Annual Status Reports for years 2019, 2020 and 2021) following the opening of the new A14.

11.3 The Envar site is not in or close to an AQMA. However, waste developments can have an adverse impact on air quality without appropriate mitigation. This can lead to wider impacts such as on human health and the natural environment. There is clearly considerable concern within the local community about emissions to air particularly from the healthcare ERF and their potentially negative effect on air quality and therefore to health either directly through inhalation, or from deposition on land from where it may enter the food chain.

11.4 The document ‘Land-Use Planning & Development Control: Planning For Air Quality’ (January 2017, Environmental Protection UK (EPUK) and the Institute of Air Quality Management (IAQM)) provides planning authorities with guidance on the consideration of air quality in land use planning including the determination of planning applications which can be accessed here: air-quality-planning-guidance.pdf (iaqm.co.uk) Whilst it is particularly applicable to assessing the effect of changes in exposure of members of the public resulting from residential and mixed-use developments, especially those within urban areas where air quality is poorer, it will also be relevant to other forms of development where a proposal could affect local air quality and for which no other guidance exists. It also refers to the NPPF and Planning Practice Guidance.

11.5 Relevant planning policies:

NPPF paragraphs 174 (e), 185, 186 & 188
MWLP Policy 18
HLP policies LP14 & LP36

11.6 Planning practice guidance identifies five considerations that may be relevant to determining a planning application which include "whether the development would:

- Lead to changes (including any potential reductions) in vehicle-related emissions in the immediate vicinity of the proposed development or further afield. This could be through the provision of electric vehicle charging infrastructure; altering the level of traffic congestion; significantly changing traffic volumes, vehicle speeds or both; or significantly altering the traffic composition on local roads. Other matters to consider include whether the proposal involves the development of a bus station, coach or lorry park; could add to turnover in a large car park; or involve construction sites that would generate large Heavy Goods Vehicle flows over a period of a year or more;

- Introduce new point sources of air pollution. This could include furnaces which require prior notification to local authorities; biomass boilers or biomass-fuelled Combined Heat and Power plant; centralised boilers or plant burning other fuels within or close to an air quality management area or introduce relevant combustion within a Smoke Control Area; or extraction systems (including chimneys) which require approval or permits under pollution control legislation;

- Expose people to harmful concentrations of air pollutants, including dust. This could be by building new homes, schools, workplaces or other development in places with poor air quality;

- Give rise to potentially unacceptable impacts (such as dust) during construction for nearby sensitive locations;

- Have a potential adverse effect on biodiversity, especially where it would affect sites designated for their biodiversity value."

(Paragraph: 006 Reference ID: 32-006-20191101 Revision date: 01 11 2019)

Point source emissions

11.7 This section of the report will address point source emissions, dust from construction and emissions from traffic. Impacts on designated sites and biodiversity are covered in section 14 and impacts on human health are discussed further in paragraphs 11.31 – 11.38.

11.8 As set out in paragraph 1.4 above the planning application was accompanied by an ES which, amongst other things, addressed air quality, primarily by means of an air quality assessment of the proposed discharges from the Envar site and of the impacts of traffic emissions (both Environmental Visage Issue 1 dated 07/06/2021). This identified the following elements of the proposed and existing development which would result in discharges to atmosphere:
• a single point source release from the healthcare ERF;
• emissions from the biofilter servicing the dry AD plant;
• a single point source release from the biogas upgrade facility;

- a single point source release from the PFPF abatement technologies;
- two exhaust stacks, each serving one of the two proposed CHP units; and
- emissions from the two existing biomass boilers.

11.9 As stated in paragraph 1.5 above, aware of the high level of concern within the local community about in particular the impacts of emissions from the proposed healthcare ERF, the WPA engaged independent professional advice on the air quality aspects of the application. Air Quality Consultants' (AQC) report dated October 2021 identified no major issues with the information submitted by the applicant and the following moderate issues which they recommended be addressed:

i) no analysis of the optimum stack height for the healthcare ERF therefore not possible to determine whether the proposed 26 metre high stack is appropriate;
ii) failure to consider the influence of local sources such as traffic emissions and fugitive dust on predicted environmental concentrations;
iii) the model does not include emissions of particulate matter from the biomass boilers;
iv) if diesel generators would be used as a back-up source of electrical power the level of NOx is likely to have been underestimated;
v) the emission of bioaerosols from the biofilter have not been assessed;
vi) there is little information on mitigation of impacts of emissions, including dust and odour, on the local area;
vii) there is no assessment of the construction phase impacts;
viii) it should be confirmed which short term PM release emission rate has actually been modelled;
ix) it is not clear if Table 38 presents just the healthcare ERF contributions or all sources;
x) the source of odour emission rates is not provided;
xi) the odour assessment fails to acknowledge the planning permission for residential use at the former mushroom farm; and

11.10 AQC also identified two minor issues:

xii) in considering the impacts of abnormal operating conditions it would have been beneficial to address local concerns by including the results at specific receptor locations as well as at the point of maximum impact neat to the site boundary; and
xiii) error in the number of HCV movements in the Air Quality Emissions from Traffic Emissions report.

11.11 HDC's environmental protection officer sought clarification on 12 points relating to the air quality impact assessment, odour, traffic and the scope of the environmental permit, some of which were also raised by AQC.
Richard Buxton Solicitors on behalf of POWI raised concerns about the applicant's air quality and health impact assessments, including exposure to dioxins, odour from the waste water lagoons, cumulative impact of odour, NO_2 levels, omission of some emissions sources and use of data from RAF Mildenhall.

11.12 The applicant was invited to address the matters raised by AQC in the WPA's formal request for further environmental information dated 21 October 2021. The applicant's response which was received on 1 March 2022 included updated air quality assessments (Environmental Visage Issue 2 dated 31/01/2022 and traffic dated 30/12/2021). The applicant also submitted a response to comments from other consultees and interested

parties (Environmental Visage Issue 2 dated 07/02/2022). This document responded to comments relating to air quality and health from: Public Health England, HDC environmental protection officer (EPO), Bluntisham Parish Council, Pidley-cum-Fenton Parish Council, Earith Parish Council, Cllr Steve Criswell, the CPRE and POWI.

11.13 The assessments undertaken by Environmental Visage concluded that:

- The results of the modelling show that although the maximum process contributions of Nitrogen Dioxide (NO_2) and particulate matter cannot readily be screened as insignificant, the major source of ground level concentrations of NO_2 and particulate were the two existing biomass boilers and the point of maximum impact occurs well within the site boundary, dispersing rapidly from that point. Process contributions and the predicted environmental concentrations of NO_2 and particulate at all sensitive receptors were screened as insignificant;
- Contributions of other pollutant species were also screened as insignificant, when considering normal, short-term or other than normal operating conditions;
- When considering the potential impact of air pollutants at sensitive receptors, all species were screened as insignificant at either the initial or secondary assessment stage and when considering human health or ecological receptors. The contributions to ecological Critical Levels and Critical Loads were also screened as insignificant;
- Further modelling predicted that eight out of 10 of the most local sensitive receptors would not experience odour concentrations above the assessment level of 3 $OU_E\ m^{-}3$ expressed as the 98th percentile of the hourly average, and the overall impact at all receptors was considered to be of slight significance at most; and
- Odour concentrations at the site boundary were notably higher. However, even the highest modelled concentrations occur for very short periods with the worst-case exceedances over the five years' worth of meteorological data modelled resulting in the odour concentrations at the boundary exceeding 3 $OU_E\ m^{-}3$ for less than 7% of the year, and with concentrations continuing to disperse quickly from the site boundary.

11.14 AQC reviewed the updated and new information, including the responses to concerns raised by third parties. AQC's report dated March 2022 concludes that most of the moderate and minor issues had been addressed in full or partially but some advisory comments were made:

i) optimum stack height for the healthcare ERF not addressed but acknowledges that whilst this is not explicitly necessary for the planning application, it will be required at the environmental permit stage.
ii) the potential maximum NO_2 concentrations are addressed by using measured concentrations from St Ives. The potential maximum PM_{10} and $PM_{2.5}$ concentrations do not take into account the contribution of fugitive dust sources but acknowledges that as the background concentrations are so low it is unlikely that the PM objective levels would be reached;
iii) addressed, now modelled;
iv) the approach to the back-up boiler is acceptable as long as emissions are through the main stack but if from a different location should be assessed separately;
v) addressed - current bioaerosol monitoring results provided and it is noted that the reduction in windrow throughput will lead to a reduction in bioaerosols;
vi) although mitigation information is included in the current permit, which will be updated for new processes, it would provide reassurance to residents to see the information provided

as part of the planning application;

vii) a draft construction environmental management plan has been submitted. If planning permission is granted then a detailed mitigation plan (which is likely to require a construction dust assessment) will need to be secured by condition;

viii) addressed - clarified that the PM_{10} maximum half hourly value of 150 mg/Nm_3 has been modelled for the 60 hours of 'abnormal operations';

ix) addressed – clarified that this does include all sources;

x) addressed – source emission rates provided and units clarified;

xi) the planning permission was not implemented and has lapsed. Any future application for residential use of the former mushroom farm would need to take account of emissions from the Envar site the odour assessment;

xii) a contour plot showing maximum annual average NO_2 concentrations only is provided. This only shows the highest concentrations adjacent to the development site and does not allow residents to identify the potential impact at their property. This information is not necessary to determine the application but would be useful to address local concerns;

xiii) addressed – corrected.

11.15 In the WPA's second formal request for further environmental information dated 8 June 2022 in respect of the air quality assessment it was acknowledged that whilst none of the matters raised by AQC in October 2021 were outstanding, the applicant was asked to address the advisory comments in AQC's March 2022 advice. The applicant's response was received on 17 August 2022. AQC's advice dated September 2022 notes that in respect of:

iv) Concerns about the emissions from back-up boilers have been addressed in part in that it has been clarified that back up boiler emissions would be vented via a 3.6 m stack therefore the impact of the back-up boiler on annual mean and short-term NO_2 concentrations has been modelled. However, an advisory remains: the impacts have been considered in combination with the healthcare ERF and background concentrations have been taken into account. The results do not appear to take into account the influence of other sources within the Envar site, such as the CHP and biomass boilers. However, based on the values presented in the August 2022 submission and the Updated Air Quality Assessment (February 2022), there is no risk of the air quality objectives being exceeded at receptors.

xii) Tables of concentrations at specific receptors has been provided which addresses the minor point about the impacts of abnormal operating conditions.

11.16 The other advisory points have not been addressed by the applicant and AQC recommends that they be considered by the WPA. These residual issues are: i, ii, iv, vi and vii.

i) Optimum stack height not addressed

Emissions from incinerators are generally released through exhaust stacks. Design of exhaust stacks, particularly height, is the primary driver for the delivery of optimal dispersion of emissions and is often determined by statutory requirements. The optimal stack height is dependent upon the local terrain and meteorological conditions, in combination with the emission characteristics of the plant. Article 46 of the Industrial Emissions Directive which deals with the control of emissions requires "Waste gases from waste incineration plants and waste co-incineration plants shall be discharged in a controlled way by means of a stack the height of which is calculated in such a way as to

safeguard human health and the environment." The Environment Agency will require the exhaust stack height of a waste incinerator plant to be optimised in relation to impact on air quality. The WPA need not, therefore, be concerned with the exhaust stack height optimisation process in relation to air emissions, although the impact of stack height on landscape and visual amenity will be a consideration and is discussed elsewhere in this report.

Based on the air quality modelling they have undertaken the applicant has put forward a scheme for the healthcare ERF with a 26 metre high stack. They have chosen not to make the application for the environmental permit concurrently with the planning application and cannot be required to do so. In delaying the evaluation of an optimum stack height until the permit application stage the applicant runs the risk of finding that the optimum stack height required by the Environment Agency is not the 26 metres on which the planning application has been based. If planning permission is granted for a 26 metres high stack and work to inform the environmental permit application shows that a stack with a different height is needed to meet emission limits and optimise impact on air quality, depending on the magnitude of difference the planning permission would need to be amended by means of a non-material amendment or a new permission for a higher stack sought, accompanied by a revised landscape and visual impact assessment.

ii) Particulate matter PM_{10} and $PM_{2.5}$ – contribution of local sources to predicted concentrations

Given AQC's opinion that as the background levels are so low it is unlikely that the PM objective levels would be reached it is not considered necessary to require the applicant to address this although to have done so would have provided more information for concerned members of the public.

iv) Back-up boiler – contribution of other on-site sources to predicted concentrations

AQC conclude that based on the information provided there is no risk of air quality objectives being exceeded at receptors so it is not considered necessary to require the applicant to address this further.

vi) Mitigation measures are unclear

Whilst further details at the planning application stage may have reassured or clarified matters for members of the public it is accepted that these matters will be covered by the updated environmental permit taking into account NPPF paragraph 188. Extracts from the existing permit are contained in Appendix 5.

vii) No assessment of construction phase impacts

A draft construction environmental management plan has been submitted and it is recommended that if planning permission is granted a detailed plan be secured by condition which would include dust mitigation measures (see recommended condition 9).

11.17 Richard Buxton Solicitors, on behalf of POWI, submitted a technical note by Air Pollution Services in response to the applicant's response to the WPA's second formal request for further information. This covered back up diesel generators, abnormal results as receptors,

potential for contamination of irrigation or animal drinking water by dioxins and furans, the St Ives-March Disused Railway CWS and stack height. This document was reviewed by AQC who advised the WPA that it did not raise any additional points that would alter the conclusions of the assessment and that the points raised are consistent with the response AQC had provided.

11.18 Richard Buxton Solicitors, on behalf of POWI, asked that the WPA require the applicant to provide the model files which lie behind the input modelling data. The applicant was unwilling to do so in the absence of a formal request from the WPA. It will be available as part of the environmental permitting process and the WPA is of the view that the model data is not necessary for it to make a decision on the planning application. AQC has advised that the model files would supply no additional information on the air quality impacts and the information submitted by the applicant is sufficient to determine whether there would be any likely significant air quality effects.

11.19 In a response to Richard Buxton Solicitors on 28 June 2022 the WPA explained that:

> "the Council is only concerned with the determination of the planning application and the information which is necessary to determine whether there would be any likely significant effect on air quality as required by the EIA Regulations. As previously advised, the Environmental Statement (ES) has been independently reviewed with no discrepancies being readily discernible in the model outputs. The Council is of the view that it is highly unlikely that the applicant would state in reports one set of model input data while entering other data into their models. However, if this were to happen then any major discrepancies would manifest in the model outputs and would be readily discernible. Minor errors would not result in any discernible changes to the model outputs.
>
> The Council also wishes to reiterate that it is only concerned with the determination of the planning application and the information which is necessary to determine whether there would be any likely significant effect on air quality as required by the EIA Regulations. The Council's independent expert is of the view that the information provided is sufficient to determine whether there would be any likely air quality significant effects as required by the EIA regulations. It is the Council's own evaluative judgment about what information is reasonably required to reach the conclusion that there is no likely significant effect on air quality as a result of the development. This also includes the level of detail and analysis of the information which is necessary to form a view.
>
> The review of the air quality reports have included detailed consideration of the stated model inputs and the presented model outputs. It is the view of our air quality expert that subject to her review comments, the stated model inputs are appropriate and the presented model outputs appear to be consistent with those inputs. This information is sufficient to determine whether there would be any likely significant air quality effects as required by the EIA Regulations. The model files themselves would supply no additional information on the air quality impacts. They would, however, allow the reviewer to verify that the model inputs and outputs are as stated in the reports, and review a small number of selections in the model setup that have not been explicitly stated in the report. It is far more powerful, as well as more efficient, to ensure that a review is carried out by a professional with extensive experience of similar assessments and to compare

the reported inputs with the reported results. This is the approach taken by the council's consultants.

It is considered highly unlikely that the applicant would state in reports one set of model input data while entering other data into their models. However, if this were to happen then any major discrepancies would manifest in the model outputs and would be readily discernible. Minor errors in the model files would not result in discernible changes to the model results and so would be missed by AQC's review. Such changes would, however, be too small to affect the overall determination of significant effects. A final check on all model inputs will be carried out by the EA at permitting stage in any event.
It is not common for model files to be provided at the planning application stage, especially to third party consultancies when protection of IP may be relevant."

11.20 The letter concluded by referring to paragraph 188 of the NPPF which explicitly states that "The focus of planning policies and decisions should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes)" and that the WPA considers that the process for determining the planning application is in accordance with the EIA requirements.

11.21 The planning and permitting regimes both have a role to play in the decisions whether or not to allow development to proceed and its regulation thereafter. The Environment Agency has advised that the proposed development would require a substantial variation to the environmental permit and has not required the applicant to provide further information at the planning application stage to enable them to adopt that position. It is considered that in employing AQC to assess the application the WPA has given a level of scrutiny to the potential air quality impacts of the proposed development beyond relying on statutory and other consultees whose input would be focussed on the environmental permit stage. The available evidence is sufficient to allow the WPA to conclude that, with appropriate detailed design (including of mitigation measures at the environmental permitting stage) the proposed development would be capable of being operated in accordance with the limits to protect air quality which would be contained within the environmental permit. As set out in Appendix 4 and in accordance with NFFP paragraph 188 the WPA has to assume that the permitting regime will operate effectively. It is therefore considered that this matter has been given an appropriate level of scrutiny at the planning application stage and that the WPA should accept that the control of emissions will if planning permission is granted, be covered by the environmental permitting regime.

11.22 Some of the objections from local residents have referred to Addenbrooke's Hospital either as having capacity to accept more clinical waste and rendering Envar's proposal unnecessary or hospitals being suitable locations for incinerators because of their proximity to the source of the waste. This conflicts with the views of the very large number of people who are concerned about the impacts of the proposed healthcare ERF on air quality and health. It has for many years been common for major hospitals to have on-site incinerators, Addenbrooke's being an example. The existing incinerator is at the heart of the hospital complex which itself is on the southern edge of Cambridge which is principally a residential area. The new Royal Papworth Hospital has been built approximately 200 metres to the north of the site of the unbuilt replacement incinerator chimney and a building which is part of the biomedical campus has been built approximately 80 metres to the south. A new children's hospital is proposed opposite the Rosie [maternity] Hospital approximately 200

metres northeast of the site the replacement incinerator and a new cancer research hospital is proposed on the Biomedical Campus next to Addenbrooke's Hospital. It is highly unlikely that such development would take place if there was any risk to human health from the operation of either the existing or proposed incinerator. Bluntisham Parish Council's response dated 2 September 2021 included at Appendix 1 an email from the Environmental Services Manager at Addenbrooke's Hospital who said in respect of regulation:

> "Yes we do operate as the Trust has done since the 1960's clinical waste incineration on site at Addenbrooke's Hills Road site, which is rigorously authorised by the Environment Agency, as I would expect this new proposed facility would be as well through the Permitting system of Regulation. Envar would have to apply for a Permit to operate any waste management facility. Limits are set through regulation for all emissions, and stringent emission monitoring is carried out, continuously and verified 6 monthly for our facility, but I am unsure which set of regulation this proposed plant would have to adhere to."

11.23 The SRCL Limited facility is on the site of Ipswich General Hospital which is within the urban area. Put simply, if a healthcare waste incinerator can be operated without any evidence of harm in locations where very vulnerable people are being treated and in a densely populated residential area, there is no reason why a similar facility could not be operated safely on the Envar site. As explained in this report and referred to in the correspondence from Addenbrooke's quoted in the previous paragraph, the emissions from incinerators are regulated by the Environment Agency by means of the environmental permit.

Odour

11.24 Concern has been raised by a large number of objectors about odour. It is acknowledged that the Envar site has on occasions given rise to odour experienced outside its boundaries significant enough for residents to make complaints. The most likely cause of odour is green waste being composted outside, either because of the nature of the material being composted or how it is handled, and the unloading and / or storage of waste outside buildings. The applicant's Air Quality Assessment did not take into account any waste management activities on the proposed new concrete pads described in paragraph 3.16 above. The probable purpose of the new concrete pads is to extend the area for compost maturation. This would bring potential sources of odour and bioaerosols to within a few metres of the travellers' site. For this reason, it is considered that planning permission could be granted for the construction of the new concrete pads with the construction impacts being mitigated by means of the construction environmental management plan. However, any waste management activities that could generate odour or bioaerosols should be precluded until the applicant has demonstrated by means of an odour and bioaerosol impact assessment that they could be undertaken with mitigation, if necessary, without resulting in unacceptable levels of noise at noise-sensitive properties. This could be secured by planning condition (see recommended condition 20). It is noted that HDC has before it an application (ref. 21/02024/FUL) for retrospective planning permission for the 5 pitches at the eastern end of the travellers' site. The WPA has raised an objection because the application does not demonstrate that the development will not prejudice the existing or future use of the waste management site identified as a waste management area as required by MWLP Policy 16

11.25 In vessel composting is less likely to generate odour than outdoor composting and the diversion of approximately half of the green and food waste feedstock from in vessel composting to the proposed dry AD process which would be carried out in a building is unlikely to increase the risk of odour being emitted from the site. Waste for the proposed transfer station, biomass boilers and healthcare ERF would be deposited and where relevant sorted and stored within the proposed buildings. As set out in paragraph 11.13 above, the applicant's air quality assessment concluded that the overall impact of odour at all receptors was considered to be of slight significance at most and although odour concentrations at the site boundary were notably higher, the highest modelled concentrations would occur for very short periods and concentrations continue to disperse quickly from the site boundary. AQC has no outstanding issues in respect of odour. Odour is and would continue to be controlled by the environmental permit, see Appendix 5. It is therefore unlikely that the proposed development would increase the likelihood of odour being emitted from the site.

Conclusions on point source emissions and odour

11.26 The applicant's air quality assessment and AQC's review of it considered all point source emissions to air. All the waste management processes would be the subject of the new environmental permit. It is considered that the proposed development (excluding the use of the new concrete pads), subject to the design and mitigation that will be required by the environmental permit, would be unlikely to result in adverse impacts on air quality so would comply with NPPF paragraphs 174 (e), 185, 186 and 188, MWLP Policy 18 and HLP policies LP14 and LP36 in respect of air quality from point source emissions and odour.

Traffic and air quality

11.27 There is concern within the local community that the increase of traffic that would be generated by the proposed development would have a detrimental impact on air quality, particularly at parts of the highway network that experience congestion.

11.28 The guidance document referred to in paragraph 11.4 above provides in Table 6.2 indicative criteria for requiring an air quality assessment. In respect of traffic these would apply when a proposed development would cause a significant change in traffic flows on local roads with relevant receptors. In respect of light duty vehicles (LDV) (cars and <3.5 tonnes gross vehicle weight) an AQA should be provided where the change within or adjacent to an AQMA would be more than 100 Annual Average Daily Traffic (AADT) or more than 500 AADT elsewhere. For heavy duty vehicles (HDV) (goods vehicles and buses >3.5 tonnes gross vehicle weight) air quality assessment should be undertaken where the AADT changes by more than 25 within or adjacent to an AQMA or by more than 100 elsewhere. The proposed development would result in an increase in 44 staff car, 26 other light duty vehicle and 6 heavy duty vehicle movements per day (see paragraph 12.3 below). AADT is the total traffic generated in a year divided by the number of days in a year. Where sites only operate on 5 days per week, the weekly number of vehicles would in effect by spread over 7 days so the AADT would be lower. It is proposed that the Envar site would operate 7 days a week and assuming a two week shut down for maintenance the vehicles would be generated for approximately 350 days per year:

70 LDV x 350 = 24,500 ÷ 365 = 67.12 AADT
6 HDV x 350 = 2,100 ÷ 365 = 5.75 AADT

For both LDVs and HDVs the increase in AADT is below the threshold for an air quality assessment in respect of emission from traffic.

11.29 As stated at paragraph 11.8 above, the applicant's environmental statement included an assessment of the air quality impacts of traffic emissions. Whilst recognising that the development site is not within an AQMA it does recognise that some vehicles serving the Envar site may use main roads around Huntingdon where the AQMA is adjacent to the A141 and A1307 (former A14). The increase in HDV movements of approximately 6 AADT is well below the 25 AADT threshold and the approximately 67 AADT increase for LDVs is below the 100 AADT threshold for undertaking an air quality assessment within or adjacent to an AQMA. The applicant's assessment concludes that by applying the EPUK and IAQM guidance the anticipated increase in traffic movements from the proposed development would have an insignificant effect therefore a detailed assessment of the air quality impacts of traffic movements from the development is not required.

11.30 It is considered that taking into account the points made at paragraphs 11.28 and 11.29 above, the proposed development would be unlikely to result in an unacceptable level of air pollution from road traffic so would comply with NPPF paragraphs 174(a), 185 and 186, MWLP Policy 18 and HLP policies LP14 and LP36 in this respect.

Human health – emissions to air

11.31 Most of the concerns that have been raised about the impact on air quality are in the context of the impact of any harmful emissions from in particular the proposed healthcare ERF on human health either through direct inhalation of indirectly by being ingested from foodstuffs grown or reared on the land around the Envar site. It has been explained in the preceding section on air quality that the principal means of assessing and regulating emissions to air is the environmental permitting regime. It has also been explained that there is nothing to suggest that the proposed development could not be designed, constructed and operated in such a way that it complied with the air quality requirements of the environmental permit. As set out in Appendix 4 the Environment Agency when determining an application for an environmental permit will take advice from the UK Health Security Agency and consult the relevant local authorities and their health departments, the Food Standards Agency and the Health and Safety Executive.

11.32 The UK Health Security Agency (see paragraph 6.11 above) has stated that they will assess the public health impact of a proposed installation and make a recommendation based on a critical review of the information provided for the environmental permit application. In the broader context they have referred to Public Health England's risk assessment that modern, well-run and regulated municipal waste incinerators are not a significant risk to public health and while not ruling out adverse health effects from these incinerators completely, any potential effect for people living close by is likely to be very small.

11.33 In Appendix 4 of this report (Environmental permit and the role of the Environment Agency) extracts have been given from the NPS for Energy (EN-1) and the NPS for Renewable Energy Infrastructure (EN-3) which it is considered make clear the government's position on the status of an environmental permit:
EN-3 at paragraph 2.5.43 states that "Where a proposed waste combustion generating station meets the requirements of WID and will not exceed the local air quality standards,

the IPC should not regard the proposed waste generating station as having adverse impacts on health." WID (Waste Incineration Directive) has been replaced by the Industrial Emissions Directive.

In respect of health, EN-1 at paragraph 4.13.5 states: "Generally, those aspects of energy infrastructure which are most likely to have a significantly detrimental impact on health are subject to separate regulation (for example for air pollution) which will constitute effective mitigation of them, so that it is unlikely that health concerns will either constitute a reason to refused consents or require specific mitigation under the Planning Act 2008. However, the IPC will want to take account of health concerns when setting requirements relating to a range of impacts such as noise."

11.34 In accordance with NPPF paragraph 188 the planning system should defer to the government's approach on public concern about the potential health impacts in that such matters are safeguarded by the UK Health Security Agency in their role as a consultee in the environmental permitting process. Paragraph 7 of the NPPW states that when determining planning applications WPAs should "consider the likely impact on the local environment and on amenity against the criteria set out in Appendix B [which does not include health] and the locational implications of any advice on health from the relevant health bodies**.** Waste planning authorities should avoid carrying out their own detailed assessment of epidemiological and other health studies".

11.35 The application was accompanied by a health impact assessment (Environmental Visage Issue 1 07/06/2021) which considered the effects of the release of Dioxins and Furans (Dioxins) and Dioxin-like Polychlorinated Biphenyls (PCBs) from the healthcare waste ERF. It considered potential exposure through inhalation, the ingestion of soil, consumption of fruit and vegetables, local dairy produce, meat and eggs and drinking water. This was reviewed for the WPA by AQC who considered it to be inadequate for the following reasons:

Major issues

i) Scope of assessment – too narrow to address the broader aspects of a Health Impact Assessment, the document submitted as a Health Impact Assessment was actually the results of a Human Health Risk Assessment related to emissions to air. It solely addressed potential air quality impacts of pollutants which cannot be adequately assessed by reference to ambient air quality standards and did not refer to noise impacts that were requested in the EIA scoping opinion and minimal reference was made to the contamination of water used to grow crops or rear animals.
ii) Receptor locations – shown in Figure 1 of the health impact assessment correspond to where members of the public would be exposed to dioxins and furans via inhalation but are not representative of locations where crops will be grown or animals reared which is where dioxins and furans would enter the food chain.
iii) Comparison with tolerable daily intake (TDI) – results have been compared against the TDI of 2 pg/kg/day recommended by the UK Committee on Toxicity (COT) which is less stringent that the lower limit of 1 pg/kg/day recommended by the World Health Organisation (WHO) and much less stringent than the 2 pg/kg/week recommended by the European Food Safety Authority's expert Panel on Contaminants in the Food Chain which has been accepted by the COT.

Moderate issues

iv) Exposure at specific receptors – No methodology was provided for the determination of exposure at the specific receptor locations in Table 11.
v) Cancer risk at specific receptors - No methodology was provided for the calculation of cancer risk in Table 12.
vi) Inclusion of furans – It is not clear whether the impacts of furans have been considered.
vii) Consumption of fish – There are a number of fisheries in the vicinity of the proposed development site but no consideration has been given to the consumption of locally caught fish as a potential intake pathway.
viii) Drinking water - Contamination of groundwater aquifers has been briefly addressed but no mention is made of Brooklands Lake and Grafham Water reservoirs approximately 11 km and 18.5 km respectively from the development site.
ix) Consumption of meat and eggs – Table 1 shows the daily average consumption of beef, pork, poultry and eggs in the UK but has excluded pork and poultry as intake pathways and only included the contribution from beef and eggs in the total presented in Table 9.
x) Increase in soil concentration – The increase in soil dioxin concentration has been compared to the maximum value in rural location as reported by the Environment Agency in 2007. It would be more appropriate to use the more recent values in the Environment Agency's 2009 Soil Guideline Values for dioxins, furans and dioxin-like PCBs.

Minor issues

xi) Intake via breast milk – The daily dioxin uptake by infants has been compared with the TDI but this relates to long-term exposure over a lifetime rather than the much shorter period during which an infant is nursing. The intake is shown to be 19% of the TDI which is not an insignificant percentage but is not discussed further.
xii) Calculation of total deposition – Section 3.8 states that total deposition of dioxins has been calculated as 3 x dry deposition but it is not clear where the multiple of 3 comes from. It is also unclear whether furans have been included.
xiii) Modelling of deposition - Section 3.11 states that dioxin deposition associated with particles with a diameter of 1µm represents a worst-case but it is not clear where this value comes from. It is also unclear whether it has been applied to furans.
xiv) Calculation of dioxin concentration in breast milk – It is not clear where the value of m = 1.31×10^{-11} mg/kg comes from in Equation 9.

11.36 The applicant was invited to address these matters in the WPA's formal request for further environmental information dated 21 October 2021. The applicant's response which was received on 1 March 2022 included an updated human health risk assessment (Environmental Visage Issue 2 dated 31/01/2022). Environmental Visage's conclusions were:
- The risk to health of the local population due to exposure to Dioxins in emissions from the facility is likely to be low, remaining within 1 % of the Tolerable Daily Intake (TDI) of 2 pg kg^{-1} for adults. The inclusion of Dioxin-like PCBs into the assessment resulted in a marginal increase in the resulting Process Contributions but remained a very small proportion of the 2 pg kg^{-1} TDI;
- the assessment for health risks associated with exposure to emissions of PAH [polycyclic aromatic hydrocarbons] demonstrated that process contributions at the sensitive receptors equate to between 0.3 and 2.7 % of the Air Quality Standard (0.25 ng m^{-3} PAH as B[a]P).

However, where contributions were not immediately screened as insignificant, all were screened at the secondary assessment stage; and
- the results from the health impact assessment confirms that there is no significant health risk associated with potential exposure to emissions of Dioxins, Furans, PCBs or PAH from the HERF [healthcare waste ERF].

11.37 AQC's report dated March 2022 concludes that most of the issues had been addressed in full or partially but some advisory comments were made:

i) The text has mostly been changed to refer to a Human Health Risk Assessment (HHRA), although some references to Health Impact Assessment remain. It is assumed that the other health-related aspects referred to in the scoping opinion have been addressed elsewhere.
ii) Addressed in detailed response.
iii) Unlike for air quality assessments, there is no single set of formally defined assessment criteria for use in a HHRA in the UK. WHO presents a range of TDI values and the HHRA uses a value which aligns with the middle of this range. It would be more precautionary to have used the lower end of the range. However, there are already many aspects of the HHRA methodology which provide for a worst-case assessment and so, on balance, the assessment is most likely to remain precautionary overall.
iv) – xi) Addressed.
xii) An explanation has been provided, but the approach is based on old guidance which is no longer supported by the Environment Agency. It would be much more precise, and much more usual, to model wet deposition explicitly rather than inferring it from dry deposition. While the approach used cannot be agreed, this is highly unlikely to affect the overall conclusions of the HHRA and so correcting the models is unlikely to be worthwhile.
xiii and xiv – Addressed.

11.38 Many objections to the proposed development include concerns about the impact on human health from the consumption of foodstuffs are grown or reared on land that may be contaminated by the deposition from emissions from in particular the healthcare ERF stack. The Environmental Visage Human Health Risk Assessment addressed these and concluded that emissions from the proposed healthcare ERF would result in no significant health risk to the local population. AQC's reviews of the application documents identified a number of matters relating to the consumption of food and water which the applicant subsequently addressed. This should give the WPA confidence that the proposed development is unlikely to result in adverse impacts on human health via sources of food and water. As stated in paragraph 11.31 above and Appendix 4 these matters are safeguarded by the UK Health Security Agency and the Food Standards Agency in their role as consultees in the environmental permitting process. In accordance with NPPF paragraph 188 it is considered that the potential impact of emissions from the proposed development will be addressed during the permitting process with any necessary controls on emissions put in place.

Health impact assessment

11.39 There are aspects of public health that are not within the remit of the environmental permitting regime. The application site area is 8.91 hectares and the proposed development would result in 10,467 m2 of new floor space so is classed as "large scale major

development" in the HLP. HLP policy LP29 requires that applications for large scale major development be informed by the conclusions of a full Health Impact Assessment (HIA).

11.40 The WPA misinterpreted the county council's Public Health team's comments (4 April 2022) and policy LP29 and asked the applicant to complete and submit the results of a rapid HIA which they duly did as part of the August 2022 submission. Paragraph 7.60 of the HLP states that "Full HIA involves the same thought process as set out in the rapid HIA Tool, but the assessment should be completed in greater depth, following national best practice. The HIA Tool can be used to identify whether a more detailed assessment is necessary, a process known as screening. Should this identify potential health impacts, more in-depth consideration of such impacts and potential mitigations will be required." The rapid HIA template recognises that not all the issues or criteria will be relevant to every development proposal. For example, the sections relating to housing design and affordability, access to health and social care services and other social infrastructure, access to open space and nature, access to healthy food and social cohesion and inclusive design are clearly aimed at residential and mixed developments where the occupiers would live, work and spend leisure time. The applicant's rapid HIA identified the three assessment criteria within the section on Air quality, noise and neighbourhood amenity as being relevant and referred to documents that had already been submitted as the supporting details/evidence:

- Does the proposal minimise construction impacts such as dust, noise, vibration and odours? A draft Construction Environmental Management Plan has been submitted;
- Does the proposal minimise air pollution caused by traffic and energy facilities? – This was covered in the documents Air Quality Impacts of Traffic Emissions (Environmental Visage December 2021); the Human Health Risk Assessment (Environmental Visage January 2022); Air Quality and Human Health Response (Environmental Visage submitted 17August 2022); Consultation response (Environmental Visage February 2022).
- Does the proposal minimise noise pollution caused by traffic and commercial uses? – This has been covered in the Noise Assessment (LF Acoustics April 2021) and Addendum Report Noise (LF Acoustics February 2022).

11.41 Paragraph 7.60 of the HLP states that "For the largest development proposals, it may prove effective to complete HIA in an integrated way together with Environmental Impact Assessment." As set out in paragraph 1.3 above, air quality (including odour and dust); and Human health (including noise) were scoped into the EIA. These matters were covered in detail by the applicant and in respect of air quality (including from traffic) and odour are discussed earlier in this section of the report. AQC has confirmed that no further information on air quality and health is necessary to inform the HIA. The impact of noise from the development is discussed in section 18 where it is concluded that with appropriate mitigation which could be secured by condition, the proposed development would not give rise to an unacceptable level of noise at the relatively few noise-sensitive properties close enough to the Envar site to potentially be affected. For those reasons it is considered that noise from the proposed development would not have an adverse impact on human health.

11.42 It is considered that the following factors make other sections of the rapid HIA of no or limited relevance to the consideration of the current planning application:

- It is an existing site whose relationship with the highway network and nearby settlements is established;
- It is in a rural area where public transport is very limited;

- The nature of the business is such that public access is not relevant and the processes mean that for health and safety reasons access for people with legitimate business there is strictly controlled;
- Although a large site, it will be the workplace for only 55 members of staff plus for short periods of time waste delivery drivers and others with a specific job to do; and
- The purpose of the buildings is to house plant and machinery and store and process waste rather than be for human occupation.

11.43 The applicant has identified in the rapid HIA the assessment criteria which have some relevance to the proposed development. It is considered that the responses contained within the rapid HIA are proportionate to their relevance. Active travel is dealt with in paragraphs 12.14 – 12.15. The creation of 22 full time jobs would increase employment opportunities in the area so could be regarded as a slight positive for those that take them but this may in the wider community be outweighed by the opposition to elements of the proposed development based on concerns about the impact on health from emissions to air. The relevant assessment criteria from the Minimising the use of resources and Climate change sections of the rapid HIA are dealt with in section15 of this report.

11.44 The council's Public Health team has reviewed the submitted information in the context of HLP policy LP29 and is of the opinion that the applicant has demonstrated compliance with the spirit of the local plan policy and supporting text in that the rapid HIA screened and scoped the areas for a more detailed assessment which would have been made had a full HIA been undertaken from the start. This is aligned to the methodology suggested in the supporting HLP text in section 7.60. Although the HIA is not presented as a full HIA it has addressed the main areas of concern raised by the Public Health team and it is considered that there would be little benefit in the applicant redoing the assessment and presenting it as a full HIA. The content would be the same but presented in one document with a clearer narrative of the scoping and screening stages (the submitted rapid HIA) and the more detailed assessments i.e. those referred to in paragraph 11.40 above.

11.45 It is considered that the underlying purpose of policy LP29 has been met as the assessments carried out have addressed the main areas of concern raised by the Public Health team and for the reasons given at paragraph 11.44 above the spirit of the policy has been complied with. Whilst there is technically non-compliance with policy LP29 this can be given little weight in the overall planning balance.

Conclusions on air quality and human health

11.46 In conclusion, taking into account the advice from AQC and the lack of objections from statutory consultees there is no reason to believe that if planning permission is granted and an environmental permit is issued, the proposed development would have an adverse impact on air quality or human health. The environmental permit would limit the emissions from the development to levels which would comply with the relevant air quality standards. It is considered that all aspects that would have been scoped into a full HIA have been addressed in sufficient detail for the relevant information to be available to the decision-takers. For these reasons it is considered that the proposed development would comply with NPPF paragraphs 174 (e), 185 and 186, MWLP Policy 18 and HLP policies LP14 and LP36 in respect of the impact on human health.

12. Traffic and highways

12.1 Relevant planning policies:

NPPF paragraphs 104, 110 – 113
MWLP Policy 23
HLP policy LP16 & LP17

12.2 The planning application was supported by a transport statement (Lennon Transport Planning – June 2021) with an addendum (February 2022) submitted in response to matters raised by the highway authority. As set out in paragraph 2.5 above, the current planning permissions allow a maximum of 200,000 tpa waste to be accepted at the Envar site and does not differentiate between the different waste streams; current inputs are predominantly green waste for composting. The number of vehicle movements is not restricted. The current application does not propose to increase the total quantity of waste that would be accepted at the site each year and as set out in paragraph 9.14 would in effect replace 12,000 tpa from existing waste streams with 12,000 tpa clinical waste for the proposed healthcare ERF. It is recognised that this new waste stream would generate different types of vehicle movements and based on handling the maximum 12,000 tpa the number of vehicles generated by the healthcare ERF per day have been estimated to be as set out in the table, Figure 8 below.

(from Transport Statement Addendum).

Vehicle type	Number per day	Notes
HGV	2-3	On the basis of handling the maximum of 12,100 tonnes of inputs per year and 900 tonnes of outputs per year, it is estimated that the proposal will generate 2x feedstock, 1x export residual materials (maximum)
Vans/Light Goods Vehicles	10-13	9x feedstock 2x engineering services (maximum)
Staff	5-10	Cars (maximum number)
TOTALS	17-26	Numbers will vary depending on day and activity

Figure 8

12.3 HGVs are vehicles over 3.5 tonnes gross weight (i.e. the vehicle with its load). The transport assessment on which the 2017 planning applications and the 200,000 tpa throughput limit were based predicted 240 HGV movements per day i.e. 120 in and 120 out. The transport statement for the current application (June 2021) has from weighbridge records for 2020 established that there were 53,626 trips and based on 250 working days and a 5 day week this would equate to 214 trips per day (107 in and 107 out). The applicant considers that because the site operates on Saturday mornings this would be higher than the actual daily trips which would be spread over 5.5 days. There were 45,698 HGV trips in 2020 or 183 per day. The 2017 assumed figures, the actual movements in 2020 and those that would be generated by the proposed development are shown in Figure 12 of the Transport Statement Addendum, reproduced below.

Total Daily Vehicular Trips (by type)	Previous TA (permitted)	2020 Background flows	With development	Net Increase
Staff Cars	66	66	110	+44
Heavy Duty vehicles	240 (but not restricted to)	183	189	+6 or -51 based on consented fallback
All other vehicles – Light Duty & Vans	Not assessed	32	58	+26

This shows that HCV movements with the proposed development would be 6 more per day than the 2020 movements but 51 fewer than the 2017 transport assessment and planning permissions were based on. The proposed development would result in staff numbers increasing from 33 to 55 with a commensurate increase in vehicle movements of 44 per day. There would also be an increase of 26 light good vehicles and vans above the current situation

12.4 Many objections to the proposed development refer to traffic congestion in and around St Ives, particularly at the 'Morrison's' roundabout, the junction of the A1123 Needingworth Road with the A1096 Harrison Way (St Ives eastern bypass) which is a link to the A1307 (former A14) at Galley Hill and suggest that vehicles generated by the proposed development would exacerbate it. The 2017 applications and 200,000 tpa throughput limit were based on 240 HCV movements per day. The county council transport assessment team's comments are summarised in paragraphs 6.20 – 6.22 above. In terms of HCV and LGV trips they conclude that given the proposed level would not exceed the theoretical levels on which the 2017 applications were assessed there is no justification to object to the current planning application on the grounds of highway capacity. The addition of growth would not (in this case) have a material impact given that the traffic to and from this site would be predominantly off-peak. Congestion at junctions is worst at peak hours unless there has been an accident or there are roadworks in the area. The 2017 planning permissions for the Envar site allow vehicles to enter and leave the site between 05:00 and 22:00 7 days per week. The current application proposes the same therefore spread across a 17 hour working day and a 5.5 or 7 day working week, the likelihood of vehicles associated with the Envar site travelling through St Ives at peak times would be less than for a development where movements are influenced by standard 09:00 – 17:00 Monday to Friday business hours.

12.5 MWLP Policy 23 states that "all proposals must demonstrate how the latest identified HCV route network is, where reasonably practical to do so, to be utilised." It also requires, where necessary, securing the use of the HCV route network by an appropriate agreement. The council's Heavy Goods Vehicle (HGV) Policy approved by the Highways and Transport Committee in October 2022 includes in Section 4 of the policy the Cambridgeshire Advisory Freight Map (CAFM) which shows the routes across the county which are restricted for use by HGVs by weight limits or height and width restrictions and strategic and local routes which are the advised routes for use by HGVs (Cambridgeshire-Advisory-Freight-Map). These are shown as HGV Route Type A and Type B. It should be noted that these do not correspond with road classifications, for example the A1123 from St Ives to Soham is shown as Type B.

12.6 Envar's planning application was accompanied by a Traffic Management Plan which sets out the route that HGVs will use to and from the site. The A141, A1307 (former A14), A1096 and A1123 from the 'Morrison's roundabout' to the A141 are shown on the CAFM as Type A Roads. In order to reach these roads, the applicant's Traffic Management Plan shows that HCVs will be routed south via the B1040 to St Ives which is a Type B Road. HCVs from local suppliers would use the most appropriate HCV to the primary route even if not the shortest - for example, from the Earith area they would use the A1123 Needingworth bypass instead of the C class roads through Bluntisham. There are 7.5 tonne weight restrictions on the B1086 through Somersham, minor roads within Colne and Bluntisham and through Woodhurst. The Traffic Management Plan could be secured by planning condition (see recommended condition 25). It is considered that the proposed development would comply with MWLP Policy 23 in respect of securing use of the HCV route network.

12.7 The accesses to the site were rationalised as part of the 2017 applications and are described in paragraph 2.3 above. The county council's highway development management engineer sought clarification on the status of the accesses that serve the site and required the applicant to demonstrate that the geometry of accesses which would be used was appropriate to accommodate two-way vehicle flow for the largest vehicle that would use them. The accesses were approved under planning permission H/5007/17/CW and the highway development management engineer is satisfied that because the types of vehicles that would use them would be similar in size to those that they were designed for the accesses would be suitable to serve the proposed development. It is considered that the proposed development would comply with NPPF paragraph 110 (b), MWLP Policy 23 (b) and HLP policy LP16 (c).

12.8 The Wheatsheaf crossroads at the southwest corner of the Envar site is the junction of the B1040 Somersham Road and B1086 St Ives Road with the C class Wheatsheaf Road to Woodhurst and the C class The Heath to Bluntisham. It is considered in the local community to be an accident blackspot, a point made by many objectors who believe that the traffic generated by the proposed development would exacerbate a poor safety record at this junction. The junction's safety record has been recognised by the county council's Highways and Transport Committee who, based on the collision record 2015 – 2020 and the fatal and serious collisions which occurred in 2019 and 2020, agreed at their meeting on 7 September 2021 that it should become traffic light controlled.

12.9 The Traffic Management Plan proposes that HGVs serving the proposed development would use Entrance 1 on the B1086 St Ives Road which is the furthest from the crossroads. HGV traffic would be going to or coming from St Ives so would not need to make a turning manoeuvre at the crossroads. This could be secured by condition (see recommended condition 21). A small number of objectors suggested that Envar should contribute to the junction improvements. This was raised by the CCC Transport Assessment Team's first response (26 August 2021) but based on the information provided in the Transport Statement Addendum they considered that the proposed development would not result in an increase in vehicle movements through the junction sufficient to impact highway safety or justify requiring Envar to contribute to the council's traffic light scheme. This would be in accordance with NPPF paragraph 57 which states that planning obligations must only be sought where they are, amongst other, things necessary to make the development acceptable in planning terms. Requiring Envar to contribute to the traffic light scheme is not necessary for the reason given so to do so would fail the test in paragraph 57.

12.10 It has already been noted that the proposed development would result in the number of people employed at the site increasing by 22 from 33 to 55. When the application was first submitted it proposed that the car park at Heath Tops, accessed from Entrance 5, would be extended to create 85 spaces (including 4 for disabled users) but this was considered to be over-provision taking into account the existing car parking accessed via Entrance 3 on the B1086 St Ives Road. It was also recognised that locating most of the car parking at Heath Tops could generate more staff vehicle movements through the Wheatsheaf crossroad junction. It is now proposed that there will be 13 car parking spaces at Heath Tops (including 2 for disabled users).

12.11 The transport statement addendum considered the impact of additional staff vehicle movements by analysing the direction of travel and arrival times of existing staff as an indicator of the journeys that would be made by the additional staff. Out of 34 existing staff, 12 came from St Ives, 7 from Somersham, 6 from Woodhurst, 5 from Pidley and 4 from Bluntisham directions. There are 52 car parking spaces accessed via Entrance 3 which would accommodate most of the increased number of employees, most of whom would have needed to make a turning manoeuvre at or cross the Wheatsheaf crossroads if they were to use the Heath Tops car park whereas only those from Woodhurst and Bluntisham would need to turn at the crossroads to use Entrance 3. Based on the additional staff following the same travel pattern, there would be a minimal increase in turning movements as a result of new staff trips.

12.12 The work undertaken for the county council in planning the Wheatsheaf crossroads improvements considered 07:30 – 08:30 and 16:30 – 17:30 to be the peaks. Given that waste deliveries may take place between 05:00 and 22:00 and some of the waste processes are 24 hour operations staff arrival and departure times are not concentrated at the morning and evening peaks resulting in only a small proportion of the additional traffic using the crossroad junction during the periods most critical for highway safety.

12.13 In the opinion of the transport assessment team, the increased number of staff trips would not have a significant impact on the highway at peak hours and there would be no justification to object to the application the grounds of highway capacity. Given the minimal increase in turning movements at the Wheatsheaf crossroads there would be no justification to object to the application on highway safety grounds. It is considered that the proposed development would comply with MWLP Policy 23 and HLP policy LP16 in respect of highway capacity and safety and the amended car parking provision would comply with HLP policy LP17. Attention is drawn to NPPF paragraph 111 which states that "Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe." In the view of the highway authority the proposed development would not result in severe impacts on the road network so refusing the application in highway safety or capacity grounds is unlikely to defensible in the event of being challenged at appeal.

12.14 NPPF paragraphs 104 and 110, MWLP Policy 23 and HLP policy LP16 encourage non-motorised and sustainable travel. NPPF paragraph 105 states "However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-taking." The CCC Public Health team is concerned that the applicant has not demonstrated a commitment to promoting active travel. The most journeys to the site would be the deliveries of the waste

feedstocks and the removal of outputs; the location of the site precludes anything other than transport by road for commercial traffic. In the applicant's Transport Statement Addendum, the information on existing staff travel patterns shows that all except 2 travel alone in a car or by motorcycle. Most i.e. those living within Woodhurst, Pidley, Somersham, Bluntisham and part of St Ives would be within 5 km of the Envar site which is recognised as a typical distance that people are prepared to cycle for non-leisure journeys. However, the site is in a rural area where there are no designated cycle routes outside St Ives and owing to a lot of the travel to and from work journeys being made in the dark may not be perceived as a safe means of travel. The site is not well served by bus services.

12.15 It is considered that the advantages of co-locating the proposed dry AD plant, healthcare ERF and PFPF on an existing waste management site to which the majority of feedstocks are already being brought outweighs the location being not well served by public transport for the relatively small number of employees, many of whose shifts are outside conventional working hours. The proposed car park at Heath Tops would include secure cycle racks and it is noted from the applicant's completed Rapid Health Impact Assessment Tool that Envar encourage employees to car share where practicable. It is considered that the number and type of cycle racks, including provision in the parking area accessed from Entrance E3, could be secured by condition to ensure that lack of secure cycle parking is not a deterrent to cycling to work (see recommended condition 26). There are already changing and showering facilities within all the staff welfare areas on the site. NPPF paragraph 113 (e) states that development should be designed to enable charging of plug-in vehicles and paragraph 5.60 of the HLP suggests that at least one charging point for an electric vehicle should be provided where a proposal includes 20 or more spaces at a rate of 1 for every 50 spaces. There are already two electric vehicle charging points at the parking area accessed from Entrance E3 and Envar proposed to install another at the proposed car park at Heath Tops, which would be in compliance with HLP policy LP17. This could be secured by condition (see recommended condition 27).

Conclusion on traffic and highway matters

12.16 It is acknowledged that there is concern from many individuals in the local community, all of the parish and town councils that have commented on the application, the local county and district councillor and the East Cambridgeshire Joint Villages HCV Group that the proposed development would exacerbate congestion and the risk of accidents on the local highway network. The proposed development would result in an increase in vehicle movements above the existing levels, but as these movements would mostly be outside peak hours and result in a minimal increase in turning movements at the Wheatsheaf crossroads, any adverse impacts on highway capacity or safety would be very small. The highway authority, as set out in paragraphs 12.2 to 12.13 above, based on analysis of the applicant's transport statement, its addendum, the 2017 planning applications and traffic and accident data consider that there would be no justification for an objection to the proposed development on highway capacity or safety grounds. It is considered that the proposed HCV route to the Type A Roads shown on the Cambridgeshire Advisory Freight Map, is acceptable, being itself a Type B Road with few residential properties.

13. Landscape and visual impact

13.1 The proposed development includes the erection of four large buildings, infrastructure of a similar height and a 26 metre high chimney. Landscape and visual impact were identified in the WPA's scoping opinion as an aspect of the proposed development that should be included in the EIA. The application was accompanied by a Landscape and Visual Impact Assessment (Applied Landscape Design, P02 08.06.2021) (the LVIA). In response to the HDC landscape officer's comments (8 September 2021) which informed the WPA's formal request for further information dated 21 October 2021 the LVIA was updated (P03 16.02.2022). It gave more consideration to the district landscape character as described in the Huntingdonshire District Council Landscape Character Assessment and the sensitivity of the wider landscape as well as of the development site itself. Although addressing some of the HDC landscape officer's concerns the effectiveness of the proposed landscape planting was not considered to be adequate and a revised scheme was submitted as part of the response to the WPA's second formal request for further information (LVIA P05 16.08.2022) and revised again as part of the biodiversity net gain information (see paragraph 14.12 below).

13.2 The impact of the proposed development on designated heritage assets is dealt with elsewhere in section 15 of this report.

13.3 Relevant policies:

NPPF paragraphs 130, 131, 134 and 174
MWLP Policy 17 and Appendix 3
HLP policies LP10 and LP11

Landscape character

13.4 In national terms the Envar site is not within an area designated for its landscape value (National Park or Area of Outstanding Natural Beauty). It is within Natural England's National Character Areas (NCA) Bedfordshire and Cambridgeshire Claylands, a gently undulating lowland plateau divided by shallow river valleys that gradually widen as they approach The Fens NCA in the east. At a district level in the Huntingdonshire Landscape and Townscape SPD (March 2022) the site is at the eastern end of the Central Claylands, with the Fen Margin including Somersham and Colne to the northeast and the Great Ouse Valley including Earith, Needingworth to the southeast. The Central Claylands predominantly comprises gently undulating mostly arable land with a large scale field pattern with few hedgerow trees giving rise to a mostly open landscape at between 10 and 50 metres AOD. Some of the distinctiveness of the Central Claylands is the regular distribution of historic villages. Historically orchards dominated much of the eastern part of the area around Somersham and Bluntisham and some remain. In paragraph 3.57 of the SPD it is noted that: "The limited hedgerow and tree coverage facilitate long distance views in many places with some large structures highly visible in the landscape." Relevant key issues for the Central Claylands landscape character area looking forward include: provision of new woodland areas to give additional structure to the landscape and aid with screening intrusive buildings; and careful location of further renewable energy generation plant avoiding the Great Fen landscape and visual setting.

13.5 The Envar site is at between 28 and 32 metres AOD on a local ridgeline and slopes slightly

from south to north. It is surrounded by agricultural land except for the Raptor Foundation, former mushroom farm and travellers' site immediately to the north. Historically the site has developed from the property known as Cheffins and the Dutch barn close to the Wheatsheaf crossroads in a north-easterly direction. By the late 1990s most of the existing buildings had been erected although some have subsequently been redeveloped. Following allocation of the land to the north and east in the 2012 Cambridgeshire and Peterborough Minerals and Waste Development Plan Site Specific Proposals the open windrow composting area was extended into most of the field to the east. The northwestern boundary of the site adjacent to the B1086 St Ives Road is well treed. The southeastern boundary bund and planting is less well established.

13.6 MWLP Policy 17 requires waste development to amongst other things, "be sympathetic to the local character, history, including the surrounding building and landscape setting, while not discouraging appropriate innovation or change (such as increased densities) and to "provide a landscape enhancement scheme which takes account of any relevant landscape character assessments (including any historic landscape characterisation) and which demonstrates that the proposed development can be assimilated into its surroundings and local landscape character". NPPF paragraphs 130 and 174 and HLP policies LP10 and LP11 have similar aims.

13.7 The updated LVIA outlines a methodology to establish baseline conditions and identifies in Table 11 the following evaluation elements: Landscape Quality, Value, Condition, Capacity, Character, Compatibility and Scope for Mitigation:

Value - The landscape has been assigned minor landscape value rating as its importance is only relevant on a local level, with very few redeeming features and room for improvement. The wider landscape that has been assigned a moderate landscape value rating as it is important at a local level and to a degree at a regional level; there is room for improvement, but it has many positive qualities.

Condition - The landscape of site has been assigned a low condition rating due to its scrub / brownfield nature. Its mature western boundary is the only big redeeming feature so there is significant room for improvement. The wide landscape character area condition is considered to be of moderate value and is of average repair / quality, due to the mix of farmland, infrastructure links, patches of low intensity industry and numerous settlements.

Capacity - The rating of moderate for landscape capacity has been applied, as the character area can accommodate a degree of change without significant effect on its character.

Character - The host landscape character (the Central Claylands at the district level) has a distinct and recognisable pattern of elements. It is a mixture of arable farmland, relatively large scale developments, ancient woodland, traditional villages etc. in a predominately open landscape. The character area could be tolerant of change / withstand change provided any future proposals seek to prevent deterioration of the landscape and have minimal negative effects, by being consistent with their surroundings. Development should ensure the character area is able to recuperate from loss or damage.

Compatibility - The development site does not fall within any land designation and views in and out of the site are restricted to the south, but available to the west, north and east. The

presence of existing built form within site that is not being developed and the adjacent developments (redundant Mushroom Farm / Raptor Foundation) some at higher elevations (breaking the skyline) is of significant mass to make these proposals compatible with the existing environment, although localised visual changes may be significantly different to those currently experienced.

Scope for Mitigation - The proposed development provides limited opportunity for a landscape and ecological enhancement strategy. Landscape mitigation (in the form of vegetated bunds) was provided as part of earlier planning permission and would help to enhance the scenic quality of the area.

From the above, the applicant's analysis is that the overall landscape sensitivity of the development site is moderate to low and that of the host landscape character area is moderate and this is not disputed by the HDC landscape officer. A moderate level of landscape sensitivity is in the middle of a 3 or 5 point range of sensitivity levels; it is where some key characteristics and qualities of the landscape are sensitive to change but would have some potential to accommodate some change.

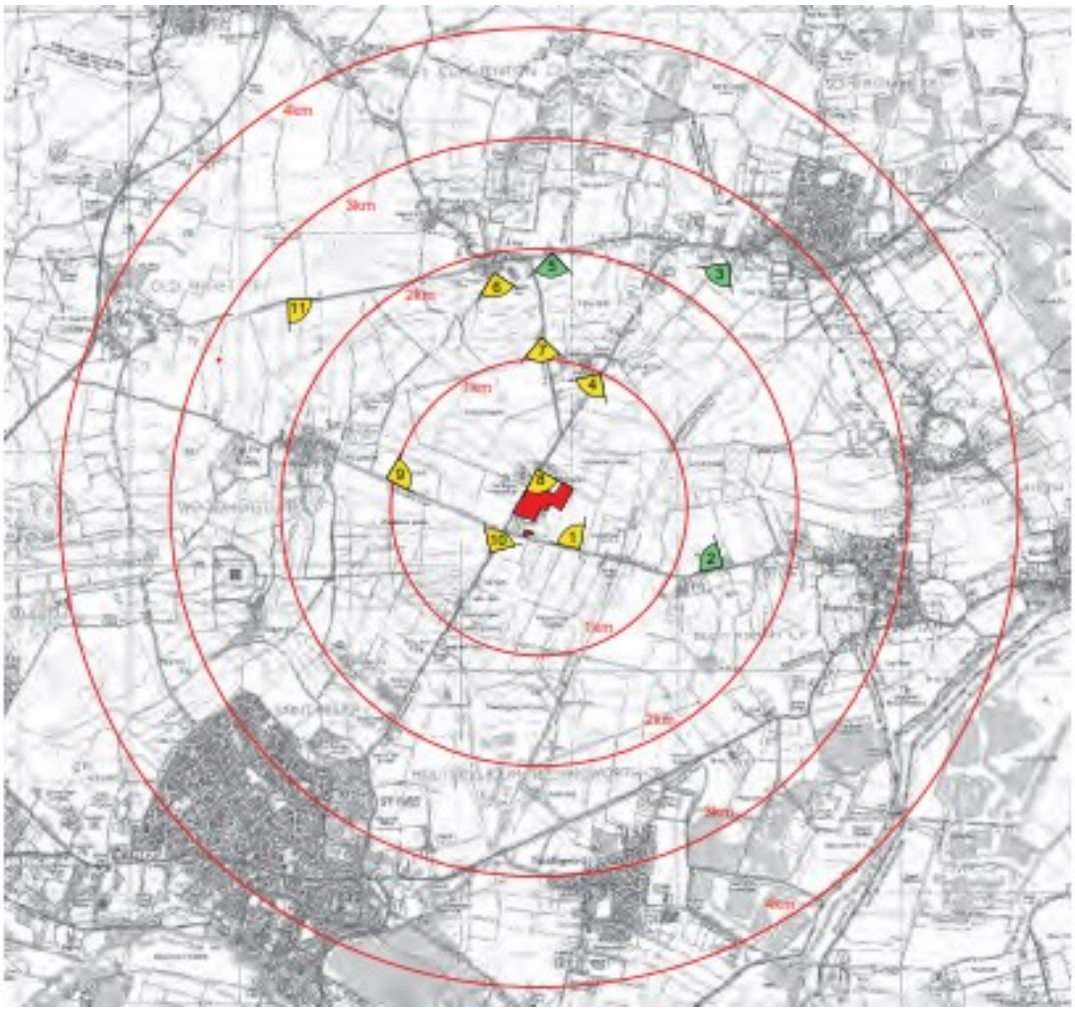
13.8 The LVIA concludes that "When considered in an increasingly broad context of the landscape, the proposed development is anticipated to be assimilated into the existing landscape and views. The existing area is considered to have the capacity to absorb the introduced characteristic elements without overarching change to the landscape character of the area and the loss of moderate to low sensitivity and uncharacteristic elements is considered acceptable. Where the visual impacts of the proposed development have been assessed to be the highest the impacts are considered to be sufficiently localised and contained that the impacts are acceptable. Where the majority of views of the proposed development are possible, they are generally seen against a backdrop of similar elements, therefore the introduction of the proposed development into these views will not appear as uncharacteristic to the existing views."

Landscape character conclusion

13.9 In national terms the Envar site is not within an area designated for its landscape value (National Park or Area of Outstanding Natural Beauty) but it is recognised that nevertheless the countryside around the site is valued by its residents and by visitors as shown by the large number of individuals whose response raised concerns about the impact of elements of the proposed development on the countryside. As set out in paragraph 13.4 above, the site lies within the Bedfordshire and Cambridgeshire Claylands National Character Area and at a district level in the Central Claylands. These designations do not afford any special protection but the Landscape and Townscape SPD guides the consideration of planning applications. It is accepted that the Envar site is within a landscape area with a moderate level of sensitivity where some change could be accommodated. It is considered that because the Envar site itself has moderate to low landscape sensitivity it has the capacity to accommodate some change without significantly adversely affecting the overall character of the landscape in which it sits. For this reason, it is considered that the proposed development would comply with MWLP Policy 17, HLP policies LP10 and LP11 and NPPF paragraph 174 in respect of landscape character.

Visual impact

13.10 The applicant's LVIA had a study area of a radius of 4 kilometres from the site within which the visibility of the proposed development was assessed. It identified that there are views into the site from a large part of the study area within 3 kilometres beyond which owing to topography and landform it would be difficult to see the site. To the north/northeast there are views from Somersham, to the west there are views from the edge of Woodhurst and to the east and south views are limited to within close proximity to the site from roads because the topography falls away and local vegetation screening. The LVIA has used 11 representative publicly accessible viewpoints which provide the clearest views of the site. These are shown on Figure 9 below reproduced from the LVIA and will be discussed in turn. The LVIA included photomontages of the proposed development from Viewpoints 2, 3, and 5 shown in green on Figure 9 and these will be reproduced in this report.



13.11 Viewpoint 1 – On Heath Road, immediately southeast of site at a field access gate, approximately 410 metres from the site, looking west to north. Potential receptors – users of the local road network.

Construction: Owing to the topography and proximity in relation to the development site, it would be possible to see a significantly increased level of activity on site for the duration of the construction of the development. The magnitude of visual impact would be moderate and temporary in nature because of the introduction of construction activities into the view.

On completion: As this viewpoint takes in the entire eastern boundary of the development site, is a short distance away and is at the same level, the proposals will consolidate the built form and perceived openness of the view. The viewer will be able to see a large proportion of the proposed buildings (The digesters, dried digestate storage area, PFPF building, biomass building and the ERF stack) across the majority of the view. These buildings will break the skyline, as the existing buildings already do, especially the ERF stack and a haze/white steam would be visible. In front of the buildings the existing planting on the bunds will over time become more effective at providing screening for passing motorists. The magnitude of visual impact would be moderate because of the proximity of the view and height of the development.

13.12 Viewpoint 2 – On Heath Road, to the west of Barnfield Farm, to the west of Bluntisham, approximately 1.55 kilometres from the site, looking west to northwest. Potential receptors – users of the local road network and individual properties.

Construction: Owing to the location of the viewpoint in relation to the development site, it would be possible to see an increased level of activity on site for the duration of the construction of the proposed development. This would be limited to the tops of machinery as the lower parts of site are screened by local intervening vegetation. Because of the proximity of the site the magnitude of visual impact would be moderate and temporary.

On completion: The proposal is only a small element of this viewpoint that takes in the eastern boundary of the proposed site as shown in the photomontage extract below:

The viewer will be able to see the development site over the intervening hedgerows towards the upper portions of the proposed buildings (digesters, dried digestate storage area, PFPF building, biomass building and the ERF stack) that are beyond Colne Heath

Farm within the view. These buildings will break the skyline, as the existing buildings already do, especially the ERF stack and haze/white steam would be visible. Existing trees, houses and pylons scattered around also break the skyline. The existing planting on the eastern boundary bunds will over time become more effective at providing screening for passing motorists and residents of the individual properties. The magnitude of visual impact would be moderate because of the proximity of the view and height of the development.

13.13 Viewpoint 3 – Footpath to the south of houses on the B1086 (St Ives Road), at the western end of Somersham Village, approximately 2.5 kilometres from the site, looking south to southwest. Potential receptors – Users of the local public rights of way network, the village of Somersham including designated heritage assets.

Construction: Owing to the location of the viewpoint in relation to the development site and view across flat fields it would be possible to see an increased level of activity on site for the duration of the construction. Because of the existing midground vegetation in the form of hedgerows and hedgerow trees in the view between site and the viewer the magnitude of visual impact would be moderate and temporary.

On completion: The proposals would only a small element of what can be seen from this viewpoint that takes in the northern boundary of the proposed site as shown in the photomontage extract below.

The viewer will be able to see the site over the intervening hedgerows towards the proposed buildings and the linking infrastructure. The proposed buildings most prominent in the view will be the waste transfer building, biomass building, healthcare waste ERF and stack, PFPF building and possibly the digesters behind. This will all be seen above and almost merging with the new warehouse being built on the site of the redundant mushroom farm (Woodhurst Farm). Because of the orientation of this view the proposed buildings will block views to the existing buildings within the Envar site. The proposed buildings and the adjacent new warehouse will merge as one and consolidate the built form and perceived openness of the view at this localised point. The proposed buildings will just break the skyline, as the existing buildings already do but the ERF stack will sit tall into the sky and

the haze/white steam will be visible although existing trees in the foreground appear taller. Existing planting on the bunds will over time become more effective at providing low level screening. The magnitude of visual impact would be moderate in part because of the distance from the site and the angle of the view and the vegetation in between.

13.14 Viewpoint 4 - On the verge of the B1086 (St Ives Road), immediately south of the entrance to Cuckoo Bridge Nursery, approximately 1 kilometre from the site, looking south to southwest. Potential receptors – Users of the local road network and visitors to Cuckoo Bridge Nursery and Farm Shop.

Construction: Owing to the location of the viewpoint in relation to the development site and view across the initially flat foreground to the proposed development site, it would be possible to see an increased level of activity onsite for the duration of the construction. Because of the existing midground hedgerows and hedgerow trees in the view between site and the viewer the overall impact would be moderate and temporary.

On completion: The proposals cover a reasonable proportion of this viewpoint that takes in the northern boundary of the proposed site. The viewer will be able to see the site over the B1086 (St Ives Road) and the intervening hedgerows and existing buildings towards the proposed buildings and the linking infrastructure. The proposed buildings most prominent in the view will be the waste transfer building, biomass building, healthcare waste ERF and stack, PFPF building and possibly the digesters behind. The new warehouse being built on the site of the redundant mushroom farm (Woodhurst Farm) that is significantly greater in height than the building it is replacing, will block low level views of the site and any screening vegetation. The proposed buildings and the adjacent new warehouse will merge as one and consolidate the built form and perceived openness of the view at this point. The proposed buildings will break the skyline and add height to the horizon, as the existing buildings already do. The ERF stack will sit tall into the sky and the haze/white steam will be visible as one of the highest elements in this view that the road users will see. The magnitude of visual impact would be moderate in part because of the distance from the site and the angle of the view and the intervening vegetation.

13.15 Viewpoint 5 - On the verge of the B1089 (Pidley Hill), to the west of Park Farm, approximately 2.1 kilometres from the site, looking directly south. Potential receptors – Users of the local road network and individual properties.

Construction: Owing to the location of the viewpoint in relation to the development site on a local high point, it would be possible to see an increased level of activity on site for the duration of the construction because the development site also sits on top of another local high point. Because of the proximity of the site the visual impact would be moderate and temporary.

On completion: The proposal is a reasonable element of this viewpoint that takes in the northern boundary of the proposed site, and as shown on the photomontage extract below.

The viewer will be able to see across to the site over the intervening arable land towards the proposed buildings and the linking infrastructure. The proposed buildings most prominent in the view will be the waste transfer building, biomass building, healthcare waste ERF and stack, PFPF building and possibly the digesters behind. The proposals will consolidate the built form and extend the mass of buildings. These buildings will break the skyline, as the existing buildings to the right of the view already do, especially the ERF stack as this will sit up tall into the sky and the white steam would be visible although a haze may not. The magnitude of visual impact would be moderate because of the proximity of the view and the higher sections of the proposed development breaking the skyline.

13.16 Viewpoint 6 - Footpath to the south of Pidley accessed off Old Hurst Road, the viewpoint is a break in a well wooded boundary, approximately 1.9 kilometres from the site, looking south to southeast. Potential receptors – Users of the local public rights of way network, the village of Pidley and listed buildings.

Construction: Owing to the location of the viewpoint in relation to the development site, it would be possible to see an increased level of activity onsite for the duration of the construction of the proposed development. This would be limited to the tops of machinery as the lower parts of site are screened by intervening vegetation. Because of the existing landscape in the midground the magnitude of the visual impact would be moderate.

On completion: The proposal is only a small element of this viewpoint that takes in the north western boundary of the proposed site. The viewer will be able to see across a busy foreground towards the proposed buildings. From this view they would only be able to see the upper portions / roof line of the tallest proposed buildings (waste transfer building, biomass building, healthcare waste ERF and stack, PFPF building and possibly the

digesters behind) as occurs now with the existing buildings on the site. The proposals will form a solid horizontal line in amongst a more natural soft landscape, but they will merge with the horizon. The ERF stack will break the skyline and white steam will be visible but the haze may not. Any view of the development on completion would be low due to the distance from the site combined with the solid foreground vegetation. The magnitude of visual impact would be low.

13.17 Viewpoint 7 - On Pidley Sheep Lane (B1040), at the entrance to Sheep Lane Farm buildings, approximately 1.3 kilometres from the site, looking south. Potential receptors – Users of the local road network.

Construction: Owing to the location of the viewpoint in relation to the development site on a road that faces the site in one direction of travel, it would be possible to see an increased level of activity on site for the duration of the construction of the proposed development. Because of the proximity of the site the magnitude of visual impact would be moderate and temporary.

On completion: The proposal is a reasonable element of this viewpoint that takes in the north western boundary of the development site. The viewer will be able to see across to the site over the intervening arable landscape towards the proposed buildings and the linking infrastructure. The proposed buildings most prominent in the view and breaking the skyline will be the waste transfer building, biomass building, healthcare waste ERF and stack, PFPF building and possibly the digesters behind. The new warehouse being built on the site of the redundant mushroom farm (Woodhurst Farm) that is significantly greater in height than the building it is replacing, will block some of the low-level views of the site. The proposals will consolidate the built form, extend the mass of buildings and affect the perceived openness of the view. The ERF stack will sit tall into the sky and the haze / white steam will be visible as one of the highest elements in this view that the road users will see in this active landscape. The existing planting to the bunds will over time become more effective at providing low level screening. The magnitude of visual impact would be moderate because there is a busy foreground in the view and the road user should be focussed on the road, however as the proposed development will break the skyline it will be noticeable.

13.18 Viewpoint 8 - On the verge at the Entrance to the Raptor Foundation, on the B1086 (Somersham Road), approximately 190 metres from the site, looking south to southeast. Potential receptors – Users of the local road network, visitors to the Raptor Foundation and a listed building.

Construction: Owing to the topography and proximity of the viewpoint in relation to the development site, it would be possible to see a significantly increased level of activity on site for the duration of the construction of the proposed development. This would be limited to the tops of machinery as the lower parts of site would be screened by localised vegetation and buildings. Because of the existing landscape in the foreground the magnitude of visual impact would be moderate and temporary.

On completion: This viewpoint is a short distance from the north western boundary and sits below the site, so the viewer is looking up. The proposed development will start to consolidate the built form and lessen the perceived openness of the view. It is likely that the viewer would be able to see the waste transfer building, fire water tanks, biomass building

and healthcare waste ERF and stack, but these buildings will block views to other buildings within site behind. The small section of visible buildings will break the skyline, but they will be lower than the existing trees that line the B1040 (Somersham Road) the ERF stack will sit up tall into the sky but it will be behind the tree canopy. The new warehouse built on the site of the redundant mushroom farm (Woodhurst Farm) that is significantly greater in height than the building it is replacing, sits to the left of the view and will block some of the lower level views of the Envar site. In front of the buildings the existing planting on the bunds will be evident and over time will become more effective at providing additional screening to the view of passing motorists. Because of the distance from the site and the localised topography the visual impact would be moderate. The proposed development would most likely break the skyline and be seen amongst the existing vegetation.

13.19 Viewpoint 9 - On the Wheatsheaf Road, to the east of Woodhurst, approximately 1.2 kilometres from the site, looking northeast to southeast. Potential receptors – Users of the local road and public rights of way networks.

Construction: Owing to the location of the viewpoint in relation to the development site on a road that will afford oblique views of the site in one direction of travel above localised vegetation, it would be possible to see an increased level of activity onsite for the duration of the construction of the proposed development. Because of the existing landscape in the midground the magnitude of visual impact would be moderate and temporary.

On completion: The proposal is a reasonable element of this viewpoint that takes in the western boundary of the development site. The viewer will be able to see across to the site over the intervening hedgerows and B1040 (Somersham Road) towards the upper portions of the proposed buildings (fire water tank / emergency leachate storage, AD building, digesters, healthcare waste ERF and stack and the waste transfer building). The proposals will consolidate the built form and extend the mass of buildings. These buildings will in most instances just break the skyline in places, as the existing buildings already do. The ERF stack will break the skyline as it will sit up tall into the sky and the haze / white steam will be visible. Existing trees and water towers scattered within the view also break the skyline. The magnitude of the visual impact would be low because there is a busy foreground in the view and the road user should be focussed on the road as the site is at an oblique angle. However, as the proposed development will break the skyline it will be noticeable.

13.20 Viewpoint 10 - On the B1040 (Somersham Road) at the entrance to MRJ Joinery, approximately 390 metres from the site, looking north to northeast. Potential receptors – Users of the local road network.

Construction: Owing to the location of the viewpoint in relation to the development site and site, it would be possible to see an increased level of activity onsite for the duration of the construction, but this would be behind the buildings in the foreground, so would be limited to the tops of cranes, and other taller machinery. Because of the existing midground scene in the view between site and the viewer the magnitude of the visual impact would be low.

On completion: The proposed development would be only a tiny element of this view that takes in the southern boundary of the site. The viewer looks up to the site and towards the existing Envar buildings that are being retained. All proposed buildings sit behind these buildings at a slightly lower topography. It is possible that there will be glimpses of the uppermost roof elements of the tallest buildings and the ERF stack. The ERF stack will

break the skyline as it will sit up tall into the sky and the haze / white steam will be visible through the existing site. Existing pylons and trees associated with the site also break the skyline in a prominent way. The magnitude of visual impact would be negligible from this view because of the intervening foreground buildings on the wider land holding. The topography is such that the proposed development site will be lower because the land slopes away from south to north.

13.21 Viewpoint 11 - West of the entrance to Pidley Lodge Farm, on The Lane, between Old Hurst and Pidley, approximately 2.8 kilometres from the site, looking east to southeast. Potential receptors – Users of the local road network.

Construction: Owing to the location of the viewpoint in relation to the development site, it would be possible to see an increased level of activity onsite for the duration of the construction of the proposed development. This would be limited to the tops of machinery as the lower parts of site are screened by intervening vegetation. Because of the existing landscape in the midground the magnitude of visual impact would be moderate and temporary.

On completion: The proposal is only a small element of this viewpoint that takes in the western boundary of the proposed site. The viewer will be able to see across a busy arable foreground towards the proposed buildings. From this view they would only be able to see the upper portions / roof line of the tallest proposed buildings (waste transfer building, biomass building, healthcare waste ERF and stack, PFPF building and possibly the digesters behind) as occurs now with the existing buildings on the Envar site. The proposals will form a solid horizontal line amongst a more natural soft landscape, but they will merge with the horizon. The ERF stack will break the skyline and the white steam will be visible but possibly the haze not. However, a few trees in the foreground and several elements in the back drop including the water towers also break the skyline. The magnitude of visual impact would be low because of the distance from the site combined with the foreground vegetation.

13.22 A magnitude of change has been attributed to the construction phase and the proposed development on completion. The categories of magnitude of change are:

High – The proposed scheme would completely change the character and/or appearance of the landscape for a long period of time or permanently. It would affect many receptors.

Moderate – The proposed scheme would cause a noticeable difference to the landscape and would affect several receptors.

Low – The proposed scheme would cause a barely perceptible impact and would affect few receptors.

Negligible – The proposed scheme is appropriate in its context. It may be difficult to differentiate from its surroundings and would affect very few or no receptors.

13.23 In order to establish the significance of the visual impact the magnitude was assessed against the sensitivity of the viewpoints and is set out in Table 13 in the LVIA.

The criteria for the levels of significance are:

Major - Very large or large change in environmental or socio-economic conditions. Effects, both adverse and beneficial, which are likely to be important considerations at a regional or district level because they contribute to achieving national, regional or local objectives, or could result in exceeding of statutory objectives and/or breaches of legislation.

Moderate - Intermediate change in environmental or socio-economic conditions. Effects that are likely to be important considerations at a local level.

Minor - Small change in environmental or socio-economic conditions. These effects may be local issues but are unlikely to be of importance in the decision making process.

Not Significant - No discernible change in environmental or socio-economic conditions. An effect that is likely to have a negligible or neutral influence, irrespective of other effects.

Viewpoints 2, 3, 5, 6 and 9 have the highest impact of Major / Moderate significance for construction, with viewpoints 2, 3 and 5 having the highest impact of Major / Moderate significance for the landscape and visual impacts across both construction and on completion. The reason for this is their high sensitivity being representative of residential properties, public rights of way or other publicly sensitive settings. Viewpoints 1, 4, 7 and 8 are assessed as having a Moderate level of significance for both construction and on completion. Viewpoint 10 is assessed as Minor for construction and Not Significant at completion and Viewpoint 11 as Moderate / Minor for construction and Minor at completion.

13.24 The applicant's LVIA has assessed the highest level of significance to be Major / Moderate at three representative viewpoints during both the construction phase and on completion. This suggests effects that will certainly be important considerations at a local level but may be at a regional or district level too. The applicants consider that proposed development would likely swing towards the Moderate level of significance. They consider that if the proposed development were being considered on its own it would have a Major level of significance. However, because there are existing buildings on the Envar site and in the immediate locality the area has already been subject to significant development and the proposed development would be seen as an extension and consolidation of the existing built development that is already breaking the skyline and is blocky in nature. For this reason, the applicants believe that the site should be considered at a regional or district level and the level of significance is Moderate not Major.

13.25 The HDC landscape officer has accepted the methodology used for the LVIA and broadly agrees with the assessment of anticipated effects. She agrees that the existing buildings on the site have a certain amount of prominence in views from the surrounding landscape to the north, northeast, northwest and west. Several factors contribute to this:

i) As identified by paragraph 4.4.3 of the LVIA, this is because of the buildings' position on the top of a north facing slope of a west to east crest landform. The crest is one of a series of such landforms that exemplify the Central Claylands character area. Due to this location, there are long reaching views to the south facing slope of the ridge some 2 - 3km northwest of the site, on which Pidley is located. The dipping intervening landform serves to make views of the existing structures of the site from Pidley, and the roads which lead east and west of it along the crest, more immediate than the 2 km distance would suggest.
ii) The landform also lends itself to views from the southern edge of Somersham in the lower lying Fen Edge character area, where the rolling landform to the south and west is in

contrast to the flatness of the Fen Edge area. To receptors in Somersham the built form on the crest magnifies the level changes and there is potential for buildings breaking the skyline to appear dominant over the lower lying landform. Because of the level change, screening views of structures on the crest is potentially challenging.

iii) As identified in the site description (paragraphs 1.2.4 and 1.2.5 of the LVIA) the boundaries are largely open, particularly to the north and east. There is a line of trees on the western boundary, however, it is only a single tree deep, and in the winter months this offers limited screening / softening, as clearly shown in many of the viewpoint photographs.

iv) It is agreed that there are fewer views from the south owing to the intervening landform and vegetation. It is noted that there are fewer footpaths and publicly accessible locations to the east, so the Bluntisham Heath Road has been used as the representative viewpoint for residential receptors, which is acceptable. These viewpoints illustrate, however, that even to the east views can be long distance and the existing boundary vegetation does not do much to screen the existing large structures on the site.

v) The existing buildings are large when compared to other structures within the countryside. There are of course larger agricultural buildings within the host landscape, but they tend to be incidental as opposed to in large groups. The exceptions to this are the large hangars associated with Wyton Airfield. Other groupings of larger buildings and warehouses do not occur until the northern perimeter of St Ives which relate very well to the urban landscape of the town and views of the town edge from the Central Claylands character area are generally screened, filtered and channelled by landform and vegetation.

Notwithstanding the above, the existing buildings on the site do form a part of a small cluster of larger warehouse-style buildings – the Raptor Foundation and Woodhurst Farm being a part of this cluster, albeit on lower ground than the Envar site.

13.26 Paragraph 4.2.8 of the LVIA refers to the HDC Landscape and Townscape Character Assessment, recognising the vulnerability of the character area to large structures and that “The lack of trees and hedgerows in much of the area, and the potential for long views, mean that those structures which are out of scale or context are visible for long distances.” One of the solutions identified to mitigate against these effects includes planting of new blocks of native woodland and hedgerows to provide a stronger sense of structure to the landscape, and to screen intrusive structures where appropriate.” Furthermore, Chapter 8 of the LVIA ‘Cumulative and Additive Effects’, which details the changes in views to the selected viewpoints, often notes how the mass of buildings will be seen extending outwards from the existing building line (for example viewpoints 5, 7, 9), and it was questioned how the proposed layout was arrived at and whether alternatives, such as positioning the proposed buildings at the south-east of the site were explored in relation to the zone of theoretical visibility.

13.27 Positioning the proposed buildings so far to the north decreases the opportunity to provide additional screening within the site and increases the built form in the area of the site that is most visually prominent, although it is appreciated that a rationale may have been locating buildings on lower ground. The planting that was originally proposed when the application was submitted in July 2021 was not considered sufficient to provide adequate screening. Much reliance was placed on the 2017 proposals and comprised:

i. A planted landscape bund that wraps around the northern and north-eastern perimeter of the site;
ii. Additional hedgerow planting around the south-eastern perimeter of the site; and
iii. Retention of existing trees along the western and southern edges of the site.

The bund would be 1.8 metres high with a 1:2 slope facing inside the site and a 1:3 slope facing outside. The top would be planted with a hedge with hawthorn, holly, blackthorn and dog rose which would have a maximum height of 5 metres. The external slope would be 5 – 5.5 metres wide which would allow 2 rows of trees and shrubs to be planted at 2 metre centres that would likely reach a height of around 7 – 8 metres (dogwood, hazel, hawthorn, holly, privet, crab apple, blackthorn, dog rose and guelder rose).

13.28 The buildings that were the subject of the 2017 planning permission are approximately 10 metres high to the ridge and are approximately 170 – 190 metres south of the bunded northern boundary. The current proposal would include new buildings being erected further north within the site and generally the built mass would be substantially increased. The proposed waste transfer building and biomass building would be approximately 75 metres southwest of the northern boundary bund and its vegetation and would be 10 metre high to the ridge. The PFPF building would be 11 metres to the ridge, the digesters 11.09 metres high, one of the biogas upgrading unit towers 12.87 metres high and the healthcare ERF chimney 26 metres high. With the increase in height of the buildings, the increased mass of the buildings and the topography, the proposed approximately 5 metres wide belt of small – medium sized trees on the northern and northeastern boundaries would be insufficient to soften, screen and filter views of the proposed development. The aim of the planting should be to break the geometry of the rooflines which would mean planting trees that have the potential to reach at least 15 metres in height. Some of these trees should be planted at more mature sizes to enable some level of early screening.

13.29 As illustrated by several of the viewpoints, a narrow strip of trees and hedgerows do not do much to screen what is beyond in the winter months; a thicket of branches is needed to create this effect. This is very well illustrated by the photography for viewpoints:

i. 2, taken on Bluntisham Heath Road, which clearly shows the difference between screening afforded by the hedgerow to the fore of the site, and the woodland block to the north of Colne Farm.
ii. 5, taken on the verge of the B1089, which illustrates how dominant the buildings extending beyond the cover offered by the woodland around the Raptor Foundation would be; and
iii. 9, on Wheatsheaf Road, which demonstrates that the single line of trees along the B1040 does little to screen the existing buildings on the site and would offer even less softening of the view for the proposed taller structures.

13.30 For the reasons given above it was considered that additional mitigation is required such as:

i. An increase in the depth of vegetation to be introduced along the northern and eastern boundaries;
ii. Addition of larger, locally found tree species into the tree mix. The Cambridgeshire Landscape Guidelines suggest Quercus robur (English oak) should be the dominant species;

iii. Addition of taller tree species needed within the vegetation previously approved for the boundary at the south-eastern corner of the, to break up views from Bluntisham Heath Road and residential receptors there; and
iv. Enhancement of the existing hedge that runs through the site to the south of the proposed lagoons to enhance the layering of screening and provide height closer to the proposed structures. Again, larger tree species should be introduced here.

13.31 The reduction in car parking spaces at Heath Top House gave greater opportunity to provide more generous landscaping including trees to break up the lengths of car parking and hard standing.

13.32 The applicant's 17 August 2022 submission of the revised LVIA P05 addressed most of the HDC landscape officer's concerns. Owing to the size and volume of the proposed new buildings and infrastructure and location of existing buildings the applicant considered that significant alternative design solutions were not feasible and would not materially affect the landscape and visual impacts of the proposed development and have only minimal impacts on the zone of visibility. A different layout was not considered as part of the LVIA.

13.33 The landscape planting scheme was revised to include 4 rows of native trees on the top and outside of the bunds forming a length of 1073 linear metres of trees. The mature tree line on the B1086 St Ives Road would be reinforced at lower levels with 160 linear metres of privet hedge. A tree belt comprising 150 native trees has been introduced between the new water storage lagoons and the waste transfer station and biomass buildings to help break up the mass of those buildings. There would be 133 linear metres of privet hedge a new grassed area and 13 native trees around the proposed car park at Heath Top House. The proposed additional planting would over time reduce the visual impact of the proposed development from most viewpoints but not so much that the magnitude and significance at any would be reduced to a "lower" category.

13.34 The council's ecology officer has identified inconsistencies between the submitted landscape scheme and the proposed BNG measures and has suggested that more details are required for the latter which could be secured by condition. Because of the interrelationship between the landscape planting and BNG measures and to ensure consistency it is recommended that a detailed landscape scheme is also secured by condition. The effectiveness of the landscape planting would be increased by early implementation which can be secured by planning condition as could the maintenance of the new trees in accordance with NPPF paragraph 131 (see recommended conditions 31 - 33).

Plume

13.35 The HDC landscape officer's concern which had not been addressed when the authority's final comments on the application were submitted is about the visual impact of a plume of water vapour from the healthcare ERF chimney. The August 2022 LVIA contained the applicant's air quality consultant's analysis which concluded that "the potential for a plume to be created and to have any notable potential impact is negligible, and no further assessment is proposed." In the opinion of AQC (21 October 2022) insufficient information had been provided to determine whether the plume visibility assessment was robust. A more detailed report was submitted on 29 November 2022 (Environmental Visage – Plume Visibility Assessment Note 2 – Envar Huntingdon).

13.36 A plume becomes visible when the water vapour within it condenses into water droplets. This is a function of the temperature and humidity of the ambient air as well as the temperature and concentration of moisture in the discharge. The initial water content and temperature of the release and information on the humidity of the ambient air was put into an advanced dispersion model to determine whether the plume would be visible and for what distance. The anticipated worst-case discharge conditions were modelled over 5 years of meteorological conditions with results specified at local receptors and boundary points. The conclusion was that "as a general rule, no plume is anticipated from the process, even when the flue-gas is discharged at the lowest anticipated temperature of 160 ^{o}C. During the five-years' of meteorological conditions that have been modelled (2016 – 2020), two hours are predicted to have the potential to result in a visible plume if, at this time, the discharge temperature is low, and the moisture content is high. Both visible plumes occur on 28th February 2018." One, at 3pm would be 37.72 metres long when the temperature was - 3.8 ^{o}C and the relative humidity 99.2% and the other would be at 7pm and be 2.68 metres long when the temperature was – 5.6 ^{o}C and the relative humidity 99.1%. The plumes would become and remain invisible at just over 70 metres from the discharge point which means that they would not extend beyond the site boundary.

13.37 Whilst the visual impact of a plume is a certainly a planning matter, the Environment Agency's now withdrawn Horizontal Guidance Note IPPC H1 contained a Plume Visibility Matrix which provided advice on quantifying the potential impact from visible plumes. The lowest category is Zero where there are "no visible impacts resulting from operation of process". The impact would be classed as Insignificant where there would be "regular small impact from operation of process; plume length exceeds boundary <5% of daylight hours per year; no local sensitive receptors". The impact would be classed as Low where there would be "regular small impact from operation of process; plume length exceeds boundary <5% of daylight hours per year; sensitive local receptors". As set out in the previous paragraph, the modelling undertaken for Envar's proposed healthcare ERF shows that a visible plume was predicted for 2 hours in a 5 year period, one of which would be in daylight hours. This would equate to 0.023% of the year or 0.022% of daylight hours. The modelled situation does not fit entirely within any of the three categories: the plume length would not extend beyond the site boundary and a visible plume would be expected to occur for only 0.022% daylight hours per year but there would be sensitive receptors i.e. those living and working within the area around the Envar site. The applicant's conclusion is that "although it is not suggested that a plume will never be visible from the HERF, the likelihood of a plume being visible and witnessed is small, due to the limited occasions where conditions might promote one and the limited period over which these might occur."

13.38 AQC has reviewed the applicant's November 2022 plume visibility review and noted that her previous concerns had been addressed with the provision of additional information which she considers is sufficient to conclude that the plume visibility assessment is robust. Given the findings of the plume visibility assessment it is considered that the likelihood of a plume being generated by the healthcare ERF that would be visible from outside the site is very small and that the visualisations sought by HDC are not now necessary. It is considered that all information necessary to come to an overall conclusion about the visual impact of the proposed development is to hand.

Visual impact conclusions

13.39 As noted at paragraph 13.9 above the countryside around the site is valued by its residents

and by visitors as shown by the large number of individuals whose responses raised concerns about the visual impact of elements of the proposed development.

13.40 If the proposed development area was a previously undeveloped site with none of the existing waste management buildings and infrastructure present, it is considered likely that the visual impact of the proposed development would be of Major rather than Moderate significance and this may have been sufficiently in conflict with planning policy to justify refusal on landscape impact grounds (subject to conclusions on other aspects of the development plan and weighing up all material considerations) . As set out in paragraph 13.24 above, the applicant considers that the significance of the impact of the current proposal in the context of an existing site is Moderate and officers are inclined to agree. Impacts of Moderate significance are likely to be important considerations at a local level so cannot be dismissed lightly.

13.41 The Envar site already contains a number of large buildings which owing to the site's relatively elevated location can be seen from a number of public viewpoints and from some of these viewpoints breach the skyline. These buildings are consented development so form the baseline for assessment. Planning officers viewed the site from all the viewpoint locations in the LVIA on a clear day in December 2022 when there was minimal leaf cover. It was not in every case easy to distinguish the Envar buildings. The proposed development would make the site more prominent from some locations by extending and / or consolidating the built form, most noticeably from Viewpoint 5 to the north.

13.42 The improved landscaping proposals would go some way towards mitigating the visual impact of the proposed development by softening and filtering views of the lower parts of the proposed buildings and structures. Whilst most of the proposed new buildings and structures would be lower, the same height or only a metre or so higher than the existing, the healthcare ERF chimney would at 26 metres be more than twice the height of any other structure on the site and it would be impossible to screen its upper section. However, its diameter would be only 1.07 metres and arguably would be less intrusive than the increased mass and blockiness that the proposed large buildings would create.

13.43 The focus of MWLP Policy 17, NPPF paragraph 174 and HLP policies LP10 and LP11 is on the character of the countryside. HLP policy LP19 (h) is relevant if the proposal is to be considered to be the expansion of an existing business outside its existing operational area and assessed under the second limb of policy LP19 (h) as discussed in paragraph 9.30. The visual impact of a development proposal and its mitigation is one aspect of this. MWLP Policy 17 (i) requires, where appropriate, the development to "provide well designed boundary treatments (including security features) that reflect the function and character of the development and are well integrated into its surroundings." NPPF paragraph 130 (b) states that developments should be visually attractive as a result of good architecture, layout and appropriate and effective landscaping. The scale of the proposed buildings is determined by their function. Buildings of this scale would be difficult to entirely assimilate into a rural landscape. Their appearance would be similar to that of the modern farm buildings but the area of land that they would occupy would be larger than agricultural buildings which are generally isolated or in smaller clusters. The presence of and need to functionally relate to existing infrastructure has limited the options for locating the proposed new development within the wider site. This has also compromised the options for mitigation by means of screen planting. It is considered that the revised landscaping scheme is as good as can practicably be achieved taking into account the constraints

referred to above. It is noted that HDC's residual issue relates to the plume and no objection is maintained in respect of the visual impact of the static features or proposed landscape treatment. It therefore needs to be considered whether the proposed mitigation is sufficient to assimilate the proposed development sufficiently into its surroundings.

13.44 It is recognised that the proposed development would increase the prominence of the site from some viewpoints in the landscape. The presence of the 26 metre chimney may draw attention to the overall changes which may otherwise not be noticed or considered overly intrusive. Even with the proposed landscape screening at full maturity the proposed development would not be completely assimilated into its surroundings and the site as a whole would remain a fairly prominent feature in the wider rural landscape. However, on balance it is considered that the visual impact of the proposed development in itself would not be so great as to be clearly contrary to NPPF paragraphs 130 and 131, MWLP Policy 17 and HLP policies 10 and 11. HLP policy 19 (h) would be relevant if the proposal is to be considered to be the expansion of an existing business outside its existing operational area and assessed under the second limb of policy LP19 (h) as discussed in paragraph 9.30. This matter will be considered again in the overall planning balance at the end of this report.

14 Ecology and biodiversity net gain

14.1 This section of the report will first consider the potential impact of the proposed development on any features of ecological interest within the site and off-site taking into account any areas that are designated for their nature conservation value. Second it will consider if the requirement to deliver biodiversity net gain (BNG) could be met.

14.2 Relevant policies:

NPPF paragraphs 174 and 180
MWLP Policy 20
HLP policy LP30

Designated sites – International and national

14.3 The Ouse Washes SSSI which is also an internationally designated Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar site is approximately 5 kilometres to the east of the Envar site. Natural England (25 August 2021) considers that the proposed development will not have significant impacts on the Ouse Washes and has no objection to the application. They refer to the need for the WPA as the competent authority to meet the requirement of the Conservation and Habitats and Species Regulations 2017 (the Habitats Regulations). Based on Natural England's advice it is considered that for the following reasons a significant effect on the Ouse Washes can be ruled out:

• Contributions of Nitrogen Dioxide, Ammonia, and SO_2 from the development were below the 1% critical level screening threshold at the Ouse Washes SAC, SPA and Ramsar;
• Contributions of nutrient Nitrogen and acid deposition from the development were below the 1% critical load screening threshold at the Ouse Washes SAC, SPA and Ramsar; and
• No other developments in the local area were identified that can be considered in-combination with the development.

14.4 Berry Fen SSSI is approximately 3.75 kilometres southeast of the Envar site. In her first response (19 August 2021) the WPA's ecology officer raised a holding objection because although the Ouse Washes was included as an ecological receptor in the air quality assessment, the results were not interpreted in the ecological report. She sought more information on air quality impacts on the SSSIs. This was provided by the applicant in the ES Addendum (March 2022) and satisfied Natural England (3 May 2022) and the ecology officer (29 April 2022) that there will be no significant air quality effect on the SSSIs.

Designated sites – local

14.5 As set out in paragraph 2.2 above, three county wildlife sites (CWS) are located between 1 and 2 kilometres from the Envar site. As for the SSSIs, the WPA's ecology officer sought further information noting that the applicant's air quality assessment identified impacts that are "not immediately screened to be insignificant" including:
- annual increase in nitrogen dioxide at St Ives Disused Railway (The Parks South) CWS;
- annual increase in ammonia at Heath Fruit Farm CWS, St Ives-March Disused Railway (The Parks South) CWS and Lawn Orchard CWS.

14.6 Following the submission of further information as part of the planning statement addendum (March 2022) the ecology officer (29 April 2022) was satisfied that there would be no air quality impact to the Heath Fruit Farm and Lawn Orchard CWSs. She remained concerned that the predicted nitrogen deposition would exacerbate the situation at the St Ives – March Disused Railway (The Parks South) CWS where background levels already exceed the critical load for neutral grassland habitat. The applicant provided further information in the planning statement addendum (August 2022) which enabled the holding objection to be removed (21 October 2022). AQC has assessed the robustness of the modelling and calculated that both the background nitrogen deposition rate and the process contribution are slightly higher than presented by the applicant. Regardless of the slight differences in calculated values and the potential risk that nitrogen deposition rates to the CWS may be marginally above the critical load of 20 KgN/ha/yr, the proposals are expected to lead to a reduction in nitrogen deposition to the CWS because of the replacement of existing biofilter with a more up to date process which would reduce the ammonia concentration from the process. Ammonia has a much higher deposition rate than nitrogen dioxide and therefore the reductions in emissions of ammonia will more than offset any increase in nitrogen dioxide concentrations, so there will be an overall reduction in nitrogen deposition. The CCC ecology officer has confirmed that she considers that the scheme will have no adverse impact on the CWS above the current situation (see paragraph 6.32 above).

14.7 Fen Drayton Gravel Pits is a CWS approximately 5 kilometres south of the Envar site. Concern has been raised about the impact of the proposed development on Fen Drayton Lakes which is an RSPB reserve and includes the CWS. Being a similar distance from the Envar site as the Ouse Washes, there is no reason to believe that the proposed development would adversely affect the CWS or wider reserve. The WPA ecology officer did not identify CWSs further than 2 kilometres from the Envar site as requiring specific consideration.

Non-designated sites

14.8 Concern has been raised by some individuals about the impact of the proposed development on Ouse Fen which is an RSPB reserve. Ouse Fen is a similar distance from

the Envar site as the Ouse Washes and there is no reason to believe that it would be adversely affected by the proposed development.

Conclusions – designated and non-designated sites

14.9 For the reasons set out in paragraphs 14.3 – 14.8 above, it is considered that the proposed development would be unlikely to adversely affect designated and non-designated sites so would comply with NPPF paragraphs 174 (a) and 180 (b), MWLP Policy 20 and HLP policy LP30 in this respect.

Ecology on site including protected species

14.10 All bat species are protected under the Conservation of Habitats and Species Regulations 2017 and it is an offence to deliberately kill, injure, disturb or capture them. It is an offence under the Wildlife and Countryside Act 1981 to disturb bats while they occupy a structure or place used for shelter or protection or to obstruct access to that place. The applicant's ecological appraisal identified potential bat roost features within a supporting wall of one of the buildings that would be demolished. The WPA's ecology officer has advised that these should be inspected by a licensed bat ecologist immediately prior to demolition to ensure that no bats are present. This can be secured by planning condition (see recommended condition 10). If bats are present the developer would need to apply for and obtain a mitigation licence from Natural England; to demolish the buildings without this would be an offence. External lighting has the potential to adversely affect bat foraging/commuting habitat so should be kept to a minimum, particularly around the lagoons and hedgerows and tree belts. A detailed lighting scheme could be secured by condition (see recommended condition 28). It is considered that with the recommended conditions in place the proposed development would comply with MWLP Policy 20 and HLP policy LP30 in this respect.

Biodiversity net gain (BNG)

14.11 The application when originally submitted and with the March and August 2022 updates did not contain enough information to demonstrate that a level of BNG proportionate to the scale of the scheme would be delivered. Further habitat survey work was needed to provide an accurate baseline assessment and the post-development habitats updated to reflect the revised landscape scheme. The WPA's ecology officer raised concerns that some of the positive changes to proposed habitats were unrealistic and unlikely to be achieved.

14.12 Further information was submitted by the applicant on 30 November 2022. It has been reviewed by the WPA's ecology officer who considers that the applicant has demonstrated that the scheme has the potential to deliver a measurable BNG proportionate to the scale of development proposed. A more accurate BNG assessment undertaken at the detailed design stage and a BNG plan including long term management can be secured by condition (see paragraph 6.31 above and recommended condition 33). It is considered that subject to securing detailed information by conditions, the proposed development in terms of BNG would be in accordance with the requirements of NPPF 2021 Paragraph 180, Policy 20 of the Cambridgeshire and Peterborough Minerals and Waste Local Plan and HLP policy LP30.

15. Design, climate change and carbon footprint

Design

15.1 Relevant policies:

NPPF paragraphs 126, 130 and 134
MWLP Policy 17 and Appendix 3
HLP policies LP11 and LP12

15.2 The policies referred to above seek to ensure that new development is well-designed taking into account its location and informed by sustainability. Other than MWLP Policy 17, these policies are intended to cover a wide range of types of development so not all elements will be relevant. Appendix 3 of the MWLP provides guidance specifically related to waste management facilities. In rural locations it recommends that the design of facilities should reflect the scale and design of agricultural buildings. The proposed buildings would be constructed with a steel frame with box profiled steel cladding coloured dark green. The shallow pitched roofs would be light grey. It is considered that this is similar in style and scale to modern agricultural buildings and to the warehouse that has recently been built immediately to the north of the Envar site on the former mushroom farm which measures 49.24 x 50.74 x 10.73 metres high. Lighting, landscape planting and parking, are covered elsewhere in this report. No detailed drawings of the dry AD infrastructure have been provided. It will in part replace existing composting tunnels and would be located at the centre of the site so would not be in a prominent position when viewed from outside the site. Nevertheless, owing to the scale and height of some of the structures it is considered prudent to require the developer to submit details of final design and external finishes for all buildings and infrastructure that would be over 9 metres in height by planning condition (see recommended condition 13). Details of the dry AD plant and healthcare ERF would also be required to enable noise mitigation to be built into the design as discussed in paragraph 18.11 in the section on noise.

15.3 The applicant's planning statement contains a short section on sustainable design and construction which refers to the waste transfer station, biomass store and PFPF buildings having solar panels on their roofs and the harvesting of rainwater from all roofs and clean surface water. The buildings are essentially to house the plant and machinery which carry out various elements of the waste management processes. The waste transfer station, biomass store and PFPF buildings would have roller shutter doors principally for vehicular access and the healthcare ERF building would also have personnel doors and a small number of windows. A small number of objectors have raised concerns about the loss of privacy. This would not arise because the small upper floor windows of the healthcare ERF building would be on the eastern elevation facing into the site and the PFPF building and those on the western elevation would be 60 metres from the site boundary and overlook fields to the west of the B1086 St Ives Road.

15.4 Some objectors have selected "More open space needed" from the options on the on-line submission form which has probably been misunderstood in the context of this application. It would usually be relevant in the context of housing or commercial development in urban areas where public open space is often a design requirement.

15.5 In conclusion, it is considered that the proposed buildings and associated infrastructure are

appropriate for their purpose and location with relatively few design options owing to their purpose. It is considered that the proposed development would comply with NPPF paragraphs 126, 130 and 134, MWLP Policy 17 and Appendix 3 and HLP policies LP11 and LP12 in respect of design.

Climate change and carbon footprint

15.6 Relevant policies:

NPPF paragraphs 152, 154 & 158
MWLP Policy 1
HLP Objectives and policies LP12 (j) and LP35

15.7 The applicant has submitted a Statement of Sustainable Design and Construction (section 6.6 of the Planning Statement) which lists the following features of the proposed development:

i. Diverting green and food waste from landfill minimising the release of greenhouse gas emission from decomposing waste and slowing down climate change;
ii. Heat that is generated in the healthcare waste ERF will be used in the dry AD plant process and PFPF providing significant on-site energy efficiencies;
iii. Providing an innovative PFPF that captures significant quantities of carbon from the anaerobically digested material to provide a high quality environmentally friendly fertilizer;
iv. Incorporating solar panels to the roofs of the main buildings;
v. Harvesting rainwater from all roofs and clean water areas and storage within the proposed storage lagoons;
vi. Generation of renewable energy in the form of biogas from the anaerobic digestion process – the biogas can be exported to the national grid to replace natural gas (fossil fuel) and can be used on site by the applicant as fuel for road going vehicles; and
vii. The CHP elements will generate a significant percentage of the electrical power required by the proposed development with the heat being utilised throughout the system.

15.8 The applicant has also provided an Energy Efficiency Overview (18/01/2023) which identifies the current energy use and its source. The current waste management activities use diesel and electrically powered machinery for the processes themselves and for pollution and odour control. In 2019 Envar installed 364 Kw (peak) solar generation capacity on the roofs of existing buildings to replace some of the grid energy use. They do still import between 1500 and 2000 megawatt hours of electrical energy each year. Based on the site's maximum throughput the energy requirement equates to 2.85 litres of diesel and just over 10kWh of imported electricity per tonne of material handled. The current site energy use has been summarised by Envar in the table reproduced as Figure 10 below.

Current Site Energy Use - Nominal Average Use			
Energy Source	Amount Used	Unit	Purpose
Diesel	570000	Litre	Mobile plant machinery & electric generation
Gas	50	M3	heating and hot water
Electricity Imported Main Incomer	1973780	Kwh	Plant Operation
Electricity Imported Secondary Supply	324000	Kwh	Plant Operation
Electricity Imported Domestic/Commercial Supply	5200	Kwh	Offices & Welfare
Electricity (Solar used On Site)	291920	Kwh	Plant Operation
Electricity Exported (Excess Solar)	9080	Kwh	Export to Grid
Grid Electrical Import Net	2001980	Kwh	
Diesel use Net	570000	Litre	

Figure 10

15.9 If the current development proposals are approved and implemented Envar would be able to significantly decrease its reliance on electricity from the National Grid and become an exporter of renewable gas. The potential energy use and export have been summarised by Envar in the table reproduced as Figure 11 below.

Potential Site Energy Creation - Nominal Average Use			
Energy Source	Amount Used	Unit	Purpose
Diesel	485000	Litre	Mobile plant machinery & electric generation
Renewable Gas - production	4579850	M3	Export to Grid
Electricity Main Incomer/Site Demand	1973780	Kwh	Plant Operation
Electricity Secondary Supply/Site Demand	324000	Kwh	Plant Operation
Electricity Domestic/Commercial Supply/Demand	5200	Kwh	Offices & Welfare
Electricity (Solar Used on Site)	1253000	Kwh	Plant Operation or Export
Grid Electrical Import Net	1049980	Kwh	Reduction in Use
Diesel Use Net	485000	Litre	Reduction in Use
Renewable Gas Export	4579850	N/M3	New Renewable Export

Figure 11

15.10 Figure 11 shows the additional solar generation capacity which would enable the site to reduce its imported electricity by nearly 50%, the equivalent of 5.25 Kwh per tonne of

material handled. The diesel usage would be reduced by the replacement with machinery with electrical connections and the replacement of diesel machinery with that which runs on gas which would bring the rate down by 14% to 2.4 litres per tonne of material handled. As well as reducing reliance on imported energy, the site would become a producer of renewable gas which could be exported to the national gas grid replacing natural gas which is a fossil fuel.

15.11 The council's Carbon and Energy Manager has reviewed the information provided by the applicant and using their figures has summarised the energy use in the table, Figure 12, below. Her comments on the application are set out in paragraphs 6.33 – 6.35 above.

Figure 12

Energy Source	Purpose	Unit	Current Amount Used	Future proposed use	Notes
Grid Electricity Import Net	Plant operation + offices	kWh	2,001,980	1,049,980	Addition of new solar PV would reduce imported electricity
Diesel	Mobile plant machinery & electric generation	Litre	570,000	485,000	Reduced use of diesel as replace with machinery that uses electricity or gas
Gas	Heating and hot water	m3	50	-	No longer required
Renewable gas production	Export to Grid	m3	-	-4,579,850	New export

15.12 Point (i) in paragraph 15.7 above can be afforded little weight because the green and food waste that is brought to the site is composted but it is acknowledged that it would be preferable to it being landfilled. However, treating approximately half the green and food waste input in the proposed dry AD plant would be a preferable technique for this waste stream in that it would enable energy recovery as well as the production of a soil improver as discussed in paragraph 9.15. The other points are considered to carry some weight for the reasons given above.

15.13 The applicant's Energy Efficiency Overview comments on the proposed PFPF which, as set out in paragraph 3.12 would use some of the organic output from the proposed dry AD plant to produce fertilizer in a pellet form. The process, developed by CCm Technologies, uses captured carbon dioxide from industrial power generation that would otherwise be emitted to the atmosphere to stabilise materials such as ammonia and phosphates from agricultural and industrial waste streams and use these to create new fertilizer products with significantly lower than usual carbon footprint. The Envar scheme would capture CO2 from combustion flue gases and biogas separation and use it to stabilise ammonia to form stable nitrogen compounds which would then be blended with the fibrous output from the proposed dry AD plant to increase the nutrient content of the fertilizer. Being in a stable form and applied as pellets with a high proportion of organic fibre rather than powder, the ammonia is less prone to leaching. CCm claim that fertilizer produced using their technology sequesters organic carbon into the soils storing it for at least 20 years. They state that for every one tonne of CCm fertilizer, approximately 1 tonne of CO_2 (e)

(equivalent) can be sequestered. The CCm fertilizer would be a direct replacement for commonly used agricultural fertilizer which is the result of a fossil fuel derived process.

15.14 The council's Carbon and Energy Manager has drawn attention to the uncertainties in the carbon savings and that other sources of carbon associated with the proposed development have not been evaluated. In respect of transport, 96% of the inputs to the site would be existing waste streams therefore for the operational phase would not be significantly different to the existing situation. The objectives of MWLP Policy 1 are ambitious and consistent with the increasing importance of considering sustainability and climate change when assessing development proposals. Policy 1 states that "Proposals should, to a degree which is proportionate to the scale and nature of the scheme, set out how this will be achieved, such as:" The purpose of the proposed new waste management processes (the healthcare ERF and the dry AD plant) is to use waste to create renewable energy. Some of that energy and organic output from the dry AD plant would be used in the production of a pellet fertilizer that would replace traditional fertilizer. It is considered that although all the carbon sources have not been evaluated, the overarching purpose of the principal elements of the proposed development would comply with the general policy aims of moving to a lower carbon future set out in NPPF paragraph 152, MWLP Policy 1 and the HLP objectives and policy LP35. It is considered that the information provided by the applicant is acceptable for the scale and nature of the proposed development. Envar would have an obligation under the environmental permit to maximise energy efficiency. The current permit requires them to "(a) take appropriate measures to ensure that energy is used efficiently in the activities; (b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and (c) take any further appropriate measures identified by a review."

16. Surface water drainage and flood risk; Water quality

Surface water drainage and flood risk

16.1 Relevant policies:

NPPF paragraphs 167 & 169
MWLP Policy 22
HLP policy LP15

16.2 The Envar site is in the Environment Agency's flood zone 1 which is the least at risk of river sea flooding. The area of the proposed development area is over 1 hectare therefore the applicant was required to submit a flood risk assessment (FRA). The Envar site covers approximately 18.5 hectares, 8.2 hectares of which is currently low permeability (hardstanding, compost pad, building roofs, water storage lagoons). Clean water from roofs is piped to Lagoon 4 from where it is re-used on site with any excess being discharged under licence to a drainage ditch to the north of the site. Dirty water from working areas is piped to Lagoons 1, 2, and 3 which feed a water treatment plant. Treated water is discharged to a ditch at the north of the site restricted by permit to 100,m_3/day.

16.3 Part of the proposed development would be on existing low permeability land but the proposed waste transfer and biomass storage buildings, the extended concrete pad and the replacement surface water lagoons would create new low permeability areas and a net total

of 15.86 hectares. This would lead to an increase in surface water run-off which requires mitigation to reduce the risk of flooding. The proposal is to use the existing water management system to convey clean and dirty water to a series of new water storage lagoons for treatment where necessary before being re-used on site or discharge off-site under licence. The new clean water lagoon would be at the northwest corner of the site between the proposed waste transfer building and the boundary with the former mushroom farm and close to the discharge point. The 3 dirty water lagoons would also be along the boundary with the former mushroom farm. The new lagoons have been designed to have sufficient capacity to accommodate run-off from the increased impermeable area.

16.4 The lead local flood authority (LLFA) initially raised an objection because the applicant's FRA contained insufficient information. This was withdrawn following the applicant's provision of a drainage strategy as part of the March 2022 supplementary submission which demonstrated to the LLFA that surface water from the proposed development can be managed through the use of a series of lagoons with sufficient volume to contain several months of rainfall along with a freeboard to contain the 1 in 100+40% storm event. Surface water will be discharged at the greenfield runoff rate of 56.3l/s for the 1 in 100 year storm event should the lagoons become full.

16.5 Taking into account the LLFA's advice including the detailed design of the surface water drainage system and measures to manage any additional surface water during construction works being secured by conditions, it is considered that the proposed surface water management system described in paragraph 16.3 above would comply with the relevant parts of NPPF paragraphs 167 and 169, MWLP Policy 22 and HLP policy LP15 (see recommended conditions 12 and 29).

Water quality

16.6 Relevant policies:

NPPF paragraph 174 (e)
MWLP Policy 22
HLP policy LP37

16.7 The Envar site is not within a source protection zone (SPZ) but according to information based on British Geological Survey data is above a secondary undifferentiated aquifer. According to the Environment Agency's guidance 'Protect groundwater and prevent groundwater pollution (14 March 2017) secondary undifferentiated aquifers are of only minor value. The biggest risk to pollution of groundwater would be from contaminated water. The proposed surface water drainage scheme has been designed so that 'dirty', potentially polluting water is collected in lagoons before being processed in a water treatment plant. The permit to discharge water off site would include controls on water quality. The waste that would be delivered to the waste transfer station and healthcare ERF would be handled and stored within the buildings. The environmental permit will require the buildings to be constructed and the waste managed in such a way that the risk of pollution to groundwater is minimised. The following statements are taken from the current environmental permit:

"All areas used for waste reception, shredding, windrow composting, in-vessel composting, transfer and treatment building, biomass processing, screening, and product storage are underlain by an impermeable surface with a sealed drainage system.

Leachate from the composting activities is treated via the on-site effluent treatment plant (ETP) which is regulated under a separate Discharge Consent PRCNF/18042. The ETP receives waste water and effluent from a series of on-site lagoons for treatment and subsequent discharge to a tributary of the Cranbook Drain or re-use within the facility."

16.8 The 2017 planning permissions are subject to a condition relating to the storage of oils, fuels and chemicals. It is proposed that this condition be imposed if planning permission is granted for the new development (see recommended condition 30).

16.9 For the reasons set out in paragraphs 16.7 and 16.8 above, it is considered that the proposed development would not increase the risk pollution to groundwater so would comply with NPPF paragraph 174 (e), MWLP Policy 22 and HLP policy LP37.

17. Historic environment

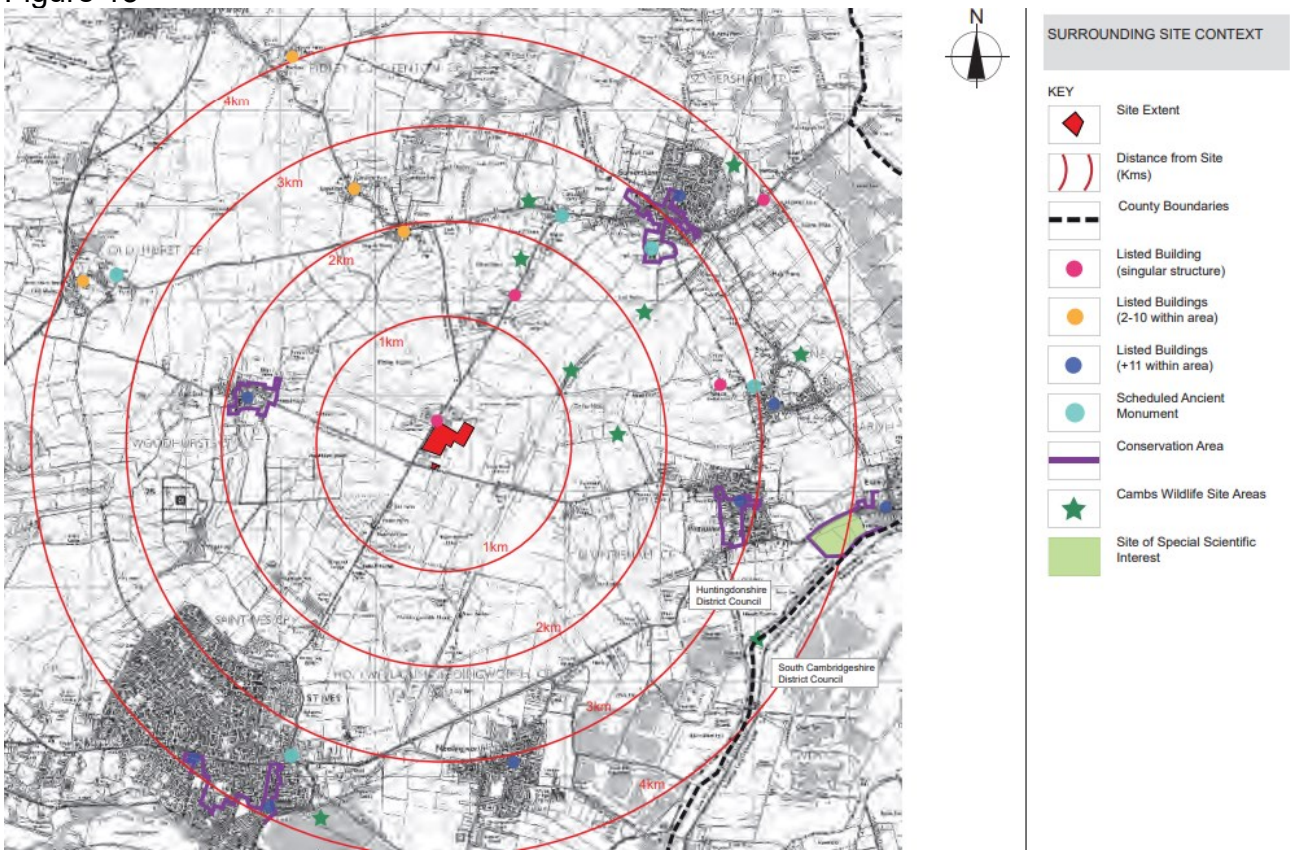
17.1 Legislative framework and relevant policies:

Planning (Listed Buildings and Conservation Areas) Act 1990 sections 66 and 72
NPPF paragraphs 195 and 199 - 203
MWLP Policy 21
HLP policy LP34

17.2 There are no designated heritage assets within the Envar site and therefore there would be no direct effects on any heritage assets from the proposed development. The matter to be considered is whether there would be harm to the significance of heritage assets and their setting i.e. their heritage value and why they were listed or designated as a result of the proposed development. The Envar site is relatively remote from designated heritage assets and for that reason the historic environment was dealt with only briefly in the applicant's planning statement. The applicant's LVIA identifies the designated heritage assets within a 4 km radius of the Envar site. Whilst visual impact is one aspect, the focus of the assessment is on the effect on significance.

17.3 Of national importance are the scheduled monuments at Old Hurst, Somersham, Colne and St Ives. These are shown on the map taken from the applicant's LVIA reproduced as Figure 13 below.

Figure 13



17.4 Obelisk at site of Republic Cottage, Stocks Bridge, St Ives – The location is within the highway verge close to the roundabout junction of Somersham Road (B1040) and Needingworth Road (A1123). There is no intervisibility between the obelisk and the Envar site owing to the separation distance (3.4 km) and the surrounding vegetation therefore the proposed development would not impact on the significance of this scheduled monument or its setting.

17.5 Obelisk at White Post, area east of Windmill public house at junction of B1089 and B1086. Owing to the separation distance (2.4 km) and intervening vegetation the proposed development would not impact on the significance of this scheduled monument or its setting.

17.6 Moated site 130 metres northeast of Manor Farm, Old Hurst – owing to the separation distance (3.7 km) it is considered that the proposed development would not affect the significance of this scheduled monument or its setting.

17.7 Moated site 90 metres northwest of Moat House, Old Church Lane, Colne. Owing to the separation distance (3 km) it is considered that the proposed development would not affect the significance of this scheduled monument or its setting.

17.8 Medieval magnate's moated residence (the Bishop of Ely's Palace) and later moated site, Somersham Park House. The applicant's LVIA includes viewpoint 3 which is a similar distance and direction from the Envar site which is visible in the distance. Owing to the

separation distance (2.65 km) it is considered that the proposed development would not affect the significance of this scheduled monument or its setting.

17.9 Listed buildings are also nationally designated. The closest listed buildings to the Envar site are two milestones on the B1086. One is approximately midway between Envar's Entrance E1 and the access to the travellers' site and the other is close to Cuckoo Bridge Cottage on the B1086 approximately 1.5 km from the Envar site. It is considered that the proposed development would not affect the significance of these listed buildings or their setting.

17.10 Woodhurst - There are 13 listed buildings in Woodhurst, all within the conservation area. Those near the eastern edge of the village are between 1.6 and 1.7 km from the Envar site. Woodhurst Parish Council considers that the proposed new buildings will have a significant detrimental impact on the outlook from parts of the conservation area and will be visible from some of the listed buildings, most notably Manor Farm.

17.11 The applicant's LVIA includes viewpoint 9 which is on Wheatsheaf Road 1.2 km west of the Envar site i.e. approximately 400 metres closer than Woodhurst. The main existing buildings at the Envar site are between 8.5 and 10 metres in height and are visible as is the Raptor Foundation and the Bluntisham water tower beyond. Some of the buildings will be replaced, with only the stack for the healthcare ERF being significantly higher than the existing buildings. The significance of the visual impact of the proposed development from viewpoint 9 has been assessed as Major/Moderate during construction and Moderate on completion. Owing to the separation distance (1.6+ km) it is considered that the proposed development would not affect the significance of the listed buildings within Woodhurst or their settings.

17.12 Conservation areas are designated because they are "areas of special architectural interest the character and appearance of which it is desirable to preserve and enhance", HLP policy LP34 states that "A proposal within, affecting the setting of, or affecting views into or out of, a conservation area should preserve, and wherever possible enhance, features that contribute positively to the area's character, appearance and setting as set out in character statements or other applicable documents," The Woodhurst Conservation Area Character Statement was adopted in 1994. It refers to one of the two entrances to the village being via the Wheatsheaf Road to the east and "the first impression being one of outward-looking properties located within a predominantly woodland setting". It is considered that owing to the separation distance the proposed development would not affect the significance of the Woodhurst Conservation Area in terms of its character, appearance and setting or affect views out of it.

17.13 Bluntisham – There are 27 listed buildings in Bluntisham, most of which are in the conservation area. There are 4 at Wood End at the western edge of the village and outside the conservation area some 2.4 km southeast of the Envar site. The applicant's LVIA includes viewpoint 2 which is on Bluntisham Road 1.55 km southeast of the Envar site i.e. approximately 850 metres closer than Wood End. The photomontage shows that the proposed buildings and ERF stack would be more prominent than the existing buildings but concludes that the significance of the visual impact would be Major/Moderate at viewpoint 2 during both construction and on completion. Taking into account the greater separation distance and the listed buildings' location in relation to other nearby buildings, it is considered that the significance of the listed buildings or their settings would not be affected by the proposed development.

17.14 Somersham – There are 3 listed buildings within the scheduled monument referred to in paragraph 17.8 above which is also part of the Somersham Conservation Area. For the same reasons, it is considered that the proposed development would not affect the setting of these listed buildings or significantly affect the views out of the conservation area. There are numerous listed buildings in Somersham, mostly along High Street and around the church. Taking into account the separation distance and their location in relation to other nearby buildings, it is considered that the significance of these listed buildings or their settings would not be affected by the proposed development.

17.15 Colne – There are 13 listed buildings in Colne, mostly on Bluntisham Road and High Street, some 2.6 km from the Envar site. The porch of the original church of St Helen is outside the village some 270 metres west of the scheduled monument referred to in paragraph 17.7 above. For the same reasons, it is considered that the proposed development would not affect the significance of this listed building or its setting.

17.16 Pidley – There are 8 listed buildings in Pidley. Owing to the separation distance of 2 – 2.7 km and their location in relation to other nearby buildings, it is considered that the significance of these listed buildings or their settings would not be affected by the proposed development.

17.17 St Ives – The numerous listed buildings are all south of the A1123, mostly within the conservation area which is close to the river. Owing to the separation distance of over 4 km and the intervening development north of the A1123 it is considered that the significance of the listed buildings in St Ives or their settings or the significance of the conservation area would not be affected by the proposed development.

17.18 Non-designated heritage assets – The county council's Historic Environment Team has reviewed the application and advised that there is no potential archaeological interest that would require evaluation. This was informed by the results of an evaluation that was undertaken in 2013 which resulted in no archaeological features or artefacts being found.

17.19 The proposed development would have no direct impact on designated or non-designated heritage assets. For the reasons given in paragraphs 17.4 – 17.17 above it is considered that the proposed development would not affect the significance of scheduled monuments or listed buildings or their settings. It is considered that the character, appearance, setting and views out of the Woodhurst Conservation Area would not be affected by the proposed development. In conclusion, it is considered that the proposed development would comply with NPPF paragraphs 195 and 199 - 203, MWLP Policy 21 and HLP policy LP34 and the council's statutory duties relating to heritage.

18. Noise and vibration

18.1 Relevant policies:

NPPF paragraph 185 (a)
MWLP Policy 17 (c), Policy 18 (c) & Policy 23 (d)
HLP policy LP14 (c)

18.2 The proposed development is not of a type that would generate vibration once operational. It is possible that vibration may occur during the construction phase but this would be no more than for the construction of other large buildings and would be most appropriately dealt with in the construction environmental management plan referred to in paragraph 11.14 which would also cover noise as recommended by the environmental protection officer (EPO) (see paragraph 6.3).

18.3 The current permitted hours of operation are set out in paragraph 2.5 above and are restricted by conditions on the 2017 planning permissions. The proposed development would be consistent with these. Some processes such AD and the healthcare ERF combustion would be continuous as are the existing in-vessel composting and biomass boiler currently. Deliveries and the operation of plant and machinery outside the buildings would, as under the terms of the 2017 planning permissions, be restricted to 05:00 – 22:00. The shredding of waste wood outside the building would, as it is now, be limited to 07:00 – 18:00.

18.4 The Huntingdonshire District Council EPO initially (14 September 2021) raised a number of queries and omissions in the applicant's Noise Assessment (April 2021), notably consideration of the potential impacts during the construction phase and the residential property at the Raptor Foundation. These were addressed by the applicant in the Addendum Noise Report (February 2022) including the submission of a draft Construction Environmental Management Plan (CEMP) which states that external construction work would take place between 07:00 and 18:00 Mondays to Saturdays excluding bank holidays.

18.5 The applicant's noise assessment (April 2021) considered the likely noise impact of the proposed development at representative residential properties: Rectory Farm, Bridge Farm. Heathfields and the travellers' site. The Addendum Noise report considered the cottage at the Raptor Foundation. Bridge Farm is approximately 660 metres southeast of the Envar site on The Heath. The applicant's report noted that the final plant details and design have not been finalised so standard building construction has been assumed. Noise levels from a similar operational healthcare ERF plant have been used. It was acknowledged that noise from the proposed dry AD and healthcare ERF plant could be tonal in nature which would be most likely to be audible at night and potentially audible at the nearest properties without mitigation and a 4 dB correction penalty was applied (see table in paragraph 18.6 below). The following tables have been taken from the noise assessment and show that except for during the night, noise from the site as developed would be similar to the noise generated by the existing permitted operations.

Calculated noise levels from existing permitted operations

Location	Calculated Noise Levels [dB $L_{Aeq,T}$]			
	Early Morning (05:00 – 07:00)	Daytime (07:00 – 18:00)	Evening (18:00 – 22:00)	Night-time (22:00 – 05:00)
Rectory Farm	41	42	41	28
Travellers Site	40	44	40	30
Bridge Farm	36	38	36	25
Heathfields	39	39	39	25

Calculated noise levels from proposed future operations

Location	Calculated Noise Levels [dB $L_{Aeq,T}$]			
	Early Morning (05:00 – 07:00)	Daytime (07:00 – 18:00)	Evening (18:00 – 22:00)	Night-time (22:00 – 05:00)
Rectory Farm	40	41	40	36
Travellers Site	37	41	37	35
Bridge Farm	36	39	36	32
Heathfields	39	40	39	35

18.6 The predicted noise levels for the proposed operation of the site were compared to background noise levels. Between 05:00 and 07:00 the noise from the site as proposed would be lower than the typical background level except at Bridge Farm which has a very low background level and where it would be 1 dB higher. This would not be a perceptible difference. Between 07:00 and 18:00 the predicted noise levels from the site as proposed would be lower than the background level at all locations. Between 18:00 and 22:00 it would be lower than background at all locations except Bridge Farm where it would be the same. Between 22:00 and 05:00 it is predicted that noise levels for the site as proposed would be between 3 and 8 dB above background and this has been attributed primarily to the operation of the dry AD plant as set out in the table below. For the Raptor Foundation cottage applying a 4 dB correction to the specific noise level of 31 would give a rating level of 35 which would be background +3.

Location	Calculated Noise Levels [dB $L_{Aeq,T}$]			Typical Background Noise Level [dB L_{A90}]	Difference re Background
	Specific Noise Level	Correction	Rating Level		
Rectory Farm	36	4	40	32	+8
Travellers Site	35	4	39	32	+7
Bridge Farm	32	4	36	30	+6
Heathfields	35	4	39	32	+7

18.7 This suggests that without mitigation, there would potentially be noise impacts on the occupants of the surrounding properties at night. The applicant's noise consultant recommends that noise levels attributable to the night time operation of the plant do not exceed a rating level of 35 dB LAeq which would ensure that they remained below the Lowest Observed Effects Level in the WHO guidelines and the threshold specified in BS 8233 as maintaining a good standard of noise. Specifying a night time rating level of 35 dB LAeq would ensure that the rating level did not exceed a level of more than 5 dB(A) above the prevailing background noise levels overnight at the quietest location, Bridge Farm.

18.8 The applicant's Noise Assessment has identified the main sources of noise at night would be from the dry AD plant. Using cladding with a higher acoustic specification would significantly reduce the noise from plant within the building. Noise from external plant could be reduced by placing them in enclosures. Tonality would also be reduced. The table below shows the calculated noise levels with the indicative mitigation measures for the dry AD plant in place:

18.9 Calculated noise levels from proposed future operations with indicative mitigation for AD plant

Location	Calculated Noise Levels [dB $L_{Aeq,T}$]			
	Early Morning (05:00 – 07:00)	Daytime (07:00 – 18:00)	Evening (18:00 – 22:00)	Night-time (22:00 – 05:00)
Rectory Farm	38	40	38	30
Travellers Site	36	40	36	31
Bridge Farm	34	38	34	28
Heathfields	37	39	37	29

18.10 The table below shows the predicted night time noise levels, with mitigation and a smaller correction for tonality compared to typical background levels.

Assessment of noise levels from night time operations with mitigation

Location	Calculated Noise Levels [dB $L_{Aeq,T}$]			Typical Background Noise Level [dB L_{A90}]	Difference re Background
	Specific Noise Level	Correction	Rating Level		
Rectory Farm	30	2	32	32	0
Travellers Site	31	2	33	32	+1
Bridge Farm	28	2	30	30	0
Heathfields	29	2	31	32	-1

18.11 It is considered that with appropriate mitigation the proposed development could be carried out without causing an unacceptable level of noise disturbance at noise-sensitive properties so would comply with NPPF paragraph 185 (a), MWLP Policy 18 (c), MWLP Policy 17 (c) and HLP policy LP14 (c) in this respect. It is recommended that to ensure that the mitigation measures are incorporated into the final design of the buildings and external plant a planning condition be imposed requiring the submission of details and a further assessment of noise levels. It is recommended that maximum noise levels be specified in a condition (see recommended condition 18). The EPO has recommended that limits based on the 'rated' sound levels that the applicant's noise assessment states could be achieved. It is acknowledged that noise is regulated by the environmental permit and that duplication of regulatory controls is firmly discouraged. However, because the mitigation measures would involve the design of the buildings and external plant this could have visual impact implications which is a planning consideration so a planning condition is considered justified (see recommended condition 17).

18.12 The applicant's Noise Assessment did not take into account any waste management activities on the proposed new concrete pads described in paragraph 3.16 above. The probable purpose of the new concrete pads is to extend the area for compost maturation. This would bring potential sources of noise from the plant used to deposit, turn and remove the compost to within a few metres of the travellers' site. For this reason, it is considered that planning permission could be granted for the construction of the new concrete pads with the construction impacts being mitigated by means of the construction environmental

management plan. However, any waste management activities that would generate noise should be precluded until the applicant has demonstrated by means of a noise impact assessment that they could be undertaken, with mitigation, if necessary, without resulting in unacceptable levels of noise at noise-sensitive properties. This could be secured by planning condition (see recommended condition 20). It is noted that at the time of finalising this report that HDC has before it an application (ref. 21/02024/FUL) for retrospective planning permission for the 5 pitches at the eastern end of the travellers' site. The WPA has raised an objection because the application does not demonstrate that the development will not prejudice the existing or future use of the waste management site identified as a waste management area as required by MWLP Policy 16.

18.13 Concern has been expressed about the harm to the noise environment that would arise from the traffic generated by the proposed development. As set out in the section on traffic and transport above, there would be 6 more HGV movements per day than the 2020 level and 51 fewer than the 2017 applications were based on. The applicant has proposed that HGVs use the recognised Type A roads and the B1040 to and from St Ives which is a Type B road on the Cambridgeshire Advisory Freight Map. The number of light goods vehicles and vans would increase by 26 per day and staff trips by 44 per day. Across the permitted hours for vehicle movements of 05:00 to 22:00 hours the increase in light commercial vehicles and private cars would not be so significant that it would noticeably increase noise from traffic. It is considered that the proposed development would comply with MWLP Policy 18 (c) and Policy 23 (d) in this respect.

19. Light; Fire; Other hazards; Flies, vermin and birds; Litter; Land instability and contamination

Light

19.1 Relevant policies:

NPPF paragraph 185 (c)
MWLP Policy 18 (g)
HLP policy LP14 (d)(i)

19.2 The policies listed above seek to prevent unacceptable levels of light pollution. The site does and would continue to operate outside daylight hours so external artificial lighting is necessary. The planning application states that column-mounted luminaires (light fixtures) would be less than 4 metres high and would be used to light the site access, internal roads and parking areas. Appropriate and well-designed lighting can be sited and orientated in such a way that light spill is minimised. The site is currently lit and it is considered unlikely that additional external lighting would significantly increase the impact of the site on nearby properties or in the night sky. Most of the proposed new buildings and associated plant would be at the centre of the site. The proposed waste transfer building and biomass building would be closer to the properties to the north of the site although the internal roadway which would run between these buildings and the proposed new water storage lagoons already has planning permission (H/5005/17/CW).

19.3 The EPO has not raised any concerns about the impact of lighting on residential amenity and the landscape officer has not raised any concerns about its impact on the night sky.

Notwithstanding the above, it is considered prudent to require the details of the external lights to be agreed and this could be secured by condition (see recommended condition 28). It is considered that with appropriate location, orientation and design the external lights would not have a significant impact on residential amenity so the proposed development would comply with NPPF paragraph 185 (c), MWLP Policy 17 (c), MWLP Policy 18 (g) and HLP policy 14 (d)(i) in that respect.

Fire

19.4 Relevant policies:

NPPF paragraph 185
MWLP Policy 18 (a) & (f)
HLP policy LP14

19.5 A number of objectors, including Pidley-cum-Fenton, Earith and Colne parish councils, the CPRE and Councillor Criswell have raised concerns about fire risk and referred to the fire at the site in 2018 and how it was dealt with by Envar. The track record of a developer is not a material planning consideration. Fire prevention is dealt with in the environmental permit (see Appendix 5). The Environment Agency (see paragraph 6.4) have identified a fire prevention plan as one of the items to be submitted with the application for an environmental permit variation. The proposed development includes fire water tanks adjacent to the proposed waste transfer building and close to the proposed dry AD plant. The new buildings would be constructed to the standards required to comply with the Building Regulations 2010 (as amended). It is noted that the Cambridgeshire Fire and Rescue Service has provided what appears to be a standard response recommending that adequate provision for fire hydrants be secured by planning condition or S106 agreement.

19.6 In accordance with NPPF paragraph 188, it is considered that control of fire risk be dealt with under the environmental permit and Building Regulations. It is considered that the proposed development would comply with NPPF paragraph 185, MWLP Policy 18 (a) and (f) and HLP policy LP14.

Other hazards

19.7 It has been suggested that the proposed flares would increase the risk of explosions. The Health and Safety Executive has been consulted on the application and has no comments to make. The consequences of an accident involving a vehicle carrying clinical waste has been raised. It has been shown in section 8 of this report that hazardous clinical waste from hospitals in Cambridgeshire and Peterborough is transported to the midlands and south of England to be disposed of. It could be argued that taking it to a facility considerably closer would reduce the risk of the vehicles being involved in a traffic accident. The security of packaging or containerising the waste for transport is outside the scope of land use planning.

Flies, vermin and birds

19.8 Relevant policies:

MWLP Policy 18 (i) and Policy 25

19.9 Complaints were received in 2021 and referred to in objections to the planning application about the large number of flies that are believed to have originated at the Envar site and causing problems for residents including in Somersham. Bluntisham Parish Council has also raised this. The most likely feedstock to attract flies would be elements of green waste that are composted outside. The only new waste stream would be the healthcare waste which would be delivered in sealed bags or containers which would be handled within the building. The proposed development would not therefore increase the likelihood of large numbers of flies in the area. For the same reason the proposed development would be unlikely to increase the risk of attracting rats or birds to the site. Pests (birds, vermin and insects) are dealt with in the environmental permit (see Appendix 5) which requires the operator amongst other things to treat pest infestations promptly and implement a pests management plan. In accordance with NPPF paragraph 188 it is considered that control of flies and other pests be dealt with under the environmental permit and the proposed development would comply with MWLP Policy 18 (i).

19.10 Scavenging birds can be attracted to waste management sites which could be a hazard to aircraft close to airports, aerodromes or their flight paths. Very tall structures such as chimneys could also present a hazard to aircraft. The Envar site is in a civil aviation renewables safeguarding area and consultation with Cambridge City Airport was required. They have assessed the proposed development and consider that it does not conflict with aerodrome safeguarding criteria so raise no objection. It is considered that the proposed development would comply with MWLP Policy 25.

Litter

19.11 Relevant policy:

MWLP Policy 18 (h)

19.12 There is usually some paper or plastic in household green waste and where composted outside has the potential to become litter. The composting operations do not form part of the current application so do not need to be considered. There is litter-catch fencing along The Heath roadside boundary and the eastern boundary facing open fields which are closest to the open windrow composting areas. The waste stream most likely to contain items which could become wind-blown litter is that consigned to the waste transfer station. It would be tipped from vehicles into the reception bay within the building so the potential for light plastic or paper escaping the site would be low. As noted in paragraph 19.9 above, the proposed new healthcare waste stream would be delivered in sealed bins or bags from where it would be loaded into the feed hopper. The environmental permit defines a building as “a means of construction that has the objective of providing sheltering cover and minimising emissions of noise, particulate matter, odour and litter” but does not place any specific requirements on its prevention.

19.13 It is considered that for the reasons given in the previous paragraph the proposed development would be unlikely to increase the risk of litter so would comply with MWLP Policy 18 (h).

Land instability and contamination

19.14 Land instability is a factor listed in Appendix B of the NPPW as a factor to be considered. The Envar site is not in an area affected by land instability so this matter does not need to be addressed. A number of objectors selected “Potentially contaminated land” from the online options. Where any further comment is made it refers to nearby land uses that could become contaminated by emission from the proposed healthcare ERF chimney rather than the proposed development site itself being contaminated. Most of the proposed new development at the north of the site would be on land that has not previously been developed. The PFPF and healthcare ERF buildings would be on the site of water storage lagoons and dry AD plant would involve the demolition and redevelopment of part of in vessel composting tunnels. Their construction would need to take into account any potentially contaminated and harmful materials encountered and could be dealt with in the construction environmental management plan. Contamination has not been raised by the Environment Agency or EPO so it is considered that no specific conditions are necessary to control this aspect of the development.

20. Other matters raised in comments from individuals

20.1 A number of responses from local residents and other members of the public have been received which refer to matters which do not constitute material considerations and should not therefore be considered in the determination of this application. These include the applicant’s track record, the attitude of their employees to local residents and to the planning and regulatory authorities, the effect on house prices, the project not coming up in a search and the WPA not having the resources to monitor the site. No element of the proposed development has been carried out therefore none of the planning application is retrospective.

21. Conclusions

Principle of the development

21.1 The principle of waste management at the Envar site is long established. The site is recognised in the MWLP as a waste management facility that makes a significant contribution to managing waste. MWLP Policy 16 protects its operation from being compromised by inappropriate non-waste development. From its origins as a producer of mushroom compost, to open windrow composting of green waste then in vessel composting of green and food waste, to energy from biomass (waste wood) and waste transfer, the Envar site has modernised and diversified as waste management and disposal practices have changed, particularly the move away from landfill. The site is one of very few within Cambridgeshire and Peterborough that is large enough to accommodate a range of waste management processes that could be developed to allow the benefits of co-location to be realised.

21.2 A very large proportion (94%) of the 200,000 tpa waste accepted at the site would not change as a result of the proposed development. The proposed waste transfer and biomass storage buildings would enable the existing waste management processes to be carried out

more efficiently. Approximately half of the green and food waste (70,000 tpa) would be treated by means of dry AD which would produce energy as well as compost and for that reason it is considered to be a process which should be supported in principle. The proposed new waste stream would be up to 12,000 tpa of healthcare waste (6% of the total) which would be incinerated to generate energy which would be used in dry AD process. Objections to the application have been raised about the principle of incinerating waste. These are not supported by Government policy which recognises the role energy from waste can play in managing waste that cannot be recycled. As set out in section 10 of this report, healthcare waste is not suitable for recycling and many elements of it may only be disposed of by incineration. It is proposed to create a pelletised fertilizer from some of the organic output from the dry AD plant and captured CO_2 from combustion flue gases and biogas separation which would be a direct replacement for agricultural fertilizer which is the result of fossil fuel derived processes. The pelletiser process would also use energy from the healthcare ERF. For these reasons it is considered that the proposed development would demonstrate a high level of co-location and would be in accordance with MWLP Policy 4 in that respect. It would be in accordance with MWLP Policy 3 by driving waste up the waste hierarchy and provided the benefits are not outweighed by harm these factors should be given significant weight.

21.3 The proposed development would be in a countryside location therefore HLP policies LP10 and LP19 are relevant. For the reasons given in paragraph 9.26 it is considered reasonable to assess the proposal as being for the expansion of an existing business within its existing operational site and under the first limb of HLP policy 19 with which it would comply. However, if the alternative interpretation of HLP policy 19 is taken and the tests in the second limb are applied the proposed development would not comply with criterion (h) in that there would be some detrimental impact on the landscape, The conflict in the second scenario between HLP policy 19 and MWLP policies 3 and 4 is referred to in paragraph 9.36 and it is considered that the more recent MWLP policies should carry more weight.

21.4 It is concluded that the development plan supports the principle of the proposed development and that there is no reason to refuse the application on need, proximity principle, waste hierarchy or locational grounds.

Climate change and carbon footprint

21.5 The purpose of the proposed healthcare ERF and dry AD plant is to generate energy from waste. The interrelationship between the proposed waste processes is summarised in paragraph 21.2 above. The generation of energy from waste for use within the site would reduce reliance on imported energy and produce gas which could be exported to the national gas grid replacing natural gas. Carbon savings would be made from electricity and diesel. The PFPF would create a product which would be a direct replacement for agricultural fertilizers that are dependent on fossil fuels. Solar panels on the roofs of three of the proposed buildings would contribute to the renewable energy generated at the site.

21.6 For these reasons it is considered that the proposed development considered as a whole and in the context of its relationship with existing processes on the site would make a contribution to reducing reliance on energy derived from fossil fuels and moving to a lower carbon future. It is concluded that there is no reason to refuse the application on the grounds that it would not contribute to managing the effects of climate change.

Air quality and health

21.7 The results of the applicant's air quality modelling show that predicted levels of NO_2 and particulates and other pollutants at all sensitive receptors would be insignificant and the impact of odour would be of slight significance at most. The impact of in particular the proposed healthcare ERF on air quality and health is of concern to local parish councils, a very large number of local residents and other interest groups. The following points have been referred to previously in this report:

i) the WPA engaged an independent consultant to assess the air quality and health aspects of the application;
ii) there have been no objections from relevant statutory consultees (Environment Agency, UK Health Security Agency, environmental protection officer);
iii) the proposed waste management processes will require an environmental permit on which the UK Health Security Agency, Food Standards Agency and local authority public health department will be consulted; and
iv) NPPF paragraph 188 which states that where the control of processes or emissions are subject to separate pollution control regimes planning decisions should assume that these regimes will operate effectively.

21.8 Emissions to air from the proposed healthcare ERF, the proposed dry AD plant, the existing biomass boilers and any other point sources would be regulated by the Environment Agency by means of the environmental permit. The level of concern that has been expressed about the proposed healthcare ERF in particular is acknowledged and it is not known how much of this was because the role of the environmental permit was not known or whether it was known but its effectiveness not trusted. Clinical waste incinerators are frequently located at major hospitals, Addenbrooke's and Ipswich being examples. These are adjacent to or within residential areas and major new healthcare and biomedical research facilities have been and are proposed to be developed at the Addenbrooke's site which would be highly unlikely to have happened if there was a risk of the health of patients or staff being adversely affected by the operation of the existing incinerator or its replacement with a new one.

21.9 It is considered that in appointing an independent consultant the WPA has given a level of scrutiny to the potential air quality and health impacts of the proposed development beyond relying on statutory and other consultees whose input would be focussed on the environmental permit stage. The small increase in traffic would not have a significant impact on air quality. The potential impact of ingesting harmful substances from locally sourced food has been considered. It is concluded that there is no reason to refuse the application on air quality or health grounds.

Visual impact and landscape character and appearance

21.10 The proposed development includes the construction of four large buildings of a similar height to the existing buildings on the Envar site and to the new warehouse on the adjacent former mushroom farm. There are few locations other than roads close to the site from which the existing buildings are readily visible. The site can be seen from more distant viewpoints and the proposed new buildings would be seen in the context of the existing buildings and structures, increasing their mass and blockiness and making them slightly more prominent in the landscape. The chimney for the proposed healthcare ERF would be

26 metres high and would be visible above the skyline from some locations. The potential for a visible plume has been assessed and not considered to be a factor. Mitigation in the form of landscape planting forms part of the proposal and whilst it would help break up the appearance of the mass of the proposed buildings it would not screen the healthcare ERF chimney. It is recognised that there will be an adverse impact on the landscape from some, mostly fairly distant viewpoints but it is considered not to be so great as to be clearly unacceptable.

Traffic and highways

21.11 The total quantity of waste that would be accepted at the site would not change as a result of the proposed development. It is acknowledged that by substituting up to 12,000 tpa of the existing waste streams with healthcare waste the type and number of vehicle movements would change. The increase in staff would also result in an increase in private vehicles. There would be 6 more HCV movements per day when assessed against 2020 figures but 51 fewer that what the 2017 permissions were based on. The number of light commercial vehicles would increase by 26 movement per day and staff car movements by 44 per day. The highway authority and Transport Assessment Team has advised that the proposed level of vehicle movements would not justify refusal on the grounds of highway capacity. Safety at the Wheatsheaf crossroads has been referred to by many objectors and under a highway authority scheme it will become a traffic light controlled junction. The proposed expansion of the staff car park at Heath Tops was reviewed and reduced to 13 with the main staff car park which would accommodate 52 cars remaining at Entrance 3 which would result in a minimal increase in turning movements at the crossroads. It is concluded that there is no reason why the application should be refused on the grounds of highway capacity or safety.

Ecology, biodiversity and designated sites

21.12 The impact of the proposed development on the natural environment has been considered and it has been concluded that it would not result in harm to designated sites or other features of ecological value. The applicant has demonstrated that an appropriate level of biodiversity net gain could be delivered, the detail of which would be secured by condition. Protection of the ecological interests of the site, particularly bats during the demolition and construction phase could also be secured by condition. It is concluded that there is no reason why the application should be refused on the grounds of impact on the natural environment and ecological interests.

Noise

21.13 The proposed dry AD plant and healthcare ERF processes would, like the in vessel composting, operate 24 hours a day. Without mitigation there would potentially be noise impacts on the occupants of the surrounding properties at night. Mitigation to acceptable levels could be achieved with mitigation such as acoustic cladding and enclosure of plant. This would be the subject of detailed design informed by a further noise assessment which could be secured by condition and controlled by the limits set in a condition. It is concluded that there is no reason why the application should be refused on the grounds of impact of noise on local residents.

Odour

21.14 Odour would be controlled by the environmental permit. The most likely cause of odour is the green waste being composted outside which is outside the scope of this planning application. It is concluded that there is no reason why the application should be refused on the grounds of impact of odour on local residents.

Water environment

21.15 No objection has been raised by the Lead Local Flood Authority which has recommended that a detailed surface water drainage scheme and measures to manage any addition surface water during the construction phase be secured by conditions. Water quality is controlled by the environmental permit and a permit is also required to discharge water off site. The risk of increasing flooding or potentially polluting water entering ground or surface water is considered to be low. It is concluded that there is no reason why the application should be refused on the grounds of impact on the water environment.

Historic environment

21.16 No designated heritage assets would be directly affected by the proposed development. Owing to the separation distances the proposed development would not adversely affect the significance any of the designated heritage assets derive from their setting. The impact on views out of the Woodhurst Conservation Area would not be significantly affected. It is concluded that there is no reason why the application should be refused on the grounds of impact on the historic environment.

Fire and other hazards

21.17 Fire prevention is dealt with in the environmental permit and the proposed new buildings would need to comply with the Building Regulations. In respect of the risk of explosions, the Health and Safety Executive had no comments to make on the application. The security of clinical waste in transit is not a land use planning matter. It is concluded that there is no reason why the application should be refused on safety grounds.

Flies, vermin, birds and litter

21.18 Pest control is covered by the environmental permit. The proposed new waste stream, healthcare waste, would be received in sealed bags or containers which would be handled within a building. It is not likely to attract flies or other pests or result in litter. Cambridge City Airport has not raised an aviation safeguarding objection in respect of bird strike. The waste transfer inputs would be tipped into a reception bay within the proposed building. It is concluded that there is no reason why the application should be refused on grounds of pests, litter or aircraft safety.

Planning balance

21.19 It is considered that there is enough information before the WPA to enable it to make an informed decision on whether or not the proposed development is acceptable in land use planning terms. The following judgements have been reached taking into account the effect

of mitigation which would be secured through planning conditions or in place via the environmental permit.

It is considered that the following aspects of the proposed development are positive and weigh in favour of the application being approved:

- The use of waste which cannot be recycled to generate energy;
- The use of dry AD instead of in vessel composting for some of the green and food waste;
- The interrelationship between the proposed and existing waste streams and processes being a good example of co-location within the operational area of an existing protected waste management site; and
- Biodiversity net gain through the introduction and long term management of habitats.

It is considered that the following aspects of the proposed development are neutral:

- Impact on air quality on human health and natural environment receptors;
- Historic environment and setting of designated heritage assets;
- Odour;
- Noise (construction and operational phases);
- Surface water drainage (construction and operational phases);
- Dust (construction phase);
- Protected species (construction phase and operational lighting);
- Water quality;
- Fire risk; and
- Pests and litter.

It is considered that the following aspect of the proposed development would have an adverse impact which could not be entirely mitigated:

- Visual impact; and
- Highway safety and congestion including impact on air quality from vehicle emissions.

21.20 For the reasons given in paragraph 21.11 above, the impact of increased traffic would be small and NPPF paragraph 111 states that development should only be refused on highway grounds if the residual cumulative impacts on the road network would be severe. A landscape planting scheme is proposed but as set out in paragraph 21.10 above, the location and scale of the proposed development are such that complete screening is not possible and there will be a residual visual impact even when the new planting is mature. Planning officers have viewed the site from all the LVIA viewpoints and are of the opinion that whilst the proposed development would make the site more prominent in the landscape from some, mostly distant locations this would not be so significant as to clearly justify recommending refusal on landscape and visual impact grounds.

21.21 In planning officers' opinion the acknowledged residual visual impact is the only clearly negative aspect of the proposed development and it needs to be afforded appropriate weight in the planning balance. As set out above, there are four aspects of the proposed development which planning officers consider to be positive and a number that relate to operational matters that would be controlled by the environmental permit and are

considered to be neutral. A larger range of matters would have an insignificant impact with or without mitigation.

21.22 MWLP Policy 17 (f) introduces an element of balance and states that development must "be sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities)" The proposed PFPF could be considered innovative and the proposed development as a whole is considered in principle to comprise appropriate changes to an existing site where co-locational benefits would be realised. The development of the dry AD plant on the footprint of some of the composting tunnels and to some extent the location of the PFPF building between the existing biomass boiler building and the composting tunnels would increase the density of the built footprint of the site. However, the proposed waste transfer station and biomass buildings would extend the built footprint to the northwest.

21.23 The potential negative impacts of the proposed development and where appropriate mitigation, have been discussed in detail in sections 8 – 19 of this report and summarised in the preceding paragraphs of this section. Taking into account the impacts listed in paragraph 21.19 above it is considered by planning officers that the adverse visual impact would not be so great as to outweigh the positive aspects of the proposed development with significant weight being afforded to the co-location of inter-related waste management processes on an existing and protected waste management site. Members of the Planning Committee have visited the site and viewed it from LVIA Viewpoints 1 – 10 so will be able to come to their own conclusions about the likely visual impact of the proposed development and what weight to afford it in undertaking their balance of the material planning considerations.

21.24 As set out at paragraph 8.1, section 38 (6) of the Planning and Compulsory Purchase Act 2004 states that "If regard is to be had to the development plan for the purpose of any determination to be made under the planning Acts the determination must be made in accordance with the plan unless material considerations indicate otherwise." it is considered that the proposed development is in accordance with the development plan taken as a whole and also meets the principles of the NPPF and NPPW and that there are no other material considerations that indicate permission should be refused.

22. Public Sector Equality Duty (PSED)

22.1 Section 149 of the Equalities Act 2010 places a statutory duty on all public bodies to consider the needs of all individuals in their day-to-day work, including those with protected characteristics. The protected characteristics under PSED are: disability, gender reassignment, pregnancy, maternity/ paternity, race, religion or belief (including non-belief), sex and sexual orientation. The council, in the exercise of the planning functions, must have due regard to the need to the following aims in their decision-making: eliminate discrimination, harassment and victimisation and any other conduct that is prohibited by or under the Act; foster good relations between people who share a relevant protected characteristic and those who do not share it; and advance equality of opportunity between people who share a relevant protected characteristic and people who do not share it. Furthermore, consideration must be given to removing or minimising disadvantages suffered by people due to their protected characteristics; meeting the needs of people with

protected characteristics; and encouraging people with protected characteristics to participate in public life or in other activities where their participation is low.

22.2 An Equalities Impact Assessment has been undertaken in relation to the nine protected characteristics of age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, and sexual orientation under the Equality Act 2010. It is not envisaged the proposed development would be likely to impact negatively or specifically upon any of these groups. Concerns have been raised from within the local population that the elderly, those with existing health conditions and nursing mothers would be particularly vulnerable to any adverse impact on air quality either from direct inhalation or from consuming food grown or reared locally. For the reasons given in section 10 of this report it is considered that the risk of impact on human health from emissions to air is low and would be controlled by the environmental permit.

23. Recommendation

23.1 It is recommended that permission be granted subject to the following conditions:

Advisory Note

The Town and Country Planning (Development Management Procedure) (England) Order 2015 requires the Planning Authority to give reasons for the imposition of pre commencement conditions. Conditions 9, 12, 31 and 33 are pre-commencement because they relate to the construction phase including early phases of landscape planting so need to be designed and in place before any works preparatory to construction take place.

Commencement of development

1 The development hereby permitted shall be commenced no later than 3 years from the dated of this permission. Within 7 days of the commencement the developer shall notify the waste planning authority in writing of the date on which the development commenced.

Reason: In accordance with the requirements of Section 91 of the Town and Country Planning Act 1990 as amended by Section 51 of the Planning and Compulsory Purchase Act 2004.

Commencement of phases of development

2 The developer shall notify the waste planning authority in writing of the date of the material start of the following phases of development within 7 days of each phase commencing:

i. construction of the surface water storage lagoons shown as 25 on drawing no. GPP/E/CWH/21/03 Rev 015 Proposed Site Layout Plan dated 08/12/21;
ii. bringing into use the surface water storage lagoons shown as 25 on drawing no. GPP/E/CWH/21/03 Rev 015 Proposed Site Layout Plan dated 08/12/21;
iii. decommissioning of any of the surface water storage lagoons shown on drawing no. GPP/E/CWH/20/02 Existing Site Layout Plan dated 27 Jul 2020;
iv. demolition of buildings shown as S1a and S1b on Appendix Three: Building Plan with Target Notes (Ecological Appraisal – Buildings Inspection – Greenwillows Associates Ltd, July 2021);

v. bringing into use the waste transfer station building, the biomass storage building and the pellet production facility building shown as 28, 49 and 47 respectively on drawing no. GPP/E/CWH/21/03 Rev 015 Proposed Site Layout Plan dated 08/12/21;
vi. the first acceptance of waste to the dry anaerobic digestion (AD) plant; and
vii. the first acceptance of waste to the healthcare waste energy recovery facility (ERF).

Reason: To enable the waste planning authority to monitor compliance with the conditions of the planning permission.

Surface water storage lagoons

3 The surface water storage lagoons shown on drawing no. GPP/E/CWH/20/02 Existing Site Layout Plan dated 27 Jul 2020 shall not be decommissioned until equivalent capacity has been created in accordance with drawing no. GPP/E/CWH/21/03 Rev 015 Proposed Site Layout Plan dated 08/12/21.

Reason: To ensure that there is sufficient surface water storage capacity during all phases of the development in accordance with Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 22 and Huntingdonshire Local Plan (May 2019) policy LP15.

Site Area

4 This permission relates only to the land shown outlined in red on drawing no. GPP/E/CWH/21/01 Rev 03 dated 26/04/21 (received 12 July 2021) and is referred to in these conditions as 'the Site'. The land shown outlined in blue on drawing no. GPP/E/CWH/21/01 Rev 03 Site Location Plan dated 26/04/21 is referred to in these conditions as 'the Envar Site'.

Reason: For clarification and to define the area of development.

Approved Plans and Documents

5 The development hereby permitted shall be carried out in accordance with the following drawings:

- GPP/E/CWH/21/03 Rev 015 Proposed Site Layout Plan dated 08/12/21 (received 1 March 2022);
- GPP/E/CWH/21/04 Rev 01 Elevation of Healthcare Waste ERF dated 26/04/21 (received 22 June 2021);
- GPP/E/CWH/21/05 Rev 03 Elevation of Waste Transfer Building dated 26/04/21 (received 22 June 2021);
- GPP/E/CWH/21/06 Rev 03 Elevation of Biomass Storage Building dated 26/04/21 (received 22 June 2021);
- GPP/E/CWH/21/07 Rev 01 Elevation of Pellet Fertiliser Production Facility Building dated 26/04/21 (received 22 June 2021); and
- GPP/E/CWH/21/08 Rev 01 Cross Sections dated 01.04.2021 (received 22 June 2021).

Reason: To define the permission and protect the character and appearance of the locality in accordance with Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 17 and Huntingdonshire Local Plan (May 2019) policy LP10.

Waste throughput

6 No more than 200,000 tonnes of waste shall be accepted at the Envar Site in any 12 month period. No more than 12,000 tonnes of waste shall be processed at the healthcare waste ERF facility in any 12 month period.

Reason: A higher annual throughput has not been assessed in highway capacity and safety terms. To enable the waste planning authority to control the quantity of waste handled at the site in the interests of highway safety in accordance with Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 23 and Huntingdonshire Local Plan (May 2019) policy LP16.

7 Waste catchment area

With the exception of wastes accepted for treatment in the healthcare waste ERF not less than 40% by weight of wastes accepted at the Envar Site in any 12-month period shall be sourced from the East of England Region. The East of England means the counties of Norfolk, Suffolk, Cambridgeshire, Essex, Hertfordshire, Bedfordshire and Northamptonshire together with the unitary authorities of Peterborough, Southend on Sea, Milton Keynes and Luton. Waste from a waste transfer station within the East of England shall be regarded as arising from within the East of England.

Reason: To ensure that a large proportion of the waste handled at the site is locally sourced and to discourage the transportation of waste over long distances in accordance with Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 1.

Records of waste inputs

8 A record of the quantity and source of wastes delivered to the site, including separately the quantity of healthcare waste, to evidence the requirements of conditions 6 and 7 above shall be maintained by the operator. This shall be made available to the waste planning authority on request within 10 working days of receipt of a written request. All records shall be kept for at least 48 months.

Reason: To enable the waste planning authority to monitor compliance with conditions 6 and 7.

Construction environmental management plan

9 No development shall commence until a detailed construction environmental management plan has been submitted to and approved in writing by the waste planning authority. This shall include but not be limited to:

i) measures to protect trees that are to be retained;
ii) measures to minimise noise and vibration;
iii) measures to minimise dust;
iv) measures to minimise the impact of lighting on humans and wildlife especially bats;
v) measures to protect nesting birds and other wildlife;
vi) measures to minimise the risk of pollution of ground and surface water;
vii) measures to manage construction traffic including routeing;
viii) parking for construction workers; and

ix) management of demolition waste.

The development shall be carried out in accordance with the approved construction environmental management plan.

Reason: To protect the amenities of the occupiers of nearby premises and wildlife during the construction phase of the development in accordance with Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 18 and Policy 20 (e) and Huntingdonshire Local Plan (May 2019) policy LP14 and policy LP30.

This is a pre-commencement condition because the construction environmental management plan needs to be in place before any demolition or construction work takes place to ensure the development is constructed in a manner which ensures amenity and wildlife are protected.

Bat survey

10 No works to the supporting wall between the buildings shown as S1a and S1b on Appendix Three: Building Plan with Target Notes (Ecological Appraisal – Buildings Inspection – Greenwillows Associates Ltd, July 2021) including demolition or illumination of the building shall take place until a bat survey has been undertaken by a licensed ecologist and confirmed that no bats are present.

If no bats are found to be present demolition works shall commence within 24 hours of the completion of the bat survey, under the supervision of the licenced ecologist. A copy of the survey report shall be submitted to the waste planning authority within 7 days of the completion of the survey along with confirmation that demolition works have been completed.

If bats are present no works to the supporting wall between the buildings shown as S1a and S1b on Appendix Three: Building Plan with Target Notes (Ecological Appraisal – Buildings Inspection – Greenwillows Associates Ltd, July 2021) including demolition or illumination of the building shall take place until a mitigation licence has been obtained from Natural England.

Reason: To ensure that protected species are not harmed by the development in accordance with Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 20 (e) and Huntingdonshire Local Plan (May 2019) policy LP30.

Construction hours

11 No construction or demolition shall take place outside 07:00 – 18:00 Mondays to Saturdays (except bank and public holidays). No construction or demolition shall take place on Sundays or on bank and public holidays.

Reason: To protect the amenities of the occupiers of nearby premises during the construction phase of the development in accordance with Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 18 and Huntingdonshire Local Plan (May 2019) policy LP14.

Construction drainage

12 No development, including preparatory works, shall commence until details of measures

indicating how additional surface water run-off from the Site will be avoided during the construction works have been submitted to and approved in writing by the waste planning authority. The developer will be required to provide collection, balancing and/or settlement systems for these flows. The approved measures and systems shall be brought into operation before any works to create buildings or hard surfaces commence.

Reason: To ensure surface water is managed appropriately during the construction phase of the development so as not to increase the flood risk to adjacent land/properties or occupied properties within the development itself in accordance with Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 22 and Huntingdonshire Local Plan (May 2019) policy LP15.

This is a pre-commencement condition because the surface water drainage arrangements need to be in place before any demolition or construction work takes place to ensure the construct phase is carried out in a manner which minimises the risk of flooding.

Materials

13 No buildings, plant or infrastructure over 9 metres in height shall be erected until details of the external construction materials, finishes and colours have been submitted to and approved in writing by the waste planning authority. The development shall be carried out in accordance with the approved details.

Reason: In the interests of visual amenity in accordance with Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 17 and Huntingdonshire Local Plan (May 2019) policy LP10.

Hours of operation

14 (i) No vehicle shall enter or leave the Envar Site except between 05:00 and 22:00 hours daily (including public and bank holidays).

(ii) No plant or machinery shall operate outside buildings except between 05:00 and 22:00 hours daily (including public and bank holidays).

(iii) No waste shall be shredded outside the buildings except between 07:00 and 18:00 hours daily (including Public and Bank Holidays).

Reason: To minimise the adverse effects of noise from the site on the occupiers of nearby properties in accordance with Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 18 and Huntingdonshire Local Plan (May 2019) policy LP14.

Reversing vehicles

15 All mobile plant at the Envar Site using reversing alarms shall be fitted with and use white noise reversing alarms.

Reason: To minimise the adverse effects of noise from the site on the occupiers of nearby properties in accordance with Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 18 and Huntingdonshire Local Plan (May 2019) policy LP14

Silencing of plant and machinery

16 No vehicle, plant, equipment or machinery shall be operated at the Envar Site unless it has been fitted with and uses an effective silencer. All vehicles, plant and machinery shall be maintained in accordance with the manufacturers' specification at all times.

Reason: To minimise the adverse effects of noise from the site on the occupiers of nearby properties in accordance with Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 18 and Huntingdonshire Local Plan (May 2019) policy LP14.

Noise mitigation

17 No development of the healthcare waste ERF or the dry AD plant shall take place until a scheme of noise mitigation measures and noise monitoring has been submitted to and approved in writing by the waste planning authority. The scheme shall demonstrate that the limits within condition 18 can be complied with and shall include details of the plant, mitigation measures and a further assessment of noise levels as well as actions to be taken if the limits set out in condition 18 are exceeded. The approved mitigation measures shall be implemented in full prior to the first acceptance of waste to the healthcare waste ERF and / or the dry AD plant and retained for the duration of the operation of the healthcare waste ERF and / or the dry AD plant.

Reason: To minimise the adverse effects of noise from the site on the occupiers of nearby properties in accordance with Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 18 and Huntingdonshire Local Plan (May 2019) policy LP14.

Noise limits

18 The rating level of the noise emitted from the Envar site shall not exceed the following levels as measured in free field conditions at the noise sensitive premises specified in the table below. The meaning of 'rated' is as defined in BS4142: 2014+A1:2019. The measurement and assessment shall be made in accordance with BS 4142:2014+A1:2019.

	Time period	05:00 – 07:00	07:00 – 18:00	18:00 – 22:00	22:00 – 05:00
Location		**Noise limit dB $L_{Aeq,T}$**			
Rectory Farm		40	41	40	32
Travellers' site		37	41	37	33
Bridge Farm		36	39	36	30
Heathfields		39	40	39	31
Raptor Foundation residence		40	42	40	31

Reason: To limit the effects of noise from the Envar site on the occupiers of nearby properties in accordance with Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 18 and Huntingdonshire Local Plan (May 2019) policy LP14.

Noise monitoring

19 Noise levels shall be monitored by the operating company in accordance with the scheme approved under condition 17 to ensure the noise levels set in condition 18 are achieved. Monitoring survey results shall be kept by the operating company during the lifetime of the permitted operations and a monitoring report supplied to the waste planning authority within 10 working days of receipt of written request.

Reason: To enable the noise mitigation measures approved in the noise monitoring scheme referred to in condition 17 to be monitored and controlled in relation to the noise levels set out in condition 18, in the interests of the occupiers of nearby properties in accordance Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 18 and Huntingdonshire Local Plan (May 2019) policy LP14.

New concrete hardstanding

20 No waste or other materials shall be stored on the land within the Site to the southeast of Dirty Lagoon 1 and to the southeast of the mushroom farm shown as Catchment Proposed Hardstanding and coloured salmon pink on EPG drawing no. 0001 Rev P01 dated 26.11.2.

Reason: The impacts of noise, odour and bioaerosols on occupants of the travellers' site have not been assessed in accordance with Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 18 and Huntingdonshire Local Plan (May 2019) policy LP14.

Access

21 No heavy commercial vehicle (HCV) associated with the development hereby permitted shall enter or leave the Site except at Entrance E1 shown on drawing no. GPP/E/CWH/21/03 Rev 015 Proposed Site Layout Plan dated 08/12/21 (received 1 March 2022). All HCVs shall turn right into Entrance E1 and shall turn left out of Entrance E1 unless in compliance with the Traffic Management Plan referred to in condition 25.

Reason: In the interests of highway safety in accordance with Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 23 and Huntingdonshire Local Plan (May 2019) policy LP17.

Prevention of mud and debris on the highway

22 No HCV shall leave the Envar Site unless the wheels and the underside chassis are clean to prevent materials, including mud and debris, being deposited on the public highway.

Reason: In the interests of highway safety and safeguarding local amenity and to comply with Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 18 and Policy 23 and Huntingdonshire Local Plan (May 2019) policy LP16.

Vehicle movements

23 There shall be no more than 190 HCV movements at the Envar Site per day (95 in and 95 out). For the avoidance of doubt an HCV shall have a gross vehicle weight of 3.5 tonnes or more and the arrival at the Envar Site and departure from it count as separate movements.

Reason: In the interests of highway safety in accordance with Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 23 and Huntingdonshire Local Plan (May 2019) policy LP16.

Record of HCV movements

24 The operator shall maintain a record of all HCV movements into and out of the Envar Site to evidence the requirements of condition 23 above. Such record shall contain the vehicles' weight, registration number and the time and date of the movement and shall be available for inspection within 3 working days of any written request of the waste planning authority.

Reason: To enable the waste planning authority to monitor compliance with condition 23.

HCV routing

25 The development hereby permitted shall not be carried out except in accordance with the Regeneration Woodhurst Traffic Management Plan (undated) received 12 July 2021.

Reason: In the interests of limiting the impact of the development on the amenity of local residents in accordance with Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 18 and Policy 23 and Huntingdonshire Local Plan (May 2019) policy LP16.

Cycle parking

26 Within 3 months of the commencement of development as notified to the waste planning authority in accordance with condition 1, secure covered cycle parking shall be provided in the car park shown as 51 on drawing no. GPP/E/CWH/21/03 Rev 015 Proposed Site Layout Plan dated 08/12/21 (received 1 March 2022) in accordance with details that have been submitted to and approved in writing by the waste planning authority.

The car parking spaces shown within area 52 on drawing no. GPP/E/CWH/21/03 Rev 015 Proposed Site Layout Plan dated 08/12/21 (received 1 March 2022) shall not be brought into use until secure covered cycle parking has been installed in accordance with details that have been submitted to and approved in writing by the waste planning authority.

Reason: In the interests of promoting sustainable travel in accordance with Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 23 and Huntingdonshire Local Plan (May 2019) policy LP16.

Electric vehicle charging point

27 The car parking spaces show within area 52 on drawing no. GPP/E/CWH/21/03 Rev 015 Proposed Site Layout Plan dated 08/12/21 (received 1 March 2022) shall not be brought into use until an electric vehicle charging point has been installed and is operational.

Reason: In the interests of promoting the use of more sustainable vehicles in accordance with Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 23 and Huntingdonshire Local Plan (May 2019) policy LP16.

Lighting

28 No external lights shall be installed within the Site except in accordance with a strategy that has been submitted to and approved in writing by the waste planning authority. The strategy shall include:

i) identification of those areas /features on site that are particularly sensitive for bats and that are likely to cause disturbance in or around their breeding sites and resting places or along important routes used to access key areas of their territory, for example, for foraging;

ii) showing how and where external lighting will be installed (through the provision of appropriate lighting contour plans and technical specifications) so that it can be clearly demonstrated that areas to be lit will not disturb or prevent the above species using their territory or having access to their breeding sites and resting places; and
iii) demonstrating (through the provision of appropriate lighting contour plans and technical specifications) that light spill outside the Site will be minimised.
All external lighting shall be installed in accordance with the specifications and locations set out in the approved strategy and these shall be maintained thereafter in accordance with the strategy. No other external lighting shall be installed without prior consent from the waste planning authority.

Reason: To protect the amenities of the occupiers of nearby premises and wildlife in accordance with Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 18 (g) and Policy 20 (e) and Huntingdonshire Local Plan (May 2019) policy LP14 (i) and policy LP30.

Surface water Drainage

29 No laying of services, creation of hard surfaces or erection of a building shall commence until a detailed design of the surface water drainage of the Site has been submitted to and approved in writing by the waste planning authority. The scheme shall be based upon the principles within the agreed Drainage Strategy for Surface Water at Envar prepared by EPG (ref: EPG-9651-DS-01) dated 26 November 2021 and shall also include:

i) Full calculations detailing the existing surface water runoff rates for the QBAR, 3.3% Annual Exceedance Probability (AEP) (1 in 30) and 1% AEP (1 in 100) storm events;
ii) Full results of the proposed drainage system modelling in the above-referenced storm events (as well as 1% AEP plus climate change), inclusive of all collection, conveyance, storage, flow control and disposal elements and including an allowance for urban creep, together with an assessment of system performance;
iii) Detailed drawings of the entire proposed surface water drainage system, attenuation and flow control measures, including levels, gradients, dimensions and pipe reference numbers, designed to accord with the CIRIA C753 SuDS Manual (or any equivalent guidance that may supersede or replace it);
iv) Full detail on SuDS proposals (including location, type, size, depths, side slopes and cross sections);
v) Site Investigation and test results to confirm infiltration rates;
vi) Details of overland flood flow routes in the event of system exceedance, with demonstration that such flows can be appropriately managed on site without increasing flood risk to occupants;

vii) Demonstration that the surface water drainage of the site is in accordance with DEFRA non-statutory technical standards for sustainable drainage systems;
viii) Full details of the maintenance/adoption of the surface water drainage system;
ix) Permissions to connect to a receiving watercourse or sewer; and
x) Measures taken to prevent pollution of the receiving groundwater and/or surface water.

Those elements of the surface water drainage system not adopted by a statutory undertaker shall thereafter be maintained and managed in accordance with the approved management and maintenance plan.

Reason: To prevent the increased risk of flooding, to improve and protect water quality, and improve habitat and amenity in accordance with Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 22 and Huntingdonshire Local Plan (May 2019) policy LP15.

Storage of oils, fuels and chemicals

30 Any facilities for the storage of oils, fuels or chemicals shall be sited on impervious bases and surrounded by impervious bund walls. The bund capacity shall give 110% of the total volume for single and hydraulically linked tanks. If there is multiple tankage, the bund capacity shall be 110% of the largest tank or 25% of the total capacity of all tanks, whichever is the greatest. All filling points, vents, gauges and sight glasses and overflow pipes shall be located within the bund. There shall be no outlet connecting the bund to any drain, sewer or watercourse or discharging onto the ground. Associated pipework shall be located above ground where possible and protected from accidental damage.

Reason: To prevent pollution of the water environment in accordance with Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 22 and Huntingdonshire Local Plan (May 2019) policy LP15.

Landscape planting

31 No development shall commence until a detailed phased landscape planting scheme based on drawings nos. KB- Sti006d Landscape and Ecological Management Plan dated Nov 2022 (received 30 November 2022) and KB-Sti052 Area 52 Car Park Proposed Landscaping dated July 2022 (received 17 August 2022) has been submitted to and approved in writing by the waste planning authority.

i) Soft landscape works shall include planting plans, written specifications (including cultivation and other operations associated with plant and grass establishment), schedules of plants with species, plant sizes and proposed numbers and densities where appropriate.

(ii) All trees, shrubs and hedge plants supplied shall comply with the requirements of British Standard 3936, Specification for Nursery Stock. All pre-planting site preparation, planting and post-planting maintenance works shall be carried out in accordance with the requirements of British Standard 4428 (1989) Code of Practice for General Landscape Operations (excluding hard surfaces).

(iii) All new tree plantings shall be positioned in accordance with the requirements of Table 3 of British Standard BS5837: 2005, Trees in relation to construction – Recommendations

The development shall be carried out in accordance with the approved scheme.

Reason: In the interests of visual amenity in accordance with Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 17 and Huntingdonshire Local Plan (May 2019) policy LP10.

This is a pre-commencement condition because early planting would maximise the intended benefits of screening the proposed development.

Maintenance of Soft Landscaping

32 Any trees, hedging or scrub planted within the Site which dies, becomes diseased or is removed within a period of 5 years from the completion of the development shall be replaced in the next planting season with others of similar size and species as those originally planted.

Reason: To ensure the benefit of the planting is maintained in the interests of visual amenity in accordance with Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 17 and Huntingdonshire Local Plan (May 2019) policy LP10.

Biodiversity net gain

33 No development shall commence until a Biodiversity Net Gain (BNG) Plan has been submitted to and approved in writing by the waste planning authority. The BNG Plan shall target how a net gain in biodiversity will be achieved through a combination of on-site and / or off-site mitigation. The BNG Plan shall include:

i) A hierarchical approach to BNG focussing first on maximising on-site BNG, second delivering off-site BNG at a site(s) of strategic biodiversity importance, and third delivering off-site BNG locally to the application site;

ii) Full details of the respective on and off-site BNG requirements and proposals resulting from the loss of habitats on the development site utilising the latest appropriate DEFRA metric;

iii) Identification of the existing habitats and their condition on-site and within receptor site(s);

iv) Habitat enhancement and creation proposals on the application site and /or receptor site(s) utilising the latest appropriate DEFRA metric;

v) An implementation, management and monitoring plan (including identified responsible bodies) for a period of 30 years for on and off-site proposals as appropriate.

The BNG Plan shall be implemented in full and subsequently managed and monitored in accordance with the approved details. Monitoring data as appropriate to criterion v) shall be submitted to the waste planning authority in accordance with the latest DEFRA guidance

and the approved monitoring period / intervals.

Reason: To secure an increase in biodiversity net gain in accordance with Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) Policy 20 and Huntingdonshire Local Plan (May 2019) policy LP30.

This is a pre-commencement condition because the BNG needs to be designed into the development and management of early landscape planting needs to be in place.

Informatives:

A. Ordinary Watercourse (OW) Consent

Constructions or alterations within an ordinary watercourse (temporary or permanent) require consent from the Lead Local Flood Authority under the Land Drainage Act 1991. Ordinary watercourses include every river, drain, stream, ditch, dyke, sewer (other than public sewer) and passage through which water flows that do not form part of Main Rivers (Main Rivers are regulated by the Environment Agency). The applicant should refer to Cambridgeshire County Council's Culvert Policy for further guidance: https://www.cambridgeshire.gov.uk/business/planning-and-development/water-minerals-and-waste/watercourse-management/

Please note the council does not regulate ordinary watercourses in Internal Drainage Board areas.

B. Pollution Control

Surface water and groundwater bodies are highly vulnerable to pollution and the impact of construction activities. It is essential that the risk of pollution (particularly during the construction phase) is considered and mitigated appropriately. It is important to remember that flow within the watercourse is likely to vary by season and it could be dry at certain times throughout the year. Dry watercourses should not be overlooked as these watercourses may flow or even flood following heavy rainfall.

Source Documents

Link to the planning application documents and consultation responses on the Cambridgeshire County Council website: Simple Search (cambridgeshire.gov.uk)

Link to the Cambridgeshire and Peterborough Minerals and Waste Local Plan (2021): Cambridgeshire and Peterborough Minerals and Waste Local Plan - Cambridgeshire County Council

Link to the Huntingdonshire Local Plan (2019): Huntingdonshire Development Plan - Huntingdonshire.gov.uk

Link to Planning practice guidance: Planning practice guidance - GOV.UK (www.gov.uk)

Link to the National Planning Policy Framework (2021): National Planning Policy Framework - Guidance - GOV.UK (www.gov.uk)

Link to the National Planning Policy for Waste: National planning policy for waste - GOV.UK (www.gov.uk)

Link to the Waste Management Plan for England (January 2021): Waste Management Plan for England (publishing.service.gov.uk)

Link to Defra's Energy from Waste Guide (2014): Energy from waste: a guide to the debate (publishing.service.gov.uk)

Link to the Government's Overarching National Policy Statement for Energy (EN-1): National Policy Statements for energy infrastructure - GOV.UK (www.gov.uk)

Link to the Government's National Policy Renewable Energy Infrastructure (EN-3): National Policy Statements for energy infrastructure - GOV.UK (www.gov.uk)

Link to Environment Agency's Waste Data Interrogator: 2021 Waste Data Interrogator - data.gov.uk

Link to Environment Agency's Waste incinerator reports: How to access waste management data for England - GOV.UK (www.gov.uk)