

FORD ENERGY RECOVERY FACILITY AND
WASTE SORTING AND TRANSFER FACILITY,
FORD CIRCULAR TECHNOLOGY PARK



SHADOW HABITAT
REGULATIONS ASSESSMENT

**FORD ENERGY RECOVERY FACILITY AND WASTE SORTING AND
TRANSFER FACILITY, FORD CIRCULAR TECHNOLOGY PARK**
SHADOW HABITAT REGULATIONS ASSESSMENT
VIRIDOR ENERGY LIMITED
GRUNDON WASTE MANAGEMENT LIMITED
FORD ENERGY FROM WASTE LIMITED
MARCH 2021



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1.0 Introduction

- 1.1 This report has been prepared in support of a planning application for the proposed Ford energy recovery facility (ERF) and waste sorting and transfer facility (WSTF).
- 1.2 The stack location lies within 10km of one statutory designated site of European importance: Duncton to Bignor Escarpment Area of Conservation (SAC). The location of the site relative to these sites is shown in figure 1. Natural England has also requested that consideration be given to the potential for habitats that act as functionally linked land to the Arun Valley Special Protection Area (SPA) to be affected by the proposals.
- 1.3 These sites receive statutory protection under the Conservation of Habitats and Species Regulations 2017 (as amended) more commonly known as the 'Habitats Regulations'). These regulations update the Conservation of Habitats and Species Regulations 2017 following the end of the transition period in December 2020. The Habitats Regulations afford a high level of protection to sites supporting habitats or rare species (other than birds) considered scarce or vulnerable at a European community level (SACs) and areas that hold significant populations of certain bird species (SPAs). SPAs and SAC form the National Site Network (NSN) within the UK.
- 1.4 Under the Habitats Regulations, West Sussex County Council (WSCC) is a competent authority, responsible for ensuring that development management decisions do not adversely affect the integrity of sites within the NSN. This document provides information for the Habitats Regulations Screening Assessment that WSCC will need to undertake in determining the planning application for site. This document screens the proposed development for likely significant effects on the European site both alone, and in combination with other plans and projects.

2.0 Legislative context and tests of the Habitat Regulations

- 2.1 SPAs, SACs and Ramsar sites form part of a network of nature protection areas within the UK known as the National Site Network (NSN). Prior to the UK leaving the European Union NSN were known as Natura 2000 sites. Ramsar sites are designated as wetlands of international importance that are afforded similar legislative protection to SPAs and SACs. Government has issued policy statements relating to the special status of Ramsar sites. This extends the same protection to Ramsar sites as that afforded to SPAs and SACs through the Habitat Regulations.
- 2.2 Under Regulation 63 of the Habitats Regulations the competent authority is responsible for assessing whether land use plans or proposed developments could adversely affect a site(s) within the NSN. This requires a process known as a Habitat Regulations Assessment (HRA) encompassing two tests required under Regulation 63(1) of the Habitats Regulations. This requires a process known as a Habitat Regulations Assessment (HRA) encompassing two tests required under Regulation 63(1) of the Habitats Regulations.
- 2.3 **Test 1:** having ascertained that the plan is not directly connected to, or necessary for site management for nature conservation, the first test of the HRA, commonly referred to as a screening test, considers whether or not a plan or project is likely to have a significant effect on a site(s) within the NSN either alone or in combination with other plans or projects. A significant effect is any effect that would undermine the conservation objectives for the respective NSN site(s) and may include physical loss and/or damage of a habitat, disturbance effects, and changes to water availability, deposition of contaminants through changes in air quality etc.
- 2.4 **Test 2:** The second test of the HRA is relevant to those plans or projects that are screened as likely to have a significant effect alone or in combination with other plans or projects, and requires an appropriate assessment. The role of the appropriate assessment is to consider the implications of the plan or project for the conservation objectives of the NSN site(s) in question, and determine whether they will have an adverse effect on the integrity of the site. In carrying out an appropriate assessment, a local authority must have regard to the manner in which the project is proposed to be carried out, or to any conditions or restrictions subject to which it proposes that the consent, permission or other authorisation should be given.
- 2.5 A recent European Court Judgment (ECJ) *People Over Wind and Sweetman v Coillte Teoranta* (C-323/17) has altered the process of screening for likely significant effects by overturning the 2008 *Hart District Council vs. Secretary of State* judgment (2008), known as *Dilley Lane*. This *Dilley Lane* judgment stated *“there is no legal requirement that a screening assessment... must be carried out in the absence of any mitigation measures that form part of that plan or project.”*
- 2.6 The recent *People Over Wind and Sweetman* ruling states that *“it is not appropriate, at the screening stage, to take account of measures intended to avoid or reduce the harmful effects of the plan or project on that site”*. This means that mitigation measures must be excluded from assessing whether a project is

likely to have a significant effect, either alone or in combination with other plans and projects.

- 2.7 A likely significant effect is any effect that is likely to undermine the site's conservation objectives, in light of the characteristics and specific environmental conditions of the SAC or SPA.
- 2.8 At the time of writing, it is understood that all courts in the UK, with the exception of the Supreme Court, will continue to be bound by judgements of the Court of Justice of the European Union handed down prior to the 31 December 2020.

Conservation objectives

- 2.9 Conservation objectives are identified for all NSN sites and cover all features that qualify the site for classification or designation. The conservation objectives apply under the Habitats Regulations and must be considered during a Habitats Regulation Assessment, including an Appropriate Assessment.

3.0 Description

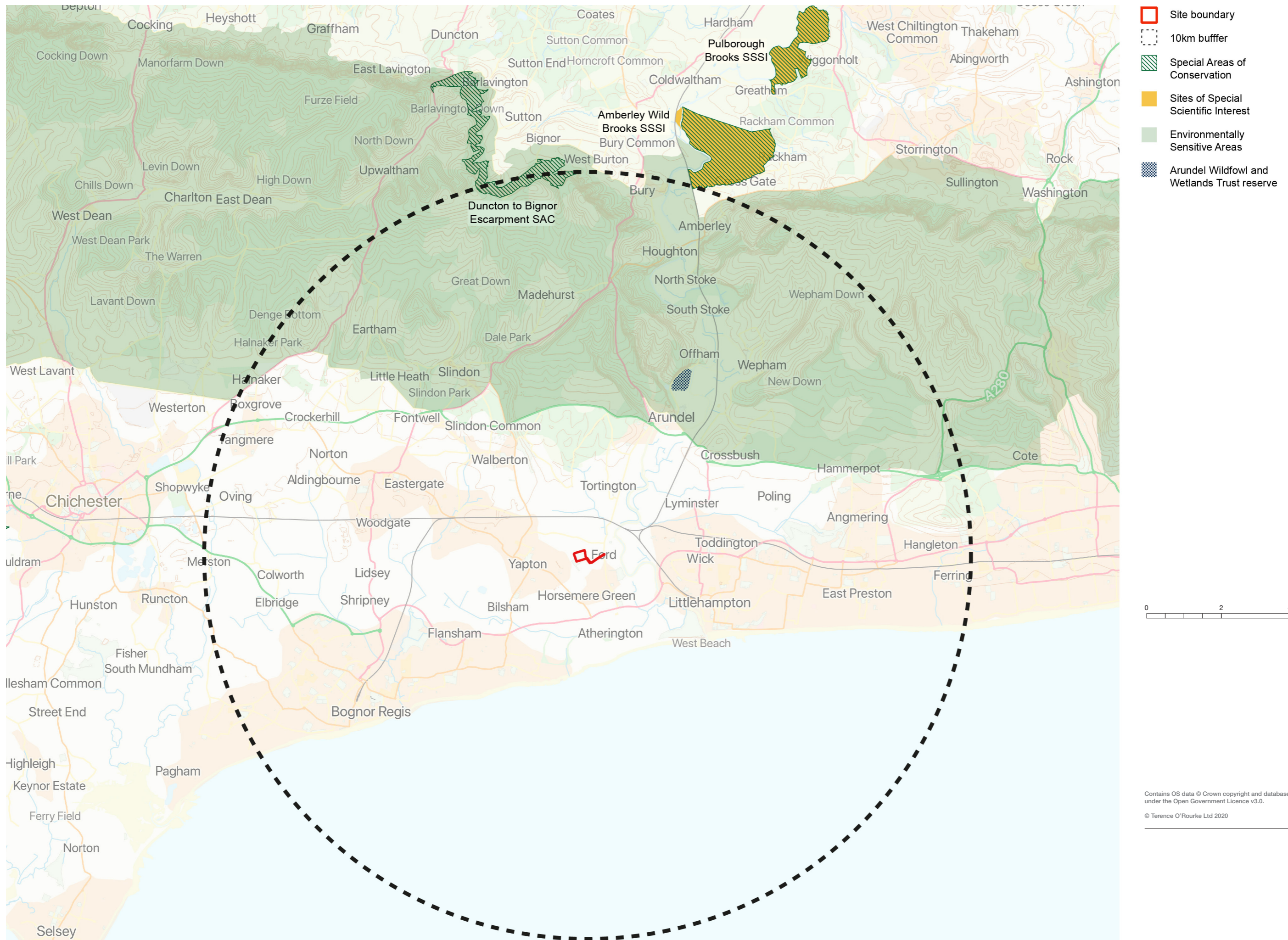
3.1 The proposed Ford ERF and WSTF encompass the following elements:

- A twin stream energy recovery facility (ERF) – located towards the centre of the application site and with a design capacity to treat 275,000 tonnes per annum (tpa) of non-hazardous, non-recyclable, residual waste material. A mixture of commercial and industrial (C&I) waste and municipal solid waste (MSW) will be the main sources of waste for the facility and this will be sourced principally from within the West Sussex county area, but also from the neighbouring counties of East Sussex, Hampshire and Surrey, including Portsmouth, Southampton and Brighton and Hove. Towards the east of the building will be the steam turbine generator. This is designed to utilise high pressure steam from water heated by the combustion processes and generate approximately 31 MW of electrical power, of which approximately 28 MW will be exported to the local electrical distribution network (equivalent of powering approximately 68,250 homes over the lifetime of the plant) and the remainder will be used within the ERF. The proposals will also be able to export up to 10 MWth of heat in the form of steam or hot water in the future, should off-site recipients be identified. The ERF building will also include education, administrative and welfare facilities.
- A waste sorting and transfer facility (WSTF) – located towards the south western part of the application site and with a capacity to process up to 20,000 tpa non-hazardous waste. The WSTF will take MSW and C&I wastes collected from local householders, businesses and industries principally from within the West Sussex county area, but also from the neighbouring counties of East Sussex, Hampshire and Surrey.
- Buildings and structures ancillary to the ERF and WSTF – these include: a gatehouse, five weighbridges and a weighbridge office, workshops, air cooled condensers, electricity transformer, pump house, storage tanks (diesel, ammonia, fire water), staff and visitor parking and internal roads.
- Landscape bunding and planting – along the north, east and western boundaries of the site in order to screen the lower part of the buildings and the activity on the site at ground level. The site boundaries will also include security fencing and acoustic timber fencing.
- Drainage – a proposed surface water drainage strategy for the developed site and a proposed foul water network discharging domestic foul and trade effluent into a local sewer.

3.2 No modifications or specific measures have been included in the design of the plant to reduce impacts on the European sites. As highlighted in the air quality chapter and technical reports (ES Technical Appendix C) prepared by Fichtner Consulting Engineers Ltd no additional mitigation measures have been embedded in the design beyond those required by legislation, regulated by the Environment Agency, under the Environmental Permit.

4.0 Description of the SAC

- 4.1 The following section sets out the location, designation criteria and conservation objectives of the Duncton to Bignor Escarpment Area of Conservation (SAC), the sole site included in this HRA screening. The location of this site relative to the application site is shown in figure 1. Consideration of the potential for land within or close to the site to act as functionally linked land to the Arun Valley SPA is detailed in section 6.
- 4.2 The SAC is selected for the presence of the Annex 1 habitat: *Asperulo – Fagetum* beech forest. It occurs on steep scarp slopes and on more gently sloping hillsides in mosaic with ash woodland, scrub and grassland. Much of the woodland is beech high forest but with some old pollards. Rare species present include white helleborine, yellow bird's nest and green hellebore. The woods also have a rich mollusc fauna. The site covers 211.84ha. A copy of the SAC citation is included in Appendix 1.
- 4.3 The conservation objectives for the SAC have been prepared by Natural England. With regard to the site and the natural habitats for which the site has been designated (the 'qualifying features' listed below), and subject to natural change; the conservation objectives aim to ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its qualifying features, by maintaining or restoring:
- The extent and distribution of qualifying natural habitats
 - The structure and function (including typical species) of qualifying natural habitats
 - The supporting processes on which qualifying natural habitats rely
- 4.4 The supplementary advice on conserving and restoring site features, which accompanies the conservation objectives, sets an objective for air quality of: maintaining, as necessary, the concentrations and deposition of air pollutants to at, or below, the site-relevant critical loads or levels given on the Air Pollution Information System (APIS) website.



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Figure 1 Location of protected sites referred to in the report

5.0 Air quality modelling results and evaluation

- 5.1 Fichtner were appointed to undertake an assessment of the impacts on air quality during the construction and operational phases of the proposed scheme. Full details of this assessment process are detailed in ES Technical Appendix C. This section presents a brief summary of the assessment work where relevant to the European sites. Further technical information can be found in Technical Appendix C.
- 5.2 Dust was screened out as a potential impact on the European site in line with the methodology outlined within the 2014 Institute of Air Quality Management (IAQM) guidance document *Guidance on the assessment of dust from demolition and construction*. The intention of the IAQM guidance is that 500 m is the distance from the area of muddy ground where dust could be deposited by vehicles leaving the site and re-suspended by vehicles using the road network.
- 5.3 The SAC is over 9km from the site boundary and the route used by construction vehicles on the public highway, up to 500 m from the site entrance. The effect of dust from trackout on the European site can be screened out.
- 5.4 As the European site considered in this assessment is well beyond 50m from the boundary of the application site no detailed assessment of impacts related to dust is required in line with the IAQM guidance (see ES Technical Appendix C).
- 5.5 The assessment of process emissions from the proposed ERF undertaken by Fichtner covered a range of pollutants that are known to have impacts on ecosystems above certain levels. The list of pollutant assessments and the critical levels used for the assessment are set out in table 1.

Table 1: Pollutants and relevant critical levels used for the ecological assessment.

Pollutant	Concentration (µg/m ³)	Measured as
Nitrogen oxides (as nitrogen dioxide)	75	Daily mean
	30	Annual mean
Sulphur dioxide	10	Annual mean for sensitive lichen communities and bryophytes and ecosystems where lichens and bryophytes are an important part of the ecosystem's integrity
	20	Annual mean for all higher plants
Hydrogen fluoride	5	Daily mean
	0.5	Weekly mean
Ammonia	1	Annual mean for sensitive lichen communities and bryophytes and ecosystems where lichens and bryophytes are an important part of the ecosystem's integrity
	3	Annual mean for all higher plants

- 5.6 The Environment Agency's Operational Instruction documents explain how to assess atmospheric emissions from new or expanding Integrated Pollution Prevention and Control (IPPC) regulated industry applications, issued under the Environmental Permitting Regulations at ecologically sensitive sites. The process

to follow to satisfy the requirements of the Conservation of Habitats and Species Regulations 2017 (as amended) is outlined.

5.7 *Operational Instruction 67_12 Detailed assessment of the impact of aerial emissions from new or expanding IPPC regulated industry for impacts on nature conservation* sets out the screening criteria for ecological receptors, see table 2.

Table 2: Screening criteria for ecological receptors

Threshold	European site
Y (% threshold long-term)	1%
Y (% threshold short-term*)	10%
Z (% threshold)	70%
*Short-term considers both daily and weekly	

5.8 Where:

- Y is the long term process contribution (PC) calculated as a percentage of the relevant critical level or load; and
- Z is the long term predicted environmental concentration (PEC) calculated as a percentage of the relevant critical level or load

5.9 Critical levels and critical loads are the ambient concentrations and deposition fluxes below which significant harmful effects to sensitive ecosystems are unlikely to occur. Critical levels of air pollution and critical loads of pollutants have been identified by the United Nations Economic Commission for Europe (UNECE).

5.10 Critical loads are defined as: " *a quantitative estimate of exposure to one or more pollutants below which significant harmful effects on specified sensitive elements of the environment do not occur according to present knowledge*".

5.11 Critical levels are defined as "*concentrations of pollutants in the atmosphere above which direct adverse effects on receptors, such as human beings, plants, ecosystems or materials, may occur according to present knowledge*".

5.12 It is important to distinguish between a critical load and a critical level. The critical load relates to the quantity of pollutant deposited from air to the ground, whereas the critical level is the gaseous concentration of a pollutant in the air.

5.13 Operational Instruction 67-12 states that if the PC is less than 1% critical level and load then emissions from the application are not significant, and if the PEC is less

than 70% critical level and load it can be concluded 'no likely significant effect' (alone and in-combination).

- 5.14 AQTAG 17 - Guidance on in combination assessments for aerial emissions from EPR permits states that "*Where the maximum process contribution (PC) at the European site(s) is less than the Stage 2 de-minimis threshold of the relevant critical level or load [i.e. the criteria detailed in Table 2], the PC is considered to be inconsequential and there is no potential for an alone or in-combination effects with other plans and projects.*"

Critical levels

- 5.15 The air quality modelling undertaken by Fichtner shows that the annual mean NO_x PC is 0.02 µg/m³, 0.06% of the critical level for Duncton to Bignor Escarpment SAC. The NO_x daily (24 hour) PC is 0.35 µg/m³, 0.47% of the critical level for the SAC. The annual mean PC combined with the baseline will be below the annual mean critical level of 30 µg/m³ for the protection of vegetation and ecosystems with the development in operation. The NO_x daily (24 hour) PC at the same point is also below the daily mean critical level of 75 µg/m³ for the protection of vegetation and ecosystems (see ES Technical Appendix C, parts 1 - 3).
- 5.16 As the mean annual and daily PC is below 1% and 10% of the relevant critical levels for NO_x no adverse impacts on vegetation and ecosystems within the Duncton to Bignor Escarpment SAC are predicted as a result of the development.
- 5.17 The air quality modelling undertaken by Fichtner shows that the annual mean sulphur dioxide (SO₂) PC is 0.01 µg/m³, 0.02% of the critical level for the SAC. The annual mean ammonia (NH₃) PC is less than 0.01 µg/m³, <0.02% of the critical level for the SAC. The weekly and daily mean for hydrogen fluoride is 0.11% and 0.06% of the relevant critical level for the SAC. The annual mean PC for SO₂ combined with the baseline level is below the annual mean critical level of 10 µg/m³ for the protection of lichens and bryophytes with the development in operation. The annual mean PC for NH₃ combined with the baseline level is below the annual mean critical level of 1 µg/m³ for the protection of lichens and bryophytes with the development in operation.
- 5.18 As the mean annual PC is below 1% of the relevant critical levels for hydrogen fluoride, sulphur dioxide and ammonia no adverse impacts on vegetation and ecosystems within Duncton to Bignor Escarpment SAC are predicted as a result of the operation of the facility.

Critical loads

- 5.19 The APIS website provides a critical load of 10-20kgN/ha/yr for the Annex 1 habitat *Asperulo-Fagetum* beech forests. Across the SAC the maximum rate of nitrogen deposition is 23.2kgN/ha/yr. The average and minimum baseline rates of nitrogen deposition across the SAC exceed the upper limit of the critical load range given for this habitat type.
- 5.20 The deposition modelling undertaken by Fichtner shows a maximum rate of nitrogen deposition (PC) within the SAC of 0.014kgN/ha/yr. This represents 0.14% of the lower end of the critical load given for the Annex 1 habitat within the SAC.

- 5.21 The Annex 1 woodland habitat within the SAC is experiencing levels of nitrogen deposition over the upper limits of the critical loads identified for this habitat. Excessive nitrogen deposition is considered to lead to decreases in mycorrhiza, changes in ground vegetation, changes in soil fauna and loss of epiphytic lichens and bryophytes.
- 5.22 Little information is currently available on the long-term impact of high levels of nitrogen deposition on the Annex 1 habitat within the SAC. Although not specifically undertaken in relation to the SAC, condition assessments undertaken to evaluate the condition of Sites of Special Scientific Interest (SSSI) offer some information that can be used to evaluate the condition of the SAC.
- 5.23 In this case, the whole of the Duncton to Bignor Escarpment SSSI (which covers the same extent as the SAC) was considered to be in favourable condition in 2008, with the exception of one unit covering 3.67ha, which was considered to be unfavourable recovering. This assessment of unfavourable recovering in this unit related to areas of grassland within the SSSI, not the beech woodland that forms the Annex 1 habitat, which was considered to be in favourable condition.
- 5.24 Comments on individual units note ash and beech with abundant growth of epiphytic lichens and bryophytes in Unit 8 which would suggest air quality was good at the time of assessment. The APIS website shows that background nitrogen deposition was higher in 2008 (closer to 25kg/N/ha/yr) but the condition assessments did not highlight any significant changes in plant composition. The favourable condition assessment would suggest that the woodland habitats within the SAC are in good condition and that current levels of nitrogen deposition are not adversely affecting the extent and distribution of qualifying natural habitats.
- 5.25 The APIS website shows the main sources of nitrogen (ranked by total nitrogen deposition) affecting this SAC are European imports (33%), UK livestock (20%) and international shipping (12%). These proposals are unlikely to add significantly to the current baseline levels of nitrogen deposition that already occur within the site, with only a very minor increase in the PEC predicted.

6.0 Evaluation of the potential of land within and around the site to be functionally linked to the Arun Valley SPA

- 6.1 The Arun Valley SPA supports a herd of wintering Bewick's swan. The number of Bewick's swan over-wintering on the SPA has decreased in the long-term having previously increased. This has triggered WeBS Alerts for the long, medium and short-term and the period since baseline.
- 6.2 The number of over-wintering Bewick's swan within southern England have fluctuated throughout the period recorded by WeBS making interpretation of the underlying trend difficult. The numbers over-wintering in Great Britain have been decreasing in the long-term having previously increased. The trend on this site follows regional and British trends suggesting the declines that triggered the WeBS alerts are the result of broad-scale population trends.
- 6.3 The increasing proportion of regional numbers supported by the Arun Valley SPA suggest the environmental conditions remain relatively favourable and also indicates that this site is becoming increasingly important on a regional scale for this species.
- 6.4 Natural England consider that supporting habitat outside of the SPA includes improved pasture, autumn-sown crops, over-wintered stubbles and oil seed rape. During the day the birds feed on pastures within the SPA or at a range of sites to the south of the SPA, between Arundel and Amberley (Thomas, 2014, and data supplied by the Sussex Ornithological Society). Bewick's swans tend to roost overnight on disturbance-free floodwaters at Pulborough Brooks, Amberley Wildbrooks or the Arundel Wildfowl and Wetlands Trust (WWT) Reserve (the WWT reserve is outside the SPA).
- 6.5 As Bewick's swan will fly up to 10km from their roost sites to feed (Stroud et al, 2016). A distance of 10km around roost sites has been used to define impact risk zones for foraging Bewick's swan in the Arun Valley. Any losses of habitat within these zones may impact the ecological integrity of this species.
- 6.6 Both Pulborough Brooks and Amberley Wildbrooks are over 10km from the site (See Figure 1). Arundel WWT reserve lies within 6km of the site indicating the farmland around the site could potentially be used by feeding Bewick's swan during the day time. It should be noted that the size of the wintering flock has significantly reduced in the last decade and the arrival time of the wintering birds has got progressively later with birds not arriving until December. Lower numbers of birds and a shorter winter occupancy of sites reduces the likelihood of birds being present on or near the site.
- 6.7 Records of sightings of Bewick's swan within 2km of the site supplied to Lindsay Carrington Ecological Services (LCES) by Sussex Biological Records Centre as part of the ecological impact assessment (EclA) preparation shows only sporadic records of Bewick's swan in the local area. Since 1980 there have been 28 records of birds; 9 are in the period 1980-1990, 15 in the period 1991-2000, two in the period 2001-2010 and two between 2011 and 2017.
- 6.8 This pattern of occurrence would suggest there is no regular use of the arable land around the site by wintering Bewick's swan. This is supported by the location

of records which are variously described as Arun Valley Ford, Arun Valley (Arundel to Littlehampton), Arun Valley Ford Station, Climping Country Park, Lyminster Country Park, Arundel Tortington and Arun Valley (Bury to Houghton). The site contains no suitable foraging or roosting habitat for Bewick's swan.

- 6.9 The area around Ford is considered to be sufficiently distant from the Arun Valley SPA not to be functionally linked to the SPA for the overall assemblage of wildfowl.
- 6.10 Natural England guidance (supplementary advice on conserving and restoring site features) for the Arun Valley SPA has specifically removed air pollution as a factor that could adversely impact on restoring the site to favourable conservation status, noting there are no expected negative impact on species due to impacts on the species' broad habitat. It is expected that this assessment also applies to any functionally linked land outside the SPA boundaries, especially farmland subject to additions of inorganic fertilisers.

7.0 Likely significant effect (LSE) test

7.1 The first test of Regulation 63 of the Habitats Regulations requires an assessment of whether the emissions from the scheme or any other activities, are likely to have a significant effect on the NSN site(s) in question, either alone or in combination with other plans and projects.

7.2 As noted in section 3 no specific measures to reduce the impact on emissions on the NSN site have been included as part of the project. Therefore, this project can be screened for likely significant effects in line with the recent People Over Wind ruling.

Identification of thresholds for critical loads and levels

7.3 The APIS website was consulted to determine the appropriate critical loads and levels for use in the assessment of likely significant effects. Fichtner used this information when undertaking the modelling work. This process is explained in section 5 along with an evaluation of the air quality modelling results.

Screening for air quality LSE

7.4 The air quality modelling has not identified any mean annual process contributions of over 1% of the relevant critical level for oxides of nitrogen, hydrogen fluoride, sulphur dioxide and ammonia. Using Environment Agency guidance it is therefore possible to screen out likely significant effects related to air quality associated with the project at this stage on the SAC.

7.5 Nitrogen deposition from the proposal also falls below 1% of the lower end of the relevant critical load for habitats within the SAC. Using Environment Agency guidance it is therefore possible to screen out likely significant effects related to air quality associated with the project at this stage for the European site.

7.6 It should be noted that background levels of nitrogen deposition within the Dunton to Bignor Escarpment SAC exceed the upper limit of the critical load given for the Annex 1 habitat. This would suggest that nitrogen deposition is already at a level that could be adversely impacting on the interest features of this site. However, the SSSI condition assessment identifies the whole site as being in favourable condition. This suggests that overall the broad habitat types support a typical range of species.

Screening for loss or impacts on functionally linked land LSE

7.7 The site supports no habitat that would provide suitable foraging or roosting habitat for Bewick's swan. The surrounding arable land could provide suitable foraging habitat for Bewick's swan depending on cropping patterns. There is no evidence to suggest Bewick's swan are anything other than sporadic visitors to the wider area around the site, with less than annual occurrences recorded (birds recorded four years out of ten in 1980 to 1990 and 1991 to 2000, with four records in the period 2011-2017), with no records in the period 2001 to 2010).

7.8 There is no evidence to suggest that this land is functionally linked to the Arun Valley SPA and, although there may be localised disturbance during construction, nothing to indicate the proposal will prevent Bewick's swan using arable fields in

this area once the site is operational. No likely significant effects are anticipated on wintering Bewick's swan.

- 7.9 The Arun Valley SPA is considered sufficiently distance from the site for it not to be considered functionally linked land for species associated with the overall site assemblage (other than Bewick's swan).

8.0 Alone and in-combination

- 8.1 The air quality modelling has not identified any likely significant effects on the SAC alone. None of the other projects identified for consideration in the in-combination assessment have the potential to contribute additional sources of aerial pollutants that could act in-combination with this proposal. The very small contribution of pollutants to critical levels and loads across the SAC and the absence of other projects that would be significant contributors to aerial pollutants support the conclusion of no likely significant effects on the interest features of the European site in-combination with other plans and projects.
- 8.2 The land within and around the application site are not considered to act as functionally linked land to the Arun valley SPA. In the absence of any regular, sustained used of this land by Bewick's swan no likely significant effects, alone or in-combination with other plans and projects are anticipated.

9.0 Conclusion

- 9.1 The air quality modelling undertaken by Fichtner has not identified any mean annual process contributions of over 1% of the relevant critical level for oxides of nitrogen, hydrogen fluoride, sulphur dioxide and ammonia within the SAC. Nitrogen deposition from the proposal also falls below 1% of the lower end of the relevant critical load for the Annex 1 habitat within the SAC.
- 9.2 Using Environment Agency guidance it is therefore possible to screen out likely significant effects related to air quality associated with the project at this stage for the SAC.
- 9.3 The land within and around the application site is not considered to be used with any regularity by wintering Bewick's swan associated with the Arun Valley SPA. It is not considered that this land represents functionally-linked land for this interest feature of the SPA.
- 9.4 This project has been subject to a HRA screening process which has concluded there will be no likely significant effects on interest features of the NSN sites, either alone, or in-combination with other plans and projects.

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Appendix 1

EC Directive 92/43 on the Conservation of Natural Habitats and of Wild Fauna and Flora

Citation for Special Area of Conservation (SAC)

Name: Duncton to Bignor Escarpment
Unitary Authority/County: West Sussex
SAC status: Designated on 1 April 2005
Grid reference: SU965137
SAC EU code: UK0030138
Area (ha): 214.47
Component SSSI: Duncton to Bignor Escarpment SSSI

Site description:

The Duncton to Bignor Escarpment is an example of mature beech *Fagus sylvatica* woodland located on the steep scarp face of the South Downs. The site has developed over chalk which is overlain in places by a clay-with-flints capping. The resulting soil conditions have produced many local variations in the composition of the woodland. Beech dominates in a mosaic with ash *Fraxinus excelsior* woodland, scrub and grassland. Much of the beech woodland is high forest but with some old pollards. Rare plants present include white helleborine *Cephalanthera damasonium*, yellow bird's nest *Monotropa hypopitys*, green hellebore *Helleborus viridis* and limestone fern *Gymnocarpium robertium*. The woods also have a rich mollusc fauna.

Qualifying habitats: The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:

- *Asperulo-Fagetum* beech forests. (Beech forests on neutral to rich soils)

This citation relates to a site entered in the Register of European Sites for Great Britain.
Register reference number: UK0030138
Date of registration: 14 June 2005

Signed: *Trew Salmon*

On behalf of the Secretary of State for Environment,
Food and Rural Affairs

European Site Conservation Objectives for Duncton to Bignor Escarpment Special Area of Conservation Site code: UK0030138



With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- **The extent and distribution of qualifying natural habitats**
- **The structure and function (including typical species) of qualifying natural habitats, and**
- **The supporting processes on which the qualifying natural habitats rely**

This document should be read in conjunction with the accompanying *Supplementary Advice* document, which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.

Qualifying Features:

H9130. *Asperulo-Fagetum* beech forests; Beech forests on neutral to rich soils

Explanatory Notes: European Site Conservation Objectives

These Conservation Objectives are those referred to in the Conservation of Habitats and Species Regulations 2017 as amended from time to time (the “Habitats Regulations”). They must be considered when a competent authority is required to make a ‘Habitats Regulations Assessment’, including an Appropriate Assessment, under the relevant parts of this legislation.

These Conservation Objectives and the accompanying Supplementary Advice (where available) will also provide a framework to inform the measures needed to conserve or restore the European Site and the prevention of deterioration or significant disturbance of its qualifying features.

These Conservation Objectives are set for each habitat or species of a [Special Area of Conservation \(SAC\)](#). Where the objectives are met, the site will be considered to exhibit a high degree of integrity and to be contributing to achieving Favourable Conservation Status for that species or habitat type at a UK level. The term ‘favourable conservation status’ is defined in regulation 3 of the Habitats Regulations.

Publication date: 27 November 2018 (version 3). This document updates and replaces an earlier version dated 30 June 2014 to reflect the consolidation of the Habitats Regulations in 2017.