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APPENDIX 11.6: Natural England Discretionary Advice

**Wheelabrator Kemsley Generating Station (K3) and Wheelabrator
Kemsley North (WKN) Waste to Energy Facility DCO**

S42 Draft ES

PINS ref: EN010083



Date: 08 October 2018
Our ref: DAS/13551/253837
Your ref: Kemsley K3 & WKN



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Dear Nick

Discretionary Advice Service (Charged Advice)

DAS/13551/253837

Development proposal and location:

Thank you for your consultation on the above dated 30 July 2018, which was received on the same date.

This advice is being provided as part of Natural England's Discretionary Advice Service. RPS has asked Natural England to provide advice on a proposed Development Consent Order (DCO) for an upgrade to an existing Energy from Waste (EfW) generating station ('the K3 upgrade') and a new EfW plant next to the existing (Wheelabrator Kemsley North, WKN). This advice will focus on:

- Potential impacts of the proposal on nearby designated sites, and any necessary mitigation measures;
- Detailed discussion regarding the proposed laydown area adjacent to The Swale SPA/Ramsar/SSSI;
- Information needed for a draft Habitats Regulations Assessment.

This advice is provided in accordance with the Quotation and Agreement dated 8 August 2018.

The following advice is based upon the information presented at the site visit on 4 September 2018 and within the Scoping Report submitted to the Planning Inspectorate on 7 September 2018.

Designated nature conservation sites

Sites relevant to assessing the impact of the K3 upgrade and WKN are:

- The Swale SPA, Ramsar site and SSSI
- The Swale Estuary Marine Conservation Zone (MCZ)
- Medway Estuary and Marshes SPA and Ramsar site
- Thames Estuary and Marshes SPA and Ramsar site
- Queendown Warren SAC

Notes on the features for which these sites are designated are set out at Annex A to this letter.

Potential impacts to be assessed

Air quality

Air quality impacts could arise from dust produced during the construction of WKN, residual

emissions from the flue gas treatment (K3 and WKN) and traffic emissions during operation (K3 and WKN).

Dust produced during the construction phase could cause smothering effects within approximately 200m. Therefore, standard mitigation measures should be employed to suppress dust.

The effects of emissions from the flue gas treatment should be modelled and Process Contributions predicted for the internationally designated sites listed above. The assessment of likely significant effects should be undertaken alone and in combination. Relevant projects to assess in combination are the K3 power upgrade, WKN, and any other projects on the Kemsley site that have been consented or likely to be consented since the date of the background levels recorded on the APIS website.

The impacts of air pollution from road traffic only needs to be considered where there are sensitive Natura 2000 site habitats within 200m of a road. If such sensitive habitats are present, then risk to those habitats should be assessed using the 1% of critical load/level threshold, or an increase of over 200 HGV Annual Average Daily Traffic movements (which is approximately equivalent to the 1% threshold). The assessment should be made against these screening thresholds for the K3 and WKN proposals alone and in combination. In accordance with the conclusions of the Wealden Judgement (<http://www.bailii.org/ew/cases/EWHC/Admin/2017/351.html>) any potential traffic impacts should be assessed in combination with other relevant projects. These would include projects on the Kemsley site that have been consented or likely to be consented since the date of the background levels recorded on the APIS website.

Disturbance

Disturbance to birds using the adjacent intertidal and reedbed habitat could occur during the construction of WKN, and operation and demolition of K3 and WKN, including from noise, visual intrusion and lighting.

I advise that, rather than using a threshold approach to assessing the impact of noise, a potentially more suitable approach is to assess the change in noise levels, both continuous noise and sporadic. A difference of 3 dBA in similar types of noise is just distinguishable to people, so it is reasonable to assume that if the change in noise is no more than 3dB it is unlikely to be significant.

At the site visit on 4 September, we looked at the proposed construction laydown area for WKN. This brings the construction area closer to The Swale SPA/Ramsar. However, the sea wall and existing fence mean that activity within the laydown area is unlikely to cause visual disturbance to birds using the adjacent intertidal. The laydown area will be used for car parking, site offices and some storage of materials. Therefore, the activities are not those that would generate the loud, percussive noises that are most disturbing to birds. Creation of the laydown area will involve earth movements, which may be noisy, therefore upgrading the existing fence to an acoustic barrier may be necessary to minimise disturbance.

Construction of WKN and HGV movements associated with the operation of WKN and K3 may add to the disturbance of marsh harriers breeding in the reedbed adjacent to the road. Marsh harriers form part of the breeding bird assemblage of The Swale SPA. However, alternative reedbed habitat at Harty Marshes on Sheppey has already been provided as mitigation for potential disturbance during the construction of K3. Natural England considers that this alternative habitat is sufficient to mitigate for any additional disturbance from the K3 upgrade and construction of WKN.

I recommend that construction impacts from the WKN plant are minimised by using non-percussive piling methods. If this is not possible, timing of piling should avoid the core winter period (November to February inclusive). If neither of these mitigation measures are possible, the HRA will have to assess impacts on birds using the adjacent intertidal area in order to ascertain whether construction will have an adverse effect on the integrity of the SPA/Ramsar. Numbers of birds potentially affected by elevated noise levels should be presented.

Water quality

As the outfall that will take surface water runoff from both WKN and the K3 upgrade has been constructed, the only impacts to assess are impacts associated with the effluent itself. The MCZ assessment should, therefore, concentrate on impacts from any changes to flows or water quality.

I understand that the outfall was designed to take flows from the existing K3 project. Therefore the assessment should look at any impacts of changes in flows from the WKN and K3 upgrade. Potential impacts from scour on intertidal and subtidal habitats should be considered with reference to flow rates, volume and how often the outfall is predicted to operate.

Similarly, the assessment should look at any impacts of changes in water quality from the WKN and K3 upgrade. Information will be required on the concentration of potential contaminants; their fate - i.e. predictions of where the contaminants would be deposited and/or accumulate; and the volume of water. Supplementary advice on the conservation objectives for The Swale Estuary MCZ¹ is available. The water quality target for contaminants is the MCZ is to '*Reduce aqueous contaminants to levels equating to High Status according to Annex VIII and Good Status according to Annex X of the Water Framework Directive, avoiding deterioration from existing levels*'. In terms of dissolved oxygen, the target is: '*Maintain the dissolved oxygen (DO) concentration at levels equating to High Ecological Status (specifically ≥ 5.7 mg per litre (at 35 salinity) for 95 % of the year), avoiding deterioration from existing levels*'.

The Environment Agency lead on water quality issues, and will be able to advise on drivers other than the MCZ, which may be more pertinent (eg Water Framework Directive targets or Shellfish Waters objectives/targets). I suggest you could also use indicators like the impact on Cefas action levels² to help demonstrate any impact.

This letter concludes Natural England's Advice within the Quotation and Agreement dated 8 August 2018.

The advice provided in this letter has been through Natural England's Quality Assurance process

The advice provided within the Discretionary Advice Service is the professional advice of the Natural England adviser named below. It is the best advice that can be given based on the information provided so far. Its quality and detail is dependent upon the quality and depth of the information which has been provided. It does not constitute a statutory response or decision, which will be made by Natural England acting corporately in its role as statutory consultee to the competent authority after an application has been submitted. The advice given is therefore not binding in any way and is provided without prejudice to the consideration of any statutory consultation response or decision which may be made by Natural England in due course. The final judgement on any proposals by Natural England is reserved until an application is made and will be made on the information then available, including any modifications to the proposal made after receipt of discretionary advice. All pre-application advice is subject to review and revision in the light of changes in relevant considerations, including changes in relation to the facts, scientific knowledge/evidence, policy, guidance or law. Natural England will not accept any liability for the accuracy, adequacy or completeness of, nor will any express or implied warranty be given for, the advice. This exclusion does not extend to any fraudulent misrepresentation made by or on behalf of Natural England.

Yours sincerely

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<https://designatedsites.naturalengland.org.uk/Marine/SupAdvice.aspx?SiteCode=UKMCZ0041&SiteName=swale&SiteNameDisplay=The+Swale+Estuary+MCZ&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=>

2

<http://webarchive.nationalarchives.gov.uk/20140108121930/http://www.cefas.defra.gov.uk/media/562541/cefas%20action%20levels.pdf>

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Annex A

Notes on the features of relevant internationally designated sites

The HRA of the K3 upgrade and WKN proposals should consider the potential impacts against the published Conservation Objectives for European sites listed in the letter above. Conservation Objectives have been derived from the citations for the sites. Supplementary advice on the Conservation Objectives is also available for the intertidal sites, and should be used in conjunction with this advice.

Information on SPAs are also found on the standard data forms on JNCC's website. Where there is a discrepancy between the features listed on the standard data form and the citation, the latter is the document to assess the project against. This approach has been tested through the NSIP examination of the Richborough Connection Project.

Links to the citations, conservation objectives, and (where available) supplementary advice on conservation objectives, can be found on Natural England's Designated Sites View website: <https://designatedsites.naturalengland.org.uk/SiteSearch.aspx>

Special Protection Area features:

The Swale Special Protection Area (SPA)

- Dark-bellied brent goose (Non-breeding)
- Dunlin (Non Breeding)
- Breeding bird assemblage
- Waterbird assemblage (Non-breeding)

Medway Estuary and Marshes SPA

- Avocet (breeding and non-breeding)
- Dark-bellied brent goose (non-breeding)
- Dunlin (non-breeding)
- Grey plover (non-breeding)
- Knot (non-breeding)
- Pintail (non-breeding)
- Redshank (non-breeding)
- Ringed plover (non-breeding)
- Shelduck (non-breeding)
- Waterbird assemblage (non-breeding)
- Little tern (breeding)
- Breeding bird assemblage

Thames Estuary and Marshes SPA

- Avocet (non-breeding)
- Black-tailed godwit (non-breeding)
- Dunlin (non-breeding)
- Grey plover (non-breeding)
- Hen harrier (non-breeding)
- Knot (non-breeding)
- Redshank (non-breeding)
- Ringed plover (non-breeding)
- Waterbird assemblage (non-breeding)

Non-breeding assemblages

The citations for the three SPAs above list one of the qualifying features as the 'waterbird assemblage'. All 'waterbirds' (as defined by the Ramsar convention) form part of the assemblage. It

is the assemblage as a whole that is the feature to be assessed within the HRA, with reference to the Conservation Objectives.

The integrity of the assemblage (for both breeding and non-breeding) is generally recognised as a product of both abundance and diversity. However, as it is impractical to list all the waterbird species and assess each one individually, it is generally recognised that some constituent species contribute more towards the integrity of the overall assemblage than others, and the assessment should therefore, focus on these.

Recognising this, and as a tool to assist with assessing the ecological impacts of any plan/project on the waterbird assemblage feature, it is useful to identify the 'main component species'. These are:

- (i) Those present in nationally important numbers and
- (ii) Migratory species present in internationally important numbers (which may also be qualifying features on their own right – although this is not always the case) and
- (iii) Those that occur in the assemblage in numbers >2000 individuals and
- (iv) Named component species otherwise listed on SPA citation

For (ii) where qualifying features are assessed individually, there is no requirement to repeat for the assemblage assessment. However, the possibility that any effects could have a cumulative effect with any effects for other component species, that might then accumulate to be significant for the assemblage as a whole, should be explored in the HRA.

The Swale citation states that it qualifies under Article 4.2 of the Birds Directive as it regularly supports over 20,000 waterfowl, with an average peak count of 57,600 birds recorded in the five winter period 1986/7 to 1990/1. It states that this total includes 17 species in internationally or nationally important numbers, but does not name them.

In this situation, and as a matter of best practice, the most recent data from BTO's Wetland Bird Survey (WeBS) should be considered to augment the information provided in the citation. Looking at the most recent (five year peak mean 2012/13 – 2016/17) WeBS counts for the Swale estuary³, the following 15 species currently occur in internationally (*) or nationally important numbers (criteria i and ii, above):

European white-fronted goose	Dark-bellied brent goose*
Shelduck	Wigeon
Teal	Little egret
Oystercatcher	Avocet
Dunlin	Grey plover
Ruff	Sanderling
Black-tailed godwit*	Bar-tailed godwit
Greenshank	

In addition, knot, lapwing and golden plover are found in numbers greater than 2000 individuals (criterion iii).

The Medway Estuary and Marshes citation lists the species making up the waterbird assemblage. However, the Thames Estuary and Marshes citation does not. Using the same approach as above, the following 27 species currently occur in the Thames Estuary and Marshes in internationally (*) or nationally important numbers (criteria i and ii):

Dark-bellied brent goose*	Shelduck
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³ Teresa M. Frost, Graham E. Austin, Neil A. Calbrade, Heidi J. Mellan, Richard D. Hearn, David A. Stroud, Simon R. Wotton and Dawn E. Balmer. 2018. Waterbirds in the UK 2016/17: The Wetland Bird Survey. BTO, RSPB and JNCC, in association with WWT. British Trust for Ornithology, Thetford. <http://www.bto.org/volunteer-surveys/webs/publications/webs-annual-report>

Wigeon
Gadwall
Pochard
Great crested grebe
Coot
Avocet*
Grey plover*
Knot*
Dunlin*
Black-tailed godwit*
Curlew
Greenshank
Turnstone

Teal
Shoveler*
Little grebe
Little egret
Oystercatcher*
Ringed plover*
Lapwing
Sanderling*
Ruff
Bar-tailed godwit*
Green sandpiper
Redshank*

In addition golden plover is found in numbers greater than 2000 individuals (criterion iii).

Breeding bird assemblages

The identification of main component species for the breeding assemblage is slightly different to that for wintering. The main component species are:

- (i) those bird species 'characteristic' of the particular SPA bird habitat; and
- (ii) 'named components' listed on the SPA citation.

The Swale citation names certain species in the 'typical assemblage of breeding species' for grazing marsh, some of which are widespread and common (criterion ii). These are:

Shelduck	Mallard	Moorhen
Coot	Lapwing	Redshank
Reed warbler	Reed bunting	

In terms of the species characteristic of the particular habitat (criterion i), in this case, grazing marsh, the starting point should be the scoring species for the lowland damp grassland SSSI bird assemblage features⁴. This includes breeding ducks, waders, yellow wagtail, marsh harrier and others.

As noted above for the non-breeding assemblage, the integrity of an assemblage is taken to be a product of both abundance and diversity. In turn, the diversity of the assemblage depends on the species richness, abundance and the relative 'importance' (an assessment of the conservation status of each assemblage component). Each component makes a different contribution to the diversity of the assemblage, and changes to some components may be considered to affect diversity more than others. Negative changes to small numbers of relatively important assemblage components may have a similar overall effect to negative changes in larger numbers of less important components.

Ramsar site features

JNCC have published Information Sheets on Ramsar wetlands on their website⁵. Natural England has not produced Conservation Advice packages, including Conservation Objectives, for Ramsar sites. This is because it is considered that the Conservation Advice packages for the overlapping European Site will be, in most cases, sufficient to support the management of Ramsar interests.

The Swale Ramsar site

- Criterion 2 – Wetland plants and invertebrates

⁴ Drewitt, A.L., Whitehead, S. and Cohen, S. 2015. *Guidelines for the Selection of Biological SSSIs. Part 2: Detailed Guidelines for Habitats and Species Groups. Chapter 17 Birds*. Joint Nature Conservation Committee, Peterborough. http://jncc.defra.gov.uk/pdf/SSSI_Chptr17_Birds2015June.pdf

⁵ <http://jncc.defra.gov.uk/page-1390>

- Criterion 5 – wintering waterfowl assemblage
- Criterion 6 – Redshank, dark-bellied brent goose, grey plover (non-breeding)

Medway Estuary and Marshes Ramsar site

- Criterion 2 – Wetland plants and invertebrates
- Criterion 5 – wintering waterfowl assemblage
- Criterion 6 – Grey plover, redshank, dark-bellied brent goose, shelduck, pintail, ringed plover, knot, dunlin (non-breeding)

Thames Estuary and Marshes Ramsar site

- Criterion 2 – Wetland plants and invertebrates
- Criterion 5 – wintering waterfowl assemblage
- Criterion 6 – Ringed plover, black-tailed godwit, grey plover, knot, dunlin, redshank (non-breeding)

Special Area of Conservation features (taken from the citation on Designated Sites View website)

Queendown Warren SAC:

H6210 – Semi natural grasslands and scrubland facies: on calcareous substrates (*Festuco-brometalia*) (important orchid sites); Dry grasslands and scrublands on chalk or limestone (important orchid sites).

Annex B

European Protected Species

A licence is required in order to carry out any works that involve certain activities such as capturing the animals, disturbance, or damaging or destroying their resting or breeding places. Note that damage or destruction of a breeding site or resting place is an absolute offence and unless the offences can be avoided (e.g. by timing the works appropriately), it should be licensed. In the first instance it is for the developer to decide whether a species licence will be needed. The developer may need to engage specialist advice in making this decision. A licence may be needed to carry out mitigation work as well as for impacts directly connected with a development. Further information can be found in Natural England's ['How to get a licence'](#) publication.

If the application requires planning permission, it is for the local planning authority to consider whether the permission would offend against Article 12(1) of the Habitats Directive, and if so, whether the application would be likely to receive a licence. This should be based on the advice Natural England provides at formal consultation on the likely impacts on favourable conservation status and Natural England's [guidance](#) on how the three tests (no alternative solutions, imperative reasons of overriding public interest and maintenance of favourable conservation status) are applied when considering licence applications.

Natural England's pre-submission Screening Service can screen application drafts prior to formal submission, whether or not the relevant planning permission is already in place. Screening will help applicants by making an assessment of whether the draft application is likely to meet licensing requirements, and, if necessary, provide specific guidance on how to address any shortfalls. The advice should help developers and ecological consultants to better manage the risks or costs they may face in having to wait until the formal submission stage after planning permission is secured, or in responding to requests for further information following an initial formal application.

The service will be available for new applications, resubmissions or modifications – depending on customer requirements. More information can be found on [Natural England's website](#).