

# The Kemsley Mill K4 Combined Heat and Power Generating Station Development Consent Order



**Planning Statement** 

Document 5.2

**Author: DHA Planning** 

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and

Procedure) Regulations 2009

Regulation: 5(2)(q)



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# **Executive Summary**

DS Smith Paper Ltd are seeking a Development Consent Order to allow for the construction and operation of a replacement Combined Heat and Power (CHP) Plant, 'K4', at the Kemsley Paper Mill to the north of Sittingbourne in Kent. At present, under the terms of a current exclusivity agreement, the K4 CHP plant would be operated and constructed by E.ON (trading as Kemsley CHP Ltd), using Costain as their key contractor.

The paper production process is energy intensive, requiring both electricity and heat (in the form of steam). Currently the energy needs of the mill are provided by **K1**, a gas turbine CHP plant and 6 ancillary package boilers located within the mill site which provides electricity and steam to the mill, **K2**, a steam generator located within the mill site which uses waste plastic and sludge as a source to provide steam to the mill and **K3**, an energy from waste plant currently being constructed and located to the east of the paper mill complex which will be operated by Wheelabrator Technologies and which from 2019 will provide steam to the mill.

K1 is now 22 years old and elements such as the gas turbine, waste heat recovery boilers and steam turbine would require significant investment to extend their operational life and would need to be upgraded to meet the more stringent controls on Industrial Emissions being introduced by the Industrial Emissions Directive in 2020. Further, K1 is outdated and oversized in terms of generation capacity.

K4 would replace K1 and would be a gas fired CHP plant with a gas turbine of 52-57 MW nominal power output, waste heat recovery boilers providing 105 MWth steam and steam turbine technology of around 16 MW nominal power output.

A new replacement CHP plant, which would meet more stringent Industrial Emission Directive limits in 2020, is the most realistic, appropriate and cost effective way of continuing to provide a secure and flexible supply of electricity and steam to the Kemsley paper mill. Nationally the intention is to move away from fossil fuel generation, but gas fired generation is recognised to still have an important role to play and EN-1 promotes the use of CHP. Whilst the plant is for a specified end user and would only export a small amount of electricity, it is considered an appropriate strategy in principle in planning policy terms.

The project is a Nationally Significant Infrastructure Project under Section 14 and Section 15 of the Planning Act 2008 as it comprises an onshore generating station with a thermal capacity of more than 50 megawatts. An application for a Development Consent Order must therefore be made to the Planning Inspectorate, with a final decision on the application to be taken by the Secretary of State for Business, Energy and Industrial Strategy.

The draft Order is 'The Kemsley Mill K4 Combined Heat and Power Generating Station Development Consent Order'.

Principal powers within the DCO include the granting of development consent and powers of maintenance, operation, transfer and defence to proceedings in respect of statutory nuisance. Five Works are proposed: 1) A Combined Cycle Generating station, 2) The retention of, connection into and continued use of existing infrastructure and tie-ins, 3) a construction compound and laydown area, 4) the retention and continued use of an internal access and haulage road and 5) the decommissioning of the existing gas-fired K1 CHP plant.



Requirements within the draft DCO deal with a 5 year time limit, notice of commencement and commissioning, detail design, decommissioning of K1, a Construction Environmental Management Plan, a Construction Traffic Management Plan, external lighting, construction hours, surface and foul water drainage, a ground gas and piling risk assessment, the investigation of archaeological interest and amendments to the approved plans.

K4 would be constructed in the south-eastern part of the Kemsley Mill complex and would comprise a collection of key structures and ancillary equipment and infrastructure. Connections would be made to existing tie-ins within the DS Smith site in respect of gas, electricity, water and other services. The construction access would be via an internal site road from Barge Way to the north of the Kemsley mill and a laydown construction area would be created on hardstanding in the north part of the mill complex.

The layout and design of the K4 CHP is not yet defined. The Works plans use limits of deviation to provide design flexibility, together with maximum building size parameters set out within the DCO. A technical decision will be made during the DCO process as to whether a vertical or horizontal tube boiler will be utilised, with both layout options forming part of the DCO application. The K4 CHP would have two stacks, at heights of 70m and 35m.

The relevant planning policy for the application is EN-1 – Overarching National Policy Statement for Energy and EN-2 – National Policy Statement for Fossil Fuel Electricity Generating Infrastructure. The NPPF and NPPG and the policies of the Swale Borough Local Plan (Bearing Fruits 2031) comprise other relevant matters for the purposes of the application.

This Planning Statement assesses the proposal against the generic impacts identified in EN-1, as expanded on in some cases in EN-2:

- Air quality the stack height proposed has been modelled to reduce air quality impacts.
   Negligible effects on air quality are expected, with no exceedance of national or local air quality limits;
- **Climate change** reduced CO<sub>2</sub> emissions would result from K4 compared with a future situation where K1 had been modified and upgraded to meet the IED regulations;
- Biodiversity there are no significant on designated sites, protected species and habitats and other species considered to be of principal importance for the conservation of biodiversity;
- **Civil/Military Aviation and defence** based on correspondence with the Civil Aviation Authority no mitigation is needed;
- Dust, artificial light and steam specific mitigation measures are proposed to address those effects. The separate Statutory Nuisance Statement [Document 5.6] confirms that no statutory nuisances are expected to arise from the construction and operation of the proposed development;
- **Flood risk** the main construction site is in Flood Zone 1 where there is a low risk of flooding. Whilst elements of the internal access road and laydown area are in Flood Zone 3, where there is a high risk of flooding, the risk to the completed development itself is not



considered to be significant and no additional impermeable areas will be created by the proposed development;

- Historic environment a scheduled monument, Castle Rough, lies 500m to the south of
  the site. No significant effects are expected on heritage assets. Whilst the presence of
  underground deposits is considered unlikely a requirement is proposed within the DCO
  which makes provision for an appropriate scheme of investigation of any areas of
  archaeological interest;
- Landscape there are no designated landscapes within the site area, although the North Kent Marshes Special Landscape Area lies close to the proposal site. There would be no direct significant effects on townscape or landscape as a result of the proposed development, although in visual terms users of the Saxon Shore Way would experience a sequence of views which when combined into a single journey would create a significant sequential effect on visual amenity. In cumulative terms there would be a slight adverse effect on townscape and a substantial adverse effect on landscape, but in both cases K4 would make a negligible contribution to those significant cumulative effects, which would occur even in the absence of K4. In visual terms there would be a significant and substantial adverse cumulative effect arising from the combination of projects in the area, with K4 making a slight adverse contribution to that cumulative effect;
- Noise and vibration there are no significant effects identified at the construction or operational stage from noise and vibration. The infrequency and limited duration of emergency steam release operations mean that that it is not considered to give rise to anything more than a slight adverse effect;
- **Socio-economic effects** 200 construction jobs would be created during the construction process, which would then ensure a secure and flexible source of energy for the wider Kemsley Paper mill, albeit no socio-economic benefits have been quantified as part of this application;
- **Traffic and Transport** construction vehicles would have a imperceptible impact on the surrounding road network. Operational traffic would only comprise ad hoc maintenance visits, with up to 5 staff present at any time;
- **Waste management** waste at the construction stage would be reduced through the use of the Construction Environmental Management Plan;
- Water quality the use of a surface water management plan, Emergency spillage plan and water quality monitoring strategy would protect water quality at the construction and operational stages. Less abstraction would be expected for K4 compared to K1.

There is an urgent need for energy infrastructure. The role of gas within that need is recognised, as are the benefits of CHP. K4 is intended to replace an existing CHP plant; there are no realistic alternatives and there are environmental benefits in taking that approach.

The application does not trigger any of the specific tests set out by Section 104 (3) of the Planning Act and can therefore be decided in accordance with the NPS's. The scheme fully accords with the relevant NPS's; EN-1 and EN-2. It also does not conflict with national planning policy, in the form of



the NPPF and NPPG, or local planning policy in the form of the Swale Borough Local Plan to 2031. On that basis this Statement concludes that it would be appropriate for a Development Consent Order to be granted for the proposed development.



# **Contents**

EXEC	UTIVE SUMMARY	2
CONT	ENTS	6
APPE	NDICES	7
GLOS	SARY	8
1	INTRODUCTION	9
2	THE DCO APPLICATION	10
3	SITE CONTEXT AND SURROUNDINGS	12
4	PROPOSED DEVELOPMENT	16
5 DEVE	THE KEMSLEY MILL K4 COMBINED HEAT AND POWER GENERATING STATION LOPMENT CONSENT ORDER	21
6	NATIONAL POLICY STATEMENTS (NPS'S)	23
7	OTHER PLANNING POLICY CONTEXT	26
8	THE PRINCIPLE OF AND NEED FOR THE DEVELOPMENT	28
9	AIR QUALITY AND EMISSIONS	32
10	CLIMATE CHANGE	36
11	BIODIVERSITY AND GEOLOGICAL CONSERVATION	40
12	CIVIL AND MILITARY AVIATION AND DEFENCE INTERESTS	47
13	DUST, ODOUR, ARTIFICIAL LIGHT, SMOKE AND STEAM AND INSECT INFESTATION	N48
14	FLOOD RISK	50
15	HISTORIC ENVIRONMENT	52



5UAL55	6 LA
60	7 LA
ON64	8 N
67	9 SC
PORT68	20 TF
NT71	21 W
D RESOURCES72	.2 W
CLUSIONS74	23 SI

# **Appendices**

Appendix A - Swale Proposal Map and Key



# **Glossary**

CHP – Combined Heat and Power Plant	MW – Megawatts	
CCS – Carbon Capture and Storage	MWth – Megawatt Thermal	
CCR – Carbon Capture Readiness	NNR – National Nature Reserve	
DCO – Development Consent Order	NPPF – National Planning Policy Framework	
BEIS – Secretary of State for Business, Energy and Industrial Strategy	NPPG – National Planning Policy Guidance	
-	NPS – National Policy Statement	
EIA – Environmental Impact Assessment  EN-1 – Overarching National Policy Statement for Energy	NSIP – Nationally Significant Infrastructure Project	
EN-2 – National Policy Statement for Fossil Fuel Electricity Generating Infrastructure	RAMSAR – a site designated under the 1971 Ramsar Convention on wetlands	
ES – Environmental Statement	SAC – Special Area of Conservation	
	SBC – Swale Borough Council	
HRSG – Heat Recovery Steam Boiler	SoS – Secretary of State	
IED – Industrial Emissions Directive	SPA – Special Protection Area (pSPA –	
KCC – Kent County Council	proposed Special Protection Area)	
LWS – Local Wildlife Site	SSSI – Site of Special Scientific Interest	



#### 1 Introduction

#### 1.1 Context of this Document

- 1.1.1 This Planning Statement has been produced in support of an application for a Development Consent Order (DCO) by DS Smith Paper Ltd to allow for the construction and operation of a replacement Combined Heat and Power (CHP) Plant, 'K4', at the Kemsley Paper Mill to the north of Sittingbourne in Kent.
- 1.1.2 Section 104 (3) of the Planning Act 2008 (as amended) ["The Act"] requires the Secretary of State (SoS) to decide a DCO application in accordance with the relevant National Policy Statements (NPS's), unless one or more of subsections (4) to (8) applies, which are discussed in Chapter 23 of this Statement and which include the SoS being satisfied that the adverse impact of the proposed development would outweigh the benefits. Section 104 (2) of the Act states that the SoS must also have regard to any other matters which are both important and relevant to its decision.
- 1.1.3 This Planning Statement assesses the extent to which the proposed development complies with the policy set out within the relevant NPS's and discusses other planning policy and any other factors which would constitute other relevant and important matters under S104 of The Act.
- 1.1.4 This Planning Statement should be read alongside the other documents which form the DCO application, and in particular:
  - The Application Guide [Document 1.2];
  - The draft Development Consent Order and its Explanatory Memorandum [Documents 2.1 and 2.2];
  - The Environmental Statement and Non-Technical Summary [Documents 3.1 and 3.2];
  - The Consultation Report [Document 5.1];
  - The Design and Access Statement [Document 5.3].

#### 1.2 Using this Statement

- 1.2.1 Chapters 2, 3 and 4 provide an introductory overview of the DCO application, the Proposal Site and the proposed development. Chapter 5 summarises the draft DCO, with particular reference to the draft requirements set out therein.
- 1.2.2 Chapters 6 and 7 provide an overview of the policy context set out within relevant NPS's and local planning policies. Chapter 8 then discusses the principle of and need for the proposed development, together with alternatives and Chapters 9 to 22 then appraise each of the generic impacts set out within EN-1, with reference to the more specific impacts within EN-2 where appropriate. Chapter 23 then discusses the overall planning balance.



# 2 The DCO Application

#### 2.1 Legislative Context

2.1.1 The Act states, at Section 15 (1) (a) that the construction or extension of an onshore generating station with a capacity of more than 50 megawatts comprises a nationally significant infrastructure project. Development Consent is therefore required, under the provisions of the Act, which in practice requires an application for a Development Consent Order to be made to the Planning Inspectorate, with a final decision on the application to be taken by the Secretary of State for Business, Energy and Industrial Strategy.

#### 2.2 The application

2.2.1 The applicant for the purpose of the application is DS Smith Paper Ltd. The draft Order is 'The Kemsley Mill K4 Combined Heat and Power Generating Station Development Consent Order'.

#### 2.3 Project Team

2.3.1 The Project Team for this application comprises the following:

Consultant	Input	
DS Smith Paper Ltd	Applicant	
E.ON	Proposed Operator	
Costain	Proposed Technical Design/Main contractor	
Burges Salmon	Legal advisor	
DHA Planning	Planning consultant	
DHA Environment	EIA Co-Ordination	
RPS	Environmental topic specialists	

#### 2.4 The Applicant – DS Smith Paper Ltd

- 2.4.1 DS Smith is a leading European manufacturer of recycled corrugated case materials and speciality papers and operates nine paper mills across Europe, with the Kemsley mill its only mill within the UK.
- 2.4.2 The Swale Local Plan identifies DS Smith as one of the largest private sector employers in the borough.

#### 2.5 E.ON and Costain

2.5.1 DS Smith have entered into an exclusivity agreement with E.ON, who would be responsible for the construction and operation of the proposed K4 CHP plant. E.ON have set up a special purpose vehicle for that purpose, which is 'Kemsley CHP Limited'.



2.5.2 Costain are employed by E.ON to act as their advisors in respect of the technical design of K4 and would be the main site contractor for the construction of K4 under the current exclusivity agreement.

#### 2.6 The DCO Application

- 2.6.1 The Application Guide [Document 1.2] provides a full list of the documents and plans submitted which form the K4 DCO application.
- 2.6.2 The proposed development takes place entirely within DS Smith Paper Ltd owned land. No Book of Reference, Statement of Reasons or Funding Statement is provided within the application as no compulsory purchase or rights over statutory undertaker equipment is being sought.
- 2.6.3 As discussed within this Statement the proposed CHP plant will use existing gas, electricity, water and other necessary tie-ins already present within the DS Smith site and included within the DCO boundary. No associated development is required or proposed.



# 3 Site Context and Surroundings

3.1.1 The Design and Access Statement [Document 5.3] and ES [Document 3.1] include a full discussion of the proposal site and its context and surroundings.

#### 3.2 The Proposal Site

- 3.2.1 The Kemsley Paper mill lies to the east of Kemsley, a residential suburb in the north of Sittingbourne in Kent. The paper mill was first constructed in the 1920's and has since expanded to form a substantial complex of buildings, areas of hardstanding and ancillary systems and equipment. The mill houses three paper machines and is capable of producing up to 800,000 tonnes per annum of recycled paper/case materials.
- 3.2.2 The proposed location of the K4 CHP plant is an area of hardstanding in the south-eastern part of the wider mill complex which is used for various purposes including paper storage and which contains a vehicle weighbridge, a truck wash area, a vehicle refuelling point and a hazardous waste storage area.
- 3.2.3 The DCO boundary comprises the construction zone/site of the proposed CHP plant, together with existing gas, electricity and water tie ins, internal access roads leading to a roundabout on Barge Way to the north of the mill complex and an area of hardstanding within the northern part of the mill complex which is intended to be used as a laydown area during construction.
- 3.2.4 For the purposes of this application the following terminology is used:
  - Kemsley Paper mill the wider Kemsley Paper mill site in its entirety;
  - The K4 CHP plant site the land identified as being within Work No.1 on the Works Plans – Key Plan [Document 4.4], within the south-eastern part of the wider Kemsley paper mill site;
  - The DCO boundary/site the entirety of the land within the DCO boundary, as shown on the Works Plans Key Plan [Document 4.4]
- 3.2.5 Immediately to the east of the Kemsley paper mill is the current construction site of 'K3', an energy from waste plant being constructed and to be operated by Wheelabrator Technologies, beyond which lies the Swale Estuary and the Isle of Sheppey. To the north lie a number of commercial and industrial companies, including a Morrisons distribution depot, Knauf plasterboard, Countrystyle Recycling and the Ridham Dock. The residential areas of Kemsley lie to the east, with areas of open grazing land and the Milton Creek Country Park to the south.





Figure 3.1 – DCO Boundary overlaid on aerial view of proposal site (K3 development not shown)

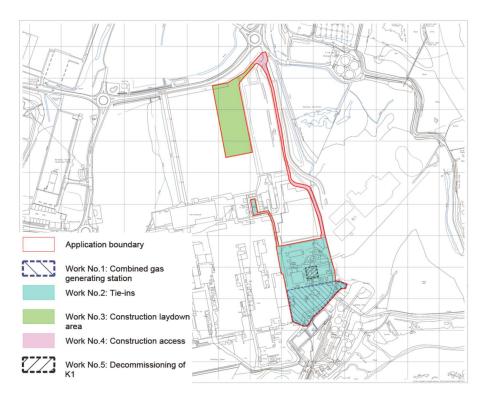


Figure 3.2 – Zoned DCO Boundary



#### 3.3 Planning History

- 3.3.1 The Kemsley Paper mill has an extensive planning history which reflects its continued evolution and modernisation. Of particular reference is planning permission SW/92/0999 which was granted on 29<sup>th</sup> March 1993 for the K1 CHP plant, which is to be replaced by K4.
- 3.3.2 There have been no planning applications covering the actual K4 CHP plant site within the last 5 years. The following historic applications relate to the proposed K4 site or the areas which immediately surround it:

Reference	Site	Development	Status
91/0211	Land to the south east of the K4 site	Development of precipitated calcium carbonate (PPC) plant and 6 associated silos and temporary storage building	Granted by SBC on 3 <sup>rd</sup> October 1991
SW/95/0846	Land in the eastern part of the K4 site	Resite the existing Grovehurst Energy Office block to a new site adjacent to the CHP plant	Granted 13 <sup>th</sup> November 1995
SW/95/0880	To the west of the K4 site	Office alterations at first floor level, formation of new offices/toilets at ground floor level, covered corridor and staircase	Granted by SBC on 7 <sup>th</sup> November 1995
98/0218	Within the energy infrastructure complex to the north of the K4 site	Extension to existing CHP plant wastes to deal with paper related wastes from Kemsley and Sittingbourne Paper Mills	Granted by KCC on 23 <sup>rd</sup> September 1998 (this refers to the K2 plant)
00/0031	Within the energy infrastructure complex to the north of the K4 site	Application pursuant to condition 2 of SW/98/0218 to reduce the design capacity of a combustion plant	Granted by KCC on 7 <sup>th</sup> April 2000 (this refers to the K2 plant)
SW/02/0623	To the north of the K4 site	Construction of a reel handling warehouse with associated offices and hardstanding	Granted by SBC on 19 <sup>th</sup> July 2002
SW/02/0629	To the south east of the K4 site and to the east of the lagoons	Construction of settling tank to supplement 2 existing tanks on site and associated holding tanks	Granted by SBC on 15 <sup>th</sup> July 2002
SW/02/1357	Within the K4 site	Construction of concrete bunds, sumps and single storey canopy to store waste skips	Granted by SBC on 21st January 2003
SW/03/0890	To the south east of the K4 site and to the east of the lagoons	Installation of plant and pipework including surge tank to the primary effluent treatment plant	Granted by SBC 21st August 2003
SW/06/0646	Land to the north of the K4 site	Construction of steel framed heavy stores building	Granted by SBC on 22 <sup>nd</sup> August 2006
SW/06/0824	Land to the south west of the K4 site	Building to house raw material processing equipment and alterations to site perimeter road	Granted by SBC on 11 <sup>th</sup> September 2006 (and fully implemented)

#### **K**3

3.3.3 Planning permission was granted by KCC on 6<sup>th</sup> March 2012 for the 'development of a sustainable energy plant to serve the Kemsley Paper mill, comprising waste fuel reception, moving grate technology, power generation and export facility, air cooled condensers,



- transformer, bottom ash handling facility, office accommodation, vehicle parking, landscaping, drainage and access' on land to the east of the Kemsley Paper mill.
- 3.3.4 The facility, known as 'K3' is being constructed and will be operated by Wheelabrator Technologies and will use an energy from waste process to create electricity for export to the grid and supply steam as a by product to the Kemsley Paper mill. The facility is currently under construction and is anticipated to become operational in mid 2019.

#### **Future Applications**

- 3.3.5 Planning permission is being sought from Swale Borough Council under the Town and Country Planning Act 1990 (as amended) for a new internal access road within the Kemsley Paper mill site. If consented the road would be constructed in late 2018.
- 3.3.6 The proposed road would run through the south-eastern part of the Kemsley paper mill complex, to the south east of the proposed K4 CHP plant site. The intention is to provide a more logical internal access road and to create more usable operational space within the paper mill site.
- 3.3.7 The proposed road is not linked to K4 in any way and the K4 development could still proceed if the road was not granted consent for any reason. However the intention is to break out the existing concrete on the K4 development site, to be used as substrate for the proposed road, given that some of the surface of the concrete is in poor condition currently and represents an economical source of road substrate materials. The planning application is accompanied by a Contamination Assessment and Archaeological Assessment which includes a discussion of the K4 development area.
- 3.3.8 It is intended that subject to securing the permission for the proposed road development construction would begin in June 2018 and be completed by spring 2019 such that there would be no overlap in the construction timescales between the proposed development and 'K4' if permitted



### 4 Proposed Development

- 4.1.1 DS Smith propose to construct and operate a replacement Combined Heat and Power Plant, 'K4', to supply electricity and steam to the paper mill.
- 4.1.2 A full technical description of the proposed development is provided in Chapter 2 of the ES [Document 3.1]. The Design and Access Statement [Document 5.3] describes the layout, design and approach to parameter plans within the DCO application.

#### 4.2 Current Context

- 4.2.1 The paper production process undertaken at the Kemsley Paper mill is energy intensive and requires both electricity, to power the paper machines and other ancillary systems, and heat to create steam, primarily for use in the pulping process.
- 4.2.2 Currently the electricity and steam requirements of the mill are provided by the following;
  - K1 a gas turbine CHP plant and 6 ancillary package boilers located within the mill site which provides electricity and steam to the mill;
  - K2 a steam generator located within the mill site which uses waste plastic and sludge as a source to provide steam to the mill;
  - K3 an energy from waste plant currently being constructed and located to the
    east of the paper mill complex which will be operated by Wheelabrator
    Technologies and which from 2019 will provide steam to the mill.
- 4.2.3 K1 is now 22 years old and elements such as the gas turbine, waste heat recovery boilers and steam turbine would require significant investment to extend their operational life and would need to be upgraded to meet the more stringent controls on Industrial Emissions being introduced by the Industrial Emissions Directive in 2020.

#### 4.3 Proposed Situation

4.3.1 K4 would replace K1 and would be a gas fired CHP plant (also referred to as a 'combined cycle generating plant') with a gas turbine of 52-57 MW nominal power output, waste heat recovery boilers providing 105 MWth steam and steam turbine technology of around 16 MW nominal power output.

#### **CHP Process**

- 4.3.2 Figure 4.1 provides an overview of the K4 CHP process, together with key inputs and outputs. Reference is then made in the below to the individual works elements identified within Schedule 1 of the DCO [Document 2.1], as illustrated on the Works Plans [Document 4.5 and 4.9]
- 4.3.3 As Figure 4.1 demonstrates, in the first instance natural gas and air are mixed and combusted. The product of that process, hot pressure gases, are used to drive the gas turbine (Building No.1 b and c) which produces electricity for export to the mill. The



resulting gas, which is at a temperature of between 500-550°C, is used to create pressurised steam within the Heat Recovery Steam Generator (Building No.1 d). That pressurised steam is in turn used to drive a Power Generation Steam Turbine (Building No.1 f). The results are electricity and low pressure steam, both of which are exported to the mill. Any excess electricity generated would be exported to the grid via an existing substation present on the Kemsley Paper mill site.

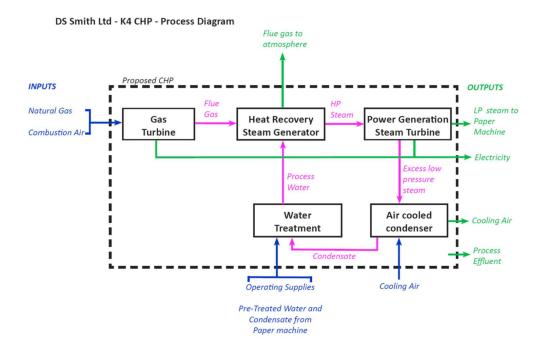


Figure 4.1 – CHP Process

#### 4.4 Location

- 4.4.1 The Works Plans Key Plan [Document 4.4] shows the location of the various schedules of Works set out within the draft DCO:
  - (1) **Work No.1** comprises the construction of the K4 CHP plant, which would take place on an existing area of hardstanding within the south-east part of the mill site. Ten key items of plant are defined within Work No.1, together with a number of ancillary plant items;
  - (2) **Work No.2** makes provision for the K4 CHP plant to connect into various existing infrastructure and systems within the mill complex, such as gas, electricity and water. Those tie-ins take place throughout the south-eastern part of the Kemsley mill complex and extend to an existing electricity substation to the south of the hardstanding storage area in the northern part of the mill complex;
  - (3) **Work No.3** allows for the creation of a construction compound and laydown area, which would be located on existing hardstanding in the northern part of the Kemsley mill complex;



- (4) **Work No.4** allows for the retention and continued use of an internal access and haulage road which runs along the eastern side of the Kemsley paper mill site and which links the construction site with the construction compound;
- (5) **Work No.5** the decommissioning of the existing K1 plant, which is located within the eastern part of the mill complex. The decommissioning would include operations such as the removal and sealing of gas feed pipework and exhaust gas ducts within K1. It is not proposed to demolish any element of K1 as part of the DCO application.

#### 4.5 Design and Layout

- 4.5.1 The proposed K4 CHP plant would contain a number of key structures;
  - A local equipment room and control (including battery enclosure) (Work No.1 a);
  - A generator and Gas Turbine (Work No.1 b and c);
  - A Heat Recovery Steam Generator (HRSG) (Work No.1 d);
  - A HRSG stack, at a height of 70m (Work No.1 e);
  - A Turbine Hall including steam turbine (Work No.1 f);
  - A CHP pipe bridge including pipes and cables (Work No.1 g);
  - A dump condenser (Work No.1 h);
  - A fin fan cooler (Work No.1 i); and
  - A Package Boiler Stack at a height of 35m (Work No.1 j).
- 4.5.2 The HRSG and Turbine hall would be located at the western end of the CHP plant site, with the pipebridge connecting into the mill to the north. The other main elements of the CHP plant would sit to the east of the HRSG and Turbine Hall. A number of further ancillary structures, plant and machinery are identified within Work No.1 and would be located where necessary around the key structures.
- 4.5.3 The design of the proposed CHP plant is still being finalised, with Requirement 5 within the draft DCO requiring full details of layout and design to be submitted to and approved by the relevant local authority prior to construction commencing.
- 4.5.4 Two technical approaches are being assessed at the point of the DCO application being made; a Vertical or Horizontal Tubed Boiler. The use of a vertical or horizontal system would have implications for the size of the HRSG building and the location of the HRSG stack. That in turn would affect the route of the pipebridge. It is expected that the design of the Tubed Boiler will be selected during the Pre-Examination or early within the Examination stage of the DCO process. The DCO application therefore contains a Works Plan with Limits of Deviation and illustrative layout plans, elevations and 3D visuals for both options at the point of submission.



- 4.5.5 The draft DCO and the Works No.1 Plans make provision for flexibility in the design, scale and siting of the main CHP structures and the ancillary equipment and machinery. Flexibility regarding the location of the HRSG and package boiler stack is sought, but the height of those stacks would be fixed at 70m and 35m respectively.
- 4.5.6 The Design and Access Statement [Document 5.3] explains in detail the approach taken to the Works Plans and the limits of deviation proposed.

#### **Alternatives**

- 4.5.7 A consideration of whether any alternative technical approaches to CHP could be utilised is discussed at Chapter 8 of this Statement.
- 4.5.8 A second tier of alternative assessment took place and considered the most appropriate location for a new CHP plant within the Kemsley Paper mill and took account of the location of existing electrical and steam tie ins and landscape and visual impact. The proposed location allows the mill to be located close to the required infrastructure and other energy generation elements of the mill complex and is an area where the proposal can best be accommodated in landscape and visual terms, particularly given the location of existing chimney stacks in close proximity to those now being proposed as part of K4.
- 4.5.9 EN-2 identifies four specific factors likely to influence site selection for fossil fuel NSIPs; land use, transport infrastructure, water resources, and grid connection. In the case of the proposed K4 CHP the starting context is different to a normal site selection process in that K4 is being proposed to meet the specific needs of the Kemsley Paper mill. The proposed development would therefore sit within the existing transport infrastructure present for the mill, with no fuel being transported by road and minimal waste associated with the operation of the plant, and would utilise the existing water resource systems already in place. The water demand for K4 would be relatively low and there is no need for direct cooling water.
- 4.5.10 The selection of an appropriate site within the wider mill complex has then been influenced by a number of factors. As noted by EN-2, a key consideration is the land footprint required. There are a number of locations around the mill complex which offer a similar amount of development land. However the proposal site offers additional locational benefits in that it is adjacent to the existing energy infrastructure present at the paper mill, and allows for existing gas, electricity and water tie ins to be utilised.
- 4.5.11 Regard has therefore been had from the outset of the need to minimise the impacts of the proposed development on the surrounding area by selecting an appropriate development site within the wider paper mill.

#### **Construction**

- 4.5.12 The overall construction process is anticipated to take approximately 20 months, with a peak construction period of around 6 months when it is estimated there would be around 200 construction staff on site.
- 4.5.13 There will be a period whereby K1 and K4 will operate simultaneously during the commissioning of K4 albeit this will be intermittent and will not involve both plant



operating at full capacity. Notwithstanding this, a worst case scenario has been assessed in the ES for robustness assuming that there will be a period whereby K1 and K4 will simultaneously operate at full capacity for a period of one year.



# 5 The Kemsley Mill K4 Combined Heat and Power Generating Station Development Consent Order

5.1.1 The approach taken by the draft Order [Document 2.1] to various issues and matters is discussed within the Explanatory Memorandum [Document 2.2].

#### 5.2 Works

- 5.2.1 As set out at 4.4.1 the draft Order makes provision for five elements of work;
  - (1) A combined cycle generating station;
  - (2) The retention of, connection into and continued use of existing infrastructure and tie-ins;
  - (3) A construction compound and laydown area;
  - (4) Retention and continued use of internal access and haulage road;
  - (5) The decommissioning of K1.
- 5.2.2 The DCO then makes provision for various other operations to be undertaken within the Order limits, such as the strengthening and alteration of buildings, site preparation and clearance works, construction compounds and other necessary construction works.
- 5.2.3 The DCO, in summary, grants development consent to DS Smith, together with powers to maintain and operate the K4 CHP plant, to transfer the benefit of the order to KCHP Ltd and provides a defence to proceedings in respect of statutory nuisance.

#### 5.3 Requirements

- 5.3.1 Paragraph 4.1.7 of EN-1 states that requirements should only be imposed which are necessary, relevant to planning, relevant to the development to be consented, enforceable, precise and reasonable in all other respects.
- 5.3.2 In addition to standard provisions relating to the expiry of the DCO and notifications of commencement and commissioning, the DCO makes specific provision for the following:
  - (5) The submission of design details;
  - (6) The decommissioning of the existing generating station (K1);
  - (7) The submission of a Construction Environmental Management Plan;
  - (8) The submission of a Construction Traffic Management Plan;
  - (9) The submission of details of external lighting;
  - (10) Construction hours;



- (11) The submission of details of surface and foul water drainage;
- (12) The submission of a piling risk assessment and details of ground gas protection, together with provisions to deal with any contaminated land found which was not previously identified;
- (13) The submission of a scheme for the investigation of areas of archaeological interest.
- 5.3.3 The above provisions reflect the assessments undertaken within the Environmental Statement and take forward any mitigation measures identified.
- 5.3.4 Requirement 5 states that full details of the proposed CHP plant, including elements such as layout, design, external appearance, dimensions, colour, materials etc. must be provided prior to the construction. A set of maximum dimensions for individual elements of the CHP plant and ancillary plant is provided within the DCO and links with the Works plans [Documents 4.4, 4.5 and 4.9] which form part of the DCO application. That approach is discussed in full in the Design and Access Statement [Document 5.3].

#### 5.4 Obligations

5.4.1 Section 174 of the Planning Act 2008 allows for development consent obligations to be agreed between an applicant and local authorities. In this case no obligations are proposed as none are considered necessary in order to make the proposed development acceptable in planning terms.

#### 5.5 Other Consents and Licences

5.5.1 DS Smith operate the existing K1 plant at the Kemsley Paper mill under an existing Environmental Permit (no EPR/BJ7395IG) and have entered into formal discussions with the Environment Agency regarding a variation to that permit to allow for the operation of K4. The variation of the existing Environmental Permit will be advanced once detailed design work has reached an appropriate stage and will be progressed in tandem with the examination of the DCO application.



# **6 National Policy Statements (NPS's)**

- 6.1.1 The national planning policy context for nationally significant energy infrastructure projects is established by the suite of National Policy Statements, which were formally designated by the UK Government in 2011 in accordance with the provisions of the Planning Act 2008.
- 6.1.2 The Planning Act 2008 requires the Secretary of State for Business, Energy and Industrial Strategy to decide an application for energy infrastructure in accordance with the relevant NPS, unless to do so would:
  - Lead to the UK being in breach of its international obligations,
  - Be in breach of any statutory duty that applies to the IPC;
  - Be unlawful;
  - Result in adverse impacts from the development outweighing the benefits;
  - Be contrary to regulations about how its decisions are to be taken.
- 6.1.3 The relevant NPS's for the purposes of this DCO application are as follows:
  - EN-1 Overarching National Policy Statement for Energy;
  - EN-2 National Policy Statement for Fossil Fuel Electricity Generating Infrastructure.

#### 6.2 EN-1 – Overarching National Policy Statement for Energy

- 6.2.1 EN-1 sets out national policy for energy infrastructure, which includes onshore electricity generating stations in England which generate more than 50 Megawatts and is the primary basis for decisions by the Secretary of State.
- 6.2.2 At the outset EN-1 makes clear, at Paragraph 4.1.2 that the SoS should start with a presumption in favour of granting consent to applications for energy NSIP's, which is a presumption which will apply unless any more specific and relevant policies in individual NPSs indicate that consent should be refused, and subject to the specific stipulations of the Planning Act 2008 (as set out above).
- 6.2.3 In considering any proposed development EN-1, at Paragraph 4.1.3, states that the SoS should take into account the potential benefits of the proposal and weigh those against the potential adverse impacts, taking into account measures to avoid, reduce or compensate for those.
- 6.2.4 Parts 1 to 4 of EN-1 set out a number of introductory themes, the Government's general policy on energy and energy infrastructure, the need for new nationally significant infrastructure projects and assessment principles. Those parts of EN-1 are reviewed and



assessed within Chapter 8, which deals with the principle of and need for the proposed development.

#### **EN-1 - Generic Impacts**

- 6.2.5 Part 5 of EN-1 identifies a number of Generic Impacts which might arise from infrastructure development. Those are addressed individually in turn within the following sections of this Statement, with the following generic issues considered relevant to the proposed K4 CHP plant:
  - Air quality and Emissions;
  - Biodiversity and Geological Conservation;
  - Civil and Military aviation and defence interests;
  - Dust, Odour, artificial light, smoke and steam;
  - Flood Risk;
  - Historic Environment;
  - Landscape and Visual;
  - Land use;
  - Noise and Vibration;
  - Socio- Economic;
  - Traffic and transport;
  - Waste Management;
  - Water quality and resources.
- 6.2.6 The generic impacts identified in respect of Coastal Change are not relevant to the proposed K4 CHP Plant, with elements such as flood risk covered within the specific Chapter on that topic. Whilst the K4 site lies near to the Swale estuary and the coastline along it, none of the coastal change issues identified within Section 5.5 of EN-1, such as erosion, coastal landslip, permanent inundation and coastal accretion are considered to exist to the extent that they would have the ability to affect the proposed development, and in that respect have not been scoped into the ES.

#### 6.3 EN-2 – Fossil Fuel Electricity Generating Infrastructure

6.3.1 **EN-2** addresses Fossil Fuel Generating Stations and at 1.8.1 confirms that it covers gas fired energy infrastructure with a generating capacity of over 50MW. As such this document represents the technology specific NPS for the scheme in question.



#### **EN-2 - Generic Impacts**

- 6.3.2 Policy Statement EN-1 identifies a range of generic impacts likely to be relevant when considering a range of nationally significant infrastructure projects. EN-2 then provides further policy on specific impacts relating to fossil fuel electricity generating infrastructure.
- 6.3.3 The following Chapters of this Planning Statement address the relevant generic impacts identified in EN-1 in turn and assess the proposed development against that policy position. Within those Chapters the additional policy set out within EN-2 in respect of the following infrastructure specific impacts is also assessed;
  - Air Emissions;
  - Landscape and Visual;
  - Noise and Vibration;
  - Water Quality and Resources.
- 6.3.4 The remaining specific impacts identified in EN-2; release of dust by and residue management for coal fired generating stations are not relevant to the proposed scheme.
- 6.3.5 Section 2.4.2 of EN-2 notes that the impacts identified within EN-1 and EN-2 are not intended to be exhaustive, however in this case no other relevant impacts have been identified as being likely to arise from K4 which are not included in the relevant National Policy Statements.



# 7 Other Planning Policy Context

- 7.1.1 Section 104 (2) of the 2008 Act requires the Secretary of State to have regard to any matters it thinks are important and relevant to its decision.
- 7.1.2 Paragraph 4.1.5 of EN-1 makes clear that the Secretary of State may consider Development Plan Documents or other documents in the Local Development Framework when assessing an application. It states that in the event of a conflict between those documents and an NPS it is the NPS which will prevail for the purposes of decision making.

#### 7.2 National Planning Policy

- 7.2.1 Since March 2012 national planning guidance within England has been provided by the *National Planning Policy Framework*. The Framework makes clear, at Paragraph 3, that it does not contain specific policies for nationally significant infrastructure projects, where special considerations apply. However it also notes that in addition to National Policy Statements, other matters thought to be important and relevant may be taken into consideration when determining a DCO application and can include the National Planning Policy Framework. As such the Framework has been assessed where relevant within this Statement, together with the National Planning Policy Guidance which links to it.
- 7.2.2 The NPPF recognises that the planning system performs an environmental role, which includes the prudent use of natural resources, the minimising of pollution and the move towards a low carbon economy. It also attaches great importance to the design of the built environment, noting that this is a key aspect of sustainable development.
- 7.2.3 The NPPF establishes a number of general criteria intended to contribute to and enhance the natural and local environment, which include protecting and enhancing valued landscapes, minimising impacts on biodiversity and preventing new development from contributing to unacceptable levels of soil, air, water or noise pollution.
- 7.2.4 The Government published draft text of a revised NPPF in March 2018 for consultation, with the formal adoption of a revised NPPF anticipated later in 2018. At present the draft policies within the amended NPPF therefore carry limited weight in planning terms, but do indicate the Government's intended direction of travel on the issues covered therein. No major changes are proposed in terms of the policy position on the various issues addressed within this Planning Statement.

#### 7.3 Local Planning Policy Context

7.3.1 In this case, given the scale, nature and likely significant impacts of the proposed development, relevant local authorities for the purpose of the assessment of local planning policies are Kent County Council and Swale Borough Council.

#### **County Level Planning Policy**

7.3.2 The Kent County Council Minerals and Waste Local Plan 2013 – 30 deals with minerals and waste matters within Kent. The proposed K4 CHP site does not lie within an identified minerals safeguarding area and is located within the Sittingbourne urban boundary and



- as such Policy DM7, the Safeguarding of Mineral Resources, is not relevant in this case. The proposed development is not then a waste or minerals operation and as such the wider policies of the Minerals and Waste Local Plan do not apply.
- 7.3.3 At the time of submission there was no emerging policy at the county level which was sufficiently advanced as to warrant any weight within the planning process.

#### **Local Planning**

- 7.3.4 The relevant development plan at the local level comprises the Swale Local Plan (Bearing Fruits 2031) which was adopted on July 2016. The policies within the Local Plan have therefore been reflected where appropriate and relevant within this Statement.
- 7.3.5 The Swale Landscape Character and Biodiversity Appraisal was published in 2011 as a Supplementary Planning Document and has been taken into account within the appraisal of landscape and visual impact within the ES, as documented at Chapter 16 of this Statement.
- 7.3.6 At the time of submission there was no emerging policy at the local level which was sufficiently advanced as to warrant any weight within the planning process.



# 8 The Principle of and Need for the Development

#### 8.1 EN-1

- 8.1.1 EN-1 makes clear, at Paragraph 3.3.13, that to meet 2050 emission reduction goals the UK must move away from fossil fuels for electricity generation, including in other sectors of industry.
- 8.1.2 However EN-1 also recognises that it is critical for the UK to have a secure and reliable supply of electricity and that gas plays an important role in the energy sector. It notes that the security of supply of gas to the UK has increased as the market reduces its reliance on one source of supply. Paragraph 3.8.19 recognises that gas is the cleanest and most reliable fossil fuel which is likely to continue to be a central part of the national energy mix during the transition to a low carbon economy, including within the industrial sector as a source of energy.
- 8.1.3 That position is encapsulated in Paragraph 3.6.1, which states:

'Fossil fuel power stations play a vital role in providing reliable electricity supplies; they can be operated flexibly in response to changes in supply and demand, and provide diversity in our energy mix. They will continue to play an important role in our energy mix as the UK makes the transition to a low carbon economy, and Government policy is that they must be constructed, and operate, in line with increasingly demanding climate change goals.'

- 8.1.4 Section 4.6 of EN-1 is then clear in its support for Combined Heat and Power, given that is technically feasible for all types of thermal generating stations and given the reductions in emissions, particularly CO<sub>2</sub>, which result from using less fuel to generate the same amount of heat and power. EN-1 recognises that CHP is only likely to be economically viable when generating stations are located close to customers with heat demands, with intensive heat users such as paper mills identified as one such suitable customer (4.6.5). Paragraph 4.6.8 states that substantial additional positive weight should be given by the SoS to applications which incorporate CHP.
- 8.1.5 Ultimately the overarching position taken by EN-1 in respect of decision making, as set out at 3.1, is that there is an urgent need for all types of infrastructure, and that substantial weight should be given to the contribution which projects would make towards satisfying that need. Paragraph 3.2.3 recognises that it will not be possible to develop the necessary amounts of infrastructure without some significant residual adverse impacts.
- 8.1.6 EN-1 notes at 4.4 that there is no general requirement to consider alternatives or to establish whether the proposed project represents the best option. However it does also note the need within an ES to include an appropriate assessment of alternatives, and the need in some cases for similar considerations under the Habitats Directive, together with the fact that some NPS's, and the sections of EN-1 dealing with Biodiversity, Flood Risk and Landscape and Visual generic impacts do raise the issue of alternatives being considered.
- 8.1.7 EN-1 establishes some general principles in terms of dealing with alternatives, setting those against the context that there is an urgent need for new energy infrastructure. It



notes that any assessment of alternatives should be proportionate and should include an assessment as to whether there is a realistic prospect of an alternative delivering the same infrastructure capacity in the same timescale as the proposed development. Any alternatives not amongst the main alternatives assessed in the ES should only be considered where important and relevant to the SoS's decision and alternatives themselves should be in accordance with policies within the NPS's in order to be important and relevant to any decision. Alternatives should not be vague or inchoate and should, wherever possible, be identified before an application is made.

#### 8.2 EN-2

8.2.1 Part 2 of EN-2 identifies various factors which are expected to influence the selection of sites by developers for fossil fuel NSIPs, albeit makes clear it is not intended that the Government will direct applicants to particular sites.

#### 8.3 Other Planning Policy

#### The NPPF

- 8.3.1 The NPPF sets a presumption in favour of sustainable development as a golden thread running through the planning system. The concept of sustainable development has three dimensions, and alongside its social and environmental roles, has an economic role to build a strong, responsive and competitive economy. The NPPF expects sufficient land to be made available of the right type, in the right places at the right time to support growth, which includes the provision of infrastructure.
- 8.3.2 The third core planning principle at Paragraph 17 states that sustainable economic development should be proactively driven and supported.
- 8.3.3 Chapter 1 of the NPPF seeks to build a strong, competitive economy and states that the planning system should do everything it can to support and not to act as an impediment to sustainable economic growth.

#### 8.4 The Swale Local Plan- Bearing Fruits 2013

8.4.1 Policy ST1 seeks to deliver sustainable development within Swale by requiring all development proposals to, as appropriate, meet a number of aims including the building of a strong competitive economy. Policy CP1 reinforces the drive towards a strong competitive economy.

#### 8.5 Appraisal

#### The Need for the proposed development

8.5.1 As documented within Chapter 2 of the ES the Kemsley Paper mill is an intensive consumer of both electricity and heat. K1, an existing CHP plant, plays a key role in the supply of electricity and heat to the paper mill but is now 22 years old and would require significant financial investment to extend the operational life of the plant, as well as to meet the lowered emission limits for industry which are to be set by the Industrial Emissions Directive in 2020.



- 8.5.2 K1 had originally operated to supply the energy requirements of both the Kemsley Paper mill and the Sittingbourne Paper mill, which has since closed. It is therefore oversized in operational capacity terms for its current role serving only the Kemsley Paper mill.
- 8.5.3 CHP is a form of technology ideally suited to paper mills, given they are intensive users of both electricity and heat, and provides the economical, flexible and secure form of infrastructure required by the Kemsley Paper mill. Against that context a solution of decommissioning K1 and importing electricity from the grid is uneconomic when compared with the retention of CHP on the paper mill site (and would still require the heat demands of the mill to be addressed) and was therefore discounted as a realistic alternative.
- 8.5.4 One theoretical solution would be to modify and upgrade K1 to extend its operational life and to meet the IED emission limits. A benchmarking exercise was undertaken using a new CHP plant at the DS Smith Aschaffenburg Mill in Germany to help assess those options. There are a number of factors which mean the modification and upgrading of K1 would be an undesirable and difficult solution; K1 would remain inefficient given it is oversized to serve Kemsley mill, many components are obsolete and would require wholesale replacement, the reliability of the plant moving forward would be limited given its age and it would not represent Best Available Technology in environmental terms which could lead to problems with environmental permitting.
- 8.5.5 The substantial cost of modifying and upgrading K1, and the limitations which would still result, means that it is more realistic, appropriate and economical to construct a new bespoke CHP plant. By virtue of a new plant being appropriately sized to serve the needs of Kemsley Paper mill and using the most modern Best Available Technology it is expected that a new CHP plant is a solution which would create lower GHG emissions and emissions to air than could be achieved by upgrading the existing plant.
- 8.5.6 In environmental and economical terms there are therefore a number of factors which support the development of a new CHP plant over the upgrade and modification of K1, which is an unrealistic option for the reasons stated. On that basis there is submitted to be a clear and justified need for the development of a replacement CHP plant at the Kemsley Paper Mill, based on a combination of on-site factors, specific to the condition and capacity of K1, external factors, in terms of the changing IED regulations, and the lack of alternative technologies or solutions which are capable of meeting the energy needs of the mill in a feasible and economical manner.
- 8.5.7 EN-1 and EN-2 focus on new energy infrastructure. However in terms of need, the intention of an industrial user to replace existing energy infrastructure for the reasons stated is considered appropriate, particularly where there are no realistic alternatives.

#### Principle of the proposed development

- 8.5.8 Notwithstanding the fact that K4 would replace the existing K1 CHP plant, it is still appropriate in planning terms to consider the proposed CHP plant against the current strategy and policy regarding the use of that technology.
- 8.5.9 There is a clear acknowledgement in EN-1 of the need to move away from fossil fuel generation within the UK, to meet the challenging CO<sub>2</sub> emission reduction targets which



- have been set nationally. At the same time EN-1 recognises the vital role gas fired electricity production will continue to play within the UK as a flexible source of energy and one which provides diversity as the amount of renewable energy generation increases.
- 8.5.10 EN-1 recognises the urgent need for new electrical capacity to meet energy security aspirations, to replace closing electricity generating capacity, to support increased supply from renewables and to accommodate future increases in electricity demand, with substantial weight to be afforded to the contribution projects would make towards satisfying that need.
- 8.5.11 The weight to be afforded in support of K4 in that respect is limited by the fact that the project is replacing an existing CHP plant to meet the needs of a particular industrial user. K4 would be capable of exporting some electricity to the grid, and some weight can be afforded in support of the proposal in that respect.
- 8.5.12 The ES undertakes an initial appraisal of the alternatives to K4 considered by DS Smith and highlights the significant improvements in electricity costs for DS Smith of utilising CHP at the Kemsley Mill compared with importing electricity from the grid. If K4 were not to be constructed then the importation of electricity does not represent a realistic economical alternative and in that respect the weight afforded in support of K4 in terms of it preventing some increased demand for grid electricity arising from a large industrial consumer is also very limited.
- 8.5.13 Notwithstanding the above, there is explicit support within EN-1 and EN-2 of the vital role to be played in the UK energy industry by fossil fuelled power stations, with gas recognised as being the cleanest and most reliable fossil fuel. Furthermore EN-1 acknowledges the significant benefits of CHP, particularly for intensive heat users such as paper mills. It would not be realistic or feasible for DS Smith to meet the energy demands of the Kemsley Paper mill from renewable sources of energy and against that context the use of gas fired electricity generation, which incorporates the benefits of CHP, is an approach which is still supported by the relevant National Policy Statements for energy and fossil fuelled electricity generation, with the use of CHP attracting substantial additional positive weight (EN-1 4.6.8).

#### 8.6 Summary

- 8.6.1 In summary the use of onsite CHP is ideally suited to the Kemsley Paper mill, with the importation of electricity and gas being uneconomical and unrealistic. Whilst there is the potential, in theory, to upgrade and modify the existing K1 plant, in reality that approach is technically difficult and not a realistic long term solution. A new CHP plant would use Best Available Technology and represents the most logical, appropriate, feasible and economical solution in this case.
- 8.6.2 The approach of replacing an outdated CHP plant with a new CHP plant is considered acceptable in principle, despite only a limited contribution being made to grid electricity supply, on the basis that gas fired CHP is recognised to have a key role to play in the UK's energy infrastructure in the future.



# 9 Air quality and Emissions

9.1.1 This Chapter of the Planning Statement deals with Air Quality and Emissions with reference to Section 5.2 of EN-1 and 2.5 of EN-2. CO₂ emissions and climate change are dealt with in Chapter 10.

#### 9.2 EN-1

- 9.2.1 At the outset EN-1 notes that emissions associated with the construction, operation and decommissioning of infrastructure development can have adverse impacts on health, protected species and may include particulate matter together with sulphur dioxide, carbon monoxide and nitrogen oxides. It highlights that NOx and ammonia emissions from generating stations can cause eutrophication within ecosystems.
- 9.2.2 EN-1 acknowledges that the EA will require the exhaust stack height to be optimised in relation to air quality and is not therefore concerned with the height optimisation process in respect of stacks, but will consider the landscape and visual impacts of those.
- 9.2.3 EN-1 reflects the assumption that other relevant pollution control regimes will be properly applied and enforced and seeks to complement those regimes but not duplicate them. It notes that air quality considerations will be given significant weight, either where there would be a deterioration in air quality, new breaches of national air quality limits, or substantial changes in air quality levels even where no breaches occur. It requires consent to be refused where a relevant statutory air quality limit could not be met.

#### 9.3 EN-2

9.3.1 EN-2 reflects the fact that the Industrial Emissions Directive will require fossil fuel generating stations to minimise NOx and other emissions. It identifies air quality impacts specific to fossil fuel generating stations, including the emission of nitrogen oxides and sulphur oxides (albeit the latter is expected to be minimal from gas fired plants).

#### 9.4 Other Planning Policy

#### **NPPF**

9.4.1 At Paragraph 124 the NPPF notes in general the need to sustain compliance with and contribute towards EU limit values or national objectives for pollutants, taking into account cumulative impacts on air quality from individual sites in local areas.

#### The Swale Local Plan-Bearing Fruits 2013

9.4.2 Policy ST1 seeks to achieve sustainable development in Swale, which includes the need to meet the challenge of climate change, flooding and coasts change, with one identified measure being the management of emissions.



#### 9.5 Appraisal

9.5.1 Chapter 5 of the ES provides a detailed assessment of the anticipated air quality impacts arising from the proposed development.

#### **Construction stage**

- 9.5.2 The assessment of air quality impacts arising from emissions from construction vehicles (including all contractor vehicles, HGV's, diggers etc.) was scoped out of the assessment of air quality within the ES on the basis of the low level of construction vehicles predicted when compared with existing daily traffic movements, and given construction traffic routing to and from the construction site would not pass through any AQMA's, in accordance with IAQM guidelines.
- 9.5.3 The scale of the proposed development indicates that magnitude of dust generated by the construction including earthworks, construction activities and track out by vehicles is potentially large. However, given the relative distance between the site and sensitive receptors, the nearest receptors are considered to be of low susceptibility to impacts over the distances involved. The overall risk of a significant effect of dust is considered to be low, particularly with the standard and proven mitigation measures proposed through the ES in accordance with IAQM¹ dust guidance. These mitigation measures are secured through inclusion in the DCO of a requirement for a Construction Environmental Management Plan (CEMP).

#### **Operational stage**

- 9.5.4 The assessment undertaken in the ES uses standard dispersal modelling techniques to predict any likely significant effects. A number of worst case assumptions specific to the proposed development are included within that modelling;
  - Pollutant emission concentrations are set at the limit set by the IED which comes into force in 2020. In reality that is a worst case scenario and emissions could be lower;
  - K1 and K4 have been included in the model as operating continuously alongside each other for an entire year. In reality K4 will replace K1 and the two plant would only run simultaneously for a number of months whilst testing and commissioning of K4 is carried out;
  - Backup power will be provided by the existing K1 boilers and a new boiler, which
    would not operate in a normal scenario when K4 is running. The inclusion of those
    boilers within the model represents a worst case and ultimately unlikely situation;

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<sup>&</sup>lt;sup>1</sup> Institute of Air Quality Management *Guidance on the assessment of dust from demolition and construction* 2016



- The model uses existing emissions arising from the current K1 boilers, but in reality those will be upgraded (although that does not form part of the current DCO application) and emissions are likely to be lower.
- 9.5.5 Alongside the assessment in the ES a stack height determination exercise has been undertaken, which has resulted in the 70 metre high HRSG stack and 35 metre high boiler stack being proposed. At the point of submission two potential HRSG stack locations exist, with the ultimate position dependant on the use of a vertical or horizontal HRSG. One option will be defined at or prior to the examination of the DCO application. Given it is proposed that there be some flexibility over stack location, using limits of deviation, both potential stack locations have been modelled to determine whether there is any tangible difference in effect arising from different stack locations.
- 9.5.6 The proposal site is not located within an Air Quality Management Area. There are four AQMA's designated in the surrounding area as AQMA's, based on high levels of NO2 due to road traffic:
  - St Pauls Street, Sittingbourne (2.8km south of the proposal site)
  - East Street, Sittingbourne (3km south of the proposal site)
  - Newington AQMA (6km west of the proposal site)
  - Ospringe Street, Faversham (9.7km southwest of the proposal site)
- 9.5.7 The assessment of air quality impacts focuses on the modelling of both short and long term Process Contributions of NO<sub>2</sub> and CO against the relevant Air Quality Assessment Limit value, as set by the Air Quality Standards (England) Regulations 2010.
- 9.5.8 The modelling demonstrates that the maximum short term process contribution of either  $NO_2$  or CO is 2% of the relevant Air Quality Assessment Limit value, which is a negligible increase in concentration according to the Air Quality Standards Regulations 2010. Similarly a negligible impact of 2% or less has been modelled at discrete receptors around the site, and the highest modelled concentration is not at a location where the public would be exposed.
- 9.5.9 The Long term NO<sub>2</sub> predicted environment contribution, when modelled using the background air concentration of K2, K3 and the proposed K4 is 1% of the relevant Air Quality Assessment Limit, which again is defined as negligible within the ES. In addition the highest concentration would not occur in a location where public exposure was possible.
- 9.5.10 The ES assesses the potential for cumulative effects to occur, either from cumulative dust generation at the construction stage or cumulative combustion related pollutants from other projects. No significant cumulative air quality effects are expected.
- 9.5.11 Air quality impacts on ecological receptors are dealt with in detail at Chapter 11 and are concluded to be insignificant.



#### 9.6 Summary

- 9.6.1 Overall the ES concludes that there are no significant effects arising from emissions on air quality, with no objectives or standards expected to be exceeded, even when based on a number of conservative, worst case assumptions within the modelling. Design mitigation, using a stack height assessment, has been incorporated into the scheme and at the construction stage a CEMP will be used and is the subject of Requirement 7 in the draft DCO.
- 9.6.2 EN-1 affords significant weight to any deterioration in air quality, whether or not defined air quality limits would be breached. In this case K4 does not conflict with any national or local air quality limits and has a negligible effect on air quality and the proposed development therefore complies entirely with the Air Quality sections of EN-1 and EN-2.



# 10 Climate Change

#### 10.1 Wider context

- 10.1.1 The Climate Change Act 2008 established a legally binding target on the UK to reduce greenhouse gas emissions by 2050 to 80% below 1990 base levels, to achieve a 50% reduction in emissions over the 2023-27 period and to source 15% of its energy from renewable sources by 2020.
- 10.1.2 The Carbon Plan 2011 sets out the UK's national strategy for reducing emissions. It notes that fossil fuelled electricity generation will only be supported if fitted with Carbon Capture Storage (CCS), but then also recognises that to maintain a secure energy supply new gas fired generation will have a significant supporting role as existing capacity closes in the period up to 2021.
- 10.1.3 A full summary of the wider context policy documents in respect of climate change commitments is provided in Chapter 6 of the ES.

#### 10.2 EN-1

- 10.2.1 Section 2.2 of EN-1 makes clear the commitment by the Government to the legally binding target to cut greenhouse gas emissions by at least 80% by 2050, compared to 1990 levels. Against that target EN-1 notes that the UK economy is reliant on fossil fuels, which are therefore expected to play a significant role within the economy for some time, albeit issues around scarcity and associated increases in pricing of fossil fuels are expected to arise by 2050.
- 10.2.2 However, as noted in the ES and as set out at Paragraph 2.2.4, EN-1 makes clear that not all aspects of Government energy and climate change policy will be relevant to decisions on NSIP's, as the planning system is only one tool intended to deliver that policy and is ultimately intended to provide a framework for the delivery of whatever infrastructure the market considers to be needed where that is acceptable in planning terms.
- 10.2.3 At 1.7.8 EN-1 discusses an alternative assessed by the Appraisal of Sustainability into the draft NPS of placing more emphasis on a reduction in CO₂ emissions when seeking to meet the energy needs of the UK, which is identified as by definition being beneficial from a climate change point of view, and having potential for beneficial impacts on human health and well being and from an economic perspective.
- 10.2.4 However EN-1, at Paragraph 1.7.9, records that it was not considered possible to practically introduce such an emphasis within the planning system within 'the next ten years or so' without risking negative impacts on security of supply. EN-1 notes that the energy NPSs do not place any barriers in the way of low carbon energy infrastructure, but that the Government is actively encouraging industry to accelerate towards a low carbon economy.
- 10.2.5 Part 4.8 of EN-1 sets out how climate change will be taken into account in respect of NSIP's, in order to ensure an appropriate level of resilience is achieved. Given new energy infrastructure is likely to operate over a number of decades it requires applicants to



consider the impact of climate change in respect of the location, design, build, operation and decommissioning of new energy infrastructure. When assessing climate change EN-1 expects the various climate change estimates and projections to be used, with the high emissions scenario used to assess safety critical elements of new energy infrastructure.

10.2.6 Paragraph 5.2.2 of EN-1 states that CO<sub>2</sub> emissions are a significant adverse impact from some types of energy infrastructure which cannot be totally avoided. However the same section highlights that the Government have made clear that CO<sub>2</sub> emissions are not a reason to prohibit the consenting of projects and that individual applications will not be assessed in terms of carbon emissions against carbon budgets, due in part to the range of non planning policies aimed at decarbonising electricity generation. The Air Quality and Emissions section of EN-1 does not therefore include any further discussion on CO<sub>2</sub> emissions.

# **Carbon Capture and Storage**

10.2.7 Carbon Capture and Storage (CCS) allows for carbon dioxide produced by fossil fuel combustion to be captured, transported and stored. Section 4.7 of EN-1 only requires new combustion power stations which have a generation capacity of 300MW or above to demonstrate that the plant is Carbon Capture Ready, and as such that requirement does not apply to the proposed K4 CHP plant.

#### 10.3 EN-2

10.3.1 Paragraph 2.5.2 of EN-2 reiterates the position taken in EN-1, that CO2 emissions are a significant adverse impact of fossil fuel generating stations, but that individual applications do not need to be assessed in terms of carbon emissions against carbon budgets.

# 10.4 Other Planning Policy

#### The NPPF

- 10.4.1 There is general support within the NPPF for the transition to a low carbon future.
- 10.4.2 Paragraph 99 states that new development should be planned to avoid increased vulnerability to the range of impacts, such as flood risk, coastal change, water supply biodiversity and landscape, which might result from climate change over the longer term.

# The Swale Local Plan-Bearing Fruits 2013

10.4.3 Policy ST1 seeks to achieve sustainable development in Swale, which includes the need to meet the challenge of climate change, flooding and coasts change, with one identified measure being the efficient use of natural resources. Policy DM14 sets general development criteria, including the need to respond to the constraints and opportunities posed from climate change.

#### 10.5 Appraisal

10.5.1 Chapter 6 of the ES addresses greenhouse gases and climate change.



- 10.5.2 The approach taken to assessing CO<sub>2</sub> emissions has been to establish a current baseline, which is the current operation of the K1 CHP plant to supply electricity and steam to the paper mill, and making an allowance for some export of additional electricity to the grid.
- 10.5.3 A future baseline has then been defined, which in the case of a CO₂ emissions assessment represents the potential alternative situation should K4 not be consented. In that case the Kemsley paper mill would be supplied steam in the first instance by the existing K2 and K3 (currently being constructed but by which time would be operational). The existing K1 CHP plant would in theory then be modified to meet IED emissions limits and would provide electricity and the balance of any steam requirements. Chapter 8 of this Planning Statement provides further discussion on the alternatives to K4 and sets out the limitations in reality of that approach.
- 10.5.4 For all assessments with the exception of Climate Change K4 has been assessed against the existing baseline scenario. This is either because it provides a worst case assessment (for example a modified K1 is likely to be less polluting) or because K1 modified or not will make no material difference of the assessment (i.e. landscape, ground conditions, heritage). Conversely for climate change an assessment between the existing K1 and its replacement K4 would over emphasise the beneficial effects of the development. On this basis it was possible to make some simple assumptions about the energy balance of a modified k1 on which to make a comparison of the net change in CO2 emissions.
- 10.5.5 No significant impacts on carbon emissions are predicted to arise from the construction of K4, as studies of similar facilities have shown that construction stage carbon emissions typically account for a minor proportion (of around 1%) of any total life cycle greenhouse gas emissions.
- 10.5.6 It is expected that K4 would provide a 16% reduction in total net greenhouse gas emissions in its first operating year when assessed against a future baseline which would occur should K4 not be developed. Over an operating lifetime of around 25 years it is expected that K4 would generate a 12% reduction in greenhouse gas emissions compared with the future baseline, which would be a significant beneficial effect when assessed against the significance criteria set out within the ES.
- 10.5.7 That notwithstanding a number of mitigation measures are proposed at the construction stage, given the position set out in IEMA (Institute of Environmental Management and Assessment) assessment principles guidance that all greenhouse gas emissions are potentially significant and given the commitment to reduce emissions across all economic sectors. Those include the use of lean/efficient design, the reuse of materials from K1 where possible and reducing air pollutant emissions from construction plant.
- 10.5.8 There are no further mitigation measures proposed at the operational stage given the proposed scheme is significantly below the CCS 300MWe threshold and given the exceptional level of operating efficiency of 94% or greater which is predicted.

#### 10.6 Summary

10.6.1 In the absence of K4 it is considered robust in terms of CO2 emissions to assess a future baseline scenario where the energy requirements of the mill are met by a modified K1, K2 and K3. In that case K4 does represent a solution with lower carbon emissions than that



alternative. Given the importance attached to reducing the UK's CO2 emissions that is a beneficial effect which can be afforded some weight, albeit that weight is limited by the fact that EN-1 and EN-2 make clear that individual applications for NSIP's are not to be assessed against carbon budgets.



# 11 Biodiversity and Geological Conservation

#### 11.1 Context

11.1.1 This Chapter deals with the issue of biodiversity; geological conservation was not scoped into the ES as it is not relevant to the proposal site or proposed scheme and has not therefore been addressed.

### 11.2 EN-1

11.2.1 Section 5.3 of EN-1 addresses biodiversity and geological conservation and sets out a tiered approach to assessing biodiversity impact, based around the general principle that development should aim to avoid significant harm to biodiversity. Appropriate weight will be attached in decision making to designated sites of international, national and local importance, to protected species and to habitats and other species of principal importance for the conservation of biodiversity.

# 11.3 Other Planning Policy

#### **NPPF**

11.3.1 Chapter 11 states that the planning system should contribute to and enhance the natural and local environment, including by minimising impacts on biodiversity and providing net gains in biodiversity where possible. The NPPF makes clear that the hierarchical nature of international, national and locally designated sites should be taken into account so that protection is commensurate with status. If significant harm from development cannot be avoided, adequately mitigated for or, as a last resort, compensated for, then planning permission should be refused.

#### The Swale Local Plan-Bearing Fruits 2013

- 11.3.2 Policy ST1 seeks to achieve sustainable development in Swale, which includes the need to conserve and enhance the natural environment, including designated sites, priority habitats and populations of protected and notable species.
- 11.3.3 Policy CP7 seeks to conserve and enhance the natural environment, including ensuring there are no adverse effects from development on the integrity of SAC, SPA or Ramsar sites, either alone or in combination. Policy DM28 requires development proposals to conserve, enhance and extend biodiversity, to provide for net gains where possible, to minimise any adverse impacts and to compensate where impacts cannot be mitigated.

#### 11.4 Appraisal

11.4.1 Chapter 10 of the ES assesses the likely significant impacts of the proposal on ecological receptors. That is supported by ES Appendix 10.2 which Habitats Regulation Screening Assessment in accordance with the duties imposed by the Conservation of Habitats and Species Regulations 2010 (as amended).



11.4.2 The process of assessment comprised the identification of designated sites and non designated ecological receptors within a defined likely zone of influence. The likely significant effects at the construction, operation and decommissioning phase on those ecological receptors in respect of impacts such as light spill, disturbance from people and plant movements, recreational disturbance, construction and operational noise, overshadowing/line or site, air quality, drainage have then been assessed.

# **Context**

- 11.4.3 The proposal site likes 0.3km from the Swale Special Protection Area and Ramsar site, both of which are internationally designated for ecological importance. Six additional internationally designated sites lie within 10km of the proposal site; the Medway Estuary and Marshes SPA and Ramsar, the Thames Estuary and Marshes Ramsar, the Queensdown Warren SAC and the Outer Thames Estuary SPA and pSPA.
- 11.4.4 At the national level the proposal site lies 0.02km north of the Swale Marine Conservation Zone and 0.3km north-west of the Swale Site of Special Scientific Interest. The Medway Estuary and Marshes SSSI and Elmley National Nature Reserve are 2.9km and 1km away respectively. There is then one non-statutory designated site within 2km of the application site, the Milton Creek Local Wildlife Site.
- 11.4.5 None of the designated sites enter the K4 proposal site, and there are therefore no direct effects from the proposed development in terms of the loss of habitat.
- 11.4.6 Record searches indicate the presence of protected amphibians, birds, flora, invertebrates, bats, water voles, European hedgehogs, brown hare, shrews and reptiles within 2km of the application site boundary.

# Phase 1 Habitat Survey

- 11.4.7 The ES records the results of a Phase 1 Habitat survey undertaken of the proposal site. The site is comprised almost entirely of hardstanding, with a small area of close mown improved grassland and an area of dense scrub. Several buildings are present, none of which are considered to have any bat roost potential.
- 11.4.8 The ES also records the extensive off-site survey work undertaken by RPS within the wider zone of influence since 2009 for the K3 project. As the ES notes those surveys have demonstrated that the Swale adjacent to the mill site is of particular importance for intertidal bird species, including citation species for both the Swale SPA and Ramsar.

# **International Sites**

11.4.9 The ES recognises that the importance, sensitivity and vulnerability to change of the internationally designated sites within 10km is very high. Of particular note, given their proximity to the proposal site, are the Swale SPA/Ramsar and the Medway Estuary and Marshes SPA/Ramsar.



#### International Sites - Construction Effects

- 11.4.10 No significant construction stage impacts are expected on the Medway Estuary and Marshes Ramsar and SPA, the Thames Estuary and Marshes Ramsar and SPA, the Outer Thames Estuary SPA and pSPA or the Queensdown SAC due to their distance from the proposal site.
- 11.4.11 The Swale Estuary SPA and Ramsar is the only internationally designated receptor where construction stage impacts would be possible, given its proximity to the proposal site.
- 11.4.12 There is no significant effect anticipated from light spill on the Swale Estuary SPA/Ramsar, due to the presence of the existing K3 construction site (and subsequently the completed K3 development) between the K4 proposal site and the relative distance of birds using the SPA/Ramsar.
- 11.4.13 Similarly no significant effects are predicted to arise from the disturbance of SPA cited bird species or the protected Marsh Harrier by people and plant movements associated with the construction of K4. The SPA cited bird species feeding on the intertidal area are already habituated to use of areas in close proximity by people and have a limited presence on the intertidal area closest to the proposed development site. The distance of the proposal site from the reedbed which is potential habitat for nesting Marsh Harrier and studies into the effects of human disturbance on breeding Marsh Harrier demonstrate no likely significant effect on that receptor. The potential for recreational disturbance arising from the K4 proposal itself is also considered minimal.
- 11.4.14 Loud percussive noise of 80dB L<sub>AMAX</sub> arising from construction activities such as impact piling have been identified in subject literature to have the greatest potential to disturb wintering birds within the Swale SPA/Ramsar, albeit an initial screening threshold of 55dB has been used following advice from Natural England. Noise modelling of the K4 site demonstrates that the loudest event expected to be experienced by wintering birds would between 60 and 65dB L<sub>AMAX</sub>, , however that would occur over a very small total area and be very short in temporal terms.
- 11.4.15 Any cranes used within the construction of K4 would be over 275m from the SPA/Ramsar and as such there is not considered to be any potential for overshadowing or the blocking of lines of sight from the proposed development. Studies of intertidal birds using the SPA/Ramsar demonstrate that main bird flight lines are offshore, and no other wetland areas exist which could lead to flightlines across the proposal site.
- 11.4.16 In summary there would be no likely significant effects on Internationally designated ecological receptors as a result of the construction of the proposed K4 development.

#### <u>International Sites - Operational Impacts</u>

11.4.17 The ES concludes that there would not be any likely significant effects on the Medway Estuary and Marshes Ramsar and SPA, the Thames Estuary and Marshes Ramsar and SPA and the Outer Thames Estuary SPA and pSPA from the operation of K4, primarily due to the distance between the proposed development and those designated areas.



- 11.4.18 The ES assesses the likely significant effects of the proposed development on the Swale Ramsar and SPA in detail, given the Swale is the receptor with most potential for effects to arise from the operation of K4:
  - Drainage the total area of impermeable surface will not later significantly and the existing surface water drainage regime will be retained, with appropriate pollution prevention measures to be used. Process water will be treated and discharged under the existing environmental permit which controls pH and water temperature limits;
  - Light spill the lighting scheme proposed would follow best practice and would be set against the context of the process necessary lighting already present on the wider Kemsley Paper mill site;
  - **Disturbance from people and movements** as with the construction stage impacts there is considered to be limited potential for disturbance to arise due to bird habituation and the limited presence of intertidal birds in the area closest to the proposal site;
  - **Recreational disturbance** a low potential given the low level of staff proposed for K4 and the restricted nature of access to and from the Kemsley Paper mill site;
  - **Operational noise** Sudden percussive noises arising from the emergency steam release valve, HGV movements or other plant activities has the greatest potential to create disturbance. However the maximum noise level modelled at the closest location of intertidal birds, some 275m from the proposed location of K4, would be 60dB LA<sub>eqx</sub> or less, and is therefore below the 80dB L<sub>AMAX</sub> level at or above which there is considered to be the greatest potential for disturbance, and would also be an infrequent occurrence which is expected to occur less from K4 than is currently the case for K1, due to the provision of a dump condenser;
  - Air quality for all pollutants either the Predicted Environmental Contributions would not exceed the critical Environmental Quality Standards level or the Process Contribution is below 1% of the Environmental Quality Standard for all interest features within the SPA. As a result no impacts are expected to arise as a result of the development on air quality;
  - Overshadowing/line of sight there is no potential for K4 to overshadow the SPA/Ramsar or to block lines of sight;
  - **Flight lines** the lack of existing flight lines and the industrialised nature of the areas immediately around the K4 sight mean that there are no expected to be any impacts on flight lines of birds using the Swale;
- 11.4.19 Overall no likely significant effects are expected to arise in respect of biodiversity in internationally designated sites either at the construction or operational stage of K4.



#### SSSI's

11.4.20 The assessment of construction and operational impacts on the Swale SSSI and Medway Estuary and Marshes SSSI is consistent with the assessment set out above in respect of the SPA and Ramsar areas. No likely significant effects are expected to arise on nearby SSSI's from the construction or operation of K4.

# **Nationally Designated Sites**

11.4.21 The distance of 1km from the proposal site to the Elmley National Nature Reserve and the intervening Swale mean that there is a negligible potential for impacts from noise and dust arising from construction. Similarly the same conclusions are drawn in respect of the NNR as for the Swale Ramsar/SPA and no likely significant effects are expected to arise from either operational noise or air quality.

#### **Marine Conservation Zones**

- 11.4.22 At the construction stage surface and foul water drainage will be managed through the existing mill drainage network, with good practice pollution prevention and waste management mechanisms employed. At the operational stage the area of impermeable surface will not have altered significantly, appropriate pollution prevention measures will be used and process water will be treated and discharged under the existing environmental permit which controls pH and water temperature limits.
- 11.4.23 No likely significant effects are therefore predicted to arise on the Swale MCZ from changes to surface water or pollutants at either the construction or operational stage.

# **Regional and Local Sites**

- 11.4.24 The Milton Creek Local Wildlife Site lies 165m south east of the K4 proposal site and forms an extension of the Swale SPA. There are no likely construction stage significant effects identified within the ES on the LWS arising from drainage, air quality or lighting.
- 11.4.25 The ES notes that some movement of people and plant may be visible to a small proportion of the SPA cited bird species using intertidal areas of Milton Creek, but the limited presence in the intertidal area closest to the proposal site and the fact that bird species in the area are habituated to people means levels of disturbance from plant and people movement is expected to be limited. Potential percussive noise levels arising from construction have been modelled and are anticipated to be no more than 70dB LAMAX at the main intertidal area of the Milton Creek LWS, which falls below the 80dB LAMAX threshold at which there is a potential for disturbance to arise.
- 11.4.26 At the operational stage process water, having first been treated, will be discharged at a point some 900m north of the LWS, with pH and temperature controlled by the existing environmental permit, and is not expected to have any significant effect on the LWS. The use of best practice lighting, the existing lighting on site and the distance of 165m to the LWS means that similarly there are no significant effects expected from lighting. No significant air quality effects are envisaged, as assessed with other tiers of designated sites.



- 11.4.27 There is limited potential for disturbance to arise from people and plant movement which would affect the LWS at the operational stage due to the habituation of bird species using the surrounding area to such activities, the limited presence of cited bird species adjacent to the proposal site and screening afforded by the sea wall, buildings and topographical features.
- 11.4.28 Noise modelling indicates that noise levels from the emergency release valve would reach between 69 and 79 dBL<sub>AMAX</sub> within the LWS. That noise level is close to the threshold of 80dBL<sub>AMAX</sub> where an impact would be expected. However that event is only expected to occur infrequently as an emergency event and K4 includes an oversized dump condenser which would decrease the need to use the emergency release valve compared with the current situation.

#### **Ancient Woodland and Protected Trees**

11.4.29 The proposed development does not affect any ancient woodland or protected trees.

# **Habitats and Other Species**

11.4.30 An area of scrub to the south of the K4 site had potential to support Cetti's Warbler, a Schedule 1 species. That area of scrub was cleared (outside of the breeding bird season) in advance of the internal access road application referenced in this Statement (Section 3.3.5) and will be mitigated by the provision of new planting elsewhere on the DS Smith site as part of the road application.

# **Biodiversity within developments**

11.4.31 The aspiration set out within EN-1 to incorporate beneficial biodiversity features as part of good design is noted. In this case the context of the surrounding mill complex means that no such opportunities exist.

#### 11.5 Relevant Draft DCO Requirements

11.5.1 Given the lack of ecological receptors within the development site itself no Requirement for further site specific ecological survey work is considered necessary. The mitigation measures identified in respect of those ecological receptors which do exist have then either been embedded within the design of the proposed development or are encapsulated into other Requirements, particularly 7) The Construction Environmental Management Plan, 9) External Lighting and 11) Drainage.

# 11.6 Summary

- 11.6.1 In accordance with EN-1 the issue of biodiversity has been assessed within the ES which has not identified any significant effects on designated sites, protected species and habitats and other species considered to be of principal importance for the conservation of biodiversity.
- 11.6.2 Various mitigation measures have been proposed and would be secured by Requirements set out within the draft DCO, and in particular include dust suppression and management measures at both the construction and operational stage. The result of those mitigation



measures is that no residual likely significant effects are anticipated on any of the designated ecological receptors identified. EN-1 states, as a general principle, that development should aim to avoid significant harm to biodiversity conservation impacts, with mitigation being used where required. The proposed scheme complies fully with that aim and in respect of biodiversity is fully compliant with EN-1.



# 12 Civil and Military aviation and defence interests

#### 12.1 EN-1

12.1.1 Section 5.4 of EN-1 establishes the importance of ensuring new nationally significant infrastructure development does not affect aerodromes, aviation technical sites and other types of defence interests. It notes that the military Low Flying system covers the whole of the UK and enables low flying activities as low as 75 metres.

# 12.2 Appraisal

- 12.2.1 The proposed K4 CHP plant would have a 70 metre high heat recovery steam generator stack and a 35 metre high package boiler stack. The parameter plans indicate the expected location of those stacks and provide the ability for the position of those to shift within the final scheme by up to 5 metres. Two layout options are provided at the point of submission, reflecting either a horizontal or vertical boiler, with the stack locations changing as a result. One of those options will be selected during the examination of the DCO application.
- 12.2.2 The CAA were consulted as part of the applicant's statutory pre-submission Section 42 consultation and whilst no response was received within the statutory deadline, following subsequent correspondence the CAA confirmed that they had seen the consultation but felt that no comment was required based on the presence in the immediate vicinity of other stacks of equal or greater height and the distance from nearby airports and aerodromes. The correspondence in question is discussed within the S42 Consultation section of the Consultation Report [Document 5.1]. On that basis no further action is considered necessary in respect of civil and military aviation and defence interests.



# 13 Dust, Odour, artificial light, smoke and steam and insect infestation

#### 13.1 EN-1

13.1.1 Section 5.6 of EN-1 highlights the potential for the construction, operation and decommissioning of energy infrastructure to give rise to a range of emissions which could have a detrimental impact on amenity or cause a common law or statutory nuisance. It recognises that for energy NSIP's some impact on amenity is likely to be unavoidable, with the aim being to keep impacts to a minimum and at a level which is acceptable

# 13.2 Other Planning Policy

# The NPPF

13.2.1 The NPPF requires any adverse impacts on health and quality of life arising from new development to be mitigated and reduced. At Paragraph 125 the NPPF encourages good design to limit light pollution from artificial lights on local amenity and nature conservation.

# The Swale Local Plan-Bearing Fruits 2013

13.2.2 Policy DM14 sets general development criteria, including the need to cause no significant harm to amenity and other sensitive uses or areas.

# 13.3 Appraisal

- 13.3.1 Chapter 5 of the ES deals with dust emissions in respect of air quality. As noted in Section 2.9.3 of the ES [Document 3.1], artificial lighting will be designed to accord with best practice and is to be defined through details submitted pursuant to Requirement 9 of the draft DCO. The noise implications of emergency steam emissions are discussed in Chapter 7 of the ES and are then reviewed at Chapter 18 of this Planning Statement. Due to the gas fired nature of the proposed K4 CHP plant odour, smoke and insect infestation are not relevant in this case.
- 13.3.2 The DCO application is accompanied by a Statement in respect of Statutory Nuisances [Document 5.6] which considers the engagement of Section 79(1) of the Environmental Protection Act 1990 and whether any of the statutory nuisances identified could arise from the proposed development.
- 13.3.3 Draft DCO Requirement 7 requires a CEMP to be prepared and agreed for all elements of the construction works associated with the proposed development, in order to manage and minimise the impacts arising from the construction of the proposed development. The CEMP would ensure the appropriate management of dust during the construction stage.
- 13.3.4 Draft DCO Requirement 9requires details of artificial light emissions during construction, operation and decommissioning to be approved at appropriate points, which directly



- addresses the artificial lighting element of both EN-1 and Section (fb) of Section 79 of the Environmental Protection Act.
- 13.3.5 As discussed in Chapter 18 of this Statement DS Smith require the ability to release high pressure steam in an emergency. The same mechanism exists currently in K1 and is typically used around 4 to 5 times a year for a period of around 60/90 seconds each time. The noise level created has been identified as having the ability to have adverse effects on residents in Kemsley, particularly as the timing cannot be controlled.
- 13.3.6 A dump condenser is included within the K4 design which would have the capability to deal with some emergency instances and as such the design of K4 is intended to reduce the amount of those emergency events compared to the current situation. Given the frequency and length of those events is already low and would reduce further, this emergency activity is not considered to have potential to give rise to a statutory nuisance.
- 13.3.7 The above demonstrates that no impacts will arise from K4 in respect of dust, artificial light or steam, either at the construction or operational stage, which have the ability to have a detrimental impact on amenity. In accordance with EN-1 reasonable steps have been taken to put mitigation measures in place to minimise the potential for detrimental impacts to occur.



# 14 Flood Risk

### 14.1 EN-1

14.1.1 The key test set out within Section 5.7 of EN-1 is that inappropriate development should be avoided in areas at risk of flooding and to that development should be directed away from the areas at the highest risk. Where new energy infrastructure is necessary in such areas that should be seen as an exception and should be made safe without increasing flood risk elsewhere and if possible by reducing flood risk overall.

# 14.2 Other Planning Policy

#### The NPPF

14.2.1 The NPPF core planning principles identify the need to take full account of flood risk and coastal change. Chapter 10 identifies a broad need to be proactive in mitigating and adapting to climate change, including taking full account of flood risk. Paragraph 99 states that inappropriate development should be avoided in areas at the highest risk of flooding, whilst making development necessary in those areas safe without increasing flood risk elsewhere.

### The Swale Local Plan-Bearing Fruits 2013

14.2.2 Policy DM1 requires development proposals to avoid inappropriate development in areas at risk of flooding or where development would increase flood risk elsewhere.

#### 14.3 Appraisal

- 14.3.1 Chapter 9 of the ES addresses the Water Environment and includes an assessment of flood risk. Separately a Flood Risk Assessment is provided as Appendix 9.1 to the ES.
- 14.3.2 The ES notes that the EA Flood Map and Swale Borough Council SFRA indicate that the proposed K4 development site lies within Flood Zone 1 which therefore has a low probability of tidal flooding from the Swale of 1 in 1000 year annual probability.
- 14.3.3 The construction access road and proposed laydown area, within the wider DCO boundary, lies within Flood Zone 3 which has a high probability of flooding. There are existing flood defences made of raised walls and embankments which are located 400m to the east of the site.
- 14.3.4 The proposed development is expected to remain with Flood Zone 1, with a low risk of flooding, throughout the EA modelled period to 2115, which takes into account changes caused by climate change.
- 14.3.5 There is not considered to be any significant impact arising from the construction stage in terms of a temporary increase in flood risk on surrounding areas from an increase in impermeable area, given the nature of the existing site and that appropriate measures will be taken to manage surface water at the site during the construction period. At the



operational stage there would not be any permanent increase in impermeable area over what currently exists, with the existing drainage regime to be retained.

# 14.4 Requirements

14.4.1 Requirement 11 requires written details of surface (and foul) water drainage to be submitted to the relevant planning authority and approved prior to commencement. It makes reference to Table 9.17 within the ES, which in respect of flood risk identifies the provision of a Surface Water Management scheme during construction and a Flood Management Plan and Flood Evacuation Plan during operation, to manage the risk of flooding at each stage.

# 14.5 Summary

14.5.1 Given the above the proposal is in full compliance with planning policy in respect of flood risk.



# 15 Historic Environment

#### 15.1 EN-1

- 15.1.1 Section 5.8 of EN-1 acknowledges that the construction, operation and decommissioning of energy infrastructure has the potential to result in adverse impacts on the historic environment, which might include all surviving physical remains of past human activity, 'heritage assets' which can be buildings, monuments, sites, places, areas or landscapes. EN-1 notes that some heritage assets are officially designated, but those capable of being designated should be afforded the same weight, and states that non designated heritage assets should also be reflected in decision making if evidence demonstrates the heritage significance of those assets merits consideration.
- 15.1.2 EN-1 requires the nature of significance and value of heritage assets to be taken into account, together with the desirability of sustaining and where appropriate enhancing the significance of heritage assets. It sets a presumption in favour of the conservation of designated heritage assets, with the level of presumption commensurate with the level of significance. The test set by EN-1 is that the substantial harm to or loss of a grade II listed garden or park should be exceptional and substantial harm to or loss of designated assets of the highest significance (including Scheduled Ancient Monuments, registered battlefields, grade I and II\* listed buildings and registered parks and gardens and World Heritage Sites) should be wholly exceptional. Any harm occurring to the significance of a designated heritage asset should be weighed against the public benefit of development, with substantial harm or total loss of significance having to be justified by substantial public benefits.

# 15.2 Other Planning Policy

### NPPF

- 15.2.1 A core planning principle of the NPPF is to conserve heritage assets in a manner appropriate to their significance, so that they can be enjoyed by existing and future generations.
- 15.2.2 Section 12 of the NPPF deals specifically with conserving and enhancing the historic environment, with great weight to be given to the conservation of a heritage asset, with the weight to be attributed proportionate to the importance of the asset. In cases where a development would cause substantial harm or total loss of an asset planning permission should be refused unless it can be demonstrated that substantial public benefits would arise and subject to further criteria set out within the NPPF. For proposals where less than substantial harm would result then harm should be weighed against the public benefits of the proposal.

#### The Swale Local Plan-Bearing Fruits 2013

15.2.3 Policy ST1 seeks to achieve sustainable development in Swale, and sets out the need to conserve and enhance the historic environment. Policy CP7 seeks to conserve and enhance the natural environment and includes provisions to protect, conserve and manage historic landscapes, archaeological and built heritage assets. CP8 then makes specific provisions to



- conserve and enhance the historic environment, primarily to sustain and enhance the significance of Swale's designated and non-designated heritage assets in a manner appropriate to their significance.
- 15.2.4 Policy DM14 sets general development criteria and seeks to conserve and enhance the built environment, taking into account the desirability of sustaining and enhancing the significance of heritage assets.
- 15.2.5 Policy DM34 states that development will not be permitted which would adversely affect a Scheduled Monument and/or its setting.

# 15.3 Appraisal

- 15.3.1 Chapter 12 of the ES deals with archaeology and cultural heritage.
- 15.3.2 A study area of 1km for the purposes of buried archaeology and 3km for the setting of heritage assets has been defined, based on the experience of RPS of other projects in the surrounding area and on the Landscape and Visual Impact Assessment undertaken within the ES.
- 15.3.3 As demonstrated by Document 4.15 (The Heritage Plan) the 'Castle Rough' Scheduled Ancient Monument, a Medieval moated site, lies some 230 metres south of the proposal site. There are no World Heritage Sites, Protected Wrecks, Registered Battlefields or registered parks and gardens within 3km of the site, and no listed buildings or Conservation Areas within 1km of the site. There is one Scheduled Monument (the Murston Old Church) and 11 listed buildings within 1km and 2km of the site and a further Scheduled Monument (WWII Anti Aircraft gun site) and 91 listed buildings within 2km and 3km of the site.
- 15.3.4 The site lies within a wider area which has seen extensive activity from early times through the prehistoric and Roman ages, which is reflected in the findings of Mesolithic/ Neolithic, Bronze Age and Roman age findings, including some Mesolithic flints being recovered at Castle Rough, to the south of the site (albeit it is expected that was material brought in as part of the construction of that site during Medieval times). Based on historical mapping it is expected that the site itself was used for agricultural purposes until the 19<sup>th</sup> century. A number of brick works were established in the area by 1900, with the Kemsley Paper mill constructed in 1923.
- 15.3.5 There is considered to be a high potential for the wider area to contain remains from all periods from the prehistoric onwards. However due to the existing hardstanding in place on the site the survival of previously unidentified remains of national importance or which would warrant preservation in situ is considered unlikely. Any buried remains are expected to be of low significance, with a high expected impact, with a minor adverse effect expected to arise in EIA terms.
- 15.3.6 There would be no physical impacts arising from the development on Castle Rough. The scheduled monument is low lying and not visible from surrounding areas, and where views are available it is seen in the context of the wider paper mill buildings. Whilst the proposed development would be visible in some views containing the scheduled monument, there is not considered to be any significant impact on its setting.



15.3.7 No significant effects are then identified either physically or on the setting of the other scheduled monument, listed buildings and historic parks and gardens and battlefields identified in the surrounding area due to a combination of the distance and lack of intervisibility between the proposal site and those heritage assets and the presence of the existing paper mill complex. The site lies within a historic landscape characterised by industrial complexes and factories which has a high capacity to accommodate change and where there would be no significant effect arising from the proposed development.

# 15.4 Requirement

- 15.4.1 Requirement 13 makes provision for a written scheme for the investigation of areas of archaeological interest to be approved by the relevant planning authority, to identify any areas where a watching brief is required and to detail measures to be taken should any significant archaeological works be found.
- 15.4.2 A similar condition is being suggested by the applicant in respect of the separate internal road application, being advanced under the Town and Country Planning Act, to ensure that appropriate measures are taken in respect of archelogy if groundworks are undertaken on the K4 site either under any DCO issued for K4 or planning permission issued for the internal access road.

# 15.5 Summary

- 15.5.1 Whilst there is considered to be a low potential for significant archaeological remains to be present, it is considered appropriate to make provision for a suitable programme of archaeological works to take place to ensure this issue is comprehensively mitigated.
- 15.5.2 There is no harm identified as arising from the proposed development on the significance of heritage assets and therefore no need to justify that harm based on a case of the public benefits arising from the proposed development, which therefore complies entirely with the Historic Environment element of EN-1.



# 16 Landscape and Visual

#### 16.1 EN-1

- 16.1.1 EN-1 deals with landscape and visual matters at Section 5.9 and acknowledges that landscape and visual impacts of a proposed development are likely to vary given the type of development proposed, its location and the landscape setting, and identifies features such as cooling towers and exhaust stacks as having the potential to have the most obvious impacts.
- 16.1.2 EN-1 accepts that virtually all NSIP's will have an effect on the landscape, and that projects should be designed carefully to minimise landscape impact whilst reflecting siting, operational and other relevant constraints, and taking into account the current quality, value and capacity to accommodate change of the existing landscape.
- 16.1.3 EN-1 applies different tests to decision making depending on whether the proposed location is within or outside a nationally designated landscape.
- 16.1.4 In visual terms EN-1 notes that it is for the decision maker to judge whether visual effects on sensitive receptors would outweigh the benefits of the project.
- 16.1.5 In mitigation terms EN-1 makes clear that measures which would have a very significant benefit in terms of reducing landscape and visual impacts may outweigh a marginal loss of function, such as a reduced generation output. Other mitigation measures identified include siting, design and landscaping (off site if appropriate).
- 16.1.6 Section 4.5 of EN-1 deals with good design for energy infrastructure and has been assessed in detail within the Design and Access Statement.

#### 16.2 EN-2

- 16.2.1 Section 2.6 of EN-2 requires particular regard to be had to nationally designated landscape areas. It too acknowledges that the main structures required for fossil fuel generating infrastructure are large and will have an impact on surrounding landscape and visual amenity, with the overall size of the development dependant on technology and design. EN-2 notes that night time lighting for continuous operation will also impact on visual amenity.
- 16.2.2 EN-2 is clear that it is not possible to eliminate the visual impacts associated with a fossil fuel generating station and mitigation should therefore reduce visual intrusion on the landscape and visual amenity as much as possible. Those mitigation measures can include building design, external finish and colour, with the precise architectural treatment needing to be site specific. Paragraph 2.6.7 acknowledges that mitigation such as bunds and tree planting can be used, but that where an existing landscape is more industrial other forms of visual impact mitigation may be involved.
- 16.2.3 EN-2 recognises the statutory and technical requirements which inform plant design and ultimately concludes that limited weight will be given to the visibility of a generating



station if the location is appropriate for a project and it has been designed sensitively to minimise landscape and visual harm.

# 16.3 Other Planning Policy

#### The NPPF

16.3.1 The fourth core planning principle, at Paragraph 17 of the NPPF, seeks to secure high quality design and a good standard of amenity for all existing and future occupants of land and buildings. Chapter 7 then expands on the requirement to provide good design, which is considered to be a key aspect of sustainable development and indivisible from good planning.

#### The Swale Local Plan-Bearing Fruits 2013

- 16.3.2 Policy ST1 seeks to achieve sustainable development in Swale, which includes achieving good design, together with protecting and where possible enhancing the intrinsic character, beauty and tranquillity of the countryside.
- 16.3.3 Policy ST5 sets a strategy for Sittingbourne and seeks to improve the condition and quality of landscapes in the area and to ensure that development is appropriate to landscape character and quality.
- 16.3.4 Policy CP4 requires good design, which is appropriate to the surroundings, and includes provisions to make efficient use of natural resources, conserve and enhance the landscape, biodiversity and local environments, to be appropriate to its context in respect of matters such as materials, scale, height, massing and the colour and durability of materials. Policy DM14 sets general development criteria and states that development must be both well sited and of a scale, design, appearance and detail which is sympathetic and appropriate to the location.
- 16.3.5 Policy DM24 requires valued landscapes to be conserved, with the scale, layout, built and landscape design of development to be informed by landscape and visual impact assessment.

# 16.4 Appraisal

- 16.4.1 Chapter 11 of the ES documents a detailed Landscape and Visual Impact Assessment, which takes a best practice approach as set out within accepted industry guidelines.
- 16.4.2 The Design and Access Statement [Document 5.3] addresses in further detail the design approach and rationale and discusses the design evolution process.

#### **Context**

16.4.3 There are no designated landscapes within the site. The nearest nationally designated landscape is the Kent Downs AONB the boundary of which is some 6.5km to the south. At the borough level the closest designation is the North Kent Marshes Special Landscape Area which covers the Swale and nearby coastal landscape, including the Chetney and



- Greenborough Marshes which lie to the east and south of the site. Slightly further afield lies an Area of High Landscape Value, approximately 1km to the south east.
- 16.4.4 There are no Scheduled Ancient Monuments within the site area, with the closest being Castle Rough some 230m to the south-west. There are no Conservation Areas in the vicinity. The nearest Public Right of Way is the Saxon Shore Way which follows the sea defences and line of the Swale and which passes 200m to the south of the site and 400m to the east.
- 16.4.5 The proposal site lies within the Greater Thames Estuary National Landscape Character Area, according to the Natural England National Character Area profiles. At the County level it lies within the Swale Marshes Character area, according to the Kent Landscape Character Assessment (2004), which recognises the intrusive buildings of Ridham Dock and the very high visual sensitivity of the surrounding rural area.
- 16.4.6 A range of Local Landscape Character Areas lie within the identified Zone of Theoretical Visibility, according to the Swale Landscape Character Assessment and Guidelines (2005), and generally are in a good condition with high intrinsic sensitivity. However the site itself lies entirely within the Sittingbourne urban area, outside of any of those defined landscape character areas. Within the urban area the proposal site lies in the Sittingbourne Industrial/Commercial area which is characterised by the large scale industrial development and flat topography alongside the Swale and which is considered to have a poor condition and low intrinsic sensitivity.
- 16.4.7 In historical terms the site lies within the Large Scale Industry landscape type of the Northern Horticultural Belt, as defined by the Kent Historic Landscape Characterisation (2001).
- 16.4.8 The industrial and commercial area within which lies the Kemsley paper mill is considered to have a poor quality and condition, although the wider estuarine and coastal landscapes have a high value. Similarly the large industrial features create a poor scenic quality and low value, whilst the open expanse of the Swale, Milton Creek and the Isle of Sheppey are landscapes of a high value. There are no features within the site worthy of retention or any conservation features which add value to the landscape. However the estuarine habitat of the Swale is something considered to add wider value to the surrounding area, and has a much more tranquil nature than the industrial area, albeit that is something which is disturbed by the adjacent industry.

# **Construction stage**

16.4.9 At the construction stage any effects on the surrounding landscape from items such as cranes or high level plant during both daytime and night-time is expected to be slight or negligible, primarily due to the small magnitude of change created due to the existing industrial character of the surrounding area. The construction stage would bring slight or negligible impacts visually within the surrounding area which are not considered to be significant, due to the distance to sensitive receptors and the existing industrial context.



### **Operational stage**

- 16.4.10 Chapter 11 of the ES acknowledges that the development is large but then notes that it would be relatively modest within the context of the extensive industrial development in the surrounding area. Individually the completed development is expected to have only a slight or negligible impact on the surrounding landscape and townscape character, at all tiers, which has been assessed as being insignificant within the ES.
- 16.4.11 In visual terms the ES concludes that there would be a significant adverse visual impact on sequential views of users of the Saxon Shore Way. No significant effects have been identified in visual terms from individual viewpoints, but instead it is the combination of a series of views of a more heavily developed cluster of energy infrastructure which would create a significant sequential effect on visual amenity, given the proximity of Saxon Shore users to the proposal site.
- 16.4.12 In cumulative terms, when assessed along with other consented and planned projects in the surrounding area, there is expected to be a slight adverse effect on townscape character, but substantial adverse effect on landscape and visual receptors. In the case of landscape K4 would make a negligible contribution to that substantial adverse effect, but due to the proximity to the Saxon Shore Way it would make a slight adverse contribution to the significant adverse effect on visual receptors.
- 16.4.13 Chapter 11 of the ES acknowledges that no landscape mitigation has been proposed as it would not achieve a meaningful reduction in landscape, townscape and visual effects. In that respect the form of K4 would largely be dictated by function and that detailed design matters would be agreed following the DCO process.

# 16.5 Draft DCO Requirements

- 16.5.1 Draft DCO Requirement 5 commits the applicant to submit details for approval to the local planning authority of the layout, design, external appearance, colour and materials etc. of the proposed development prior to the development commencing. Requirement 14 makes provisions for approval to be sought for amendments to the approved plans from the local planning authority.
- 16.5.2 Chapter 11 of the ES envisages that the new infrastructure will be clad in non-reflective materials and generally pale grey or similar in colour to help minimise scale and bulk when viewed against the skyline and the context of the existing Kemsley mill.
- 16.5.3 Requirement 9 requires details of lighting at all stages of the project to be agreed with the relevant planning authority.

#### 16.6 Summary

- 16.6.1 There are no significant landscape effects considered to arise either at the construction or operational stage.
- 16.6.2 At the operational stage a significant adverse effect has been identified to arise from sequential views along the Saxon Shore Way as a result of the proposed development, both individually and cumulatively.



- 16.6.3 EN-2 makes clear that it is not possible to eliminate all the visual impacts associated with a fossil fuel generating station. The design details agreed for K4 under Requirement 5 will seek to reduce visual impact as much as possible by using an appropriate design approach for the context of the site, but a residual significant adverse impact is still anticipated.
- 16.6.4 Given the nature and magnitude of that impact it is not considered that the visual effects would outweigh the benefits of the project in terms of its benefits, which as set out in Chapter 19 of this Statement include some positive social and economic effects.



# 17 Land use

#### 17.1 EN-1

17.1.1 Section 5.10 of EN-1 states that an energy infrastructure project will have direct effects on the existing use of a proposed site and can have indirect effects on the use or planned use of other land in the vicinity for other types of development. It requires applicants dealing with proposals on previously developed land to have regarding to the risk posed by land contamination.

# 17.2 Other Planning Policy

#### **NPPF**

17.2.1 The NPPF, as a core planning principle, encourages the effective use of previously developed land, providing it is not of high environmental value.

### The Swale Local Plan-Bearing Fruits 2013

- 17.2.2 Policy ST1 seeks to achieve sustainable development in Swale and seeks to apply national policy in respect of pollution, contaminated and previously developed land.
- 17.2.3 ST3 identifies Sittingbourne as the primary focus for growth within the Borough, with the Local Plan also generally highlighting the need for achieve a strong, competitive economy within the town.

# 17.3 Appraisal

#### Land use

- 17.3.1 The proposed development site is brownfield land within the wider Kemsley Paper mill complex. The Paper Mill was first constructed in the 1920's and has expanded since to its present size.
- 17.3.2 In that respect the proposed development would not result in the loss of any open space, sports, recreational land, or the best and most versatile agricultural land. The proposal site does not lie within a Green Belt or an identified minerals safeguarding area.
- 17.3.3 EN-1 acknowledges that the re-use of previously developed land for new development can make a major contribution to sustainable development by reducing the amount of countryside and greenfield land which needs to be used. The NPPF also encourages the effective use of previously developed land which is not of high environmental value.
- 17.3.4 The proposal site selected complies entirely with those two aspirations. The site currently is a relatively underused parcel of land within the wider mill complex, which ensures that existing structures and operations present can easily be accommodated elsewhere within the mill without having to seek the extension of the mill site in other areas.



- 17.3.5 Nearby residential areas of Kemsley were originally constructed as a garden village by Edward Lloyd as part of his construction of the Kemsley Paper Mill in the 1920's. The paper mill has therefore been an ever present feature as the residential suburb of Kemsley has continued to expand since. At the same time the areas to the north and east of the residential areas of Kemsley have become synonymous with large industrial developments, including the Morrisons distribution depot, Knauf plasterboard manufacturing, Countrystyle Recycling, the Ridham Dock and Hanson Concrete.
- 17.3.6 As demonstrated by the Proposals Map which forms part of the Swale Borough Local Plan to 2013 [Appendix A], the Kemsley Paper mill lies within the built-up boundary of Sittingbourne. The area immediately to the west of the mill, between it and the nearest residential part of Kemsley, forms part of a wider committed allocation for employment development. The land immediately to the south of the Kemsley Paper Mill car park is a new employment allocation. The areas to the south, east and north of the mill then have a range of protective designations reflecting their status as international, national and local designated sites of biodiversity, a coastal change management area and a high landscape value area at the Kent level, with the land to the south of the mill intended to form part of the extended Milton Creek Country Park.

#### **Contamination**

- 17.3.7 Chapter 8 of the ES deals with contamination and presents the findings of a preliminary qualitative land contamination assessment which, whilst not including any intrusive investigations, does draw on the extensive history of intrusive investigations from elsewhere within the paper mill site and the surrounding area.
- 17.3.8 The proposed development site currently comprises concrete hardstanding used for a combination of paper storage, weighbridge and vehicle washing and refuelling. A bunded above ground tanked fuel store is present. There is a network of surface drains present which connect to the wider surface water management system across the paper mill site. The site was previously undeveloped agricultural land before being incorporated into the wider mill complex and used for various purposes from the 1930's onward. It is likely that there will be Made Ground comprising gravelly sands and clays and other infill materials beneath the concrete surface layer, with the London Clay bedrock layer underlying any made ground present. The London Clay bedrock is unproductive in respect of hydrogeology and is only likely to support shallow perched water in overlying areas such as the made ground.
- 17.3.9 The concrete hardstanding across the site is generally sound albeit some of the top surface layer is in a poor state of repair, and current potential sources of pollution are being appropriately managed, with the risk of new sources of pollution thereby being minimised. The made ground beneath the site is not anticipated to contain high levels of contamination, based on past studies of surrounding areas. No unacceptable risks to the health of construction workers or adjacent site users have been identified, albeit measures will need to be put into place to deal with any localised sources of asbestos.
- 17.3.10 The approach to shallow groundwater will differ within the construction zone and the remainder of the land within the DCO boundary. Within the construction zone piled foundations and shallow depth excavations will be undertaken which could encounter



and remobilise contamination within shallow perched groundwater. However there is considered to be a low risk of that occurring, based on the past uses of the site and the current concrete surfacing. There is more potential for groundwater to be present in the northern part of the DCO boundary, but no excavation is proposed within that area. Instead appropriate measures will be used to manage potential construction impacts from waste or fuel storage etc.

- 17.3.11 The use of piled foundations does create the potential for pathways to be created for contamination to pass from shallow groundwater to deep groundwater. The risk of a significant effect arising has been assessed as being low due to the expected lack of contamination, the low sensitivity of the underlying secondary aquifer and the presence above the more sensitive chalk aquifer of water flow limiting bedrock units. A piling risk assessment is proposed to identify an appropriate method of piling which would minimise any downward migration of contamination.
- 17.3.12 No risks have been identified arising from ground gas on construction workers. Similarly there are no ground contamination effects identified on future site users or adjacent site users at the operational stage. There is some potential risk at the operational stage from ground gas, which is to be mitigated by using ground gas measures in new structures. The risk of any soil contamination affecting human health or groundwater will be minimised by the hardstanding proposed within the development design.
- 17.3.13 The DS Smith road application (discussed at Section 3.3.5) proposes to break out the concrete on the K4 site to be used as substrate for the road construction. That application is therefore accompanied by a Contamination Assessment which sets out how that process will be managed to prevent any issues arising from contamination which might be present currently or which could arise after that work was completed. It is therefore anticipated that a suitable condition would be imposed in respect of contamination on any planning permission issued for the proposed internal road, which alongside the Requirement proposed within the draft DCO ensures that the issue of potential contamination will be appropriately dealt with should the existing K4 site surface be broken up as part of works undertaken under a DCO or planning permission.

# 17.4 Draft DCO Requirements

17.4.1 Requirement 12 within the draft DCO makes provision for a piling risk assessment and details of ground gas risk assessment to be agreed by the relevant planning authority in consultation with the Environment Agency, which reflects the conclusions drawn by the ES. The same requirement also makes provision for any contaminated land not previously identified to be dealt with appropriately.

#### Summary

17.4.2 The proposed development would represent a small scale addition in physical terms to the existing paper mill, which is a longstanding substantial industrial complex within the surrounding area. The residential areas of Kemsley represent an important local receptor which has been reflected within the various assessments undertaken within the ES. The use of brownfield land is supported by EN-1 and national planning policy and there are no



- planned uses of surrounding land which would be detrimentally affected by the proposed development.
- 17.4.3 The issue of contamination is fully addressed by the various elements of Requirement 12 within the draft DCO.
- 17.4.4 The proposal is therefore considered to comply fully with the Land Use section of EN-1.



# 18 Noise and Vibration

#### 18.1 EN-1

- 18.1.1 Section 5.11 of EN-1 explains the issues arising from noise and vibration on human life and health, damage to buildings, or impacts on wildlife and biodiversity, and notes that factors which will determine noise impact include the operational noise from a development and its characteristics, the proximity of the development to noise sensitive premises and the proximity to guiet places and to designated sites for biodiversity.
- 18.1.2 Paragraph 5.11.9 states that development consent should not be granted unless the proposals can avoid significant adverse impacts on health and quality of life, can mitigate and minimise any adverse impact and contribute where possible to secure improvements to health and quality of life through the management of noise. Mitigation measures identified include engineering, layout and administrative solutions.

#### 18.2 EN-2

- 18.2.1 In respect of fossil fuel generating stations EN-2 identifies gas and steam turbines as potential sources of noise, together with external noise sources such as externally sited air cooled condensers.
- 18.2.2 EN-2 requires the extent to which operational noise would be controlled by the EA to be taken into account but expects applicants to demonstrate that noise would be adequately mitigated, with good design identified as the primary measure to achieve appropriate mitigation.

# 18.3 Other Planning Policy

## **NPPF**

18.3.1 Paragraph 123 of the NPPF requires planning decisions to avoid noise arising from new development from giving rise to significant adverse impacts on health and quality of life. The NPPF recognises that development will often create some noise, and makes clear that businesses should not have unreasonable restrictions placed on them because of changes in nearby land uses since they were established.

# 18.4 Appraisal

- 18.4.1 Chapter 7 of the ES addresses noise and vibration.
- 18.4.2 The potential impacts of construction and operational noise on biodiversity receptors are discussed at Chapter 10 of the ES and at Chapter 11 of this Statement. Chapter 13 of this Statement deals with statutory nuisance and includes comments in respect of the emergency steam release.



#### **Construction**

- 18.4.3 Construction noise and vibration impacts are by nature temporary and intermittent, depending on the construction activity taking place.
- 18.4.4 The closest residential properties to the construction zone are 500 metres away and the ES therefore concludes that construction activities are unlikely to result in significant adverse effects on that sensitive receptor. The noisiest construction activity is expected to be piling, particularly if impact piles are used. Noise levels arising from piling are expected to be 40 dB LAEQ at any surrounding area, which in ES terms is considered to be a negligible impact during the day time and a minor adverse impact at night time, which equates to a slight adverse effect on the nearest residential areas and a negligible impact on other receptors such as the Saxon Shore Way and Kemsley school, neither of which are significant impacts.
- 18.4.5 Construction vehicles, when modelled against existing traffic flow levels, are expected to create a noise increase of less than 1dB on the majority of road links to the site, with the exception of Barge Way West to Fleet End Roundabout, where a 5dB increase is anticipated during a Sunday daytime. That is primarily due to the low level of vehicles using that link, which is well separated from any residential receptors. There are no significant cumulative effects identified to arise from a combination of construction vehicles arising from different construction projects.
- 18.4.6 Vibration levels decrease rapidly with distance due to energy absorption by soil and other obstacles and discontinuities. The plant proposed to be used in the construction of K4 would only be expected to create low levels of vibration and the distance from the nearest residential receptors ensures that no significant effects are expected.
- 18.4.7 Both construction noise and vibration will be managed nonetheless through the CEMP, which is the subject of Requirement 7 of the draft DCO. Requirement 8 manages construction vehicle noise through the requirement for a Construction Traffic Management Plan. Requirement 10 then specifies construction hours as being 0700 to 1900 Monday to Friday and 0700 to 1600 on Saturdays, Sundays and bank holidays unless emergency works or works which are inaudible at the DCO boundary are taking place.

### Operation

- 18.4.8 The assessment of noise levels within the ES demonstrates that under normal operating conditions there would be no significant effect on nearby residential receptors, with an increase of no more than 0.3 dB arising from K4 compared to the current baseline situation and no potential identified for significant cumulative operational effects to occur.
- 18.4.9 Should the paper mill not require heat whilst K4 is operational then the dump condenser array would be used for process cooling. The dump condenser is considered to be a significant additional source of noise, but would result in only a 1 dB increase in background noise levels which is also considered not to be a significant effect on residential receptors.
- 18.4.10 In the case of an emergency event, such as the failure of the turbine, steam valve safety systems would be used to vent steam to the atmosphere. The ES assesses the noise levels arising from that process as being a major adverse impact, with absolute noise levels



- approaching 60 dB L<sub>AEQ</sub> at residential receptors, which could result in sleep disturbance and general annoyance.
- 18.4.11 However, the anticipated infrequency of steam release for K4 will be less than for K1, which is historically approximately 3 to 4 times a year for a duration of approximately 60 to 90 seconds on each occasion, due to the of provision of a steam condenser (not an existing feature of K1). In the consideration of context required by BS 4142:2014, it is considered that this infrequency of occurrence would not constitute a moderate or major significant impact. Consequently, the steam release occurrence is considered no more than slight adverse effect.
- 18.4.12 No significant vibration effects are expected to arise at the operational stage, due to design measures to minimise vibration and the distance to sensitive receptors.

# 18.5 Draft DCO Requirements

- 18.5.1 Draft DCO Requirement 7 requires a CEMP to be prepared and agreed for all elements of the construction works associated with the proposed development, to manage the impacts of construction works.
- 18.5.2 Draft DCO Requirement 8 requires a Construction Traffic Management Plan to be agreed with the local authority, to manage the impact of construction traffic on the surrounding area.
- 18.5.3 Draft DCO Requirement 10 then specifies construction hours, to manage the issue of noise during the construction stage.

#### 18.6 Summary

- 18.6.1 No significant effects are expected to arise on sensitive receptors from noise or vibration arising from on-site construction activities or construction vehicle movements. At the operational stage no significant effects are expected from vibration at any time and from noise during normal operating conditions or when the dump condenser is functioning.
- 18.6.2 The use of emergency steam release valve safety systems would create a significant adverse noise impact. However that is already an infrequent occurrence for the K1 CHP plant and the dump condenser included within the K4 design ensures that the proposed position is a betterment of the situation which currently exists by further reducing the need for emergency high pressure steam venting.
- 18.6.3 Notwithstanding the above Requirements are proposed which would control construction working hours, general construction activities and construction vehicle movements. The lack of any significant effects, other than in emergencies, ensures that the proposed scheme complies entirely with EN-1 and EN-2 in respect of noise and vibration.



# 19 Socio-Economic

#### 19.1 EN-1

19.1.1 Section 5.12 of EN-1 recognises that energy infrastructure can create socio-economic impacts at local and regional levels and states if that is considered to be the case those impacts should be assessed within the ES.

# 19.2 Appraisal

- 19.2.1 In the case of K4 it was not considered that socio-economic impacts warranted consideration within the ES and this topic was therefore scoped out.
- 19.2.2 The proposed K4 plant would create some direct positive socio-economic impacts at the construction stage with around 200 construction jobs to be generated by the development at its peak. At the operational stage K4 would be managed by existing operatives involved in the management of the current mill energy infrastructure.
- 19.2.3 There are some likely secondary socio-economic effects arising from the proposed development, albeit those are difficult to quantify. Those would arise as a result of K4 providing the Kemsley Paper mill with a secure, flexible and economic supply of electricity and heat which therefore makes a contribution to the mill remaining competitive within the European and UK paper and packaging market. That in turn has a social benefit in making a contribution to the job security of the circa 400 people employed at the mill.
- 19.2.4 There are no detrimental socio-economic effects identified as a result of the proposed development and it is therefore submitted that some positive weight can be afforded in favour of the proposal, although it is acknowledged that any weight afforded would be very limited, particularly when taken against the assertion at 5.12.7 of EN-1 that limited weight is to be afforded to social economic impacts which are not supported by evidence.



# 20 Traffic and transport

#### 20.1 EN-1

- 20.1.1 Section 5.13 of EN-1 sets out that the impact of the transport of materials, goods and personnel to and from a project, during all project phases, can have impacts such as congestion, leading to secondary impacts such as economic, social and environmental effects. It concludes that the consideration and mitigation of transport impacts is an essential part of the Government's wider policy objectives for sustainable transport.
- 20.1.2 The test applied by EN-1 is that any substantial impacts on the surrounding transport infrastructure should be mitigated, including during construction. Mitigation measures identified in EN-1 include planning obligations and requirements and management measures such as seeking more sustainable forms of transport and controlling the number of HGV movements. EN-1 states that providing an applicant is prepared to enter into obligations or requirements to mitigate transport impacts then consent should not be withheld and appropriately limited weight applied to any residual effects on the surrounding transport infrastructure.

# 20.2 Other Planning Policy

#### **NPPF**

20.2.1 Chapter 4 of the NPPF promotes sustainable transport. Paragraph 32 of the NPPF makes clear that development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.

#### The Swale Local Plan-Bearing Fruits 2013

20.2.2 Policy CP2 promotes sustainable transport and requires developers to contribute to transport network improvements if capacity is to be exceeded or safety standards would be unacceptably compromised. Policy DM6 seeks to manage transport demand and impact and requires a Transport Assessment to be prepared if development proposals would generate a significant amount of transport movements.

# 20.3 Appraisal

20.3.1 In accordance with EN-1 a Transport Assessment has been prepared by RPS, and Traffic and Transport is dealt with at Chapter 4 of the ES.

#### **Context**

20.3.2 There are two existing vehicular accesses to the mill, both reached via the A249, which links to both the M2 and M20. Swale Way provides access to the western entrance and Barge Way provides access to the northern entrance. From the junction with the A249 Swale Way passes residential areas of Kemsley to the south and west and commercial and industrial areas to the north before reaching the southern mill entrance. To the north Swale Way and then Barge Way pass areas either developed or allocated for commercial and industrial development.



- 20.3.3 There is a good provision of footway and cycleways along Barge Way and Swale Way, which in turn provide access to wider residential areas of Sittingbourne. Off and on road cycle routes are also present in the vicinity and provide access locally to the Kemsley and Sittingbourne areas.
- 20.3.4 The closest bus stop is 1km west of the site and provides services into Sittingbourne. Kemsley railway station is 2km west of the site and provides services to Sheerness and to Sittingbourne, which then in turn provides services to London, Ramsgate and Dover.

#### **Normal Construction Traffic**

- 20.3.5 It is expected that there will be an average of 100 staff on site during the construction programme, with a peak of 200 staff during early groundworks and foundation works. The construction of K4 is expected to generate between 25 to 30 HGV deliveries per day, with a peak of up to 40 HGV deliveries anticipated during the early groundwork and foundation work period.
- 20.3.6 A modal share has been assumed within the ES and Transport Assessment which would generate an average of 85 construction staff arriving and departing by car each day from the K4 site, with 170 staff travelling by car at the construction peak. The movement of construction staff on the highway has been assessed based on the working hours proposed within the draft DCO, whilst HGV movements have been spread equally across the working week. Whilst the origin of HGV's is likely to change depending on the construction activity taking place and the contractors involved, the routing of HGV's near to the Kemsley paper mill is expected to be via the A249, Swale Way and Barge Way, due to the proximity of the A249 as a key arterial route through the area. At the wider context HGV's would be expected to route along the M2 and M20.
- 20.3.7 The ES concludes that there would be a negligible impact of average construction traffic on the adjacent highway network, based on the percentage increase in traffic over existing flows which would arise from the proposed development together with other cumulative developments in the surrounding area.

# Abnormal indivisible loads

- 20.3.8 The HGV deliveries discussed at 20.3.6 include an estimated 15 abnormal loads which would be delivered to site under police or contractor escort.
- 20.3.9 The ES separately assesses the ability of the abnormal indivisible loads which would be required to have likely significant environmental effects, given their potential to be slow moving and to cause delay. It concludes that there would not be any adverse effects arising from abnormal loads in terms of traffic noise and vibration, disruption and driver delay, risk of accidents, dust and dirt, visual effects or pedestrian severance, intimidation and delay.

#### **Operational Development traffic**

20.3.10 When operational K4 would only generate the need for occasional ad-hoc maintenance vehicles and as such no formal assessment is required as there will be no impact on the road network.



# 20.4 Draft DCO Requirement

20.4.1 Draft DCO Requirement 8 requires a Construction Traffic Management Plan to be agreed prior to the commencement of construction to mitigate any impacts of vehicles associated with construction.

# 20.5 Summary

20.5.1 Construction traffic arising from the project has been assessed as having an imperceptible impact on the surrounding road network, with only ad-hoc maintenance vehicles required at the operational stage. In respect of EN-1 the development will not create substantial impacts on surrounding transport infrastructure, and in respect of the NPPF there will be no residual cumulative highways impacts arising from the proposed development. Notwithstanding that position, the draft DCO makes provision for a Construction Traffic Management Plan to control the impacts of construction traffic on the surrounding highways networks and local receptors.



# 21 Waste Management

#### 21.1 EN-1

21.1.1 Section 5.14 of EN-1 establishes the principle of protecting human health and the environment by producing less hazardous and non-hazardous waste and by using it as a resource whenever possible. The waste hierarchy comprises prevention, preparing for reuse, recycling, other recovery and disposal. EN-1 recommends that a Site Waste Management Plan be produced, to include an assessment of waste recovery and disposal and the capacity of waste management facilities to deal with any waste arising for five years of operation. Applicants are expected to minimise the volume of waste produced and sent for disposal unless it can be demonstrated that is the best environmental outcome.

# 21.2 Other Planning Policy

#### The Swale Local Plan-Bearing Fruits 2013

21.2.1 Policy DM19 deals with sustainable design and construction and promotes waste reduction, re-use and recycling during construction and throughout the lifetime of the development.

### 21.3 Appraisal

- 21.3.1 EN-1 acknowledges that the Environmental permitting regime will cover waste management during operation, and no further assessment is needed of that element given EN-1 also makes clear it is not intended that the DCO process duplicate other regulatory regimes.
- 21.3.2 At the construction stage draft DCO Requirement 7 requires a CEMP to be prepared and agreed for all elements of the construction works associated with the proposed development, to manage the impacts of construction works, which will include measures to reduce waste arising from the construction process. Those measures will include the principal contractor being responsible for waste segregation, storage and collection of onsite waste.



# 22 Water quality and resources

#### 22.1 EN-1

- 22.1.1 Section 5.15 of EN-1 discusses potential adverse impacts on groundwater, inland surface water, transitional waters and coastal waters at the construction, operation and decommissioning stages due to increased water demand and discharges to water.
- 22.1.2 EN-1 recognises that water discharge and abstraction activities are addressed by separate permitting and licensing regimes and notes therefore that it is any adverse impact on the objectives of the Water Framework Directive which will be considered within the decision making process on a DCO.

# 22.2 Other Planning Policy

#### **NPPF**

22.2.1 Paragraph 121 of the NPPF states that planning decisions should ensure that a site is suitable for its new use, taking into account pollution arising from previous uses and any land remediation required.

### 22.3 Appraisal

- 22.3.1 Water Environment is dealt with at Chapter 9 of the ES. A discussion of potential spills or contamination on the water environment is dealt with in Chapter 17 of this Statement and flood risk is dealt with at Chapter 14.
- 22.3.2 Currently clean surface water arising from the existing site is directed via a drainage pipe network to an outfall on the eastern extent of the access road. Water then flows through an open channel before discharging into the Swale via an open outfall. DS Smith hold a groundwater abstraction licence together with a licence for the discharge of treated process water to the Swale estuary.
- 22.3.3 At the construction stage measures will be introduced to intercept any run-off and to ensure that surface water discharges from the construction site are controlled in both quality and volume. Water quality monitoring will be carried out during construction to ensure no increase in suspended sediment levels or discharge of pollution occurs.
- 22.3.4 Similar drainage controls will be incorporated into the final design, to ensure the quality of discharge at the operational stage. The discharge of process water will then continue to be controlled by the parameters within the existing discharge licence, which includes a limit on the temperature of discharge. It is anticipated that K4 will produce a lower volume of waste water than K1, by virtue of its smaller size, and it is therefore expected it will continue to operate within the existing permit limits without variation.
- 22.3.5 K4 will used abstracted groundwater stored within the lagoons to the south-east of the proposed site. Again by virtue of its smaller size K4 would use less water and DS Smith will therefore no need to vary their existing abstraction licence.



# 22.4 Draft DCO Requirements

- 22.4.1 Requirement 7 makes provision for a Construction Environmental Management Plan which will include elements relating to the control and management of surface water drainage during the construction stage.
- 22.4.2 Draft DCO Requirement 11 then requires details of foul and surface water drainage to be approved prior to the relevant stages of works. That requirement includes reference to Table 9.17 within the ES which makes provision for a Surface Water Management Plan at the construction stage and a Drainage Maintenance Plan, Emergency Spillage Management Plan and Water Quality Monitoring Strategy to be prepared to ensure water quality is maintained at both the construction and operational stages.
- 22.4.3 Draft Requirement 12 makes further provisions in respect of contaminated land and groundwater by requiring a piling risk assessment, details of ground gas protection measures and making provision should previously unidentified contaminated land be found.

# 22.5 Summary

22.5.1 The proposed development would not have any detrimental impact on water quality due to the continued management of surface water run off during both the construction and operational stages. By virtue of its smaller size both the process discharge and water usage of K4 is expected to be less than that currently licenced for K1, and as such there would a small improvement over the current situation in those areas. In accordance with EN-1 the DCO includes appropriate requirements which mitigate any potential adverse impacts on the water environment.



# 23 Summary and Conclusions

#### 23.1 Context

- 23.1.1 Section 104 (3) of The Planning Act 2008 (as amended) states that the SoS must decide a DCO application in accordance with the relevant NPS, except to the extent that one or more of the specific circumstances set out within that section applies.
- 23.1.2 Section 104 (2) states that the Secretary of State must also have regard to any local impact report, any matters prescribed in relation to the development and any other matters which are considered both important and relevant to the decision.

# 23.2 The Planning Balance

- 23.2.1 As demonstrated by the ES and as summarised in this Planning Statement the proposed development is environmentally benign, with very limited likely significant effects anticipated. The only significant adverse effect identified is a slight cumulative adverse impact in visual terms on users of the Saxon Shore Way footpath and arises where there is already a cumulative adverse impact identified. The issue of visual impact is afforded limited weight by EN-1, which acknowledges that energy infrastructure will have some adverse visual impact. The ES concludes that there would be a significant beneficial effect in respect of reduced greenhouse gas emissions, when compared with a future baseline which would occur if K4 were not constructed.
- 23.2.2 Appropriate requirements are proposed within the draft DCO to manage and control the environmental impacts of the proposal by bringing forward any specific mitigation measures identified within the ES.
- 23.2.3 The proposed development therefore conforms with the guidance set out within EN-1 and EN-2 in respect of the generic environmental impacts expected to arise from energy infrastructure and those specifically related to fossil fuel electricity generating infrastructure.
- 23.2.4 EN-1 and EN-2 set out to meet the urgent need for all types of energy infrastructure within the UK, which reflects factors such as existing generation capacity closing and the need for energy security at a time when the UK is making the transition to a supply based on renewable energy sources. EN-1 and EN-2 both make explicit the fact that gas fired CHP has a role to play in that transition and note how appropriate that technology is for certain industrial users.
- 23.2.5 However the focus of EN-1 and EN-2 is on new electricity generating infrastructure designed to meet that national need. On that basis EN-1 makes clear the substantial weight which should be given to the contribution projects would make towards satisfying the urgent need for all types of infrastructure when considering applications for development consent, against the context at 3.2.3 that it will not be possible to develop the necessary amount of such infrastructure without some significant residual adverse impacts.
- 23.2.6 K4 is a Nationally Significant Infrastructure Project by virtue of its generating capacity, as per the Planning Act 2008. However in real terms it is replacement energy infrastructure to



serve an industrial end user with only minimal electricity export expected to the grid, and in physical terms it is a very modest addition to the substantial established Kemsley Paper Mill. In that respect it does not fit particularly neatly into the policy framework established by EN-1 and EN-2, albeit it can be afforded some limited weight on the basis of being capable at times of exporting electricity to the grid.

- 23.2.7 However the ability for an established industrial end user to continue to benefit from a secure, flexible and economical energy supply by replacing existing and outdated on-site energy infrastructure is something which should be supported in principle. In the case of K4 that is particularly true given that EN-1 and EN-2 recognise both the continued role of gas fired electricity generation within the UK for the foreseeable future, and acknowledge the benefits of CHP, with those benefits even more prevalent within the context of a paper mill due to the increased efficiencies which result.
- 23.2.8 In this case the alternative of upgrading the existing infrastructure, whilst possible in theory, is both not ideal as a long term strategy and is technically difficult, and the provision of a new CHP plant would carry environmental benefits over that approach. There are no significant residual effects which outweigh the benefits identified of K4, even without being able to afford substantial weight to any contribution being made to the national need for energy infrastructure.
- 23.2.9 The planning balance is therefore in favour of the proposed development, which is also in full conformity with EN-1 and EN-2. EN-1 sets out a clear presumption in favour of granting consent to energy NSIP's, unless more specific and relevant policies indicate consent should be refused or the tests within Section 104 of the Planning Act apply.

# 23.3 The National Policy Statements

- 23.3.1 In this case there is nothing to prevent the SoS determining the application in accordance with the relevant NPS's (EN-1 and EN-2) since to do so would not lead to the UK breaching its international obligations, be in breach of any statutory law, be unlawful or be contrary to any other regulations.
- 23.3.2 As set out above the proposed development does not then give rise to any adverse impacts which would outweigh its benefits.

#### 23.4 Other matters

- 23.4.1 Section 104 states that the Secretary of State must also have regard to any local impact report, any matters prescribed in relation to the development and any other matters which are considered both importance and relevant to the decision.
- 23.4.2 As demonstrated by the Consultation Report the level of local public interest in the proposed scheme has been minimal, with very few objections raised. The proposed development would not give rise to any environmental effects which would significantly effect the amenity of those people living in, working in or using the surrounding area.
- 23.4.3 K4 does not conflict with any other national or local planning policies or with existing or planned land uses, and is supported by those policies at the national level which promote continued economic development.



23.4.4 The proposed development does not conflict or create any significant adverse impacts in respect of the prescribed matters set out within the Infrastructure Planning (Decisions) Regulations 2010. The assessment in respect of listed buildings, conservation areas and scheduled monuments is set out in Chapter 12 of the ES and summarised in Chapter 15 of this Statement. The prescribed matters in respect of the Coast Protection Act 1949, the Food and Environment Act 1985 or in respect of hazardous substances or biological diversity are not affected.

#### 23.5 Conclusion

23.5.1 The planning balance is in favour of the proposed development, which is in full conformity with EN-1 and EN-2. On that basis it is submitted that the order granting development consent should be made as proposed.



# **APPENDIX A**

# **Swale Borough Local Plan Proposals Map and Key**

# Key to the Proposals Maps **Borough Boundary** Built-up area boundary ST3 **Existing Committed Employment Allocations A1 Existing Committed** Housing Allocations A7 Proposed Employment Allocations ST4 Proposed Housing Allocations ST4 Proposed Mixed Use Allocations ST4 Proposed Regeneration Areas ST4 Faversham Creek Neighbourhood Plan NP1 Safeguarded Area of Search for Sittingbourne Northern Relief Road AS1 Town Centre Boundary DM1 Primary Shopping Area DM2 Secondary Shopping Area DM2 Holiday Parks DM4 Proposed Local Green Spaces DM18 Coastal Change Management Area DM23 Erosion Zone 1 DM23 Erosion Zone 2 DM23 Kent Downs Area of Outstanding Natural Beauty DM24 Areas of High Landscape Value (Kent Level) DM24 Areas of High Landscape Value (Swale Level DM24) Important Local Countryside Gaps DM25 Rural Lane DM26 International & National Designated Site of Biodiversity &/or Geological Value DM28 National Site Designated Solely for Biodiversity &/or Geological Value DM28 Local Designated Site of Biodiversity DM28 ( inc. roadside nature reserve) Scheduled Monument DM34 Historic Parks and Gardens DM35 Area of High Townscape Value DM36

