

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



Statement of Statutory Nuisances

Document 5.4

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Statement of Statutory Nuisances

Client: **DS Smith Paper Ltd**

Project: The Kemsley Mill K4 Combined Heat

and Power Generating Station DCO

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1 Introduction

1.1 Purpose of this document

- 1.1.1 This Statement has been prepared on behalf of DS Smith Paper Ltd in support of an application for a Development Consent Order (a 'DCO'), that has been submitted to the Secretary of State (the 'SoS') for Business, Energy and Industrial Strategy, under The Planning Act 2008.
- 1.1.2 The purpose of this document is to comply with Regulation 5(2)(f) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009, which requires applications for DCO's to be accompanied by a Statement setting out whether the development proposal could cause a statutory nuisance pursuant to Section 79(1) of the Environmental Protection Act 1990 (EPA) and if so, how the applicant proposes to mitigate or limit them.
- 1.1.3 Section 158 of the Planning Act 2008 confers statutory authority for carrying out development consented by, or doing anything else authorised by, a development consent order and provides a defence against any civil or criminal proceedings for nuisance. This would include a defence for proceedings for nuisance under Part III of the Environmental Protection Act 1990 (statutory nuisance) but only to the extent that the nuisance is the inevitable consequence of what has been authorised.
- 1.1.4 The draft DCO provides, at Article 8, defence for the developer against proceedings by an aggrieved person (i.e. not the local authority) in respect of statutory nuisance, including where it cannot reasonably be avoided when it arises a) as a consequence of the construction or maintenance of the proposed development or b) as a consequence of the use of the proposed development.
- 1.1.5 In accordance with the National Planning Policy Statement for Energy (EN1):
 - "It is very important that, at the application stage of an energy NSIP, possible sources of nuisance under section 79(1) of the 1990 Act and how they may be mitigated or limited are considered by the Infrastructure Planning Commission so that appropriate requirements can be included in any subsequent order granting development consent."
- 1.1.6 This Statement identifies the relevant potential nuisances set out in Section 79(1) of the Environmental Protection Act (EPA) 1990 to the proposed development, sets out what (if any) mitigation is proposed to prevent the potential nuisance and concludes as to whether the proposed development could cause statutory nuisance following mitigation.

1.2 The Applicant

- 1.2.1 DS Smith Paper Ltd (DS Smith) is the applicant for the purposes of the DCO application.
- 1.2.2 DS Smith is a European manufacturer of recycled corrugated case materials and speciality papers. The company operate nine paper mills across Europe, with Kemsley their only mill within the UK. The entire site is owned by DS Smith, who have invested heavily in modernising the facility, which now employs around 400 people and has an annual production capacity of up to 800,000 tonnes of recycled paper/case materials.



1.3 E.ON and Costain

- 1.3.1 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'.
- 1.3.2 E.ON (Kemsley CHP Limited) have employed Costain to act as their advisors in respect of the technical design of K4 and based on the current exclusivity agreement Costain would therefore be the main site contractor for the construction of K4. Costain is a long established civil engineering company well versed in best practice and the legal requirements of construction activity and is a member of the Considerate Constructors Scheme. Companies registered with the Scheme are obliged to consider appearance, respect the community, protect the environment, and secure everyone's safety as set out in the schemes Code of Practice.



2 Proposed development

2.1.1 This section briefly sets out the background to the proposed development, describes the site and outlines the development proposals. Further details are available in the Environmental Statement [Document 3.1] and Planning Statement [Document 5.1] submitted in support of the DCO application.

2.2 Background

2.2.1 The paper production process is energy intensive and requires a substantial amount of electricity and steam. The energy and steam requirements of the Kemsley Mill are provided by a range of sources, operated by either DS Smith or partner companies.

The power sources are:

- 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 under construction to be operated by Wheelabrator to the east of the main mill complex which from 2019 will provide steam to the mill. (It should be noted that K3 is an entirely separate proposal from the K4 scheme which forms the subject of this DCO).
- 2.2.2 The K1 plant is 22 years old and is operated under a contract by E.ON (Business Heat and Power). DS Smith have assessed the condition of K1 and is aware that it will require significant investment into the gas turbine, waste heat recovery boilers and steam turbine which would not be proportional to the length of extended life achieved. By the time the DCO process has been completed and K4 fully commissioned K1 will be nearly 25 years old. Moreover, K1 is oversized for its existing use sized originally to provide energy to the now redundant Sittingbourne Mill in the centre of Sittingbourne and therefore inefficient.

2.3 The Site

- 2.3.1 The Site lies adjacent to the south east corner of the existing Kemsley Paper Mill approximately 600m west of the Swale Estuary and north of Milton Creek in the Borough of Swale, Kent. The main part of the Site is roughly triangular in shape and consists almost entirely of existing concrete hardstanding. Figure 1 shows the Site location and application boundary.
- 2.3.2 The Site is accessed from the A249 via Swale Way and Barge Way into the Paper Mill. An internal access road provides access to the Site.
- 2.3.3 The Site lies immediately east of the Kemsley residential suburb of Sittingbourne with the town centre some 2.5km south of the Site.



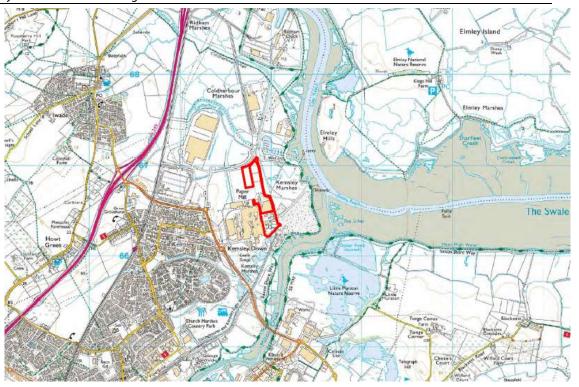


Figure 1: Site location

2.4 Proposed Development

2.4.1 DS Smith Paper Limited ("the Applicant") is seeking permission to decommission an existing gas fired Combined Heat and Power ("CHP") Plant ("K1") and build a new gas-fired CHP plant ("K4") with a nominal power output of 68-73 megawatts (the "Proposed Development") on DS Smith owned land ("the Site") to be operated by DS Smith and/or other companies to supply electricity and steam to their existing Kemsley Paper Mill, in Sittingbourne, Kent ("The Mill") with any excess power being exported to the National Grid.



3 Matters Considered by Section 79 of the EPA (1990)

- 3.1.1 Section 79(1) of the EPA 1990 identifies the following matters that are said to be 'statutory nuisances':
 - (a) any premises in such a state as to be prejudicial to health or a nuisance;
 - (b) smoke emitted from premises so as to be prejudicial to health or a nuisance;
 - (c) fumes or gases emitted from premises so as to be prejudicial to health or a nuisance;
 - (d) any dust, steam, smell or other effluvia arising on industrial, trade or business premises and being prejudicial to health or a nuisance;
 - (e) any accumulation or deposit which is prejudicial to health or a nuisance;
 - (f) any animal kept in such a place or manner as to be prejudicial to health or a nuisance;
 - (fa) any insects emanating from relevant industrial, trade or business premises and being prejudicial to health or a nuisance;
 - (fb) artificial light emitted from premises so as to be prejudicial to health or a nuisance;
 - (g) noise emitted from premises so as to be prejudicial to health or a nuisance;
 - (ga) noise that is prejudicial to health or a nuisance and is emitted from or caused by a vehicle, machinery or equipment in a street;
 - (h) any other matter declared by any enactment to be a statutory nuisance;
- 3.1.2 "Noise" includes vibration for the purposes of Section 79(1) of the EPA 1990.
- 3.1.3 A full Environmental Impact Assessment of the proposed development has been undertaken in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, the results of which are presented in the Environmental Statement [Document 3.1] submitted as part of a suite of documents submitted in support the DCO application.
- 3.1.4 With reference to the above it is considered that the relevant potential nuisances to the proposed development relate to parts a, c, d, fb, g and h only.
- 3.1.5 This document sets out the likely nuisances the proposed development could potentially give rise to and how and where this has been addressed in the ES and any mitigation measures proposed within the draft DCO [Document 2.1] to avoid or reduce this effect.
- 3.1.6 Further details on the assessment of environmental effects and mitigation measures proposed can be found in the full ES.



4 Assessment of Matters set out in Section 79(1) of the EPA (1990)

4.1 Part 1a

Any premises in such a state as to be prejudicial to health or a nuisance

- 4.1.1 There is no definition or guidance on what the exact meaning of 'any premises in such a state as to be prejudicial to health or a nuisance' set out in part 1a albeit it is generally considered to relate to poor management and/or housekeeping that may lead to a statutory nuisance or be detrimental to health.
- 4.1.2 A draft Construction Environmental Management Plan has been submitted as Appendix 2.1 of the Environmental Statement [Document 3.1]. The purpose of the CEMP is to:
 - Ensure compliance with current legislation and contemporary best practice;
 - Effectively minimise any potential adverse environmental effects during construction including how site-specific method statements will be developed to avoid, minimise and mitigate construction effects on the environment;
 - Translate committed mitigation, set out in the ES, into committed site procedure.
- 4.1.3 Requirement 7 of the draft DCO requires a full detailed CEMP to be submitted to and approved in writing prior to the commencement of the development. By taking that approach the probability of statutory nuisance occurring through poor maintenance or housekeeping of the site during construction is considered negligible. Matters relating to dust and noise are addressed under the relevant headings of this report where appropriate.
- 4.1.4 Once completed the site will be regulated by the Environment Agency under the Environmental Permitting Regulations (England and Wales) Regulations 2016. The environmental permit will set conditions to control effects on land, water and air which by existence necessitate good management and maintenance of the site and its operation.
- 4.1.5 To further safeguard the above the water environment assessment in the ES sets out that the following documents should be produced and implemented to safeguard the water environment for the lifetime of the development and include a:
 - Drainage maintenance plan;
 - Flood management plan;
 - Emergency spillage management plan;
 - Water quality monitoring strategy;
 - Operational management plan.



- 4.1.6 Requirement 11 of the DCO states that details of surface and foul water drainage are to be submitted to and approved by the planning authority and constructed in accordance with the approved details, and includes reference to the elements listed above.
- 4.1.7 On the basis of the above the potential for statutory nuisance to occur through poor maintenance or housekeeping of the site during operation is considered negligible.

4.2 Part 1c

Fumes or gases emitted from premises so as to be prejudicial to health or a nuisance

- 4.2.1 The plant would be designed and operated in accordance with the requirements of the Industrial Emissions Directive (2010/75/EU) which requires adherence to emission limits for a range of pollutants.
- 4.2.2 The combustion of gas produces nitrogen dioxide and therefore there is a need to discharge the flue gases through an elevated stack to allow dispersion and dilution of the residual combustion emissions. A stack height determination exercise has been undertaken and a stack height of 70m subsequently proposed as part of the proposed development to ensure that pollutant concentrations are acceptable by the time they reach ground level.
- 4.2.3 The air quality assessment presented in Chapter 5 of the ES and associated appendices demonstrates that the proposed development will have a negligible effect on air quality on all identified receptors and national air quality objectives will be met across the entire zone of influence of the proposed development.
- 4.2.4 No gases emitted from the proposed development prejudicial to health or likely to result in a statutory nuisance will therefore occur.

4.3 Part 1d

Any dust, steam, smell or other effluvia arising on industrial, trade or business premises and being prejudicial to health or a nuisance

- 4.3.1 A full dust risk assessment has been undertaken and is set out in Chapter 5 of the ES.
- 4.3.2 The result of this assessment concludes that the predicted Dust Impact Risk is classified as low in accordance with the Institute of Air Quality Management's Guidance on the assessment of dust from demolition and construction (2016). The IAQM dust guidance lists mitigation measures for low, medium and high dust risks.
- 4.3.3 The measures listed below are based on the IAQM dust guidance 'highly recommended' measures for low risk sites. These mitigation measures are included in the outline CEMP provided as Appendix 2.1 of the ES.

Preparing and maintaining the site

 Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible;



- Avoid site runoff of water or mud;
- Operating vehicle/machinery and sustainable travel;
- Ensure all vehicles switch off engines when stationary no idling vehicles.

Operations

• Use enclosed chutes and conveyors and covered skips.

Waste management

Avoid bonfires and burning of waste materials.

Communications

- Display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary. This may be the environment manager/engineer or the site manager;
- Display the head or regional office contact information.

Site Management

- Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken;
- Make the complaints log available to the local authority when asked;
- Record any exceptional incidents that cause dust and/or air emissions, either onor off-site, and the action taken to resolve the situation in the log book.

Monitoring

- Carry out regular site inspections to monitor compliance with a Dust Management Plan, record inspection results, and make an inspection log available to the local authority when asked.
- 4.3.4 The plant is not expected to give rise to dust or odour emissions during operation as natural gas fuel does not generate dust during combustion and also because there is not envisaged to be any loss or release of unburned gas during normal operation.
- 4.3.5 Steam is produced as part of the CHP process to maximise the energy efficiency of the plant and to provide steam to DS Smith as part of the paper making process. The proposed development includes a dump condenser which essentially cools and condenses any excess steam produced before being recycling in the CHP process. This is essentially a sealed cycle whereby steam is not directly released to air except in the event of an emergency through the emergency release valve.
- 4.3.6 Any steam release to air would be an emergency event and not part of the normal operation of the plant. The existing K1 plant typically requires emergency steam release to occur approximately 3 to 4 times a year, for a duration of between 60 and 90 seconds. The



provision of a steam condenser within the proposed K4 development, which is not present within the K1 CHP plant, would reduce the instances of emergency steam below the current levels. The infrequency and duration of the emergency events, and moreover the distance of circa 600m to the nearest residential receptors, means that only a slight adverse effect is identified in EIA terms which is not considered sufficient to give rise to a statutory nuisance.

4.4 Part 1fb

Artificial light emitted from premises so as to be prejudicial to health or a nuisance

- 4.4.1 The Proposed Development is not yet at the detailed design stage. A detailed lighting design and specification will be prepared by a specialist lighting contractor at the detailed design stage and will be designed to best practice guidance, including British Standard EN12464-2:2014 Lighting Lighting of Work Places, Outdoor works and Charted Institution Building Service Engineers (CIBSE) Lighting Guide 6 The Exterior Environment.
- 4.4.2 Contemporary lighting schemes minimise light spill and reduce lateral and vertical light spill from the source and the ability to minimise these is wholly achievable within the scope of any modern lighting scheme.
- 4.4.3 Furthermore, given the context of the site i.e. adjacent to an existing lit industrial complex and the relative distance to the nearest residential receptors the risk of statutory nuisance from the lighting of the proposed development is considered negligible.
- 4.4.4 Requirement 9 of the draft DCO states that a scheme for the management and mitigation of artificial light emissions during construction, operation and decommissioning shall be submitted to and approved by the relevant planning authority and implemented as approved.

4.5 Part 1g

Noise emitted from premises so as to be prejudicial to health or a nuisance

- 4.5.1 A full noise and vibration assessment has been undertaken and is provided in Chapter 7 of the ES submitted with the DCO application.
- 4.5.2 Construction activities will be undertaken during normal construction working hours of 07:00 and 19:00 on weekdays and 07:00 to 16:00 on Saturdays and Sundays and this is secured by Requirement 10 of the draft DCO. Even for the nosiest construction activity (impact piling), noise levels are predicted to be a maximum of 40 dB LAeq at any surrounding residential area, as determined by the noise model.
- 4.5.3 The assessment concludes that construction works on site would not result in any significant impact within the surrounding residential area. Notwithstanding this, best practicable means to reduce construction noise impact will be implemented to minimise any potential for disturbance to the surrounding area. These are included within the relevant section of the outline CEMP provided in Appendix 2.1 of the ES.
- 4.5.4 Requirement 7 of the draft DCO requires a full detailed CEMP to be submitted to and approved in writing prior to the commencement of the development and on that basis statutory noise nuisance is not considered likely.



- 4.5.5 With regard to vibration during construction the nearest residential properties are over 500 m from the main construction area of K4. From BS 5228-2, vibration levels decrease rapidly with increasing distance and is also attenuated by energy absorption in the soil and by obstacles and discontinuities. Given the separation between the K4 site and the nearest residential receptors, vibration from construction activities will be significantly below the minor significance criteria. As such, vibration is considered to have no or negligible impact magnitude, and will have no significant adverse effect.
- 4.5.6 During normal operation of the proposed development no significant effect on residential amenity is predicted. Given the separation between the K4 site and the nearest residential receptors, vibration from operational activities will be significantly below the negligible significance criteria. As such, vibration is considered to have no or negligible impact magnitude, and will have no significant adverse effect.
- 4.5.7 During extraordinary or emergency operation, necessitating the use of the steam release valve noise levels approaching 60 dB LAeq are predicted at neighbouring residences. The Proposed Development will replace the existing CHP plant (K1) and, as noted in Paragraph 4.3.6 of this Statement, records provided by DS Smith Ltd indicate that the emergency release valve on K1 is used approximately 3 to 4 times a year for duration of approximately 60 to 90 seconds.
- 4.5.8 The proposed development has been designed to include an oversized dump condenser. This acts to accommodate any foreseeable volume of excess steam the CHP plant might produce in the event of a planned or unplanned reduction in the requirement of steam in the wider paper mill. This is not a feature of the existing CHP plant. Whilst it cannot therefore be said the emergency release valve will never be used it can be said that it will reduce the already very infrequent use of the emergency release valve associated with the existing K1 CHP plant. The ES suggests a mitigation measure in that respect, of undertaking any commissioning or testing of the steam release valves during the daytime period.
- 4.5.9 The ES concludes that there are no significant adverse residual effects arising from noise from the construction, operation or decommissioning of the proposed development, and noise is not therefore expected to give rise to statutory nuisance.

4.6 Part 1h

Any other matter declared by any enactment to be statutory nuisance

4.6.1 No other matters considered likely to result in potential statutory nuisance associated with the construction and operation of the proposed development has been identified.



5 Summary

- 5.1.1 This Statement has been prepared to fulfil Regulation 5(2)(f) of the Infrastructure Planning Regulations 2009, which requires applications for DCO's to be accompanied by a Statement setting out whether the development proposal could cause a statutory nuisance pursuant to Section 79(1) of the Environmental Protection Act 1990 (EPA).
- 5.1.2 Detailed assessments have been undertaken to assess: the condition of the site, potential air quality impacts, noise levels, and health effects amongst others generated by the proposed development during both construction and operation. These assessments are presented in the ES submitted as part of the suite of documents submitted with the DCO.
- 5.1.3 Appropriate Requirements are then proposed to take forward any mitigation measures identified into the DCO.
- 5.1.4 The DCO seeks defence against proceedings in respect of statutory nuisance through a combination of the effect of section 158 of the Planning Act 2008 and Article 8. Based on the conclusions of the ES and the Requirements proposed within the DCO that approach is considered to be justified and appropriate, as with appropriate mitigation the development proposal would not have the potential to cause a statutory nuisance, during either its construction or operation, of the types identified under Section 79(1) of the Environmental Protection Act 1990.