

Environmental Statement Volume 3: Non-Technical Summary

Wheelabrator Kemsley (K3 Generating Station) and Wheelabrator Kemsley North (WKN) Waste to Energy facility Development Consent Order

PINS Ref: EN010083

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 Regulation: 5(2)(a)

Document 3.2 September 2019 - Submission Version



Introduction

Wheelabrator Technologies Inc. ("the Applicant") has made an application to the Secretary of State for Business, Energy and Industrial Strategy (SoS) for a Development Consent Order (DCO) relating to the Wheelabrator Kemsley Generating Station ('K3'), which is currently under construction, and for a waste-to-energy facility called Wheelabrator Kemsley North ('WKN') on land adjacent to K3. Figure 1 shows the location of the two developments, which are to the north-east of Kemsley, Sittingbourne, in Kent, and the DCO boundary.

The Planning Act 2008 states that any proposal for the construction or extension of an onshore generating station in England with a generating capacity of over 50MW is a Nationally Significant Infrastructure Project for which a DCO is required from the Secretary of State.

K3 – Existing Situation

Planning permission for K3, an energy-from-waste facility with a generating capacity of 49.9MW and an annual tonnage throughput of 550,000 tonnes of waste, was granted by Kent County Council on the 6th March 2012 ("K3 as consented"). A number of material and non material amendments have been made to that original consent since then.

All construction related planning conditions have been discharged and construction of K3 began in 2016, with the facility expected to be fully operational to its consented generating capacity (49.9MW) and tonnage throughput (550,000 tonnes) by late 2019. Figure 3 of this document shows K3 as consented under construction in July 2019.

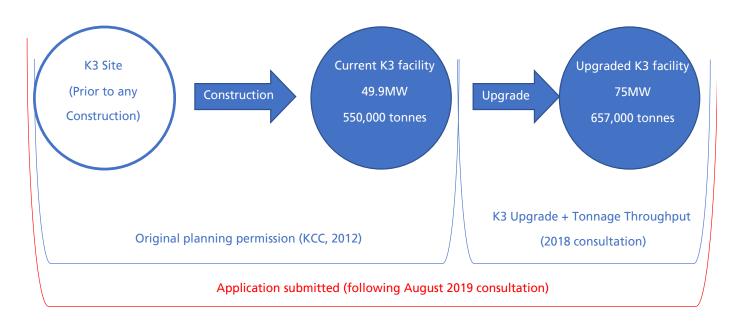
K3 – Proposed Development

The Applicant has identified that K3 as consented would be capable of processing an additional 107,000 tonnes of waste per annum and, without any change to the external layout or design, of generating an additional 25.1MW of electricity.

In order for the K3 project to be properly categorised and consented under the Planning Act 2008 the applicant is seeking consent for the construction of K3 at its total generating capacity of 75MW (49.9MW consented + 25.1MW upgrade) together with its proposed tonnage throughput of 657,000 tonnes per annum (550,000 consented + 107,000 tonnage increase) (the 'K3 Proposed Development').

However, the 'practical effect' of the K3 Proposed Development would simply allow K3 as consented to generate an additional 25.1MW and to process an addition 107,000 tonnes of waste per annum over its current consented generating and waste processing capacity.

Construction of K3 began in July 2016 and is expected to be completed with the facility operational by late 2019. The practical effect of the DCO consent sought would not result in any additional external physical changes to K3 as consented and the layout and appearance of the facility will remain as per its consented design.



WKN Proposed Development

Development Consent is also being sought for a proposed new waste-to-energy plant, Wheelabrator Kemsley North (WKN), which would be a single line facility capable of processing 390,000 tonnes of waste per annum, with a generating capacity of 42MW. WKN would be located on land immediately adjacent to K3 (the 'WKN Proposed Development").

The WKN Proposedd Development is not therefore a Nationally Significant Infrastructure Project as its generating capacity is below 50MW. Instead WTI made a formal application on the 1st June 2018 to the Secretary of State (SoS) for Business, Energy and Industrial Strategy under Section 35 of the Planning Act 2008 for a direction as to whether the WKN development together with any matters associated with it can be treated as development for which a development consent order is required. The SoS issued their direction on the 27th June 2018 confirming that the WKN Proposed Development can be treated as development for a which Development Consent Order is required.

The Application

K3 and WKN will therefore be subject to a single DCO sought under a single application to the Secretary of State (SoS) for Business, Energy and Industrial Strategy via the Planning Inspectorate.

Environmental Impact Assessment

Both the K3 and WKN Proposed Developments are of a type listed in part 10 Schedule 1 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (hereafter the EIA Regulations) as waste disposal installations for the incineration of non-hazardous waste with a capacity exceeding 100 tonnes per day.

All development of a type listed in Schedule 1 of the EIA Regulations constitute EIA Development as defined in the EIA Regulations and the application for the K3 and WKN DCO is therefore required to be accompanied by an Environmental Statement (ES), prepared in accordance with the EIA Regulations.

This document provides a non-technical summary of the results of the EIA undertaken. Members of the public who register themselves as interested parties with PINS by the relevant deadline after the acceptance of the formal application are able to make comments on the ES (details provided at the end of this document).

Proposed Development Sites

Wheelabrator Kemsley (K3) Site

The K3 Site is located on land immediately to the east of the Kemsley Paper Mill, located to the east of Kemsley, a residential suburb in the north of Sittingbourne in Kent. It lies adjacent to the Swale Estuary, with the Isle of Sheppey beyond. To the south of the site beyond K3 lies a capped former landfill site which lies adjacent to the confluence between Milton Creek and the Swale Estuary. The site lies in proximity to the A249 which links to both the M2 and M20 motorways to the south and with the Isle of Sheppey to the north.

The site benefits from planning permission (KCC/SW/10/444) granted in 2012 for the construction of a sustainable waste-to-energy plant and the site is at an advanced stage of construction and programmed to become fully operational in late 2019 (K3 as consented). A full EIA of the facility was undertaken and submitted as part of the application pursuant to permission KCC/SW/10/444. See Wheelabrator Kemsley (K3) for further details on page 7.

Wheelabrator Kemsley North (WKN) Site

The WKN Site is located immediately north of K3 as consented which is currently under construction and immediately to the east of the Kemsley Paper Mill. The WKN site is currently being used by WTI as a laydown and parking area for the construction of the adjacent K3 facility. The site has been cleared of vegetation and laid to concrete or hardcore with a perimeter fence. The site has extant permission for an Incinerator Bottom Ash facility permitted by Kent County Council (KCC/0265/2016). WTI no longer wish to build this facility and instead wish to replace it with the new waste-to-energy plant the subject of this application.

To the east of the site lies the Swale Estuary with the Isle of Sheppey beyond. Immediately to the north of the site lie the Kemsley Marshes beyond which lies the Kemsley Paper Mill effluent treatment works and a jetty operated by Knauf for the import of gypsum by barge.

The sites lie within the ward of Kemsley (0.8km to the south west) and Milton Regis (2.6km to the south west). Sittingbourne is situated approximately 2.6km south of the site.

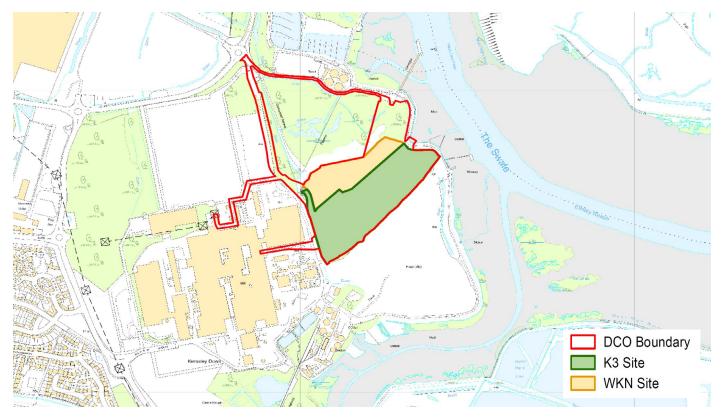


Figure 1: Site location plan (indicative red line)

The sites lies in proximity to a number of sensitive areas and sites which could be potentially affected by the K3 and WKN proposals and which will be assessed within the EIA. The main sensitive sites/areas are listed below and their location illustrated in Figure 2:

- The Swale Special Protection Area, Special Site of Scientific Interest and Ramsar site designated for its grazing marshes and estuarine habitats and the assemblage of breeding and overwintering birds it supports.
- 'Castle Rough' a Medieval moated site (Scheduled Monument).
- Local residents in the Kemsley area of Sittingbourne.
- The A249 and local highways network.
- The River Swale.
- The Saxon Shore Way Public Right of Way which runs along the site's eastern boundaries.

It should be noted that this is not an exhaustive list but identifies the main sensitive sites/areas only.

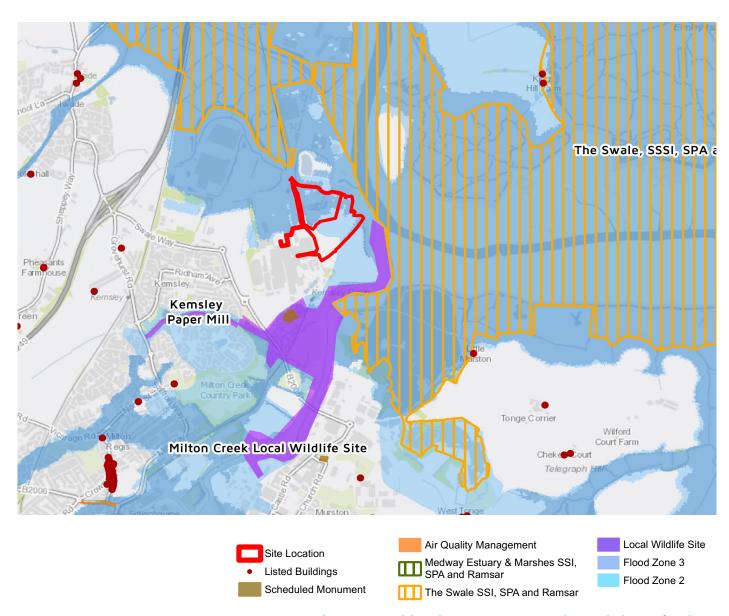


Figure 2: Sensitive sites/areas/receptors in proximity to the sites.

Wheelabrator Kemsley (K3)

Planning permission was granted under the Town and Country Planning Act 1990 by Kent County Council in 2012 for a sustainable waste-to-energy plant (K3 as consented). Construction of the plant began in August 2016 and is expected to be completed with the plant operational by late 2019. As consented the K3 facility will have two 102MWth lines, be capable of processing 550,000 tonnes of waste per annum and have a generating output of 49.9MW.

The facility when operational will process post-recycled waste to produce electricity and steam consequentially reducing the disposal of waste to UK landfill. Steam generated by the facility will be piped to the adjacent Kemsley Paper Mill for the paper production process. The facility will employ approximately 50 full time members of staff and will operate in accordance with an Environmental Permit issued by the Environment Agency which sets limits on emissions to air, water and land and is continually monitored by them.

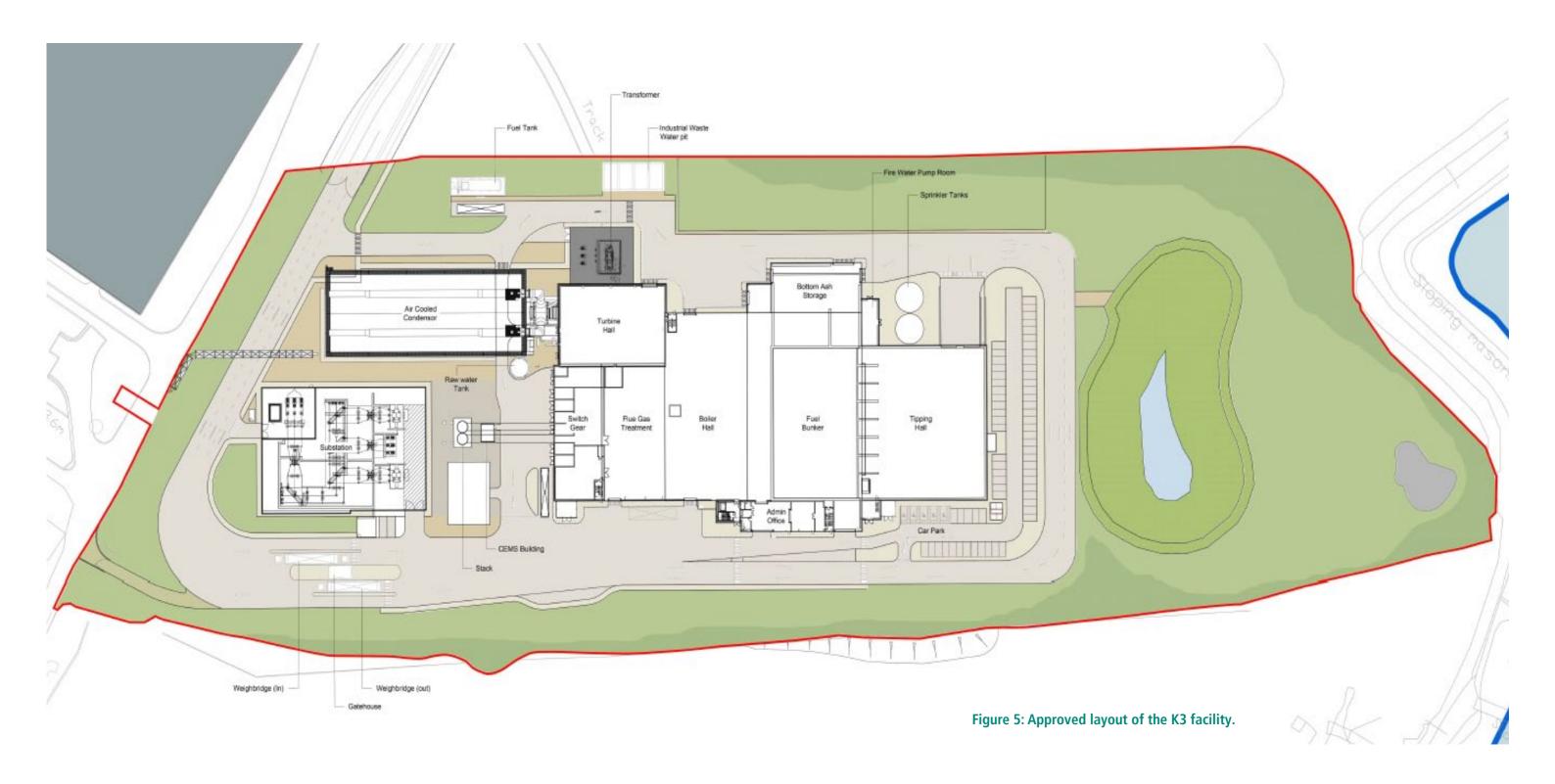


Figure 3: Photograph of the K3 facility under construction in July 2019.



Figure 4: 3D computer generated image of how the K3 facility will look once completed.

Wheelabrator Kemsley (K3)



Proposed Development

Wheelabrator Kemsley (K3) Proposed Development

As identified previously K3 benefits from planning permission (KCC/SW/10/444) granted in 2012 (as amended) and the facility is at an advanced stage of construction and programmed to become fully operational in late 2019.

The application for the K3 Proposed Development seeks Development Consent for the construction and operation of the Wheelabrator Kemsley Generating Station ('K3') with a 75MW generating capacity, together with a waste throughput of 657,000 tonnes per annum.

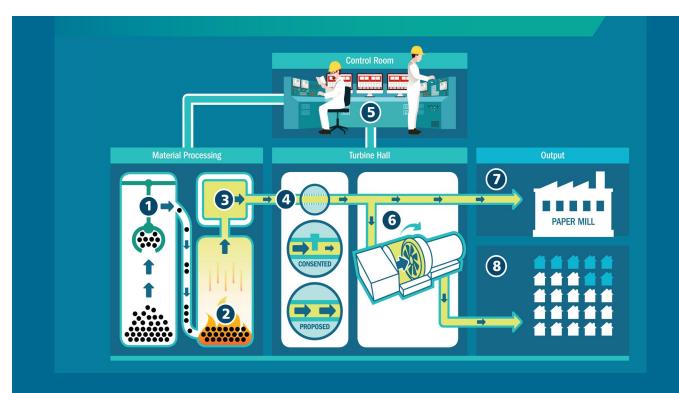
Whilst Development Consent is sought for construction, in accordance with the Planning Act 2008, the physical works proposed remain as consented by the planning permission dated 6 March 2012 granted by Kent County Council (together with subsequent material and non-material variations thereto) and includes an electricity grid connection, surface water outfall to the Swale, steam connection to Kemsley Paper Mill, site access road and associated temporary construction lay down area (as shown on the K3 Works Plan Document No. 5.5a submitted with the application).

The practical effect of the DCO application in environmental terms is therefore to permit K3 as consented to operate at an upgraded capacity of up to 75MW (an additional 25.1 MWe) and to process an additional 107,000 tonnes of waste per annum beyond that possible under the existing Town and Country Planning permission.

The consent sought would not result in any additional external physical changes to K3 as consented and the layout and appearance of the facility will remain as per its consented design and as currently being constructed These are purely operational changes to the facility and do not require any changes to the built form (design, size, shape or appearance) as consented (KCC/SW/10/444 as amended) or to the layout of the site.

The ability to increase the power output from the facility is consequential to improvements to the efficiency of in plant technology since the original application was made. The operational change to the plant would be facilitated by derestricting the flow of steam to the turbine and reconfiguring the central control system as shown on Figure 6.

An increased tonnage throughput allows WTI in the event of increased availability (the amount of time the plant can operate between routine maintenance) or changes in the composition of the waste received (and therefore the amount of waste required to produce the same energy output) to generate as much energy as they are permitted to do so and increase the overall efficiency of the plant.



HOW IT WORKS

- 1 A crane places the post-recycled waste into a feed hopper. The fuel then drops down a feed chute onto the grate.
- 2 The action of the moving grate turns the waste to allow it to burn fully.
- 3 Hot gases produced in the process pass through a water boiler where the water is converted to high pressure steam.
- 4 If we receive permission to optimise K3 we will then de-restrict the flow of that steam to our turbine.

- (5) We will also re-configure our central control systems to the facility can operate at its newly-optimised level.
- 6 The turbine we install will use the increased flow of steam to generate even more clean power.
- Part of the steam we produce will then be piped directly for use by DS Smith, to help reduce the Mill's reliance on fossil fuels and overall carbon footprint.
- The low carbon electricity we produce will be exported to homes and businesses via the National Grid distribution network.

Figure 6: Process diagram illustrating the practical effect of the K3 Proposed Development.

Wheelabrator Kemsley North (WKN) Proposed Development

The proposed application seeks Development Consent to construct and operate a waste-to-energy plant, Wheelabrator Kemsley North (WKN) ('the WKN Proposed Development'). The facility would comprise a single line facility capable of processing 390,000 tonnes of waste per annum, with a generating capacity of up to 42MW.

An illustrative plan showing how the layout of the facility will likely be arranged is shown in Figure 8. The plant will essentially comprise a series of interlinked buildings the key buildings, of which will be as follows:

- Fuel reception and storage facilities, consisting of a tipping hall, a shredder, storage bunker and cranes;
- A combustion system housed within a boiler hall comprising a single combustion line and associated boilers;
- A steam turbine and generator housed within a turbine hall;
- A bottom ash handling system, including storage hall and ash collection bay;
- A flue gas treatment system, including residues and reagent storage silos and tanks;
- A stack and associated emissions monitoring systems;
- A cooling system comprising air cooled condenser (ACC) units;
- Electricity grid connection, access road and surface water outfall to the Swale;
- Other associated supporting facilities.

As with the adjacent K3 facility all waste will be brought to the site in HGVs or in Refuse Collection Vehicles via Barge Way from the north of the Paper Mill. Once arriving at the site, the HGVs access the facility via a weighbridge and then manoeuvre on site and enter the tipping hall.

The WKN facility will then combust the waste imported to the site to generate hot gases that in turn are used to produce steam and ultimately electricity. The key waste-to-energy processes are illustrated in Figure 7 overleaf.

WKN - Hours of Operation

The facility will operate 24 hours per day, 7 days per week with programmed offline periods for maintenance.

WKN - Access and Transport

The waste will be brought to the site in HGVs or in refuse collection vehicles via Barge Way from the north of the Paper Mill. It is estimated that there will be on average 125 HGVs per day Monday to Saturday associated with the operation of the plant including waste delivery, IBA removal and deliveries of process inputs.

WKN - Chemical Storage

The facility will use a number of raw materials during the combustion and processing operation including hydrate lime, solid urea, activated carbon and low sulphur diesel. All chemicals will be stored in fully bunded areas.

WKN - Wastewater and Drainage

Water used in the waste-to-energy process is continually recycled such that the facility is not a regular net consumer of water. Any excess process water is stored safely on site and utilised as and when required. No process water is discharged to the Swale.

The onsite surface water drainage network for the site will be split into two separate drainage systems.

The first drainage system will collect clean surface water runoff (for example from building roof areas) and store it in the lagoon. The second drainage system will collect 'dirty' runoff (for example from the waste bunker) and store it in the 'dirty' water tank. This 'dirty' water will then be used in the process as required (for example for ash quenching) and will not be discharged into the Swale. The clean water will be stored in the lagoon and used to top up the 'dirty' water tank as and when required. If the lagoon has reached the maximum acceptable capacity it will be discharged at a controlled rate into the Swale Estuary.

WKN - Employment

It is anticipated that during the operational phase, the Project will generate between 35-50 full-time permanent Jobs.

WKN - Construction of the Proposed Development

The entire site preparation and construction programme is anticipated to take approximately 40 months from commencement to take over. This will comprise the following key stages:

- Civil engineering works (month 0-38)

 the physical works associated with constructing the facility
- Process works (month 12-38) mechanical and electrical installation, fit out and commissioning of the plant
- Commissioning of the facility (month 30 40)

With the exception of construction using the concrete slip-forming method, construction using constant pour methods for concrete laying and internal process works relating to mechanical and/or electrical equipment installation, construction activities shall only take place between 07:00 and 19:00 hours Monday to Friday inclusive and 07:00 and 16:00 hours Saturday and Sunday with no construction activities to take place on Bank or Public Holidays subject to any prior written variation as approved by the Waste Planning Authority. The designated route for delivery of construction plant and materials is via Barge Way.

A designated construction laydown area is proposed north east of the site, adjacent to the Knauf Jetty, as shown on the WKN Works Plan Document 5.5b submitted with the application.

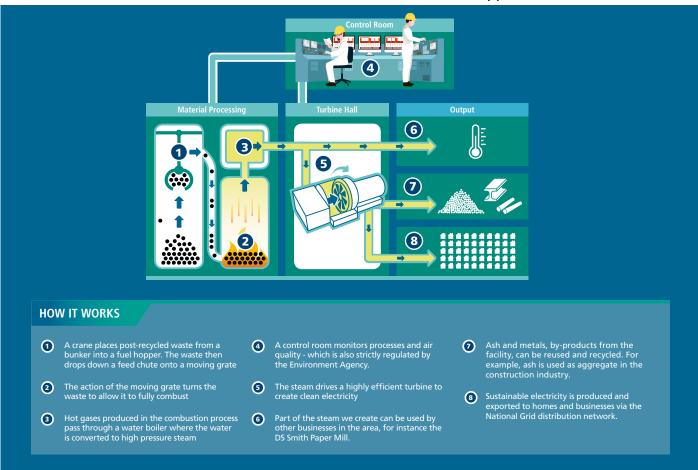


Figure 7: Process diagram showing how the WKN Proposed Development will operate.





Figure 9: 3D model showing how K3 and WKN will appear together.

Environmental Impact Assessment

What is the purpose of EIA?

The purpose of Environmental Impact Assessment (EIA) is to identify the likely significant effects of a proposed development, positive or negative, to some aspect of the environment whether natural or man made. Both the sensitivity of the environmental receptors being affected and the magnitude of the impact inform the significance of the effect.

The findings of the EIA are then presented in a document known as an Environmental Statement (ES).

The significant environmental effects associated with the construction, operation and future decommissioning of the K3 and WKN Proposed Developments requires assessment in the ES by appropriate technical experts.

Where feasible, mitigation measures have been proposed to avoid/reduce an adverse effect identified. A reassessment of an effect with this mitigation in place is then undertaken to determine its significance post mitigation. Any significant environmental effects remaining after mitigation are reported and represent the likely residual effects of the proposed development on the environment (if any).

Where identified, significant residual effects are required to be taken into account in the application decision making process by the SoS. If consent is granted mitigation measures are secured by requirements within the DCO to ensure they are implemented and legally enforceable.

What issues have been assessed?

A formal scoping opinion request was made to PINS in August 2018 to seek to agree the scope of the issues to be included in the EIA in consultation with the relevant consultees i.e. Kent County Council (KCC) Highways, the Environment Agency, Natural England etc. A copy of the formal Scoping Opinion is publicly available on PINS website: https://infrastructure.planninginspectorate.gov.uk/projects/southeast/wheelabrator-kemsley-generating-station-k3-and-wheelabrator-kemsley-north-wkn-waste-to-energy-facility/.

Consequently it was agreed that the following topic areas need to be assessed within the EIA, a summary of the preliminary results of which is provided within this document:

- Traffic and transport
- Air Quality
- Greenhouse Gases and Climate Change
- Noise and Vibration
- Human health
- Ground contamination
- Water Environment
- Ecology
- Landscape and Visual Effects
- Archaeology and heritage
- Cumulative effects

Where a particular environmental feature, or component of it, has not been included within an EIA, this is not to suggest that there will be no associated effects; rather that these are not considered to be among the potentially significant effects.

It should be noted that at the time of scoping the intention was to apply for an extension to K3 as consented to comprise 'a power upgrade from 49.9MW to 75MW and an increase in annual permissible waste throughput of 107,000tpa'. Whilst this remains the practical effect in environmental terms of the DCO application, in order to accord with the Planning Act 2008 the submitted DCO application seeks permission for 'the construction and operation of a 75MW generating station' with a total annual throughput of 657,000tpa (i.e. including K3 as already consented by the planning permission dated 6 March 2012 granted by Kent County Council, together with subsequent material and non-material variations thereto.)

The physical elements of the facility will remain as permitted under the existing Town and Country Planning permission. Construction of the plant in accordance with the extant permission began in July 2016 and is expected to be completed with the facility fully operational by late 2019 and all construction-related planning conditions pursuant to this have been discharged.

It is therefore considered that the Scoping Report and the subsequent Scoping Opinion issued by PINS remains relevant to the practical effect of the DCO in environmental terms. However, in order to ensure that the effect of constructing and operating a 75MW generating station has been fully assessed in accordance with the consent now sought the following has been provided as part of the application and within the ES:

• The 2010 Environmental Statement (as amended) which assessed the effect of the construction and operation of K3 as consented (see Document 3.3. submitted with the application).

The assessment of the operation of the K3 Proposed Development in two parts;

- The K3 Proposed Development assuming the absence of the operation of K3 as consented i.e. the effect of the construction and operation of a 75MW Generating Station processing 657,000tpa per annum of waste;
- The 'practical effect' in environmental terms of the DCO application which is K3 as consented constructed and operating at an upgraded generating capacity of up to 75MW (an additional 25.1 MWe) and processing an additional 107,000 tonnes of waste per annum beyond that possible under the existing Town and Country Planning permission.

The assessment of the WKN Proposed Development assesses the construction, operation and decommissioning of the facility at a future date.

The ES will include an assessment of the cumulative effect of the K3 and WKN Proposed Developments and other locally proposed or approved developments.

Where a particular environmental feature, or component of it, has not been included within an EIA, this is not to suggest that there will be no associated effects; rather that these are not considered to be among the potentially significant effects.

Impacts Assessed

The EIA has assessed a range of potentially significant environmental effects utilising the professional experience of a range of competent experts and the Scoping Opinion of the SoS and relevant consultees. The findings of the EIA are presented in the final ES Document 3.1 submitted with the application. The summary below provides a commentary on the assessments undertaken including the likely significant environmental effects envisaged, any mitigation measures proposed to reduce or offset these effects and the likely residual effects of the development on the environment. Please see the end of this document for information on how you can comment on this Non-Technical Summary and the final ES submitted to the SoS.

Method of assessment

The specialist assessments follow generally similar methodologies. Desk and/or field studies will be undertaken to establish the existing situation at the site(s) and surrounding area. The effects of the K3 and WKN Proposed Developments are then established using a method that compares the sensitivity/ importance of an aspect of the environment with the likely size of the predicted change to establish the degree of effect (negligible, slight, moderate, substantial, very substantial). Typically if an effect is determined to be of moderate significance or above then it is deemed to be a significant effect for the purpose of the EIA Regulations.

The degree of an effect determines the resources that should be put in place to avoid or reduce an adverse effect. Where appropriate mitigation measures have been proposed to avoid/reduce a significant adverse effect. The significance of an effect with this mitigation in place is then re-assessed to determine its significance post mitigation.

Any significant environmental effects remaining after mitigation are reported and represent the likely residual effects of the proposed development on the environment.

All methodologies are undertaken in accordance with current guidance and best practice.

A summary of the preliminary assessments of the specialist environmental topics is provided on the following pages.

Traffic and Transport

The effects related to the construction of the K3 were assessed as part of the ES completed in 2010 pursuant to its Town and Country permission which will be provided in the final ES. No likely significant effects were identified.

Subsequently, by the point of the application being examined all works pursuant to the construction of K3 as consented in accordance with the Construction Environmental Management Plan will have been completed.

During operation it is estimated that the K3 Proposed Development would generate 208 HGV visits (416 movements) to the site per day and employ approximately 50 full time members of staff. The practical effect of the K3 Proposed Development is to generate an average of 34 additional HGV deliveries (68 movements included in the 416 movements above) per day as a result of the additional 107,000 tonnes of waste to be imported above that of K3 as consented; staff numbers would be unchanged as a result of the practical effect of the K3 Proposed Development.

The WKN Proposed Development is estimated to produce an average of 125 HGV/RCV deliveries (250 movements) per day when operational in addition to between 35-50 staff over three shifts to be employed when fully operational. During the construction of the WKN Proposed Development there is expected to be a maximum of 45 HGV deliveries and 480 construction staff per day. The majority of construction and operational staff vehicle movements will not occur during the peak hours on the highway network.

The cumulative effect of the K3 Proposed Development and the WKN Proposed Development when operational is to generate 333 HGV visits (666 movements) to the site per day and employ approximately 85-100 full time members of staff. The practical effect of the K3 Proposed Development and the WKN Proposed Development when operational is to generate an average of 159 additional HGV deliveries (318 movements) to the site per day in addition to between 35-50 staff.

Access for the vehicles associated with the K3 Proposed Development and the WKN Proposed Development would be via the A249, Swale Way and Barge Way. Highway capacity assessments have been undertaken to determine the effect of these vehicle movements along the adjacent highway network.

There are currently approximately 20,000 vehicle movements per day along Swale Way, 2,000 of which are HGVs. Thus, the traffic associated with the operation of the K3 Proposed Development and the WKN Proposed Development represents only a small proportion of current traffic flows on the adjacent highway network (approximately 4%) and the relative change in traffic flows as a result of these vehicle movements would be difficult to perceive. The sensitivity of receptors along the adjacent highway network are deemed to be low / negligible and most movements would occur outside of peak hours.

There is expected to be a number of abnormal indivisible loads required to deliver large items of plant in connection with the construction of the WKN Proposed Development. The escort and management requirements will be agreed with the highway authorities as part of obtaining permission to enable their movement on the highway via the Motor Vehicles (Authorisation of Special Use) General Order (HMSO,2003). A Construction Traffic Management Plan has been produced to control construction vehicle routes and the timing of HGV arrivals and departure. The implementation of the Construction Traffic Management Plan will be secured through the DCO. There were abnormal indivisible loads previously generated by the construction of K3 under the 2012 planning permission, all of which were authorised by these same procedures.

Air Quality

The effects related to the construction of the K3 Proposed Development were assessed as part of the ES completed in 2010 pursuant to its Town and Country permission. No likely significant effects were identified. Subsequently by the point of the application being examined all works pursuant to the construction of K3 and conditions relating to dust and air quality will have been completed and discharged including a Construction Environmental Management Plan.

The impacts of emissions on human health and ecological receptors from the operation of the K3 Proposed Development have been assessed using an atmospheric dispersion model. Emissions have been modelled at the emission concentration limits in the Industrial Emissions Directive (IED). The predicted contributions have been added to existing background concentrations and the total pollutant concentration compared with the relevant Environment Assessment Levels. The model has been run for five years of hourly sequential meteorological data to allow the impacts to be assessed for a wide range of weather conditions. Emissions from traffic generated by the K3 Proposed Development have also be assessed. No likely significant effects resulting from the K3 Proposed Development have been identified.

The impacts of stack emissions on human health and ecological receptors from the practical effect of the K3 Proposed Development have been assessed using an atmospheric dispersion model with emissions modelled at the emission concentration limits set out in the IED. The results of the dispersion modelling indicate that the effects are considered to be 'negligible'.

The risk of odour and bioaerosol impacts has been assessed qualitatively using a source-pathway-receptor conceptual model. No likely significant effects are envisaged.

Impacts during the construction of the WKN Proposed Development, such as dust generation and plant vehicle emissions, are predicted to be of short duration. The results of the risk assessment of construction dust impacts, undertaken using the Institute of Air Quality Management's (IAQM) dust guidance, indicates that the risk of dust impacts will be low. Implementation of the highly recommended mitigation measures described in the IAQM construction dust guidance for a low risk site will ensure the residual dust effects are "not significant". The agreed mitigation measures would be included in a Construction Environmental Management Plan secured through the DCO.

The impacts of emissions on human health and ecological receptors from the operation of the WKN Proposed Development have been assessed using an atmospheric dispersion model with emissions modelled at the emission concentration limits set out in the IED. This includes an assessment to determine a suitable stack height for the WKN Proposed Development to ensure adequate dispersion of pollutants. The results of the dispersion modelling indicate that the effects are considered to be 'negligible'. Similarly, the effects of traffic emissions generated by the WKN Proposed Development are reported to be negligible. The risk of odour and bioaerosol impacts has been assessed qualitatively using a source-pathway-receptor conceptual model. The likely odour and bioaerosol effect is negligible.

The cumulative effects of WKN, the practical effect of the K3 Proposed Development and other cumulative developments have been assessed. Emissions from the stacks and generated traffic have been assessed and the effects are considered to be 'negligible'.

Greenhouse Gases and Climate Change

The main impact on climate change from both the K3 Proposed Development and the WKN Proposed Development would be their direct greenhouse gas emissions (GHG) when operational from the combustion of waste. Net total GHG emissions from the operation of the K3 and WKN Proposed Developments have been calculated based on their waste throughput, combustion processes and treatment of residues. These emissions have been compared to baseline GHG emissions from the landfill disposal of waste and from conventional electricity and heat generation.

The practical effect of the K3 Proposed Development DCO application, when compared to the baseline of landfill waste disposal and electricity generation that it would avoid, is predicted to result in a GHG emission reduction equivalent to approximately 60 kilo tonnes of CO₂ equivalent (ktCO₂e) per annum more than the consented K3 operation, which would be a beneficial effect of the K3 Proposed Development that is considered significant.

The beneficial effect of the K3 Proposed Development, i.e. a 75 MW generating station processing 657,000 tpa of waste, would be greater than this when considering the total energy generation and landfill diversion of waste.

The WKN Proposed Development when compared to the baseline of landfill waste disposal and electricity generation that it would avoid is predicted to reduce GHG emissions equivalent to approximately 64 kilo tonnes of CO₂ (ktCO₂e) per annum, which is considered significant.

Noise and Vibration

Survey data to establish baseline noise levels has been gathered from previous projects at Kemsley Paper Mill and is considered sufficient and representative without further baseline measurement.

Noise effects related to the construction of the K3 Development were assessed as part of the ES completed in 2010, pursuant to its existing planning permission. No likely significant effects were identified. Subsequently by the point of the application being examined all works pursuant to the construction of K3 and conditions relating to Noise and Vibration will have been completed and discharged including a Construction Environmental Management Plan.

Noise levels from the operation of K3 have been previously assessed as part of the ES completed in 2010 pursuant to its Town and Country permission and no likely significant effects were identified, with acoustic emission levels not significantly affecting the existing noise environment at residential receptors. There will be a negligible 0.2 dB increase in noise emissions as a consequence of the practical effect of the K3 Proposed Development, arising from limited additional on-site HGV movements associated with the increased throughput. As such noise effects of the K3 Proposed Development would not be considered significant. Vibration during operation of the K3 will be controlled at source, and off-site vibration will be negligible.

Noise and vibration during construction of the WKN Proposed Development will be controlled by adherence to an appropriate CEMP which will stipulate appropriate construction methods to minimise construction noise. There will be no regular construction working outside of the normal working hours without the express written permission of the Waste Planning Authority (KCC).

Operational noise effects of the WKN Proposed Development will be controlled to acceptable levels in accordance with industry guidelines and World Health Organisation guidance, by selection of appropriate plant and restricted to an acoustic emission level that does not affect the existing noise environment at residential receptors. Noise from the operational plant of the WKN Proposed Development would be similar in character and magnitude to that from K3 and would only lead to negligible increase of noise levels at nearby residential receptors by no more than 0.1 dB. The increase in vehicle movements associated with waste import would be 0.7 dB and is not perceptible. Vibration during operation of the WKN Proposed Development will be controlled at source, and off-site vibration will be negligible.

Cumulative noise levels associated with the K3 Development, the WKN Proposed Development and 46 other schemes that are operational / constructed, consented or for which planning permissions are currently being sought have been assessed. Cumulative noise effects for all scenarios considered are no greater than negligible significance.

Human Health

The human health assessment draws from and builds upon outputs from the wider technical disciplines to assess the potential human health effects (both adverse and beneficial) that would be directly attributed to the K3 and WKN Proposed Developments.

The approach and specific health assessment protocols applied are dependent on the nature, duration, magnitude and degree of community exposure to construction, operational and decommissioning activities and hazards which could potentially influence health.

For both the K3 and WKN Proposed Developments the significance of effect on human health has been considered in the context of a generally low socio-economic status in the area and comparably high allage all-cause mortality rate (i.e. local communities are considered relatively sensitive to both positive and negative changes in environmental and socio-economic conditions).

Potential effects relating to the K3 Proposed Development requires construction, operation and decommissioning phases to be considered. Potential effects relating to construction of the K3 Proposed Development have been assessed by each of the inter-related technical disciplines (air quality, noise, transport and employment opportunities) in the 2010 ES where human health was not originally assessed. Drawing from this information, an assessment of human health relating to the construction of the K3 Proposed Development has be included in the final ES. No likely significant human health effects are predicted.

Potential effects relating to operation of the K3 Proposed Development has been revisited in the final ES due to changes to the environmental baseline. While the magnitude of impact on human health from all health determinants will increase, the overall significance of effect is not significant. Potential effects relating to the decommissioning of the K3 Proposed Development have been assessed for air quality, noise, transport and employment health determinants, drawing upon the information in the 2010 ES. Results indicate that the relative change in emission concentration will be insufficient to quantify any change in local health, and no significant effects on human health are envisaged.

Potential effects relating to the WKN Proposed Development requires construction, operation and decommissioning phases to be considered. The health determinants assessed for all phases comprise changes in air quality, noise, transport and employment opportunities. Results indicate that the relative change will be insufficient to quantify any change in local health, and no significant effects on human health are envisaged.

The cumulative assessment reviews three scenarios where potential human health effects from the K3 Proposed Development, WKN Proposed Development and other cumulative developments are considered for the construction, operation and decommissioning phases for all relevant health determinants. Results indicate that no significant effects on human health are envisaged.

The assessment undertaken indicates that the magnitude of change for each health determinant is not sufficient to quantify any measurable change in health outcomes. This is consistent with the Public Health England (formerly Health Protection Agency) position on Energy from Waste facilities (Health Protection Agency, 2010), which concludes that well managed waste-to-energy facilities operating to strict environmental standards would have only a small contribution to local air quality, and no measurable risk to human health.

Landscape and Visual Effects

An assessment of the likely significant landscape, townscape and visual resource effects of K3 as consented was undertaken as part of the ES completed in 2010 pursuant to its Town and Country permission.

The potential impacts of the construction of the K3 facility was considered. This determined that there would be no significant impacts on landscape or townscape character or views.

The effect of the completed development was considered to be minor adverse and not significant on both landscape and townscape character. Views of the K3 facility were considered to be prominent in near views, becoming barely discernible within the existing industrial context in mid to long distance views. The overall visual effect of the completed development was considered to be moderate/minor adverse and not significant. The consent sought would not result in any additional external physical changes to K3 as consented and the layout and appearance of the facility will remain as per its consented design and as currently being constructed and therefore no additional effects are anticipated to arise from the K3 Proposed Development on landscape, townscape and visual resources beyond that identified previously.

The WKN Site currently comprises laydown and parking areas for the construction of K3 and has been cleared of vegetation. Large scale industrial buildings and chimneys at the DS Smith Paper Mill form the western and southern site boundaries and separate the location from the residential districts of Sittingbourne. This urban area is defined as the Sittingbourne Industrial Commercial townscape character area. The Industrial/commercial character area has a poor quality and condition due to the extensive industrial buildings and infrastructure and the presence of disused and derelict land resulting in a low value.

The WKN Site is currently not visible in views from the majority of the settlement of Sittingbourne due to industrial development on the edge of the town and the restored landfill mound to the south. To the east of the WKN Site the channel of the Swale and low-lying landscape of the Isle of Sheppey allow more open, longer distance views. Key receptors of potentially high sensitivity and susceptibility to change in view as a result of the proposals include walkers using the Saxon Shore Way long distance footpath (ZU1/2) beside the Swale and Milton Creek. The greatest number of visual receptors with views towards the WKN Site would be the occupants of vehicles travelling on Swale Way.

Twelve viewpoint locations have been defined and photography undertaken to inform the visual impact assessment. Viewpoints have been agreed through consultation with Kent County Council/Swale Borough Council.

The new buildings and infrastructure which form the WKN Proposed Development, although large in scale, would form an extension of the existing character of neighbouring development at the Kemsley Paper Mill. The townscape character of the WKN Site would be of low sensitivity to change through development. Significant adverse effects on townscape character during construction or operation during the day or at night, have not been identified.

The surrounding landscape character areas of the Swale and Isle of Sheppey are generally in good condition and have an intrinsically high value. There would be no direct effects on these rural and wild landscapes and their sensitivity to change as the indirect influence of the new WKN would be medium or low.

Significant adverse effects on these landscape character areas during construction or operation during the day or at night would also be unlikely due to the similar nature of the proposals to the established industrial context.

There are unlikely to be any significant adverse effects during construction and operation on views gained by visual receptors at individual locations within the study area as a result of the proposals. The proposed buildings and structures would generally be visible in front of or in the backdrop of existing large-scale industrial buildings at Kemsley Paper Mill. The tops of flue stacks are likely to be the only visible element, beside other stacks in views from the south and west. There will be no locations where new industrial buildings or structures at the WKN Site would be seen in a view that does not already contain views of large areas of existing industry.

Whilst there is always an inherent effect on landscape and views from built development the WKN Proposed Development is not considered significant in its context.

Non-Technical Summary- K3 and WKN Proposed Development

The K3 and WKN Proposed Developments and many of the relevant cumulative developments lie within the same urban character type comprising the Sittingbourne Industrial/Commercial townscape character area. The characteristics of the townscape would be intensified as a result of the addition of cumulative schemes and the K3 and WKN Proposed Developments. There would be a medium magnitude of change, leading to a slight adverse level of cumulative townscape effect in the day and at night. The K3 and WKN Proposed Developments would make a slight contribution to this cumulative effect. Cumulative effects on the rural character of the Chetney and Greenborough Marshes and the Iwade Arable Farmland character areas would be substantial adverse, which is significant however, the K3 and WKN Proposed Developments would make a negligible contribution to this cumulative effect. Visual receptors within the study area would generally gain views of a more intensively developed industrial/ commercial townscape within the same angle of view as the K3 and WKN Proposed Developments. The scale and nature of the cumulative schemes would change the nature and character of some views, resulting in a more developed context at Kemsley for walkers using the Saxon Shore Way near Sittingbourne. Walkers using the Saxon Shore Way are receptors of high sensitivity. The magnitude of change in view in some locations would be medium and long term in nature, leading to a substantial adverse level of cumulative effect, which is significant. However, the WKN Proposed Development would make a moderate or slight adverse contribution to these cumulative visual effects.

Biodiversity

The effects of the construction of K3 as consented on ecology were assessed as part of the ES completed in 2010 pursuant to the Town and Country Planning Act permission. During this assessment, there was sufficient uncertainty regarding the effects of construction activity on breeding Marsh Harrier using a large area of reedbed that lies to the immediate north of the K3 Site that, in discussion with Natural England and the Royal Society for the Protection of Birds (RSPB), it was agreed that a new 1 ha reedbed would be created at Harty Fen on the Isle of Sheppey such that, should marsh harrier abandon the Kemsley reedbed due to construction disturbance, there would be alternative breeding habitat available nearby. The reedbed was built in 2011 and handed over to the RSPB in 2012. Marsh Harrier continued to breed in the reed bed during the construction of K3 and are likely therefore to have become habituated to the noises typical of an industrial site and construction. Once this mitigation was incorporated, and subject to the implementation of various conditions related to ecology, including the production of and compliance with a Construction Environmental Management Plan, no likely significant effects on ecology from the construction of the K3 Proposed Development were identified. Subsequently, all construction-related conditions/S106 obligations with respect to ecology have been completed and discharged.

Operational effects on ecology were assessed as insignificant in the 2010 ES. The operational effects of the K3 Proposed Development have been re-assessed in the final ES and no likely significant effects have been identified.

The assessment of the practical effect of the K3 Proposed Development along with that of the WKN Proposed Developments on ecology has been assessed following good-practice guidelines (Chartered Institute of Ecology and Environmental Management 2018) along with PINS Advice Note 10: Habitats Regulations Assessment Relevant to Nationally Significant Infrastructure Projects.

The principal potentially significant adverse effects of the K3 and WKN Proposed Developments relate to their proximity to The Swale SPA/Ramsar and SSSI, designated for its breeding and overwintering bird population and the potential for changes in water quality, noise and air quality to affect them. The drainage system for the development is designed such that there is no pathway for contaminated water to enter the Swale. Detailed air quality monitoring has not identified the potential for significant effects.

Noise from the WKN Proposed Development will be low during operation and not of a level sufficient to cause disturbance to wildlife. Noise created during the construction phase of the WKN Proposed Development however does have the potential to disturb birds wintering within the SPA/Ramsar, causing them to cease feeding or fly away from the area of influence and ultimately affecting mortality. It is recognised that loud and 'percussive' noises have the greatest potential to cause disturbance. Detailed noise modelling identified that the proposed impact piling for the development had the potential to create percussive noise at sufficient volume to cause disturbance to overwintering birds but also breeding marsh harrier in the reed bed to the north.

On this basis piling activity is to be seasonally restricted to avoid sensitive times of the year and secured pursuant to the development consent. Further visual screening in the form of fencing around construction compounds will also be implemented to further limit the potential for disturbance.

The assessment concludes that subject to standard best practice construction management techniques and restrictions on the timing of piling that no likely significant ecological effects from the K3 and WKN Proposed Development will occur.

The cumulative assessment reviews three scenarios where potential ecology effects from the K3 Proposed Development, WKN Proposed Development and other cumulative developments are considered for the construction, operation and decommissioning phases on those receptors for which a cumulative pathway exists (the Swale SPA/Ramsar/SSSI and Medway Esturay & Marshes SPA/Ramsar & SSSI). Results indicate that no significant effects on ecology are envisaged.

Ground Conditions

The ground conditions of the K3 Site were assessed as part of the ES completed in 2010 for the original planning application for the facility. No likely significant effects were identified in relation to ground conditions.

Subsequently all works pursuant to the construction of K3 and planning conditions in relation to ground conditions have been completed and discharged, including adherence to a Construction Environmental Management Plan. In the absence of any change in built form associated with the K3 Proposed Development, it is anticipated that there is no potential for further ground condition related effects.

The effect of the WKN Proposed Development has been assessed following UK best practice, principally based around the Environment Agency and DEFRA document 'CLR11 – Model Procedures for the Management of Land Contamination'.

The baseline ground conditions in the vicinity of the WKN Proposed Developments has been considered. This involved reviewing the history, geology, hydrogeology and hydrology of the WKN site as well as available ground investigation information from previous investigations undertaken at and in the vicinity of the site. It is anticipated that, although the WKN site is located adjacent to the wider Kemsley Paper Mill site since the 1930s, any contamination present associated with the mill's industrial history will be limited in extent.

It was identified that without suitable risk management and mitigation measures that the WKN Proposed Development could result in effects to human health, groundwater, surface water quality in the Swale from contamination as well as the potential for ground gas accumulation and exposure within proposed structures.

However, through the implementation of industry best practice methodologies during and post construction, including appropriate piling techniques, capping of landscaped areas with clean soil and embedding ground gas protection measures into the design of the buildings, no likely significant effects are anticipated. These mitigation measures are secured through appropriately worded requirements that will form part of any DCO consent for the WKN Proposed Development.

Water Environment

The flood risk and drainage strategy for K3 as consented was assessed as part of the original application for the development (as amended) and presents an assessment of the construction and operation of the K3 facility in that regard. In the absence of any change to the quantum of the impermeable surface of the site and no proposed changes to the drainage regime arising from the practical effect of the K3 Proposed Development there is no potential for further significant effects associated with the K3 Proposed Development as set out in the previous assessments. All effects associated with K3 were identified as being not significant.

The effect of the WKN Proposed Development has been assessed following UK best practice, Institute of Environmental Management and Assessment (IEMA) Guidelines for Environmental Impact Assessment (2004) and the Design Manual for Roads and Bridges (DMRB), Volume 11, Part 10, (November 2009). Whilst the DMRB is not specific to the assessment of hydrology and flood risk, it provides an accepted approach to the assessment of development impacts.

Determination of the baseline conditions at the WKN Site has been established through a review of literature and data from publicly available sources including; the Environment Agency (EA), British Geological Survey (BGS), Medway Drainage Board, and Kent County Council (KCC).

The Water Environment Chapter of the ES has focused on flood risk and the potential impacts on water quality and quantity as a consequence of the WKN Proposed Development during the construction, operation and decommissioning phases.

The tidally dominated Swale is approximately 50m to the east at closest orientation to the WKN site and has been classified by the EA as the main risk of flooding.

A comparison between EA flood model outputs and the profiled site ground level indicates that the entire footprint of WKN Proposed Development lies within Flood Zone 1 (FZ1), with low probability of flooding (assessed as land having a less than 1 in 1,000 annual probability of river or sea flooding). Whilst other areas in the DCO boundary, such as the laydown area lie in flood zones 2 and 3 (at moderate to high risk of flooding), no permanent development is to be situated in these locations. Standard flood risk prevention measures will be employed during the construction stage to mitigate any temporary flood risk associated with the construction laydown area.

The nearby Swale and Milton Creek are both sensitive receptors both in terms of surface water quality and as nature conservation areas, therefore the study has assessed the potential effects construction and operation of the WKN Proposed Development might have on these receptors.

A drainage strategy has been devised forms part of the application and the detailed drainage strategy will be finalised by the contractor and agreed with the Environment Agency.

The onsite surface water drainage network for the site will be split into two separate drainage systems. The first drainage system will collect clean surface water runoff (for example from building roof areas) and store it in the lagoon. The second drainage system will collect 'dirty' runoff (for example from the waste bunker) and store it in the 'dirty' water tank. This 'dirty' water will then be used in the process as required (for example for ash quenching) and will not be discharged into the Swale. The clean water will be stored in the lagoon and used to top up the 'dirty' water tank as and when required. If the lagoon has reached the maximum acceptable capacity it will be discharged at a controlled rate into the Swale Estuary. The strategy incorporates the use of appropriate SuDS techniques, interceptors and separators as required, treating surface water run-off generated from the WKN Proposed Development, prior to discharging into the Swale Estuary at an agreed rate. Subject to their implementation no likely significant effects on water quality will occur.

The cumulative assessment reviews three scenarios where potential effects on the water environment may occur; the K3 Proposed Development, WKN Proposed Development and other cumulative developments considered for the construction, operation and decommissioning phases. Results indicate that no significant effects on the water environment are envisaged taking into account current national and local planning requirements.

Cultural Heritage and Archaeology

K3 as consented is substantially complete with all below ground works completed. An assessment of the likely significant effects of K3 on buried archaeology was undertaken as part of the ES completed in 2010 pursuant to its Town and Country permission. Subsequently all ground works pursuant to the construction of K3 and conditions relating to archaeology have been completed and discharged including a full trial trenching exercise. No archaeological remains were observed as part of works on the K3 Site.

The potential impacts of the construction of the K3 plant on the setting of designated historic assets (World Heritage Sites, Scheduled Monuments, Listed Buildings, was fully articulated in the 2010 ES. This determined that there would be no significant impacts on the setting of any designated assets during the construction phase of K3. Subsequent minor amendments to the visual form of the K3 plant have been considered, and were determined to have no additional impact. Potential effects on heritage assets will be confined to the construction phase of the plant. No changes to the foot print or design of K3 will be required by consequence of the practical effect of the K3 Proposed Development and there will therefore be no additional impacts either on buried archaeological remains or on the settings of any designated assets.

A desk-based assessment undertaken in connection with the WKN Proposed Development has revealed that there are no statutorily designated heritage assets (e.g. Scheduled Monuments, Listed Buildings) within the DCO boundary. The closest designated asset is Castle Rough, a Scheduled Monument (SM). The SM is located some 460 metres southwest of the WKN Site.

It is low lying and not visible from any distance away. The closest listed building to the WKN Site is Little Murston Farmhouse, which is located some 1.4 kilometres southeast and is Grade II listed. There are a number of other designated assets within the study area. Construction and operation of the WKN Proposed Development would have no significant effect on any designated assets.

Construction of the WKN Proposed Development would have the potential to damage any buried archaeological remains within the site. Recent archaeological work in the area, including on the Sittingbourne Northern Relief Road, has indicated that the higher ground of the Kemsley Ridge has the potential to contain remains from the prehistoric through to the medieval periods, with further activity taking place in the lower lying marshlands now represented by areas of alluvium. There is also the potential for remains from later periods. However, no archaeological remains were observed as part of works on the K3 Site. The nature of the 20th century land-use within the WKN site and the associated ground disturbance suggest that the potential for the survival of previously unidentified sub-surface archaeological remains of national importance, or of sufficient importance to warrant preservation in situ, is unlikely. It is likely that any archaeological deposits within the proposed construction footprint have been damaged, possibly removed, and that the potential for the survival of archaeological remains is low. Notwithstanding this an investigative programme of archaeological fieldwork (most likely initially to take the form of a borehole monitoring and deposit modelling exercise, but likely to include trial trenching) will be undertaken at a suitable time following consent and prior to construction to ensure that should archaeology exist on the WKN site it is excavated and recorded appropriately. There would be no operational effects on any buried archaeology within the site.

Cumulative Effects

Schedule 4 of the EIA Regulations states that an ES should provide a description of the likely significant effects of the development on the environment resulting from inter alia -

5(e) The cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to area of particular environmental importance likely to be affected or the use of natural resources.

Cumulative effects can occur where more than one individual impact may lead to a more significant effect when considered in combination. The ES has therefore considered the potential cumulative effects of the K3 and WKN Proposed Developments in combination with other developments within the local area.

All large-scale development within 3km of the site(s) and all large energy, industrial and mixed-use schemes for the purposes of the air quality and landscape and visual impacts (i.e. of a similar type to the proposed development and therefore most likely to result in significant effects) within 10km of the site(s) have been identified for assessment in the ES. This includes sites subject to planning applications and relevant allocations in Swale Borough Council's development plan. A list of these developments is provided below and their location identified on Figures 11 and 12.

- 1. SW/11/1291 Anaerobic digester and associated ground profiling and landscaping.
- 2. SW/14/0224 Solar farm, comprising the erection of solar arrays of photovoltaic panels, inverter and transformer sheds, fencing, site storage cabin, combined DNO and EPC switchgear housing, internal gravel access road, and associated equipment.
- 3. 14/500327/OUT Up to 8000m2 of Class B1 and B2 floor space and all necessary supporting infrastructure including roads, parking, open space, amenity landscaping, biodiversity enhancement and buffer to proposed extension to Milton Creek Country Park. Detailed approval for Phase 1 including (i) vehicular and pedestrian access to Swale Way; (ii) 30 space (approximately) informal car park to serve extension to Milton Creek Country Park; Change of use of approximately 13.31 ha of Kemsley Marshes as an extension to Milton Creek Country Park with footpath connections to the proposed informal car park
- 4. 14/501181/COUNTY KCC Regulation 13 Scoping opinion as to the scope of an environmental impact assessment for a proposed combined heat and power plant at Ridham B
- 5. 15/500348/COUNTY Install advance thermal conversion and energy facility at Kemsley Fields Business Park to produce energy and heat, including construction of new buildings to house thermal conversion and energy generation plant and equipment; construction of associated offices; erection of external plant including storage tanks; and erection of discharge stack (KCC planning application KCC/SW/0010/2015 refers).
- 6. 15/510589/OUT Outline application for access matters reserved for construction of Business Park (Use Classes B1(B), B1(C), B2 and B8) (research and development, light industrial, general industrial and storage or distribution) (up to a maximum of 46,600sqm), including associated accesses (including alterations to existing northern relief road), parking and servicing areas, landscaping, bunds, surface water storage areas, and related development.
- 7. 16/501228/FULL Construction of a new baling plant building within an existing waste paper storage yard.
- 8. 16/501484/COUNTY County matter The construction and operation of a gypsum recycling building with plant and machinery to recycle plasterboard and the re-configuration of the existing lorry park to include office/welfare facilities and ancillary supporting activities, including rain water harvesting tanks, container storage, new weighbridges, fuel tanks, hardstanding, safe lorry sheeting access platform and automated lorry wash.
- 9. 16/506193/ENVSCR EIA Screening Opinion Outline application for proposed residential development of 275 dwellings including affordable housing with open spaces, appropriate landscaping and minor alterations to the surrounding highway network (access).

- 10. 17/505073/FULL Erection of a tile factory including service yard, storage yard and car parking area.
- 11. 18/500257/EIFUL Proposed development of 155 dwellings (9 x 2 bed flats, 13 x 2 bed houses, 66 x 3 bed houses, and 67 x 4 bed houses) together with associated new access road, car parking, linear park with acoustic barrier to the A249, dedicated LEAP, allotments, areas of surface water drainage attenuation and ecological enhancement, and new planting, including an area planted in the style of an orchard.
- 12. 18/500393/FULL Erection of a natural gas fuelled reserve power plant with a maximum export capacity of up to 12MW
- 13. 15/502197/FULL Extension to existing yard and HGV parking area including installation of 5 no. lighting columns, landscaping, drainage and amendments to existing balancing pond
- 14. SW/13/1495 Variation of condition 9 of planning permission SW/11/548 (use of building 15B to install and operate materials recycling facility (MRF) and a refuse derived fuel (RDF) facility and to use existing weighbridge, weighbridge office, site office and washroom/toilets to the south of building 15a) to allow an increase of HGV movements from 58 to 98 (49 in and 49 out) for a temporary period of 12 months
- 15. 18/502489/FULL Construction of a 7.2m wide internal access road and pedestrian footpath, together with the associated removal of existing water holding lagoon, chemical building and works yard. Erection of a new chemical store, works yard and engine store, breaking out and crushing of existing concrete hardstanding, lighting and landscape planting.
- 16. EN010090 (18/501923/ADJ) Application for an Order Granting Development Consent to decommission the existing K1 CHP on the site and build, commission and operate a new CHP plant.
- 17. 15/504458/FULL Formation or new rear access road and extension to trailer park to serve Kemsley Paper Mill and ancillary development including attenuation pond, security kiosk and weightbringers
- 18. 16/506935/COUNTY County Matters application for steam pipeline connecting the Ridham Dock Biomass Facility to the DS Smith Paper Mill.
- 19. 17/504034/COUNTY County Matter Provision of a new car park, drainage layout and SUDs pond to accommodate and support the existing waste management facility
- 20. SW/14/0191 Extension to existing HGV Fitters shed plus small additional storage building.
- 21. 17/502678/COUNTY Section 73 application to vary conditions 15 and 16 of planning permission SW/12/1184 to permit the facility to operate during a wider range of hours and to also change the number of vehicle movements associated with the operations.
- 22. 17/505919/COUNTY County Matter: For extension of the existing IBA Recycling Facility by the use of an adjoining building and land; and associated amendments to the layout of the site.
- 23. 17/502834/FULL Installation of new underground water pipeline via open cut trenching and directional auger boring, including working area and site compounds
- 24. 14/501588/OUT Outline application for the development of 550-600 houses and all necessary supporting infrastructure including roads, open space, play areas, neighbourhood shopping/community facilities (up to 650 sq m gross) and landscaping. All detailed matters are reserved for subsequent approval except (i) vehicular access to A2 Fox Hill; (ii) emergency access to Peel Drive; (iii) landscape buffer between housing and countryside gap and (iv) layout, planting, biodiversity enhancement and management of countryside gap, as amended by drawings 5257/OPA/SK001 Rev J (new red line plan), D119/52 (Swanstree Avenue Plan) and D119/53 (junction layout plan).

- 25. 16/507877/FULL Erection of a residential development comprising 383 dwellings including associated access, parking, public open spaces and landscaping. New vehicular/pedestrian access from Eurolink Way and further secondary vehicular/pedestrian access off Crown Quay Lane. Associated drainage and earthworks.
- 26. 18/502190/EIHYB Full Planning Application Phase 1 North Erection of 91 dwellings accessed from Grovehurst Road, public open and amenity space (including an equipped children's play area) together with associated landscaping and ecological enhancement works, acoustic barrier to the A249, internal access roads, footpaths, cycleways and parking, drainage (including infiltration basins and tanked permeable paving), utilities and service infrastructure works. Full Planning Application - Phase 1 South -Erection of 252 dwellings (including 34 affordable dwellings) accessed from Quinton Road, public open and amenity space, together with associated landscaping and ecological enhancement works, internal access roads, footpaths, cycleways and parking, drainage (including infiltration swales, ring soakaways, and permeable paving), utilities and service infrastructure works. Outline Planning Application - for up to 857 new dwellings (including 10% affordable housing, subject to viability), a site of approximately 10 ha for a secondary and primary school, a mixed use local centre, including land for provision of a convenience store, public open and amenity space (including equipped children's play areas), together with associated landscaping and ecological enhancement works, acoustic barrier to the A249, internal access roads, footpaths, cycleways and parking, drainage (including a foul water pumping station and sustainable drainage systems), utilities and service infrastructure. All matters reserved, except for access for the schools site from Grovehurst Road.
- 27. 18/503873/ENVSCR EIA Screening Opinion Application for housing and country park
- 28. 16/507687/COUNTY County matters application for the construction and operation of an Incinerator Bottom Ash (IBA) Recycling Facility on land adjacent to the Kemsley Sustainable Energy Plant
- 29. 16/507943/FULL Construction of an agricultural anaerobic digestion plant and associated infrastructure, for the purposes of generating renewable energy.
- 30. SW/13/1571 The erection of four wind turbines with a maximum blade tip height of up to 126.5 metres, together with a substation and control building, associated hardstandings, an improved access junction, connecting internal access tracks, and other related infrastructure.
- 31. 17/503032/FULL Installation of an electricity battery storage facility within a new steel framed portal building and ancillary infrastructure
- 32. 15/506005/COUNTY EIA Screening opinion (County) to determine whether an environmental impact assessment is required for the proposed establishment of a secondary aggregate recycling facility and the reworking of existing aggregate deposits at Rushenden Marshes Disposal Site.
- 33. 16/507594/COUNTY County Matter phased extraction of brickearth, advance planting, access improvements, restoration and replanting back to agricultural use.
- 34. 18/503075/NSIP (EN010085) Consultation Construction and Operation of Photovoltaic (PV) Electricity Generating and Storage.
- 35. 15/506166/ENVSCR EIA Screening Opinion Redevelopment of site, comprising demolition of selected buildings, extension, refurbishment and remodelling of selected buildings and the erection of new buildings to provide up to 88,000sqm, comprising laboratories, offices incubation/innovation hubs; 400sqm of retail and up to 300-400 dwellings.
- 36. MC/18/2229 request for a screening opinion as to whether an Environmental Impact Assessment is necessary for the development of a new cement plant

Swale Borough Council Bearing Fruit 2031 Local Plan 2017 Allocations

- A1 Land allocated for 286,200 sqm of 'B' class employment uses
- A10 Housing allocations for a mix of at least 240 dwellings
- A17 Iwade Expansion
- MU1 North West Sittingbourne minimum of 1,500 dwellings, community facilities and structural landscaping and open space adjacent the A249.
- MU2 mixed use development comprising 43,000 sqm of 'B' use class employment uses, approximately 106 dwellings, together with 31.1 ha of open space, flooding, biodiversity and landscape enhancements
- A3 Planning permission will be granted for employment uses (use classes B1, B2 or B8 up to 7,500sqm)
- A4 Planning permission will be granted for employment uses on sites north and south of the A249 at Cowstead Corner, as shown on the Proposals Map. The northern site is allocated for an hotel (use class C1), whilst the southern site for use classes B1, B2 or B8 (5,600sqm).
- MU3 Planning permission will be granted for a minimum of 564 dwellings, commercial floorspace (including potential neighbourhood facilities), landscaping and open space on land at southwest Sittingbourne (Borden),
- MU4 Planning permission will be granted for mixed uses comprising approximately 260 dwellings, 26,840 sqm of 'B' use class employment, open space and landscaping
- MU5 Planning permission will be granted for mixed-uses, comprising 1,500 sqm of commercial floorspace, together with some 330 homes and proposals for the conservation, enhancement, and long term management of the site's ecological and heritage assets

Following the implementation of the mitigation measures set out by the relevant technical specialists the development is only considered to result in a significant adverse cumulative effect on landscape character and views from the Saxon Shore Way.

The direct cumulative effects of the cumulative schemes and indirect effects of the K3 and WKN Proposed Development are predicted to result in a substantial adverse cumulative effect during the day time on the rural character of the Chetney and Greenborough Marshes and Iwade Arable Farmland character areas which is significant. However, the K3 and WKN Proposed Development would make a negligible contribution to this cumulative effect which would occur even in its absence through the other cumulative projects identified.

The K3 and WKN Proposed Development in combination with the other cumulative developments identified would result in a significant adverse effect on sequential views along the Saxon Shore Way public right of way. This is an inevitable effect of the quantum of development permitted or proposed in this locality, reflective of its industrial context. However, the K3 and WKN Proposed Development is considered to make a slight contribution to the cumulative effect.

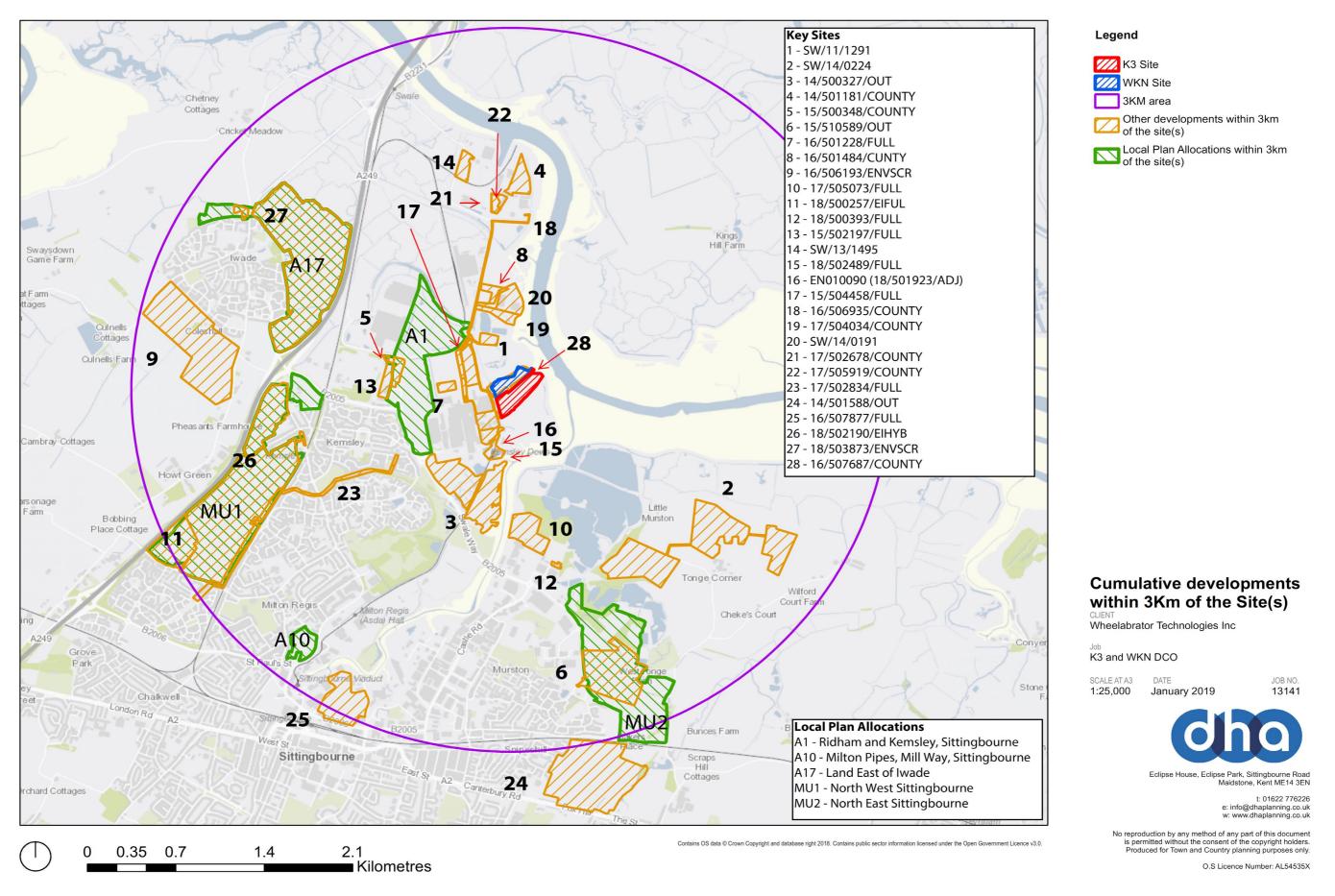


Figure 11: Cumulative developments within 3km of the Sites.



Industrial/ Energy/Mixed use Local Plan Allocations within10Km of the site(s)

developments within 10km of the

Industrial and Energy

Legend

K3 Site

WKN Site

10KM area

3KM area

Cumulative developments within 10Km of the Site(s)

Wheelabrator Technologies Inc

K3 and WKN DCO

1:80,000

No and With DOO

SCALE AT A3 DATE

January 2019

Cha

Eclipse House, Eclipse Park, Sittingbourne Road Maidstone, Kent ME14 3EN

> t: 01622 776226 e: info@dhaplanning.co.uk w: www.dhaplanning.co.uk

JOB NO.

13141

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Figure 12: Cumulative developments within 10km of the Sites.

Further Information

Electronic copies of the ES, NTS and other DCO application documents can be viewed and downloaded free of charge on the PINS and WTI's websites:

- https://infrastructure.planninginspectorate.gov.uk/projects/south-east/wheelabrator-kemsley-generating-station-k3-and-wheelabrator-kemsley-north-wkn-waste-to-energy-facility/
- www.wtikemsley.co.uk

Copies of the ES and NTS can also be inspected at the following locations until the conclusion of the examination period (anticipated around June 2020), with typical opening hours shown:

-Sittingbourne Library, Central Avenue, Sittingbourne, ME10 4AH

9:00am to 6:00pm Monday to Friday 9:00am to 5:00pm Saturdays

- Swale Borough Council Offices, East Street, Sittingbourne, ME10 3HT

8:45am to 5pm Monday to Thursday, 8:45am to 4:30pm Friday

-Kent County Council Offices, County Hall Reception, County Hall, Maidstone, Kent, ME14 1XQ9:

9:00am to 4:00pm Monday to Friday

Additional copies of the ES (paper or CD) may be obtained at a reasonable charge to reflect printing and distribution costs by contacting:

Email: info@wtikemsley.co.uk

Writing to: FREEPOST WHEELABRATOR KEMSLEY

Calling (freephone): 0800 062 2982

Making Representations On The ES And DCO Application

Following submission PINS has up to a month to assess whether the DCO application is valid. The applicant is required to publicise the acceptance of a DCO application, at which point details will be provided as to how to register with PINS to be an Interested Party during the DCO examination. At that stage there is the opportunity to make an initial representation regarding the content of the DCO application. All such Relevant Representations made will be published by PINS on their website.

Anyone registered as an Interested Party will then be updated by PINS as the examination of the application progresses. They will have the opportunity to attend and speak at the Preliminary Meeting, which considers how the examination will proceed, and then at any Hearings which take place during the examination period itself. In addition, Interested Parties can submit a detailed Written Representation and make submissions in response to the formal questions raised by the Inspector(s) and the submissions of the Applicant and other Interested Parties. Further information is available on PINS website:

https://infrastructure.planninginspectorate.gov.uk/application-process/the-process/

