

14 Summary

14.1 Introduction

- 14.1.1 A comprehensive assessment of the potential significant environmental effects arising from the K3 and WKN Proposed Developments has been undertaken. Where possible, measures have been incorporated into the design of the proposals to avoid / reduce the potential for significant environmental effects to arise known as 'primary mitigation' (see Chapter 2 of this ES).
- 14.1.2 Measures to help mitigate effects identified during the assessment process have also been proposed for some of the environmental topics ('secondary mitigation'). These largely, but not exclusively, cover potential effects arising during construction and decommissioning activities and are summarised in Table 14.1 for the K3 Proposed Development and 14.2 for the WKN Proposed Development below.
- 14.1.3 The residual effects, i.e. those potential significant effects remaining after mitigation, represent the likely significant effects of the K3 and WKN Proposed Development and these are summarised in Table 14.3 and Table 14.4 respectively.
- 14.1.4 Tables 14.5, 14.6 and 14.7 provide a summary of the likely significant cumulative effects predicted to result from the K3 and WKN Proposed Developments in combination with other committed/proposed developments as set out in Chapter 3 of this ES as follows:
- Table 14.5 - K3 Proposed Development + other relevant cumulative developments within the zone of influence of the development
 - Table 14.6 - WKN Proposed Development + other relevant cumulative developments within the zone of influence of the development
 - Table 14.7 - K3 Proposed Development + WKN Proposed Development + other relevant cumulative developments within the zone of influence of the development



Wheelabrator Technologies Inc

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

Table 14.1 Proposed measures to mitigate potentially significant adverse effects from the K3 Proposed Development		
Potential significant adverse effects	Mitigation measure proposed	Mitigation secured through
Traffic and Transport		
Effects on the local road network (including traffic flows, disruption and driver delay) associated with the future decommissioning of K3	A Decommissioning Environmental Management Plan (DEMP) will be prepared and approved by the local planning authority prior to decommissioning and the works will be undertaken in accordance with this.	Requirement X of the dDCO (to be included in the final ES)
Air Quality		
Generation of dust during decommissioning	A DEMP will be prepared and approved by the local planning authority prior to decommissioning and the works will be undertaken in accordance with this.	Requirement X of the dDCO (to be included in the final ES)
Climate Change		
Greenhouse gas emissions associated with decommissioning	A DEMP will be prepared and approved by the local planning authority prior to decommissioning and the works will be undertaken in accordance with this.	Requirement X of the dDCO (to be included in the final ES)





Noise and vibration		
Decommissioning noise levels on noise sensitive receptors	A DEMP will be prepared and approved by the local planning authority prior to decommissioning and the works will be undertaken in accordance with this.	Requirement X of the dDCO (to be included in the final ES)
Human Health		
The Human Health assessment has taken into account any proposed mitigation measures which are already part of K3 as well as any additional mitigation outlined within the relevant environmental technical disciplines associated with the K3 Proposed Development, namely Chapter 5: Air Quality and Chapter 4: Traffic and Transport. On this basis, no additional mitigation measures relevant to human health are considered necessary.		
Ground Conditions		
Decommissioning of K3	A DEMP will be prepared and approved by the local planning authority prior to decommissioning and the works will be undertaken in accordance with this.	Requirement X of the dDCO (to be included in the final ES)
Water Environment		
Decommissioning of K3	A DEMP will be prepared and approved by the local planning authority prior to decommissioning and the works will be undertaken in accordance with this.	Requirement X of the dDCO (to be included in the final ES)





Ecology		
Decommissioning of K3	A DEMP will be prepared and approved by the local planning authority prior to decommissioning and the works will be undertaken in accordance with this.	Requirement X of the dDCO (to be included in the final ES)
Landscape and Visual Impact		
No mitigation proposed or required.		N/A
Cultural Heritage		
No mitigation proposed or required.		N/A





Table 14.2 Proposed measures to mitigate potentially significant adverse effects from the WKN Proposed Development		
Potential significant adverse effects	Mitigation measure proposed	Mitigation secured through
<i>Traffic and Transport</i>		
Effects on the local road network (including traffic flows, disruption and driver delay) from construction vehicles including HGV's during construction of the WKN Proposed Development	<p>A Construction Environmental Management Plan (CEMP) will be prepared and this will require a Construction Traffic Management Plan (CTMP) to be prepared and agreed with Highway Officers prior to construction commencing and the works will be undertaken in accordance with this. The CTMP will be a management tool that contractors will follow to minimise the impact of construction vehicles. It will be regularly monitored and reviewed on an ongoing basis to seek to further reduce impacts where possible.</p> <p>The CTMP would include measures to manage construction vehicles at the WKN Site and, for example, will include details such as:</p> <ul style="list-style-type: none"> • Programme and total timescale for the project, each major phase of the construction and the anticipated start date; • Days and hours of site construction works; • Vehicular access routes to and from the site; 	Requirement X of the dDCO (to be included in the final ES)





	<ul style="list-style-type: none">• Details on the number, type, size and weight of vehicles accessing the site;• Details of how contractors, delivery companies and visitors will be made aware of the access route;• Measures to ensure route compliance;• Site plan showing compound locations where materials, skips and plant will be stored along with loading / unloading / laydown areas;• Demonstration that vehicles can access the site and turn to exit in a forward direction;• Contingency details on where delivery vehicles will wait to load/unload in the event they are unable to access the site;• Details on vehicle wheel wash facilities be provided;• Details on the arrangements for co-ordinating and controlling delivery vehicles;• Details on the arrangements for supervising, controlling and monitoring vehicle movements to/from the site;• Details on the arrangements to ensure that the loading/collection areas are clear of vehicles and materials before the next HGV arrives;	
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	<ul style="list-style-type: none"> • Details on any specific arrangements for contractor car sharing / minibus / collection / drop-off arrangements to and from the site; • Details on the arrangements for contractor parking on site; • Details on monitoring and review; • Details on how complaints from local residents and businesses, etc. will be dealt with, reported and acted upon; • Details on the transport requirements for abnormal indivisible loads; • A detailed swept path analysis of abnormal indivisible loads; • Details of any measures to accommodate abnormal indivisible loads along the access route along with the management measures to be adopted; and • Details of any road condition surveys. 	
<p>Effects on the local road network (including traffic flows, disruption and driver delay) associated with the future decommissioning of the WKN Proposed Development</p>	<p>A DEMP will be prepared and approved by the local planning authority prior to decommissioning and the works will be undertaken in accordance with this.</p>	<p>Requirement X of the dDCO (to be included in the final ES)</p>





Air Quality		
Generation of dust during construction	<p>A Construction Environmental Management Plan (CEMP) will be prepared and agreed with the local planning authority prior to construction commencing and the works will be undertaken in accordance with this. The CEMP will stipulate but not limited to the following measures:</p> <ul style="list-style-type: none">• 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;• Ensure all vehicles switch off engines when stationary – no idling vehicles;• Use enclosed chutes and conveyors and covered skips;• Avoid bonfires and burning of waste materials.• 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;• 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 on- or off-site, and the action taken to resolve the situation in the log book;	Section X of the dCEMP and Requirement X of the dDCO (to be included in the final ES)





	<ul style="list-style-type: none"> • Production/implementation of a Dust Management Plan; • 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. 	
Generation of dust during decommissioning	A DEMP will be prepared and approved by the local planning authority prior to decommissioning and the works will be undertaken in accordance with this.	Requirement X of the dDCO (to be included in the final ES)
Climate Change		
Greenhouse gas emissions during construction	<p>Construction-stage effects are not predicted to be material to the total life-cycle effect of the WKN Proposed Development. Nevertheless, in consideration of IEMA guidance that all GHG emissions are potentially significant, and government policy seeking GHG emissions reductions across all economic sectors including construction, in general terms it is recommended that the Applicant considers implementing the following additional mitigation measures during detailed design:</p> <ul style="list-style-type: none"> • seek a reduction in total materials required and hence embodied carbon through lean/efficient design; • specify materials with low embodied carbon (e.g. based on data in the BRE Green Guide to Specification [Ref. 6.22] or product EPDs; • source materials locally where possible to reduce transport GHG emissions; and • consider use of an established methodology, such as BREEAM New Infrastructure [Ref. 6.23], PAS2080 [Ref. 6.21] and/or life-cycle analysis to guide low- 	Requirement X of the dDCO (to be included in the final ES)





	carbon design and construction, set a feasible reduction target and quantify its achievement.	
Greenhouse gas emissions associated with decommissioning	A DEMP will be prepared and approved by the local planning authority prior to decommissioning and the works will be undertaken in accordance with this.	Requirement X of the dDCO (to be included in the final ES)
Noise and vibration		
Construction noise levels on noise sensitive receptors	<p>The Project is to be constructed during standard working hours except by prior written agreement of SBC.</p> <p>A Construction Environmental Management Plan (CEMP) is to be prepared which will demonstrate how the construction works will meet best practicable means for reducing construction noise. Examples of appropriate construction mitigation are provided in BS 5228-1:2009+A1:2014. The CEMP will be agreed in writing with the local planning authority prior to commencement of development.</p>	Section X of the dCEMP and Requirement X of the dDCO (to be included in the final ES)
Operational noise generated by the WKN Proposed Development	<p>Secured through the detailed design process, any plant noise specification should require that noise emissions as experienced within neighbouring residential areas are relatively free from distinct tone or impulsive character or specified to a lower acoustic emission such that the BS 4142 rating level remains as stated in Table 7.14 of Chapter 7.</p> <p>Noise level monitoring should be undertaken as part of completion tests and compared against the predicted noise</p>	Requirement X of the dDCO (to be included in the final ES)





	and effect levels in Chapter 7 of the ES, to ensure that the noise emissions committed to within this ES are achieved.	
Decommissioning noise levels on noise sensitive receptors	A DEMP will be prepared and approved by the local planning authority prior to decommissioning and the works will be undertaken in accordance with this.	Requirement X of the dDCO (to be included in the final ES)
Human Health		
The Human Health assessment has taken into account any proposed mitigation measures which are already part of K3 as well as any additional mitigation outlined within the relevant environmental technical disciplines associated with the K3 Proposed Development, namely Chapter 5: Air Quality and Chapter 4: Traffic and Transport. On this basis, no additional mitigation measures relevant to human health are considered necessary.		
Ground Conditions		





<p>Effects on human health and the environment during construction</p>	<p>The impact assessment has not identified any potential significant effects to human health and the environment as a consequence of the construction phase of the WKN Proposed Development. However, there are a number of standard measures that shall be implemented during construction to minimise potential impacts associated with the WKN Proposed Development. These measures are standard in construction projects and are in line with current industry good practice for construction on brownfield sites.</p> <p>A Construction Environmental Management Plan (CEMP) will be prepared and agreed with the local planning authority prior to construction commencing and the works will be undertaken in accordance with this. The CEMP will stipulate but not limited to the following measures:</p> <ul style="list-style-type: none">• Stockpiling of contaminated materials should be avoided where practicable. Where it is necessary, stockpiles would be located on areas of hard-standing or plastic sheeting to prevent contaminants infiltrating into the underlying ground;• The implementation of dust suppression measures during construction to minimise nuisance dust emissions during the works;• Any necessary licences would be obtained for the storage, treatment and disposal of waste;• Where significant unforeseen contamination is identified e.g. hydrocarbons, fibrous asbestos, during the course of the work, work would stop and further investigation would be undertaken to establish the nature and level of contamination and the risks posed to human health and controlled waters. Where remediation is required, on-site treatment, including	<p>Section X of the dCEMP and Requirement X of the dDCO (to be included in the final ES)</p>
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	<p>bioremediation would be carried out wherever practicable;</p> <ul style="list-style-type: none">• Suitable management and control of shallow groundwater during excavation works to minimise the potential for the spread of contamination contained within the water;• The disposal of solid waste, including surplus spoil, would be managed to maximise the environmental and developmental benefits from the use of surplus material and to minimise any adverse effects of disposal. In general, the principles of the waste management hierarchy, reduce-reuse-recycle would be applied;• Prior to commencement of construction works, a Site Waste Management Plan would be produced. This would predict all waste streams to be produced including volumes expected and to identify the waste management action proposed for each different waste type in line with the waste hierarchy;• Potential waste arising from excavation would be sampled and analysed to determine the waste classification required to establish relevant waste streams, suitability for reuse/recycle and disposal/storage requirements;• Excavation works would be carried out in such a way to enable effective segregation of clean materials for reuse on site wherever practicable. It is anticipated that 'clean' concrete and masonry would be crushed for reuse for backfilling and other purposes, or would be sent offsite for recycling or recovery with disposal only as a final resort. Material would only be re-used	
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	<p>on site in accordance with the Environmental Permitting Regulations or appropriate approved Code of Practice e.g. Contaminated Land: Application in Real Environments (CL:AIRE) or Waste Resource Action Plan (WRAP);</p> <ul style="list-style-type: none">• Storage of hazardous materials, including fuel, during the construction phase should utilise industry best practice e.g. storage in bunded areas, to minimise the potential for spills / leakages to impact soil and groundwater;• The implementation of suitable measures in line with the Construction Design Management Regulations (2015) would manage any risks posed to human health, particularly with regard to asbestos. These measures should include the provision of suitable Personal Protective Equipment (PPE) and welfare facilities. Other measures to manage risks to human health from the presence of asbestos should be implemented and should include dust suppression measures and air monitoring.	
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<p>Contamination of aquifer through piling during construction</p>	<p>A piling risk assessment is to be produced to determine the most suitable piling technique to be implemented, to minimise the potential for the downward migration of contamination within the Made Ground into the Secondary A aquifers (Lambeth Group and Thanet Formation).</p>	<p>Requirement X of the dDCO (to be included in the final ES)</p>
<p>Effects on human health from the presence of potential ground gas post construction</p>	<p>To mitigate completed development effects to human health from the presence of ground gas, ground gas protection measures will be implemented within new structures to minimise the potential for the migration into and accumulation of ground gas within these structures.</p> <p>The design of ground gas protection measures will be undertaken in accordance with CIRIA C665 and BS8485 (see Chapter 8).</p>	<p>Requirement X of the dDCO (to be included in the final ES)</p>
<p>The risk of potential exposure of future site users through the potential presence of residual contaminants in underlying soils</p>	<p>In areas of proposed landscaping, a capping layer should be installed to minimise potential exposure of future site users from the presence of contaminants within the underlying soils. The capping layer should comprise the importation of clean soils and be constructed of a suitable thickness to form an effective and robust barrier and to ensure establishment of vegetation.</p>	<p>Requirement X of the dDCO (to be included in the final ES)</p>
<p>Decommissioning of the WKN Proposed Development</p>	<p>A DEMP will be prepared and approved by the local planning authority prior to decommissioning and the works will be undertaken in accordance with this.</p>	<p>Requirement X of the dDCO (to be included in the final ES)</p>





Water Environment		
<p>Water quality and flood risk impacts during construction</p>	<p>A Construction Environmental Management Plan (CEMP) will be prepared and agreed with the local planning authority prior to construction commencing and the works will be undertaken in accordance with this. The CEMP will include but not limited to the following measures:</p> <p><u>Best practice measures</u></p> <ul style="list-style-type: none"> • CIRIA – SuDS Manual [Ref 10.34]; • Prevent surface water being affected during earthwork operations. No discharge to surface watercourses will occur without permission from the EA (SuDS Manual) [Ref 10.34]; • Environment Agency, Pollution Prevention Guidance Note 6 (PPG6): Pollution Prevention Guidelines – Working at Construction and Demolition Sites [Ref 10.37]; • Environment Agency, Pollution Prevention Guidance Note 5 (PPG5): – Working in, near or liable to affect watercourses [Ref 10.38]; • CIRIA (C741) Environmental good practice on site guide [Ref 10.35]; • Prevent surface water being affected during earthwork operations. No discharge to surface watercourses will occur without permission from the EA (SuDS Manual); • Wheel washers and dust suppression measures to be used as appropriate to prevent the migration of pollutants (SuDS Manual); 	<p>Section X of the dCEMP and Requirement X of the dDCO (to be included in the final ES)</p>





	<ul style="list-style-type: none">• Regular cleaning of roads of any construction waste and dirt to be carried out (SuDS Manual); and• A construction method statement to be submitted for approval by the responsible authority (SuDS Manual). <p><u>Water Quality monitoring</u></p> <p>Water quality monitoring will be carried out throughout the construction phase to ensure no discharge of pollutants or increase in suspended sediments occurs in accordance with the existing licence EPR BJ7468IC-V009 .</p> <p><u>Pollution prevention measures</u></p> <ul style="list-style-type: none">• Management of construction works to comply with the necessary standards and consent conditions as identified by the EA;• A briefing highlighting the importance of water quality, the location of watercourses and pollution prevention included within the site induction;• Areas with prevalent run-off to be identified and drainage actively managed, e.g. through bunding and/or temporary drainage;• Areas at risk of spillage, such as vehicle maintenance areas and hazardous substance stores (including fuel, oils and chemicals) to be bunded and carefully sited to minimise the risk of hazardous substances entering the drainage system or the local watercourses. Additionally the bunded areas will have impermeable bases to limit the potential for migration of contaminants into groundwater following any leakage/spillage. Bunds used to store fuel, oil etc. to have a 110% capacity;• Disturbance to areas close to watercourses reduced to the minimum necessary for the work;	
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	<ul style="list-style-type: none">• Excavated material to be placed in such a way as to avoid any disturbance of areas near to the banks of watercourses and any spillage into the watercourses;• Construction materials to be managed in such a way as to effectively minimise the risk posed to the aquatic environment;• All plant machinery and vehicles to be maintained in a good condition to reduce the risk of fuel leaks;• Drainage works to be constructed to relevant statutory guidance and approved via the LLFA prior to the commencement of construction; and• Consultation with the EA to be ongoing throughout the construction period to promote best practice and to implement proposed mitigation measures. <p><u>Surface water management strategy</u></p> <p>A surface water management plan would be present which will ensure that any increase in surface water run-off would be handled on-site and a run-off rate to the surrounding water environment (Swale Estuary) is maintained at the agreed upon rate. This would highlight potential contaminants and suspended sediment originating from the WKN Site, which may affect the receiving watercourse. Monitoring would be carried out during the construction phase and continue throughout the lifetime of the development WKN Proposed Development.</p> <p><u>Flood management plan</u></p> <p>A flood management plan will be produced and adhered to throughout the construction phase, and will include flood-warning measures for safe site evacuation.</p>	
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<p>Water quality and flood risk impacts during operation of the WKN Proposed Development</p>	<p><u>Surface water drainage strategy</u></p> <p>An outline drainage strategy forms part of the application and the detailed drainage strategy will be finalised by the contractor and agreed with the EA and LLFA. The strategy will incorporate the use of appropriate SuDS techniques, interceptors and separators as required, treating surface water run-off generated from the WKN Proposed Development, prior to either infiltrating into the underlying geology, where appropriate, or discharging into the Swale Estuary at an agreed rate.</p> <p><u>Drainage maintenance plan</u></p> <p>This plan is applicable throughout the lifetime of the development for the drainage within the WKN Proposed Development, and any connections to the surface water, or foul sewer and trade waste networks.</p> <p><u>Flood management plan</u></p> <p>This plan is applicable throughout the lifetime of the development and should include flood-warning measures. This plan applies to the WKN Site on a regional basis.</p> <p><u>Emergency spillage management plan</u></p> <p>This plan is applicable throughout the lifetime of the development and should include emergency measures. This plan applies to the WKN Site on a regional basis.</p> <p><u>Water quality monitoring strategy</u></p>	<p>Requirement X of the dDCO (to be included in the final ES)</p>
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	<p>Ongoing water quality monitoring should be undertaken throughout the lifetime of the development. This will apply to the drainage ditches within and surrounding the WKN Site.</p> <p><u>Flood Evacuation Plan</u></p> <p>A flood evacuation plan will be developed for the construction and operational phases of the WKN Proposed Development, with staff training provided, to ensure in the event of the plan be activated staff are aware of the procedures upon receipt of the flood warning, together with evacuation routes. The flood evacuation plan should be practiced regularly.</p>	
Decommissioning of the WKN Proposed Development	A DEMP will be prepared and approved by the local planning authority prior to decommissioning and the works will be undertaken in accordance with this.	Requirement X of the dDCO (to be included in the final ES)
Ecology		
Dust impacts on designated sites during construction	Subject to the implementation of the dust mitigation measures set out above under 'Air quality' no further mitigation measures are required.	Section X of the dCEMP and Requirement X of the dDCO (to be included in the final ES)
Visual disturbance impacts on breeding marsh harrier and the Swale SPA and Ramsar site during construction	<p>A Construction Environmental Management Plan (CEMP) will be prepared and agreed with the local planning authority prior to construction commencing and the works will be undertaken in accordance with this. The CEMP will include but not limited to the following measures:</p> <ul style="list-style-type: none"> • Retention of the existing 2.4m closed board fence along the northern boundary of the WKN site • Erection of a new 2.4m closed board fence around the WKN laydown area 	Section X of the dCEMP and Requirement X of the dDCO (to be included in the final ES)





	<ul style="list-style-type: none"> A lighting scheme for the construction phase to follow best practice to minimise light impacts such that lighting levels at the site boundary will be no more than 1 lux. 	
Noise disturbance on breeding marsh harrier and the Swale SPA and Ramsar site during construction	<p>In order to avoid impacts to the birds using the intertidal area and marsh harrier, impact piling would be undertaken during the following periods:</p> <ul style="list-style-type: none"> No impact piling between April and August, inclusive; No impact piling between the months January and February inclusive. Limited impact piling is permissible between the months of November and December provided that any impact piling activity does not accrue to more than a total of 10 days consecutively or otherwise. 	Requirement X of the dDCO (to be included in the final ES)
Surface water drainage during construction	Subject to the implementation of the measures set out above under 'Water environment' no further mitigation measures are required.	Section X of the dCEMP and Requirement X of the dDCO (to be included in the final ES)
Impacts on reptiles and annual beard grass during and post-construction	<p>Production of an ecological mitigation and enhancement plan (EMEP) to include:</p> <ul style="list-style-type: none"> Requirement of a two stage strip of areas adjacent to construction access road and laydown area Destructive search of all appropriate areas to ensure all reptiles have been removed Installation of drift fencing to prevent reptiles re-entering the site Sowing of annual beard grass seeds along bare banks of the attenuation pond Restoration of the laydown area to provide suitable reptile habitat (post construction) Creation of a grassland/ scrub mosaic in the landscaping area proposed on the WKN Site 	Requirement X of the dDCO (to be included in the final ES)





	<ul style="list-style-type: none"> Set out a detailed management regime to maintain the habitats created 	
Dust impacts on designated sites during decommissioning	A DEMP will be prepared and approved by the local planning authority prior to decommissioning and the works will be undertaken in accordance with this.	Requirement X of the dDCO (to be included in the final ES)
Landscape and Visual Impact		
Visual impact of the WKN Proposed development	The provision of landscaping to help integrate the WKN Proposed Development within the landscape of The Swale, and short and long-distance views.	Requirement X of the dDCO (to be included in the final ES)
Cultural Heritage		
Impact on the archaeological resource of the site	Whilst the archaeological resource of the Site is likely to be low and the unmitigated effect of the development on the buried archaeology therefore not significant, in light of the fact the archaeological resource of the Site is technically unknown a programme of archaeological fieldwork in the form of trial trenching (in the first instance) will be undertaken at a suitable time following consent.	Requirement X of the dDCO (to be included in the final ES)





Table 14.3 Identified significant residual effects from the K3 Proposed Development		
Impact Type	Stage of Development	Significant Residual Effects (beneficial or adverse)
Traffic and Transport	Completed Development	There are no predicted significant traffic and transport effects envisaged as a result of the K3 Proposed Development subsequent to the mitigation measures set out in Table 14.1 above.
	Decommissioning	
Air Quality	Completed Development	There are no predicted significant effects on air quality envisaged as a result of the K3 Proposed Development subsequent to the mitigation measures set out in Table 14.1 above.
	Decommissioning	
Climate Change	Completed Development	The GHG emission reductions predicted due to the K3 Proposed Development associated with the diversion of waste from landfill, is considered to have a significant beneficial effect.
	Decommissioning	There are no predicted significant climate change related effects envisaged as a result of the decommissioning of the K3 Proposed Development subsequent to the mitigation measures set out in Table 14.1 above.
Noise and Vibration	Completed Development	There are no predicted significant effects on the noise environment envisaged as a result of the K3 Proposed Development subsequent to the mitigation measures set out in Table 14.1 above.
	Decommissioning	
Human Health	Completed Development	There are no predicted significant effects on human health envisaged as a result of the K3 Proposed Development subsequent to the mitigation measures set out in Table 14.1 above.
	Decommissioning	
Ground Conditions	Completed Development	There are no predicted significant ground condition related effects envisaged as a result of the K3 Proposed Development post implementation of the mitigation measures set out in Table 14.1 above.
	Decommissioning	
Water Environment	Completed Development	There are no predicted significant effects on the water environment envisaged as a result of the K3 Proposed Development post implementation of the mitigation measures set out in Table 14.1 above.
	Decommissioning	





Wheelabrator Technologies Inc

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

Ecology	Completed Development Decommissioning	There are no predicted significant effects on ecology envisaged as a result of the K3 Proposed Development post implementation of the mitigation measures set out in Table 14.1 above.
Landscape & Visual Impact	Completed Development Decommissioning	There are no predicted significant landscape and visual effects envisaged as a result of the K3 Proposed Development.
Archaeology & Cultural Heritage	Completed Development Decommissioning	There are no predicted significant archaeology and cultural heritage effects envisaged as a result of the K3 Proposed Development.





Table 14.4 Identified significant residual effects from the WKN Proposed Development		
Impact Type	Stage of Development	Significant Residual Effects (beneficial or adverse)
Traffic and Transport	Demolition and Construction	There are no predicted significant traffic and transport effects envisaged as a result of the WKN Proposed Development subsequent to the mitigation measures set out in Table 14.2 above.
	Completed Development	
	Decommissioning	
Air Quality	Demolition and Construction and Completed Development	There are no predicted significant air quality effects envisaged as a result of the WKN Proposed Development subsequent to the mitigation measures set out in Table 14.2 above.
	Decommissioning	
Climate Change	Demolition and Construction and Completed Development	There are no predicted significant climate change related effects envisaged as a result of the construction of the WKN Proposed Development subsequent to the mitigation measures set out in Table 14.2 above.
	Decommissioning	The GHG emission reductions predicted due to the WKN Proposed Development associated with the diversion of waste from landfill, is considered to have a significant beneficial effect.
		There are no predicted significant climate change related effects envisaged as a result of the decommissioning of the WKN Proposed Development subsequent to the mitigation measures set out in Table 14.2 above.
Noise and Vibration	Demolition and Construction	There are no predicted significant effects on the noise environment envisaged as a result of the WKN Proposed Development subsequent to the mitigation measures set out in Table 14.2 above.
	Completed Development	
	Decommissioning	
Ground Conditions	Demolition and Construction	There are no predicted significant ground condition related effects envisaged as a result of the WKN Proposed Development post implementation of the mitigation measures set out in Table 14.2 above.





	Completed Development <hr/> Decommissioning	
Water Environment	Demolition and Construction <hr/> Completed Development <hr/> Decommissioning	There are no predicted significant effects on the water environment envisaged as a result of the WKN Proposed Development post implementation of the mitigation measures set out in Table 14.2 above.
Ecology	Demolition and Construction <hr/> Completed Development	There are no predicted significant effects on Ecology envisaged as a result of the WKN Proposed Development post implementation of the mitigation measures set out in Table 14.2 above.
Landscape & Visual Impact	Demolition and Construction <hr/> Completed Development <hr/> Decommissioning	There are no predicted significant landscape and visual effects envisaged as a result of the WKN Proposed Development post implementation of the mitigation measures set out in Table 14.2 above.
Archaeology & Cultural Heritage	Demolition and Construction <hr/> Completed Development <hr/> Decommissioning	There are no predicted significant archaeological or cultural heritage related effects envisaged as a result of the WKN Proposed Development post implementation of the mitigation measures set out in Table 14.2 above.





Table 14. 5 Identified significant residual cumulative effects from the K3 Proposed Development with other planned or proposed development		
Impact Type	Stage of Development	Significant Residual Effects (beneficial or adverse)
Traffic and Transport	Completed Development Decommissioning	There are no predicted significant cumulative effects on traffic or transport envisaged as a result of the K3 Proposed Development post mitigation as set out in Table 14.1 above
Air Quality	Completed Development stages Decommissioning	There are no predicted significant cumulative effects on air quality envisaged as a result of the K3 Proposed Development post mitigation as set out in Table 14.1 above.
Climate Change	Completed Development stages Decommissioning	The K3 Proposed Development is considered to result in a significant beneficial cumulative effect on climate change. There are no predicted significant cumulative climate change related effects envisaged as a result of the decommissioning of the K3 Proposed Development subsequent to the mitigation measures set out in Table 14.1 above.
Noise and Vibration	Completed Development Decommissioning	There are no predicted significant cumulative noise and vibration effects envisaged as a result of the K3 Proposed Development post mitigation as set out in Table 14.1 above.
Human Health	Completed Development Decommissioning	There are no predicted significant cumulative human health effects envisaged as a result of the K3 Proposed Development post mitigation as set out in Table 14.1 above.
Ground Conditions	Completed Development Decommissioning	There are no predicted significant cumulative ground condition related effects envisaged as a result of the K3 Proposed Development post mitigation as set out in Table 14.1 above.
Water Environment	Completed Development Decommissioning	There are no predicted significant cumulative effects on the water environment envisaged as a result of the K3 Proposed Development post mitigation as set out in Table 14.1 above.
Ecology	Completed Development Decommissioning	There are no predicted significant cumulative effects on ecology envisaged as a result of the K3 Proposed Development post mitigation as set out in Table 14.1 above





Wheelabrator Technologies Inc

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

Landscape & Visual Impact	Completed Development Decommissioning	There are no predicted significant cumulative landscape and visual effects envisaged as a result of the K3 Proposed Development.
Archaeology & Cultural Heritage	Completed Development Decommissioning	There are no predicted significant cumulative archaeological or heritage effects envisaged as a result of the K3 Proposed Development.





Table 14. 6 Identified significant residual cumulative effects from the WKN Proposed Development with other planned or proposed development		
Impact Type	Stage of Development	Significant Residual Effects (beneficial or adverse)
Traffic and Transport	Demolition and Construction	There are no predicted significant cumulative effects on traffic or transport envisaged as a result of the WKN Proposed Development post mitigation as set out in Table 14.2 above.
	Completed Development	
	Decommissioning	
Air Quality	Demolition and Construction and Completed Development stages	There are no predicted significant cumulative effects on air quality envisaged as a result of the WKN Proposed Development post mitigation as set out in Table 14.2 above.
	Decommissioning	
Climate Change	Demolition and Construction and Completed Development stages	There are no predicted significant cumulative climate change related effects envisaged as a result of the construction of the WKN Proposed Development subsequent to the mitigation measures set out in Table 14.2 above.
	Decommissioning	The WKN Proposed Development is considered to result in a significant beneficial cumulative effect on climate change.
		There are no predicted significant cumulative climate change related effects envisaged as a result of the decommissioning of the WKN Proposed Development subsequent to the mitigation measures set out in Table 14.2 above.
Noise and Vibration	Demolition and Construction	There are no predicted significant cumulative noise and vibration effects envisaged as a result of the WKN Proposed Development post mitigation as set out in Table 14.2 above.
	Completed Development	
	Decommissioning	
Human Health	Demolition and Construction	There are no predicted significant cumulative human health effects envisaged as a result of the WKN Proposed Development post mitigation as set out in Table 14.2 above.





	Completed Development Decommissioning	
Ground Conditions	Demolition and Construction Completed Development Decommissioning	There are no predicted significant cumulative ground condition related effects envisaged as a result of the K3 Proposed Development post mitigation as set out in Table 14.2 above.
Water Environment	Demolition and Construction Completed Development Decommissioning	There are no predicted significant cumulative effects on the water environment envisaged as a result of the WKN Proposed Development post mitigation as set out in Table 14.2 above.
Ecology	Demolition and Construction Completed Development Decommissioning	There are no predicted significant cumulative effects on ecology envisaged as a result of the WKN Proposed Development post mitigation as set out in Table 14.2 above
Landscape & Visual Impact	Demolition and Construction Completed Development	<p>The direct cumulative effects of the cumulative schemes (identified in Chapter 3) and indirect effects of the 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 character area which is significant. However, the WKN Proposed Development would make a negligible contribution to this cumulative effect.</p> <p>The direct effects of the cumulative schemes and the indirect effect of the WKN Proposed Development on the Iwade Arable Farmland character area is predicted to result in a substantial adverse effect during the day and at night, which is significant. However, the WKN Proposed Development would make a negligible contribution to this cumulative effect.</p> <p>Walkers using the Saxon Shore Way/Footpath ZU1 south of the WKN Site and footpath ZU2 at Viewpoint 3 and 7, would experience a substantial adverse cumulative effect during the day and night time on views from the footpaths which is significant. However, the WKN Proposed Development would make a slight or negligible adverse contribution to this cumulative effect.</p>





		The direct effects of the cumulative schemes and the indirect effect of the WKN Proposed Development on views from the central high point of the Isle of Sheppey predicted to result in a substantial adverse cumulative effect during the day, which is significant. However, the WKN Proposed Development would make a negligible to slight adverse contribution to this cumulative effect.
	Decommissioning	There are no predicted significant cumulative landscape and visual effects envisaged as a result of decommissioning WKN Proposed Development.
Archaeology & Cultural Heritage	Demolition and Construction Completed Development Decommissioning	There are no predicted significant cumulative archaeological or heritage effects envisaged as a result of the WKN Proposed Development post mitigation as set out in Table 14.2 above.





Table 14. 7 Identified significant residual cumulative effects from the K3 and WKN Proposed Development with other planned or proposed development		
Impact Type	Stage of Development	Significant Residual Effects (beneficial or adverse)
Traffic and Transport	Demolition and Construction	There are no predicted significant cumulative effects on traffic or transport envisaged as a result of the K3 and WKN Proposed Developments post mitigation as set out in Table 14.1&2 above.
	Completed Development	
	Decommissioning	
Air Quality	Demolition and Construction and	There are no predicted significant cumulative effects on air quality envisaged as a result of the K3 and WKN Proposed Developments post mitigation as set out in Table 14.1&2 above.
	Completed Development stages	
	Decommissioning	
Climate Change	Demolition and Construction and	There are no predicted significant cumulative climate change related effects envisaged as a result of the construction of the WKN Proposed Development subsequent to the mitigation measures set out in Table 14.2 above.
	Completed Development stages	The K3 and WKN Proposed Developments are considered to result in a significant beneficial cumulative effect on climate change.
	Decommissioning	There are no predicted significant cumulative climate change related effects envisaged as a result of the decommissioning of the K3 and WKN Proposed Developments subsequent to the mitigation measures set out in Tables 14.1&2 above.
Noise and Vibration	Demolition and Construction	There are no predicted significant cumulative noise and vibration effects envisaged as a result of the K3 and WKN Proposed Developments post mitigation as set out in Table 14.1&2 above.
	Completed Development	
	Decommissioning	
Human Health	Demolition and Construction	There are no predicted significant cumulative human health effects envisaged as a result of the K3 and WKN Proposed Developments post mitigation as set out in Table 14.1&2 above.





	Completed Development Decommissioning	
Ground Conditions	Demolition and Construction Completed Development Decommissioning	There are no predicted significant cumulative ground condition related effects envisaged as a result of the WKN and K3 Proposed Developments post mitigation as set out in Table 14.1&2 above.
Water Environment	Demolition and Construction Completed Development Decommissioning	There are no predicted significant cumulative effects on the water environment envisaged as a result of the K3 and WKN Proposed Developments post mitigation as set out in Table 14.1&2 above.
Ecology	Demolition and Construction Completed Development Decommissioning	There are no predicted significant cumulative effects on ecology envisaged as a result of the K3 and WKN Proposed Developments post mitigation as set out in Table 14.1&2 above.
Landscape & Visual Impact	Demolition and Construction Completed Development Decommissioning	There are no predicted significant cumulative landscape and visual effects envisaged as a result of the K3 Proposed Development in the absence of any change to the built form. The potential for cumulative effects relates to the WKN proposed Development only and are set out in Table 14.6 above.
Archaeology & Cultural Heritage	Demolition and Construction Completed Development Decommissioning	There are no predicted significant cumulative archaeological or heritage effects envisaged as a result of the K3 and WKN Proposed Developments post mitigation as set out in Table 14.2 above.

