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Project No: 314107

Environmental Risk Assessment

Prepared for:

Cooks Waste Kare Limited

Raeburn Road South

Ipswich

Suffolk

IP3 0ET

Contents Amendment Record

This report has been issued and amended as follows:

Revision	Description	Date	Signed
1.0	Final	September 2024	Graeme Kennett

Acknowledgement

This report has been prepared for the sole and exclusive use of Cooks Waste Kare Limited (t/a Sun Skips) in accordance with the scope of work presented in Mabbett & Associates Ltd (Mabbett) Letter Agreement (314107/LA/GK), dated 26 October 20243. This report is based on information and data collected by Mabbett. Should any of the information be incorrect, incomplete or subject to change, Mabbett may wish to revise the report accordingly.

This report has been prepared by the following Mabbett personnel:

MABBETT & ASSOCIATES LTD

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MABBETT & ASSOCIATES LTD

Dr. Dan Colby, PhD
Principal Environmental Consultant

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Section 1.0: Introduction

Cooks Waste Kare Limited (t/a Sun Skips), 'the operator', has instructed Mabbett & Associates Ltd to prepare a bespoke permit variation application, under the Environmental Permitting (England and Wales) Regulations 2016 (as amended), for the Waste Recycling Facility (WRF) at:

COOKS WASTEKARE RECYCLING SITE

Raeburn Road South

Ipswich

Suffolk

IP3 0ET

1.1 Site setting

The Site is located within an area used for a variety of industrial processes. Nearby industrial land uses include Anglian Water's Cliff Quay Sewage Treatment Works which is located approximately 150m west of the Site and Indipave Depot which is located just north of the Site on the opposite side of Raeburn Road South. Other businesses in the vicinity include manufacturing, recycling and transport / haulage.

The site is located within Ipswich Borough Council and is not covered by an Air Quality Management Area (AQMA).

The proposed operation has the potential to cause air quality impacts because of fugitive dust emissions associated with the operation of the facility, as well as road traffic exhaust emissions from vehicles travelling to and from the site. The potential effects and control measures are contained in the following risk assessment and the separate Dust & Emissions Management Plan (DEMP) document.

1.2 Sensitive receptors

There are residential areas located to the north and east, which are located approximately 220m and 250m from the Site respectively. These residential areas are part of the residential town of Ipswich. There are also some allotments located approximately 200m east of the Site. Three schools are located within 1km of the Site, the closest of which is Piper's Vale Primary School which is located approximately 280m northeast of the Site.

1.3 Environmental receptors

Pipers Vale Local Nature Reserve (LNR)[1] is located along the southern boundary of the Site and contains deciduous woodland. There are other areas of deciduous woodland located in close proximity to the Site.

The Orwell Estuary is a Site of Special Scientific Interest (SSSI), Special Protection Area (SPA) and Ramsar site, and is located 270m southwest of the Site.

[1] Sites | Ipswich Borough Council

1.4 Operational background

The recycling site will process construction and demolition, and other suitable producers' waste materials for either:

- Production of saleable product in accordance with the Aggregate Quality Protocol (AQP);
- Production of saleable product in accordance with RPS190[2]; or
- Despatch from site as a waste for use by third parties under a suitable exemption/ waste management operation.

There are no other waste related activities taking place on the site.

1.5 The operation

The WRF processes suitable incoming demolition and excavation materials for, either:

- Production in the Aggregate Quality Protocol (Resource Framework).
- Despatched from site as a waste for use under a suitable exemption/waste management operation.

The proposed variation to the WRF will see an increased material throughput at the site.

This qualitative environmental risk assessment followed these steps:

- Identified and considered risks for the proposed site, and the sources of those risks.
- Identified the receptors (people, animals, property and anything else that could be affected by the hazard) at risk from the site.
- Identified the possible pathways from the sources of the risks to the receptors.
- Assessed risks relevant to the specific activity and checked that they are acceptable and can be screened out.
- States the measures in place to control risks if they are too high.

A copy of the risk assessment is contained within the management system.

1.6 Risks from the site

The risk assessment identifies whether any of the following risks could occur and what the environmental impact could be:

- any discharge, for example sewage or trade effluent to surface or groundwater accidents;
- odour;
- noise and vibration;
- uncontrolled or unintended ('fugitive') emissions, e.g., dust, litter;
- visible emissions, e.g., visible dust plumes.

Where these are not considered to be significant risks, this is stated in the permit application.

[2] Use of manufactured topsoil: RPS 190 - GOV.UK (www.gov.uk)

For each risk that applies, each actual or possible hazard was identified and stated:

- the hazard, e.g., dust, litter, type of visible emission.
- the process that causes the hazard, e.g., screening inert waste.
- the receptors, e.g., people, animals, property and anything else that could be affected by the hazard.
- the pathways, i.e., how the hazard may get to a receptor.
- the measures that will be taken to reduce any risks.
- probability of exposure, for example whether a risk is unlikely or highly likely.
- consequences, i.e., what harm could be caused.
- what the overall risk is, based on what has already been stated in the table, e.g., 'low when management techniques are applied'.

1.7 Risks from noise and vibration

An assessment of predicted noise levels from the proposed following activities has been carried out for the planning permission and covered the following on-site operations;

- Sorting (manually and mechanically)
- Shredding,
- Temporary storage of materials;

1.8 Identify risk of accidents

Examples of possible accidents include:

- Spillages during the transfer of substances, e.g., loading or unloading vessels.
- overfilling vehicle fuel tanks.
- plant or equipment failure, e.g., over pressurised tanks and hydraulic pipework.
- vandalism
- flooding
- inadequate bunding around tanks.

The risk of accidents was assumed that operator error will occur at least once every 100 times an operation is carried out[3], e.g.

- drop or damage a drum from a forklift.
- have a spillage from a tanker.

1.9 Identify receptors.

All the receptors that are potentially at risk from the site have been identified.

The main receptors that are potentially at risk were given the main focus, e.g., any groundwater beneath the site, and any other ecological and human receptors near the site were also considered.

[3] Risk assessments for your environmental permit - GOV.UK (www.gov.uk)

These receptors included:

- protected sites and species
- anywhere used to grow food or to farm animals or fish
- drain and sewer systems
- factories and other businesses
- fields and allotments used to grow food
- footpaths
- groundwater beneath the site
- homes, or groups of homes (such as villages or housing developments)
- playing fields and playgrounds
- private drinking water supplies
- regionally important geological sites
- schools, hospitals and other public buildings
- water, e.g., ponds, streams, rivers, lakes or the sea
- conservation and habitats protected areas and areas of scientific interest (SSSIs, SPA, SAC, RAMSAR sites)

The risk assessment includes a scale plan that shows:

- the site
- all the nearby receptors

1.9.1 Sensitive receptors

There are residential areas located to the north and east, which are located approximately 220m and 250m from the Site respectively. These residential areas are part of the residential town of Ipswich. There are also some allotments located approximately 200m east of the Site. Three schools are located within 1km of the Site, the closest of which is Piper's Vale Primary School which is located approximately 280m northeast of the Site.

1.9.2 Environmental receptors

Pipers Vale Local Nature Reserve (LNR)[4] is located along the southern boundary of the Site and contains deciduous woodland. There are other areas of deciduous woodland located in close proximity to the Site.

The Orwell Estuary is a Site of Special Scientific Interest (SSSI), Special Protection Area (SPA) and Ramsar site, and is located 270m southwest of the Site.

[4] Sites | Ipswich Borough Council

Section 2.0: Summary of Key Parameters

Table 2-1: Summary of key parameters

Parameter	Details
Facility	Raeburn Road South Recycling Facility
Operator	Cooks Waste Kare Ltd (t/a Sun Skips)
Permit ref	EPR/KB3304FX
Location	Raeburn Road South Ipswich Suffolk IP3 0ET
NGR	TM 17680 41919
Site entrance (w3w)	orange.scrub.dock
Location of key environmental sites	See section 3.0
Risk assessment carried out by	Graeme Kennett
Date	10th May 2024
Risk Criteria Summary	
Parameter 1	The site operates sorting, screening, and shredding operation to produce a range of aggregates for use in construction projects, substitute soils and recovered materials. Waste is stored (R13) prior to and post-treatment.
Parameter 2	Quantity of waste accepted at the facility <75,000 tonnes per annum.
Parameter 3	All waste will be stored and treated on an impermeable surface with a sealed drainage system.
Parameter 4	There are no point source discharges to controlled waters.
Parameter 5	The activities are not carried out within a groundwater source protection zone (SPZ1), or within 500 m of any well, spring, borehole used for the supply of water for human consumption, including private water supplies.
Parameter 6	The treatment process is carried out within 250 m of the nearest sensitive receptor.
Parameter 7	The treatment activity is carried out within 500 m of a European Site or a Site of Special Scientific Interest (SSSI).

Section 3.0: Summary List of Environmental Receptors

Table 3-1:List of environmental receptors

Site name/description	Distance from site	Details
Designated and non-designated habitats and wildlife sites		
Stour and Orwell Estuaries RAMSAR	<270 m	The Stour and Orwell Estuaries is a wetland of international importance, comprising extensive mudflats, low cliffs, saltmarsh and small areas of vegetated shingle on the lower reaches. It provides habitats for an important assemblage of wetland birds in the non-breeding season and supports internationally important numbers of wintering and passage wildfowl and waders. The site also holds several nationally scarce plants and British Red Data Book invertebrates.
Stour and Orwell Estuaries SPA	<270 m	The Stour and Orwell Estuaries SPA straddle the Suffolk-Essex border on the east coast of England. The Estuaries are adjacent but combine near the mouth as they join the North Sea. Both are tidal, shallow and relatively sheltered, although the Orwell Estuary is narrower and more linear compared to the wider Stour Estuary. Invertebrate-rich mudflats flank the edges of both estuaries, regularly being covered and uncovered by the tide. The Stour Estuary in particular has extensive mudflats due to the wider and more intertidal channel, with large areas found within the five main bays: Seafield, Holbrook, Erwarton, Jacques and Copperas. The mudflats of the Orwell Estuary are more linear in nature, but are present at Black Ooze, Pond Ooze, Nacton, Freston, Mulberry Middle and Woolverstone. The algae Enteromorpha is present across the mudflats, as well as several small areas of seagrass (Zostera spp.). Diverse communities of saltmarsh fringe the edges of both estuaries, ranging from high saltmarsh species such as sea purslane Atriplex portulacoides, sea aster Aster tripolium and annual sea blite Suaeda maritima, to low saltmarsh species such as glasswort Salicornia spp. and cord grasses Spartina spp. Several freshwater pools and grazing marshes fall within the SPA boundary, such as Trimley and Shotley Marshes.

		The SPA hinterlands include large areas of arable agricultural land, as well as several major urban areas, including Ipswich at the head of the Orwell Estuary, and the towns of Harwich and Felixstowe at the mouth of the estuaries, both of which are major ports.
Orwell Estuary SSSI	1100	The Orwell Estuary is of national importance for breeding avocet *Recurvirostra avosetta*, its breeding bird assemblage of open waters and their margins, nine species of wintering waterfowl (including black-tailed godwit *Limosa limosa islandica*), an assemblage of vascular plants, and intertidal mud habitats.
Pipers Vale Local Nature Reserve and County Wildlife Site	<10	Piper's Vale LNR and CWS covers an area of *c.*15ha located on the south-eastern edge of Ipswich. A remnant of the Suffolk coastal Sandlings that once stretched from Ipswich to Lowestoft, Piper's Vale boasts a variety of habitats spread across the adjoined sites of Elm Hill, and the Anglian Water Jetty, including lowland acid grassland, heathland, scrub, reedbed and deciduous woodland.
Priority habitat inventory		
		No features found
Groundwater and abstractors		
		No features found
Groundwater vulnerability		
		Unproductive
Source Protection Zones		
		No features found
Water protection zone and status		
		No features found
Soil classification		
		Freely draining sandy soils
Surface water		
		None within 1400m
Flood risk		
		Very low risk.
Air Quality Management Area (AQMA)		
		The site does not lie in an AQMA

Section 4.0: Summary List of Sensitive Receptors

Table 4-1: Identified sensitive environmental and human receptors.

Ref	Receptor	Description	Direction from site	Distance from boundary (m)
1	Pipers Vale (LNR)	Protected Habitat- Deciduous Woodland	Southeast	0
2	Raeburn Road South	Nearest public highway	North	30
3	Indipave	Industry	Northeast	60
4	Greenshoots Print	Business	Northeast	70
5	BBS Stone/ Granite Concepts	Industry	North	75
6	D&M Forwarding & Warehousing	Industry	Northwest	130
7	Anglian Water WWTW	Sewage treatment plant and composting facility	West	150
8	The Five Castles Press Ltd	Industry	Northeast	150
9	Morland Road Allotments	Recreational	East	200
10	East Coast Driver Training	Industry	North	220
11	Gainsborough Town	Area of residential dwellings and associated infrastructure	Southeast	220
12	Sandyhill Lane	Road	North	225
13	Orwell Country Park	Recreational	Southeast	250
14	Gainsborough Town	Area of residential dwellings and associated infrastructure	Northwest	250
15	Orwell Estuary Site of Special Scientific Interest (SSSI), Special Protection Area (SPA) and Ramsar	Protected habitat	Southwest	270
16	Piper's Vale Primary Academy	School	Northeast	280
17	Newmarket Plant Hire Ltd	Industry	Northwest	320
18	Hamiltons Driver Training	Business	Northwest	400
19	Deciduous woodland	Protected habitat	Northwest	430
20	Landseer Road	Road	North	480
21	Cliff Quay Substation	Industry	Northwest	505
22	ISG offices	Business	Northwest	560
23	Morland Church of England Primary school	School	Southeast	560
24	Landseer Park- Wildflower Meadow	Protected Habitat	North / Northeast	585
25	A14	Road	South	595
26	Bauder Flat Roofs	Business	Northeast	640
27	Tarmac Ipswich Asphalt Plant	Industry	East	650
28	ABP Sentinel Terminal	Industry	Southwest	735
29	Ipswich BMX Club	Recreational	North	740
30	Gainsborough Community Library	Recreational	Northeast	770
31	BMC Cakery	Business	Northeast	770

32	Deciduous woodland	Protected Habitat	Southeast	800
33	Southern Cement	Industry	West	820
34	Deciduous Woodland	Protected Habitat	Northwest	870

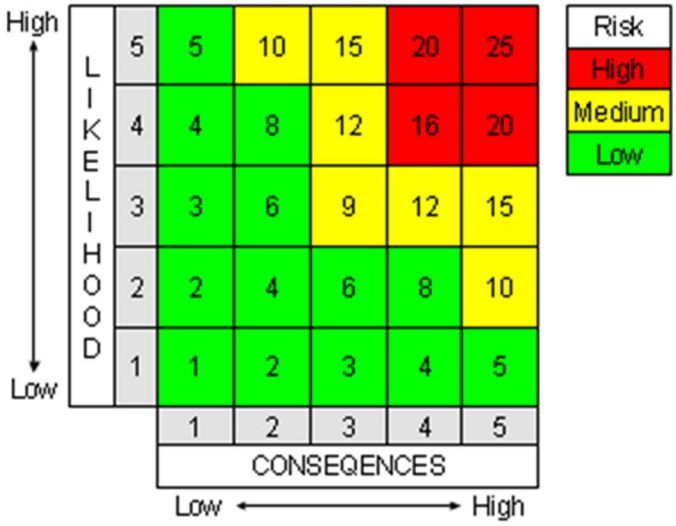
Section 5.0: Risk Criteria Rating

Risk ratings are based on the likelihood of an event occurring multiplied by the severity of potential impact. Ratings are made of residual risk following implementation of preventative measures on site. The following scale is applied to rate these parameters:

Table 5-1: Calculated risk criterium

Severity		Likelihood	
1	No environmental harm arising	1	Very unlikely to happen
2	Fleeting localised impacts	2	Low probability/occasional
3	Localised impacts medium term	3	Likely to occur
4	Wider scale impacts of a fleeting nature, or localised impacts of a more persistent nature	4	Highly likely to occur
5	Widespread/persistent impacts on high amenity/sensitive sites	5	Inevitable

Figure 5-1 Risk assessment matrix



5.1 Dynamic risk assessment

Any scenario for which the Magnitude of Risk has not already been assessed for in Table 5-4 can be undertaken by completion of a dynamic risk assessment using the Risk Matrix.

The dynamic risk assessment will be completed by the Site Manager and recorded. If the scenario is likely to recur, it will be added to the relevant Management Plan at the earliest opportunity which addresses the risk of the facility following the variation.

Table 5-2: Final calculated risk levels

What do you do that can harm and what could be harmed?			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk Management**	**Probability of exposure**	**Consequence**	**What is the overall risk?**
What has the potential to cause harm?	*What is at risk? What do I want to protect?*	*How can the hazard get to the receptor?*	*What measures will you take to reduce the risk? Who is responsible for what?*	*How likely is contact (1-5)*	*What is the harm that can be caused? (1-5)*	*What is the risk that still remains? (Likelihood x Severity)*
Release of dust (manual sorting)	Local human population	Air – windblown dispersion in the atmosphere	Low impact measures will prevent dust release	Very unlikely to happen. 1	Nuisance – dust on cars, clothing and inhalation of dusts 1	**Very low 1**
Release of dust (mechanical sorting)	Local human population	Air – windblown dispersion in the atmosphere	Low impact measures will prevent dust release	Very unlikely to happen. 1	Nuisance – dust on cars, clothing and inhalation of dusts 1	**Very low 1**
Release of dust (screening)	Local human population	Air – windblown dispersion in the atmosphere	The screening plant will house spray bars to dampen down all areas of dust generation. All personnel employed on site will undertake visual monitoring for dust throughout the working day. Any observed problems will be reported to the SM who will investigate the cause and implement any necessary remedial action.	Very unlikely to happen. 1	Nuisance – dust on cars, clothing and inhalation of dusts 1	**Very low 1**
Release of dust (shredding)	Local human population	Air – windblown dispersion in the	The shredding plant will house spray bars to dampen down all areas of	Very unlikely to happen.	Nuisance – dust on cars, clothing and	**Very low 1**

		atmosphere	dust generation. All personnel employed on site will undertake visual monitoring for dust throughout the working day. Any observed problems will be reported to the SM who will investigate the cause and implement any necessary remedial action.	1	inhalation of dusts 1	
Dust from the movement of vehicles to and from the site	Local human population	Air – windblown dispersion in the atmosphere	Provision of an impermeable surface for the entire site and between Burrell Way and the operational area. Site will have an imposed speed limit of 5mph. Regular dampening down of all vehicle routes will be undertaken;	Very unlikely to happen. 1	Nuisance – dust on cars, clothing and inhalation of dusts 1	**Very Low** **1**
Mud on roads from the movement of vehicles to and from the site	Local human population	Deposited on the ground by vehicles entering and exiting the site	Provision of an impermeable surface for the entire site. Site will have an imposed speed limit of 5mph. Appropriate measures will include clearing any mud or other spillage which might arise from the affected areas inside and outside of the site.	Very unlikely to happen. 1	No environmental harm arising. 1	**Low** **1**
Release of particulate matter from input material deliveries to, stored and despatched from site.	Local human population	Air – windblown dispersion in the atmosphere	Material arrives as inert wastes and may generate dust. All vehicles using the facility will ensure their loads are adequately sheeted or otherwise contained. Dampening down of stockpiles will be	Likely to happen. 2	Nuisance – dust on cars, clothing and inhalation of dusts 2	**Low** **4**

			undertaken during loading periods, if required.			
Input material may contain litter.	Local human population	Air – windblown dispersion in the atmosphere	Input materials are likely to contain litter, material will be kept within the building prior to treatment at all times to reduce the effects of litter being blown off-site. Any office waste generated on site will be stored in sealed bins and removed from site on a regular basis to ensure that volumes of all types of waste do not accumulate on site. Appropriate measures will include clearing litter arising from the activities from affected areas in and outside of the site.	Likely to happen. 2	Nuisance – dust on cars, clothing and inhalation of dusts 2	**Low** **4**
	Adjacent land					
Odour from delivered input material	Local human population	Air – windblown dispersion in the atmosphere	The main storage and bulking areas will be inside the recycling building. The waste will have very limited storage times in order for the site turnover to be as rapid as possible. Odour will be monitored and controlled in accordance with the EMS and OMP.	Odours are unlikely to impact on local receptors as materials are non-odourous. 1	Localised impacts medium term 1	**Low** **1**

Odour from the treatment process	Local human population	Air – windblown dispersion in the atmosphere	Treatment process has a low propensity to produce, or release, odour.	Odours are unlikely to impact on local receptors as materials are non-odourous. 1	Localised impacts medium term 1	**Low** 1
Odour from storage of input material in the process	Local human population	Air – windblown dispersion in the atmosphere	The main storage and bulking areas will be inside the recycling building. The waste will have very limited storage times in order for the site turnover to be as rapid as possible.	Odours are unlikely to impact on local receptors as materials are non-odourous. 1	Localised impacts medium term 1	**Low** 1
Flies in waste	Local human population	Air	The main storage and bulking areas will be inside the recycling building. The waste will have very limited storage times in order for the site turnover to be as rapid as possible.	Flies are unlikely to impact on local receptors as waste is not susceptible to fly infestation. 1	Nuisance – unlikely 1	Low 1
Rodent infestation	Local human and wildlife population	Over land	The main storage and bulking areas will be inside the recycling building. The waste will have very limited storage times in order for the site turnover to be as rapid as possible.	Rodents are unlikely to impact on local receptors as waste is not susceptible to infestation. 1	Nuisance – unlikely 1	Low 1

Scavenging birds and animals	Local human and wildlife population	Over land and through the air	The input material is not it attractive to scavengers.	Scavengers are unlikely to impact on local receptors as waste is not attractive. 1	Nuisance – unlikely 1	Low 1
Noise from vehicle movements/ deliveries	Users of highway, local workplaces, and local dwellings.	Air	Vehicle movements are scheduled to occur Monday to Friday during normal working hours. The SM is responsible for ensuring vehicles are turned around efficiently, with least impact on the neighbouring properties and that vehicles are removed from the surrounding roads quickly. Plant (and site surfaces) to be maintained in good order and operated in a manner conducive to not generating unnecessary noise. Reversing alarm sounders on site-based mobile plant to be of the non-tonal type, unless otherwise dictated by health & safety considerations.	Site located close to the A11 with good access to main routes. Location has good access for the highway. Infrequent impact to neighbours to cause nuisance 2	Nuisance from noise. Duration should be short as vehicle movements reduced 1	Low 2

Noise/vibration from plant	Local human and wildlife population	Air	Plant (and site surfaces) to be maintained in good order and operated in a manner conducive to not generating unnecessary noise.	Very unlikely to happen. 1	Nuisance – from noise vibration 1	**Low** **1**
Delivery of input materials	Ground/groundwater/ surface water	Spillage through ground	All deliveries will be supervised and will take place during normal working hours. The input material is restricted to non-hazardous and inert wastes. Deliveries take place only on a sealed, impermeable concrete area. State of repair of the surface is monitored on a regular basis, and proactive maintenance carried out if necessary. No liquid wastes accepted.	Low as supervised delivery procedure in place .1	Pollution of watercourse/ groundwater/land 3	**Low** 3
Chemical delivery	Ground/groundwater/ surface water	Spillage during delivery to drain/ground	Chemicals only stored with secondary containment. No drains within building. Low volumes kept on site. No access to surface or ground water. Risk of spillage/response to spillage dealt with in incident response plan. Tailored spill kit to be kept on site in	Very unlikely to happen. 1	Pollution of watercourse/ groundwater/land 4	**Low** **4**

			the locality of deliveries.			
Storage of small volumes of chemicals	Local environment	Spillage during use or transferring	All chemicals are stored with lids or caps secured. All chemicals are stored to ensure substances are not exposed to conditions that could cause a reaction and spillages are contained. Chemicals are segregated as appropriate and stored in secondary containers to catch any small spillages.	Very low volumes are kept on site. Storage is contained and indoors 1	Harm to local environment and animal health 2	**Low** **2**
Flooding of site	Local human population and local environment	Contaminated flood waters	Permitted waste types are non-hazardous so any waste washed off site will add to the volume of the local post-flood clean-up workload, rather than the hazard. Site is in an area at very low risk of flooding (Zone 1).	No history of flooding in the area. Site is within an area identified at very low risk of flooding. 1	Contamination of buildings / natural habitats downstream 1	**Low** **1**
Spillage of liquids, leachate from waste, contaminated rainwater run-off from waste with high organic content.	All surface waters close to and downstream of site.	Direct run-off from site across ground surface, via surface water drains, ditches etc.	All processing operations are carried out entirely within sealed surfaces within the site. Any liquids kept in containers and provided with secondary	Very unlikely to happen 1	Pollution of watercourse/ land 4	**Low** **4**

			containment. Permitted waste types do not include sludges or liquids.			
Spillage of liquids, leachate from waste, contaminated rainwater run-off from waste with high organic content.	Groundwater	Transport through soil/groundwater then extraction at borehole.	All processing operations are carried out entirely within sealed surfaces within the site. Any liquids kept in containers and provided with secondary containment. Permitted waste types do not include sludges or liquids.	Very unlikely to happen 1	Pollution of groundwater/land 4	**Low** **4**
Accidental fire causing the release of polluting materials to air (smoke or fumes), water or land.	Local human population and local environment	Air transport of smoke. Firewater runoff from site.	Input materials are not considered flammable. Permitted activities do not include the burning of waste. All plant and equipment are modern and are fitted with fire suppression systems.	Negligible 1	Respiratory irritation, illness and nuisance to local population. Injury to staff, firefighters or vandals. Pollution of water or land. 3	**Low** **3**
Unauthorised access to site	Bodily injury to person or animal entering site	Direct physical contact	The site is located within an industrial estate and surrounded by perimeter fencing and a lockable gate to the entrance. Site office entrance is security controlled and kept locked when staff are not present on site. The site is fitted with remote 24/7	Low as site is locked and fenced when not manned Access to the site is controlled during operating hours.	Bodily injury/damage to plant 3	**Low** **3**

			CCTV system, so staff are alerted to the presence of intruders. All vehicles/people entering the site will be received by the main reception operator who will be present in the area while the site is open.	1		
Arson and / or vandalism causing the release of polluting material to air (smoke or fumes), water or land.	Local human population, staff, firefighters, vandals or local environment.	Air transport of smoke. Firewater runoff from site.	The site is located within an industrial estate and surrounded by perimeter fencing and a lockable gate to the entrance. Site office entrance is security controlled and kept locked when staff are not present on site. The site is fitted with remote 24/7 CCTV system so staff are alerted to the presence of intruders. All vehicles/people entering the site will be received by the main reception operator who will be present in the area while the site is open.	Site is secure 1	Respiratory irritation, illness and nuisance to local population. Injury to staff, firefighters or vandals. Pollution of water or land. 3	**Low** **6**
Harm to protected site through nutrient enrichment, leachate, contaminated surface water run-off, smothering, disturbance or predation.	Protected sites - European sites and SSSIs protected species/habitats and other nature conservation sites (LWS)(LNR).	Any	Sites are protected as the processing only takes place on an impermeable surface.	Very unlikely to happen. 1	No environmental harm arising. 1	**Low** **1**

Section 6.0: Impact on the Environment

This environmental risk assessment (ERA) has been carried out to assess the environmental risks posed by the to the Cooks Waste Kare WRF following the proposed changes to the site.

There are no point source emissions to land, air, surface or groundwater from the facility.

The upgraded facility will process demolition and construction wastes in the purpose designed plant outside the main process building.

The upgraded facility will have drainage infrastructure in place at the site so that all potentially contaminated site drainage is captured and directed via a sealed system, consisting of concrete impermeable pavement with falls towards the drain channels that captures all liquids and directs it to a sealed tank.

Operational procedures at the site will monitor and manage amenity and accident risks from the proposed activities and includes provision for the monitoring of odour, noise, and fugitive emissions.

The impact of the proposed development on surrounding human and environmental receptors has been assessed in the ERA.

As the management measures detailed in the risk assessment will be in place from commencement of operations, the conclusion has been reached that the proposed waste materials and treatment activities, are unlikely to result in a significant accident risk or risk to the local environment, including from odour, noise, or pollution of surface or ground waters.

Section 7.0: Dynamic Risk Matrix for the Ceasing of Operations

Conditions	Probability	Consequence	Risk magnitude
Risk from waste treatment activities			
Dry, cool weather (<20deg)	M	L	L
Dry, hot weather (>20deg)	M	M	M
Dry, hot (>20deg), windy (>4 Beaufort)	M	M	M/H
Dry, windy weather (>4 Beaufort)	M	M	L/M
Wet, windy weather (>4 Beaufort)	H	L	L
Dry, little wind (<3 Beaufort)	L	L	L
Gale-force winds (>8 Beaufort)	M	H	M/H
Plant failure or breakdown (spray bars or other essential water suppression or water supply)	M	H	M/H
Preventative and remedial mitigation measures not effective	L	H	H
Risk from waste storage			
Dry, cool weather (<20deg)	M	L	L
Dry, hot weather (>20deg)	M	M	M
Dry, hot (>20deg), windy (>4 Beaufort)	M	M	M/H
Dry, windy weather (>4 Beaufort)	M	M	M/L
Wet, windy weather (>4 Beaufort)	H	N	L
Dry, little wind (<3 Beaufort)	L	M	L
Gale-force winds (>8 Beaufort)	M	M	M/L
Plant failure or breakdown (spray bars or other essential water suppression or water supply)	M	H	M/L
Preventative and remedial mitigation measures not effective	L	H	H
Risk from other site activities			
Mud tracked onto highway in dry conditions	L	M	M
Mud tracked onto highway in wet conditions	M	L	L
Debris on site surface in dry conditions and still conditions (<4 Beaufort)	M	L	M/L
Debris on site surface in dry conditions and windy conditions (>4 Beaufort)	M	M	M
Debris on site surface in wet conditions	M	L	L

Section 8.0: Action Required per Risk Magnitude Rating

Risk magnitude	Action
Low	Continued implementation of preventative measures
Medium	Dust emissions are likely. Relevant activities* stop until additional remedial mitigation is implemented. Relevant waste activity may temporarily cease - can resume upon implementation of additional mitigation if measure is effective. Relevant waste activity must stop if excessive dust emissions are observed. Relevant waste activity can resume when the conditions no longer apply/ additional remedial mitigation is implemented and there are no significant dust emissions
High	Relevant waste activity will stop. In the case of waste storage this will mean either removal or covering of the offending waste within 1 day if remedial mitigation is not effective. Relevant waste activity can resume when the conditions no longer apply/ additional remedial mitigation is effectively implemented and there are no excessive dust emissions.

** Relevant activities: Activities identified as generating excessive dust emissions or having the potential to generate excessive dust emissions in such conditions.*

Section 9.0: Site Management

Site management will comprise of the following staff members;

- A Technically Competent Manager (TCM); who will manage the operation and regularly attend site in compliance with the defined attendance requirement.
- A site supervisor; who will be responsible for the ongoing operation who may also undertake office and plant operation duties.
- Other trained plant operators as required.

Section 10.0: Site Condition Report

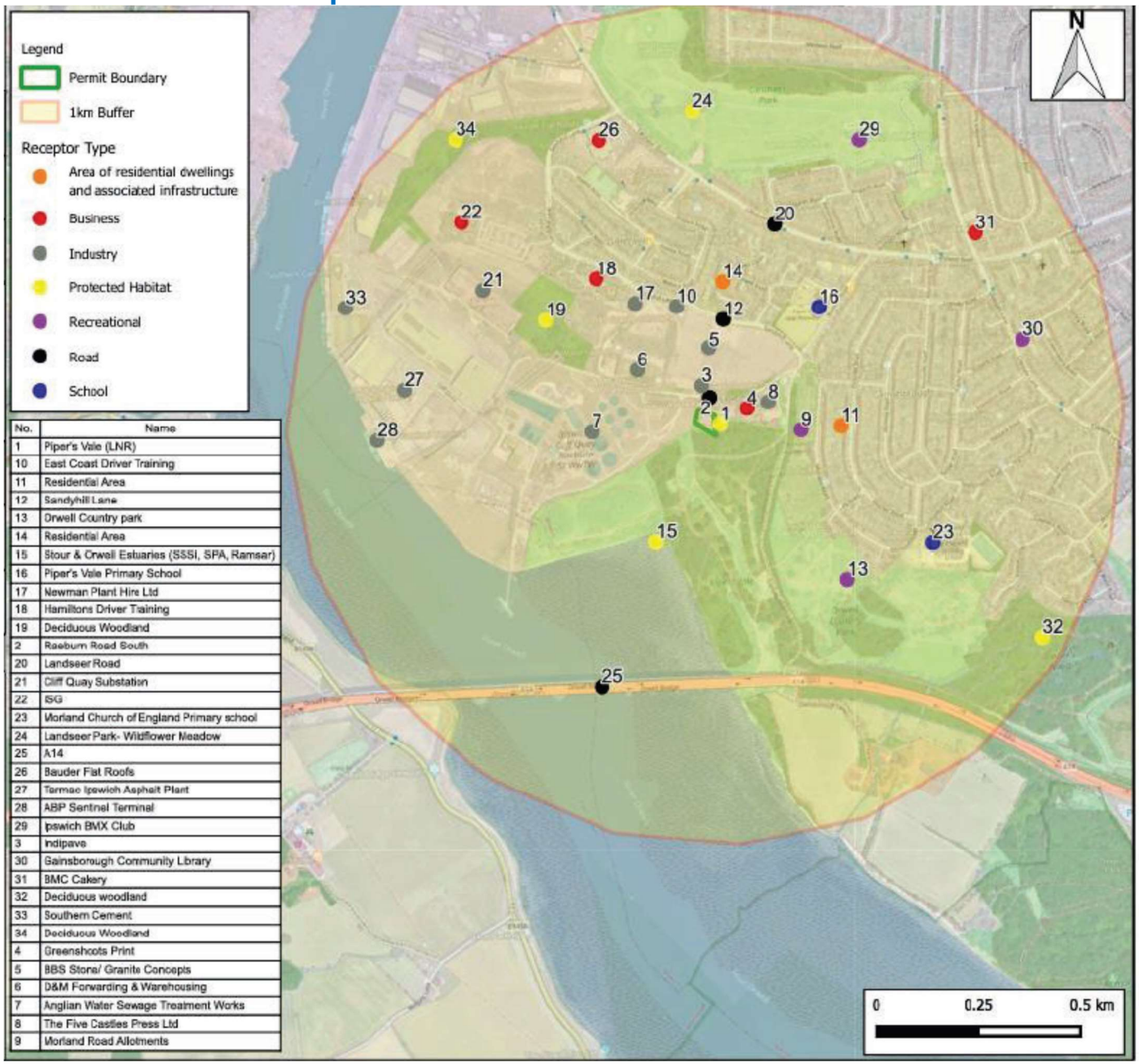
The Site Condition Report (SCR), produced as a part of the original application for the operation, will be extended to cover the additional area.

The extended and upgraded facility will operate with due regard to the conditions of the environmental permit and all relevant environmental legislation to ensure that land and groundwater is protected during the lifetime of the site and that the land is in a satisfactory state when the permit is eventually surrendered.

The possibility of any significant releases to the ground occurring during the lifetime of the permit is therefore limited. Minor spillages, if they occur, will be dealt with immediately by trained staff using appropriate spill response procedure and spill kits located around the site.

Appendix A: Residential receptor plan

Appendix B: Identified sensitive receptors.



No.	Name
1	Piper's Vale (LNR)
10	East Coast Driver Training
11	Residential Area
12	Sandyhill Lane
13	Orwell Country park
14	Residential Area
15	Stour & Orwell Estuaries (SSSI, SPA, Ramsar)
16	Piper's Vale Primary School
17	Newman Plant Hire Ltd
18	Hamiltons Driver Training
19	Deciduous Woodland
2	Raeburn Road South
20	Landseer Road
21	Cliff Quay Substation
22	ISG
23	Morland Church of England Primary school
24	Landseer Park- Wildflower Meadow
25	A14
26	Bauder Flat Roofs
27	Tarmac Ipswich Asphalt Plant
28	ABP Sentinel Terminal
29	Ipswich BMX Club
3	Indipave
30	Gainsborough Community Library
31	BMC Cakery
32	Deciduous woodland
33	Southern Cement
34	Deciduous Woodland
4	Greenshoots Print
5	BBS Stone/ Granite Concepts
6	D&M Forwarding & Warehousing
7	Anglian Water Sewage Treatment Works
8	The Five Castles Press Ltd
9	Morland Road Allotments