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SC JOHNSON, DENBY **ENVIRONMENTAL RISK** **ASSESSMENT**

SC JOHNSON, DENBY ENVIRONMENTAL RISK ASSESSMENT

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CONTENTS

1.	INTRODUCTION	1
2.	IDENTIFICATION OF ENVIRONMENTAL RISKS	2
2.1	Source-Pathway-Receptor Concept	2
2.2	Environmental Risks	2
3.	IDENTIFICATION OF RECEPTORS	5
4.	POTENTIAL POLLUTION PATHWAYS	6
4.1	Identification of Possible Pathways from the Sources of the Risks to Receptors	6
5.	RISK ASSESSMENT METHODOLOGY	7
5.1	Assessing Likelihood and Consequence	7
5.2	Assessment of Risk	7
6.	RISK ASSESSMENT	8
6.1	Noise	8
6.2	Accidents	10
6.3	Fugitive Emissions	12
6.4	Global Warming Potential	13
6.5	Installation Waste	14
7.	ERA CONCLUSION	15

APPENDICES

Appendix 1

External Noise Assessment

1. INTRODUCTION

Ramboll UK Limited (Ramboll) was commissioned by SC Johnson Professional Limited ('SC Johnson' or the 'Client') to prepare an Environmental Risk Assessment (ERA) in relation to the proposed Environmental Permit (EP) variation at the existing chemical production, blending and packaging facility located at Denby Hall Way, Ripley, DE5 8JZ (the 'Facility' or the 'site').

The Facility already operates under a Low Impact Part A(1) installation permit. It is understood that due to production increases the facility will produce more hazardous waste than is permitted under a Low Impact permit.

It has been established that the permit will be varied to become a bespoke chemical production permit for the following activity:

- Schedule 1, Section 4.1 Organic Chemicals, Part A(1), a) Producing organic chemicals such as: (xi) Surface-Active Agents.

The objective of the ERA is to identify the scenarios where pollution to air, water or land could occur, particularly where there is the likelihood of an accident. The Environmental Risk Assessment (ERA) has been carried out based on the Environment Agency's (EA) EPR H1 Guidance.

In accordance with the aforementioned guidance, this ERA is structured as follows:

1. Identification and consideration of risks for the Facility and sources of the risks.
2. Identification of receptors (people, animals, property and anything else that could be affected by the hazard) at risk from the Facility.
3. Identification of possible pathways from the sources of the risks to receptors.
4. Assessment of the risks relevant to the specific activities carried out at the site and consideration of which risks can be screened out as negligible.
5. Description of measures to control identified risks.

2. IDENTIFICATION OF ENVIRONMENTAL RISKS

2.1 Source-Pathway-Receptor Concept

In order for pollution to have an impact on the environment, a pollution linkage must be present which relies on the Source-Pathway-Receptor concept, where all three factors must be present and linked for a potential risk to exist.

A "pollution linkage" requires the following:

- i) A "source" is a substance which is in, on or under the land and which has the potential to cause significant harm to a relevant receptor, or to cause significant pollution of controlled waters;
- ii) A "receptor" is something that could be adversely affected by a contaminant, for example a person, an organism, an ecosystem, property, or controlled waters; and
- iii) A "pathway" is a route by which a receptor is or might be affected by a contaminant.

Identification of the source, pathway and receptor enables management interventions to be made to manage the environmental risks and avoid pollution reaching the receptor.

In this section the potential sources (environmental risks) of pollution at the Facility are identified and screened for their significance, and the potential pathways and receptors are identified.

2.2 Environmental Risks

The Operator is required to identify the environmental risks (sources of potential contamination) which could occur during the operation of the Facility, including any risks which may arise from accidents. The EA online guidance¹ stipulates that the Operator must consider the following potential risks:

- any discharge (e.g. sewage or trade effluent to surface water or groundwater);
- accidents;
- odour;
- noise and vibration;
- uncontrolled and unintended ('fugitive') emissions (for which risks include dust, litter, pests; and pollutants that shouldn't be in the discharge); and
- visible emissions (e.g. smoke or visible plumes).

In considering the risk, the Operator can determine that a potential risk is not considered to be significant in terms of its potential impact on the environment; however, a justification must be provided for any risk which is 'screened out'.

Based on the guidance summarised above, the potential environmental risks at the Facility have been identified and have been determined either significant or not significant based on the potential environmental impact arising from the risk. A summary of these risks is presented in the table below which also provides justifications where risks are considered to be insignificant. The risks which have been identified as significant have been included in the risk assessment in Section 5 of this report.

¹ <https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit#risks-from-your-site>

Table 2.1: Screening of Environmental Risks

Environmental Risk	Applicability	Justification
Controlled discharges to surface waters	Not Applicable	There are no controlled discharges to surface water from the Facility. This risk has not been considered for further assessment.
Controlled discharges to Groundwater	Not Applicable	There are no controlled discharges to groundwater from the Facility. This risk has not been considered for further assessment.
Accidents	Applicable	<p>Plant or Equipment Failure: Large quantities of equipment are in-use across the Facility. The failure of plant or equipment may result in an incident occurring which could potentially impact on the environment.</p> <p>Materials Handling: Raw materials and wastes are stored on site in bulk and will be transported across the Facility via HGV trucks and through transfer pipework from bulk storage vessels. There is the potential for accidents (e.g. spills, leaks etc.) to occur during the filling of the above ground storage tanks, and the movement of materials, which may result in contaminated run-off.</p> <p>Vandalism: The Facility is located in a mixed commercial and industrial setting surrounded by agricultural land. The risk of vandalism is deemed to be very low but cannot be discounted.</p> <p>Operator Error: Processing plant is automated but with a large degree of manual handling and operation (e.g. loading of powders. The potential for operator error cannot be ruled out.</p>
Odour	Not Applicable	There are no odorous emissions from the Facility This risk has not been considered for further assessment.
Noise	Applicable	Operations at the Installation have the potential to produce noise, in particular external plant such as extract fans and a high-level flue outlet, forklift trucks and the movement of Heavy Goods Vehicles making deliveries to and collections from the site.
Visual Impact	Not Applicable	<p>The Facility is bordered to the north by commercial logistics depots, to the east by an access road, car park and lorry park, to the south by agricultural land and to the west by underdeveloped scrubland.</p> <p>Visible emissions from the Facility will be limited to dust generated by road vehicles.</p> <p>These emissions are not considered to be significant in terms of visual impact. Based on this, visual impact has not been considered to be significant and has not been included for further assessment.</p>
Fugitive Emissions to air and water	Applicable	Emissions to air: The facility includes a Local Exhaust Ventilation (LEV) system to maintain appropriate indoor air quality requirements. This is for health and safety purposes only and is not required as environmental abatement of the permitted processes. Extraction to atmosphere has the potential to generate fugitive emissions but these are not

Environmental Risk	Applicability	Justification
		<p>considered to be significant under normal operating conditions.</p> <p>Surface Water: potential for blocked/ damaged drains or misconnections in the drainage system to result in an uncontrolled release of trade effluent to ground or surface water.</p> <p>Storm water discharges: storm water run-off from the site roofs and yard areas is directed via an integrated wastewater and storm water drainage system flowing towards the south of the site. A balancing pond is present in the north-east of the site.</p>
Controlled releases to air	applicable	There are no significant point source emissions to air arising from the installation. Powder pre-weigh is conducted in a filter booth with extraction through a bag filter and external extraction of filtered air. This risk has been considered for further assessment, though dust monitoring has shown the releases to be very low.
Global Warming Potential	Applicable	Indirect emissions arise from the use of electricity, and water. There are no direct emissions produced by the facility.
Facility Waste	Applicable	Hazardous and non-hazardous wastes will be produced at the Facility as a result of the production processes, maintenance and administrative functions.

3. IDENTIFICATION OF RECEPTORS

A receptor is defined as something that could be adversely affected by a pollutant. Based on desk-based research and information provided by the client, Ramboll has identified the receptors within the vicinity of the site. A summary of the identified receptors is provided in Table 3.1 below.

Table 3.1: Summary of Identified Receptors

Receptor	Location
<p><i>Groundwater:</i> The site is underlain by bedrock classified as a Secondary A Aquifer and is not located within a groundwater Source Protection Zone.</p> <p>The EA currently classifies groundwater beneath the site (Derwent – Secondary Combined Water Body) as being of ‘good’ quantitative status and ‘poor’ chemical status under the Water Framework Directive (WFD) classification scheme.</p> <p>According to historical borehole logs for on-site boreholes (detailed further below), slight groundwater seepage was recorded at 2.30 m below ground level (bgl).</p>	On-site and in the immediate vicinity.
<p><i>Surface Water:</i></p> <p>The nearest identified surface watercourse is a network of drainage channels present from adjacent to the west and north-west of the site. The drainage channels eventually join the Bottle Brook located approximately 1.6km south of the site at its nearest point.</p> <p>The EA currently classifies the Bottle Brook as being of ‘moderate’ ecological status and ‘fail’ chemical status under the WFD classification scheme.</p>	Adjacent and in the immediate vicinity.
<p><i>Ground:</i></p> <p>British Geological Survey (BGS) mapping indicates that the site is directly underlain by bedrock geology of the Pennine Lower Coal Measures Formation (mudstone, siltstone and sandstone).</p> <p>According to the BGS GeoIndex Onshore viewer, two historic boreholes are located on site that were drilled in November 1983. The borehole logs identify the following ground conditions:</p> <ul style="list-style-type: none"> • Made Ground (from ground level to between 2.20m bgl and 4.30 m bgl) comprising silty clay with clinker, gravel and carbonaceous materials; underlain by • Highly weathered silty mudstone up to 5.0m bgl; underlain by • Highly weathered very silty sandstone up to 4.5m bgl (final depth of borehole). 	On-site and in the immediate vicinity
<p><i>Designated Ecological Sites:</i></p> <p>There are no statutory designated ecologically sensitive sites located within 2km of the site.</p>	>2 km
<p><i>Human Occupation:</i> Facility workers and visitors are anticipated to be present across the internal and external areas of the site. The nearest residential dwellings are located approximately 200m south of the site.</p> <p>Commercial and light industrial units are present from 30m north-east and 100m north-west.</p>	On-site and directly adjacent

4. POTENTIAL POLLUTION PATHWAYS

4.1 Identification of Possible Pathways from the Sources of the Risks to Receptors

The potential pollution pathways between the sources identified in Section 1 (excluding those which have been screened out) and the receptors identified in Section 2 are summarised in the table below.

Table 4.1: Potential Pollution Pathways

Source	Potential Pathway	Receptor
<i>Noise:</i> arising from external plant, site operations and vehicle movements.	Transmitted through the air and through ground vibration.	<i>Humans including:</i> Facility workers/visitors; workers on nearby premises; local residents; intermittent presence on pedestrian routes / roadways surrounding the Facility.
<i>Accidents:</i> including plant or equipment failure; materials handling; vandalism; operator error; fire; and flooding.	Over site surfaces; through site drainage systems.	<i>Surface water; Groundwater; Ground, and Humans including:</i> Facility workers/visitors; workers on nearby premises; local residents; intermittent presence on pedestrian routes / roadways surrounding the Facility.
<i>Fugitive Emissions:</i> including dust; litter; and surface water run-off.	Through the air; windblown; over Facility surfaces; through Facility drainage systems.	<i>Surface water; groundwater; ground, and humans including:</i> facility workers/visitors; workers on nearby premises; local residents; intermittent presence on pedestrian routes / roadways surrounding the site.
<i>Trade Effluent:</i> including out of specification discharges to the foul sewer.	Direct to foul sewer after effluent treatment plant.	<i>Severn Trent Water sewage treatment plant</i>
<i>Global Warming Potential:</i> from direct and indirect use of fossil fuels.	Through the air.	<i>Atmosphere.</i>
<i>Installation Waste:</i> hazardous and non-hazardous wastes arising as a result of production processes; maintenance; and administrative functions undertaken at the Facility.	Windblown over ground; surface water run-off.	<i>Groundwater; surface water; ground; and atmosphere.</i>

5. RISK ASSESSMENT METHODOLOGY

The risk assessment provides a simple representation of the hypothesised relationships between contaminants, pathways and receptors. This allows the identification of potential contamination linkages and, therefore, an interpretation of the potential for pollution to occur at the Facility or within the vicinity of the site as a result of the activities at the Facility.

The potential for pollution to occur at the site is determined by assessing the likelihood of an identified receptor being exposed to pollution emanating from a source at the Facility and the resultant consequences of any such exposure. In determining the likelihood and the consequence of a pollution exposure the risk management techniques which are used at the Facility, and the effect on any such exposure are considered. Where the risk management techniques are considered to have a mitigating impact, the resultant overall likelihood of the pollution exposure occurring and its consequences on a receptor are lowered.

5.1 Assessing Likelihood and Consequence

Within the risk assessment, each hypothesised relationship between contaminants, pathways and receptors is assessed to determine the likelihood of the receptor being exposed to pollution and the consequences of exposure using the rankings listed in the tables below.

Table 5.1: Likelihood Rankings

Very Low	Low	Medium	High
Exposure to pollution is considered to be <i>highly unlikely</i> .	Exposure is considered to be <i>unlikely</i> .	Exposure is considered to be <i>likely</i> .	Exposure is considered to be <i>highly likely</i> to occur.

Table 5.2: Consequence Rankings

Very Low	Low	Medium	High
No impact or imperceptible impact on the receptor.	Low level impact easily and quickly mitigated or may not require any intervention to rectify any impact.	Moderate impact which will not be rectified without some mitigation / intervention.	High impact requiring significant intervention / mitigation and may have caused irreparable damage to the receptor.

5.2 Assessment of Risk

Following the determination of the likelihood and consequence rankings for the hypothesised relationships developed using the source-pathway-receptor concept, the matrix in the table below is used to determine the overall risk of the pollution exposure occurring.

Table 5.3 Risk Matrix

		Likelihood			
		Very Low	Low	Medium	High
Consequence	High	Low	Medium	High	High
	Medium	Low	Medium	Medium	High
	Low	Low	Low	Medium	Medium
	Very Low	Very Low	Low	Low	Low

6. RISK ASSESSMENT

6.1 Emissions to Air

The potential sources of air emissions at the Facility have been identified and used to develop the risk assessment for dust emissions (see Table 6.1 below). A detailed assessment of dust has been carried out on 21st May 2024 by EEUK Ltd.

Table 6.1: Noise

Source-Pathway-Receptor Hypothetical Model			Risk Management Techniques	Assessing the Risk		
Source of Pollution	Receptor	Pathway		Likelihood of Exposure	Consequence of Exposure	Overall Risk
<i>Dust:</i> arising from dust extraction plant in the process pre-weigh area,.	<i>Humans including:</i> Facility workers/visitors; workers on nearby premises; local residents; intermittent presence on pedestrian routes / roadways surrounding the factory	Through the air	<ul style="list-style-type: none"> Pre-weigh area fitted with extraction system with pre-filter before ductwork linked to external bag filter unit. Bag filter unit exhausts final air downwards onto the yard to prevent water ingress and to ensure that no dust is dispersed into the air. Monitoring data pre- and post-filter shows that the final discharge to the atmosphere in the yard is 0.12 mg/m³ which equates to 2.4% of the BAT dust level. The report considers that even these readings may have picked up external environmental dust meaning the process contribution is expected to be lower than this. Yard area subject to regular daily visual inspection. 	Low	Low	Low

6.2 Noise

The potential sources of noise at the Facility have been identified and used to develop the risk assessment for noise (see Table 6.2 below). A detailed assessment of noise is provided separately in the External Noise Assessment report (C29377-V001), dated January 2024, provided in Appendix 1.

Table 6.2: Noise

Source-Pathway-Receptor Hypothetical Model			Risk Management Techniques	Assessing the Risk		
Source of Pollution	Receptor	Pathway		Likelihood of Exposure	Consequence of Exposure	Overall Risk
<i>Noise:</i> arising from external plant, site operations and vehicle movements.	<i>Humans including:</i> Facility workers/visitors; workers on nearby premises; local residents; intermittent presence on pedestrian routes / roadways surrounding the factory	Through the air	<ul style="list-style-type: none"> Ductwork fitted with in-line attenuator to reduce noise levels by at least -15 dBA. Removal of the welded mesh which is producing regenerative noise. Speaker units decoupled from the building and hung using anti-vibration hangers. Site Management to regularly monitor volume of music internally. Routine inspection and maintenance of roads. Routine inspection and maintenance of equipment. Use of efficient extraction fans, with any fan-related noise complaints to be investigated promptly. Deliveries are made only during daytime hours to minimise disturbance. Engines must be turned off when not required. Vehicles which are fitted with audible reversing warning systems are only used during the daytime. Repair work to be undertaken during normal working hours to minimise disturbance. In the event of major repair work which is likely to cause significant noise and disruption or an emergency breakdown that is likely to impact on operations, neighbouring residents will be notified. Noise management plan in place even though risk is assessed as low and receptors are limited. This is good practice demonstrated by the operator. 	Low	Low	Low

6.3 Accidents

The risk assessment for accidents at the site is included in table 6.3 below.

Table 6.3: Accidents

Source-Pathway-Receptor Hypothetical Model			Risk Management Techniques	Assessing the Risk		
Source of Pollution	Receptor	Pathway		Likelihood of Exposure	Consequence of Exposure	Overall Risk
<i>Accident:</i> Leaks and spillages	<i>Ground</i>	Over surfaces & through drainage systems	<ul style="list-style-type: none"> Regular maintenance will be undertaken on all plant and equipment in accordance with the manufacturer’s guidance. Daily plant checks will be undertaken to ensure that any leaks are identified and repaired as soon as possible. Spill kits are provided, and staff are trained on how to use spill kits. Interceptors are installed on drainage systems to capture hydrocarbons. In the event of a spill or leak that could cause risk to the environment, site leadership will be informed. If necessary, works shall cease while measures are put in place to remediate the leak or spill and the Environment Agency will be informed where appropriate. All chemicals will be stored indoors where not in a bulk tank. Non-flammable bulk tanks are located inside the process building. All tanker offloading is undertaken in an area where the drainage system is connected to the effluent treatment system, ensuring spills or leaks during delivery can be contained and stored for correct disposal. Emergency response procedures are in place at the site including leaks and spillage. Mixing Operatives are trained to follow form Q322 Tanker Off Load Checklist when accepting tanker deliveries. This will include the requirement to perform a check on connections prior to commencing tanker offloading and checking for spills/incidents/issues when relocking the pump-off point. Planned inspections of the tanks will be carried out by an external contractor every 36 months, and by internal maintenance every 12 months. Storage tanks are located within bunds that are inaccessible by standard site PPT. Work carried out in the bunds are carried out following the permit to work process. Weekly inhouse checks of TOC sampling equipment which provides text alerts and visual cabinet lights. 	Very Low	Medium	Low
	<i>Groundwater</i>			Very Low	Medium	Low
	<i>Surface Water</i>			Very low	Medium	Low
<i>Accident:</i> Plant failure and breakdown	<i>Ground</i>	Through Facility drainage systems	<ul style="list-style-type: none"> All plant will be checked on a daily basis, and any issues reported immediately. All internal areas of the Facility feature impermeable surfaces and a sealed drainage system. Interceptors will be present across the site and will be inspected and cleaned regularly. Spill kits will be available in key risk areas. A spill response procedure will be defined in the site’s Accident Management Plan. The site will keep backups of important plant or parts so that minimal disruption will be experienced in the event of plant failure or breakdown. In the event of prolonged plant failure that could lead to environmental pollution, site operations may temporarily cease and any incoming vehicles will be diverted to an alternative (off-site) permitted facility for treatment. All vehicles and plant will be turned off when not in use. 	Very Low	Low	Low
	Groundwater			Very Low	Low	Low
	Surface Water			Very Low	Low	Low
<i>Accidents (Vandalism):</i> Damage / theft of externally located equipment / tanks / pipework	<i>Ground</i>	Over Facility surfaces; and, through drainage systems.	<ul style="list-style-type: none"> CCTV covers the site, which is fully secured by fencing, security presence and with authorised access only. Site gates will be kept locked at all times when the site is not operational. There will be a manned weighbridge with visibility to the Facility entrance. 	Very Low	Low	Low
	Groundwater			Very Low	Low	Low
	Surface Water			Very Low	Low	Low

Source-Pathway-Receptor Hypothetical Model			Risk Management Techniques	Assessing the Risk		
Source of Pollution	Receptor	Pathway		Likelihood of Exposure	Consequence of Exposure	Overall Risk
			<ul style="list-style-type: none"> The Facility will be manned between the hours of 07:00 to 17:30 from Monday to Friday and between the hours of 08:00 and 13:30 on a Saturday. CCTV will be monitored by an external security company when the site is not manned. 			
<i>Accidents (Fire):</i> Fire and arson attacks	Ground	Over Facility surfaces; through the air; and, through Installation drainage systems.	<ul style="list-style-type: none"> Due to the nature of the majority of bulk chemicals accepted into the facility building/bulk tank farm and the blending and mixing activities being undertaken, it is considered that the activities are of an inherently low fire risk. A dedicated bulk tank farm for flammable liquids is present at the northern boundary of the site, within a specific bunded compound adjacent to the sprinkler tanks. This tank farm of five above ground tanks is located approximately 25m away from the main processing building. A dedicated and demarcated tanker offloading bay is present adjacent to the flammables tank farm. All tanker offloads are supervised by competent SC Johnson employees. Strict chemical acceptance procedures will be put in place to minimise the risk of non-compliant product being accepted. These procedures form part of the site quality management system. The operator will undertake regular maintenance of plant and equipment in accordance with the manufacturer's guidance. Trained Fire Marshals will be in place to respond to alarms. Firefighting equipment will be available on site for handling small fires. Hazardous waste treatment and storage areas will be fully concreted and will have kerbed edgings with sealed drainage. All chemicals are stored in accordance with manufacturers guidance within a dedicated chemicals storage area inside the building. All bulk raw material tanks have real-time level monitoring. 	Very Low	High	Low
	Groundwater			Low	High	Low
	Surface Water			Very Low	High	Low
	Atmosphere			Very Low	High	Low

6.4 Fugitive Emissions

The risk assessment for fugitive emissions is presented in Table 6.4 below.

Table 6.4: Fugitive Emissions

Source-Pathway-Receptor Hypothetical Model			Risk Management Techniques	Assessing the Risk		
Source of Pollution	Receptor	Pathway		Likelihood of Exposure	Consequence of Exposure	Overall Risk
Fugitive Emissions: dust and odour	Humans including: Facility workers/visitors; workers on adjacent premises; local residents; intermittent presence on pedestrian routes / roadways surrounding the factory.	Through the air	<ul style="list-style-type: none"> The site operations are not inherently dusty. While powders and dry ingredients are employed at the site, these are provided in bagged form, meaning that bulk transfers of dusty materials are not undertaken. Manual loading of bagged materials into the process vessels is undertaken at a manual pre-weigh station. This is provided with LEV extracting to a bag filter within the process area. The filtered air is vented through the roof of the process building. Should the ventilation system and filters associated with the pre-weigh station fail, the pre-weigh process would cease for safety purposes. Waste materials will be stored internally, only moved outdoors when appropriately packaged for collection. As dust is not a significant issue on site, routine monitoring will not be undertaken. However, any reports of significant dust will be investigated. All other ventilation systems present on site are for health and safety/workplace ventilation purposes only and are not associated with process vessels or storage vessels. 	Very Low	Low	Low
	Atmosphere			Very Low	Low	Low
Fugitive Emissions: contaminated surface water run-off from external areas.	Surface Water	Through drainage systems	<ul style="list-style-type: none"> Storm water run-off from the site roofs is discharged to the site balancing pond and then off-site through surface water sewer networks. There are no surface water drains within the process building or bulk storage/tank farm areas. All effluent treatment plant wastewater is tested for compliance before discharge to the foul sewer network under trade effluent consent. Of the three tanks, one is kept for filling and mixing, the other for testing before discharge, and the third used when the other two are full or for temporary holding of out-of-specification wastewater pending further treatment or disposal. All yard areas are appropriately hardsurfaced with concrete or tarmac. The surface water drains are linked to the wastewater treatment plant area in locations where hazardous substances may be transferred from vehicles. 	Low	Medium	Medium
	Ground water					

6.5 Global Warming Potential

Table 6.5: Global Warming Potential

Source-Pathway-Receptor Hypothetical Model			Risk Management Techniques	Assessing the Risk		
Source of Pollution	Receptor	Pathway		Likelihood of Exposure	Consequence of Exposure	Overall Risk
<i>Global Warming Potential: Use of grid-sourced electricity to support production processes resulting in in-direct emissions of greenhouse gasses.</i>	<i>Atmosphere</i>	Through the air	<ul style="list-style-type: none"> Energy consumption will be monitored, recorded, and reported on a monthly basis. 	High	Very Low	Low
<i>Risks to the facility from Climate Change, e.g. extreme rainfall, leading to more frequent and severe floods, heat waves, drought, rise in sea levels and tidal surges, storms, wildfires.</i>	<i>Site</i>	-	<ul style="list-style-type: none"> Site operations are not inherently water intensive. Future increase in temperature is unlikely to limit the amount of mains water available to the facility. Increase in temperature will not significantly increase the risk of fire at the facility. Bulk storage vessels for raw materials are located within the building so are protected from solar gain. Flammables bulk tanks are designed for a broad range of environmental conditions and will be similarly unaffected. Given the location of the facility on a hillside, direct flooding risks from rivers or seas is considered remote. Surface water flooding is possible in the event of heavy rainfall, though the sealed nature of the external storage vessels means the risk of leaks or spills to surface water is low. Wildfires are not considered likely given the low growth nature of the scrubland adjacent to the site. 	Medium	Low	Low-Medium

6.6 Installation Waste

Table 6.6: Installation Waste

Source-Pathway-Receptor Hypothetical Model			Risk Management Techniques	Assessing the Risk		
Source of Pollution	Receptor	Pathway		Likelihood of Exposure	Consequence of Exposure	Overall Risk
<p><i>Facility Waste:</i> Wastes which arise from production and administrative activities at the site comprising: mixed recyclables; general waste; wood, cardboard and hazardous waste.</p>	<p><i>Humans including:</i> Facility workers/visitors; workers on adjacent premises; local residents; intermittent presence on pedestrian routes / roadways surrounding the factory</p>	Through the air	<ul style="list-style-type: none"> All wastes produced at the Facility will be segregated and provided with suitable containment. All wastes will be stored within a dedicated recycling and waste area. Wastes will be stored either in a container skip, in sealable containers (e.g. drums) or will be baled ready for collection. Out of specification chemicals will be kept in original packaging, e.g. IBCs, for collection by licensed waste contractor. The management of waste will be contracted to a suitable waste carrier, who will manage collection and disposal on behalf of the Facility. All wastes removed from the Facility will be disposed of at permitted facilities. Duty of Care related documentation will be received and retained as required. 	Low	Low	Low
	<p><i>Surface Water</i></p>	Over Facility surfaces; and through drainage systems		Low	Low	Low
	<p>Groundwater</p>			Low	Low	Low
	<p>Ground</p>			Low	Low	Low

7. ERA CONCLUSION

Ramboll has identified potential environmental risks at the Facility and determined the potential environmental impact arising from each risk. The assessment has demonstrated that with the appropriate management controls in place, risks identified are acceptable, i.e. low to medium.

The Facility has an effective environmental management system certified to ISO 14001.

APPENDIX 1 EXTERNAL NOISE ASSESSMENT