Bleak Hill I

784- B031732

Environmental Risk Assessment

Environmental Permit Application

CEMEX UK Materials Limited

January 2024

Document prepared on behalf of Tetra Tech Environment Planning Transport Limited.
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1.0 INTRODUCTION

1.1 REPORT CONTEXT

1.1.1 This section of the Environmental Permit application corresponds to Section 6 of Part B2 of the Environmental Permit application form, and has been prepared on behalf of the Operator, CEMEX UK Materials Limited (CEMEX), by Tetra Tech.

1.1.2 This document relates to CEMEX's Hamer Warren Quarry site off Harbridge Road, Ringwood, BH24 3PX, which is located approximately 1.5km southeast of Alderholt in Hampshire and is centred at approximate National Grid Reference (NGR) SU 13076 11041. The application site is detailed on Drawing Number CEM/B031732/PER/01.

1.1.3 CEMEX are seeking an environmental permit for the operation of a soil washing facility that will process a maximum of 250,000 tonnes per annum of non-hazardous soils.

1.1.4 Further details regarding the proposed activities are provided in the Operating Techniques document which is provided as Appendix C of the Environmental Permit Application.

1.1.5 This Environmental Risk Assessment (ERA) is limited to a qualitative assessment of the potential risks to the environment and human health specifically related to the proposed changes at the site. This report will identify any significant risk and demonstrate that the risk of pollution will be acceptable by taking the appropriate measures to manage the risk.

2.0 ENVIRONMENTAL RISK ASSESSMENT

2.1 METHODOLOGY

2.1.1 This report has been prepared following the Environment Agency's (EA) Risk Assessment guidance and takes into consideration the potential risks associated with the following risk types: -

- Amenity and accidents;
- Surface water discharges;
- Air;
- Global Warming potential;
- Site Waste; and,
- Groundwater.

2.1.2 There will be no direct emissions to groundwater, surface water or air as a result of this proposal. In addition, the EA's 'Assess the impact of air emissions on global warming' guidance indicates that the global warming impact assessment is only required if the proposal comprises emission points to air. Subsequently, it's considered that no further assessment is required for groundwater, surface water, air, and global warming potential.

2.1.3 This report addresses the risks associated with site waste and amenity and accidents.

- This risk assessment addresses the above, and is based on the following methodology: -
- Identification of potential sources of risk;
- Identification of all potential receptors to risk; and,
- Risk assessment of each risk type.

2.1.4 The ERA is a tool used to identify the pollutant linkage i.e., source – pathway – receptor. For most risks, the atmosphere is the main pathway and will always exist. Therefore, the ERA deals primarily with the sources and receptors. The ERA is provided in Appendix A of this document and is summarised below.

2.1.5 A 'Nature and Heritage Conservation Screen' (EPR/LB3602TQ/A001), was requested from the EA. The screen determines the presence of any site of nature and heritage conservation, or protected species or habitats that may be impacted by the proposal. A copy of the results is in Appendix B of this document.

2.2 SOURCES

2.2.1 The potential sources of risks have been considered for each risk type, as provided in Appendix A of this document and summarised below: -

<u>Odour</u>

- Acceptance of odorous waste materials.

<u>Noise and vibration</u>

- Engine noise from vehicles;
- Use of reverse vehicle warnings;
- Loading/unloading of waste; and,

- Mechanical treatment of waste.

Fugitive emissions

- Particulate matter i.e., dust;
- Scavenging birds, pests and vermin;
- Mud; and,
- Litter.

Accidents

- Fire;
- Leaks and spillages; and,
- Unauthorised access.

2.3 PATHWAYS

2.3.1 The pathways have been identified for each risk type as shown in Table 1: -

Table 1: Potential Pathways

Risk Type	Pathway
Odour	Atmosphere
Noise and Vibration	Atmosphere
Fugitive Emissions	Atmosphere
Accidents	Atmosphere
	Surface water run-off
	Infiltration
	Percolation

2.4 RECEPTORS

2.4.1 Receptors within 1km of the proposed application boundary, including those identified in the Nature and Heritage Conservation Screen (EPR/LB3602TQ/A001) have been listed in Table 2 and are shown on Drawing Number CEM/B031732/REC/01. The main pathway for the identified sources will be the atmosphere and as such, atmospheric conditions can affect dispersion rates and hence potential risk. As a result, the location of each receptor in relation to the site may influence the potential impact of the risk, as summarised in Table 2.

Table 2: Location of Sensitive Receptors

ID	Receptor	Direction from Operational Area	Minimum Distance from the Permit Application Boundary (approx. m)
Domestic Dwellings			
1	Properties on Lomer Lane	NE	445

2	Properties adjacent to Bleak Hill I Site	S	225
3	Properties on Kent Lane	SE	635
4	Residential Properties of Harbridge Green	E	445
5	Property off Harbridge Drove	NE	320
6	North Plumley Cottages	SW	857
Commercial, Industrial and Farmland Premises			
7	Bleak Hill Plants	NE	360
8	Snowdrop Cottage (Indoor accommodation)	SE	705
9	Warren Park Farm	NW	700
10	Huzzey J (Self-catering accommodation)	NW	955
11	Farm Property of Lomer Lane (Hill View)	NE	675
12	Harbridge Green Farmland Properties	W	570
13	Industrial Property off Bleak Hill I Access Road	S	430
14	Plumley Quarry Site	SW	570
15	Caroline Levine	SW	745
16	Harbridge Green Farmland	NE	970
17	Juicy Digital Agency	NE	445
18	North Plumley Farm	SW	790
Highways or Minor Roads			
19	Harbridge Drove	E	220
20	Lomer Lane	NE	370
21	Kent Lane	E	245
22	Hillbury Road	N	920
23	Ringwood Road	NW	885
24	Northern End Lane	NE	950
Priority Habitats			
25	BAP Priority Habitat –Woodpasture and Parkland	W	90
26	BAP Priority Habitat – Woodpasture and Parkland Alderholt Road	SE	225
27	Deciduous Woodland	W	90
28	Deciduous Woodland	W	550
29	Deciduous Woodland East of Harbridge Drive	E	350
30	Deciduous Woodland Alderholt Road	SE	660
31	Deciduous Woodland East of Warren Park Farm	NW	760
32	Deciduous Woodland West of Warren Park Farm	NW	980
33	Deciduous Woodland Cobley Wood	SE	700
34	Deciduous Woodland Fernbrook	NE	610
35	Ancient Woodland – Ancient and Semi-Natural Woodland	W	340
36	Ancient Woodland – Ancient and Semi-Natural Woodland	E	695
Listed Buildings and Scheduled Monuments			
37	Fernhill Cottage, 35, Bleak Hill, Ellingham, Harbridge and Ibsley, New Forest, Hampshire (Grade II Listed)	NE	670
Surface Water e.g. rivers and streams			

38	Pond	S	110
39	Collection of Streams and Ponds	NW	370
40	Warren Farm Ponds	NW	620
41	Ringwood Road Pond	N	800
42	Pond	S	775
43	Hammer Brook	SW	30
44	Turmer Brook	SE	595
Nature and Heritage Conservation Sites – Local Wildlife Sites (LWS)			
45	Ringwood Forest & Home Wood	W	90
46	Lomer Copse	NE	500
Protected Species			
47	Sand Lizard	S/W	Adjacent
Groundwater (sensitivity)			
According to the Multi-Agency Geographic Information for the Countryside's (MAGIC) website, the site is located on a Medium-High scale on the Groundwater Vulnerability Map. In terms of aquifers, the MAGIC website indicates the site is a Secondary A Bedrock and Superficial Drift Aquifer. MAGIC further shows that the site is not located in a Source Protection Zone.			

2.5 RISK ASSESSMENT

2.5.1 The ERA (Appendix A) looks at each specific hazard identified and assesses the likelihood of those hazards impacting on the receptors. This is achieved by fulfilling the following objectives: -

- Identify the location and nature of each hazard; Identify the specific receptors potentially at risk and assess the sensitivity of each receptor;
- Provide a qualitative assessment of the risk posed to each sensitive receptor;
- Identify management and monitoring techniques; and,
- Provide recommendations for more detailed assessments where necessary.

2.6 SUMMARY OF ERA

2.6.1 The ERA (Appendix A) indicates that the proposed changes at the site will have no significant impacts in terms of odour, noise and vibration, and fugitive emissions, and the likelihood of accidents is minimal.

DRAWINGS

CEM/B031732/REC/01 – Receptor Plan

CEM/B031732/PER/01 – Environmental Permit Boundary

APPENDIX A - ENVIRONMENTAL RISK ASSESSMENT

Table A1: Odour Risk Assessment

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 wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence.**
Odour from acceptance, storage, and treatment of putrescible waste/contaminated soils	Domestic dwellings listed in Table 2. Commercial and industrial users listed in Table 2. Schools and amenities listed in Table 2. Designated ecological habitats, priority habitats and protected species listed in Table 2.	Atmosphere	As part of the proposal, CEMEX do not intend to accept or process any waste streams that are putrescible in nature. As such, the risk of odour is not expected to increase as a result of this application. Nevertheless, the following measures will be implemented at the site to minimise the risk of odour. There will be strict waste acceptance procedures in place to minimise the risk of non-compliant wastes being accepted. Details of the waste acceptance procedures are provided in the Operating Techniques Document (Appendix C of the Environmental Permit Application). Waste will be accepted at manageable volumes to avoid a backlog of wastes pending treatment. Use of water to dampen stockpiles to suppress odour emissions, if necessary. The treatment system will be enclosed, so there will be no odorous emissions from the treatment process.	**Low** – the proposed waste types are not putrescible in nature and management procedures should prevent emissions of odours	**Medium/Low** - Odour annoyance	**Low** – the proposed waste types are not putrescible in nature and management procedures employed reduce the likelihood of impact

			In the event of odorous materials being received at the site, or materials becoming odorous during storage, these will be treated before other materials already stockpiled at the site. This will minimise the risk of odour to impact sensitive receptors beyond the site boundary. All site operatives will be vigilant with regard to identifying non-compliant wastes and any non-conformances or odour issues will be reported to the Site Manager.			

Table A2: Noise and Vibration Risk Assessment

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 wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence.**
Vehicle movements on site and haul road (including reverse vehicle warnings)	Domestic dwellings listed in Table 2. Commercial and industrial users listed in Table 2. Schools and amenities listed in Table 2. Designated ecological habitats, priority habitats and protected species listed in Table 2.	Atmosphere.	Vehicle movements will only be undertaken during the existing operating hours (07:00 – 18:00 Monday to Friday and 08:00 – 13:00 on Saturdays), with the exception of emergency repairs. There are no proposed changes to the operational hours of the site. All vehicle drivers will comply with the speed limits within the site and on the access roads. An anti-idling policy will be employed on site which requires all vehicles and plant to be switched off when not in use. All vehicles will utilise low level reversing signals where possible. All plant and machinery will have effective silencers where practicable and be maintained in accordance with the manufacturer's requirements to minimise the risk of mechanical failure which could result in increased noise emissions. All noise generating activities will be monitored closely and site operatives will be vigilant and report any excessive noise or vibration issues to the Site Manager. In addition to the above, a Noise Impact Assessment (NIA) and a Noise Management Plan (NMP) have been prepared which provides an assessment of noise from the proposed activities and	**Low** - Intermittent during operating hours.	**Medium/Low** - Intermittent noise and vibration disturbance.	**Low** – The management procedures employed reduced the likelihood of impact.

			how noise will be managed at the site. The NIA and NMP are provided as Appendix G of the Environmental Permit Application.			
Noise and vibration from loading and unloading of waste	Domestic dwellings listed in Table 2. Commercial and industrial users listed in Table 2. Schools and amenities listed in Table 2. Designated ecological habitats, priority habitats and protected species listed in Table 2.	Atmosphere.	All noise generating activities will only be undertaken during the existing operating hours (07:00 – 18:00 Monday to Friday and 08:00 – 13:00on Saturdays), with the exception of emergency repairs. There are no proposed changes to the operational hours of the site. The loading/unloading of wastes will be undertaken in a controlled manner to keep noise/vibration to a minimum. For example, drop heights will be minimised as much as practicable. All noise generating activities will be monitored closely and site operatives will be vigilant and report any excessive noise or vibration issues to the Site Manager. In addition to the above, a Noise Impact Assessment (NIA) and a Noise Management Plan (NMP) have been prepared which provides an assessment of noise from the proposed activities and how noise will be managed at the site. The NIA and NMP are provided as Appendix G of the Environmental Permit Application.	**Low** - Intermittent during operating hours.	**Medium/Low** - Intermittent noise and vibration disturbance.	**Low** – The management procedures employed reduced the likelihood of impact.
Noise from waste treatment activities	Domestic dwellings listed in Table 2. Commercial and industrial users listed in Table 2. Schools and amenities	Atmosphere	It is considered unlikely that the receptors in Table 2 would be affected by noise produced at the site. This is due existing waste operations being carried out at the adjacent sites Bleak Hill I and II and also operations occurring at Plumley. All noise generating activities will only be undertaken during the existing operating hours (07:00 – 18:00 Monday to Friday and 08:00 – 13:00on Saturdays), with the exception of emergency repairs. There are no proposed changes to the operational hours of the site.	**Low** - Intermittent during operating hours.	**Medium/Low** - Intermittent noise and vibration disturbance.	**Low** – The management procedures employed reduced the likelihood of impact.

	listed in Table 2. Designated ecological habitats, priority habitats and protected species listed in Table 2.		The proposed activities will take place externally which is typical for the operation of a soil washing facility. The activity is not considered likely to produce significant levels of noise. It is not considered that any additional bunding or screening is required. Drop heights will be minimised where possible when transferring waste to stockpiles and into the loading hopper. Once loaded into the hopper, the waste treatment process is enclosed, which will minimise the risk of noise emissions beyond the site boundary. All plant and machinery will have effective silencers where possible. The use of modern plant and equipment shall be practiced and will be maintained in accordance with the manufacturer's requirements. This will minimise the risk of mechanical failure which could result in increased noise emissions. All noise generating activities will be monitored closely and site operatives will be vigilant and report any excessive noise or vibration issues to the Site Manager. In addition to the above, a Noise Impact Assessment (NIA) and a Noise Management Plan (NMP) have been prepared which provides an assessment of noise from the proposed activities and how noise will be managed at the site. The NIA and NMP are provided as Appendix G of the Environmental Permit Application.			

Table A3: Fugitive Emissions Risk Assessment

What do you do that can harm and what could be harmed?			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Hazard**	**Receptor**	**Pathway**	**Hazard**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What has the potential to cause harm?**	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What has the potential to cause harm?**
To Air						
Dust emissions from vehicle movements	Domestic dwellings listed in Table 2. Commercial and industrial users listed in Table 2. Schools and amenities listed in Table 2. Designated ecological habitats, priority habitats and protected species listed in Table 2.	Atmosphere	Vehicles delivering waste to the site will be covered or sheeted to prevent the generation of dust whilst the waste is in transit. The site is bound by hedgerows, will provide screening for the site from wind. Further, the receptors, which are closest to the site, including the area of BAP and Deciduous woodland, are also unlikely to experience an increase in dust levels because the prevailing wind direction is from the SW. The site is situated within the wider Hamer Warren Quarry site where speed limits are restricted. An anti-idling policy will be employed on site which requires all vehicles and plant to be switched off when not in use This will minimise the risk of dust that's typically associated with idling. The Site Manager will undertake a daily visual assessment of dust levels and all site operatives will be vigilant and report any problems to the Site Manager. Dust will be managed in accordance with the Dust Management Plan that's provided as Appendix E of the environmental permit application.	**Low** – the management actions should prevent emissions of dust	**Low –** human health risk in immediate vicinity, nuisance risk to nearby vehicles and property.	**Low** – The management procedures employed reduced the likelihood of impact.

Dust emissions from loading/unloading of waste	Domestic dwellings listed in Table 2. Commercial and industrial users listed in Table 2. Schools and amenities listed in Table 2. Designated ecological habitats, priority habitats and protected species listed in Table 2.	Atmosphere	The loading/unloading of wastes would be undertaken in a controlled manner to keep dust emissions to a minimum. Drop heights will be minimised as much as practicable to reduce the generation of dust whilst the waste is being handled. The site is bound by hedgerows, will provide screening for the site from wind. Further, the receptors, which are closest to the site, including the area of BAP and Deciduous woodland, are also unlikely to experience an increase in dust levels because the prevailing wind direction is from the SW. The Site Manager will undertake a daily visual assessment of dust levels and all site operatives will be vigilant and report any problems to the manager. The site staff will be vigilant and will report any incidents of unacceptable dust emissions to the site management staff. The site manager or supervisor will be responsible for visually monitoring dust levels and implementing any necessary remedial action as required. Extra care will be taken during periods of prolonged dry weather or high winds. Dust will be managed in accordance with the Dust Management Plan that's provided as Appendix E of the environmental permit application.	**Low** – the management actions should prevent emissions of dust	**Low –** human health risk in immediate vicinity, nuisance risk to nearby vehicles and property.	**Low** – The management procedures employed reduced the likelihood of impact.
Dust emissions from storage of waste	Domestic dwellings listed in Table 2. Commercial and industrial users listed in Table 2.	Atmosphere	All pre and post storage will be undertaken outside on hardstanding. All soils will be stored in designated bays and will be kept sheeted at all times to prevent dust. The site is bound by hedgerows, will provide screening for the site from wind. Further, the receptors, which are closest to the site, including the area of BAP and Deciduous woodland, are also unlikely to experience an increase in dust levels because the prevailing wind direction is from the SW.	**Low** – the management actions should prevent emissions of dust	**Low –** human health risk in immediate vicinity, nuisance risk to nearby vehicles and property.	**Low** – The management procedures employed reduced the likelihood of impact.

	Schools and amenities listed in Table 2. Designated ecological habitats, priority habitats and protected species listed in Table 2.		The site staff will be vigilant and will report any incidents of unacceptable dust emissions to the site management staff. Extra care will be taken during periods of prolonged dry weather or high winds. The Site Manager will undertake daily visual assessments of dust levels and all site operatives will be vigilant and report any problems to the Site Manager. Dust will be managed in accordance with the Dust Management Plan that's provided as Appendix E of the environmental permit application.			
Dust emissions from the mechanical treatment of waste	Domestic dwellings listed in Table 2. Commercial and industrial users listed in Table 2. Schools and amenities listed in Table 2. Designated ecological habitats, priority habitats and protected species listed in Table 2.	Atmosphere	No point source emissions are expected from the treatment plant as the process will involve the treatment of soil wastes via a soil washing facility which is an enclosed process. All wastes will be loaded onto a hopper which then passes the material onto an enclosed conveyor belt for loading into the system. The use of modern plant and regular maintenance shall be practiced minimising the risk of mechanical failure which may result in increased dust emissions. All plant and equipment will be maintained in accordance with a preventative maintenance programme which will be defined by the manufacturer's requirements. The site is bound by hedgerows, will provide screening for the site from wind. Further, the receptors, which are closest to the site, including the area of BAP and Deciduous woodland, are also unlikely to experience an increase in dust levels because the prevailing wind direction is from the SW. The site staff will be vigilant and will report any incidents of unacceptable dust emissions to the site management staff. Extra care will be taken during periods of prolonged dry weather or high winds.	**Low** – the management actions should prevent emissions of dust	**Low –** human health risk in immediate vicinity, nuisance risk to nearby vehicles and property.	**Low** – The management procedures employed reduced the likelihood of impact.

			Should noticeable quantities of dust be identified during site inspections, a misting unit/hose will be used to dampen stockpiles and access roads. All plant and equipment will be inspected on a daily basis (prior to use) by the Site Manager. The purpose of this inspection is to identify any signs of defects that may affect the integrity or operational efficiency of the plant/equipment. If any defects are identified, the defective plant/equipment will not be used until the necessary remedial works have been undertaken. The Site Manager will undertake daily visual assessments of dust levels and all site operatives will be vigilant and report any problems to the Site Manager. Dust will be managed in accordance with the Dust Management Plan that's provided as Appendix E of the environmental permit application.			
To Water						
Contaminated rainwater from contact with putrescible wastes Run off of contaminants from wastes or non-wastes (e.g., oil, fuel)	Groundwater Surface water features listed in Table 2.	Direct surface water run-off from site. Infiltration. Percolation.	All pre and post storage will be undertaken outside on hardstanding, as the soil washing process will be entirely enclosed, there is minimal risk of the transmission of potentially contaminated liquids into groundwater beneath the site. Water from the site's drainage will be pumped into holding tanks to be used in the treatment process. All areas of the impermeable concrete surface, fixed/temporary bays and containers will be visually inspected on a daily basis to ensure continuing integrity and fitness for purpose. In the event that any damage breaches the integrity of the engineered containment so that it no longer meets the required standards, necessary remedial work will be completed as soon as practicable.	**Low** – The engineered systems and infrastructure are designed to prevent any discharge of contaminated rainwater run off	**Medium –** contamination of local water bodies and/or groundwater	**Low -** due to the design of the site

Pests/Scavenging birds						
Scavenging birds or animals attracted to site and carrying waste off site.	Domestic dwellings listed in Table 2. Commercial and industrial users listed in Table 2. Schools and amenities listed in Table 2. Designated ecological habitats, priority habitats and protected species listed in Table 2.	Air – dropped by birds. Terrestrial – removed from site by vermin.	As part of the proposal, CEMEX do not intend to accept or process any waste streams that are putrescible, or hazardous in nature and therefore will not attract pests, vermin and/or scavenging birds. As such, the risk of pests from the waste treatment activity is expected to be low. Nevertheless, the following measures will be implemented at the site to minimise the risk of odour. Strict waste acceptance procedures in place to minimise the risk of non-compliant wastes being accepted. Details of the waste acceptance procedures are provided in the Operating Techniques Document (Appendix C of the Environmental Permit Application).	**Low –** The management actions should reduce the risk	**Medium** - Nuisance, property damage and risk of vermin spread infections.	**Low** – the management procedures in place reduce likelihood of impact.
Litter/Debris						
Litter/debris and mud on public highway	Domestic dwellings listed in Table 2. Commercial and industrial users listed in Table 2. Schools and amenities	Litter – atmosphere and terrestrial (likely to be in accordance with prevailing wind direction)	The site is situated within the wider Hamer Warren Quarry and the proposed area benefits from a concrete surface, as does the access road. As such, the risk of mud is considered to be low. Vehicles will be sheeted/netted, if necessary, when entering/leaving the site to prevent fugitive emissions of litter/waste materials onto the public highways. The site will employ good housekeeping criteria. Any litter that's noticed on site will be removed as soon as is practicable and a check will be undertaken at both the start of the	**Low** – the management actions should prevent materials being tracked/dropped onto local highways	**Medium** - Nuisance and potential health and safety hazard caused by waste on the highway.	**Low** – The management procedures in place minimise the likelihood of impact.

	listed in Table 2. Designated ecological habitats, priority habitats and protected species listed in Table 2. Highways listed in Table 2. Railway lines listed in Table 2	Mud – terrestrial	workday and the end of the workday to ensure that there is no litter.			

Table A4: Accident and Incident Risk Assessment and Management Plan

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 wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence.**
Leaks/spillages from items of plant or waste	Groundwater. Surface water features listed in Table 2.	Surface run-off. Infiltration. Percolation	The operator will undertake regular maintenance of plant equipment in accordance with manufacturer's guidance. This will minimise the risk of mechanical failure which may result in leaks. The use of modern plant and equipment shall be practiced and will be maintained in accordance with the manufacturer's requirements. This will minimise the risk of mechanical failure which could result in leaks and spillages. Site operations will be undertaken within the confines of a building which benefits from an impermeable concrete surface to prevent the transmission of potentially contaminated liquids into groundwater beneath the site. All areas of the impermeable concrete surface, fixed/temporary bays and containers will be visually inspected at least weekly to ensure continuing integrity and fitness for purpose. In the event that any damage breaches the integrity of the engineered containment so that it no longer meets the required standards, necessary remedial work will be completed as soon as practicable. In addition, all plant and equipment will be subject to daily pre-use inspection checks. The purpose of this inspection is to	**Low** – the Management actions should prevent accidents and the engineered systems and infrastructure are designed to prevent any discharge of contaminated water run off	**Medium** - Pollution of local water courses, groundwater and aquifers	**Low -** The management procedures in place should prevent this occurring.

			identify any signs of defects that may affect the integrity and operational efficiency of the plant. In the event that a defect is identified on any item of plant or equipment, the use of the plant/equipment will be suspended until the necessary remedial works have been undertaken.			
Vandalism / theft – damage to waste containment.	Groundwater. Surface water features listed in Table 2. Domestic dwellings listed in Table 2. Commercial and industrial users listed in Table 2. Schools and amenities listed in Table 2. Designated ecological habitats and priority habitats listed in Table 2.	Unauthorised entry to the site.	Although the proposal is to expand the site's waste operations, there are no proposed changes to the site boundary and therefore the risk of unauthorised access is not expected to increase. Nevertheless, the following measures are currently in place at the site and will continue to be implemented to minimise the risk of unauthorised access. All waste accepted at the site will be stored within the confines of the larger Hamer Warren Quarry site which is secured by fencing and a lockable gate which is kept closed and locked outside hours of operation to prevent unauthorised access to the site. The site will comprise a CCTV system which will be monitored by on site staff during working hours and the contractors outside working hours. Contractors will have details of the emergency contacts from CEMEX to ensure that any incidents are dealt with a timely manner. There will be procedures in place which will require all visitors to the site to sign in on arrival and sign out on departure. All waste streams will be stored on an impermeable concrete surface to prevent the transmission of potentially contaminated liquids into groundwater beneath the site.	**Low** – the management actions should prevent unauthorised access and the engineered systems and infrastructure are designed to prevent any discharge of harmful liquids.	**Medium** - Pollution of local water courses, groundwater and aquifers.	**Low -** The management procedures in place should prevent this occurring.
Arson/fire from self-combustion of waste (for waste treatment facility).	Groundwater. Surface water features listed in Table 2.	Infiltration. Contaminated rainwater runoff.	The proposal comprises the implementation of a soil washing facility and all pre and post storage will occur outside on hard standing. Due to the non-hazardous and inert nature of waste accepted at the site, the risk of fire from this particular activity is minimal.	**Low –** the management actions should prevent fire.	**Medium-** possible respiratory irritation from smoke inhalation	**Low –** due to Management system in place.

	Domestic dwellings listed in Table 2. Commercial and industrial users listed in Table 2. Schools and amenities listed in Table 2. Designated ecological habitats and priority habitats listed in Table 2.				Nuisance from smoke and emissions of particulates.	

APPENDIX B - NATURE AND HERITAGE CONSERVATION SCREEN (EPR/LB3602TQ/A001)