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ENVIRONMENTAL PERMIT VARIATION APPLICATION SUPPORTING STATEMENT

SKELBROOKE QUARRY EXTENSION AREA
STRAIGHT LANE
SKELBROOKE
DONCASTER
SOUTH YORKSHIRE
DN6 8LY

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Information Sheet

ENVIRONMENTAL PERMIT VARIATION APPLICATION - SUPPORTING STATEMENT SKELBROOKE QUARRY EXTENSION AREA, STRAIGHT LANE, SKELBROOKE, DONCASTER

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1	August 2022	Updated to accommodate the revised planning consent and associated scheme of restoration	R Chapple	D Thomas

SKELBROOKE QAURRY EXTENSION AREA
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DONCASTER

ENVIRONMENTAL PERMIT VARIATION APPLICATION
SUPPORTING STATEMENT

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1.0 INTRODUCTION

1.1 Scope

1.1.1 Sirius Environmental Limited ('Sirius') has been commissioned by Darrington Quarries Limited ('DQL'), part of the FCC Group of Companies, to prepare an application to vary the Environmental Permit EPR/CP3994ZR to approve a revised scheme of restoration for the disused quarry extension area.

1.1.2 The current permit authorises a restoration of the quarry by means of landfill disposal operations, although the site is currently 'closed', and no wastes are therefore permitted to be deposited at the site. The revised scheme of quarry restoration seeks to achieve final levels by the permanent deposit of suitable wastes as a waste recovery operation due to the flooded nature of the void.

1.1.3 The application is supported by the following documents:-

- Application forms (Parts A, C2, C4 and F1);
- Non-Technical Summary;
- Supporting Statement;
- Environmental Setting and Site Design Report;
- Hydrogeological Risk Assessment;
- Environmental and Accident Risk Assessment;
- Waste Recovery Plan;
- Dust Management Plan; and
- Supporting Drawings.

1.2 Background

License History

1.2.1 Environmental Permit EPR/CP3994ZR was originally issued under the Waste Management Licensing Regulations 1994 in July 2001 (Licence Ref.: EAWML65052). The permit originally authorised the disposal of biodegradable wastes in engineered cells, although no cells have been engineered within the extension area to date and no wastes therefore deposited.

1.2.2 In 2007, the permit/licence was modified to remove conditions allowing the acceptance of waste at the site, with the exception of waste to support landfill restoration activities (where appropriate), subject to prior written agreement with the Environment Agency.

1.2.3 In January 2015, an EA initiated variation to the permit was determined to close the facility following which no wastes are currently permitted for disposal at the site. A Closure Plan (Doc. Ref.: 1776/R/025/1) dated October 2014 was incorporated into the permit as part of this variation.

1.2.4 The extension area forms part of wider former limestone quarry and landfill complex located to the southwest of the extension area, which has already been restored by landfilling under a separately regulated landfill activity (Environment Permit EPR/BV1470IE). Completion to the final levels approved under the planning consent for the site has yet to be achieved at the adjacent Skelbrooke Landfill facility, but all existing deposits are currently capped and definite closure has been agreed with the EA.

1.2.5 The extension area void is flooded due to groundwater levels within the surrounding geology, although the site also forms part of the surface water management system for the adjacent, closed landfill facility.

1.2.6 The site originally benefited from a discharge consent that allowed the discharge of surface water via a land drain located along the north-eastern boundary of the extension area, in which the volumes and rate of discharge were limited to 200m³/day and 20m³/hr respectively. This consent was subsequently incorporated into Environmental Permit EPR/BV1470IE for the main landfill.

Development History

1.2.7 Quarry operations at Skelbrooke Quarry have been present since the mid-1800's. The quarry has been developed within the Permian Magnesian Limestone, subject to a number of planning approvals. Messrs J. Hinchcliffe & Son Ltd developed quarry operations prior to the mid-1970's. Darrington Quarries Ltd has operated the site since 1976. Darrington Quarries became part of Waste Recycling Group plc in 1998. No other operations occurred within the area of Skelbrooke Quarry prior to the development of the quarry.

1.2.8 The development layout of the main Skelbrooke Landfill facility to the south of the northern extension area is illustrated in **Drawing No. WR7640/10/SS1**. Cell 1 of the main Skelbrooke Landfill Site was initially developed by Darrington Quarries in 1992. Landfilling within Cell 1 was completed in June 1993 and the cell capped off in August 1993. Subsequent landfill cells 2 to 5 were developed, filled and capped between June 1993 and October 2001. Tipping operations were suspended between August 1995 and October 1996, and again between November 1998 and July 1999. With landfilling operations within Cell 6 commencing in August 2001 and ceasing in 2005. The main landfill area is currently closed to the receipt of further waste deposits, although the site has yet to be filled to its approved final landform. The site was permitted to receive hazardous, non-hazardous and inert wastes.

1.2.9 Mineral extraction in the northern extension area commenced around 1998 and was completed prior to 2001/02, following which the void was allowed to flood with groundwater. Bathymetric surveys of the flooded section of the extension area indicates that this area has been excavated to depths of between ~16 and 20mAOD, relative to surrounding ground levels of ~35mAOD and 29mAOD along the south-western and north-eastern edges of the flooded extension area. This void is also now used to balance surface water run-off form the restored surface of the adjacent landfill site prior to pumped discharge of the waters to a tributary of The Skell river that flows north from the edge of the site.

2.0 WASTE MANAGEMENT AND CONTROL

2.1 Permitted Wastes

2.1.1 The waste codes and associated descriptions that will be permitted for recovery in the extension area are presented in **Appendix SS1.** All wastes will be non-hazardous in nature and will consist of a pollution potential that is less than, or equal to, that of the surrounding geology/water, and will principally be sourced from sites within the locality of the site which will ensure a low risk of contamination. The waste to be accepted at the site will not have undergone significant physical, chemical and biological transformation. This will comprise of materials with low pollution potential from low contamination risk sources, including quarry, construction product manufacturing, construction, demolition and excavation wastes and products, as well as soils from local greenfield or low-risk brownfield development sites.

2.1.2 Materials to be accepted will be in line with Environment Agency guidance. Where required during pre-acceptance procedures, the operator will undertake an analysis of the material prior to deposit to ensure it is suitable.

2.1.3 Waste will be accepted at the site until final restoration levels are reached. This will require the deposit of material below the water table, which currently ranges between 24.3 and 31mAOD (range of groundwater levels recorded in groundwater monitoring borehole SK02), compared to the void basal levels of between 16 and 20 mAOD. In order to achieve the current approved scheme of restoration ~230,000 cubic metres of non-hazardous material will be deposited. This could be achieved over the period of a year or possibly longer, subject to waste availability. Note, under the previous approved scheme of restoration the modelled void capacity was estimated as ~235,100m^3. This volume has principally been reduced to provide greater flood attenuation and freeboard capacity in the surface water lagoon, in line with current guideline requirements. Furthermore, a review of materials balances will result in approximately 6,000m^3 of the 230,000m^3 being sourced from existing deposits at the site, reducing required import balance to ~224,000m^3.

2.2 Waste Acceptance Procedures

2.2.1 The facility is proposing to principally import mineral wastes from local quarries and soils from low contamination risk local development sites, although other low risk waste sources will also be accepted at the site.

2.2.2 DQL has defined procedures for the acceptance of waste at its waste facilities sites which are set out in accordance with the relevant EA guidance. This is to ensure that waste material received is acceptable for deposit at the facility.

2.2.3 The acceptance procedures ensure compliance with the requirement implicit under Duty of Care when dealing with waste materials, particularly the need to assess the material from initial customer enquiry to when it is deposited on site. The procedures are divided into ‘Pre-acceptance’ and ‘Acceptance’ measures.

Pre-Acceptance

2.2.4 Prior to acceptance of waste at the site the waste producer must provide adequate information relating to the waste to determine the correct waste code and the characteristics of the waste to ensure that it complies with the waste streams suitable for deposit at the site.

2.2.5 This should be by means of the Company Waste Characterisation Form, or similar document, but must include the necessary information for a Level 1 Basic Characterisation as specified in the Landfill Regulations. The following information will be required as minimum:-

- Waste source and origin;
- The code applicable to the waste under the European Waste Catalogue (EWC);
- Determination if the waste has any hazardous properties as per WM3;
- The process producing the waste (including a description of the process, its SIC code and characteristics of its raw materials and products which may affect its behaviour upon deposit);
- The waste treatment applied, or a statement of why treatment is not considered necessary;
- The appearance of the waste (including smell, colour, consistency and physical form);
- Confirmation that the waste is not prohibited from deposit at the facility (for example liquid waste and whole used tyres);
- Confirmation of whether the waste requires testing.

2.2.6 In the case of mirror entry waste codes, appropriate evidence that the waste doesn't display any hazardous properties will also be required. Typically, this could be provided in the form of desk study information only or extend to physical sampling and testing of the material.

2.2.7 The wastes identified in **Table SS1** mirror those listed under EA guidance[1] that may be accepted for recovery at the site without being subject to any additional testing, provided:

- The waste is a single stream and single source material. Different wastes contained in **Table SS1** may be accepted together, provided they are from the same source;
- Are well characterised and described; and
- Carry no risk of contamination[2].

Table SS1: Wastes that do not require additional testing

EWC Code	Description	Restrictions
01 01 02	Waste from non-metalliferous excavation	-
01 04 08	Waste gravel and crushed rocks other than those containing hazardous substances	-
01 04 09	Waste sand and clays	-
10 12 08	Waste ceramics, bricks, tiles and construction products (after thermal processing)	-
17 01 01	Concrete	Selected Construction and Demolition Waste only
17 01 02	Bricks	Selected Construction and Demolition Waste only
17 01 03	Tiles and ceramics	Selected Construction and Demolition Waste only
17 01 07	Mixtures of concrete, bricks, tile sand ceramics	Selected Construction and Demolition Waste only

[1] https://www.gov.uk/government/publications/deposit-for-recovery-operators-environmental-permits/waste-acceptance-procedures-for-deposit-for-recovery *(Published 21st April 2021)*

[2] *In case of suspicion of contamination (either visual or from knowledge of the origin of the waste), testing should be applied against the criteria given in Tables SS1 and SS2 prior to delivery to the quarry, otherwise the waste must be rejected.*

EWC Code	Description	Restrictions
17 05 04	Soil and stones	Excluding topsoil, peat; excluding soil sand stones from contaminated sites
19 12 09	Minerals (for example sand, stones)	-

2.2.8 Wastes not included in or that fall outside the scope of **Table SS1** may not be accepted unless representative samples of the waste have been submitted for compliance leaching testing at a solid to liquid ratio (L/S) of 10 l/kg by a suitable laboratory, in accordance with BS EN 12457:2002. The wastes must not exceed the limit values provided in **Table SS2**. These values have been derived based on the natural baseline groundwater chemistry associated with the Magnesian Limestone.

Table SS2: Leaching Limit Values

Substance	L/S = 10l/kg Limit Value (mg/kg)	L/S = 10l/kg Limit Value (mg/l)
Arsenic	1.5	0.15
Cadmium	0.12	0.012
Chromium	1.5	0.15
Copper	6	0.6
Nickel	1.2	0.12
Lead	0.5	0.05
Mercury	0.03	0.003
Nickel	1.2	0.12
Phenol	3	0.3
Zinc	12	1.2
Chloride	2,400	240
Fluoride	30	3
Sulphate	3,000	300

2.2.9 In addition to the leaching limit values above the wastes must meet the additional limit values provided in **Table SS3.**

Table SS3: Limits values for total content of organic parameters for inert waste

Parameter	Limit Value (mg/kg)
TOC*	30,000 or 3%w/w
BTEX	6
PCBs	1
Mineral Oil (C10 to C40)	500
PAHs	100

* - *In the case of soils a higher limit value may be admitted by the Environment Agency, provided that the Dissolved Organic Carbon value of 500 mg/kg is achieved at L/S 10 l/kg at the pH of the soil or at a pH.*

2.2.10 Further information on waste characterisation requirements can be found in Environment Agency guidance *"Waste acceptance procedures for deposit for recovery"*

Restoration Soils

2.2.11 The soil profile within 2m of the final levels will be be subject to the limits set out in **Tables SS4** and **SS5** below. These thresholds account for the sites end use, comprising grassland and trees/shrubs.

Table SS4: Waste Acceptance Criteria for final restoration soil profile

Component [4]	Proposed Waste Acceptance Limit [1] (mg/kg)	Source and Comments
Arsenic	100	Less than Atkins ATRISK soil SSV (for open spaces)
Cadmium	50	Less than Atkins ATRISK soil SSV (for open spaces)
Chromium (Non-Hexavalent)	1000	Less than Atkins ATRISK soil SSV (for open spaces)
Chromium (Hexavalent)	200	Less than Atkins ATRISK soil SSV (for open spaces)
Copper	500[3]	Possible phytotoxic substance – significantly less that Atkins ATRISK soil SSV (for open spaces)
Lead	800	Less than Atkins ATRISK soil SSV (for open spaces)
Mercury	20	Less than Atkins ATRISK soil SSV (for open spaces)
Nickel	400	Possible phytotoxic substance – significantly less that Atkins ATRISK soil SSV (for open spaces) and approximately 20% hazardous waste threshold for worst-case compound
Selenium	500	Less than Atkins ATRISK soil SSV (for open spaces)
Zinc	500[3]	Possible phytotoxic substance – significantly less that Atkins ATRISK soil SSV (for open spaces)
Boron (water soluble)	3	Former ICRCL Limit – no SSVs determined for open spaces
pH	5 – 10	Guideline values to avoid extreme acidic or alkaline conditions
Sulphate (water soluble)	2000	Former ICRCL Limit – no SSVs determined for open spaces
Free Cyanide	30	Less than Atkins ATRISK soil SSV (for open spaces)
Phenol	2000	Less than Atkins ATRISK soil SSV (for open spaces)
Total Petroleum Hydrocarbons / mineral oil (Unspeciated)	800	Significantly less that Atkins ATRISK soil SSV (for open spaces) and approximately 20% hazardous waste threshold
Petroleum Range Organics (PRO) (C6-C10)	450	Less than Atkins ATRISK soil SSV (for open spaces) for aliphatic PRO C8-C10
Diesel Range Organics (DRO) (C10-C25)	1000	Significantly less that Atkins ATRISK soil SSV (for open spaces) and an order of magnitude below the hazardous waste threshold
Unknown lubricating / other oil (not fuel) (Inc C25-C40) (no PAH Speciation)	800	Significantly less that Atkins ATRISK soil SSV (for open spaces) and approximately 20% hazardous waste threshold
PAHs (Total) – Unspeciated (must be non-hazardous)	900	Less than former ICRCL limit (for landscaped areas) – no SSVs determined for open spaces for total PAHs. Any total PAH analysis exceeding 100mg/kg requires speciation and compliance with individual PAH concentrations (at or below SSVs for open spaces) as described in **Table RP5**.

Notes:
[1] – All thresholds for metals stated in mg/kg dry weight

[2] – All PAHs must individually be classified as non-hazardous. This is especially relevant for any PAHs which have been assigned a substance specific hazardous threshold (used for H14 ecotoxic hazardous property assessment).
[3] – The acceptable concentration of the potentially phytotoxic metals of copper and zinc may be elevated to 800mg/kg (dry weight) for soils where there is comprehensive evidence that the pH is at or greater than 7.
[4] – For soil wastes expected to have a potential for elevated conductivity (such as soils containing ashes, dredgings, silts etc) then there is a requirement to determine the conductivity of the soil wastes. The guideline concentration to be used for conductivity is 3,700µS/cm.

Table SS5: Individual PAH Waste Acceptance Criteria for Final 2m

Component	Proposed Waste Acceptance Limit [1] (mg/kg)	Source and Comments
Acenaphthene	250	Less than Atkins ATRISK soil SSV (for open spaces)
Acenaphthylene	250	Less than Atkins ATRISK soil SSV (for open spaces)
Anthracene	250	Less than Atkins ATRISK soil SSV (for open spaces)
Benzo(a)anthracene	20	Less that Atkins ATRISK soil SSV (for open spaces) and approximately 20% hazardous waste threshold
Benzo(a)pyrene	4.2	Atkins ATRISK soil SSV (for open spaces)
Benzo(b)fluoranthene	35	Less than Atkins ATRISK soil SSV (for open spaces)
Benzo(g,h,i)perylene	250	Less than Atkins ATRISK soil SSV (for open spaces)
Benzo(k)fluoranthene	250	Less than Atkins ATRISK soil SSV (for open spaces)
Chrysene	250	Less than Atkins ATRISK soil SSV (for open spaces)
Dibenzo(ah)anthracene	4.5	Atkins ATRISK soil SSV (for open spaces)
Fluoranthene	250	Less than Atkins ATRISK soil SSV (for open spaces)
Fluorene	250	Less than Atkins ATRISK soil SSV (for open spaces)
Indeno(1,2,3 - cd)pyrene	35	Less than Atkins ATRISK soil SSV (for open spaces)
Naphthalene	250	Less than Atkins ATRISK soil SSV (for open spaces)
Phenanthrene	250	Less than Atkins ATRISK soil SSV (for open spaces)
Pyrene	250	Less than Atkins ATRISK soil SSV (for open spaces)

Notes:
1 – All thresholds for metals stated in mg/kg dry weight

2.2.12 The proposed restoration soil guideline concentrations for the final 2m to be imported to a 'generic' restoration activity are derived from screening values based on an Open Space end-use with limited public access. These Soil Screening Values (SSVs) have been derived by Atkins and their ATRISK guidance. The Atkins ATRISK SSVs are calculated by using the appropriate Contaminated Land Exposure Assessment Protocol (CLEA). The proposed 'generic' end-use of the restoration is that of grassland and trees/shrubs which are planted on the restoration area and maintained throughout the aftercare period specified in the planning permission.

2.2.13 For the majority of the components, the guideline concentration has been set at a value significantly lower than the corresponding SSV to ensure a conservative approach has been taken and also to ensure that the hazardous waste threshold will not be exceeded. For the potential phytotoxic metals of copper

and zinc, a lower guideline concentration has been applied; unless evidence is available that the soil material is not acidic.

Waste Acceptance

2.2.14 Once the acceptable material arrives at site, as arranged during the Pre-acceptance measures, it will be subjected to the appropriate on-site verification 'Acceptance' checks. A record is kept of the:-

- Date and time of waste deliveries
- Quantities and the nature of the waste deposited at the site
- Name of the company and their representation delivering (if applicable) each load of waste and vehicle registration number

2.2.15 Where safe, deliveries will be visually inspected at the weighbridge by a trained staff person to determine the basic characteristics of the waste and ensure it accords with the pre-acceptance paperwork.

2.2.16 Should waste be found to be unsuitable, the load will remain on the vehicle for immediate off-site transfer. Any such events will be recorded in the site diary and the Regulator informed where necessary.

2.2.17 Where visual inspection of the waste on the vehicle is not feasible, waste will be tipped along the edge of the flooded void for inspection.

2.2.18 Should a load be deposited at the site and found to be non-compliant by machine operatives, the material will be immediately reloaded and rejected off site having given consideration for the relevant Duty of Care requirements. Should the producer/carrier have left the site, this load will be placed in a quarantine area awaiting collection for delivery to a suitably permitted facility. Such events will be recorded in the site diary.

Verification Testing

2.2.19 In additional to basic visual inspection of the wastes, if the total quantity of waste to be received from a single source or carrier is to exceed 2,000 tonnes in any single project or year at least one sample will be retrieved from each source transferred to the site for disposal and subjected to testing as per the parameters specified in **Table SS2 and Table SS3.** If the waste source is deemed heterogenous in nature a minimum of 3 samples will be retrieved.

3.0 OUTLINE DEVELOPMENT PROPOSALS

3.1 Geological Barrier

3.1.1 Due to the flooded nature of the quarry void, the construction of an Artificially Established Geological Barrier will not be possible. The requirement of Article 22 to the Environmental Permitting Regulations 2016 (as amended) will be met through the deposit of wastes in which their pollution potential is less than or equal to the natural quality of the surrounding geology/water and is physically, biologically and chemically suitable.

3.2 Groundwater Management

3.2.1 The proposals involve the direct tipping of uncontaminated wastes into the flooded quarry void. No groundwater management will be necessary to support restoration of the quarry extension area, although monitoring of the water quality will be undertaken to demonstrate that the operations are not leading the deterioration of groundwater quality.

3.3 Stability Risk Assessment

3.3.1 As no engineered containment systems will be constructed and waste will be principally deposited directly into water no assessment of the stability risks is considered necessary for these elements. The final restored surface of the site will also consist of shallow gradients which are not at significant risk of becoming unstable.

4.0 AMENITY MANAGEMENT AND MONITORING

4.1 Introduction

4.1.1 An Environmental and Accident Risk Assessment *(Doc. Ref.: WR7640/08)* has been carried out for the proposed quarry restoration operations. Outlined details of the methods and procedures to be implemented to manage and monitor any potential emissions from the operations are presented below.

4.2 Dust/Particulate Matter

4.2.1 Owing to the fact that waste will largely be deposited directly into flooded quarry void the potential for the migration of dust and particulate matter is very low. As waste levels rise above water levels within the flooding void surface waters that will be continuously drained into the area and used to support dust suppression by means of a towed bowser or equivalent. Dust management will primarily comprise of enforcing speed limits on site, ensuring delivery vehicles are sheeted or fully enclosed and conducting visual assessments of dust generation on site. Seeding/planting will also be established as soon as reasonably practicable once final levels have been achieve across relevant areas. A Dust Management Plan *(Doc. Ref.: WR7640/12)* has been prepared in support of this application.

4.3 Odour

4.3.1 Due to the properties of the waste to be accepted at Skelbrooke, the odour generation potential of the operations is negligible. Odour management will therefore be limited to the assurance that only specific waste is accepted and deposited at the facility, supported by visual inspection of waste as they are delivered to and discharged at the site.

4.4 Mud & Debris

4.4.1 The dispersal of dirt and mud originating at the site onto public roads and the surrounding land will be controlled.

4.4.2 The following operational procedures will be implemented to ensure that dirt and mud do not reach the public highways and surrounding land:

- Metalled surfacing is provided between the site access point with Boundary Lane and the tipping areas;
- Wheel wash facilities will be located along internal haul routes;
- Plant and machinery will be thoroughly cleaned before leaving the site
- Mechanical sweeper to be deployed to remediate any mud and debris that has been deposited on to the public highway or metalled access road.

4.4.3 The Site Business Manager or nominated deputy will regularly inspect the entrance areas for evidence of mud and debris that has been trafficked.

4.5 Litter

4.5.1 The wastes to be deposited at the quarry will not contain any significant quantity of light fractions. All loads will be inspected upon delivery and/or discharge at the site to ensure contaminated wastes are not accepted.

4.5.2 The site will be inspected daily for evidence of litter, with litter picking undertaken as necessary.

4.6 Birds, Vermin and Insects

4.6.1 Due to the properties of the waste that will be accepted there is a low potential to attract birds, vermin and insects. No specific measures are therefore required, however, visual inspections of will be carried out by the weighbridge clerk at the point of acceptance with further assessment by site operatives when the waste is deposited. Daily site inspections will also be undertaken to identify any potential issues that may arise.

4.7 Noise and Vibration

4.7.1 A Noise Impact Assessment (NIA) was conducted in February 2021 to support the infilling and restoration works at Skelbrooke Quarry northern Extension area. This NIA has been included is **Appendix SS2**. The NIA assessed the impact from the infill and restoration work on the closest residential receptors, including properties along Straight Lane and off Doncaster Lane and Leys Lane, as well as Priory Farm.

4.7.2 The NIA is based on the following plant and equipment being used at the site to support the restoration works:-

- D6 Dozer
- A30 Dump Truck
- PC 210 Excavator
- HGV Tipper
- Water Pump
- Water Bowser (occasional)
- Portable Generator

4.7.3 The baseline sound measurements were undertaken in positions adjacent to potential receptors to identify typical background and residual levels when the site is not operational. The representative background sound measurements taken adjacent to the nearest residential receptors along Doncaster Road, Leys Lane and the A1 road network. The background noise environment is dominated by distant road traffic.

4.7.4 The greatest predicted rating noise levels modelled were modelled at +1 to +4 dB above the baseline sound level (LA90) at nearest noise sensitive receptors, located off Doncaster Lane, and are below the residual sound levels for this receptor position. The rating levels at all other receptor locations were all modelled at below the corresponding baseline sound levels.

4.7.5 The NIA recommendations included the below to ensure that ‘best practice’ is applied:

- All mobile plant used on site to have ‘broadband’ type reverse alarms (i.e. no tonal ‘beeper’ type).
- Proposed operating hours to be restricted to those described in the report.
- Maintain the mobile plant and ensure all silencers are fitted and in good working order and effective.
- Ensure the haul road between the plant area is well maintained, minimum gradient and as smooth as practicable.
- Drivers of HGV’s or mobile plant should be instructed to avoid leaving engines running unnecessarily or excessive revving of engines.
- Avoid the use of speed restrictions ‘humps’.

- As far as practicable, maintain maximum separation distance for plant to receptors located north off Doncaster Lane. For example, keep any fixed plant such as water pumps or portable generators as far south of the site as possible and HGV tipper vehicle haul roads as far south as practicable.
- Provide liaison with local residents to inform them of site activities and a means of contact in case of any complaints.

4.7.6 To reduce any potential impact on receptors, operational hours will be restricted to those outlined below to reduce any nuisance to the local population.

- 07:30 to 18:00 Monday to Friday
- 07:30 to 13:00 Saturday
- No working on Sundays or Bank Holidays

4.7.7 Owing to the results of the NIA presented in **Appendix SS2,** it is deemed that a Noise Management Plan (NMP) will not be necessary for the site.

4.7.8 The NIA recommendations comprise Best Available Techniques (BAT) which would be applied in relation to the plant operation and site noise management to comply with BS5228 guidance on mitigation and minimising noise.

5.0 MANAGEMENT SYSTEMS

5.1 Groundwater

5.1.1 Due to the fact that the deposited waste will be uncontaminated and will principally consist of mineral wastes, and soils and stone originating from the locality, there is no requirement for groundwater management aside from continued pumping within the parameters of the current discharge consent to prevent overspill and potential localised flooding.

5.2 Surface Water

5.2.1 Surface water management will not be required. Surface water from the adjacent Skelbrooke Landfill Site will continue to be discharged into Skelbrooke Extension Area void whilst tipping is underway. During the final stage of the main Skelbrooke Landfill Site, a wetland area will be established within the footprint of the Skelbrooke Quarry Extension Area void to act as an attenuation lagoon for the Skelbrooke Landfill Site.

6.0 ACCIDENT MANAGEMENT

6.1 Emergency Planning

6.1.1 An Environmental and Accidents Risk Assessment (*Doc. Ref.: WR7640/08*) has been prepared in support of this application. As part of this, a matrix has been prepared in accordance with EA guidance which identifies potential hazards, their likelihood, and resulting consequences, as well as the risk management measures that will be put in place to ensure that risks are acceptable.

6.2 Emergency Contact

6.2.1 In the event of any significant environmental emergency/incident, a representative of DQL will notify the EA by telephone immediately, but first having due regard for the incident at hand and any remediation actions required to ensure the safety of site personnel and the immediate environment.

6.2.2 Details of any environmental incident will be confirmed to the EA in writing, on the next working day after identification of the incident. This confirmation will include: the time and duration of the incident, the receiving environmental medium or media where there has been any emission as a result of the incident, an initial estimate of the quantity and composition of any emission, the measures taken to prevent or minimise any further emission and a preliminary assessment of the cause of the incident.

6.2.3 Any incident notified to the EA will be investigated, and a report of the investigation sent to the EA. The report will detail, as a minimum, the circumstances of the incident, an assessment of any harm to the environment and the steps taken to bring the incident to an end. The report will also set out proposals for remediation and for preventing a repetition of the incident.

6.3 Control of Fires

6.3.1 As part of the ongoing operations, arrangements will be made, as necessary, with the local fire liaison officer to visit the site and discuss the relevant operations with the client. Any specific advice given by the fire liaison officer can then be incorporated into the site's management plan as appropriate.

6.3.2 No waste will be burned within the confines of the site boundary. Due to the nature of waste stored in other areas of the site, all fires within the facility will be treated as a potential emergency and dealt with accordingly. Fires may occur in relation to:

- Plant failure – fixed or mobile plant fires; and
- Within non-conforming waste loads awaiting removal from the site.

6.3.3 In the event that a fire occurs at the facility, the following actions would be undertaken:

- Person(s) discovering a fire will raise the alarm;
- Report the incident to the Site Business Manager / nominated person;
- All site personnel and visitors will be accounted for and evacuated to a safe location;
- Contact the emergency services and state the nature of the incident;
- Follow all instructions given by the emergency services;

- If the fire can be controlled without endangering operatives, appropriate actions will be undertaken using available firefighting equipment. Fires will be tackled by a minimum of two site operatives;
- Ensure access is clear for the emergency services but prevent access to the facility from anyone else until the emergency is over; and
- The EA will be informed forthwith of any fires that occur at the facility.

6.3.4 Firefighting equipment will be available at the facility and will be clearly marked and tested, at appropriate intervals, to confirm their suitability and functionality. Site personnel will be made aware of the locations of all firefighting equipment and will be trained in their correct use.

6.3.5 A record of the occurrence of a fire will be maintained in the site log, along with any actions taken. An Incident and Accident Report will be completed by the Site Business Manager.

6.3.6 Following approval by the fire services and/or facility manager the residues from the fire will be disposed of accordingly at a suitable permitted waste management facility.

6.4 Explosions

6.4.1 Due to the nature of the wastes accepted at the facility, the likelihood of the materials containing explosive elements is highly unlikely. However, awareness and caution will be practised with all staff and to ensure no other waste is accepted that has explosive properties, the waste acceptance procedures identified in **Section 2.0** will ensure that unauthorised waste types are prevented from entering the facility.

6.4.2 In the unlikely event that materials with explosive elements are discovered within a waste delivery that has already been accepted, the following action would be taken:

- Contact the Site Business Manager or in his absence the Site Supervisor;
- Check that all site personnel and visitors are accounted for and are moved to a safe location;
- Contact the emergency services and state the nature of the incident (including whether any fires have occurred);
- Follow all instructions given by the emergency services;
- If injuries have occurred medical assistance will be called;
- No further wastes will be accepted at the facility until the Site Business Manager has given authority; and
- The EA will be informed forthwith of any arisings of explosive materials or any explosions that occur.

6.4.3 Once the emergency is over and the emergency services have declared that the area is made safe, an incident/accident report shall be completed. A written account of the incident will also be forwarded to the EA no later than 14 days after the incident.

6.5 Flooding

6.5.1 Following a review of the Environment Agency flood risk map, the site is not at risk of flooding. The site is located outside the floodplain and is not likely to flood, even in extreme conditions. This takes into account the effect of any flood defences that may be in this area, whether or not these are currently illustrated on the EA Flood Map.

6.6 Control of Leaks and Spillages

6.6.1 Daily visual inspections of the operational and processing surfaces will be conducted. In the event of a spillage, facility operatives will inform the Site Business Manager or Supervisor who is responsible for assessing the situation and deciding on the most appropriate actions to be undertaken.

6.6.2 All necessary measures will be taken to contain any spillage or discharge by means of suitable material and equipment. The actions undertaken will depend on the size of the spillage, the location of the spillage in relation to sensitive receptors and the nature of the spilled material.

6.6.3 Where spillages of dry wastes occur, these will be cleared by either manual or mechanical means, for example handpicking, sweeping or shovelling, dependant on the size and location of the spillage.

6.6.4 Minor spillages of liquid will be contained using spillage kits or any suitable readily available absorbent material. This material will be disposed of in a manner appropriate to the type of material absorbed.

6.6.5 If a major spillage of liquid occurs, such as heavy plant oil/fuel, the following actions will be undertaken, where appropriate:-

- Ensure no risk of off-site transfer;
- Report the occurrence to the Site Business Manager immediately;
- Trained facility operatives will take immediate action to try and contain the leak where it is safe to do so;
- If it is safe to do so, the cause of the spill or leak will be isolated and/or moved to a bunded area;
- If the liquid spillage is large, inert low permeability material such as clay will be used to make a temporary containment bund to prevent further transfer of the spillage. The Site Business Manager or designated person will contact the EA to discuss best practicable disposal options;
- Access to the immediate area should be restricted until a disposal/clean up solution is implemented;
- If the spillage cannot be contained using approved methods, senior management will be contacted immediately, and specialist advice and help will be sought; and
- If a vehicle or item of plant is identified as leaking, wherever practicable, it will be stored on an impermeable pavement (at the site offices/garages) / highly compacted made ground within a bunded area, where the spillage can be contained until such time as a repair is affected.

6.6.6 The Environment Agency will also be informed immediately of major spillages, having due regard to first take appropriate measures to deal with any emergency in hand.

6.6.7 The locations of spillage kits and other emergency equipment will be detailed within an appropriate plan.

6.7 Investigation of Accidents and Incidents

6.7.1 For any accident, incident or dangerous occurrence, an Incident and Accident Report will be completed by the Site Business Manager. All relevant details of the accident, incident or dangerous occurrence will be recorded, together with any additional statement, photographs, logs or records that may assist in the full investigation of the accident, incident or dangerous occurrence.

6.7.2 After an Environmental Incident and Emergency has been made safe, an investigation will be conducted, if necessary, by the Site Business Manager and other Company Personnel as appropriate.

7.0 MONITORING PLAN

7.1 During Operations

7.1.1 Due to the nature of the waste to be deposited, there will not be any monitoring during the operational period will be limited to the groundwater and surface water, as detailed in the Hydrogeological Risk Assessment.

7.1.2 Landfill gas monitoring will not be required owing to the nature of the waste (primarily quarry fines and sub-soils) to be deposited.

7.2 Post Closure / Aftercare

7.2.1 The post closure management will be minimal owing to the nature of the waste. As the quarry fines, soil and stones that will be tipped into the void will be clean and compatible with the locality, the waste will be of very low pollution risk and will not produce gas. Therefore, there will be no subsequent aftercare or monitoring requirements.

7.2.2 Following completion of the waste activities, the void will be utilised to create wetland and ecological habitats. Subsequent to this restoration, the site permit will be surrendered.