PARRY'S QUARRY LANDFILL, ALLTAMI, FLINTSHIRE

Environmental Permit Application

Non-Technical Summary

Prepared for: Mold Investments Limited

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1.0 Introduction

SLR Consulting Limited (SLR) has been retained by Mold Investments Limited (Mold) to prepare an Environmental Permit (EP) application for Parry's Quarry Landfill and an associated Waste Transfer Station (WTS) in Alltami, Flintshire under the Environmental Permitting (England and Wales) Regulations 2016.

This non-technical summary (NTS) provides a summary of the regulated facilities, an explanation of exactly what is being applied for, and a summary of the key technical standards and control measures that will be implemented at the site.

To support this application, the following documentation is submitted in addition to this NTS:

- **Application Forms (Parts A, B2, B3, B4 and F1)** and supporting documentation including WAMITAB Certificates and Certificates of Continuing Competence and the associated copy of the planning application.
- **Financial Provision/Expenditure Plan** – Landfill only.
- **OPRA Spreadsheet:**
  - For installations – Landfill
  - For waste operations – WTS
- **Drawings;**
- **Environmental Setting and Installation Design Report (ESID);**
- **Environmental Risk Assessment (ERA);**
- **Stability Risk Assessment (SRA);**
- **Hydrogeological Risk Assessment (HRA);**
- **Landfill Gas Risk Assessment (LFGRA);**
- **Odour Impact Assessment and Odour Management Plan (OMP);**
- **Operating Techniques and Management Plan (OTMP)**:
  - Fire Prevention & Mitigation Plan (FP&MP) (WTS only) and associated drawings;
  - Waste Acceptance Procedure (WAP); and
  - Site Condition Report (SCR).
- **Noise Assessment Report.**

1.1 Pre-Application Meeting

A pre-application meeting was held on the 29th November 2018 with Stuart Ross and James McClymont at Natural Resources Wales' (NRW) Buckley office. The new design of the landfill was discussed, as was the new approach to the odour modelling and groundwater monitoring. Further advice was also received from NRW's AQMRAT team regarding the odour assessment.

1.2 Consolidation of Existing Permit

Mold also propose to consolidate their existing EP for the current inert transfer and reprocessing station (NRW Ref: EPR/TB3590HJ/T001) which was originally issued to Robin Jones and Sons Limited in February 2006 and subsequently transferred to Mold in September 2015.

The facility is currently permitted to accept inert waste for physical sorting, separation and screening for further recovery or disposal.

1.3 The Site

The site is situated within the existing Parry's Quarry in Alltami, Flintshire and bounded by the A494 to the south, A55 to the north and Pinfold Road to the west. The National Grid Reference (NGR) for the entrance to the site is SJ 27478 66278.

The remaining land use immediately surrounding the proposed site is predominately agricultural land, with scattered residential and commercial / industrial premises. Access to the site will be via Pinfold lane. The site's location is illustrated on Drawing ESID1, and the site layout on Drawing ESID2.

All surrounding land uses and receptors within 1km are identified on Drawing ESID3 and all cultural and natural heritage is illustrated on Drawing ESID4.

A summary of the site's immediate surrounding land uses is identified in Table 1-1 below.

Table 1-1: Surrounding Land Uses

Boundary	Description
North	Ewloe Wood House and commercial/industrial properties are located adjacent to the northern boundary beyond which lies the A55 and a service station (eastbound on the A55) including a petrol station, hotel and restaurant. Also, to the north of the site beyond the immediate surrounding is the residential conurbation of Northop Hall and the Northop Hall Country House Hotel. The outskirts of Northop Hall are located approximately 600m to the north.
East	To the east of the site is the westbound A55 Service Station, including an unnamed residential property, beyond which lies the A55 and agricultural land. The small town of Ewloe Green and the larger conurbation of Ewloe are located 550m and 1km respectively to the east.
South	Adjacent to the south of the site is an area of small woodland beyond which lies the A494. Beyond the A494 is a large building supply merchant and other commercial/industrial premises. The further surrounding land is predominately agricultural land with scattered residential buildings (farm houses) including Parrys Cottage and the Pottery Cottages. A further large commercial / industrial estate is located within 1km to the south. The south eastern edge of the site encompasses part of multi designated Buckley Claypits and Commons Site of Special Scientific Interest (SSSI) / Deeside and Buckley Newt Site Special Area of Conservation (SAC).
West	Pinfold Lane is located immediately to the west. A disused quarry is located off Pinfold Lane, beyond which lies predominately agricultural land and scattered residential/agricultural buildings, including Pinfold Cottage and Alltami House. The town of Alltami is located approximately 640m to the southwest. Also adjacent to the west and southwest of the site is numerous commercial/industrial premises.

2.0 Landfill

This EP application proposes to develop a non-hazardous and inert landfill for the deposit of waste. The following sections provide details of the development.

2.1 Non-Hazardous and Inert Waste Landfill

The proposed landfill operations comprise restoring the quarry void using non-hazardous and inert wastes within fully engineered containment cells.

The site will be restored by importing approximately 2,050,133m^3 (2,460,161 tonnes[1]) of non-hazardous and inert waste material over an estimated 8-year period to enable satisfactory restoration.

This will equate to approximately 320,000 tonnes per annum (tpa).

2.2 Listed Activity

The landfill will be listed under the Environmental Permitting (England and Wales) Regulations (EPR) 2016. Table 2-1 below details the operations associated with the landfill.

Table 2-1
Landfill Operations

EPR Schedule 1 Reference	Waste Framework Directive (WFD) Annex I and II Operations	Limits of Specified Activity
Section 5.2 Disposal of waste by landfill, Part A (1), a) ii) the disposal of waste in a landfill with a total capacity of more than 25,000 tonnes.	**D5: Specially engineered landfill** Landfill for non-hazardous waste and landfill restoration	Receipt, handling, storage and disposal of waste, consisting of types and quantities detailed in Appendix 01 to this NTS. TOC content <10%

2.3 Directly Associated Activities

The following Directly Associated Activities (DAA's) will be required for the landfill:

- Leachate storage tanks;
- Storage of fuel for operation of plant and equipment; and
- Flaring of landfill gas[2] for disposal in an appliance.

[1] Based on a conversion rate of 1.2tonnes/m^3

[2] This application does not cover the Medium Combustion Plant Directive (MCPD) requirements, because at this time it is unknown whether the utilise of an engine will be required on site. An engine will also not be required for several years after landfilling.

2.4 Waste Types and Phasing Plan

Drawing ESID6 illustrates the design of the landfill and the location of each phase. There are to be eight landfilled cells at the proposed Parry's Quarry landfill site; Cells 1, 2, 3, 4, 5, 6, 7 and 8. These cells will ultimately occupy a surface area of 9.8ha.

One of these cells, Cell 6, is designated as the cell that will accept 'biodegradable' wastes. It is anticipated that all other cells at the site will essentially accept commercial and industrial wastes that are anticipated to contain significantly lower concentrations of biodegradable material.

The landfill will accept a variety of waste streams, which will be split into the following 3 categories:

- Inert Waste (as defined in the Landfill Directive) – which will be deposited into Phases 1, 2, 3, 4, 5, 7 and 8;
- Non-Hazardous Non-Biodegradable Waste – which will be deposited into Phases 1, 2, 3, 4, 5, 7 and 8; and
- Non-Hazardous Biodegradable Waste – only deposited into Phase 6.

The full waste list is included as Appendix 02-1 of the OTMP. Table 2-2 below details the phase by phase quantities:

Table 2-2
Landfill Phase Quantities Summary

Parry's Quarry - Phase by Phase Quantities										
Description	**Unit**	**Phase**								**Total**
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	
Basal Area Lined	m^2	7,144	5,865	5,872	3,975	5,181	4,989	7,416	5,818	46,260
Side Slope Area Lined	m^2	10,763	5,363	4,673	6,700	7,288	5,810	7,212	8,557	56,366
Total Area (Basal + Side Slope)	m^2	17,907	11,228	10,545	10,675	12,469	10,799	14,628	14,375	102,626
Void Space	m^3	139,718	166,522	179,398	131,333	176,234	264,717	374,358	617,853	2,050,133
Temporary Cap Area	m^2	12,156	13,387	12,988	10,779	9,438	13,107	18,160	-	90,015
Permanent Cap Area	m^2	6,079	4,576	5,098	5,762	11,762	14,073	17,265	38,940	103,555
Tonnage Input at 1.2t/m^3	tonnes	167,662	199,826	215,278	157,600	211,481	317,660	449,230	741,424	2,460,161

2.5 Site Engineering

The conceptual stability site model has been developed from information contained in the ESID and review of relevant publicly available and site-specific data.

The following sections provide further details of the principal components of the landfill development.

2.5.1 Basal Subgrade Model

The basal subgrade will be formed by the base of mineral extraction between approximately 86m – 88mAOD, sloping to the northeast in the deepest area of extraction. The basal subgrade slopes at a shallow gradient, following the base of the mineral horizon.

The current base is uneven as a result of stockpiling, access routes and extraction. Groundwater seepage has been recorded at the base of the excavation in the south of the site. As a result, the base of the quarry will be raised with site won material in order to ensure waste remains above groundwater.

2.5.2 Side Slope Subgrade Model

The side slope subgrade will be formed by the cut extraction side slopes and fill comprising site won clay. Overburden comprising glacial till is observed as being up to 2m thick in some locations with underlying mudstone of the Etruria Marl.

Extraction has left the quarry with steep sided slopes. In the main extraction area, the depth of excavation currently reaches 26m below surrounding ground level with slopes at a gradient of 1V:1.4H in the northwest. Prior to installation of the lining system, site won clay will be placed against the in-situ side slopes at a maximum gradient of 1V:2.7H.

2.5.3 Basal Lining System Model

The site will benefit from full containment engineering; the lining system will comprise:

- Geological barrier a minimum of 0.5m thick constructed of clay with a permeability of $5x10^{-10}$m/s;
- Geosynthetic Clay Liner (GCL);
- Artificial sealing liner (HDPE);
- Protective geotextile (non-woven); and,
- Leachate drainage layer.

2.5.4 Side Slope Lining System Model

The side slope lining system will be composed of the same material as the basal lining system as outlined in Section 2.6.3.

2.5.5 Waste Mass Model

The site will accept non-hazardous, inert or biodegradable waste for disposal. Waste will be subject to strict WAP.

The site will be filled in eight cells separated by bunds orientated approximately north to south and east to west.

2.5.6 Capping System Model

The site will be capped following placement of waste. Capping will comprise a minimum of 1m of restoration soils overlying an artificial sealing liner (LLDPE) and underlying regulation layer.

The proposed restoration contours will result in a slightly domed profile with a maximum slope gradient of approximately 1V:5H.

2.5.7 Environmental Monitoring

Ongoing groundwater, surface water and leachate monitoring schedules have been determined in the HRA prepared for this application and included in Section 8. The leachate management plan and monitoring locations are located on Drawing ESID14.

Ongoing landfill gas monitoring and management has been determined in the LFGRA, included in Section 9 of this application. An indicative drawing illustrating the management of gas on site is included in Drawing ESID13.

Daily monitoring will also be undertaken in accordance with Mold's management system, detailed in the OTMP included in Section 12 of this application.

An Environmental Monitoring Plan, illustrating all monitoring points (apart from leachate monitoring), has been included as Drawing ESID9, and included in Section 4 of this application.

3.0 Waste Transfer Station (WTS)

The proposed activities comprise the storage and physical/manual treatment of waste by sorting, separation, screening, blending, baling and shredding into different components for recovery and disposal or recovery. However, the likelihood is that minimal treatment will be undertaken at the WTS and the transfer in the building will be to ensure that fugitive emissions from noise, dust and odour are controlled and contained, before transfer to the landfill.

3.1 Specified Waste Management Activities

The activities that will be carried out at the site as defined under Annex II of the Waste Framework Directive can be summarised as follows:

- **R3**: Recycling/reclamation of organic substances which are not used as solvents;
- **R4**: Recycling/reclamation of metals and metal compounds;
- **R5**: Recycling/reclamation of other inorganic materials;
- **D9**: Physico-chemical treatment not specified elsewhere which results in final compounds or mixtures which are disposed of by any of the operations numbered D1 to D12 (no more than 50 tonnes per day for disposal).
- **R13**: Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)
- **D14**: Repackaging prior to submission to any of the operations numbered D1 to D13.
- **D15:** Storage pending any of the operations numbered D1 to D14.

3.2 Waste Types and Treatment

The WTS will accept up to 400,000tpa of commercial, industrial and household waste for further processing. The full waste list is included as Appendix 02-1 of the OTMP

All waste will be stored within the waste reception building, which will benefit from fast roller action doors.

Waste pre-segregated upon acceptance will be stored immediately in the relevant storage bays indicated on Drawing FPP1. Mixed or bulked waste will undergo further processing and separation in the recycling building, prior to being stored in the appropriate bays.

After processing, wastes will be stored on site for the durations indicated in Table 3-1 prior to removal off site for further recovery or for disposal into the Parry's Quarry landfill if the waste meets the WAP for the landfill.

Table 3-1
Maximum Stockpile Dimensions and Storage Time

Waste Type	Max Storage Time	Bay Length (m)	Bay Width (m)	Bay Height (m)	Max Bay Volume (m^3)
All waste storage bays illustrated on Drawing FPP1	1 week, but likely to be up to 48 hours	7	5	4	140

3.2.1 Indicative Storage Bays

The final internal design of the WTS building has not be completed. However, to ensure that NRW are confident that Mold will operate the facility with due regard to NRW's guidance[3], an indicative layout has been prepared and is presented on Drawing FPP1.

A worst-case scenario has been taken in this approach, in terms of the amount of waste which will be stored at any one time – which entails storage bays that are 7m long, 5m wide and 5m high, with bay walls that are 80cm think. The bays will maintain a 1m freeboard at all times which will result in the total bay waste height being capped at 4m. The freeboard is designed to prevent sparks or flames spreading from one bay to another in the event of fire.

[3] NRW Guidance – Fire Prevention and Mitigation Plan Guidance – Waste Management, Version 2.0, August 2017

4.0 Application Contents

4.1 Application Forms

Parts A, B2, B3, B4 and F1 of the Natural Resources Wales (NRW) application forms have been completed. The forms are accompanied by the following additional information:

- Appendix A WAMITAB Certificates and Certificates of Continuing Competence;
- Appendix B Expenditure Plan; and
- Appendix C Planning Application.

The application forms are included in Section 1 of this EP application.

4.2 OPRA Spreadsheets

The OPRA spreadsheets for installations and waste operations have been completed to dictate the application fee for the landfill and WTS element of the application.

The application fee for the landfill installation is determined to be £17,098 and the application fee for the WTS is £9,747.

The OPRA spreadsheets are included in Section 2 of this application.

4.3 Drawings

The following drawings are included in this EP application and are enclosed in Section 4.

- Drawing ESID1 Site Location
- Drawing ESID2 Installation Site Layout
- Drawing ESID3 Environmental Site Setting
- Drawing ESID4 Cultural and Natural Heritage
- Drawing ESID5 Phasing Plan and Cell Layout
- Drawing ESID6 Cross Sections, Pre-Settlement and Post Settlement Contours
- Drawing ESID7 Restoration
- Drawing ESID8 Engineering Details
- Drawing ESID9 Environmental Monitoring
- Drawing ESID10 Superficial Deposits Geology
- Drawing ESID11 Bedrock Geology
- Drawing ESID12 Local Hydrology
- Drawing ESID13 Indicative Gas Management Plan
- Drawing ESID14 Leachate Management Plan

4.4 Environmental Site Setting and Installation Design Report

The ESID report with associated design and phasing plans has been written in reference to NRW/EA guidance relating to disposal by landfill of inert, non-hazardous non-biodegradable and non-hazardous biodegradable waste.

In addition, a Closure and Aftercare Plan is included in the ESID in accordance with Article 13 of the Landfill Directive (which requires that a closure and aftercare management plan is maintained throughout the life of a landfill) and Section 2.5 of (NRW) Guidance[4].

The ESID is included in Section 5 of this application.

4.5 Environmental Risk Assessment

The ERA has been carried out to assess the environmental risk posed by the landfill and the WTS. The assessment has been completed in accordance with the EA/NRW's Environmental Risk Assessment technical guidance[5].

The aim of the assessment is to identify any significant risks and demonstrate that the risk of pollution or harm will be acceptable by taking the appropriate measures to manage these risks.

Operational procedures at the site have been developed to monitor and manage amenity risks from the proposed activities and include provision for the monitoring of scavenging birds, vermin, insects, litter, mud on roads, dust, odour and noise. The potential impact of the proposed development on surrounding human and environmental receptors is assessed in the risk assessment and the receptors illustrated on Drawings ESID3 and ESID4.

Subject to the implementation of management measures, the conclusion of the assessment is that the proposed activities are unlikely to result in a significant risk to the amenities of the local environment.

The ERA is included in Section 6 of this application.

4.6 Stability Risk Assessment

As part of the permit application, SLR has undertaken a geotechnical SRA. This document describes the manner in which the assessment has been carried out and presents the overall findings of the work.

The methodology adopted for this SRA generally follows the principles outlined in the EA R&D Technical Report P-385, volumes TR1 and TR2[6] (from here on referred to as the guidance). Where additional analytical techniques have been used, these are described within the text.

The SRA has considered the stability of all relevant components of the site including basal and sidewall subgrade, basal and sidewall geological barrier, waste and capping system.

The SRA also includes the following appendices:

- Appendix SRA1 Side Slope Geological Barrier Analysis;
- Appendix SRA2 Waste Mass Analysis; and
- Appendix SRA3 Capping Analysis.

The SRA is included in Section 7 of this application.

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[4] NRW Guidance, EPR5.02 - How to comply with your environmental permit, additional guidance for: Landfill
[5] EA Website – Environmental Risk Assessments, https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit
[6] Environment Agency R&D Technical Report P1-385/ TR1 and TR2, 'Stability of Landfill Liner Systems', March 2003.

4.7 Hydrogeological Risk Assessment

The HRA[7] was conducted by Stantec UK Limited to assess the risk to surface water and groundwater.

The HRA provides an assessment of the hydrogeological conceptual site model, which has been developed based upon the proposed landfill engineering and environmental site setting detailed within the associated ESID submitted with this application. The HRA provides the following:

- Review of detailed site information, including geology, hydrology and hydrogeology;
- The hydrogeological conceptual site model;
- Associated HRA; and
- Requisite surveillance including leachate, surface water and groundwater monitoring requirements.

The HRA concluded that the landfill at Parry's Quarry has demonstrated full compliance with the Landfill and Groundwater Directive's.

The HRA is included in Section 8 of this application.

4.8 Landfill Gas Risk Assessment

This document has been prepared to demonstrate that the proposed landfill is compliant with the requirements of the Environmental Permitting (England and Wales) Regulations 2016. These regulations implement the Landfill Directive and require that:

- Landfill gas must be collected from all landfills receiving biodegradable waste and the landfill gas must be treated and, to the extent possible used;
- Appropriate measures must be taken in order to control the accumulation and migration of landfill gas;
- The collection, treatment and use of landfill gas must be carried out in a manner which minimises damage to or deterioration of the environment and risk to human health; and
- Landfill gas which cannot be used to produce energy must be flared.

This document has been prepared with due regard to NRW EPR Guidance framework[8], and Landfill Technical Guidance Notes LFTGN03 - 08 on the management and monitoring of landfill gas.

Further, reference has been made to a previous EP application for a landfill at the site (refused) and the NRW Decision Document[9] as necessary throughout the report.

The LFGRA undertaken for the Parry's Quarry Landfill has demonstrated that, given the design, control and management and monitoring for the site, the landfill will be operated in compliance with the requirements of the Environmental Permitting (England and Wales) Regulations 2016. In particular:

- Appropriate measures will continue to be taken in order to control the accumulation and migration of landfill gas;
- The landfill will receive biodegradable wastes and landfill gas generated will continue to be collected, treated and, to the extent possible, used. The landfill gas will be used to generate electricity using gas engines employed at the landfill as long as sufficient gas is generated;

[7] Stantec UK Limited, Parry's Quarry Landfill Environmental Permit Application – Hydrogeological Risk Assessment, dated July 2019 (Ref: 66388R1D1)
[8] https://naturalresources.wales/permits-and-permissions/environmental-permits/epr-guidance
[9] Natural Resources Wales permitting decisions, Parry's Quarry Non-Hazardous Waste Landfill Refusal Decision Document (Refused 20th December 2016)

- The collection, treatment and use of landfill gas will continue to be carried out in a manner that minimises damage to, or deterioration of, the environment and risk to human health; and
- Odour nuisance will be minimised by the management and monitoring of landfill gas.

The LFGRA is included in Section 9 of this application.

4.9 Odour Feasibility Assessment and Management Plan

4.9.1 Odour Risk Assessment

The scope of the assessment was to assess the potential impact of odour emissions from the proposed infilling of biodegradable waste within Cell 6 of Parry's Quarry Landfill upon receptors in the surrounding area.

The principal objective is to assess whether odour emissions are effectively dispersed so that no significant detriment to amenity will occur when the site is operational.

The Odour Risk Assessment is included in Section 10 of this application.

4.9.2 Odour Management Plan

As defined within the H4 Odour Guidance[10], the objectives of the OMP have been to:

- Identify potentially significant odour sources at the facility and any foreseeable situations which may compromise the operator's ability to prevent and / or minimise odour releases from the proposed site activities;
- Identify and employ appropriate methods, including monitoring and contingencies, to control and minimise odour pollution;
- Identify and employ appropriate control measures and actions that the operator will take to minimise the impact if odour incidents occur;
- Prevent unacceptable odour pollution at all times;
- Reduce the risk of odour releasing accidents or incidents by anticipating them and planning accordingly; and
- Provide a working document for on-site staff.

The Odour Feasibility Assessment and OMP is included in Section 10 of this application.

4.10 Leachate Management Plan

The LMP describes how leachate will be managed across the proposed site during both operational and the post closure periods and includes the following information:

- An outline description of the proposed landfill cells, their leachate collection point numbers and distribution;
- An assessment of the likely volumes of leachate generation, over time, for all currently proposed cells at the Parry's Landfill Site;
- An assessment of the required operational maximum and long-term leachate abstraction rate from each cell and from the site as a whole;

[10] NRW, How to comply with your environmental permit. Additional guidance for H4 Odour Management. Version 2.0, October 2014.

- An assessment and outline specification of the pumping systems required to achieve the abstraction rates required;
- An assessment of the capacity of disposal arrangements available for the site to accommodate the additional leachate generation volumes from the proposed cells; and
- An outline of the management techniques that may be required to minimise the risk posed by leachate contained within the site of exceeding assessment limits or otherwise escaping from containment.

The LMP is included in Section 11 of this application.

4.11 Operating Techniques and Management Plan

The OTMP describes the operating techniques and management system that will be implemented at the facility to ensure compliance with the conditions of the EP. The report incorporates the operating techniques for the WTS and the landfill operations and should also be read in conjunction with the ESID. It is drafted to satisfy the requirements of NRW Guidance[11] and covers elements including the management, operations and emissions and monitoring on site.

The OTMP is enclosed as Section 12 of this application.

The OTMP contains the following appendices which are described further in the sections below:

- Appendix 01 Fire Prevention & Mitigation Plan;
- Appendix 02 Waste Acceptance Procedure; and
- Appendix 03 Site Condition Report.

4.11.1 Fire Prevention & Mitigation Plan

The FPMP is applicable only to the WTS and its associated activities. The report follows the NRW guidance for FPMP's and details the required mitigation and management methods to prevent a fire of combustible materials stored at the WTS.

The information contained within the FPMP aims to meet the following 3 main objectives:

- Minimise the likelihood of a fire happening;
- Aim for a fire to be extinguished within 4 hours; and
- Minimise the spread of fire within the site and to neighbouring sites.

4.11.2 Waste Acceptance Procedure

The purpose of the WAP is to ensure that the site only accepts waste that is:

- Suitable for the activity;
- Allowed by the EP; and
- Appropriately considered by the ERA.

The WAP will also assist with:

- Ensuring the activities do not cause pollution;
- The waste sourcing decision making process; and

[11] NRW Guidance – How to comply with your environmental permit, Version 8, October 2014.

- Preventing the receipt of non-permitted wastes.

This WAP is divided into the following sections for ease of use:

- Section 02-1 Landfill and Waste Transfer Station Waste List

4.11.3 Site Condition Report

A SCR has been prepared as part of this application to establish the baseline environmental conditions within the proposed permit boundary which will not be subject to the permanent deposit of waste. The SCR has been prepared in accordance with NRW's H5 guidance note[12].

The facility will operate with due regard to the conditions of the EP and all relevant environmental legislation to ensure that the site does not pose a significant risk to the surrounding human and natural environment.

4.12 Noise Assessment Report

A NAR[13] was prepared by Wardell Armstrong for the previously submitted and accepted planning application relating to the operations proposed at Parry's Quarry Landfill.

Wardell Armstrong has previously prepared two noise assessment reports in support of existing and proposed future operations at the site, in April 2016. The NAR submitted with this application provides the information required by NRW in support of a permit application for the facility, including details of the noise surveys, noise data, assessment of the results in accordance with current guidance, including an assessment in accordance with BS4142:2014.

Noise from the different phases of operation at Parry's Quarry Landfill, when used for landfill, have been assessed and comprise site preparation, landfill, WTS and site restoration. When assessed in accordance with the criteria in BS4142, this impact has been considered to be low at existing receptors, with the exception of the residential properties located to the south east of the site along Mold Road, which was considered to be moderately adverse.

It was concluded that the noise from operations at the facility was only marginally above the background noise level, and therefore mitigation measures were not required.

[12] EPR Guidance for applications H5, Site Condition Report – guidance and templates, Version 5, October 2014.
[13] Wardell Armstrong, Parry's Quarry Noise Assessment Report, dated April 2016 (Ref: LE12936, 005)

5.0 Management System and Operating Techniques

The key technical standards laid out in the following documents govern the design and operation of the site:

- The Environmental Permitting (England and Wales) Regulations 2016 (as amended);
- Regulatory Guidance Series – LFD1 – Understanding the Landfill Directive
- NRW's Relevant Guidance Notes (RGN's);
- Developing a management system: environmental permits;
- Controlling and monitor your emissions for an environmental permit;
- Sector Guidance Note S5.06; Guidance for the Recovery and Disposal of Hazardous and Non-Hazardous Waste;
- Relevant landfill guidance; and
- Relevant EA/NRW Guidance e.g. Environmental Risk Assessment's, Site Condition Reports, FP&MPs.

The site will be managed and operated in accordance with the OTMP submitted with this application.

The OTMP will therefore ensure that:

- The risks that the activities pose to the environment are identified;
- The measures that are required to minimise the risks are identified;
- The activities are managed in accordance with the management system;
- Performance against the management system is audited at regular intervals; and
- The EP is complied with.

The control measures relevant to the proposed activities are described in the OTMP submitted with this application.

The proposals have been assessed against these standards and are all considered to meet the relevant technical standards.

The overall conclusion is that there is unlikely to be a significant environmental impact as a result of the proposed activities on site.

Mold is fully committed to ensuring the highest standards are met and will undertake its activities in a manner consistent with best industrial practices and in accordance with the Company's OTMP and associated procedures.

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