

Watlington Quarry – Site Condition Report

A117209
November 2021

PRESENTED TO

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1.0 EA SITE CONDITION REPORT TEMPLATE

1.0 Site Details	
Name of the applicant	Mick George Limited
Activity address	Watlington Quarry, Watlington Road, Tottenhill, Kings Lynn, Norfolk, PE33 0RG
National Grid Reference	TF 63427 11556
Document reference and dates for Site Condition Report at permit application and surrender	Appendix G - Site Condition Report
Document references for site plans (including location and boundaries)	MGL/A117209/PER/01 – Site Location and Environmental Permit Boundary W8/1/19/04 – Restoration Proposals

Note:

In Part A of the application form you must give us details of the site’s location and provide us with a site plan. We need a detailed site plan (or plans) showing:

- Site location, the area covered by the site condition report, and the location and nature of the activities and/or waste facilities on the site.
- Locations of receptors, sources of emissions/releases, and monitoring points.
- Site drainage.
- Site surfacing.

If this information is not shown on the site plan required by Part A of the application form then you should submit the additional plan or plans with this site condition report.

2.0 Condition of the land at permit issue

Environmental setting including: <ul style="list-style-type: none"> Geology hydrogeology surface waters 	<p><u>Setting</u></p> <p>The application site forms part of the wider Watlington Quarry site in Norfolk and is located approximately 1.5km north east from the village of Watlington. The environmental permit boundary is shown on Drawing Number MGL/A117209/PER/01.</p> <p>Access to the site is achieved from an access road off Watlington Road located to the north of the site. Beyond the</p>
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wider quarry site, the immediate surroundings are agricultural and the nearest residential property is considered to be Oak House which is located approximately 575m north of the application site.

Geology

The sites Geology comprises Tottenhill Gravels (superficial) overlying Kimmeridge Clay (bedrock). There is alluvium to the west of the site near Spring Pit. To the south and East of the site, the Tottenhill Gravels and Nar Valley Deposits give way to Diamicton (Glacial Till) to the south and the Sandringham Sand formation in the east.

The British Geological Survey (BGS) describes the Tottenhill Gravel Member as a complex sequence of sands and gravels, dominated by flint. There is a sharp lithological change between the Tottenhill Gravels and the Kimmeridge Clay Formation. The Kimmeridge Clay Formation comprises dark brown-grey to black, organic rich, fissile mudstone with occasional hard, thin carbonate-cemented horizons.

As the site is a quarry, all of the superficial deposit will be removed from site prior to any filling.

Hydrogeology

The Kimmeridge Clay and the Nar Valley sediments to the north of the site are classified as Unproductive Strata. The Tottenhill Gravels and the Sandringham Sands Formation are classified as Secondary A and Principal Aquifers respectively. The site is not located within a source protection zone (SPZ), the closest of which is associated with the West Melbury Marly chalk abstraction some 8.8km to the east at Narborough. These abstraction points are physically and hydrogeologically separate from the gravel deposits.

Hydrology

According to the Flood Map for Planning Service (FMPS) and the Amber Planning Flood Risk Assessment produced, the is located in Flood Zone 1 which has a low probability of flooding.

The site is located 1.4km south of the River Nar within the River Nar valley. The surface water features, and groundwater elevation are controlled by the artificial drainage channels which all ultimately drain to the Polver Drain, via Hobbs Drain to the north. The site itself and the low-lying

area surrounding the site falls within the Inland Drainage Board (IDB) area of the East of Ouse, Polver and Nar IDB. Hobb's Drain, is located approximately 400m northwest of the site and drains a substantial catchment to the west of the site and is set in a shallow valley. Hobb's Drain flows northwards to join the Polver Drain which, in turn, flows eastwards to join with the River Great Ouse.

Ecology

A 'Nature and Heritage Conservation Screen' (EPR/GB3805FN/A001) was requested from the Environment Agency. 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 appended in the Environmental Risk Assessment (Appendix C of the Environmental Risk Assessment).

The results of the screen identified two local wildlife sites Tottenhill Village Green and Tottenhill Row Common and areas of deciduous woodlands which are designated as Priority Habitats.

Pollution history including:

- pollution incidents that may have affected land
- historical land-uses and associated contaminants
- any visual/olfactory evidence of existing contamination
- evidence of damage to pollution prevention measures

Watlington Quarry has been an active site for the production of sand and gravel, and aggregate since the first planning permission was issued in the mid 1960's and since then a number of planning permissions for extensions to the site have been granted.

Permission reference C/2/2000/2022 was granted by Norfolk County Council (NCC) on 03/06/2003 for the extension of sand and gravel extraction with progressive restoration to nature conservation and agriculture, the erection of a new processing plant and retention of existing access.

Permission reference C/2/2011/2023 was granted by NCC on 21/08/2012 a variation of condition 8 of planning permission C/2/2000/2022 to enable the phased extraction of the remaining reserves in accordance with a new phasing plan.

Permission reference C/2/2015/2007 was granted by NCC on 04/11/2015 a variation of conditions 1 and 3 of planning permission C/2/2011/2023 to allow continued use of plant site until 1 August 2020, to service the proposed quarry extension (MIN 75).

Planning permission C/2/2015/2006 was granted by NCC on 04/11/2015 to enable an extension to quarry (MIN 75) with installation of ground conveyor with culvert to accommodate the conveyor.

Planning permission C/2/2018/2001 was granted by NCC on 18/04/2019 to enable an extension to the Quarry with contained use of the ground conveyor (part), culvert and service track.

Planning permission C/2/2018/2002 was granted by NCC on 18/04/2019 enabled a variation of conditions 1,3 and 18 of planning permission C/2/2015/2007 to extend the time period for restoration of sixty acre field and allow continued use of plant site to service proposed quarry extension (MIN 76) until 31 December 2023.

Planning permission C/2/2018/2024 was granted by NCC on 06/08/2019 to enable the construction of additional silt lagoon and subsequent removal of sand and gravel and clay – amended description of proposal

In 2021, planning permission (reference FUL/2021/0007) was granted by NCC to allow the extraction of sand, gravel and clay with subsequent restoration in an area to the south

	of the existing quarry site (as outlined on Drawing Number MGL/A117209/PER/01
Evidence of historic contamination, for example, historical site investigation, assessment, remediation and verification reports (where available)	There is no recorded evidence of historic contamination within the site boundary.
Baseline soil and groundwater reference data	None provided.
Supporting information	None provided.

3.0 Permitted activities	
Permitted activities	<p>The proposal entails the importation of inert waste to infill and restore the quarry void that will be created following mineral extraction activities.</p> <p>The works will be completed in accordance with the restoration scheme Drawing Number W8/1/19/04- Indicative Restoration Scheme.</p> <p>It is considered that the proposed activities at Watlington Quarry Inert Landfill will fall under the following Recovery and Disposal codes, provided for in Annex II to Directive 2008/98/EC of the European Parliament and The Council of 19th November 2008 Waste.</p> <ul style="list-style-type: none"> • D1: Deposit into or on to land.
Non-permitted activities undertaken	With regards to the permitted activities that will be undertaken within the wider application site, there will be an access road located to the north of the site. This will be the primary access point to the site. The site office will also be located to the north of the site as well as the weighbridge which will be used to undertake on site verification checks of incoming wastes. Details of these checks are provided in the Operating Techniques (Appendix B of the main report).
Document references for:	MGL/A117209/PER/01 – Site Location and Environmental Permit Boundary
<ul style="list-style-type: none"> • plan showing activity layout; and • environmental risk assessment. 	W8/1/19/04 – Restoration Proposals

Note:

In Part B of the application form you must tell us about the activities that you will undertake at the site. You must also give us an environmental risk assessment. This risk assessment must be based on our guidance (*Environmental Risk Assessment - EPR H1*) or use an equivalent approach.

It is essential that you identify in your environmental risk assessment all the substances used and produced that could pollute the soil or groundwater if there were an accident, or if measures to protect land fail. These include substances that would be classified as ‘dangerous’ under the Control of Major Accident Hazards (COMAH) regulations and also raw materials, fuels, intermediates, products, wastes and effluents. If your submitted environmental risk assessment does not adequately address the risks to soil and groundwater we may need to request further information from you or even refuse your permit application.

4.0 Changes to the activity	
<ul style="list-style-type: none"> Have there been any changes to the activity boundary? 	If yes, provide a plan showing the changes to the activity boundary.
<ul style="list-style-type: none"> Have there been any changes to the permitted activities? 	If yes, provide a description of the changes to the permitted activities
<ul style="list-style-type: none"> Have any ‘dangerous substances’ not identified in the Application Site Condition Report been used or produced as a result of the permitted activities? 	If yes, list of them
<ul style="list-style-type: none"> Checklist of supporting information 	<ul style="list-style-type: none"> Plan showing any changes to the boundary (where relevant) Description of the changes to the permitted activities (where relevant) List of ‘dangerous substances’ used/produced by the permitted activities that were not identified in the Application Site Condition Report (where relevant)

5.0 Measures taken to protect the land	
Use records that you collected during the life of the permit to summarise whether pollution prevention measures worked. If you can’t, you need to collect land and/or groundwater data to assess whether the land has deteriorated.	
<ul style="list-style-type: none"> Checklist of supporting information 	<ul style="list-style-type: none"> A baseline site condition report that you produced in response to IED requirements (installations only) Inspection records and summary of findings of inspections for all pollution prevention measures Records of maintenance, repair and replacement of pollution prevention measures

6.0 Pollution incidents that may have had an impact on land, and their remediation	
Summarise any pollution incidents that may have damaged the land. Describe how you investigated and remedied each one. If you can’t, you need to collect land and /or groundwater reference data to assess whether the land has deteriorated while you’ve been there.	
<ul style="list-style-type: none"> Checklist of supporting information 	<ul style="list-style-type: none"> Records of pollution incidents that may have impacted on land Records of their investigation and remediation

7.0 Soil gas and water quality monitoring (where undertaken)	
Provide details of any soil gas and/or water monitoring you did. Include a summary of the findings. Say whether it shows that the land deteriorated as a result of the permitted activities. If it did, outline how you investigated and remedied this.	
Description of soil gas and/or water monitoring undertaken	The monitoring of landfill gas and groundwater was undertaken prior to the commencement of work from five perimeter boreholes (BH 1, BH 2, BH 3, BH 4, and BH 5). The results on the monitoring were used to set relevant compliance limits. The results of the landfill gas monitoring are addressed in the Landfill Gas Screen Report (Appendix J of the Environmental Permit Application). The results of groundwater monitoring are addressed in the Hydrogeological Risk Assessment (Appendix H of the Environmental permit Application).

8.0 Decommissioning and removal of pollution risk	
Describe how the site was decommissioned. Demonstrate that all sources of pollution risk have been removed. Describe whether the decommissioning had any impact on the land. Outline how you investigated and remedied this.	
Checklist of supporting information	<ul style="list-style-type: none"> Site closure plan List of potential sources of pollution risk Investigation and remediation reports (where relevant)

9.0 Reference data and remediation (where relevant)	
<ul style="list-style-type: none"> Say whether you had to collect land and/or groundwater data. Or say that you didn't need to because the information from sections 3, 4, 5 and 6 of the Surrender Site Condition Report shows that the land has not deteriorated. If you did collect land and/or groundwater reference data, summarise what this entailed, and what your data found. Say whether the data shows that the condition of the land has deteriorated, or whether the land at the site is in a "satisfactory state". If it isn't, summarise what you did to remedy this. Confirm that the land is now in a "satisfactory state" at surrender. 	
Checklist of supporting information	<ul style="list-style-type: none"> Land and/or groundwater data collected at application (if collected) Land and/or groundwater data collected at surrender (where needed) Assessment of satisfactory state Remediation and verification reports (where undertaken)

10.0 Statement of Condition	
<ul style="list-style-type: none"> Using the information from sections 3 to 7, give a statement about the condition of the land at the site. This should confirm that: the permitted activities have stopped decommissioning is complete, and the pollution risk has been removed the land is in a satisfactory condition. 	