

Great Billing Quarry

Environmental Permit Application

Site Condition Report

Mick George Limited

October 2022

Prepared on Behalf of Tetra Tech Environment Planning Transport Limited.
Registered in England number: 03050297

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1.0 INTRODUCTION

1.1 REPORT CONTEXT

- 1.1.1 This report has been prepared by Tetra Tech on behalf of the operator, Mick George Limited (Mick George).
- 1.1.2 In July 2018, planning permission (reference 17/00053/MINFUL) was granted by Northamptonshire County Council (NCC) to allow the following:-
- “Extraction of sand and gravel, construction of concrete batching plant, processing plant, including ancillary weighbridge, office, workshop, recycling activities and access, plus the importation of inert material and restoration to agriculture and nature conservation at Land to the East of Great Billing WRC, Northampton, Northamptonshire, NN3 9BX”*
- 1.1.3 In order to facilitate the infilling and subsequent restoration of the site, Mick George seeks to utilise inert waste material and therefore seeks to gain a bespoke waste disposal permit for the permanent deposit of inert waste.
- 1.1.4 In accordance with the Environmental Permitting Regulations – Site Condition Report (H5) guidance, a Site Condition Report (SCR) is not applicable to parts of a permitted facility which comprise the permanent deposits of wastes. However, in accordance with the Environment Agency’s Regulatory Guidance Note RGN 9 – Surrender, a SCR is required for areas within a permitted facility that will not be used for the permanent deposit of waste.
- 1.1.5 According to the Phasing Plans (Drawing Numbers 0047/PO/1 – 0047/PO/4), extraction and progressive infilling with waste material will take place in ten phases that are situated to the east of the site. The west of the site will be used to accommodate a Plant and Operations Area and a Water Management Area. Although mineral will be extracted from the Plant and Operations Area and a Water Management Area, it is proposed that these areas will be restored using topsoil and subsoil that’s stripped from these areas and retained on site in the form of screening bunds. As such, no waste will be deposited within the Plant and Operations Area and a Water Management Area.
- 1.1.6 As such, this SCR has been prepared in relation to the Plant and Operations Area and a Water Management Area within the application site. The SCR has been prepared using the Environment Agency’s H5 SCR template.

2.0 SITE CONDITION REPORT

1.0 Site Details	
Name of the applicant	Mick George Limited
Activity address	Great Billing Quarry Land East of Great Billing WRC Northampton Northamptonshire NN3 9BX
National Grid Reference	SP 83190 62010
Document reference and dates for Site Condition Report at permit application and surrender	Application Site Condition Report (October 2022)
Document references for site plans (including location and boundaries)	MGL/B029956/PER/01 - Site Location and Environmental Permit Boundary

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 	<u>Site Setting</u> The Plant and Operations Area and a Water Management Area is situated to the north west of the wider Great Billing Quarry site. The site is situated is situated to the east of the Great Billing Water Recycling Centre (WRC) and is located approximately 3km east of Northampton on the south side of the dual carriageway A45. To the north west of the application site but separated from the site by the dual carriageway A45, is the settlement of Great Billing which is

part of the larger Northampton urban area (nearest homes in Great Billing are approximately 400m). Also, to the north beyond the A45, is the village of Ecton (nearest homes at approximately 800m) and North east is the village of Earls Barton, over 1km from the site. The River Nene and ponds lie to the south, approximately 400m from site. Further south, beyond the River Nene, lies the village of Cogenhoe, whose closest properties are approximately 800m.

The northern boundary of the application site in the central parts reaches almost to the A45 just south of Ecton Lane where it crosses the A45. In other parts of the site the northern boundary is separated from the A45 by open land including an area of mature trees and agricultural land. The southern boundary adjoins a restored former mineral workings, comprising water bodies, beyond which is the River Nene. The western boundary of the extraction area is partly formed by an overland drain. Barton Brook forms the eastern boundary of the site and flows south to join the Nene.

Geology

Using the British Geological Survey (BGS) Geology of Britain Viewer, the recorded superficial deposits which underlay the site consist of clay and silt (alluvium). These superficial deposits formed up to two million years ago in the Quaternary Period in a local environment previously dominated by rivers.

With regard to the bedrock geology underlying the site consists of the Lias Group deposit that comprises the Whitby Mudstone Formation. This mudstone is a sedimentary bedrock formed approximately 174 to 183 million years ago in the Jurassic Period in a local environment previously dominated by shallow seas.

Hydrogeology

With reference to the Multi Agency Geographic Information for the Countryside's (MAGIC) website under the Groundwater Vulnerability Map, the site is not situated within a Groundwater Source Protection Zone.

In terms of aquifers, the MAGIC website shows that the site overlies a Secondary A Superficial Drift Aquifer. The Environment Agency defines this type of aquifer as *'permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers'*

In terms of the bedrock geology, the MAGIC website indicates that there are no recorded aquifers.

Hydrology

According to the Flood Map for Planning Service (FMPS) shows that the application site lies within the low probability flood area (Flood Zone 1), medium probability flood area (Flood Zone 2) and high probability flood area (Flood Zone 3). The application site is also shown as being potentially liable to flooding from several local reservoirs / water bodies.

Water bodies within the vicinity of the site include the River Nene which lies to the south of the application site and flows east roughly parallel to the southern boundary of the site. Billing Brook is located approximately 1.5km west of the site. The Ecton Brook flows south through the Ecton Brook Linear park along the western edge of Great Billing, towards the Great Billing WRC.

The Barton Brook flows south from Sywell Wood some 7.5 km to the north of the site. Its route takes it beneath the A45 from where it flows along the eastern boundary of the site and into the Nene. The Brook is joined at Sywell Reservoir (approximately 2.7 km north of the site) by a tributary originating in the north-east of Sywell village.

Ecology

A 'Nature and Heritage Conservation Screen' (Reference EPR/KB3109GZ/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 D of the Environmental Risk Assessment).

The results of the screen identified the following:-

- Two Local Wildlife Sites (Ecton Backwater and Ecton Gravel Pits) within 200m of the site;
- The following protected species within 500m of the site:
 - Brown trout *Salmo trutta*
 - European eel *Anguilla Anguilla*
 - European eel *Anguilla Anguilla migratory route*
 - Bullhead *Cottus gobio*
 - Spined loach *Cobitis taenia*
 - Water Vole *Arvicola amphibius*

	<ul style="list-style-type: none"> Protected habitats (deciduous woodland and coastal and floodplain grazing marsh) within 50m of the site.
<p>Pollution history including:</p> <ul style="list-style-type: none"> 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 	<p>Based on the historic maps that are available on the Old-Maps website, the site has been used, at least in part, as an irrigation farm as far back as the late 19th Century. Use as an 'Irrigation Field' continues into the 20th century, with tanks shown on the mapping from the 1960s when the site was re-designated a 'Sewage Farm'.</p> <p>The sewage irrigation use continued until recently, but is no longer actively used on site and much of the site is in arable use.</p>
Evidence of historic contamination, for example, historical site investigation, assessment, remediation and verification reports (where available)	There is no 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. According to the Phasing Plans (Drawing Numbers 0047/PO/1 – 0047/PO/4), extraction and progressive infilling with waste material will take place in ten phases that are situated to the east of the Plant and Operations Area and the Water Management Area.</p> <p>The works will be completed in accordance with the restoration scheme (Drawing Number G13/20/01, Revision B).</p> <p>It is considered that the proposed activities at the site 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. <p>According to the Phasing Plans (Drawing Numbers 0047/PO/1 – 0047/PO/4), extraction and progressive infilling with waste material will take place in ten phases that are situated to the east of the site. The west of the site will be used to accommodate a Plant and Operations Area and a Water Management Area. Although mineral</p>

	<p>will be extracted from the Plant and Operations Area and a Water Management Area, it is proposed that these areas will be restored using topsoil and subsoil that's stripped from these areas and retained on site in the form of screening bunds. As such, no waste will be deposited within the Plant and Operations Area and a Water Management Area.</p>
Non-permitted activities undertaken	<p>In terms of non-permitted activities, the Plant and Operations Area will comprise of the following (as detailed on Drawing Number 0047/O/PW/1):-</p> <ul style="list-style-type: none"> • Sand and gravel screening and washing plant; and • Concrete batching plant <p>Both activities will solely be used to process (non-waste) aggregates that are obtained from mineral extraction activities. Despite this, the Plant and Operations Area will comprise a weighbridge which will be used to complete on site verification checks of incoming wastes . Details of these checks are provided in the Operating Techniques (Appendix B of the environmental application). In addition, there will be a wheel cleaning facility in the area which will be used by all HGVs before they leave the site.</p>
Document references for:	<ul style="list-style-type: none"> • 0047/O/PW/1 - Detail of Plant & Operations and Water Management Area • 0047/PO/1 – 0047/PO/4 (4 Drawings) – Phasing Plans • Environmental Risk Assessment (Appendix C of the Environmental Permit Application)
<ul style="list-style-type: none"> • plan showing activity layout; and • environmental risk assessment. 	

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	
Have there been any changes to the activity boundary?	If yes, provide a plan showing the changes to the activity
Have there been any changes to the permitted activities?	If yes, provide a description of the changes to the

	permitted activities
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
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.

Checklist of supporting information	<ul style="list-style-type: none"> Inspection records and summary of findings of inspections for all pollution prevention measure Inspection records and summary of findings of inspections for all pollution prevention measures Records of maintenance, repair and replacement of pollution prevention measures
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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.

Checklist of supporting information	<ul style="list-style-type: none"> Records of pollution incidents that may have impacted on land
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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.

Checklist of supporting information	<ul style="list-style-type: none"> Description of soil gas and/or water monitoring undertaken Monitoring results (including graphs)
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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.

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| 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) |
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9.0 Reference data and remediation (where relevant)

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.

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| 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) |
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10.0 Statement of Condition

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.