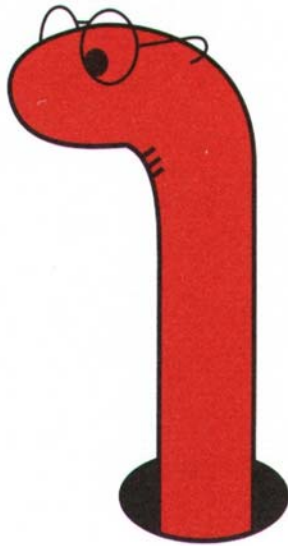


Electronic Report



WORMS EYE

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Our Ref: Park Grove / M19 3AQ / 2022
Date: 25 April 2022

Al-Raza Foundation
8 – 16 Park Grove
Manchester
M19 3AQ

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PARK GROVE, MANCHESTER, M19 3AQ
PROPOSED INVESTIGATION

INTRODUCTION

A commercial development is proposed. Following a Preliminary Risk Assessment (25/4/22) the objective is to design an investigation to consider contamination, landfill gas and geotechnical issues.

SITE DESCRIPTION

The site is irregular shaped, about 40 by 26 metres, located to the north of Park Grove in Manchester and at OS Grid Reference 387287, 394673. The site comprises a dilapidated single storey building at the west/middle (used as a mosque), with a surrounding tarmac surfaced car park. The building has part pre-cast concrete, part brick wall, part flat roof and part asbestos cement sheet roof. At the northeast corner is a single storey brick, garage with modern sheet metal roof.

PROPOSED DEVELOPMENT

It is proposed to demolish the existing building and build a two storey community centre with associated car park and limited landscaping.

INDUSTRY PROFILE

The site was formerly occupied by houses and later a British Legion Club, works and garden centre.

Industry	Possible Contaminants
Works/Garden Centre/Made Ground	Metals: copper, zinc, chromium, nickel, lead, cadmium, arsenic, Inorganic compounds: cyanide, sulphates Phenols VOCs Mineral oils, fuel oils (TPHs) Asbestos PCBs General hydrocarbons (PAHs)

CONCEPTUAL MODEL

Source	Receptors	Pathway	Potential/Likely Pollutant Linkage
Asbestos	End-users	Inhalation	Yes
	Off-site	Migration off-site	Possible
Inorganic contaminants	End-users	Direct contact, ingestion, inhalation of dust	Unlikely
	Groundwater	Leaching towards	No
	River/stream	Leaching towards	No
Sulphate	Building fabric	Concrete directly in contact with soil	Yes
Hydrocarbons	End-users	Direct contact, ingestion, inhalation of dust	Possible
	Service pipes	Seeping into drinking water pipes	Yes
	Groundwater	Leaching towards	No
	River/stream	Leaching towards	No
Hydrocarbon vapours	End-users	Inhalation of vapours indoors and outdoors	No
Landfill gas	End-users - in buildings	Seeping into buildings, explosion, asphyxiation	Possible
Radon	End-users - in buildings	Seeping into buildings	No

PROPOSED INVESTIGATION

Contamination

Taking into account the history of the site it is considered that contamination may be present. However, bearing in mind the proposals for the site, only a very low risk to end-users is expected.

An intrusive investigation is required, consisting of boreholes/ trial holes and tests to confirm the presence/absence and extent of contamination on the site. There are no specific point sources for contamination.

Proposed Investigation

- *Drill 4 boreholes to about 6 metres deep.*
- *Excavate 2 trial holes up to 0.6m deep.*
- *Test 6 shallow samples (about 0.25m deep) for: heavy metals, cyanide, sulphate, PAHs, TPHs, phenols and asbestos.*
- *Test 3 shallow samples for PCBs.*
- *Test 2 deeper samples for a suite of contaminants suitable for selecting water pipes.*
- *Screen the boreholes for VOC using hand-held PID monitor.*
- *Test the 3 worst case samples from the PID screen, >5ppm, for a more detailed analysis. Maximum 1 per BH.*

Controlled Waters

No risk to controlled water is expected and no further action is considered necessary at this stage. This may need to be reviewed following the soil tests.

Landfill Gas/Ground Gas

There are nearby filled features and possible made ground on-site. A very low to low gas risk is expected. A gas testing programme is required, 4 tests over 1 month being suggested.

Proposed Action

- *Install 3 gas monitoring wells.*
- *Test for methane, carbon dioxide and gas outflow on 4 occasions over 1 month.*

Radon

Radon protection measures are not required.

Foundations

A series of boreholes are required in the area of the proposed building to allow the most suitable foundations to be designed.

Plasticity tests are required to confirm the shrinkage potential of the clay.

Proposed Investigation

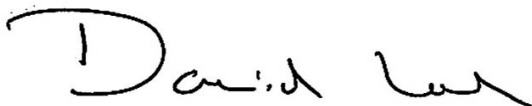
- *Supplement boreholes with 1 dynamic probe.*
- *Carry out plasticity tests on 2 samples of clay.*

General

The PRA, and these proposals, should be issued to the Local Authority for their comments before proceeding with the investigation.

Yours faithfully

on behalf of Worms Eye Ltd



David Lord
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