

# Barrie House, Camden

**Risk Assessment Method Statement** (RAMS)

# Arbitrage Group

Revision Date: 01 April 2022

Job No:1034378Doc Ref:1034378 RAMS AQ01.docRevision:A



Project title	Barrie House	Job Number
Report title	Risk Assessment Method Statement (RAMS)	1034378

### **Document Revision History**

Revision Ref	Issue Date	Purpose of issue / description of revision
_	01 April 2022	Draft for comment

#### Document Validation (latest issue)

01/04/2022

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01/04/2022

Principal author

Signed by: Carrington, Jenny

Checked by Signed by: Hodgkiss, Glyn



01/04/2022

Signed by: Hodgkiss, Glyn

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# 1.0

# Scope of Work

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# **1.0** Scope of Work

## 1.1 Proposed Development

It is understood that the following work will be carried out at the site:

- Demolition of existing Porter's Lodge
- Construction of Barrie House flats by extending the existing building

It is understood that Air Quality Consultancy Services are being sought to provide the necessary information to discharge the following planning condition:

"No development shall take place until full details of the air quality monitors have been submitted to and approved by the local planning authority in writing. Such details shall include the location, number and specification of the monitors, including evidence of the fact that they have been installed in line with guidance outlined in the GLA's Control of Dust and Emissions during Construction and Demolition Supplementary Planning Guidance and have been in place for 3 months prior to the proposed implementation date. The monitors shall be retained and maintained on site for the duration of the development in accordance with the details thus approved"

## 1.2 Consultation with Camden Council

Liaison with Camden Council Environmental Health team is required to discuss and agree the scope of the continuous monitoring programme for airborne particulate matter (including PM<sub>10</sub>) during demolition and construction.

The Environmental Health Officer (EHO) at London Borough of Camden Council has been consulted to determine acceptance of the scope of work as detailed here. A response was received on 24th February. The scope of work is therefore based on the initial agreement with Camden Council, as well as Cundall's previous experience for carrying out similar monitoring programmes. Correspondence with Camden Environmental Health is included as Appendix A.

### 1.3 Agreed Scope of Work

The work will be carried out in accordance with the latest available guidance, and in particular Greater London Authority (GLA) guidance The Control of Dust and Emissions during Construction and Demolition SPG (July 2014).

The scope of works outlined and agreed with Camden Council can be summarised as follows:

- Sensitive receptors There are several residential receptors surrounding the site.
- $\circ~$  **Parameters** Camden Council have confirmed they require  $PM_{10}$  monitoring in the form of two real-time MCERTs indicative level automatic monitors .
- **Number of monitoring equipment units** (automatic samplers) required Camden Council have confirmed they require two continuous monitors.
- Monitoring locations, taking into account possible locations for unforeseen future sensitive receptors. It has been assumed that there will be one monitor upwind and one downwind. Camden Council have confirmed their provision agreement of the proposed monitoring locations but will require additional details such as photos of the proposed sites.
- **Duration** Camden Council have outlined in their planning condition that monitoring needs to commence 3 months prior to the commencement of any on-site demolition/construction activities).
- Action and trigger levels Camden Council have stipulated they must be informed of any exceedance and provided with an explanation as to the works that were occurring at site at the time and what mitigation measures were subsequently used to combat this.

## o Content and frequency of monitoring reports - assumed to be quarterly

### 1.4 Initial Site Visit

The main purpose will be to understand the layout of the site, to identify sensitive receptors and to finalise suitable sampling locations (considering security and also mains power supply) for the monitoring equipment.

## 1.5 Health and Safety

All site visits will be undertaken by staff familiar with monitoring set-up. A review and familiarisation of the RAMS will be undertaken before attending site by both staff members. This includes information on the necessary Health and Safety clothing and measures to be taken. It will be necessary to update the Safe Plan of Action (Appendix H) whenever there is a change of task, hazards or work conditions.

The on-site working hours are expected to be one hour after sunrise and one hour before sunset. Site work will only take between these hours and no site work will be undertaken in poor light.

## 1.6 Capability

The work will be carried out by Cundall's air quality team, who are all members or affiliates of the Institute of Air Quality Management (IAQM). The work will be managed and overseen by team members who are also professionally chartered. Information on these key personnel is provided in Appendix I and CVs are available on request.



# 2.0

# **Site Setting**

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# 2.0 Site Setting

### 2.1 Site Location

The site is located at Barrie House, 29 St Edmund's Terrace NW8 7QH in the London Borough of Camden. A site location plan is included as Figure 2-1. The site setting is illustrated below in Figure 2-2, courtesy of Google Earth.

A site redline boundary is included as Figure 2-3, courtesy of Marek Wojciechowski Architects Ltd<sup>1</sup>.

The surrounding site use can be summarised as follows:

- Broxwood Way to the south-west
- Residential properties (Kingsland) to the north-west and north.
- Residential properties of St Edmund's Terrace to the north-east and east
- St Edmund's Terrace to the south-east and south

Photos of the current site setting (March 2022) are included in Appendix C.



Figure 2-1 Site Location Plan

<sup>&</sup>lt;sup>1</sup> Marek Wojciechowski Architects Ltd (2017) Barrie House, 29 St Edmund's Terrace NW8 7QH, Site Location Plan, Ref: 16033, Issued for Planning, 04.01.18



Figure 2-2 Site Setting (courtesy of Google Earth)



Figure 2-3 Redline Boundary (courtesy of Marek Wojciechowski Architects Ltd)

### 2.2 Site Access Requirements

The site is located in an urban environment and accessible via public transport and walking. A car will be required to access the site, to enable heavy monitoring equipment to be delivered.

## 2.3 Proposed Monitoring Locations

The landscaped area surrounding Barrie House has an abundance of mature trees and there are currently no high walls or fencing on the site perimeter.

It will therefore likely be necessary to install the monitors for baseline monitoring on the facades of the Barrie House building.

Camden Council have requested their criteria is met with respect to installation height, distance from building and inlet angles. We therefore intend to consult further with Camden Council to agree the exact locations. Please see Appendix A for the consultation to date with Camden Council.



# 3.0

# **Key Risks and Controls**

# 3.0 Key Risks and Control

The key risks within the study area include walking near/crossing roads and slips, trips and falls. Controls have been put into place to manage these risks. The team will remain on pavements, crossroads at designated pedestrian crossings where available and will use public footpaths where possible. Appropriate PPE will be worn at all times (PPE requirements detailed in section 4.2). There will be no lone working at the set-up with working on height (using step ladder).

The following table summarises all key risks and identifies controls following the completion of the Site/Task Specific Risk Assessment (Appendix G).

Risk	Control					
	Wear hi-vis jacket and safety boots at all times when on site.					
Working close to busy roads	Be aware of traffic and surroundings.					
and car parks	adders could be potentially used to install equipment. Whenever using ladders near to road, nsure that a minimum of two staff members are present, and that the ladder is positioned to ninimise the risk of it falling into the road.					
Working at height	Use a certified step ladder on an even and flat surface. Attach monitors and weather station to structure (building or hoarding), but do not use the top step of the ladder. Three limb placement on ladder/street furniture to be observed at all times. Two suitable qualified and trained people will set-up the equipment when working at height.					
Trip, slips or falls hazard –	Pay attention when walking to around the site.					
uneven paving or branches on footpaths	Be wary of slips and trips caused by obstructions such as plants, roots, trailing leads etc.					
	The site visit will be undertaken by two members of staff, to establish the exact monitoring					
Site working call in procedure	to be adequate. Safety apps on smartphones will be used on site to track the team's movements and ensure they can be located if in danger.					
	Respond calmly and walk away if antagonised. Contact PM to alert of the situation and select a new monitor location if necessary.					
Confrontation with the public	The site has potential for interaction with dogs. If loose dogs are present showing aggressive behaviour, do not approach.					
	Ensure that all team members have an object on their person such as a clip board that they are able to 'feed' to a dog in the event of attack. Before going to site, read guidance supplied in Appendix J on what to do if you are approached by a dog or bitten by a dog.					

On arrival at the site and prior to commencement of any work, a SPA must be completed. Any hazards not identified previously must be noted and the risks assessed and revaluated. The necessary actions must then be briefed to the site team. If no additional hazards are identified, then the SPA must be annotated with "No change".



# 4.0

# **On Site Procedures**

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# 4.0 On Site Procedures

## 4.1 Monitoring Procedures

The methodology for the construction dust monitoring is outlined in Appendix E and has been discussed with the Environmental Health team at Camden Council (Appendix A).

### 4.2 Protection of the Environment

Cundall staff will comply with the Cundall Environmental Policy Statement when carrying out their survey work. Waste created by Cundall employees will not be left on site and will be placed in a bin/disposal unit where available.

## 4.3 Equipment and PPE

The following equipment/PPE has been identified following the completion of the Site/Task Specific Risk Assessment (Appendix G):

ltem	Note
Boots with ankle support (there is no requirement for safety boots with mid sole or toe protection unless a specific risk is identified during surveys)	Mandatory
Safety gloves	As required
Safety googles	As required
Yellow high visibility jacket	Mandatory
Yellow high visibility trousers	Not required
Hard hat	As required
A-Frame 3-Step Ladder	Mandatory for first visit, as required thereafter
First Aid Kit	Mandatory
Mobile phone (well charged)	Mandatory
Clothes for expected/unexpected weather	Mandatory
Appropriate amount of drinking water & food	Mandatory
Weather writer and pens/pencils	Mandatory
CSCS Card plus other photo id (e.g.,S driving licence)	Mandatory
Scissors	Mandatory
Type measure	Mandatory
Site Plan and maps	Mandatory
Site Data recording sheets	Mandatory
Camera/Smart Phone with Photo capability (fully charged)	Required
Sun cream/sun hat/sunglasses/insect repellent	As required
Appropriate contact details	Required



## 4.4 Welfare Facilities

Welfare facilities are available at:

Public toilets in Regents Park, London NW1 4RY

### 4.5 Emergency Response

Nearest Hospital / Minor Injuries Unit for "first aid" injuries (in an emergency 999) Name: University College Hospital Address: 235 Euston Road, NW1 2BU Tel: 020 3447 0083



Figure 4-1 Closest Hospital

#### 4.6 Working Hours

Site work will be undertaken during daylight hours Monday - Friday.



# 5.0

# Contacts

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## 5.0 Contacts

### 5.1 Project Key Contacts

Role	Name	Mobiles	Office
Client	Aldo Attanasio d'Aponte	07803 921 934 aldo@arbitragegroup.com	62 St Martins Lane, London WC2N 4JS
Architect	Ben Rogers	07801 534 938 ben@carbognoceneda.com	Angle House, 48a Antill Road, London N15 4BA
Architect	Andrea Carbogno	07890 586884 andrea@carbognoceneda.com	Angle House, 48a Antill Road, London N15 4BA

## 5.2 Cundall Key Contacts

Role	Name	Mobiles	Office
AQ Project Manager	Jenny Carrington	07590 862225	Cundall Birmingham
Principal AQ Consultant	Glyn Hodgkiss	07784 229901	Cundall Birmingham
Cundall Graduate AQ	Brittany Huggins	0121 2622749	Cundall Birmingham
Consultant			
Cundall Partner	Andrew Parkin	0121 2376851	Cundall Birmingham

All incidents involving Cundall employees or sub-consultant or subcontractor under Cundall control (including motor vehicle accidents, "Name on the Gate" incidents, environmental incidents or near-misses) shall be reported as soon as possible **IN PERSON** or **BY TELEPHONE**.

#### 5.3 Verbal Reporting Chain for Incidents





# 6.0

# Appendices

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# Appendix A Consultation with Camden Council

## 1<sup>st</sup> April 2022 – Email to Camden Council

From: Jenny Carrington
Sent: 01 April 2022 12:19
To: Jenny Carrington <j.carrington@cundall.com>; Ben Spode <Ben.Spode@camden.gov.uk>; Tom Parkes
<Tom.Parkes@camden.gov.uk>; Air Quality <AirQuality@camden.gov.uk>
Cc: Glyn Hodgkiss <g.hodgkiss@cundall.com>
Subject: RE: Barrie House - Construction dust monitoring

Good Afternoon Ben

We visited the Barrie House site yesterday and are currently in the process of preparing a method statement for the monitoring.

The landscaped area surrounding Barrie House has an abundance of mature trees and there are currently no high walls or fencing on the site perimeter.



Installing the monitors for baseline monitoring on the corner facades of the Barrie House building seems to be the best available option.

We would like to understand more regarding your installation criteria, with respect to installation height, distance from building and inlet angles so we can agree on the best solution.

We are also in contact with the architect to determine where the sources of electrical supply are likely to be.

It would be great if we could please arrange a time to discuss this. Can we arrange a convenient time for a telephone call?

I intend to be in London next Thursday 7<sup>th</sup> April, so could meet you on site that day if that were a possibility?



Look forward to hearing from you.

Kind regards Jenny

Jenny Carrington Principal Air Quality Consultant Cundall

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#### 24<sup>th</sup> February 2022 – Email to Camden Council

From: Jenny Carrington <j.carrington@cundall.com>
Sent: 24 February 2022 14:20
To: Ben Spode <Ben.Spode@camden.gov.uk>; Tom Parkes <Tom.Parkes@camden.gov.uk>; Air Quality <AirQuality@camden.gov.uk>
Cc: Glyn Hodgkiss <g.hodgkiss@cundall.com>
Subject: RE: Barrie House - Construction dust monitoring

Good Afternoon Ben

Many thanks for your email. We have used this information to inform our proposal scope of works for construction dust monitoring at the site.

We are currently awaiting confirmed of our fees from the client.

Should we get the go ahead for carrying out the monitoring, we expect the baseline period to start in approximately June 2022, as the proposed construction start date is currently September 2022. In which case, we would be in touch nearer the time to provide the requested clarifications.

Kind regards Jenny

Jenny Carrington Principal Air Quality Consultant Cundall

4th Floor, 15 Colmore Row, Birmingham, B3 2BH, United Kingdom D +44 121 389 8725 T +44 121 262 2720 M +44 7590 862225 www.cundall.com | People | Ideas | Projects | Twitter | Linkedin | Join 24<sup>th</sup> February 2022 – Response from Camden Council

From: Ben Spode <Ben.Spode@camden.gov.uk>
Sent: 24 February 2022 12:41
To: Jenny Carrington <j.carrington@cundall.com>; Tom Parkes <Tom.Parkes@camden.gov.uk>; Air Quality
<AirQuality@camden.gov.uk>



**Cc:** Glyn Hodgkiss <g.hodgkiss@cundall.com> **Subject:** RE: Barrie House - Construction dust monitoring

Hi Jenny,

Thank you for sending over the below email. The locations for the two monitors suggested provisionally look to be acceptable however, we require more detail such as photos of the specific proposed locations for each monitor so that we can ensure our criteria has been met (height, distance from building, inlet angles etc.).

With regard to your other questions, I have responded below in red.

Kind regards,

Ben Spode Air Quality Officer (Planning)

Telephone: 020 7974 1695

The majority of Council staff are continuing to work at home through remote, secure access to our systems. Where possible please communicate with us by telephone or email. From: Jenny Carrington <<u>j.carrington@cundall.com</u>> Sent: 18 February 2022 17:18 To: Tom Parkes <<u>Tom.Parkes@camden.gov.uk</u>>; Charlotte Adams <<u>Charlotte.Adams@camden.gov.uk</u>>; Ben Spode <<u>Ben.Spode@camden.gov.uk</u>>; Air Quality <<u>AirQuality@camden.gov.uk</u>> Cc: Glyn Hodgkiss <<u>g.hodgkiss@cundall.com</u>> Subject: RE: Barrie House - Construction dust monitoring

**[EXTERNAL EMAIL]** Beware – This email originated outside Camden Council and may be malicious Please take extra care with any links, attachments, requests to take action or for you to verify your password etc. Please note there have been reports of emails purporting to be about Covid 19 being used as cover for scams so extra vigilance is required.

Good Afternoon Air Quality Team

Cundall have been asked about providing construction dust monitoring for a site in Camden. The site is at 29 St Edmunds Terrace, NW8 7QH. The site is known as Barrie House or Broxwood View. The planning reference is : 2018/0645

We have received an email from the client regarding the planning condition for the redevelopment at the Barrie House site, and in particular the following requirement relating to air quality:

No development shall take place until full details of the air quality monitors have been submitted to and approved by the local planning authority in writing. Such details shall include the location, number and specification of the monitors, including evidence of the fact that they have been installed in line with guidance outlined in the GLA's Control of Dust and Emissions during Construction and Demolition Supplementary Planning Guidance and have been in place for 3 months prior to the proposed implementation date. The monitors shall be retained and maintained on site for the duration of the development in accordance with the details thus approved.

Works are proposed to commence on site in September 2022 will completion predicted for December 2023.

To achieve 3 months baseline monitoring we would need to start monitoring on site in June 2022.

Regarding this, can we please confirm the following:

• We would propose to install two monitors, one upwind in the south-west area of the site boundary and one in the north-eastern area of the site boundary, such as the locations (purple triangles) shown in the image below. A weather station will be located on one of the monitors. Please let us know if this is sufficient?



- We assume these are to be automatic monitors, rather than dust deposition gauges. Yes two real-time MCERTs indicative level automatic monitors will be needed
- Are we to assume PM10 monitoring is sufficient, or will you need additional parameters, such as PM2.5 at one or more of the monitoring sites? We only require PM10 to be monitored however, would always encourage developers to expand their monitoring
- We assume you will not need use to supplement the survey with hand held monitors? This is not required
- Regarding how alerts will be handled, we will have remote access to the data via a web based portal. There will be remote exceedance alarms. We will contact site manager to inform them on exceedance and request work ceases until the issue can be rectified. – The Council must be informed of any exceedance alarms and provided with an explanation as to the works that were occurring onsite at the time and what mitigation measure were subsequently used to combat this

We have also been asked to provide an updated Air Quality Assessment. Following on from the 2018 planning application, we are told that there will be an additional two floors, but the overall GIA is likely to be similar. There will be minimal car parking spaces and the energy design at the moment is for low emission gas boilers in the residential units. We do not propose to carry out an detailed modelling. We intend to update the baseline and air quality neutral assessment and refer to the 2019 LAEI in an updated exposure assessment. If you have any comments regarding this, please let me know.

Thank you in advance for your response. Have a great weekend

Kind regards Jenny



Jenny Carrington Principal Air Quality Consultant Cundall

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### 18th February 2022 – Email to Camden Council

From: Jenny Carrington <j.carrington@cundall.com>
Sent: 18 February 2022 17:05
To: tom.parkes@camden.gov.uk; charlotte.adams@camden.gov.uk; ben.spode@camden.gov.uk; airquality@camden.gov.uk
Cc: Glyn Hodgkiss <g.hodgkiss@cundall.com>
Subject: Barrie House - Construction dust monitoring

Good Afternoon Air Quality Team

Cundall have been asked about providing construction dust monitoring for a site in Camden. The site is at 29 St Edmunds Terrace, NW8 7QH. The site is known as Barrie House or Broxwood View. The planning reference is : 2018/0645

We have received an email from the client regarding the planning condition for the redevelopment at the Barrie House site, and in particular the following requirement relating to air quality:

No development shall take place until full details of the air quality monitors have been submitted to and approved by the local planning authority in writing. Such details shall include the location, number and specification of the monitors, including evidence of the fact that they have been installed in line with guidance outlined in the GLA's Control of Dust and Emissions during Construction and Demolition Supplementary Planning Guidance and have been in place for 3 months prior to the proposed implementation date. The monitors shall be retained and maintained on site for the duration of the development in accordance with the details thus approved.

Works are proposed to commence on site in September 2022 will completion predicted for December 2023. To achieve 3 months baseline monitoring we would need to start monitoring on site in June 2022.

Regarding this, can we please confirm the following:

• We would propose to install two monitors, one upwind in the south-west area of the site boundary and one in the north-eastern area of the site boundary, such as the locations (purple triangles) shown in the image below. A weather station will be located on one of the monitors. Please let us know if this is sufficient?



- We assume these are to be automatic monitors, rather than dust deposition gauges.
- Are we to assume PM10 monitoring is sufficient, or will you need additional parameters, such as PM2.5 at one or more of the monitoring sites?
- We assume you will not need use to supplement the survey with handheld monitors?



• Regarding how alerts will be handled, we will have remote access to the data via a web-based portal. There will be remote exceedance alarms. We will contact site manager to inform them on exceedance and request work ceases until the issue can be rectified.

We have also been asked to provide an updated Air Quality Assessment. Following on from the 2018 planning application, we are told that there will be an additional two floors, but the overall GIA is likely to be similar. There will be minimal car parking spaces and the energy design at the moment is for low emission gas boilers in the residential units. We do not propose to carry out any detailed modelling. We intend to update the baseline and air quality neutral assessment and refer to the 2019 LAEI in an updated exposure assessment. If you have any comments regarding this, please let me know.

Thank you in advance for your response. Have a great weekend

Kind regards Jenny

Jenny Carrington Principal Air Quality Consultant Cundall

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# Appendix B Site Locations – to be completed following installation

Downwind Monitor		Site Photo	
Site Name		North	East
Grid Reference			
Site Description			
Distance from Kerb	-		
Height from ground			
Observations	No traffic hazard here		
Commissioned			
Decommissioned			
Monitor		South	West



Upwind Monitor	2	Site Photo				
Site Name		North	East			
Grid Reference						
Site Description						
Distance from Kerb						
Height from ground						
Observations						
Commissioned						
Decommissioned						
Monitor		South	West			
1						

# Appendix C Site Photos

Front of Site South-West- Possible Façade Mounting



Front of Site South-West- Possible Façade Mounting



Rear of Site North- Possible Location 1



Rear of Site North- Possible Location 2





# Appendix D Monitoring Equipment

We propose to use the following equipment. However, should the equipment not be available due to stock delay shortages, we reserve the right to substitute for equipment of similar technical speciation to overcome any sub-contractor supply issues.

# Remote Dust Monitor Model ES-642



## The ES-642 Remote Dust Monitor is an industrial air-quality sensor designed to provide accurate measurements of particle concentration in both indoor and outdoor environments.

The unit is supplied in a rugged weatherproof enclosure. It includes an LCD display to provide information about particulate concentration, flow rate, instrument status and power. The electronics and optical system are protected from moisture by a built in intake heater that is humidity level controlled. The heater power is regulated to maintain a minimum humidity level. Additional features include a purge air system and an automatic zero calibration routine. The sensor can be wall mounted or installed on a vertical mast up to 3 inch in diameter.

The ES-642 is supplied with a 10 ft cable and connector for power (15 to 40 VDC) and signal output. The ES-642 measures particulate concentration using a highly sensitive forward scatter laser nephelometer, having a measurement range of 0 to 100 mg/cubic meter or 0 to 100,000 ug/cubic meter. Optional sharp-cut cyclones are used to set the measurement level of the ES-642. As supplied it provides particulate monitoring for TSP, with the addition of the sharp-cut cyclone it can be set for particulate smaller than  $PM_{10}$  or smaller than  $PM_{25}$ , or  $PM_1$ . The accuracy of the instrument is set for particles +/-5% based on a traceable PSL 0.6 micron reference standard.





- Applications: Building Automation
  - Military Applications
  - Environmental Clean Up Sites
  - Air Pollution Level Monitoring
  - **Dust Level Warning Systems**

# **Specifications**

# **Remote Dust Monitor Model ES-642**

Measurement Principles	Particulate concentration by forward light scatter laser Nephelometer.
Available Cut Points	TSP Inlet Standard. $PM_{10}$ , $PM_{2.5}$ , and $PM_1$ sharp-cut
	cyclone inlets available.
Measurement Range	0 to 100 mg/m <sup>3</sup> (0 to 100,000 μ g/m <sup>3</sup> )
Measurement Sensitivity	.001 mg/m <sup>3</sup> .
Nephelometer Accuracy	$\pm$ 5% traceable standard with 0.6um PSL.
Particle Size Sensitivity	0.1 to 100 micron. Optimal sensitivity 0.5 to 10 micron particles.
Display	2 X 16 back lit LCD. Provides information on operation including: Power, Flow Operation,
Zero Calibration	Status and Concentration.
Flow Bate	Automatic Zero Calibration every hour or as programmed from 1 to 999 minutes.
Power	2.0 liters/minute $\pm$ 0.1 lpm.
Power Consumption	15 – 40 VDC @ 1.5 A maximum.
	350 mA (no heater) 1.1 A (with heater) @ 15 VDC.
	4-20 mA and 0 – 10 VDC.
	RS-485 full and half duplex, RS-232.
Serial Communication	ASCII Text data and MODBUS RTU.
Alarm Output	Normally open and normally closed relay 30 VDC @ 1A maximum.
Operating Temperature	0 to +50°C . (Ambient Temperature Sensor Range -30 to +50°C).
Barometric Pressure	600 to 1040 mbar pressure sensor range.
Ambient Humidity Range	0 to 90% RH, non-condensing.
Intake Moisture Control	Automatic 10 Watt inlet heater module controlled to sample RH set point.
Factory Service Interval	24 Months typical, under continuous use in normal ambient air.
Mounting Options	Wall mount bracket standard or EX-905 tripod.
Unit Weight	2.27 kg ( 6.0 lbs)
Unit Dimensions	22.9cm high, 17.8cm wide, 10.8cm deep, (9.0" x 7.0" x 4.25"), w/out inlet assy. 48.3cm high, 17.8cm wide, 10.8cm deep, (19.0" x 7.0" x 4.25"), w/ inlet assy.

Specifications are subject to change at any time.

## **Applications:**

- Automatic Zero Calibration
- Controlled Input Heater
- Easily Removable Filters
- Contact Closure Alarm Output
- Front Panel LCD Display
- Sealed Environmental Enclosure

## **UK & Ireland Distributor**



Kingfisher Business Park, London Road, Stroud, Gloucestershire, GL5 2BY, UK

Tel: +44 (0) 1453 733200 sales@et.co.uk www.et.co.uk

# Appendix E Monitoring Procedures

## E.1 General

- E1.1 The Environmental Health Officer (EHO) at London Borough of Camden Council has been consulted to determination acceptance of the scope of work as detailed here. A response was received on 24<sup>th</sup> February. The scope of work is therefore based on the initial agreement with Camden Council, as well as Cundall's previous experience for carrying out similar monitoring programmes.
- E1.2 The Institute of Air Quality Management (IAQM)'s document "Guidance on Air Quality Monitoring in the vicinity of Demolition and Construction Sites" and Greater London Authority (GLA) guidance The Control of Dust and Emissions during Construction and Demolition SPG (July 2014) will be followed.
- E1.3 It will be necessary to further liaise with London Borough of Camden Council's EHO to provide updates on the progress of the monitoring programme, especially regarding the installed monitoring locations and the changes thereafter to accommodate the construction activities. This is to make sure that they agree on the methodology and programme as proposed. Cundall will liaise with the EHO again once appointed to carry out the work.
- E1.4 Should there be any requirement to significantly change to the scope of work required, Cundall will advise the client and obtain agreement (which may involve a change in fee) before proceeding with the work.

## E2.0 Initial Site Visit and Consultation with the Local Authority EHO

- E2.1 An initial site visit will be made following the initial appointment. The main purpose will be to understand the layout of the site, to identify sensitive receptors and to finalise suitable sampling locations (considering security and also mains power supply) for the monitoring equipment.
- E2.2 Liaison with the client and is required to discuss and agree the scope of the continuous monitoring programme for airborne particulate matter (including PM<sub>10</sub>) during demolition and construction. For the most part, this has already been carried out to inform this proposal. This includes:
  - The sensitive receptors identified (there are several residential receptors surrounding the site).
  - $\circ~$  Parameters. ( Camden Council have confirmed they require  $PM_{10}$  monitoring in the form of two real-time MCERTs indicative level automatic monitors .
  - Number of monitoring equipment units (automatic samplers) required. (Camden Council have confirmed they require I two continuous monitors).
  - The monitoring locations, taking into account possible locations for unforeseen future sensitive receptors. (It has been assumed that there will be one monitor upwind and one downwind. Camden Council have confirmed their provision agreement of the proposed monitoring locations but will require additional details such as photos of the proposed sites).
  - Duration (Camden Council have outlined in their planning condition that monitoring needs to commence 3 months prior to the commencement of any on-site demolition/construction activities).
  - The action and trigger levels (Camden Council have stipulated they must be informed of any exceedance and provided with an explanation as to the works that were occurring at site at the time and what mitigation measures were subsequently used to combat this).
  - o Content and frequency of monitoring reports (assumed to be quarterly)

## E3.0 Monitoring Prior to Demolition and Construction Work

- E3.1 The objective for the initiation of monitoring prior to the commencement of any demolition and construction work is to establish the baseline conditions at the site.
- E3.2 It is highly recommended that monitoring should be carried out before any activity starts on site. The purpose of this is to carry out baseline monitoring, thereby enabling a better understanding of ambient particulate concentrations in the vicinity of the site.

- E3.3 Two automatic airborne particulate matter monitors will be deployed on site, at locations to be agreed with the client and the EHO. This is to ensure that representative locations across the site are covered.
- E3.4 If it is possible, data captured by the automatic monitors will be compared with that from a nearby automatic monitoring station (to be agreed with EHO), so that the data can be ratified. The data will also be compared with the Air Quality (England) 2000 Regulations and the Amended Regulations 2002, which there is a regulatory objective for PM<sub>10</sub> specifically.

### **E4.0 Baseline Reporting**

E4.1 A short technical report in a letter format will be produced after the completion of the baseline monitoring, summarising the monitoring programme, data captured, and whether or not there are any exceedance of relevant threshold objectives.

## E5.0 Monitoring During Demolition and Construction Work

- E5.1 The objective for monitoring airborne particulate matter during the demolition and construction phase is to ensure that the dust mitigation measures as outlined in the dust management plan (DMP) or CEMP is effective in suppressing any particles or dust generated by the activities on site. Where the monitoring indicates higher levels than those above action levels, further mitigation would be put in place to ensure that the trigger level i.e., limit) is not breached. This will protect the local environment and sensitive receptors from exposure to dust nuisance or elevated levels of PM<sub>10</sub>.
- E5.2 The current proposed monitoring period is estimated to be 18 months (exact timing and duration to be confirmed, but it is understood that following three months of baseline monitoring (from June 2022), demolition of buildings will start in September 2022 and subsequent construction works will continue until approximately December 2023).). This will be confirmed with the client and the EHO once a more detailed programme of work for the work becomes available, to ensure that this meets the requirements of London Borough of Camden Council.
- E5.3 Two continuous dust monitor units will be installed at two suitable locations for the whole course of the monitoring programme to measure concentrations of airborne particulate matter. One of the units will be equipped with an anemometer to measure wind speed and direction.
- E5.4 An automatic remote logging system will be set up, such that airborne particulate matter concentration data will be collected on a regular basis (e.g., once every five minutes) throughout the whole monitoring period. The live and historic data can be accessed remotely via the internet. It is noted that locations of the equipment may need to be moved during the monitoring period.
- E5.5 The client has confirmed that mains power will be available during demolition and construction and that there is currently live power to the site. Cundall will not be responsible for any outage of monitoring service because of interruption of power supply during this period.
- E5.6 The alert and action levels for PM<sub>10</sub> will be set up in accordance with Camden's requirements. Once an exceedance is detected, a text and/or e-mail alert (to be confirmed), will be sent to all appropriate people on the designated contact list (e.g., site manager, Cundall staff, the local authority). This will provide notification of the incident, thereby enabling appropriate remedial action to be taken in a timely and efficient manner.
- E5.7 The equipment will be serviced, calibrated and maintained in accordance with the manufacturer's recommendations. A short period of down-time will occur during the servicing period, but this should not compromise the integrity of the monitoring programme. The quality of the monitoring data gathered will go through the quality assurance/quality control procedures as set out by Defra.

### E6.0 Reporting

E6.1 It is assumed that a monitoring report in electronic format is required every quarter (three months) during the whole monitoring programme. Should a different reporting frequency be required, a revised fee will be proposed and agreed with the client. The report will summarise the below:



- Location of monitoring equipment
- o General activities and visual dust observation during the period
- $\circ$   $\;$  The 24-hour average  $PM_{10}$  concentration from the automatic sampler  $\;$
- General wind direction and wind speed during the quarter, and specifically during any exceedance that may have occurred
- Date and time of any exceedance of the trigger action level with the 15-minute mean PM<sub>10</sub> concentrations, and the associated activities during that time if information is available
- Any mitigation measures implemented by the client.

# Appendix F Emergency Contact

Should your mobile phone have no network coverage you are still able to contact the emergency services by dialling 112 on your mobile phone. This number is programmed into every sim card and allows calls made to this number to be prioritised across all mobile phone networks. In simple terms once 112 is dialled your phone will search each and every network in order to connect to the emergency services.

## The Process

### To initiate the call, dial 112.

Stand with your back to the wind. This blocks the wind and assists the operator to hear your voice and you to hear the operator.

- Allow the phone to try and connect for 1 minute.
- If your first attempted is unsuccessful rotate by 180º and call again, (waiting 1 minute for the call to connect).
- If both attempts fail you can text a message to 112 providing you have pre-registered.

#### To pre-register

- Send at text containing the word REGISTER to 112.
- You will then receive a text back.
- Read this text carefully then reply YES. This confirms registration.

### To Text the Emergency Services

- Write a text stating: Who you are, Where you are, What the incident is and the number of people injured.
- Wait for 3 minutes to receive a text back.
- If NO reply try resending the txt.

Should both calls and texts fail to go through keep trying until you are successful.

If the result of an incident requires more than first aid treatment, dial 999 or 112. Hospital

The nearest Accident and Emergency Department:

Name: University College Hospital, 235 Euston Road, NW1 2BU, Tel 020 3447 0083 The nearest hospital for Minor Injuries Unit / "first aid" injuries (in an emergency 999):

Name: University College Hospital, 235 Euston Road, NW1 2BU, Tel 020 3447 0083

# Appendix G Safe and Task Specific Risk Assessment

Task / Activity	Hazard	Degree of Risk			Measures to Reduce Risk	Residual Risk Factor			Action required
		L (1-5)	S (1-5)	T (1-25)		L (1-5)	S (1-5)	T (1-25)	Y/N
Call in procedure	Working on site	2	4	8	The site visit will be undertaken by two members of staff, to establish the exact monitoring locations. The use of a buddy system, mobile phones and measures in this RAMS are	1	4	4	Ν
Installing monitoring equipment	Assaulted by the public/ Approached by objectionable members of the public.	1	3	3	Always address public politely and retreat to car and leave area if you feel threatened. Carry a charged mobile phone at all times and check signal is adequate. If threatened, report via verbal reporting chain as soon as practical. If immediate risk of harm is perceived, equipment should be abandoned. If there is any further risk the employee should call for help or alert office buddy using mobile phone.	1	3	3	Ν

Task / Activity	Hazard	Degree of Risk			Measures to Reduce Risk	Residual Risk Factor			Action required
		L (1-5)	S (1-5)	T (1-25)		L (1-5)	S (1-5)	T (1-25)	Y/N
Installing monitoring equipment	Working near busy roads and/or car parks	3	5	15	Activity that requires care and diligence. Suitable Hi-Viz clothing is mandatory when outside your vehicle and at kerb or roadside locations. When crossing roads observe the rules of the Highway Code. Ensure that tubes are sited >0.5m from road carriageways with signed limits below 50mph, and >1.2m from road carriageways with signed limits of 50mph or above.	1	5	5	Ν
Installing monitoring equipment	Slips, trips and falls on uneven/slippery ground or ground obstructed by plant roots.	3	3	9	Use designated walking routes where possible. Wear sturdy, flat soled boots with ankle protectors where ground is uneven or wet. Take care when walking across the site.	1	3	3	Ν

Task / Activity Hazard		Degree of Risk			Measures to Reduce Risk	Residual Risk Factor			Action required
		L (1-5)	S (1-5)	T (1-25)		L (1-5)	S (1-5)	T (1-25)	Y/N
Installing monitoring equipment	Working at Height.	3	3	9	Only a lockable A-Frame step ladder is used. Use ladder on an even surface, to avoid tipping. Keep three limbs secure on the ladder/street furniture and do not overreach. Do not use the top step of the ladder. Only use ladder when two members of staff present. During the two- person initial site set up visit, one member of the team will foot the bottom of the ladder and three points of contact on the ladder/or street furniture will be used at all times.	1	3	3	
Installing monitoring equipment	Damage fingers when setting up ladder.	2	2	4	Take care when opening and closing A-Frame Ladder to avoid trapping fingers. Ensure ladder is locked into position before use. Using lightweight cut resistant gloves when holding ladder / setting up.	1	2	4	Ν

Task / Activity	Hazard Deg	Degree	of Risk		Measures to Reduce Risk	Residual Risk Factor			Action required
		L (1-5)	S (1-5)	T (1-25)		L (1-5)	S (1-5)	T (1-25)	Y/N
Unforeseen hazards	e.g., flooding, discarded needles, missing manhole covers, animals.	2	3	6	All work is carried out on public rights of way. Movement on foot should be at walking pace, paying attention to footpaths and pavements. Any hazards noted should be recorded and if necessary, brought to the attention of the local authority. A mobile phone and first aid kit should be carried at all times. If there is a serious accident contact the emergency services immediately – dial 999.	1	3	3	Ν



## Appendix H Safe Plan of Action

Project No.	
Project Name	
Job/Task	
Survey Location	
Date	

What has changed?	Reaction to Changes	Safe Plan		

	Print	Sign
Team Members Signature		
Team Members Signature		
Supervisor's Signature		

Instructions:

- 1. Write type of survey, location and date in space provided.
- 2. Identify the changes that have occurred.
- 3. Identify what needs to be done to maintain safety of the team.
- 4. In the safe plan, identify how the changes are going to be implemented
- 5. Ask each team member to sign in the spaces provided.

# Appendix I Key Personnel

We propose to utilise the skills of the following key personnel on this project for whom detailed CVs can be provided on request;



**Glyn Hodgkiss** Principal Consultant

Cundall's Air Quality Team. He has 30 years' experience working in the environmental field and has specialised in Air Quality for over 15 years. He is a Chartered Environmentalist and Member of the Institute of Air Quality Management. Working in both the private and public sectors, Glyn has gained extensive experience in monitoring and modelling air quality. His role in Local Government included air quality action planning, working with developers to minimise air quality impacts of new development, working on regional planning policy initiatives and on the delivery of government funded air quality improvement programs. He has also worked in private sector consultancy on the delivery of multiple air quality assessments ranging from small, single source dispersion modelling studies through to complex multi-source assessments and major road and infrastructure projects. This work has provided valuable support in the design, planning, construction and operation of new developments. Glyn has a pedigree in

Glyn is a Principal Consultant in

collaborative working, bringing together the expertise of Cundall alongside other consultants and stakeholders to promote smooth project progression from inception to conclusion.



Jenny Carrington Principal Consultant

Jenny Carrington is a Chartered Scientist (CSci) Principal Air Quality Consultant for Cundall Jenny has sixteen years' experience working in the environmental sector for a range of both public and private clients. She is responsible for undertaking air quality assessments and is fully conversant with atmospheric dispersion modelling through the use of ADMS software as part of more detailed air quality assessments. She also has responsibility for managing air quality monitoring programs. In her role as an environmental specialist Jenny has worked on a range of multi-disciplinary projects often fulfilling the role of project manager in coordinating third parties to enable a successful completion of the project. She is experienced in producing air quality chapters for Environmental Statements for a range of different developments and has previously reviewed Environmental Statement's on behalf of Local Authorities.

She has previously spent time working in Environmental Health at a Local Authority, as well as two other private consultancies.

# Appendix J Dog Bites

Advice for preventing dog bites

- Never approach a strange dog, especially one who's tied or confined behind a fence or in a car.
- Avoid eye contact with a dog. Don't look a strange dog right in the eyes. The dog may see this as a challenge.
- Never turn your back to a dog and run away. A dog's natural instinct will be to chase and catch you. Remain motionless, hands at your sides, and avoid eye contact with the dog. Once the dog loses interest in you, slowly back away until its out of sight.
- Don't disturb a dog while they are sleeping, eating, chewing on a toy, or caring for puppies. Be cautious around strange dogs.
- Always assume that a dog who doesn't know you may see you as an intruder or as a threat.
- If the dog does attack, "feed" it your jacket, diary, tools or anything that you can put between yourself and the dog.
- If you fall or are knocked to the ground, curl into a ball with your hands over your ears and remain motionless. Try not to scream or roll around.

What to do if a dog bites you

- Place a clean towel over the injury to stop any bleeding.
- Try to keep the injured area elevated.
- Wash the bite carefully with soap and water.
- Apply a sterile bandage to the wound.
- See a doctor in the nearest walk-in clinic or hospital.



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