National Grid Property Holdings

Barnsley Gas Holder Site, S71 1DL

WYG Asbestos Demolition Survey Report

7 Mar 2014



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Contents Page

0.0 Executive Summary..... 4
1.0 Introduction..... 5
2.0 Site Details..... 6
3.0 Survey Methodology..... 7
4.0 Survey Conditions..... 8
5.0 Asbestos Register..... 10
6.0 Recommendations..... 11
7.0 Glossary of Terms..... 15
8.0 References..... 16

Table Contents

Table 1 Areas of No Access..... 9

Appendix Contents

Appendix A – Report Conditions for WYG Asbestos Demolition Survey
Appendix B – Inspection Reports
Appendix C – Material Risk Assessment Criteria
Appendix D – Site Sketches
Appendix E – Analysis Certificates

0.0 Executive Summary

Site Address	The site address is Barnsley Gas Holder Site S71 1DL.
General Site Description	The site comprises 3 buildings.
Date and type of survey undertaken	It is understood from the client that the survey was undertaken to provide a higher level of information to demolition contractors/assist with the compliance of the Control of Asbestos Regulations (CAR) 2012. A WYG Asbestos Demolition Survey was undertaken in accordance with HSG 264 Asbestos; The Survey Guide. The WYG Asbestos Demolition Survey was conducted on the 17 Feb 2014 by Alex McCulloch of WYG Environment Planning Transport Ltd. Sample analysis techniques were UKAS accredited in accordance with HSG 248 – Asbestos: The Analysts Guide for Sampling, Analysis and Clearance Procedures, 2005.
Summary of Asbestos Containing Materials Identified	A total of 12 no. samples were analysed following the survey. Of these, 0 no. samples were confirmed as asbestos. This led to the identification of 0 no. items. These include the following material types:
Areas of No Access	Every effort was made to access all areas of the site. Inaccessible areas and limitations of a WYG Asbestos Demolition Survey are detailed in Sections 4.2 and 4.3 of this report. Inaccessible areas should be presumed to contain asbestos containing materials (ACM's) until such time as an inspection can be made that proves otherwise, as required by the Control of Asbestos Regulations (CAR) 2012.
This sheet is intended to provide a summary only of the asbestos survey findings. It does not provide a definitive engineering analysis for the purposes of costing or construction and is subject to the limitations of this WYG Asbestos Demolition Survey.	

1.0 Introduction

1.1 General

WYG Environment Planning Transport Ltd (WYG) was commissioned by National Grid Property Holdings to undertake a WYG Asbestos Demolition survey at the Barnsley Gas Holder Site S71 1DL.

Alex McCulloch undertook the survey on 17 Feb 2014.

1.2 Objectives

A WYG Asbestos Demolition survey was undertaken at the site in order to meet the following objectives:

- To identify the presence, location and condition of reasonably accessible asbestos containing materials (ACM's).
- To produce a report to identify areas of confirmed and suspected asbestos and to provide an indication as to their location, condition and extent.

1.3 Report Conditions

This report has been prepared in accordance with the accepted service details, terms and conditions of our accepted proposal letter Q005296. The report is further subject to the conditions detailed in Appendix A.

2.0 Site Details

2.1 Location

The site address is Barnsley Gas Holder Site.

2.2 Buildings

The site comprises 3 buildings.

Specific areas included within the survey scope are as follows:

- Barnsley Gas Holder/Ground Floor/1 Within gas holder
- Barnsley Gas Holder/External/1 External
- Outhouse 1/Ground Floor/1 Outhouse 1
- Outhouse 1/External/1 External
- Outhouse 2/External/1 External
- Outhouse 2/Ground Floor/1 Outhouse 2

3.0 Survey Methodology

A WYG Asbestos Demolition survey, using the methodology set out in HSG 264 was undertaken. Each accessible area was inspected to locate materials presumed or strongly presumed to contain asbestos, all of which must be removed prior to demolition. Photographs of each sample location were taken, however where similar materials were identified these are referenced to similar homogeneous materials.

Each sample is assessed using a material assessment algorithm, which assigns a score of risk to each individual ACM based the following criteria:

- Product Type;
- Extent of Damage or Deterioration;
- Surface Treatment; and
- Asbestos Type

Each criterion has various scores and when all the scores for each are added together a value of risk is generated for the material. This is only a requirement of HSG 264 for Management Surveys; however, the algorithm values have been applied during this survey as we understand that contractors may visit the site prior to demolition. All samples were analysed by a UKAS accredited laboratory using Polarised Light Microscopy and Dispersion Staining techniques in accordance with HSG 248.

Priority must be determined by carrying out a risk assessment (ie a priority assessment) which will take into account factors such as:

- the location of the material;
- the extent of the material;
- the use to which the location is put;
- the occupancy of the area;
- the activities carried on in the area; and
- the likelihood/frequency with which maintenance activities are likely to take place.

The priority assessment can only be carried out with the detailed knowledge of all these factors. The surveyor can help in this process, by obtaining information which will contribute to the priority assessment, particularly in small or simple premises where information on occupancy and use is straightforward. However, such help must be undertaken with caution. Priority Assessment is outside the scope of our UKAS accreditation. It is the duty holder, under CAR 2012, who is required to make the risk assessment using their detailed knowledge of the activities carried out in the premises.

The combined material and priority assessment results should be used to establish the priority for those ACMs needing remedial action and the type of action that will be taken. There are various remedial options available: in many cases the ACMs can be protected or enclosed, sealed or encapsulated, or repaired. These options should be considered first. Where such actions are not practical, ACMs should be removed. Further information on risk assessments and management of asbestos is available in *A comprehensive guide to managing asbestos in premises.*

Sampling of suspect materials is completed in accordance with HSG264 and accreditation by UKAS to ISO17020. By its nature, sampling building materials may include a limited damage and WYG accept no responsibility for making good such areas, unless agreed in writing in advance of the survey.

4.0 Survey Conditions

4.1 Access Constraints

All areas within the scope of works were assessed (unless stated in Section 4.3) for the presence of ACM's and where ACM's were presumed and/or strongly presumed samples were taken. These presumptions are based upon surveyors experience associated with identification of a particular material.

4.2 Survey Limitations

Whilst the surveyors made every effort, WYG cannot guarantee that all asbestos containing materials have been identified, or that survey results are definitive. Specific areas of the site where suitable access was not available are recorded in Section 4.3 of this document.

Features that generally fall outside the scope of a WYG Asbestos Demolition survey include:

- Within solid floor voids (e.g. Concrete Slab), where no inspection hatch is present.
- Areas behind or above suspected asbestos containing materials[1]
- Within solid concrete floors where asbestos shuttering may have been used
- Within confined spaces etc. where reasonable access is unavailable[2]
- Within live plant or electrical apparatus
- Beneath lagging or cladding of live pipes where a burn hazard may be present
- Concealed pipe runs, where reasonable access in unavailable
- Areas that are considered to present a significant Health & Safety risk.
- Within live plant or electrical apparatus
- Areas where access may involve damaging the fabric of the building

[1] Areas behind or above suspected asbestos containing materials are required to be inspected by HSG264. Where such areas could not be identified prior to the commission of the survey, a provisional sum should have been allowed for by the client to enable the surveyor to return to site with a licensed asbestos contractor in order to gain access. Such access may also necessitate 14–day (ASB5) notification to the HSE and may require concurrent air monitoring to be carried out. Should this type of access have been required, we liaises and sought agreement from the project team before commencing beyond the agreed project scope.

[2] Where access is restricted due to confined space or other health & safety concerns, these areas will be detailed in the report and recommendations given for the most appropriate means of investigation, and if necessary, any additional costs which would be entailed. A strategy of using representative samples of suspected asbestos materials has been used to minimise the number of samples taken to a practical level and keep to a minimum the disturbance of potential asbestos containing materials at the site. Because of this strategy the results of the survey should be interpreted such that all visually similar materials in the same area must be assumed to be composed of the same material until proven otherwise.

In accordance with The Control of Asbestos Regulations 2012, it must be assumed that materials visually assessed as asbestos containing materials contain amphibole asbestos fibres (i.e. Amosite and Crocidolite), unless sampled to prove otherwise.

4.3 Areas of No Access

Table 1 Areas of No Access

Room Number	Area of No Access	Reason
1	Within gas holder	No safe access within

4.4 Survey Specific Notes

There is always a possibility that asbestos materials other than those highlighted by this report are present in those areas not accessed fully at the time of the survey.

Inaccessible areas should be presumed to contain amphibole asbestos and appropriate management planning should be implemented in order to control access and maintenance activities to these areas until such a time as they can be accessed and the presence or absence of asbestos containing materials can be confirmed.

A strategy of using representative samples of suspected asbestos materials has been used to minimise the number of samples taken to a practical level and keep to a minimum the disturbance of potential asbestos containing materials. Because of this strategy the results of the survey should be interpreted such that all visually similar materials in the same area must be assumed to be composed of the same material until proven otherwise.

In accordance with The Control of Asbestos Regulations 2012, it must be assumed that materials visually assessed as asbestos containing materials contain amphibole asbestos fibres (i.e. Amosite and Crocidolite), unless strongly presumed otherwise or sampled to prove otherwise.

Asbestos products and non–asbestos products in some areas of the building are located in close proximity to each other. Care must be taken when removing the asbestos in order that contamination of the non–asbestos materials is not caused, as this will increase disposal costs.

Material assessments have been undertaken on the various items inspected. These assessments are carried out according to the material assessment algorithm appended to this report, which is based on the assessment criteria in HSG 264.

5.0 Asbestos Register

Inspection Number	Area	Feature	Material Type – (Friability)	Asbestos Fibre	Material Assessment Score	Priority Assessment Score	Total Assessment Score	Sample Number	Recommendations
No asbestos identified at time of survey									

6.0 Recommendations

6.1 Summary

Survey inspection reports detail the ACM identified, its approximate extent and its priority risk rating, these reports are contained within Appendix B of this report. The asbestos register, Section 5.0 of this report summarises asbestos containing materials and presumed asbestos materials identified during the course of the survey.

6.2 Further Investigation

There is a possibility that asbestos material may be present in those areas that were concealed or inaccessible at the time of the survey or fell outside the scope of this investigation. Prior to demolition or any activity that disturbs the fabric of the building outside the scope of this survey it is recommended that a fully intrusive WYG Asbestos Demolition survey be conducted, under controlled conditions where appropriate.

Prior to the application of a WYG Asbestos Demolition survey all areas of the site should be approached with caution during any future works, we suggest that the contractor has an appropriate method statement in place such that if suspected asbestos materials are encountered, a sample can be taken to confirm the nature of the material prior to any work in that area.

6.3 General

If asbestos removal is required, it is recommended that a site–specific asbestos removal specification and method statements be produced in order to facilitate any asbestos removal works.

The waste generated from asbestos removal should be notified and disposed of in accordance with the Hazardous Waste (England & Wales) Regulations 2005, Amended 2009.

The contractor must ensure that adequate Duty of Care provisions are put in place for the transportation and disposal of wastes from the site in line with the obligations of the Environmental Protection Act 1990.

In accordance with Regulation 4 of The Control of Asbestos Regulations 2012, it is advised that a management plan is produced and a duty holder be appointed to coordinate and oversee the management of the asbestos at the site.

Where asbestos insulation materials are removed, the building manager should ensure that non–asbestos replacement materials are installed, to maintain fire proofing.

If asbestos containing materials (ACM's) are to remain in–situ across the premises, CAR 2012 requires a Duty Holder be appointed/identified, who will be responsible for producing and implementing an Asbestos Management Plan, as defined by HSG 227.

Due to the nature of a WYG Asbestos Demolition Survey there is always the possibility of asbestos being present within inaccessible areas and those areas outlined within Sections 4.2 and 4.3 of the report as outside the scope of this type of survey. If any work is to be carried out within these areas then materials encountered should be presumed to contain asbestos unless there is strong evidence for a reasoned argument that the material does not contain asbestos. This can be achieved by taking a sample and having subsequent analysis undertaken on the sample in accordance with HSG 248.

Prior to demolition or any other works that might disturb the asbestos materials identified, they should be removed. It is recommended that a site–specific method statement be produced in order to facilitate the removal of the asbestos. It is advised that a competent person be appointed to coordinate and oversee the management of asbestos at the site.

The detailed extent of asbestos materials presented in this report are approximate values only and should not be used in isolation to prepare quotations for asbestos repair or removal. It is recommended that any asbestos repair or removal be evaluated by an asbestos removal contractor, who should attend site to confirm the extent of asbestos.

6.4 Asbestos Management Plan (AMP)

The Control of Asbestos Regulations 2012 stipulates under Regulation 4, that persons responsible by virtue of ownership, contract or tenancy of a non–domestic premise are responsible for undertaking a suitable and sufficient assessment for the presence of asbestos materials within those premises and implement an appropriate Asbestos Management Plan (AMP).

Areas highlighted in Sections 4.2 and 4.3 as areas of 'no access' should be presumed to contain amphibole asbestos and appropriate management planning should be implemented in order to control access and maintenance activities to these areas until such a time as they can be accessed and the presence or absence of asbestos containing materials can be confirmed.

The Approved Code of Practice L127: The management of asbestos in non–domestic premises *(Regulation 4 of the Control of Asbestos Regulations)* outlines the procedures that should be followed when developing and implementing an AMP.

In accordance with Regulation 4 of The Control of Asbestos Regulations 2012, it is advised that a 'Duty Holder' be appointed to coordinate and oversee the management of asbestos at the site. The most appropriate person to be considered to be a Duty Holder is the person responsible for coordinating maintenance activities for the premises.

The Duty Holder has the responsibility to incorporate the results of this survey into an AMP for the building. The Duty Holder must ensure that an appropriate Priority Assessment is undertaken as detailed in HSG 227: *A Comprehensive Guide to Managing Asbestos in Premises,* taking into account factors such as:

- Normal Occupant Activity – assessment based upon the interaction of occupants and the area being assessed.
- Likelihood of disturbance – assessment based upon location of asbestos, its accessibility and quantity of material that has the potential to be disturbed.
- Human Exposure Potential – assessment based upon number of occupants, frequency of use and duration of use.
- Maintenance Activity – assessment based upon type of maintenance activity and frequency.

Combining the Material Risk Assessment with the Priority Assessment provides an overall assessment with respect to ACM's present within a building. This overall assessment will then determine the management requirements for the building.

WYG can assist in the process of risk assessment to further develop the AMP in accordance with L127 and HSG 227. Priority Assessment is outside the scope of our UKAS accreditation.

6.5 MMMF

A number of materials associated with Machine Made Mineral Fibre (MMMF) are present with areas in the building (e.g. within ceiling voids). These materials are covered by the COSHH regulations and persons working on or near

these materials should undertake sufficient risk assessments and/or wear appropriate Personal Protective Equipment.

6.6 Fire Protection

Where asbestos insulation materials are removed, the building manager should ensure that non–asbestos replacement materials are installed, to maintain fire proofing.

If fire–rated materials are removed there may be a requirement to review and revise the site Fire Risk Assessment. WYG has a dedicated Fire Risk Assessment team, who would be pleased to provide further guidance in this respect required.

6.7 Other Safety Management and Compliance Services

We provide a range of safety management and compliance services to a variety of clients across the public and private sector. Services include:

Health and Safety Management

- Development and implementation of safety management systems such as OHSAS 18001, BS8800, HSG65
- Advice on preparing effective health and safety policies, procedures and systems of work
- Risk assessments (including workplace and work activity, manual handling, display screen equipment (DSE), CoSHH etc)
- Advice on setting key performance indicators for driving improvements in safety performance
- Accident and incident investigation
- Independent compliance audits
- Occupational exposure monitoring – dusts, fumes, vapours, etc
- Noise monitoring and noise control
- Indoor air quality and working environment investigation.

Legionella Assessment

- L8 compliant Legionella risk assessments
- Legionella awareness seminars and training
- Independent compliance audits

CDM Co–ordinator Services

- Full proactive CDM co–ordinator service on notifiable projects of all sizes
- Client's construction health and safety advisor for non–notifiable projects
- Design of health and safety risk workshops
- CDM regulations compliance audits of all duty holders.

Fire and Explosion

- Regulatory reform (fire safety) order compliant fire risk assessments
- Expert advice on means of escape, structural protection, automatic detection and fire fighting systems
- Liaison with enforcing authorities
- Dangerous substances and explosive atmospheres regulations (DSEAR) risk assessment

Training

- Institution of occupational safety and health accredited courses:
- Directing safely
- Managing safely
- Working safely
- Executive update – key health and safety legislative requirements
- Health & safety responsibilities of line managers
- H&S risk assessments – a practical approach
- DSE safety and user awareness
- Handling loads, preventing injury – good manual handling practice
- COSHH assessment, assessor training
- CDM Regulations 2007 – introduction
- CDM Regulations 2007 for designers
- Asbestos awareness & training for non–licensable activities.

Asbestos Consultancy

- Asbestos surveys (management, refurbishment & demolition surveys)
- Removal specifications
- On–site inspection and monitoring of works
- Asbestos management plans
- Completion and validation reporting
- Asbestos awareness seminars and training
- Expert witness

7.0 Glossary of Terms

ACM	Asbestos Containing Material
AIB	Asbestos Insulating Board
AMP	Asbestos Management Plan
CAR	Control of Asbestos Regulations
EA	Environment Agency
HSE	Health and Safety Executive
HSG	Health and Safety Guidance
MMMF	Machine Made Mineral Fibre
NADIS	No Asbestos Detected in Sample
UKAS	United Kingdom Accreditation Service
WYG	WYG Environment Planning Transport Ltd

8.0 References

HSG 264	Asbestos: The Survey Guide, 2nd Edition, 2012
HSG 248	Asbestos: The Analysts Guide for Sampling, Analysis and Clearance Procedures, 2005.
CAR 2012	Control of Asbestos Regulations 2012, April 2012.

Appendices

Appendix A – Report Conditions for WYG Asbestos Demolition Survey

WYG ENVIRONMENT PLANNING TRANSPORT LTD

This report is produced solely for the benefit of National Grid Property Holdings, no account is taken for any reliance placed on it by any other party unless specifically agreed in writing otherwise.

This report refers, within the limitations stated, to the condition of the site at the time of the inspections. No warranty is given as to the possibility of future changes in the condition of the site.

This report is based on a site inspection in the accessed areas as noted, the physical investigation as detailed, information supplied by those parties referenced in the text. Some of the opinions are based on unconfirmed data and information and are presented as the best that can be obtained without further extensive dismantling and disturbance. The test results that are available can only be regarded as a limited but likely representative sample assessed against current guidelines. The impact of our assessment on other aspects of the development requires evaluation by other involved parties. The possibility of the presence of asbestos, perhaps in higher concentrations, elsewhere on the site, cannot be discounted.

Whilst the findings detailed within this report reflect our best assessment, because there are no exact UK definitions of these matters, being subject to risk analysis, we are unable to give categoric assurances that they will be accepted by authorities or funds without question as such bodies have unpublished, more stringent objectives. This report is prepared and written for the purposed uses stated in the report and should not be used in a different context without reference to WYG. In time improved practices or amended legislation may necessitate a re–assessment.

The report is limited to those aspects specifically reported on and is necessarily restricted and no liability is accepted for any other aspect. The opinions expressed cannot be absolute due to the limitations of time and resources accepted by the agreed brief and the possibility of unrecorded previous use and abuse of the site and adjacent sites. The report concentrates on the site as defined in the report.

Appendix B – Inspection Reports

Priority Assessment is outside the scope of our UKAS accreditation.

Inspection Number	1	Reference Number:	BP000001
Inspection / Sample	Sample taken	Inspection Cross Reference / Visual I.D.	N.A.D.I.S



Notes	

Building	Barnsley Gas Holder
Floor Level	External
Area / Room	1 External
Feature	Insulation to pipework below MMMF insulation
Product Type	Insulation
Extent Amount	111

Recommendation	

Product Score	Medium Fibre Release - Asbestos insulating board, mill board, other low density insulation board, asbestos textiles, gaskets, rope and woven textiles, asbestos paper and felt	0
Extent of Damage	Good Condition	0
Surface Treatment	Unsealed	0
Asbestos Type	No Asbestos Detected	0

Material Assessment Score	0

Normal occupant activity	N/A	N/A

Likelihood of disturbance	N/A	N/A
Accessibility	N/A	N/A
Extent / Amount	N/A	N/A
Average		N/A

Number of occupants	N/A	N/A
Frequency of use of area	N/A	N/A
Average time area is in use	N/A	N/A
Average		N/A

Type of maintenance activity	N/A	N/A
Frequency of maintenance activity	N/A	N/A
Average		N/A

Priority Assessment Score	N/A

Total Material Score	N/A

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Inspection Number	2	Reference Number:	BP000002
Inspection / Sample	Sample taken	Inspection Cross Reference / Visual I.D.	N.A.D.I.S



Notes	

Building	Barnsley Gas Holder
Floor Level	External
Area / Room	1 External
Feature	Bitumen wrap to low-level pipework
Product Type	Well Bound Material
Extent Amount	111

Recommendation	

Product Score	Low Fibre Release - Asbestos reinforced composites (plastics, resins, mastics, roofing felts, vinyl floor tiles, semi-rigid paits or decorative finishes, asbestos cement, etc.)	0
Extent of Damage	Low Damage	0
Surface Treatment	Completely Sealed	0
Asbestos Type	No Asbestos Detected	0

Material Assessment Score	0

Normal occupant activity	N/A	N/A

Likelihood of disturbance	N/A	N/A
Accessibility	N/A	N/A
Extent / Amount	N/A	N/A
Average		N/A

Number of occupants	N/A	N/A
Frequency of use of area	N/A	N/A
Average time area is in use	N/A	N/A
Average		N/A

Type of maintenance activity	N/A	N/A
Frequency of maintenance activity	N/A	N/A
Average		N/A

Priority Assessment Score	N/A

Total Material Score	N/A

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Inspection Number	3	Reference Number:	BP000003
Inspection / Sample	Sample taken	Inspection Cross Reference / Visual I.D.	N.A.D.I.S



Notes	

Building	Barnsley Gas Holder
Floor Level	External
Area / Room	1 External
Feature	Residue to pipework below MMMF insulation
Product Type	Insulation
Extent Amount	111

Recommendation	

Product Score	High Fibre Release - Thermal insulation (e.g. pipe and boiler lagging) sprayed asbestos, loose asbestos, asbestos mattresses and packing	0
Extent of Damage	High Damage	0
Surface Treatment	Unsealed	0
Asbestos Type	No Asbestos Detected	0

Material Assessment Score	0

Normal occupant activity	N/A	N/A

Likelihood of disturbance	N/A	N/A
Accessibility	N/A	N/A
Extent / Amount	N/A	N/A
Average		N/A

Number of occupants	N/A	N/A
Frequency of use of area	N/A	N/A
Average time area is in use	N/A	N/A
Average		N/A

Type of maintenance activity	N/A	N/A
Frequency of maintenance activity	N/A	N/A
Average		N/A

Priority Assessment Score	N/A

Total Material Score	N/A

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Inspection Number	4	Reference Number:	BP000004
Inspection / Sample	Sample taken	Inspection Cross Reference / Visual I.D.	N.A.D.I.S



Notes	

Building	Barnsley Gas Holder
Floor Level	External
Area / Room	1 External
Feature	Residue to pipework below MMMF insulation
Product Type	Insulation
Extent Amount	111

Recommendation	

Product Score	High Fibre Release - Thermal insulation (e.g. pipe and boiler lagging) sprayed asbestos, loose asbestos, asbestos mattresses and packing	0
Extent of Damage	High Damage	0
Surface Treatment	Unsealed	0
Asbestos Type	No Asbestos Detected	0

Material Assessment Score	0

Normal occupant activity	N/A	N/A

Likelihood of disturbance	N/A	N/A
Accessibility	N/A	N/A
Extent / Amount	N/A	N/A
Average		N/A

Number of occupants	N/A	N/A
Frequency of use of area	N/A	N/A
Average time area is in use	N/A	N/A
Average		N/A

Type of maintenance activity	N/A	N/A
Frequency of maintenance activity	N/A	N/A
Average		N/A

Priority Assessment Score	N/A

Total Material Score	N/A

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Inspection Number	5	Reference Number:	BP000005
Inspection / Sample	Sample taken	Inspection Cross Reference / Visual I.D.	N.A.D.I.S



Notes	

Building	Barnsley Gas Holder
Floor Level	External
Area / Room	1 External
Feature	Residue to pipework below MMMF insulation
Product Type	Insulation
Extent Amount	111

Recommendation	

Product Score	High Fibre Release - Thermal insulation (e.g. pipe and boiler lagging) sprayed asbestos, loose asbestos, asbestos mattresses and packing	0
Extent of Damage	High Damage	0
Surface Treatment	Unsealed	0
Asbestos Type	No Asbestos Detected	0

Material Assessment Score	0

Normal occupant activity	N/A	N/A

Likelihood of disturbance	N/A	N/A
Accessibility	N/A	N/A
Extent / Amount	N/A	N/A
Average		N/A

Number of occupants	N/A	N/A
Frequency of use of area	N/A	N/A
Average time area is in use	N/A	N/A
Average		N/A

Type of maintenance activity	N/A	N/A
Frequency of maintenance activity	N/A	N/A
Average		N/A

Priority Assessment Score	N/A

Total Material Score	N/A

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Inspection Number	6	Reference Number:	BP000006
Inspection / Sample	Sample taken	Inspection Cross Reference / Visual I.D.	N.A.D.I.S



Notes	

Building	Barnsley Gas Holder
Floor Level	External
Area / Room	1 External
Feature	Gaskets to large diameter pipework
Product Type	Textiles/Paper
Extent Amount	6 no.

Recommendation	

Product Score	Medium Fibre Release - Asbestos insulating board, mill board, other low density insulation board, asbestos textiles, gaskets, rope and woven textiles, asbestos paper and felt	0
Extent of Damage	Low Damage	0
Surface Treatment	Surface Sealed	0
Asbestos Type	No Asbestos Detected	0

Material Assessment Score	0

Normal occupant activity	N/A	N/A

Likelihood of disturbance	N/A	N/A
Accessibility	N/A	N/A
Extent / Amount	N/A	N/A
Average		N/A

Number of occupants	N/A	N/A
Frequency of use of area	N/A	N/A
Average time area is in use	N/A	N/A
Average		N/A

Type of maintenance activity	N/A	N/A
Frequency of maintenance activity	N/A	N/A
Average		N/A

Priority Assessment Score	N/A

Total Material Score	N/A

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Inspection Number	7	Reference Number:	BP000007
Inspection / Sample	Sample taken	Inspection Cross Reference / Visual I.D.	N.A.D.I.S



Notes	

Building	Barnsley Gas Holder
Floor Level	External
Area / Room	1 External
Feature	Wrap to large diameter pipework
Product Type	Textiles/Paper
Extent Amount	15 m

Recommendation	

Product Score	Medium Fibre Release - Asbestos insulating board, mill board, other low density insulation board, asbestos textiles, gaskets, rope and woven textiles, asbestos paper and felt	0
Extent of Damage	Good Condition	0
Surface Treatment	Surface Sealed	0
Asbestos Type	No Asbestos Detected	0

Material Assessment Score	0

Normal occupant activity	N/A	N/A

Likelihood of disturbance	N/A	N/A
Accessibility	N/A	N/A
Extent / Amount	N/A	N/A
Average		N/A

Number of occupants	N/A	N/A
Frequency of use of area	N/A	N/A
Average time area is in use	N/A	N/A
Average		N/A

Type of maintenance activity	N/A	N/A
Frequency of maintenance activity	N/A	N/A
Average		N/A

Priority Assessment Score	N/A

Total Material Score	N/A

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Inspection Number	8	Reference Number:	BP000008
Inspection / Sample	Sample taken	Inspection Cross Reference / Visual I.D.	N.A.D.I.S



Notes	

Building	Barnsley Gas Holder
Floor Level	External
Area / Room	1 External
Feature	Bitumen wrap to pipework running between gas holder and outhouse 1
Product Type	Well Bound Material
Extent Amount	14 m

Recommendation	

Product Score	Low Fibre Release - Asbestos reinforced composites (plastics, resins, mastics, roofing felts, vinyl floor tiles, semi-rigid paits or decorative finishes, asbestos cement, etc.)	0
Extent of Damage	Low Damage	0
Surface Treatment	Completely Sealed	0
Asbestos Type	No Asbestos Detected	0

Material Assessment Score	0

Normal occupant activity	N/A	N/A

Likelihood of disturbance	N/A	N/A
Accessibility	N/A	N/A
Extent / Amount	N/A	N/A
Average		N/A

Number of occupants	N/A	N/A
Frequency of use of area	N/A	N/A
Average time area is in use	N/A	N/A
Average		N/A

Type of maintenance activity	N/A	N/A
Frequency of maintenance activity	N/A	N/A
Average		N/A

Priority Assessment Score	N/A

Total Material Score	N/A

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Inspection Number	9	Reference Number:	BP000009
Inspection / Sample	Sample taken	Inspection Cross Reference / Visual I.D.	N.A.D.I.S



Notes	

Building	Barnsley Gas Holder
Floor Level	External
Area / Room	1 External
Feature	Wrap to low-level pipework below MMMF insulation
Product Type	Textiles/Paper
Extent Amount	111

Recommendation	

Product Score	Medium Fibre Release - Asbestos insulating board, mill board, other low density insulation board, asbestos textiles, gaskets, rope and woven textiles, asbestos paper and felt	0
Extent of Damage	Good Condition	0
Surface Treatment	Unsealed	0
Asbestos Type	No Asbestos Detected	0

Material Assessment Score	0

Normal occupant activity	N/A	N/A

Likelihood of disturbance	N/A	N/A
Accessibility	N/A	N/A
Extent / Amount	N/A	N/A
Average		N/A

Number of occupants	N/A	N/A
Frequency of use of area	N/A	N/A
Average time area is in use	N/A	N/A
Average		N/A

Type of maintenance activity	N/A	N/A
Frequency of maintenance activity	N/A	N/A
Average		N/A

Priority Assessment Score	N/A

Total Material Score	N/A

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Inspection Number	10	Reference Number:	BP000010
Inspection / Sample	Sample taken	Inspection Cross Reference / Visual I.D.	N.A.D.I.S



Notes	

Building	Barnsley Gas Holder
Floor Level	External
Area / Room	1 External
Feature	Residue to low-level pipework below MMMF insulation
Product Type	Insulation
Extent Amount	111

Recommendation	

Product Score	High Fibre Release - Thermal insulation (e.g. pipe and boiler lagging) sprayed asbestos, loose asbestos, asbestos mattresses and packing	0
Extent of Damage	High Damage	0
Surface Treatment	Unsealed	0
Asbestos Type	No Asbestos Detected	0

Material Assessment Score	0

Normal occupant activity	N/A	N/A

Likelihood of disturbance	N/A	N/A
Accessibility	N/A	N/A
Extent / Amount	N/A	N/A
Average		N/A

Number of occupants	N/A	N/A
Frequency of use of area	N/A	N/A
Average time area is in use	N/A	N/A
Average		N/A

Type of maintenance activity	N/A	N/A
Frequency of maintenance activity	N/A	N/A
Average		N/A

Priority Assessment Score	N/A

Total Material Score	N/A

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Inspection Number	11	Reference Number:	BP000011
Inspection / Sample	Sample taken	Inspection Cross Reference / Visual I.D.	N.A.D.I.S



Notes	

Building	Barnsley Gas Holder
Floor Level	External
Area / Room	1 External
Feature	Wrap below MMMF insulation to vertical pipework at first level gantry
Product Type	Textiles/Paper
Extent Amount	50

Recommendation	

Product Score	Medium Fibre Release - Asbestos insulating board, mill board, other low density insulation board, asbestos textiles, gaskets, rope and woven textiles, asbestos paper and felt	0
Extent of Damage	Good Condition	0
Surface Treatment	Unsealed	0
Asbestos Type	No Asbestos Detected	0

Material Assessment Score	0

Normal occupant activity	N/A	N/A

Likelihood of disturbance	N/A	N/A
Accessibility	N/A	N/A
Extent / Amount	N/A	N/A
Average		N/A

Number of occupants	N/A	N/A
Frequency of use of area	N/A	N/A
Average time area is in use	N/A	N/A
Average		N/A

Type of maintenance activity	N/A	N/A
Frequency of maintenance activity	N/A	N/A
Average		N/A

Priority Assessment Score	N/A

Total Material Score	N/A

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Inspection Number	12	Reference Number:	BP000012
Inspection / Sample	Sample taken	Inspection Cross Reference / Visual I.D.	N.A.D.I.S



Notes	

Building	Outhouse 1
Floor Level	External
Area / Room	1 External
Feature	Gasket to pipework
Product Type	Textiles/Paper
Extent Amount	1 no.

Recommendation	

Product Score	Medium Fibre Release - Asbestos insulating board, mill board, other low density insulation board, asbestos textiles, gaskets, rope and woven textiles, asbestos paper and felt	0
Extent of Damage	Low Damage	0
Surface Treatment	Surface Sealed	0
Asbestos Type	No Asbestos Detected	0

Material Assessment Score	0

Normal occupant activity	N/A	N/A

Likelihood of disturbance	N/A	N/A
Accessibility	N/A	N/A
Extent / Amount	N/A	N/A
Average		N/A

Number of occupants	N/A	N/A
Frequency of use of area	N/A	N/A
Average time area is in use	N/A	N/A
Average		N/A

Type of maintenance activity	N/A	N/A
Frequency of maintenance activity	N/A	N/A
Average		N/A

Priority Assessment Score	N/A

Total Material Score	N/A

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Appendix C – Risk Assessment Criteria

Material Risk Assessment

Product Type

SAMPLE VARIABLE	SCORE	EXAMPLES OF SCORE VARIABLES
Product type (or debris from product)	1	Asbestos reinforced composites (plastics, resins, mastics, roofing felts, vinyl floor tiles, semi–rigid paints or decorative finishes, asbestos cement etc)
	2	Asbestos insulating board (AIB), mill boards, other low density insulation boards, asbestos textiles, gaskets, ropes and woven textiles, asbestos paper and felt
	3	Thermal insulation (e.g. pipe and boiler lagging) sprayed asbestos, loose asbestos, asbestos mattresses and packing.

Extent of Damage

SAMPLE VARIABLE	SCORE	EXAMPLES OF SCORE VARIABLES
Extent of damage / deterioration	0	Good condition: no visible damage
	1	Low damage: a few scratches or surface marks, broken edges on boards, tiles etc.
	2	Medium damage: significant breakage of material or several small areas where material has been damaged revealing loose asbestos fibres
	3	High damage or de–lamination: of materials, sprays and thermal insulation. Visible asbestos debris

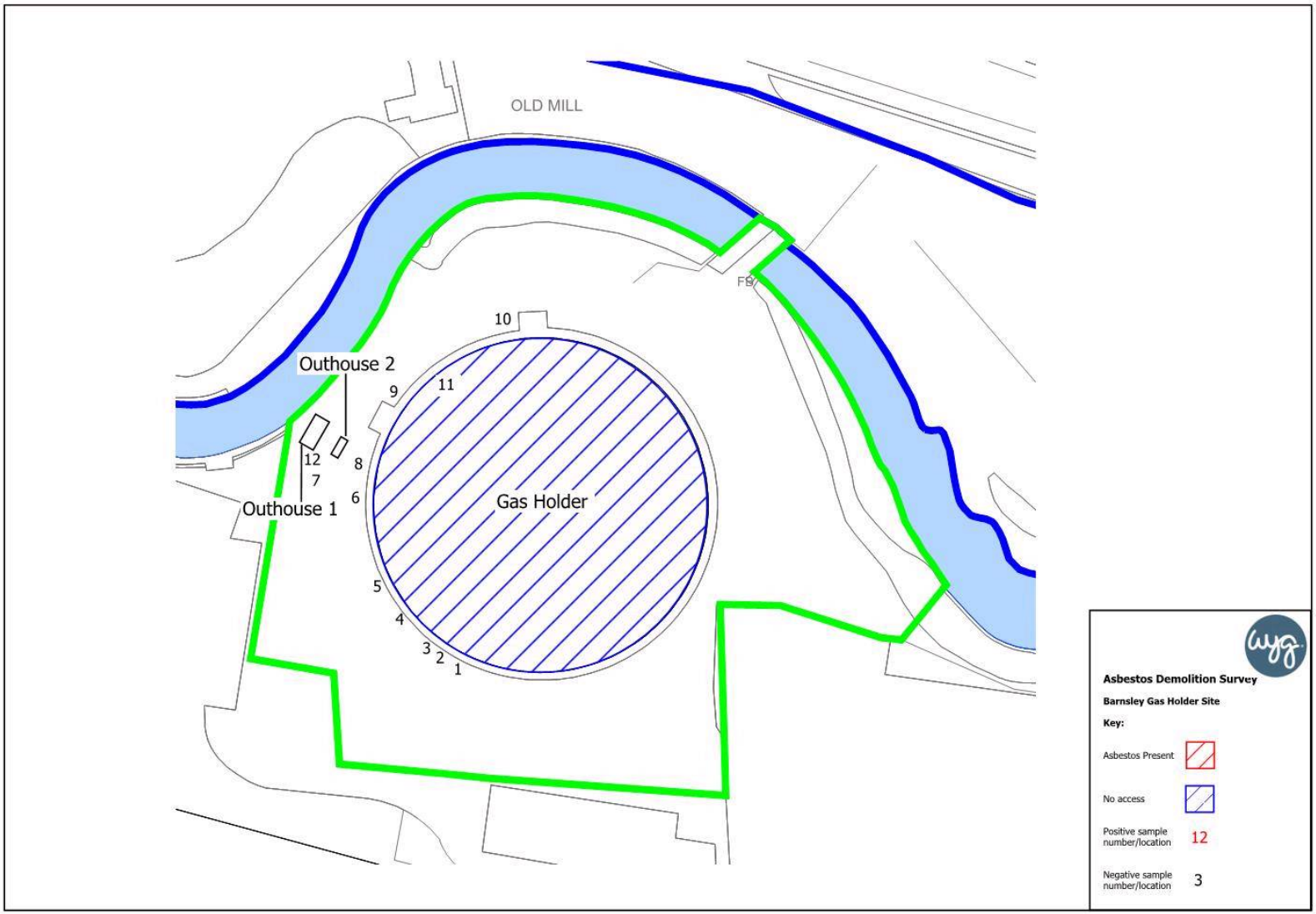
Surface Treatment

SAMPLE VARIABLE	SCORE	EXAMPLES OF SCORE VARIABLES
Surface treatment	0	Composite materials containing asbestos: reinforced plastics, resins, vinyl tiles, asbestos cement (with exposed face painted or encapsulated)
	1	Enclosed sprays and lagging, AIB with (exposed face painted or encapsulated), unsealed asbestos cement sheets etc.
	2	Unsealed AIB or encapsulated lagging and sprays
	3	Unsealed lagging and sprays

Asbestos Type

SAMPLE VARIABLE	SCORE	EXAMPLES OF SCORE VARIABLES
Asbestos type	1	Chrysotile
	2	Amphibole asbestos excluding crocidolite (ie. Amosite)
	3	Crocidolite

Appendix D – Site Sketches



Barnsley Gas Holder Site S71 1DL

Appendix E – Analysis Certificates

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6060

ANALYSIS OF BULK MATERIALS FOR ASBESTOS

Client:	National Grid Property Holdings tbc
Site:	Barnsley Gas Holder Site
Order Reference:	N/A
Number of Samples:	12
Sample(s) taken by:	Alex McCulloch, WYG
Date Received:	17th February 2014
Date Analysed:	6th March 2014
Analysed by:	Peter Hurst
Analysed at:	WYG EPT Ltd, Arndale Court
Method:	Samples of materials, referenced as shown above, have been analysed qualitatively to determine the presence of asbestos fibres. Fibres in the sample were identified using a stereo microscope, polarised light and dispersion staining in accordance with in-house Procedure 07 based on Appendix 2 of HSG 248 'Asbestos: The analyst's guide for sampling, analysis and clearance procedures'.
Report Number:	J005297
Report Date:	7 Mar 2014

RESULTS

Sample Reference	Location	Feature	Material Type	Type of Asbestos Detected
BP000001	1 - External	Insulation to pipework below MMMF insulation	Insulation	NADIS
BP000002	1 - External	Bitumen wrap to low-level pipework	Well Bound Material	NADIS
BP000003	1 - External	Residue to pipework below MMMF insulation	Insulation	NADIS
BP000004	1 - External	Residue to pipework below MMMF insulation	Insulation	NADIS
BP000005	1 - External	Residue to pipework below MMMF insulation	Insulation	NADIS
BP000006	1 - External	Gaskets to large diameter pipework	Textiles/Paper	NADIS
BP000007	1 - External	Wrap to large diameter pipework	Textiles/Paper	NADIS
BP000008	1 - External	Bitumen wrap to pipework running between gas holder and outhouse 1	Well Bound Material	NADIS
BP000009	1 - External	Wrap to low-level pipework below MMMF insulation	Textiles/Paper	NADIS
BP000010	1 - External	Residue to low-level pipework below MMMF insulation	Insulation	NADIS
BP000011	1 - External	Wrap below MMMF insulation to vertical pipework at first level gantry	Textiles/Paper	NADIS

RESULTS

Sample Reference	Location	Feature	Material Type	Type of Asbestos Detected
BP000012	1 - External	Gasket to pipework	Textiles/Paper	NADIS

J005297

REPORTED BY  Name: Peter Hurst Position: Bulk Sample Analyst

Disclaimer.

Opinions and interpretations, including the description of material type, are outside the scope of our UKAS accreditation. Results apply only to the sample(s) listed in the table above. WYG Environment Ltd accepts no responsibility for errors which may have arisen during sampling or transportation and cannot take responsibility for the accuracy, representative nature and location of samples taken by external customers. This test report shall not be reproduced except in full without the written approval of WYG Environment Ltd

Appendix F – Descriptions of general items in each room

Area	Description of Materials
Barnsley Gas Holder	
External	
1. External	Sheet metal construction
External	
1. External	Fibreglass walls and roof
External	
1. External	Fibreglass walls and roof
Ground Floor	
1. Outhouse 2	Concrete floor; fibreglass walls and roof; modern valves.
Ground Floor	
1. Outhouse 1	Metal floor; fibreglass walks and roof; modern electrics; MMMF insulated pipework; plastic water tank.
Ground Floor	
1. Within gas holder	No safe access within