Phoenix Environmental Safety Ltd.

ASBESTOS SURVEY REPORT

(Refurbishment / Demolition Survey)

Client: Kildare County Council, Devoy Park, Naas, Co. Kildare

Location: Derelict Houses Site, Station Road, Kildare Town, Co. Kildare (R51 Y540)

Date: 6th November 2023

Report No. PE23-1157



Graigueswood, Freshford, Co. Kilkenny

Tel: 056 8832414 Fax: 056 8832950 admin@phoenixenv.ie www.phoenixenv.ie Client Name: Kildare County Council, Devoy Park, Naas, Co. Kildare

Property: Derelict Houses Site, Station Road, Kildare Town, Co. Kildare

Asbestos Survey Type: Refurbishment/Demolition Asbestos Survey

Survey Company: Phoenix Environmental Safety Ltd.

Surveyors: Andrew Hickey & Jamie Hogan

Testing Laboratory: G & L Consultancy Limited

Date of Survey: 2nd November 2023

Date of Survey Report: 6th November 2023

Report issue: Final

Signed:

Andrew Hicker

Date: 6th November 2023

This report cannot be used for contractual or engineering purposes unless this sheet is signed where indicated by Surveyor. The report must also be designated `final` on the signatory sheet.

Please note that Phoenix Environmental Safety Ltd. cannot be held responsible for the way in which the Client interprets or acts upon the results. The report must be read in its entirety including any appendices. Phoenix Environmental Safety Ltd. accepts no responsibility for sub-division of this report. All measurements in this report are approximate and therefore should not be used by the asbestos removal contractor for pricing purposes. The asbestos removal contractors should ascertain for themselves, by site measurements and inspection, the exact nature and extent of the work to be done.

The survey information should be used to help in the tendering process for removal of ACMs from the building before work starts. The survey report should be supplied by the client to designers and contractors who may be bidding for the work, so that the asbestos risks can be addressed. In this type of survey, where the asbestos is identified so that it can be removed (rather than to manage it), the survey does not normally assess the condition of the asbestos, other than to indicate areas of damage or where additional asbestos debris may be present. However, where the asbestos removal may not take place for some time, the ACMs' condition will need to be assessed and the materials managed.

PAGE

TABLE OF CONTENTS

| Cover sheet | 1 |
|--|-------|
| Signatory Sheet | 2 |
| Table of Contents | |
| Summary | 4 |
| Introduction | 5-6 |
| Appendix A (Asbestos materials in buildings) | |
| Appendix B (Results of Laboratory Analysis) | 9-11 |
| Appendix C (Asbestos Data Sheets) | 12-14 |
| Appendix D (Non asbestos containing materials) | 15-17 |
| Appendix E (Non-accessible locations) | 18 |
| Appendix F (Floor plans & location of asbestos containing materials) | 19-20 |

SUMMARY

Following a request made by Kildare County Council, we have produced this Refurbishment/Demolition Asbestos Survey report for the Derelict Houses Site, Station Road, Kildare Town, Co. Kildare with the aim of finding asbestos containing materials (ACMs) within the scope of the asbestos survey.

The scope of the asbestos survey was confined to all accessible areas of the two derelict houses and adjoining garage on Station Road which is due for refurbishment works.

During the asbestos survey of the Derelict Houses Site in Kildare Town the following asbestos containing material was identified:

- Asbestos cement slates were identified on the roof of the two houses (90 m² approx. floor area)
- An asbestos containing toilet cistern was identified in the W/C in the shed at the rear of the house

See Appendix C & F for more details

INTRODUCTION

Background

Asbestos has been used extensively in the building industry for over one hundred years and has proved to be an excellent product for a variety of uses, having many qualities such as insulation, fire and chemical resistance to name a few. Its suitability across a wide range of uses and its relatively cheap cost made it very popular, with over 3,000 different asbestos products having been recorded.

The use of asbestos containing materials (ACM's) was most prevalent between the 1950's and 1970's when it provided an economic, easy to use and versatile material. Unfortunately, given the constitution and make up of asbestos it can give rise to microscopic airborne fibres being released into the working environment. The fibres have carcinogenic properties caused by inhalation of the fibres which can get lodged in the lining of the lungs causing disease and death.

Scope & Purpose

Kildare County Council has commissioned Phoenix Environmental Safety Ltd. to undertake an asbestos survey at the Derelict Houses Site, Station Road, Kildare Town, Co. Kildare. The aim of the survey was to locate and identify the presence of asbestos containing materials (ACM's) or suspected ACM's. This report provides a record and assessment of the extent and characteristics of ACM's and is based on information made available on the 2nd November 2023.

This particular survey comprised of a Refurbishment / Demolition Survey, carried out in accordance with S.I. No. 386 of 2006 Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006, the Health and Safety Executive's (UK) guidance document HSG 264 (Asbestos: The Survey Guide) and HSG 227 (A Comprehensive Guide to managing Asbestos in Premises).

This means that:

- As far as reasonably practicable, locate and describe all ACM's in all reasonably accessible areas within the scope of the survey
- A sampling programme is undertaken to identify possible ACM's and estimates of the volumes and the surface areas of ACM made
- A record of the condition of the ACM's or where additional asbestos debris may be expected to be present is produced

Refurbishment / Demolition Surveys (formerly type 3 surveys)

This type of survey is necessary prior to any refurbishment (including "minor") or demolition work being carried out. These "refurbishment / demolition" surveys will be much more intrusive and destructive compared with management surveys as their intention is to locate all the ACMs so that they can be removed before the refurbishment or demolition takes place. Refurbishment/demolition surveys are required as necessary when the needs or use of the building changes and the fabric of the building will be disturbed or complex fixed plant and equipment are to be dismantled.

The purpose of the report is to:

- Enable the client to take appropriate precautions so that people who work at the Derelict Houses Site during the forthcoming refurbishment works are not exposed to asbestos-related health risks
- Provide information to assist the client in developing and implementing an action plan before any refurbishment works or demolition is carried out

Presentation of Findings

Data Sheets

A series of data sheets have been prepared to provide assessments and recommendations for each of the locations where samples were taken. These data sheets are presented in Appendix C.

Figures

The schematic diagrams presented in Appendix F at the rear of this document shows the locations of all of the asbestos containing materials detected during the asbestos survey.

Caveats

All reasonable steps have been taken to ensure that the contents and findings of this report are true and accurate. Though as stated below, further undetected ACM's may still be present within the premises. The client should therefore be aware of his responsibilities for identifying, locating, removing and/or managing all ACM's within the premises, and for notifying the appropriate authorities where necessary.

Refurbishment / Demolition Surveys

This type of survey employs the use of destructive sampling techniques of an unfamiliar site. Although every effort is made to locate all asbestos containing materials, it is impossible to rule out the possibility that undiscovered asbestos materials may be present. If the building is to undergo major refurbishment or demolition, it is recommended that the persons carrying out the work are made aware of this and take sufficient precautions, as may be appropriate, to ensure the health and safety of their own employees and any other parties who may be affected by the works.

APPENDIX A ASBESTOS MATERIALS IN BUILDINGS

Sprayed coatings applied in Ireland were typically a mixture of hydrated asbestos cement containing up to 85% asbestos, mainly amosite but crocidolite and mixtures have been used. Primarily used for anti-condensation and acoustic control and fire protection to structural steelwork. It is a friable material but if in a good condition and unlikely to be disturbed presents no immediate danger; however it is likely to release fibres, if disturbed especially during repair and maintenance work. As it ages the binding medium of sprayed asbestos may degrade with the consequent release of more fibres.

Thermal insulation to boilers, vessels, pipe work, valves, pumps etc also known as hand applied lagging. Lagging may have a protective covering of cloth, tape, paper, metal or a surface coating of cement. All types of asbestos may be found in lagging and the content can vary between 15 and 85% asbestos with the protective papers being up to 100% chrysotile. The likelihood of fibre release depends upon its composition, friability and state of repair, but it is particularly susceptible to damage and disturbance through maintenance work or the action of water leaks.

Asbestos insulating boards usually contain between 15 to 40% amosite, although boards may be found to contain other types of asbestos and in other quantities. Insulating boards were developed in the 1950s to provide an economical, lightweight, fire resisting insulating material. As insulation board is semi-compressed it is more likely to release fibres as a result of damage or abrasion. Work on asbestos insulation board can give rise to high levels of asbestos fibre.

Asbestos cement products as in roofing slates, wall cladding, permanent shuttering, flue, rain water and vent pipes generally contain 10 to 15% of asbestos fibre bounded in Portland cement, some flexible boards contain a small proportion of cellulose. All three types of asbestos have been used in the manufacture of asbestos cement. The asbestos fibres in asbestos cement are usually firmly bound in the cement matrix and will be released only if the material is mechanically damaged or as it deteriorates with age.

Ropes and yarns are usually high in asbestos content, approaching 100% and all three types of asbestos have been used in their manufacture. They were used as in the pipe lagging process and in pipe jointing and also for packing materials as in heat/fire resistant boiler, oven and flue sealing or anywhere thermal of fire protection was required. The risk of fibre release depends upon the structure of the material; bonded gasket material is unlikely to release asbestos but an unbonded woven material may give rise to high fibre release especially if when damaged or frayed.

Cloth thermal insulation and lagging, including fire resistant blankets, mattresses and protective curtains, gloves, aprons, overalls etc. All types of asbestos have been used in the manufacture but since the mid 60's the majority has been chrysotile, the content of which can be up to 100 %.

Millboard, paper and CAF gaskets usually have an asbestos content approaching 100% with all three types of asbestos being used in their manufacture. They were used for insulation of electrical equipment and for thermal insulation. Asbestos paper has been used as a laminate for fireproofing to various fibre panels. These materials are on some occasions not well bonded and will release asbestos fibres if subject to abrasion and wear.

Bitumen felts and coatings may contain asbestos either bound in the bitumen matrix or as an asbestos paper liner. These materials are not likely to present a hazard during normal installation or use, but should be removed and disposed of in compliance with any regulation applicable.

Thermoplastic floor tiles can contain up to 25% asbestos usually chrysotile, PVC vinyl floor tiles and unbacked PVC flooring normally 7-10% chrysotile and asbestos paper backed PVC flooring the paper backing may contain up to 100% chrysotile. Fibre release is not normally an issue but may occur when the material is cut or subjected to abrasion.

Textured coatings. Decorative coatings on walls and ceilings usually contain 3-5% chrysotile. Fibre release may occur when subjected to abrasion.

Mastics, sealants, putties and floor tile adhesives may contain small amounts of asbestos. The only possible risk is from sanding of hardened material when appropriate precautions should be taken.

Reinforced plastic and resin composites, used for toilet cisterns, seats, banisters, stair nosings, window seals, lab bench tops, brake shoes and clutches in machines. The plastics usually contain 1-10% chrysotile and were used in for example car batteries to improve the acid resistance. Resins may contain between 20 and 50% amosite, but because of its composition fibre release is likely to be low.

| ASBESTOS FIBRE TY | PE COMMON NAMES | | |
|-----------------------|-------------------|--|--|
| Chrysotile | White Asbestos | | |
| Amosite | Brown Asbestos | | |
| Crocidolite | Blue Asbestos | | |
| Fibrous Actinolite | N/A | | |
| Fibrous Anthophyllite | N/A | | |
| Fibrous Tremolite | N/A | | |
| Chrysotile Amo | osite Crocidolite | | |







| BULK MATERIAL SAMPLE REPORT | | | | |
|-----------------------------|---------------------------------------|------------------|-----------------|--------------------------------|
| Reference No: | J679838 | Client Order | No: | N/A |
| Date Received: | 3 Nov 2023 | | | |
| Client Name and Address: | Phoenix Environmental Saf | ety Ltd (IE), Gr | aigueswood, Fre | eshford, Co. Kilkenny, Ireland |
| Site Address: | Station Road, Kildare Town | i, Co. Kildare | | |
| Sampling Officer: | Phoenix Environmental Safety Ltd (IE) | | | |
| Date of Analysis: | 3 Nov 2023 | | | |
| Analyst: | Andy Webster | | 09 000 | |
| Approving Officer: | Becky Shaw | Signed: | Dhaw | |
| Issue Date: | 6 Nov 2023 | | | |

ANALYSIS RESULTS

Sampling carried out by our own officers follows the procedures documented in our internal method M3: The Sampling of Bulk Materials, for Analysis to Determine the Presence of Asbestos. These samples have been analysed in accordance with internal method M2: The Identification of Asbestos, within Bulk Materials, by the Use of Optical Microscopy. Both these internal methods are based on the standard method as outlined in the HSE Document 'Asbestos: The Analysts' Guide. Any deviations from these standard methods will be recorded in this report. No responsibility is taken for sampling that is not carried out by own officers. Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation. Any comments regarding percentage content is outside the scope of our UKAS accreditation. The material classification is the opinion of the analyst, based on the samples' appearance, as received, and may not accurately reflect the source material on site. Where 'Trace Asbestos' has been reported, only 1 or 2 fibres or fibre bundles have been identified and analysed as asbestos following a thorough examination of the sample. All samples are analysed at one of our UKAS accredited laboratories in Somerset or Northern Ireland. This report must not be reproduced, except in full, without the written permission of the laboratory. These samples will be retained within this laboratory for a period of six months prior to disposal at a licensed asbestos disposal site, unless the client makes alternative arrangements. Reports will be retained for a minimum of five years following the date of issue. For advice concerning these materials, risk assessments, removal procedures or information regarding the current legislation for work with asbestos containing materials, please contact G&L Consultancy Ltd.

| Site Ref | Lab Ref | Description | Analysis Result | Classification |
|------------|----------|--------------------------------------|----------------------|----------------------|
| S1 | BS206702 | Main roof - Cement slate | Chrysotile + Amosite | Asbestos Cement |
| S2 | BS206703 | Garage roof - Felt | No Asbestos Detected | Not Applicable |
| S 3 | BS206704 | Rear extension - Roof - Cement slate | No Asbestos Detected | Not Applicable |
| S4 | BS206705 | Rear extension - Toilet - Cistern | Amosite | Reinforced Composite |

G&L Consultancy Ltd

54A Huntly Road, Banbridge, Co. Down, Northern Ireland, BT32 3UA Tel: 028 4062 3566 Email: ni@gnl.org.uk Web: www.gnl.org.uk Company Directors: Mrs J Lewis and Mr P Lewis. VAT Registration Number 729 1092 34 Registered Office: Unit 5A, Castle Road, Chelston Business Park, Wellington, Somerset, TA21 9JO G&L Consultancy Ltd is a company registered in England and Wales with a Company Number: 3687929



Template.04.10.23.92.MS

Page 1 of 2

J679838 Version 1

BULK MATERIAL SAMPLE REPORT (CONTINUATION)

| Site Ref | Lab Ref | Description | Analysis Result | Classification |
|------------|----------|--|----------------------|----------------|
| S 5 | BS206706 | Front entrance - Brown floor tile | No Asbestos Detected | Not Applicable |
| S 6 | BS206707 | Kitchen - Beige floor tile | No Asbestos Detected | Not Applicable |
| S 7 | BS206708 | W/C - Light brown floor tile | No Asbestos Detected | Not Applicable |
| S8 | BS206709 | Hallway - Door to W/C - Green floor tile | No Asbestos Detected | Not Applicable |
| S 9 | BS206710 | End entrance area - Cork floor tile & adhesive | No Asbestos Detected | Not Applicable |

Page 2 of 2

J679838 Version 1

APPENDIX C ASBESTOS DATA SHEETS



Derelict Houses Site, Station Road, Kildare Town, Co. Kildare

| | PHOENIX ENVIRONMENTAL SAFETY LTD. ASBESTOS DATA SHEET | | | | |
|-------------------|--|---------------------|----------------|-----------------|--------------|
| | Phoenix Environmental Safety Ltd. | | | | 4 |
| Created By | Andrew Hickey | | | | tet- |
| Date | 6th November 2023 | | | | |
| Site Details | Derelict Houses Site, Station Road, Kildare Town, Co. Kildare | | | | |
| Client Name | Kildare County Council | | | | |
| Survey Type | R/D Asbestos Survey | | | | A CONTRACTOR |
| Site Ref | PE 23-1157 | | t | 1 | |
| Building Ref. | Station road | Survey Date | 2.10.2023 | Sample No. | BS 206702 |
| Location | Main roof | Survey Company | Phoenix Enviro | onmental Safety | Ltd. |
| Extent/ Amount | 90 m ² approx. floor area | Testing Laboratory. | G & L Consulta | incy Ltd. | |

| | MATERIAL ASSESSMENT | | PRIORITY ASSESSMENT |
|-------------------|--------------------------------|---------------------------|--------------------------------|
| Product type | Cement slates | Normal occupant activity | N/A |
| Extent of damage | Low | Likelihood of disturbance | N/A |
| Surface treatment | Unsealed | Human exposure potential | N/A |
| Asbestos type | Chrysotile & Amosite | Maintenance activity | N/A |
| [| Material assessment score: N/A | TOTAL SCORE: N/A | Priority assessment score: N/A |

CONCLUSIONS AND RECOMMENDATIONS

The cement slates identified on the roof of the houses contain Chrysotile (white) & Amosite (brown) asbestos fibres. Asbestos cement products usually contain between 10-15% asbestos fibres, bound in Portland cement

The asbestos cement slates should be removed by an asbestos removal contractor and disposed of as asbestos waste before demolition works commence.

See Appendix F for more details

All asbestos removal work must be carried out in accordance with S.I. No. 386 of 2006 Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006-2010

PHOENIX ENVIRONMENTAL SAFETY LTD. ASBESTOS DATA SHEET

| | Phoenix Environmental Safety Ltd. | | | | |
|-------------------|--|-----------------------|---------------|-----------------|-----------|
| Created By | Andrew Hickey | · | | | |
| Date | 6 th November 2023 | | | | |
| Site Details | Derelict Houses Site, Station Road, Kildare Town, Co. Kildare | C TOTAL | R | P.A. | |
| Client Name | Kildare County Council | | / Part | | |
| Survey Type | R/D Asbestos Survey | | h | | ale in |
| Site Ref | PE 23-1157 | and the second second | | | * |
| Building Ref. | Station road | Survey Date | 2.10.2023 | Sample No. | BS 206705 |
| Location | Rear W/C | Survey Company | Phoenix Envir | onmental Safety | Ltd. |
| Extent/ Amount | 1 | Testing Laboratory. | G & L Consult | ancy Ltd. | |

| | MATERIAL ASSESSMENT | | PRIORITY ASSESSMENT |
|-------------------|--------------------------------|---------------------------|--------------------------------|
| Product type | Resin toilet cistern | Normal occupant activity | N/A |
| Extent of damage | Low | Likelihood of disturbance | N/A |
| Surface treatment | Sealed | Human exposure potential | N/A |
| Asbestos type | Amosite | Maintenance activity | N/A |
| [| Material assessment score: N/A | TOTAL SCORE: N/A | Priority assessment score: N/A |

CONCLUSIONS AND RECOMMENDATIONS

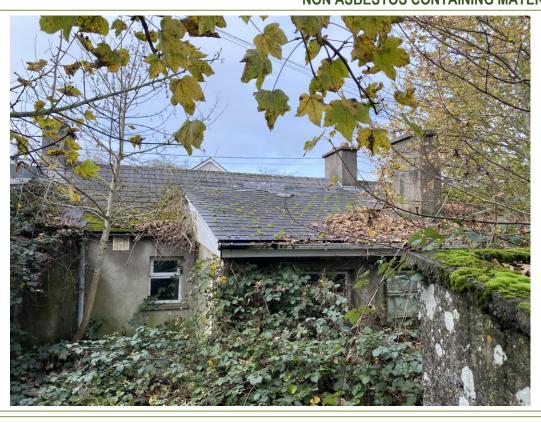
The resin toilet cistern identified in the W/C in the shed at the rear of the house contains Amosite (brown) asbestos fibres. Resin products may contain between 20-50% asbestos fibres.

The asbestos resin toilet cistern should be removed by an asbestos removal contractor and disposed of as asbestos waste before demolition works commence.

See Appendix F for more details

All asbestos removal work must be carried out in accordance with S.I. No. 386 of 2006 Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006-2010

APPENDIX D NON ASBESTOS CONTAINING MATERIALS



Slates sampled from rear extension



Felt sampled from the roof of the garage



NON ASBESTOS CONTAINING MATERIALS

Metal cladding on the roof of the rear shed



Plasterboard ceilings & fiberglass insulation



NON ASBESTOS CONTAINING MATERIALS

Vinyl floor tile sampled throughout



Old linoleum on floor

Phoenix Environmental Safety Ltd.

APPENDIX E

- No inspection was carried on flues, ducts, voids and similar enclosed areas, the access to which would necessitate the use of specialist equipment or tools, or which would have caused damage to decorations, fixtures, fittings or the structure of the building
- No inspection of live electrical or mechanical plant or similar requiring the attendance of a specialist engineer was carried out
- No inspection of any areas requiring specialist access equipment other than telescopic ladder was carried out
- Samples have not been taken where the act of sampling would endanger the surveyors or affect the functional integrity of the item concerned
- All contractors working on site should always remain vigilant to the possibility that other asbestos containing materials may be concealed within the fabric of the building or equipment. If any suspect asbestos containing materials are uncovered during the course of the work, works must stop in that area and the suspect material should be sampled and analysed immediately for the presence of asbestos

APPENDIX F FLOOR PLANS & LOCATION OF ASBESTOS CONTAINING MATERIALS

