Report No: DEA/01283/3/LLWYN

# Asbestos Survey:

St Cadocs Hospital,

Llwyn Onn

**Surveyed by:** _____

**Survey report by:** _____

**Authorised by:** _____

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## COMMENTS AND RECOMMENDATIONS SUMMARY

No asbestos containing materials were found in this area.

## TABLE OF CONTENTS



## APPENDICES

## 1. INTRODUCTION

Instructions were received from Steve Knight on behalf of Gwent Healthcare NHS Trust to carry out an asbestos survey on the property known as St Cadocs Hospital, Llwyn Onn, , Caerleon, , . This survey was carried out 22nd March 2001.

The scope of works was to carry out a full asbestos location survey on the premises as outlined by the client. The extent and type of asbestos based materials on site was to be defined.

## 2. SITE DESCRIPTION

Llwyn Onn is a single storey block on the St Cadocs Hospital site.

## 3. SAMPLING STRATEGY FOR ASBESTOS MATERIAL (HEALTH & SAFETY POLICY)

The object of carrying out sampling was to identify the nature and extent of any visible asbestos material.

All samples were collected in self seal bags where appropriate, and where practicable a label was left on the site adjacent to the sample location. This label indicates the sample number for cross reference to this report. Care was taken to prevent cross-contamination of samples.

All sampling was undertaken causing the minimum possible nuisance and potential risk to the health of the occupants and visitors of the building.

As required under the Control of Asbestos at Work Regulations 1987 as amended by the Control of Asbestos at Work (Amendment) Regulations 1992 and 1998, dust release in sampling must be reduced to as low as is reasonably practicable and an assessment in respect of likely dust release will dictate the need for precautionary measures. This includes the isolation of the sampling area, wetting of the material to supress dust release, an appropriate cleaning process and use of personal protective equipment. After sampling, any broken material was sealed with PCL cloth tape. All samples were double sealed in polythene bags. Sampling did not impair the structural integrity of the building or plant.

## 4. ASBESTOS SURVEY STRATEGY

Knowledge, training and experience of the common application of materials that may contain asbestos form the basis of the sampling strategy adopted for this survey. The building was surveyed visually in a systematic manner following documented in-house procedures for materials suspected of containing asbestos.

A strategy has been established to keep to a minimum the number of bulk samples taken for analysis and therefore minimise the cost of the survey. The strategy employed is a combination of a visual inspection and sampling of bulk materials.

During the survey, where a material was suspected to contain asbestos, a bulk sample was taken for analysis. In areas where there were substantial quantities of visually uniform materials, a small number of samples were taken as being representative of the whole area. Therefore, where a sample is identified as containing asbestos, visually similar materials in the same area must be assumed to also contain asbestos.

Where the survey reports a material as NON-ASBESTOS by visual inspection and with no analysis of samples (e.g. recently lagged pipework covered with metal cladding) then the client should exercise caution in interpreting the results. It is IMPORTANT to stress that in such circumstances, there may be residues of asbestos trapped under the newly applied lagging (e.g. from previous asbestos removal carried out in the past).

It is not usually practicable to detect such residues until major disturbances of the material take place within the scope of a destructive survey. Therefore Scientifics Ltd cannot accept liability for the detection of such residues in this survey. If the client undertakes major alterations in a specific area where it may be possible that residual asbestos may be found, then it is recommended that further investigation of the specific area be carried out before the start of work.

Where "NO ACCESS" is used, it indicates that the area specified was not accessible at the time of the survey. The client is to be alerted to the possibility of there being asbestos materials in the

area. This may therefore require further investigation. Only those areas defined are covered in this report. Those areas not identified should be considered as not accessed for the purpose of this survey.

## 5. METHODS OF BULK SAMPLE ANALYSIS

Samples were examined for the presence of asbestiform fibres using polarised light microscopy (PLM) and dispersion staining techniques in accordance with documented in-house procedures based on Health & Safety Executive Publication MDHS 77, 'Asbestos in Bulk Materials'.

Identification of asbestos fibres was based on the following analytical procedure:

A) A preliminary visual examination of the whole of the bulk sample was made to assess the sample type and the required sample treatment (if any) : where possible a representative sub-sample treatment was taken at this stage;

B) Sample treatment was undertaken (if required) to release or isolate fibres;

C) A detailed and thorough search under the microscope was made to classify the fibre types present;

D) Representative fibres were mounted in appropriate RI liquids on microscope slides;

E) The different fibrous components were identified using PLM.

## 6. REPORT STRATEGY DEFINITIONS

All asbestos containing materials identified on the site have been incorporated into a Risk Assessment Priority Rating System which will allow the client the opportunity to plan any requirements for removal, remedial action and costings.

Implementation of the system will ensure:

A safe working environment is maintained on site with respect to all asbestos materials identified.

Compliance with the appropriate Health & Safety Legislation

A Priority Rating will be assigned to each asbestos element identified on the sites surveyed. Non-asbestos elements will not be assigned a priority rating. The priority rating is based on a combined assessment of the condition, friability and location of the asbestos element.

### 6.1 Assessment of Condition of Asbestos Elements

GOOD - Asbestos elements in good condition are those which are intact, have not been machined or drilled and are in all aspects pristine. Good condition may be achieved in moulded or preformed products when the moulding has not been damaged cracked or broken. Pipework lagging, whole sections and asbestos insulating boarding, fully sealed would also be assigned to a good category.

FAIR - Asbestos elements in fair condition are those that have been machined, indented or cracked but damaged asbestos has not fallen or broken away.

POOR - Asbestos elements in poor condition indicate that some asbestos material has been damaged by being broken or shattered with some debris present. This indicates that some asbestos material has become detached from the original bulk of the asbestos element.

## 6.2 Assessment of Damage Potential of Each Asbestos Element

The damage potential of each asbestos element on site will be assessed. This is important as the damage potential relates to the likelihood or possibility of damage occurring to the asbestos. The potential for damage or impact on asbestos materials must be considered in conjunction with the likely building usage of the area in question. Risk of damage will be more likely in areas of constant use in comparison with areas of intermittent use of entry for maintenance inspections or observation of equipment.

LOW - Asbestos materials with a low damage potential are those elements which are difficult to reach or damage due to it being in a location which is not normally accessible, except for the purposes of maintenance, e.g. in a roof space or plant room.

MEDIUM - Asbestos materials with a medium damage potential are those elements where some degree of effort would be required to reach and damage the asbestos, e.g. using a ladder or standing on a chair.

HIGH - Asbestos materials with a high damage potential are those elements which are within normal reach to touch or damage.

## 6.3 Assessment of Friability of Each Asbestos Element

The degree of friability of each asbestos element is probably the most important category since the softness of the asbestos material largely determines the extent of asbestos fibre release into the adjacent atmosphere.

LOW - Low friability asbestos materials are those where the asbestos fibres are locked within hard materials such as cement, concrete or plastics. In these cases the dangers of fibre release into the atmosphere are negligible providing that the element is not machined, drilled or otherwise worked upon.

MEDIUM - Medium friability asbestos materials are all those elements which are listed in the low category but are in poor condition, including badly weathered asbestos cement. Medium friability materials also include sealed and unsealed asbestos insulating board and bonded asbestos flange gaskets.

HIGH - High friability asbestos materials include all sprayed and lagged asbestos and unbonded asbestos rope materials. Finely divided asbestos insulating board debris contamination would also be classified as a high friability material.

## 6.4 Assessment of Priority of Each Asbestos Element

1 - Priority 1 asbestos materials are in a condition or location which requires urgent attention. Priority 1 asbestos materials are usually not suited to any form of containment programme and should be removed or environmentally cleaned as soon as possible. All fallen asbestos debris and surface contaminating materials will always be assigned a priority rating of 1. Any disturbance to priority 1 materials is liable to expose personnel to elevated levels of airborne respirable asbestos fibres and then also is liable to spread the extent of the contamination throughout the rest of the building.

2 - All priority 2 asbestos materials are in a location and/or condition which require some remedial action. The action may be minor repairs to damaged surfaces or encapsulation of all exposed asbestos surfaces. Following completion of remedial works, the priority 2 material should be assigned a priority 3 rating. In the long term it is recommended that all priority 2 materials be removed as soon as resources become available.

3 - Priority 3 asbestos materials are in a condition and/or location which does not give rise to a significant health risk, PROVIDED THE MATERIAL REMAINS UNDISTURBED either by routine maintenance operations or by personnel carrying out their normal daily work activities which could cause impact or surface damage to the material. Priority 3

is only valid if this provision is maintained. Building managers should be aware of any changes in work activities in areas where priority 3 asbestos materials are located. Priority 3 asbestos materials would change to priority 1 materials if it is decided to carry out building works which would require some disturbance of the asbestos material.

All Priority Rating assessments of all asbestos materials found on the site are to be found in the asbestos survey report sheets.

## 6.5 Computed Risk Assessment of Each Asbestos Element

0 to 15 (LOW) - Materials with assessment scores between 0 to 15 should be regarded as low risk materials, which will only need removal if serious damage or deterioration is detected in periodic inspections.

16 to 26 (MEDIUM) - There is little likelihood that a release will occur, or if there is an increased likelihood the type of material present will release only very low levels of airborne fibres. The material does not need any immediate work and any removal can be planned within a suitable budget and timescale. In the meantime it should be labelled and subject to re-inspection and re-assessment at suitable periods.

27 to 40 (HIGH) - This is a situation in which there is a high likelihood that friable loose asbestos may be dispersed giving a significant airborne fibre release. Some immediate plans for remedial work are usually required and the area should be isolated from access by adequately trained personnel.

APPENDIX B: Drawings

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fao: Steve Knight, Esq.

o/r: 85500/20/42/1/RAMM(SWA01492/3)
y/r: Order No.CC5868

2 April 2001

**TEST REPORT:**
**SUSPECTED ASBESTOS FOR IDENTIFICATION**

The samples shown below have been examined by microscope for the presence of asbestiform fibres using polarised light and dispersion staining techniques in accordance with documented in-house procedures based on Health & Safety Executive Publication MDHS 77 *Asbestos in Bulk Materials*.

Job No: SWA01492/3 Date Sampled: 22&23/03/01
Location: St Cadoc's Hospital, Caerleon: **Llwyn Onn**

| Lab. Reference | Sample Description | Fibre Type |
|---|---|---|
| SWA01492/3/213 | Entrance Lobby, ceiling Artex | No asbestos found |
| 01492/3/214 | Kitchen Room 011, sink pads | No fibrous material |
| 01492/3/215 | Cleaners' Store Room 012, ceiling Artex | No asbestos found |

Chrysotile = White Asbestos; Amosite = Brown Asbestos; Crocidolite = Blue Asbestos.

**Analyst:** R Martin **Signature:** **Date Analysed:** 30/03/01

**Comments**: Any opinions and interpretations based on test results are outside the scope of UKAS Accreditation.
Samples /213 & /215 contain organic fibre
All rooms in this building have similar Artex ceiling treatment.

David Gough
Principal Scientist