

Cwmcarn High School
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Response to Reports produced by Ensafe Consultants and the Health
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I confirm that I have made clear which facts and matters referred to in this report are within my own knowledge and which are not. Those that are within my own knowledge I confirm to be true. The opinions I have expressed represent my true and complete professional opinions on the matters to which they refer



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1. Summary of events leading to the closure of Cwmcarn High School (CHS)

- 1.1 Santia Asbestos Management Ltd (SAML) was instructed by Caerphilly County Borough Council (CCBC) to attend site in September 2012 following asbestos related issues identified at Cwmcarn High School (CHS) by CCBC's Asbestos Officers. SAML was commissioned by the Health & Safety Division at CCBC to undertake reassurance air monitoring in various locations to assess the possible risk posed by the warm air heater cabinets. Following shortly after this initial request SAML was commissioned to investigate the overall asbestos related issues inclusive of the heater cabinets within CHS and establish whether the asbestos condition and/or make-up of the heaters posed a risk to occupants (**Appendix A**).
- 1.2 Following a study of the existing surveys (**Appendix B, C, and D**) and the warm air heaters at CHS, it was soon identified that a number of the cabinets were constructed using Asbestos Insulating Board (AIB) wall panels. The AIB wall panels were observed to be sealed in a number of areas and unsealed in others, damaged AIB debris was noted within some heaters and joints between panels were worn with unsealed edges. Where AIB was noted within the cabinets, a full inspection of the make-up was undertaken, it was observed that a number of the cabinets had no effective barrier between the contaminated ceiling voids and the heater cabinets, permitting a direct path of movable air from the ceiling void to the classrooms. In addition it was observed during the site walk around with Richard Phillips of CCBC, that a number of displaced and water damaged MMMF and AIB ceiling tiles were present.
- 1.3 The ceiling voids within Building A at CHS have widespread AIB debris identified within as detailed in the Enquin Environmental Ltd Management Survey Report; CCBC were advised that this debris should not be within the void. Asbestos Insulating Board debris was identified on the RSJ's, supporting framework and on top of the ceiling tiles (**Appendix E**). It is a requirement during all removal works undertaken since 2002 when the "Control of Asbestos at Work Regulations" came into force, requiring that a "Certificate of Reoccupation" be undertaken which encompassed a 4 stage clearance process to ensure that the ACM's being removed were done so in accordance with guidance and regulations, and that the area was deemed clean on completion as per Regulation 17 in the "Control of Asbestos Regulations 2012" and all former regulations applicable. It is therefore alarming to see not only this amount of debris and the area with which it covers, but it is evident that new ceiling tiles have been replaced in parts of the school where this AIB debris resides as advised by CCBC Asbestos Officer Richard Phillips.
- 1.4 Based on the information gathered during the study of the existing survey materials (1.2 to 1.3) a meeting was held with Ms Donna Jones of CCBC (Health & Safety Division) on the 17th September 2012 at CCBC offices. Ms Donna Jones commissioned SAML to assess all information gathered to date on CHS and assess the risk posed to pupils under CCBC's "Duty of Care" as prescribed in Section 175 of the Education Act 2002, the Health and Safety at Work Act 1974, the Management of Health & Safety at Work Regulations 1999 and the Control of Asbestos Regulations 2012.
- 1.5 At this stage of the investigation not all information was provided to SAML by CCBC, such as the Asbestos Policy, procedures, previous information or records of removals etc. It is understood that this information was not available to CCBC as CHS has Foundation status and the property is owned and managed by the Governors of CHS not CCBC. It was acknowledged however that CCBC has a "Duty of Care" to the pupils as previously mentioned under Section 175 of the Education Act 2002; in so far as asbestos and CCBC's responsibilities, CCBC were only contracted by CHS to provide 1 to 2 days per annum "Asbestos Conditional Monitoring" under a "Service Level Agreement" which CHS bought into (**Appendix F**) for the year 2011 to 2012 (exact dates unknown).

- 1.6 Presenting the information to Ms Donna Jones at a joint meeting held at SAML offices on the 12th October 2012, SAML emphasised the overall risk which exists at CHS. Following further meetings within CCBC it was decided that the safest way to deal with the asbestos containing material's (ACM's) in CHS was to remove all staff and pupil's from the site so that a full survey of the premises could be undertaken without posing any further risk. The survey(s)/register currently in place at CHS did not encompass all areas of the premises and the full extent of the debris was not clear. It is re-iterated that CCBC acted to enforce their "Duty of Care" to pupils and undertook the necessary action from a legal, moral and ethical stance.

2. Responses to the Ensafe report J35768 (Appendix G)

2.1 The introduction of the Ensafe report (Section 1.1), states that the information provided by CHS Governors did not support the closure of CHS; in the recommendations (section 2.1) Ensafe state ***“The following actions should be undertaken without delay to safely and progressively re-open the CHS site to prevent the inevitable decline of the internal site conditions”***. Of concern is the statement that the school should not have been closed to one of ***“safely”*** re-opening. Section 2.9 of the Ensafe report states that it would be perfectly safe to open the school based on the information provided by SAML, then in the next sentences state that a precautionary approach would be needed due to the debris within the ceiling void. The first sentence in section 2.10 contains a contradictory statement, thus it is unclear whether Ensafe are sure of the risk(s) within CHS which may be as a result of Ensafe only conducting a desk top study and visual assessment.

2.2 Ensafe report section 1.1

“This report is prepared following a desk top study review of all available documentation and a visual site inspection of CHS”

Ensafe Consultants Managing Director Greg Kirkman has conducted a desk top study and visual assessment of CHS, instructed by the Governors of CHS and evidenced within the report produced on the 2nd January 2013. It is however not clear as to the amount of time or number of available documents which Ensafe Consultants have used to support their report.

2.3 Ensafe report section 1.2

“It is clear from the various site surveys, experience & knowledge of CLASP construction and the site inspection that parts of the CHS site were constructed with significant quantities of various asbestos containing products particularly within the A block CLASP building where insulating board materials were utilised as fire protection cladding to columns; wall linings and ceiling tiles. This CLASP construction was typically used for construction of schools of this period and many similar school sites across the UK are still in use and similarly to CHS have significant quantities of ACMs present”

In respect to these comments SAML re-iterates the need to manage the asbestos as required under the provisions of the “The Control of Asbestos Regulations 2012” Regulation 4 and paragraph 4 HSE CLASP Guidance 18th September 2008 (**Appendix H**). It is essential that the condition/deterioration of ACM's is closely monitored as damaged ACM's pose a risk from exposure to the asbestos fibres when airborne. CHS has a large amount of damaged ACM's within the ceiling void. Paragraph 13 HSE CLASP Guidance 18th September 2008 states ***“Personnel who carry out activities such as sealing the tops of the columns would be subject to a heightened level of exposure requiring respiratory and other personal protective equipment along with precautions to prevent the spread of dust. Overall, the risk of exposure is less if entry into the ceiling voids can be avoided. Unless there is some other reason to enter the void or replace ceiling tiles when it could be done at the same time, sealing of the column tops is not therefore a priority”***. In that there is a number of missing, damaged and dis-lodged ceiling tiles within CHS, there is therefore a serious risk of the ceiling void environment contaminating the areas beneath. The levels likely to be found within the ceiling voids are denoted with the HSL report RR624 (**Appendix I**). Table 16 identifies fibre levels up to 0.18 fibres per cm³ when heavy disturbance is conducted such as brushing, similarly re-wiring/maintenance tasks. Similarly in Table 17 fibre levels

were recorded up to 0.014 fibres per cm³, which is above the clearance indicator level stipulated for us in the UK, when cleaning within classrooms of partially remediated CLASP buildings; surprisingly neither results were subject to TEM so the Asbestos fibre content is unknown but the associated risk is above the HSE level of “LOW” (1 death per million) when either accessing the ceiling voids or during cleaning operations in CLASP buildings.

2.4 Ensafes report section 1.2

“Upon inspection, the vast majority of the ACM products which were visible below ceiling level at CHS were visually in a very good and well-sealed condition; a fact detailed in the various survey reports and regularly recorded in the site asbestos log book annual inspections, and as such would not pose any significant risk unless physically disturbed”

CHS has a number of ACM's which are below the ceiling void and as a result are within disturbance level. This is no more evident than on the ground level of Building A where AIB sits below the windows internally and has been repeatedly scraped and scuffed by pupil's desks and chair; the same panels have also had pupils work pinned to them. During the initial air testing at CHS, the caretaker stipulated that he has painted the AIB window panels on numerous occasions due to the aforementioned damage. It is understood that the caretakers at CHS attended an asbestos awareness course in the month of November 2012, but it is not clear when the caretakers last attended a training seminar to enable them to:

- a) Assess damage/deterioration of asbestos;
- b) Make good any damage/deterioration and undertake maintenance tasks whilst remaining within the constraints of CAR 2012 and all previous legislation/guidance.

2.5 Ensafes report section 1.3

“It is not possible to assess whether the suggested ‘foreseeable risk’ of non-asbestos ceiling tile failure (due to primarily water leaks/ingress) releasing asbestos containing material (ACM) debris and potentially airborne asbestos fibre in some limited areas of CHS is valid . However if this risk does exist it does not require the closure of the entire CHS site. The potential areas of risk are confined to specific rooms within the original two storey CLASP construction A Block of CHS. The validity of this potential risk can be assessed following an appropriate survey and testing works”

CHS was due to have roof repairs undertaken as a consequence of its poor condition. This work has not been undertaken due to the widespread debris within the ceiling void. The roof's current defects, to our knowledge, have resulted in a further 5 ceiling tile collapses whilst the school has been unoccupied (**Appendix J**). The number and frequency of any previous ceiling tile collapses is not as yet known and further it has not been possible to ascertain at what time of day these collapses occurred. As the collapses are not predictable, the risk of asbestos exposure increases. A conditional monitoring ceiling tile survey has been undertaken by CCBC (**Appendix K**) to provide further information on the spread and scale of the leaks within the roof. The leaks are within areas of ceiling void contamination and there are also AIB ceiling tiles which are subject to water ingress, as such their integrity is compromised, increasing the risk of:

- a) Ceiling tiles falling on occupants
- b) Spread of contamination from the machine -made mineral fibre (MMM) tiles due to them being contaminated as a consequence of their porous nature being in proximity to damaged AIB

- c) Fragments of damaged AIB which may be on the top of these tiles also falling down and
- d) Exposure to asbestos from asbestos contaminated water which once dried permits fibres to become airborne (**Appendix L**).

2.6 Ensafe report section 1.4

“It should however be noted that, even within these areas of A block and indeed the entire CHS site air testing undertaken by Santia failed to identify any airborne fibre levels in excess of the Limit of Quantification/Clearance indicator level of < 0.010 f/ml even following and during clean-up operations of tile failures within A block. The highest Santia result was 0.008 fibres per cm³. Therefore it would appear that the school site has been closed simply on the premise that the alleged bulk ACM debris within the ceiling void may be released if there is a tile failure.”

SAML conducted air testing within CHS at various locations using the recognised HSE/WHO standard Phase Contrast Microscopy. CHS was closed by CCBC based on the risk posed by the debris located within the ceiling void along with the failing ceiling grid integrity, ACM's being repeatedly damaged within classroom's and ACM's which are unsealed/damaged within the heater cabinets in Building A, compounded by poor maintenance tasks undertaken by the staff at CHS, such as replacing ceiling tiles, replacing light fittings resulting in unsealed AIB and the repeated painting of AIB window panels following damage caused by desks and chairs. The air tests undertaken were a measure requested by CCBC to ascertain if there were airborne-fibres which may be attributable to damaged ACM's. Other statutory compliance requirements that were also being hindered by the asbestos issues within CHS, no-more essential than the access prohibition to the ceiling voids where many electrical and water pipes run. It is also not clear, due to the access prohibition to the ceiling voids, whether fire compartmentalisation is in place and to statutory compliance standards. It should be noted that the ceiling tiles play an integral part in preventing fire spreading in such an event. At this present time they are not effective due to missing, damaged and dis-lodged tiles (Regulatory Reform Fire Safety Order 2005 4 (1)a) in particular within corridors and stairwells (Regulatory Reform Fire Safety Order 2005 4 (1)b). Furthermore, in this connection, the legislation pertaining to the acceptable fibre concentrations for reoccupation of buildings, rooms and areas needs to be considered. The Control of Asbestos Regulations 2012, regulation 17 It requires the airborne fibre concentration to be less than 0.01 fibres per cm³ when undertaking a “Certificate of Reoccupation” stage 3; however at no time is it stipulated that only asbestos fibres are counted as this is not possible using the HSE/WHO recommended “Phase Contrast Microscopy” fibre analysis technique. It is also not stipulated that this figure of 0.01 fibres per cm³ applies to air monitoring other than for the purpose of a “Certificate of Reoccupation”. What is stipulated however is that the fibre concentration level of 0.01 fibres per cm³ is a transient level (**Appendix M**) and not an acceptable permanent environmental level. At the time of undertaking all reassurance air monitoring at CHS it should be noted that the school was unoccupied and the replication of disturbance which would be caused by 900 pupils and 100 staff could not be replicated. With this last statement in mind it is reasonable to expect that in a fully occupied building the fibre concentration results to be more elevated than reported. It should be acknowledged that the level of 0.01 fibres per cm³ was not based on an assessment of risk to health, but it was simply what was being achieved by removal contractors when cleaning in asbestos removal enclosures during the late-1980s. The HSE has not yet formulated or provided formal limits for environmental exposures to asbestos for adults or children. With the lack of relevant guidance the "Clearance Indicator" of 0.01 fibres per cm³, which is used to assess whether enclosures for work with asbestos can be dismantled, has been adopted for evaluating both Background and Reassurance samples in accordance with the advice contained in the HSE document, HSG 248 Asbestos: “The

analyst's guide for sampling, analysis and clearance procedures". A conclusion which could be drawn from the investigation undertaken by HSL at CHS, involving more sophisticated techniques than the Regulatory method used in the UK of Phase Contrast Microscopy, is that consideration should now be given to the issuing of guidance requiring the use of Electron Microscopy techniques particularly where the evaluation of low level exposures. In this connection it must be considered that the Approved Code of Practice L143, "Work with materials containing asbestos" categorically states that the level of 0.01 fibres per cm³ is not considered as an acceptable environmental level. Santia Asbestos Management Limited would welcome such progress in the field of the determination of airborne fibre levels (**Appendix N – conclusion 3 on**).

2.7 Ensafé report section 1.5

"The relatively few positive 'positive' contact/wipe samples collected within A block appear, according to the Certificates of Analysis, to have generally been collected from high level and inaccessible locations and from rooms where the asbestos ceiling tiles have previously been removed"

During investigations and clean-up operations at CHS, a number of swab samples have been taken to assess by Polarised Light Microscopy whether any asbestos fibres were present. It is widely known within the asbestos industry that where asbestos products have been used in buildings one will potentially identify asbestos fibres on adjacent surfaces particularly where there are damaged or unsealed ACM's. In the Ensafé report it is stated that the vast majority of ACM's visually inspected are in good repair and encapsulated thus fibres should not be present. However, a number of swab samples on window ledges, projector surfaces have returned positive analysis which is more than 3 fibres as per Health and Safety Guidance document HSG248 – "Asbestos: The analysts' guide for sampling, analysis and clearance procedures". It is evident that a greater number of swab samples from lower levels have returned a negative sample result, but this is not unexpected as CHS employ cleaners. Within cleaning contracts the high level cleaning is often excluded due to the increase in risk from "falling at height" incidents, which means that low levels are cleaned more frequently putting the cleaners at risk of exposure as they are more likely to disturb any fibres during their cleaning practices.

2.8 Ensafé report section 1.7

"It is of significant concern that the site heating has been turned off as this, and the reduction in on-going maintenance, promotes damp conditions and prevents the prompt identification of water ingress. It must be stated that there is no indication, based on all air testing results conducted on behalf of CCBC that the heating of the building would create or increase the risk of asbestos fibre being present within the air at this site"

As previously noted, within Building A there are warm air heater cabinets which have variously sealed, unsealed and damaged AIB within them. There are also a number of warm air heater cabinets which have a direct unobstructed pathway from the contaminated ceiling voids into the warm air heater cabinets and into the classrooms. SAML acknowledges that under the provisions of regulation 4 of CAR 2012, which details the requirements on Duty Holders to put in place arrangements to ensure the safe management of ACMs in premises, that such materials, in good condition, can and in most cases should remain in place. However, the AIB within the heater cabinets is not in good condition and in some cases unsealed and damaged. In 1982 the HSC released a document of advice to local authorities on AIB contained within warm air heaters (**Appendix O & P**). Due to the unsealed and damaged AIB within the warm air heater cabinets it was recommended that the heaters be turned off. In order to comply with duties

prescribed in regulation 4 all ACMs in premises should be maintained in good condition so that they do not, as far as is reasonably practicable release asbestos fibres which can become airborne. Clearly this duty has not been complied with at CHS.

2.9 Ensaf report section 2.4

“The above works could be conducted quickly and simply, without the requirement for notifications, and would allow the majority of the school to be returned to normal usage, having been subject to a revised management survey during the sealing up works process, whilst further surveys and site investigations are conducted in the sealed areas of the CHS site if necessary”

CHS currently has a number of surveys which have been undertaken for varying refurbishment works. There is also an existing management survey in place which was undertaken in 2009 to 2012 by Enquin Environmental Ltd. In order to fully establish the amount and spread of ACM's it is essential to conduct a further survey of CHS. CCBC commissioned SAML in 2012 to undertake a refurbishment survey at CHS with the aim of establishing the costs associated with:

- a) Removing the damaged ACM's and for protecting other ACMs where this action may be more appropriate
- b) The required electrical, water and fire compartmentalisation all to comply with current legislation and
- c) The necessary re-instatement costs on completion.

The process of surveying and costing would take far less time, disruption, risk with the school remaining in its unoccupied state. As identified in the Enquin report there is widespread debris within the voids of Building A. It is therefore essential that a Licensed Asbestos Removal Contractor is present on site during the refurbishment survey including the use of a decontamination unit (DCU). This work should be conducted under the remit of a 14 day notification ASB5 to the HSE, due to the widespread debris within the voids there is potential to exceed both the four hour control limit of 0.1 fibres per cm³ and the Sporadic and Low intensity threshold of 0.6 fibres per cm³ as measured over 10 minutes.

2.10 Ensaf report section 2.5

“The purpose of the revised Management survey of the CHS site and A block in particular would be initially to confirm the presence and extent of alleged ACM debris within the ceiling voids above the non-asbestos ceiling tiles, it is accepted and of little consequence that ACM debris is known to be present above the existing AIB ceiling tiles. The survey would encompass both the sealed and returned to operational status of the school (constructed prior to 2000) to undertake a full asbestos Management survey to create a new and comprehensive asbestos register for the school. The requirement for the revised Management survey is driven by the inaccuracy of the most recent survey in referencing the different areas of the CHS site and also to aid in the investigation of how some of the alleged discovered ACM debris has been found in the locations stated within the Certificates of Analysis. The survey will also be able to hopefully provide confirmation that in areas of potential historical removals appropriate void seals were erected and will also assist in planning an appropriate medium to long term remediation strategy for the CHS site”

It is a matter of fact that there is significant asbestos debris within the ceiling void of Building A as detailed in the Enquin Environmental Ltd asbestos management survey report, supported by further localised refurbishment & demolition surveys undertaken by

SAML. What is not certain though is the full extent of the debris as a full and conclusive survey has not been completed to enable the total amount to be quantified and assessed, though the debris is visible as detailed in the recent pictures undertaken by CCBC on the 29th August 2012 as previously referred to in Appendix E.

2.11 Ensafé report sections 2.12 & 2.12

“Due to some areas of the CHS site including the majority of A Block, sports hall, canteen and the rooms off the canteen potentially having to remain closed for a period it may be required to install temporary classroom and/or canteen facilities. Wherever these temporary facilities are installed, providing they do not encroach on any area of the ‘sealed’ areas of the CHS site or any agreed contractor’s compounds, they would not be at any risk from asbestos at all”

“Confirmation has been obtained that all necessary temporary accommodation for the CHS is available locally and could be installed promptly. The costs for installation of either full accommodation for the entire CHS site, if the strategy detailed in this proposal is not adopted, or the reduced accommodation requirement if the strategy is adopted are detailed below”

SAML does not agree with the Ensafé recommendations of temporary facilities at CHS. This would impose great financial cost to any party and would not serve a positive purpose. The school is currently unoccupied and would ensure that the works required are done so in the shortest period of time. It would also not be beneficial to reoccupy CHS utilising temporary buildings such as portacabins as any works undertaken have the potential to cause disturbance to studying pupils/lessons and the costs to ensure safety not only on the site but from potential intruders would also increase.

2.12 Ensafé report section 4

“The licensed asbestos contractor will attend site to facilitate high level access; safe access into non asbestos ceiling voids; minor encapsulation works (not requiring notification); suitable segregation of areas (if necessary) to allow the safe re-occupancy of adjacent areas; general survey enabling assistance and emergency cleaning services if required”

Ensafé have provided costs for undertaking surveying, air monitoring costs utilising an asbestos contractor, accessing non-asbestos ceiling voids. The costs and method however do not stipulate the method of assessing the non-asbestos from asbestos voids nor does it stipulate how they enter the asbestos voids to enable them to provide a full and comprehensive survey in the timeframe and costs they have proposed.

3. Summary of events following the closure of Cwmcarn High School

- 3.1 Following the closure of CHS, SAML met with the HSE and CCBC at Ty-Penallta, the Council's Head Office to discuss the SAML report and all information pertaining to the closure of the school

During this meeting on 6th November 2012 Mr Stuart Charles HM Inspectorate of Health & Safety, Cardiff HSE, stated that,

“the overall situation is such that it is difficult to manage the continued occupation of the building under its current condition”

A contemporaneous note of this comment was made at the meeting and permission was requested of Mr Charles to refer to this comment to which he agreed.

- 3.2 Following the closure of CHS, SAML received a request under the “Freedom of Information Act” pertaining to the Religious Education room in Building A, referring to a flood and the subsequent use of dehumidifiers from a Ms Amanda Pritchard (**Appendix Q**). However SAML was not able to comment as the particulars of the request were not known, the request was redirected to CCBC.
- 3.3 Following a number of meetings between CCBC and staff at CHS, the IT teacher at CHS spoke with CCBC regarding asbestos removal works undertaken at the school. The concern was that he has undertaken IT cabling works within the ceiling void in the vicinity of damaged asbestos identified at the school, however the duration was not known.
- 3.4 There is and has been confusion surrounding the “Duty Holder” at CHS as there is a SLA in operation, provided by CCBC at a premium. This SLA provides 1 to 2 days per year for conditional monitoring; it is stated within the Ensafe report that the logbook shows that CHS has been diligent in its duties to undertake the inspections/monitoring. The SLA does not imply any responsibility to be deemed the “Duty Holder”; the SLA can be terminated at any time by CHS. Furthermore the premises are owned and run by CHS not CCBC. The “Duty Holder” should have full control of the premises ensuring that they have the necessary powers to undertake any works to comply with statutory compliance. It is therefore the case that CCBC cannot be regarded as the “Duty Holder” which is emphasised by the fact that the Governors have denied CCBC access to the school to undertake a full survey of the premises. Further the Governors have requested CCBC to notify CHS of any further attendance so that access can be arranged if approved.

4. Information to be requested of the Governor(s)/Head teacher at Cwmcarn High School (CHS)

- 4.1 It is clear from the survey undertaken in 2009 to 2012 by Enquin Environmental Ltd, that there is a need to establish the history of CHS in respect of both asbestos and other statutory compliance legislation. To enable this appraisal one would need to identify and collate all survey records, contractor's method statements and risk assessments including the asbestos consultant's analytical paperwork and invoices, should all other paperwork be unobtainable, for all present and previous asbestos and other statutory compliance work.
- 4.2 It would also be of benefit to ascertain CHS's policy for tendering/vetting companies over the years which have/are undertaking works at CHS to establish if there is a root cause which has subsequently led to the debris located within the ceiling voids identified in the Enquin Environmental Ltd survey report. Similarly this would also be of importance to establish if the tendering/vetting process was at fault for contracting, which led to the prosecution of "T A Roden" in 2002 by the HSE, case number 2019916 (**Appendix R**).
- 4.3 The provision of historical data will enable an evaluation of the original content of the building in respect of asbestos containing materials subsequent removal and analytical paperwork, determining whether the tendering/vetting procedures/policy ensured the removal works and air testing were undertaken in accordance with legislation at the time of removal and by competent contractors in possession of the required License issued by the HSE under the provisions of the relevant edition of the Control of Asbestos Regulations or the now withdrawn Asbestos (Licensing) Regulations 1983.
- 4.4 To further support the historical and current data surrounding ACM's it is essential the level of competency within CHS to "manage" the ACM's in line with "The Control of Asbestos Regulations 2012", the Health and Safety at Work Act 1974 and the Management of Health and Safety at Work Regulations 1999 is determined. It is essential that not only the "Duty Holder", but the maintenance/caretaker(s) have adequate training to ensure they are able to manage and maintain the ACM's in accordance with statutory legislation and guidance.
- 4.5 It is of importance that CHS provide all historical data surrounding asbestos to establish the root cause of asbestos issues which currently exist, this will also ensure through record interrogation that anyone who may have been exposed to asbestos is notified and the events recorded on their medical history. SAML acknowledges the last sentence of Para (1.6) of the Ensafe report which refers to the lack of available removal records and further supports the need to seek further information from the Governors of CHS, also addressed by the Welsh Government Assembly on 27th November 2012 (**Appendix S**).

5. Action(s) required enabling the safe reoccupation of Cwmcarn High School

- 5.1 It is important that a full assessment of CHS is undertaken at the earliest opportunity; this opportunity exists whilst CHS remains unoccupied providing unrestricted and unhindered access thus presenting no risk to others.
- 5.2 In order to assess the works required to facilitate the safe reoccupation of CHS, the following options appraisal would need to be undertaken to ensure that a full cost/benefit analysis can be facilitated:
- 5.2.1 Assess the works required to enable the upgrade of any electrical cabling, systems to comply with 17th Edition, providing a cost and timeframe of works required;
 - 5.2.2 Assess the fire compartmentalisation of the buildings and measures in place to ensure the buildings comply with the RRFSO 2005, providing a cost and timeframe of works required;
 - 5.2.3 Undertake an assessment of the pipework within CHS, including the lagging of pipework to ensure that there is no risk from Legionellosis as detailed in ACoP L8, providing a cost and timeframe of works required;
 - 5.2.4 The overall cost and timeframe of undertaking all works to comply with current UK statutory legislation and the subsequent re-instatement costs;
 - 5.2.5 Undertake a full survey to enable the quantification of asbestos removals required, providing a cost and timeframe of works required to enable the safe works referred to above;
 - 5.2.6 Cost of transfer for Ebbw Vale to CHS;
 - 5.2.7 The future cost of CHS complying with its statutory duties as outlined in paragraph 1.4.
- 5.3 It is a requirement of the “Control of Asbestos Regulations 2012” Regulation 4 (9) that the Asbestos Management Plan for premises should include details for

(9) The measures to be specified for managing the risk (arising from ACMs) shall include adequate measures for –

(a) Monitoring the condition of any asbestos or any substance containing or suspected of containing asbestos;

(b) Ensuring any asbestos or any such substance is properly maintained or where necessary safely removed; and

(c) Ensuring that information about the location and condition of any asbestos or any such substance is –

(i) Provided to every person liable to disturb it, and

(ii) Made available to the emergency services.

As CHS is currently unoccupied it would be prudent to survey the premises and conduct the safe removals of damaged ACM's. Once the removals are complete the Governors can then turn their attention to put in place an effective Asbestos Management Plan for any remaining ACM's

- 5.4 An overhaul of the staff training regime is also required to enable key stakeholders to:
- a) have the right knowledge and training to undertake inspections, register updates as and when required, and
 - b) provide technical support to ensure the policy and procedures are followed in accordance with legislation and guidance.

It is also of importance to build in to the training regime refresher training/update procedures for changes in legislation in order to ensure that the changes are

disseminated and applied accordingly for all Stakeholders involved, all in accordance with the Control of Asbestos Regulations 2012 and associated guidance provided in the Approved Code of Practice L143.

- 5.5 The children who study in the school, their parents and guardians, staff and contractors who work there need to be reassured that the Governors as “Duty Holders” regard their safety as paramount, and that any assurances given by them on the issue of a safe environment is matched by their actions in relation to the management of substantial risk in the school.

6. Response to HSL report AS/2012/14 (Appendix T)

- 6.1 SAML acknowledges receipt of the HSL report sent to SAML on the 25th January 2013, received 28th January 2013; conducted 26th to 28th November 2012.
- 6.2 It is understood that the HSL were asked by the HSE to undertake a study of airborne fibre concentrations within the CHS buildings. From the content of the report it would appear that this is the limit of their brief as the report produced does not address the overall asbestos management issues identified within the body of this report and as such the HSL report cannot be regarded as an overall assessment of the asbestos situation at CHS.
- 6.3 CCBC acknowledges the draft document sent to them relating to the proposed Transmission Electron Microscopy (TEM) sampling carried out at CHS. Neither asbestos Officers of CCBC nor a representative of SAML recall any disturbances undertaken as detailed by Dr Garry Burdett of HSL. Furthermore, CCBC and SAML do not recall any risk assessment or onsite indication being presented by HSL relating to these disturbance activities. The provisions relating to the preparation of Risk Assessments for such activities are contained within Management of Health and Safety at Work Regulations Regulation 3 and Regulation 6 of CAR 2012. Section 7 of the Health and Safety at Work Act 1974 details the requirements on individuals to conduct their work in a safe manner and Regulation 11 of CAR 2012 requires that exposures to asbestos are kept to the lowest level which is reasonably achievable. **(Appendix U, V & W).**
- 6.4 SAML attended CHS with HSL and CCBC to run air tests alongside the HSL pumps to collate as much information as possible. However, neither CCBC nor SAML were aware that any air tests, inclusive of “disturbance” air tests were to be undertaken on the 28th November and as such the SAML representative did not have any pumps running which could have been compared alongside the HSL samples.
- 6.5 At the time of the investigation it was unclear why HSL chose to run sampling pumps overnight within CHS as the buildings were unoccupied and as such there was no disturbance taking place which would be typical of a normally occupied school. On reading the report it is apparent that the volume of air sampled during these hours of no occupation and no activity has been included in the pooled sampled calculations to calculate the mean fibre concentration. This of course will result in a lower average fibre concentration than would otherwise been the case. However we can see from the data that the fibre levels from the heaters were Amosite fibres and the concentration was 0.004f/cm³. As this figure was analysed using TEM the LOQ for PCM does not need to be referenced as there is no interfering fibres that can be deducted thus the fibre concentration is as stated. With this in mind it would be prudent to consider the “Control of Asbestos Regulations 2012” Regulation 11 which requires employers to take measures to reduce the exposure of his employees to asbestos to the lowest level reasonably practicable by measures other than by the use of respiratory protective equipment. It is clear that the level is not as low as reasonably practicable at CHS as the damaged asbestos within the ceiling void, the heater cabinet AIB wall panels and associated debris can be removed which would result in reducing the potential for exposures to airborne asbestos fibre concentration in the future. For the most part these materials are damaged to a point where they cannot be maintained in a safe condition as is required under the provisions of Regulation 4 of CAR 2012. The fact that such damaged materials present is a clear indication of the failure to safely manage the asbestos materials contained within the fabric of the school in accordance with the regulatory requirements.

- 6.6 Throughout the report the HSL has referred to the inadequacies of “Phase Contrast Microscopy” (PCM). It should be pointed out that this method is the current method prescribed by the HSE and the World Health Organisation (WHO) and conforms to current United Kingdom legislation, guidance and accreditation. By endorsing the microscopy techniques used by the HSL, the HSE now draws into question the suitability of using PCM in any investigations relating to the presence of low level asbestos fibre concentrations in buildings as they relate to possible ill health effects. SAML would welcome a wider discussion on this point with the HSE and other interested parties. However for the present the Regulatory method used in the UK is PCM as referenced in Regulation 19, 20 & 21 of “The Control of Asbestos Regulations 2012” and accredited by the “United Kingdom Accreditation Scheme” to ISO 17025. It is clear that there needs to be a wider discussion in relation to these techniques and hopefully these will take place in the foreseeable future and lead to the eventual publication of relevant guidance from the HSE.
- 6.7 We acknowledge and are relieved that the airborne concentrations measured at CHS by the HSL do not provide conclusive proof of the existence of a “significant” risk to health; we also acknowledge that some minor disturbance was said to have been undertaken. However the level of disturbance can and will not replicate 1000 occupants by one person conducting a number of possible disturbances, of which the total duration, frequency and the number of windows opened is not determinable from the report.
- 6.8 To this end we recommend that CCBC give consideration to undertaking further air testing at the school utilising an independent organisation using SEM/TEM to provide further data in relation to the airborne fibre concentrations in the buildings.
- 6.9 In the HSL “Executive Summary” the HSL has incorrectly assumed that the airborne fibre concentrations were the “greatest concern”. SAML and CCBC is concerned not only with the potential airborne fibre releases but also with the magnitude of damaged AIB within the ceiling void and the neglect to comply with CAR 2012 Regulation 4 along with several other regulations. With this in mind it would also be prudent to highlight that the risk within CHS includes but is not restricted to the airborne fibre concentrations, debris within the ceiling voids, damaged AIB window panels, damaged ceiling tiles, incorrect maintenance procedures and collapsing ceiling tiles which are a barrier between the occupants and the contaminated void.
- 6.10 HSL has stipulated that at no time were air tests undertaken by them to ascertain the fibre concentrations when undertaking simulated maintenance tasks or entering the ceiling voids despite this being one plausible cause of fibre release. But we can refer to 2.3 of this report which includes a reference to Appendix I. Within this document air tests have previously been undertaken by Dr Garry Burdett within ceiling voids, the fibre levels were elevated and of concern. SAML believed it would be prudent to ascertain the levels within the void to ensure the “uncontaminated” building is as defined by the HSE.
- 6.11 The report prepared by HSL on behalf of HSE is not objective because it is not comprehensive enough. The report fails to address the wider and essential issue of the history of asbestos management within the school, the duty to keep the risks associated with asbestos to an absolute minimum. HSL have also failed to set out the history of HSE involvement in relation to asbestos issues in the school in the period 2002 to 2012 when it was recently closed.
- 6.12 On the 5th February 2013 BBC News Wales website carried an article allegedly attributable to HSE stating that CHS is “an essentially uncontaminated school after new tests”. We consider this statement to be reckless and untrue. We stand by the contents of our first report and maintain that CHS in its current state is an “unsafe” environment in

which to study and work. We are confident that any further independent report addressing the issues that we were asked to investigate will endorse our findings on this paramount point of principle.

6.13 On 21 September 2010 HSE published the results of a survey and follow up inspection of councils in England (**Appendix X**). The survey revealed that 72% of those councils were managing asbestos in the system build school initiative in “system-build” schools in accordance with appropriate asbestos procedures. It also highlighted key actions required for local authorities including:-

- Ensuring contractors have provided asbestos awareness training for their workforce
- Checking that where asbestos management functions are delegated to site personnel those staff are trained and competent for the role: and
- Checking that site specific asbestos management plans are in place, and that these consider on-going maintenance and refurbishment work and how to deal with unplanned emergency work.

Commenting on the survey Rosalind Roberts the head of the public services sector stated in an HSE Press Release (**Appendix Y**):-

“We are satisfied that most local authorities were taking their responsibilities seriously when it comes to managing asbestos in system build schools.

“Where local authorities had fallen below acceptable standards, we took action to secure improvements. There are key lessons for the whole education sector. Those responsible for managing asbestos must be properly trained and management plans which set out the measures to be taken to manage the risks must be in place and readily available.

“If asbestos is properly managed, remains undamaged and undisturbed then its presence alone should not be a cause for concern. However, there is no room for complacency; managing asbestos in buildings needs effective and on-going attention. Those most likely to be exposed are tradesmen who may disturb it through their work - so it is essential that their work is carefully planned and managed.”

This statement and its reference to the need for vigilance rather than complacency is the crux of the matter. It is therefore very surprising that the HSL report does not address the central issue of the need for a safe environment and the history of poor asbestos management in the school by the Governors and the Head as duty holders.

7. BBC Press Releases 8 February 2013

The Press Releases issued by the BBC at 2057 on 8 February 2013 are attached. We have marked them A and B (top right corner) .Press Release A was amended on or after 11 February 2013. 4 key paragraphs were added which confirm HSE's views on the HSL report which is described as a document that had been prepared for "research purposes". It describes two strands to their investigations the other one being an investigation into the "management of asbestos at CHS which is almost complete". It then finishes by stating that "no enforcement action is required at this time because the system for managing asbestos does not give any immediate cause for concern".

For the reasons set out in this report we fundamentally disagree with this decision. The school is empty at present so the need to manage asbestos is not as great as it would be with children, staff and visitors present in the school. It also appears that the outcome of any investigation on management of asbestos described as "on-going" has been pre-empted by the conclusion that no enforcement action is in fact necessary.

We await a copy of the HSE report on the management of asbestos in the school.

8. Definition of Terms

'You' means Caerphilly County Borough Council

'Asbestos' means any of the minerals, and substances including the minerals, crocidolite, amosite, chrysotile, fibrous actinolite, fibrous anthophyllite and fibrous tremolite.

'Asbestos containing material' means any material, substance or product which is made with or contains asbestos.

'Abatement' means any and all procedures physically taken to control fibre release from asbestos containing material.

'Encapsulation' means treatment of asbestos containing material with another material that surrounds or embeds asbestos fibres in an adhesive matrix to prevent the release of fibres, as the encapsulant creates a membrane over the surface, penetrates the asbestos containing material and binds its components together.

'Enclosure' means the construction of an airtight, impermeable barrier around asbestos containing material to control the release of asbestos fibres into the adjacent environment.

'Non-friable asbestos containing material' means any asbestos containing material which when dry cannot be crumbled, pulverised or reduced to powder by hand pressure (for practical reasons, non-bonded, asbestos containing textile fabrics should be considered as friable).

'Removal' means the stripping of any asbestos containing material from surfaces or components in a building.

'Sampling/Sample' means any asbestos bulk or swab taken.

'Air test' means any test where a quantifiable volume of air has been drawn through a nitrate-cellulose membrane, and analysed to provide a fibre concentration.

'MMMM' means machine-made mineral fibre

'AIB' means Asbestos Insulating Board

'PLM' Polarised Light Microscopy

'PCM' Phase Contrast Microscopy

'UKAS' United Kingdom Accreditation Service

'CHS' Cwmcarn High School

'CCBC' Caerphilly County Borough Council

'SAML' Santia Asbestos Management Ltd

'HSE' Health & Safety Executive

'HSL' Health & Safety Laboratory

'WHO' World Health Organisation

'COR' Certificate of Reoccupation

'HSC' Health & Safety Committee

'RRFSO' Regulatory Reform Fire Safety Order 2005

'ACoP' Approved Code of Practice

'SLA' Service Level Agreement

'TEM' Transmission Electron Microscopy