

Vandenberg, Barbara

From: CURTIS L Burns(SMTP:curtis.burns@state.co.us)
Sent: Monday, December 16, 2002 2:59 PM
To: Nesta, Stephen
Subject: CMU Sealant



RFETSApp.doc



CURTIS L
Burns.vcf.txt

Steve,

Here is the document that reflects the approach that the Division proposes be implemented at RFETS to resolve the issue of friability of the CMU sealant. The document was forwarded to you guys by email in mid-Novemebr and hand-delivered on December 4, 2002.

If you hav any questions, please give me a call.

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December 4, 2002

Approach 2: CMU Sealant without Mock Testing Discussion Document

Overall Concept

In consideration of RFETS and the Division's recent discussions, the Division agrees with RFETS that all block sealant at RFETS that is substantively the same as Stapleton Hangar 10 sealant will be considered non-friable ACM and can be demolished in place, *without further emission demonstration testing* (subject to approval of the demolition procedures by the Division). No variance would be required, but the RFETS would have to submit a demolition plan that addresses demolition practices and procedures, wetting, demolition air monitoring (for work practice quality verification), transportation and disposal of materials.

The Division will work with RFETS staff to help characterize the sealant materials as friable or nonfriable.

Division's Assessment to Date

Regulation No. 8 and national inspection standards require that materials be assessed for friability by touching the materials to see if they are friable. Hence, all sealant material that powders (e.g., chalks, sluffs, or leaves a residue when touched) or crumbles with hand pressure is friable and must be properly abated prior to demolition. This provision is not unique to this proposal and clearly must be applied in this case as with all demolition projects.

Following the Division's inspection, the Division believes that different block sealant materials were used—some areas of sealant were similar in characteristics to the block sealant at Stapleton Hangar 10 (somewhat akin to primer) while others were more akin to drywall muds or joint compounds, which crumble or powder when touched. Based on the information the Division has to date, the Division agrees with RFETS resolution outline dated 10/16/02 that RFETS has insufficient data to conclude what homogeneous areas of sealant materials exist and what sealant materials are friable and nonfriable. The Division agrees with section 2.a. of that outline that RFETS conduct a thorough "walkdown" or inspection and assessment of the buildings in question to determine the following:

- a) The location and size of all homogeneous areas of sealant materials. A laboratory breakdown of constituents of each sample may be a useful tool in determining which areas are homogeneous. This entails requiring the laboratory to fully characterize and report out constituent components of

each sample. Commonalities can be identified and the homogeneous areas subsequently determined.

- b) Whether or not the sealant materials are asbestos containing by collecting statistically valid samples of the homogeneous areas of sealant to determine asbestos content.
- c) Whether or not the sealant materials are friable (by touching the material as discussed above). In some cases paint removal (through the use of spray poly, tape, etc., may be necessary for the inspector to make this determination.
- d) Whether or not the sealant materials are substantively the same as the sealant material at SIA Hangar 10 in terms of thickness, amount of asbestos, physical condition, etc. Again, based on the Division's inspection, we believe that some of the material is similar enough to the Hangar 10 material so that material can be left in place for demolition.

As with most building inspections, the Division also believes that a thorough review of building specifications and plans to determine dates of construction, materials specified, uses of each areas of buildings and contractors who performed the work (including methods of application for the sealant material) may be useful in helping better define the homogeneous areas. Furthermore, the Division believes that contractors and other knowledgeable persons (such as maintenance supervisors) should be interviewed as part of the attempt to accurately define homogeneous sealant materials. Currently, the Division believes that this type of routine investigative work may have already been performed for some buildings and may not need to be redone.

4.5 Asbestos

A Colorado Certified Asbestos Inspector **SHALL** identify all homogenous areas of friable and non-friable suspected asbestos containing building material (ACBM), and sample those areas not assumed to be ACBM per 40 CFR 763.85 through 763.87 and 5 CCR 1001 – 10 (Regulation 8). The presence of asbestos (i.e., greater than 1% by volume, weight or area) **SHALL** be determined by a certified laboratory with asbestos accreditation by the National Voluntary Laboratory Accreditation Program (NVLAP) using EPA Method 600/R-93/116, a polarized light microscopy (PLM) technique. Point counting will be required when PLM results range between trace and 1%. All analytical and quality specifications associated with the analysis are contained in Kaiser-Hill Analytical Services Division Statement of Work, Industrial Hygiene, Asbestos Module IH02. An additional assessment to determine whether the CMU surface material is friable shall be made consistent with the CDPHE's memorandum, dated December 4, 2002.

Building records (e.g., blueprints and specifications) will be consulted to document use of asbestos in construction or remodeling of the building under characterization. Maintenance and asbestos abatement records, blueprints, as-built drawings, specifications, and emergency response documents are examples of the data used.

A physical tour of the building **SHALL** be conducted, and notation made of suspect or affected materials that indicate through either historical data or the asbestos inspector's experience the presence of asbestos in building materials. A list **SHALL** be generated that includes estimated quantities. A Certified Asbestos Inspector may assume that a material is asbestos until proven otherwise.

4.5.1 Sample Types and Locations

Sample locations **SHALL** be selected randomly according to how each represents a homogeneous material. Since homogeneous areas are located throughout the building, the representation and number of samples is the driving factor rather than the exact location of the sample in each room. The generic categories of materials to be sampled for asbestos are listed below:

- Thermal systems (e.g., pipe insulation)
- Walls (that may be transite)
- Surfacing materials (e.g., fireproofing and ceiling texture)
- Miscellaneous (e.g., floor tiles, ceiling panels, mastic and caulking).

Non-suspect (or unaffected) materials are those traditionally made of wood, glass or metal. However, the inspector **SHALL** suspect the adhesives that have been applied to secure non-suspect materials to the substrate.

In general, the following standards apply to PCB media sampling:

- For non-porous surfaces, wipe sampling will be carried out as described in the *Metals and PCB Characterization Procedure* (PRO-487-MPCR).
- For porous surfaces into which a PCB spill could migrate, sampling will be carried out as described in the *Metals and PCB Characterization Procedure* (PRO-488-MPCR).

The analytical method **SHALL** have a practical quantitation limit (PQL) of less than 50% of the regulatory threshold which applies to the particular type of waste. EPA SW-846 Analytical Methods 4020 and 8082 satisfy this criterion.

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Building records (e.g., blueprints and specifications) will be consulted to document use of asbestos in construction or remodeling of the building under characterization. Maintenance and asbestos abatement records, blueprints, as-built drawings, specifications, and emergency response documents are examples of the data used.

A physical tour of the building, entering every accessible area and room that is not a high contamination or airborne radioactivity area, **SHALL** be undertaken, and notation made of suspect or affected materials that indicate through either historical data or the asbestos inspector's experience the presence of asbestos in building materials. A list **SHALL** be generated that includes estimated quantities. A Certified Asbestos Inspector may assume that a material is asbestos until proven otherwise.

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