Form: TH-04
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Fast-Track Regulation
Agency Background Document

Agency name	Department of General Services
Virginia Administrative Code (VAC) Chapter citation(s)	1 VAC 30-20
VAC Chapter title(s)	Survey Standards for the Inspection of Hospitals for the Presence of Asbestos
Action title	Repeal of Chapter 1 VAC 30-20
Date this document prepared	September 16, 2024

This information is required for executive branch review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act (APA), Executive Order 19 (2022) (EO 19), any instructions or procedures issued by the Office of Regulatory Management (ORM) or the Department of Planning and Budget (DPB) pursuant to EO 19, the Regulations for Filing and Publishing Agency Regulations (1 VAC 7-10), and the *Form and Style Requirements for the Virginia Register of Regulations and Virginia Administrative Code.*

Brief Summary

Provide a brief summary (preferably no more than 2 or 3 paragraphs) of this regulatory change (i.e., new regulation, amendments to an existing regulation, or repeal of an existing regulation). Alert the reader to all substantive matters. If applicable, generally describe the existing regulation.

The Department of General Services is repealing this chapter as the standards are addressed in the state building code that is overseen by DHCD and the DGS Construction and Procurement Services Manual(CPSM). The CPSM is published under the authority of §2.2-1132, Code of Virginia.

Acronyms and Definitions

Define all acronyms used in this form, and any technical terms that are not also defined in the "Definitions" section of the regulation.

DGS means the Department of General Services
DHCD means the Department of Housing and Community Development

CPSM – DGS' Construction and Procurement Services Manual

Statement of Final Agency Action

Provide a statement of the final action taken by the agency including: 1) the date the action was taken; 2) the name of the agency taking the action; and 3) the title of the regulation.

DGS will repeal the regulation: Survey Standards for the Inspection of Hospitals for the Presence of Asbestos on September 11, 2024.

Mandate and Impetus

Identify the mandate for this regulatory change and any other impetus that specifically prompted its initiation (e.g., new or modified mandate, petition for rulemaking, periodic review, or board decision). For purposes of executive branch review, "mandate" has the same meaning as defined in the ORM procedures, "a directive from the General Assembly, the federal government, or a court that requires that a regulation be promulgated, amended, or repealed in whole or part."

Consistent with Virginia Code § 2.2-4012.1, also explain why this rulemaking is expected to be noncontroversial and therefore appropriate for the fast-track rulemaking process.

This chapter was exempt from the Administrative Process Act when it was promulgated and should not have been promulgated. As stated in the summary, this standard has been addressed by DHCD and CPSM.

DGS believes this action will be non-controversial as the standards are addressed by DHCD and CPSM.

Legal Basis

Identify (1) the promulgating agency, and (2) the state and/or federal legal authority for the regulatory change, including the most relevant citations to the Code of Virginia and Acts of Assembly chapter number(s), if applicable. Your citation must include a specific provision, if any, authorizing the promulgating agency to regulate this specific subject or program, as well as a reference to the agency's overall regulatory authority.

DGS is the promulgating agency. The Code of Virginia §2.2-1102 A. 1 is the state legal authority for promulgating(repealing) this regulation.

Purpose

Explain the need for the regulatory change, including a description of: (1) the rationale or justification, (2) the specific reasons the regulatory change is essential to protect the health, safety or welfare of citizens, and (3) the goals of the regulatory change and the problems it is intended to solve.

DGS needs to repeal the regulation that is addressed by DHCD and the CPSM.

Substance

Briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both. A more detailed discussion is provided in the "Detail of Changes" section below.

No substantive provisions or changes exist.

Issues

Identify the issues associated with the regulatory change, including: 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions; 2) the primary advantages and disadvantages to the agency or the Commonwealth; and 3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, include a specific statement to that effect.

No issues are expected for the public or businesses with the repealing of this regulation. The primary advantage for the Commonwealth is a reduction in regulatory requirements that are no longer needed.

Requirements More Restrictive than Federal

Identify and describe any requirement of the regulatory change which is more restrictive than applicable federal requirements. Include a specific citation for each applicable federal requirement, and a rationale for the need for the more restrictive requirements. If there are no applicable federal requirements, or no requirements that exceed applicable federal requirements, include a specific statement to that effect.

None

Agencies, Localities, and Other Entities Particularly Affected

Consistent with § 2.2-4007.04 of the Code of Virginia, identify any other state agencies, localities, or other entities particularly affected by the regulatory change. Other entities could include local partners such as tribal governments, school boards, community services boards, and similar regional organizations. "Particularly affected" are those that are likely to bear any identified disproportionate material impact which would not be experienced by other agencies, localities, or entities. "Locality" can refer to either local governments or the locations in the Commonwealth where the activities relevant to the regulation or regulatory change are most likely to occur. If no agency, locality, or entity is particularly affected, include a specific statement to that effect.

Other State Agencies Particularly Affected

None

Localities Particularly Affected

None

Other Entities Particularly Affected

None

Economic Impact

Consistent with § 2.2-4007.04 of the Code of Virginia, identify all specific economic impacts (costs and/or benefits), anticipated to result from the regulatory change. When describing a particular economic impact, specify which new requirement or change in requirement creates the anticipated economic impact. Keep in mind that this is the proposed change versus the status quo.

Impact on State Agencies

For your agency: projected costs, savings, fees or revenues resulting from the regulatory change, including: a) fund source / fund detail; b) delineation of one-time versus on-going expenditures; and c) whether any costs or revenue loss can be absorbed within existing resources	N/A
For other state agencies: projected costs, savings, fees or revenues resulting from the regulatory change, including a delineation of one-time versus on-going expenditures.	N/A
For all agencies: Benefits the regulatory change is designed to produce.	N/A

Impact on Localities

If this analysis has been reported on the ORM Economic Impact form, indicate the tables (1a or 2) on which it was reported. Information provided on that form need not be repeated here.

Projected costs, savings, fees or revenues resulting from the regulatory change.	N/A
Benefits the regulatory change is designed to produce.	N/A

Impact on Other Entities

If this analysis has been reported on the ORM Economic Impact form, indicate the tables (1a, 3, or 4) on which it was reported. Information provided on that form need not be repeated here.

Description of the individuals, businesses, or other entities likely to be affected by the regulatory change. If no other entities will be affected, include a specific statement to that effect.	No entities affected by the repealing of this chapter.
Agency's best estimate of the number of such entities that will be affected. Include an estimate of the number of small businesses affected. Small business means a business entity, including its affiliates, that: a) is independently owned and operated and; b) employs fewer than 500 full-time employees or has gross annual sales of less than $6 million.	No small business are affected by the repealing of this chapter.
All projected costs for affected individuals, businesses, or other entities resulting from the regulatory change. Be specific and include all costs including, but not limited to:	No costs are involved

a) projected reporting, recordkeeping, and other administrative costs required for compliance by small businesses; b) specify any costs related to the development of real estate for commercial or residential purposes that are a consequence of the regulatory change; c) fees; d) purchases of equipment or services; and e) time required to comply with the requirements.	
Benefits the regulatory change is designed to produce.	Less regulatory requirements.

Alternatives to Regulation

Describe any viable alternatives to the regulatory change that were considered, and the rationale used by the agency to select the least burdensome or intrusive alternative that meets the essential purpose of the regulatory change. Also, include discussion of less intrusive or less costly alternatives for small businesses, as defined in § 2.2-4007.1 of the Code of Virginia, of achieving the purpose of the regulatory change.

No alternatives considered or necessary.

If this analysis has been reported on the ORM Economic Impact form, indicate the tables on which it was reported. Information provided on that form need not be repeated here.

Regulatory Flexibility Analysis

Consistent with § 2.2-4007.1 B of the Code of Virginia, describe the agency's analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: 1) establishing less stringent compliance or reporting requirements; 2) establishing less stringent schedules or deadlines for compliance or reporting requirements; 3) consolidation or simplification of compliance or reporting requirements; 4) establishing performance standards for small businesses to replace design or operational standards required in the proposed regulation; and 5) the exemption of small businesses from all or any part of the requirements contained in the regulatory change.

N/A

If this analysis has been reported on the ORM Economic Impact form, indicate the tables on which it was reported. Information provided on that form need not be repeated here.

Public Participation

Indicate how the public should contact the agency to submit comments on this regulation, and whether a public hearing will be held, by completing the text below.

Consistent with § 2.2-4011 of the Code of Virginia, if an objection to the use of the fast-track process is received within the 30-day public comment period from 10 or more persons, any member of the applicable standing committee of either house of the General Assembly or of the Joint Commission on Administrative Rules, the agency shall: 1) file notice of the objections with the Registrar of Regulations for publication in the Virginia Register and 2) proceed with the normal promulgation process with the initial publication of the fast-track regulation serving as the Notice of Intended Regulatory Action.

If you are objecting to the use of the fast-track process as the means of promulgating this regulation, please clearly indicate your objection in your comment. Please also indicate the nature of, and reason for, your objection to using this process.

The Department of General Services is providing an opportunity for comments on this regulatory proposal, including but not limited to (i) the costs and benefits of the regulatory proposal and any alternative approaches, (ii) the potential impacts of the regulation, and (iii) the agency's regulatory flexibility analysis stated in this background document.

Anyone wishing to submit written comments for the public comment file may do so through the Public Comment Forums feature of the Virginia Regulatory TownHall web site at: https://townhall.virginia.gov. Comments may also be submitted by mail, email or fax to Sandra Gill, DGS Deputy Director at sandra.gill@dgs.virginia.gov. In order to be considered, comments must be received by 11:59 pm on the last day of the public comment period.

Detail of Changes

List all regulatory changes and the consequences of the changes. Explain the new requirements and what they mean rather than merely quoting the text of the regulation. For example, describe the intent of the language and the expected impact. Describe the difference between existing requirement(s) and/or agency practice(s) and what is being proposed in this regulatory change. Use all tables that apply, but delete inapplicable tables.

If an existing VAC Chapter(s) is being amended or repealed, use Table 1 to describe the changes between existing VAC Chapter(s) and the proposed regulation. If existing VAC Chapter(s) or sections are being repealed and replaced, ensure Table 1 clearly shows both the current number and the new number for each repealed section and the replacement section.

Table 1: Changes to Existing VAC Chapter(s)

Current chapter-section number	New chapter-section number, if applicable	Current requirements in VAC	Change, intent, rationale, and likely impact of new requirements
1VAC30-20-10		Definitions The following words and terms, when used in this chapter, shall have the following meanings, unless the context clearly indicates otherwise: "Abatement contractor" means the company or individual properly licensed in the Commonwealth of Virginia who routinely conducts asbestos abatement activities such as, but not limited to removal, encapsulation or enclosure of asbestos containing materials in buildings. "Asbestos" means any material containing more	Repeal

		than one percent of the asbestiform varieties of: 1. chrysotile (serpentine), 2. crocidolite (riebeckite), 3. amosite (cummingtonite-grunerite), 4. anthophyllite, 5. tremolite, or 6. actinolite. "Building manager" means the contact person representing the owning entity at each facility. "Commissioner" means the Commissioner, Virginia Department of Health. "Competent personnel" means personnel who are qualified by education or experience to determine the presence of asbestos and to assess its hazard, or to abate any such such hazard by proper encapsulation, enclosure, removal, repair or operations and maintenance of the asbestos containing material and who are licensed by the Virginia Department of Professional and Occupational Regulation pursuant to the requirements of Chapter 5 (§ 54.1-500 et seq.) of Title 54.1 of the Code of Virginia. In addition, asbestos inspectors must meet the minimum competency requirements specified in 1VAC30-20-40 C of these standards. "Director" means the Director, Office of Planning and Regulatory Services, Virginia Department of Health. "Encapsulation" means the treatment of asbestos-containing materials with a material that surrounds or embeds asbestos fibers in an adhesive matrix to prevent the release of fibers, as the encapsulant creates a membrane over the surface (bridging encapsulant) or penetrates the material and	

		binds its components together (penetrating encapsulant). "Enclosure" means the construction or installation over or about the asbestos-containing material of any solid or flexible coverings, which will not deteriorate or decompose for an extended period of time, so as to conceal the material, contain all asbestos fibers and render the asbestos-containing material inaccessible. "Facility" means any building built prior to January 1, 1978, in which a hospital is located. "Friable" means that material which is capable of being crumbled, pulverized, or reduced to powder by hand pressure or which under normal use or maintenance emits or can be expected to emit asbestos fibers into the air. "Homogenous material" means any material that appears similar in terms of color, texture, pattern, date of material application and functional use "Inspector" means the individual who physically inspects each building for materials that may contain asbestos, who is properly licensed to conduct building inspections for asbestos by the Virginia Department of Professional and Occupational Regulation pursuant to the requirements of Chapter 5 (§ 54.1-500 et seq.) of Title 54.1 of the Code of Virginia and who meet the additional requirements specified in 1VAC30-20-40 C of this chapter. "Management planner" means the individual who develops the plan to manage any identified or suspect	

		asbestos containing materials in the facility, who is properly licensed by the Virginia Department of Professional and Occupational Regulation as an Asbestos Management Planner pursuant to the requirements of Chapter 5 (§ 54.1-500 et seq.) of Title 54.1 of the Code of Virginia. "Notification" means the procedure used to inform building occupants and visitors of the location, description and condition of all asbestos containing materials identified or suspected in the facility and of the existence and location of a plan to manage the material. "Removal" means the physical removal of asbestos-containing material from a building and disposal thereof in accordance with all applicable regulations. "Repair" means to cause friable asbestos-containing material to be changed or modified to a condition where it is not friable. "Response actions" means any action, including removal, encapsulation enclosure, repair, method of operation, maintenance, record keeping or notification that protects human health from building materials containing asbestos. "Significant hazard area" means any area where the asbestos containing material is highly friable, where more than 10% of the material is exposed, where the damage is widespread and the area is accessible to occupants including by any air handling system. "Team leader" means the individual who is properly licensed as an asbestos inspector and management	

		planner pursuant to the requirements of Chapter 5 (§ 54.1-500 et seq.) of Title 54.1 of the Code of Virginia and who meet the minimum requirements specified in 1VAC30-20-40 C of this chapter. "Varying visible appearance" means any visible difference in size, color, texture, degree of hardness, etc., which may indicate differing material. This term is synonymous with "visually distinct material."	
1VAC30-20-20		Background: There has been a growing public awareness of the link between the inhalation of asbestos fibers and various diseases such as asbestosis, mesothelioma, lung and other cancers. As a result, legislation was enacted by the 1987 General Assembly (§§ 2.1-526.12 through 2.1-526.17 of the Code of Virginia) and was modified by the 1988 General Assembly which required the Department of General Services to develop survey standards for the inspection of buildings other than school buildings in order to identify the presence of asbestos and to the extent practicable the relative hazard to health or safety posed by any asbestos identified.	Repeal
1VAC30-20-30		Purpose: The primary purpose of these standards is to establish the minimum requirements, relevant to the inspection of each hospital facility for asbestos, the evaluation of the risk to human health, and the development of a specific schedule and plan to abate that risk prior to July 1, 1989, as is required by § 32.1-126.1 of the Code of Virginia.	Repeal
1VAC30-20-40		Scope: A. All hospitals shall be evaluated and a plan	Repeal

		developed in accordance with the provisions of these standards after July 1, 1989. B. Any building completed after January 1, 1978, is exempt from the requirements of these standards. C. Minimum competency requirements. 1. Individuals conducting inspections of buildings for asbestos containing materials shall meet the following minimum requirements: a. They shall have a valid Asbestos Inspector's License and Asbestos Management Planner's License issued by the Virginia Department of Professional and Occupational Regulation pursuant to the requirement of Chapter 5 (§ 54.1-500 et seq.) of Title 54.1 of the Code of Virginia; and b. Either successfully completed a minimum of two weeks of intensive field training under the direction of a team leader or; c. Have a minimum of two years experience in conducting field assessment surveys for asbestos containing materials in buildings. D. Individuals filling positions of team leader shall meet the following minimum requirements. 1. Possess, at a minimum, a college degree (A.S. or B.S.) in a physical science or related scientific field (e.g. biology, environmental science, engineering, geology, etc.), and 2. Have a minimum of three years experience in conducting field assessment surveys for asbestos containing materials in buildings, and	

		3. Have a valid Asbestos Inspector's License and Management Planner's License issued by the Virginia Department of Professional and Occupational Regulation pursuant to Chapter 5 (§ 54.1-500 et seq.) of Title 54.1 of the Code of Virginia.	
1VAC30-20-50		Preliminary Assessment: An initial assessment shall be made to determine which, if any, buildings were completed prior to January 1, 1978. Any disagreement shall be resolved by the commissioner. All buildings being used as a hospital must be evaluated before July 1, 1989, by competent personnel as defined herein unless they are deemed exempt by the commissioner pursuant to 1VAC30-20-40 of this chapter.	Repeal
1VAC30-20-60		Document review and on-site survey: A review should be made of all appropriate building construction documents (i.e., floor plans, blueprints, microfilm record, previous inspection records, asbestos abatement projects, etc.) to facilitate the identification of areas where asbestos may be present if available. A basic sketch of the representative floor plan showing any major detail must be prepared to identify bulk sample locations and general asbestos material location. Any on-site inspections must be conducted by competent personnel who have the training to identify the presence of asbestos, and to assess, to the extent practicable, the relative hazard or hazards to health and safety posed at each location at which asbestos is suspected or identified. Each	Repeal

		on-site survey shall include at least the following and be documented in a report to the owners. 1. Visual inspection. All accessible building areas and spaces shall be visually inspected, including but not limited to the following: a. Rooms, hallways, and office; b. Mechanical and electrical equipment room; c. Pipe chase; d. Basement; e. Attic; f. The space above ceilings, between walls, and below floor; g. Steam tunnel; h. Stairwell i. Closets and storage area; i. All occupied and unoccupied space; and j. Crawl spaces, including soil as appropriate. In addition, the location of all fire doors suspected of containing asbestos shall be identified and documented. These locations are to be designated on the building sketches and included in the inspection report. Areas where access is impossible or prohibitive should be identified on the building sketches. In the plan a notation must be made as to why the areas could not be investigated. All materials in these areas are to be considered to contain asbestos and must be included in the plan. The area must be evaluated according to the requirements of these standards when the area becomes accessible but before occupation. 2. Bulk sampling. Representative bulk sampling of suspected asbestos-containing materials shall be conducted	

		and submitted to a laboratory meeting the minimum requirements found in 1VAC30-20-70 of this chapter. All sample areas shall be clearly marked and a permanent identification number corresponding to the respective samples and shall be identified on copies of the available construction drawings or the building sketches prepared by the inspector. a. Representative samples of each distinct type of friable asbestos material as defined herein shall be collected to confirm its asbestos content unless it is assumed to contain asbestos. Distinction between types of material shall be based on at least the following criteria: (1) Visual appearance, and size; (2) Texture and hardness; (3) Functional use, including but not limited to insulation, ceilings, walls, boilers, tanks, furnace, other mechanical equipment, ceiling pipes, pipe wrapping, elbow material, valve material, structural members, decks, beams, duct materials, fire doors or stage curtains; and. (4) Information provided by documents, interviews, or any source as to prior renovation or patchwork. b. The minimum number of samples to be taken for each distinct type of suspected asbestos material shall be as follows: (1) Sprayed or troweled material. Three random samples for each visually or functionally different material or known different application for up to 1,000 sq. ft., five random samples from 1,000 to 5,000 sq. ft., seven random samples from 5,000	

		to 10,000 sq. ft., and for every 5,000 sq. ft. over 10,000 sq. ft. one additional random sample will be taken. This rule applies to homogeneous material on each floor only. (2) Pipe and duct insulation. A minimum of one sample for every 150 linear feet of material of varying size or visual appearance per floor. Samples shall be taken where material is damaged or exposed where possible, to avoid breaching intact covering. (3) Valve or fitting muds. Three samples of valve material or elbow mud for each insulated line of varying diameter or visual appearance per floor or area. (4) Boilers, tanks, and furnaces. Three samples per unit if homogeneous. (5) Patchwork. One sample of each patch or repair. (6) Ceiling or acoustical tile. Three samples for each material of varying visible appearance per floor. (7) Other friable materials. As determined as necessary by the inspector, but at least two samples per homogenous material per floor. (8) If the friable materials is not sampled but assumed to contain asbestos, then the inspector must complete the hazard assessment using 100% asbestos as the asbestos content value. (9) If the suspected asbestos-containing material is not friable as defined herein, a sample need not be taken. The location, type, and condition of the material shall be noted on the building layout documents or sketches provided by the inspector. The material shall be labeled according to the requirements of 1VAC30-20-	

		100 for suspect material. These materials must be included in the specified schedule and plan and must be included in the Priority Level IV Response Action category. c. Selection of sample location: (1) For sprayed on or troweled on material, the EPA guidelines located on pages 15-27 in "Asbestos-Containing Materials in School Buildings. Guidance for Analytical Programs" shall be followed. (2) For other types of uses, visually distinct materials will be sampled. d. Bulk sample size: (1) Samples shall be taken to penetrate all layers of the material. Samples should contain at least 15 cubic centimeters of material and shall be placed in a container and sealed at the time of collection. e. Sampling precautions. All precautions shall be taken to prevent exposure to those present in or around the facility during the collection of samples. The survey team is responsible for protecting occupants of the area and for patching the sampling area. (1) All sampling shall be conducted when building occupants are not in the immediate area, and preference shall be given to time when the areas being sampled are not in use. When it is not possible to collect samples during a time when the facility is not being used, advance arrangements shall be made to evacuate the immediate sampling areas for the time necessary to collect the samples. The building manager is responsible for insuring that evacuation takes place.	

		(2) Proper procedures and equipment shall be used during sampling to minimize fiber generation. (3) Area protection and cleanup. Care should be taken to minimize fiber release; however, any visible debris or residue generated during the sampling shall be thoroughly removed by wet wiping the debris or HEPA vacuuming. An area at least four feet in each direction shall also be cleaned using the above methods. (4) Locations from which samples are taken shall be patched as soon as the sampling has been completed by using methods and materials which are acceptable to the project manager and which are both structurally sound and aesthetically compatible. Each such location may be treated by low pressure application of an approved encapsulation. (5) When samples are taken in areas where the material is in poor condition, care must be taken to prevent further deterioration or fiber release. (6) The sample location will be adequately patched to prevent fiber release or deterioration by the inspector unless otherwise noted by the Building Manager in writing.	
1VAC30-20-70		Bulk sample analysis: A. Samples shall be analyzed by polarizing light microscopy using the EPA Interim Method for the Determination of Asbestos in Bulk Insulation Samples (EPA-600/M4-82-020). B. The inspector shall submit bulk samples for analysis to a laboratory that successfully participates in the National Institute of Standards and Technology (NITS) or an	Repeal

		approved equivalent Quality Assurance Program and have certification or accreditation by the American Industrial Hygiene Association. C. Sample submissions; laboratory analyst. Each analyst must have successfully completed a course in basic asbestos analysis, similar to that offered by Walter C. McCrone Associates of Chicago, Illinois. In addition, each analyst must have six months of on-the-job training with an analyst found acceptable through the NITS Quality Assurance Program/National Voluntary Laboratory Accreditation Program (NVLAP), or an approved equivalent.	
1VAC30-20-80		Relative exposure potential assessment: 1VAC30-20-80. Relative exposure potential assessment. Each location where the presence of asbestos is suspected or identified shall be evaluated using the algorithm found in Appendix A. The building manager will be notified immediately by the inspector if significant hazard area is discovered. This notification may be verbal initially but must be reduced to writing within 24 hours.	Repeal
1VAC30-20-90		Assessment of conditions and prioritization for remedial action: Upon completion of the on-site inspections and the calculation of the relative exposure potential assessment, recommendations shall be made regarding future response actions. A number of factors are used to determine the exposure number and, subsequently, the priority level. One of the most important factors	Repeal

		among those listed in Appendix A of this standard is the friability factor. Friability is the ability to crumble, pulverize, or powderize a dry material by hand pressure or which under normal use or maintenance emits or can be expected to emit asbestos fibers into the air. The determination of friability is straight forward and is explained in Appendix A of this Standard. Friability is a multiplicative factor and can increase the final exposure number as much as 33% to 100%. Another factor important in determining exposure potential is the mechanism for fiber transportation. This transport mechanism may be an air plenum or it can be the simple opening and closing of a door. High occupant activity can cause fibers to be become entrained, and even water damage can be a means of fiber transport. A number of the factors mentioned above are addressed in the field and scored on the algorithm. One of the most serious situations is to have a highly friable material in a non-ducted supply air plenum. Another serious concern is to have a highly friable material in a return air plenum. No matter what the transport mechanism is, corrective procedures will need to be designed and implemented to reduce or eliminate the transportation of fibers. Five priority levels have been defined for those areas found to contain asbestos. These priority levels are a function of the exposure number. (For explanation of exposure numbers, please see Appendix A). A priority	

		ranking is an excellent means of designing a phased abatement program. The following is a detailed explanation of each priority level: Significant hazard area. Areas placed in this category are those that are considered to pose a significant potential hazard to human health. The proper response to this priority is to immediately isolate the area and repair, encapsulate, enclose or remove the material before access is allowed. Any response other than removal must leave the material not accessible or not friable. Priority Level I. Areas placed in this priority category are those that are felt to pose a high exposure potential. Materials in these areas are usually in very poor condition with material possibly laying about on the floor. However, there is the possibility for the material to be in good condition and still exhibit a high potential for exposure, depending on other factors such as friability, accessibility, air movement and vibration. Fireproofing is a material that can exhibit this condition. These are the areas that should be addressed first. The response action recommended for items in this level are to repair the material by encapsulation, enclosure or by any other means which will render the material not friable and to institute a plan designed to insure that the material does not become friable, or remove the material using competent, licensed personnel. Priority Level II: Areas listed in this level have materials that are not in as	

		poor condition as those listed in Priority Level I but still pose a relatively high potential for exposure. In some cases the difference between a Priority Level I area and Priority Level II may be access to the area and the material. The corrective action plan for these areas should be to properly repair of the material and to institute a plan to insure that the material does not become friable, or remove the material using competent, licensed personnel. Priority Level III: These areas pose a moderate exposure potential; however, with time these materials will deteriorate and should be abated. Corrective action should be aimed at eliminating the factors causing the material to deteriorate and to making repairs. A plan will be necessary to monitor the condition of these materials to insure that they do not become friable after repairs are made. Priority Level IV: These materials currently have a relatively low exposure potential. Make minor repairs to the material and institute a plan to insure the material remains not friable or remove the material using competent, licensed personnel. Determination of priority levels: The determination of Priority Level I areas and Priority Level II areas is based on considerable experience and compiled with standard, recognized approaches to prioritization based on industry standards. The priority levels are gradational by design. An	

		area that falls in the upper portion of Priority Level II should be considered to pose a higher exposure potential than an area that falls in the lower portion of Priority Level II. Finally, it is strongly recommended that in any area that is scheduled to undergo renovation or demolition, a complete survey be conducted to confirm the asbestos content of all suspect materials that could contain asbestos. Materials that contain asbestos must be removed prior to commencement of any renovation or demolition work in which the asbestos containing material will be disturbed by the project. Any removal of asbestos materials must be by personnel properly licensed by the Department of Professional and Occupational Regulation.	
1VAC30-20-100		Signs, labels and notification: Every location at which asbestos is suspected or identified shall be clearly marked with suitably designed signs or labels or the building occupants shall be notified of the location and condition of the asbestos containing material within the building and the existence of a plan for its management, in writing. 1. Every mechanical room where asbestos is identified shall have at least one sign located in a conspicuous place at each entrance which contains appropriate wording (e.g., WARNING CEILING MATERIAL CONTAINS ASBESTOS. DO NOT DISTURB). 2. Locations containing any materials identified or suspected to contain asbestos shall be reported in	

		order to provide a permanent record for future reference by the facility and shall be included in the plan. 3. All thermal system insulation with suspected or known asbestos-containing materials shall be labeled accordingly (e.g., WARNING SUSPECTED ASBESTOS. DO NOT DISTURB). The labels shall be painted on or affixed to the insulation or covering in a color that contrasts with the color of the material at intervals that would prevent someone from disturbing the material without knowing that it does or is likely to contain asbestos.	
1VAC30-20-110		Certification: To determine compliance, documentation shall include at a minimum: 1. Qualifications of inspector; 2. Qualifications of laboratory and analyst; 3. Documentation necessary to determine that the survey was conducted according to these standards; and 4. Proposed action to comply with unmet requirements.	Repeal
1VAC30-20-120:1		Appendix A: INSTRUCTIONS FOR USE OF THE 20-VARIABLE ALGORITHM The 20-variable algorithm is an expansion on the old EPA or Sawyer algorithm. Where the primary variables are identical to the Sawyer algorithm, the first six variables have two sub-variable used to adjust the subjective or general score. The subjective or general score can be adjusted to represent a more accurate reflection of the true value of that general variable. ASSESS EACH OF THE FACTORS Carefully consider each of the following seven factors	Repeal

		(the eighth factor, asbestos content, must be determined from laboratory reports) and record your observations: FACTOR ONE. MATERIAL CONDITION: The condition of the asbestos-containing material is the most important indicator of whether fibers have been released in the past or may be released in the future. An assessment of the condition should evaluate: the quality of the installation, the adhesion of the material to the underlying substrate, deterioration, destruction of the material by water, vandalism which has damaged the material, and any other damage. Evidence of debris on horizontal surfaces, material hanging, dislodged chunks, scrapings, indentations, or cracking are indicators of poor material condition. Condition is closely related to other factors considered in the assessment inspection: if the asbestos-containing material is accessible, it is likely to be damaged; if the activity level is high in the area, the level of damage may be high; and materials which are exposed may be more likely to sustain damage. Accidental or deliberate physical contact with the material can result in damage to the asbestos-containing material. Inspectors should look for any evidence that the asbestos-containing material has been disturbed such as finger marks in the material, graffiti, pieces dislodged or missing, scrape marks from movable equipment or furniture, or accumulation of the friable material of floors,	

		shelves, or other horizontal surfaces. Asbestos-containing material may deteriorate as a result of the quality of the installation as well as environmental factors which affect the cohesive strength of the asbestos-containing material or the strength of the adhesion to the substrate. Deterioration can result in dusting of the surface of the asbestos-containing material, delamination of the material (i.e., separating into layers), or an adhesive failure of the material where it pulls away from the substrate and either hangs loosely or falls to the floor and exposed the substrate. Inspectors should touch the asbestos-containing material and determine if dust is released when the material is lightly brushed or rubbed. If the coated surface "gives" when slight hand pressure is applied or the material moves up and down with light pushing, the asbestos-containing material is no longer tightly bonded to its substrate. FACTOR ONE: MATERIAL CONDITION: This factor is comprised of three levels: A. NO DAMAGE: Material is intact and shows no sign of deterioration. NUMERICAL VALUE: 0 B. MODERATE DAMAGE - SMALL AREAS: Through visual inspection and physical contact there are indications that 10% or less of the material is breaking up into layers or beginning to fall. There may be small areas where the material is deteriorating. There may be signs of accidental or intentional damage. NUMERICAL VALUE: 2	

		C. WIDESPREAD SEVERE DAMAGE: Greater than 10% of the material is damaged. Large pieces are dislodged or debris in the area is evident. Parts of the material may be suspended from the ceilings or may have fallen to the floor. Evidence of severe accidental or intentional damage. NUMERICAL VALUE: 5 After the subjective score is determined for material condition based on the standard EPA guidelines for determining such, the score should be adjusted up one point or down one point depending on the building area age. If the age of the material or building in question is greater than 30 years, the objective variable is increased by one. If the area age is less than 15 years, it is subtracted by one. If the age is between 15 and 30 years, the score does not change. Then if the type of material, in particular pipe coverings, is a magnesium or calcium silicate preformed pipe which has a tendency to deteriorate more rapidly, the score is up by one; and if the material type is corrugated air cell or paper product, it is reduced by one. For ceiling plasters or fireproofing, if the material type is a more cementitious Monokote Type it is reduced by one. If it is a cotton candy Cafco type blaze shield or sound shield, it is up by one. For standard acoustical plaster materials, there is no change in the sub variable. FACTOR TWO: WATER DAMAGE: Water damage is usually caused by roof leaks, particularly in buildings with flat roofs or a concrete slab and steel beam construction.	

		Skylights can also be significant sources of leaks. Water damage can also result from plumbing leaks and water in the vicinity of pools, locker rooms, and lavatories. Water can dislodge, delaminate, or disturb asbestos-containing materials that are otherwise in satisfactory condition and can increase the potential for fiber release by dissolving and washing out the binders in the material. Materials which were not considered friable may become friable after water has dissolved and leached out the binders. Water can also carry fibers as a slurry to other areas where evaporation will leave a collection of fibers that can become resuspended in the air. Inspect the area for visible signs of water damage such as discoloration of the asbestos-containing material, stains on the asbestos-containing material, adjacent walls, or floor, buckling of the walls or floor, or areas where pieces of the asbestos-containing material have separated into layers (delaminated) or come loose and fallen down thereby exposing the substrate. Close inspection is required. In many areas staining may only occur in a limited area while water damage causing delamination may have occurred in a much larger area. In addition, the water damage may have occurred since the original inspection for friable material was conducted causing new areas to become friable and require an assessment inspection. Delamination is particularly a problem in areas where the	

		substrate is a very smooth concrete slab. Check to see if the material "gives" when pressure is applied from underneath. FACTOR TWO: WATER DAMAGE: This factor is comprised of three levels: A. NO WATER DAMAGE: No water stains or evidence of the material being disturbed by water. No stains on the floor or walls to indicate past water damage. NUMERICAL VALUE: 0 B. MINOR WATER DAMAGE: Small areas of other material or adjacent floor or walls show water stains and ceiling material may be slightly buckled. However, pieces have not fallen from the ceiling and the damage affects 10% or less of the material. NUMERICAL VALUE: 1 C. MODERATE TO MAJOR WATER DAMAGE: Water has dislodged some of the material and caused the material to break away or has become saturated and has the potential to fall, or greater than 10% of the material has been affected. Asbestos fibers have been carried from the asbestos-containing material by water and evaporation has occurred, or the fibers have been deposited on other surfaces. NUMERICAL VALUE: 2 After the general subjective determination has been made, if the roof above the material is a sloped or hipped roof, the subjective is reduced by ½. If it is a flat roof and built- up it is increased by ½. If the substrate type is metal or concrete, it is reduced by ½.	

		FACTOR THREE: EXPOSED SURFACE AREA: The amount of asbestos-containing material exposed to the area occupied by people can increase the likelihood that the material may be disturbed and determines whether the fibers can freely move through the area. An asbestos-containing material is considered exposed if it can be seen, i.e., if there are no physical barriers which must be moved in order to get to the material. For a material not to be exposed, the barrier must be complete, undamaged, and not likely to be removed or dislodged. An asbestos-containing material should be considered exposed if it is visible, regardless of the height of the material. If the asbestos-containing material is located behind a suspended ceiling with movable tiles, a close inspection must be made of the condition of the suspended ceilings, the likelihood and frequency of access into the suspended ceiling, and whether the suspended ceiling forms a complete barrier or is only partially concealing the material. Asbestos-containing material above a suspended ceiling is considered exposed if the space above the suspended ceiling comprises an air plenum. Suspended ceilings with numerous louvers, grids or other open spaces should be considered exposed. This factor is comprised of three levels: FACTOR THREE: EXPOSED SURFACE AREA:	

		A. MATERIAL NOT EXPOSED: Located above suspended ceiling. None visible without removing panels or ceiling sections. Suspended ceiling is not damaged. NUMERICAL VALUE: 0 B. TEN PERCENT OR LESS OF THE MATERIAL IS EXPOSED: A few panels of a suspended ceiling have been removed. Spaces between ceiling tiles exist which would allow fibers to pass through the barrier. NUMERICAL VALUE: 1 C. GREATER THAN 10% OF THE MATERIAL IS EXPOSED. NUMERICAL VALUE: 4 After the general determination is made, if there is an HVAC system that is part of the plenum area, the general determination is increased by one. If there is no plenum but only an enclosed dead space, it is reduced by one. If there is a semi- or permanent enclosure under the fireproofing or acoustical plaster isolating the mechanical system, the general determination is reduced by ½. FACTOR FOUR: ACCESSIBILITY: If the friable asbestos-containing material can be reached by building users or maintenance people either directly or by impact from objects used in the area, it is accessible and subject to accidental or intention contact and damage. Material which is accessible is most likely to be disturbed in the future. Evidence of degree of accessibility can also be determined by examining asbestos-containing surfaces for impact marks, gouges,	

		scrapes, finger marks, items thrown into the material, etc. Even coated ceilings 25 feet high have been observed with pencils, pens, forks and other items stuck in the material. Also note such practices as stacking boxes from floor to ceiling. The top box may scrape the asbestos-containing coating off the ceiling when it is moved. The proximity of the friable asbestos-containing material to heating, ventilation, lighting and plumbing systems requiring maintenance or repair may increase its accessibility. In addition, the activities and behavior of persons using the building should be included in the assessment of whether the material is accessible. For example, persons involved in athletic activities may accidentally cause damage to the material on the walls and ceilings of gymnasiums through contact by balls or athletic equipment. To become fully aware of the uses of the building by its occupants, the inspector should consult with building staff or personnel familiar with routine building activities. This factor is comprised of three levels: ACCESSIBILITY A. NOT ACCESSIBLE: The material is located above a tight suspended ceiling or is concealed by ducts or piping. The building occupants cannot contact the material. NUMERICAL VALUE: 0 B. RARELY ACCESSIBLE: The material is contacted only during abnormal activity such as infrequent maintenance or repair of nearby heating ventilation, lighting or plumbing systems.	

		Building occupants rarely touch the material or throw objects against it. NUMERICAL VALUE: 1 C. HIGHLY ACCESSIBLE: Material is contacted frequently due to routine maintenance. The building occupants can contact the material during normal activity at which time they routinely touch and dislodge the materials or throw objects against it. NUMERICAL VALUE: 4 If the ceiling height or material height is greater than 9 ½ feet, the subjective score is reduced by one. If it is under 9 ½ feet it is increased by one. Since the building occupancy and use status tells us a great deal about how often the material is going to be accessed, we adjust the subjective determination by 1 ½+ depending on the amount of occupancy. Pipe chases, crawl spaces, attics and mechanical air handling rooms are reduced by 1 ½, whereas major boiler rooms, classrooms, secretarial pools, or offices are increased by 1 ½. FACTOR FIVE: ACTIVITY AND MOVEMENT The level of activity and movement in the vicinity of the asbestos-containing material can affect both the potential for disturbance of the material as well as the level of resuspension of the fibers which have come loose from the material. Consider not only the movement caused by the activities of people in the area but also movement from other sources such as high vibration from adjacent rooms, highways, et cetera. Another source of vibration is sound, such as music and	

		noise. Sound sets airwaves in motion in certain frequencies. As these sound waves impact on asbestos-containing material, they may vibrate this material and contribute to fiber release. Therefore fibers may be released to a greater extend in a band room, music practice room, or auditorium than in the remainder of the building. Aircraft noise also has the ability to vibrate buildings; therefore, the inspector should determine if the building is in a direct flight path. It has been reported that in several schools whose ceilings were coated with asbestos-containing acoustical plaster, the band rooms were dustier than any other room in the school and granular material was deposited on floors and desks after music practice sessions. The level of activity can best be described by identifying the purpose of the area as well as estimating the number of persons who enter the area on a typical day. ACTIVITY AND MOVEMENT A. NONE OR LOW ACTIVITY: This level would normally include areas such as administrative offices, libraries, and those classrooms where the population is quiet and non-destructive. NUMERICAL VALUE: 0 B. MODERATE ACTIVITY: This level describes corridors, classrooms or other areas where activities exit that could create undue vibration. This vibration could result in fibers being released from the material into the immediate area. NUMERICAL VALUE: 1 C. HIGH ACTIVITY LEVEL: This level may be found in	

		cafeterias and corridors whose occupants are vandalous or disruptive in their activities. This also includes all gymnasiums, swimming pools and rooms containing machinery. NUMERICAL VALUE: 2 After the subjective determination is made, we must determine whether there is sedentary or non-sedentary movement. If the room in question is a library or other sedentary work environments, the subjective variable is reduced by ½. However, if the area in question has a great deal of activity such as in a hallway, a boiler room, a maintenance shed, etc. the variable will be increased by ½. If the room in question in subject to sound or mechanical vibration such as in an auditorium or a band hall or in an air handling or boiler room where there are constant vibrations, the variable is up by ½. If the area in question contains no recognizable sound or mechanical vibrations, or if no air handling systems are on the roof of the area, the subjective variable is reduced by ½. FACTOR SIX: AIR PLENUM OR DIRECT AIR STREAM An air plenum exists when the return (or, in rare cases, conditioned) air leaves a room or hall through vents in a suspended ceiling and travels at low speed and pressure through the space between the actual ceiling and the suspended ceiling or ducts. In evaluating whether an air plenum or direct air stream is present the inspector must look for evidence of ducts or cavities used to convey air to and from heating or cooling	

		equipment or the presence of air vents or outlets which blow air directly onto friable material. A typical construction technique is to use the space between a suspended ceiling and the actual ceiling as a return air plenum. In many cases you will have to lift the tiles in the suspended ceiling to check if this is the case. Inspection of the air handling or HVAC equipment rooms may also provide evidence of the presence of this material in the plenums. Special attention should be paid to whether activities such as maintenance frequently occur which would disturb the material in the plenum. Also any evidence that the material is being released or eroded (i.e. is it damaged or deteriorated so that the material is free to circulate in the airstream) such as accumulations of the material in the plenum should be noted. The presence of a direct air stream is indicated by discoloration of the asbestos coating in the vicinity of a vent or erosion patterns may be evident in the asbestos-containing material. AIR PLENUM OR DIRECT AIR STREAM A. NO AIR PLENUM OR DIRECT AIR STREAM PRESENT: NUMERICAL VALUE: 0 B. AIR PLENUM OR DIRECT AIR STREAM PRESENT: Look for dust patterns deposited by an air stream on surfaces next to air supply diffusers. Fan rooms coated with asbestos-containing material may be contributing asbestos fibers to the building air if the circulation system draws air from such a coated room.	

		Look for debris from the asbestos-containing material being deposited on dampers and filters of the air intake. NUMERICAL VALUE: 1 After the general determination is made, we look at the velocity of the air flow if in fact there is an air flow. If the air flow is recognizable by human feeling rather than subtle, the variable is increased by ¼. If it nonrecognizable it is reduced by ¼. If the air flow is a constant, steady stream it, again, is reduced by ¼; whereas if the air flow is an impact air flow such as through thermostatic action where large gusts of air impact the material from time to time it is increased by ¼. FACTOR SEVEN. FRIABILITY The term "friable" is applied to dry material that can be crumbled, pulverized, or reduced to powder by hand pressure or which under normal use or maintenance emits or can be expected to emit asbestos fibers into the air. In order to evaluate the friability of the material it should be touched. The asbestos-containing material can vary in degree of friability. The more friable the material, the greater the potential for asbestos fiber release and contamination. A material that contains asbestos can be expected to emit fibers during use or maintenance if the original integrity of the material has been disturbed. FRIABILITY A. NOT FRIABLE: Material that is hard and cannot be damaged by hand. An object is required to penetrate material. The material integrity has been maintained.	

		NUMERICAL VALUE: 0 B. LOW FRIABILITY: Material that is difficult yet possible to damage by hand. Material can be indented by forceful impact. If the granular, cementitious asbestos-containing material is rubbed, it leaves granules on the hand but no powder. Material integrity has been disturbed. NUMERICAL VALUE: 1 C. MODERATE FRIABILITY: Fairly easy to dislodge and crush or pulverize. Material may be removed in small or large pieces. Material is soft and can easily be indented by hand pressure. The granular, cementitious asbestos-containing material leaves a powder residue on the hands when rubbed. NUMERICAL VALUE: 2 D. HIGH FRIABILITY: The material is fluffy, spongy, or flaking and may have pieces hanging down. Easily crushed or pulverized by hand pressure. Material may disintegrate or fall apart when touched NUMERICAL VALUE: 3 FACTOR EIGHT: ASBESTOS CONTENT The percentage for all types of asbestos present should be added for the total asbestos content. The numerical value is assigned based upon the report of analysis, not on appearance of the material. With a high percentage of asbestos, there are more fibers that can be released and contaminate the building environment. Therefore, if certain areas are identical in their assessment using the other seven factors, this factor will be helpful in establishing priorities and indicating which area needs to be addressed first. This	

		factor is comprised of three levels A. TRACE AMOUNTS TO ONE PERCENT. NUMERICAL VALUE: 0 B. GREATER THAN ONE PERCENT TO FIFTY PERCENT. Ceiling and wall coatings most frequently encountered in this category are the granular, cementitious acoustical plasters. NUMERICAL VALUE: 2 C. FIFTY PERCENT TO ONE HUNDRED PERCENT. Most frequently materials containing over 50% asbestos were pipe and boiler wrapping or the fibrous, cotton candy, type sprayed-on insulation. NUMERICAL VALUE: 3 Step 2: Exposure number calculation The exposure number is derived from the factor scores by a formula. After entering the chosen factor scores on lines 1 through 8. (a) Sum factors 1 through 6 and enter opposite SUM; (b) Multiply factor 7 times factor 8, and enter opposite PRODUCT; (c) Multiply SUM times PRODUCT and enter opposite EXPOSURE NUMBER; This number represents the result of your assessment for each area of the building. The values can range from 0 to 162. The higher the numerical value, the greater the potential for fiber release and therefore the more hazardous the situation. The exposure number must now be compared to the Corrective Action Scale, which is Step 3. Step 3: Comparison of Exposure Number to Corrective Action Scale	

		Appendix B, Corrective Action Scale, presents five Priority Levels, and a range of Exposure Numbers for which that Priority Level is appropriate. Compare the Exposure Number derived in Step 2 to the Priority Levels in Appendix B. For example, an Exposure Number of 65 indicates that a Priority Level of I should be assigned. An Exposure Number of 10, however, indicates that a Priority Level of IV should be assigned. The proper response action for each Priority Level is found in Section IX of these standards.	

If a new VAC Chapter(s) is being promulgated and is not replacing an existing Chapter(s), use Table 2.

Table 2: Promulgating New VAC Chapter(s) without Repeal and Replace

New chapter-section number	New requirements	Other regulations and law that apply	Intent and likely impact of new requirements

*If the regulatory change is replacing an **emergency regulation**, and the proposed regulation is identical to the emergency regulation, complete Table 1 and/or Table 2, as described above.*

*If the regulatory change is replacing an **emergency regulation**, but changes have been made since the emergency regulation became effective, also complete Table 3 to describe the changes made since the emergency regulation.*

Table 3: Changes to the Emergency Regulation

Emergency chapter-section number	New chapter-section number, if applicable	Current emergency requirement	Change, intent, rationale, and likely impact of new or changed requirements since emergency stage