

**TENTATIVE AGENDA  
WASTE MANAGEMENT BOARD MEETING**

**Wednesday, December 16, 2009  
HOUSE ROOM C  
GENERAL ASSEMBLY BUILDING  
9<sup>TH</sup> & BROAD STREETS  
RICHMOND, VIRGINIA**

**Convene – 10:00 a.m.**

<b>I. Minutes (December 8, 2008)</b>			<b>TAB A</b>
<b>II. Regulations – Final Exempt Actions</b>			
Vegetative Waste Management and Yard Waste Composting Regulations			
9 VAC 20-101 Amendment A09w	Sabasteanski		B
Transportation of Solid and Medical Wastes on State Waters			
9 VAC 20-170 Amendment A09w	Sabasteanski		B
Solid Waste Management Regulations			
9 VAC 20-80 Amendment A09w	Sabasteanski		B
Coal Combustion Byproduct Regulations			
9 VAC 20-85 Amendment A09w	Sabasteanski		B
Hazardous Waste Management Regulations			
9 VAC 20-60 Amend to Adopt FR updates	Sabasteanski		C
<b>III. Regulations - Final</b>			
Solid Waste Management Regulations – Amendment 7 (9VAC 20-81 Adopt; 9VAC20-80 & 9VAC20-101 Repeal)	Jason Williams		D
<b>IV. Significant Noncompliance Report</b>	Justin Williams		F
<b>V. Public Forum</b>			
<b>VI. Other Business</b>			
Recycling Report	Murphy		
Division Director's Report	Golden		
Future Meetings			

ADJOURN

NOTE: The Board reserves the right to revise this agenda without notice unless prohibited by law. Revisions to the agenda include, but are not limited to, scheduling changes, additions or deletions. Questions on the latest status of the agenda should be directed to Cindy M. Berndt at (804) 698-4378.

**PUBLIC COMMENTS AT WASTE MANAGEMENT BOARD MEETINGS:** The Board encourages public participation in the performance of its duties and responsibilities. To this end, the Board has adopted public participation procedures for regulatory action and for case decisions. These procedures establish the times for the public to provide appropriate comment to the Board for its consideration.

For REGULATORY ACTIONS (adoption, amendment or repeal of regulations), public participation is governed by the Administrative Process Act and the Board's Public Participation Guidelines. Public comment is accepted during the Notice of Intended Regulatory Action phase (minimum 30-day comment period) and during the Notice of Public Comment Period on Proposed Regulatory Action (minimum 60-day comment period). Notice of these comment periods is announced in the Virginia Register, by posting to the Department of Environmental Quality and Virginia Regulatory Town Hall web sites and by mail to those on the Regulatory Development Mailing List. The comments received during the announced public comment periods are summarized for the Board and considered by the Board when making a decision on the regulatory action.

For CASE DECISIONS (issuance and amendment of permits), the Board adopts public participation procedures in the individual regulations which establish the permit programs. As a general rule, public comment is accepted on a draft

permit for a period of 30 days. If a public hearing is held, there is an additional comment period, usually 45 days, during which the public hearing is held.

In light of these established procedures, the Board accepts public comment on regulatory actions and case decisions, as well as general comments, at Board meetings in accordance with the following:

**REGULATORY ACTIONS:** Comments on regulatory actions are allowed only when the staff initially presents a regulatory action to the Board for final adoption. At that time, those persons who commented during the public comment period on the proposal are allowed up to 3 minutes to respond to the summary of the comments presented to the Board. Adoption of an emergency regulation is a final adoption for the purposes of this policy. Persons are allowed up to 3 minutes to address the Board on the emergency regulation under consideration.

**POOLING MINUTES:** Those persons who commented during the public hearing or public comment period and attend the Board meeting may pool their minutes to allow for a single presentation to the Board that does not exceed the time limitation of 3 minutes times the number of persons pooling minutes, or 15 minutes, whichever is less.

**NEW INFORMATION** will not be accepted at the meeting. The Board expects comments and information on a regulatory action or pending case decision to be submitted during the established public comment periods. However, the Board recognizes that in rare instances new information may become available after the close of the public comment period. To provide for consideration of and ensure the appropriate review of this new information, persons who commented during the prior public comment period shall submit the new information to the Department of Environmental Quality (Department) staff contact listed below at least 10 days prior to the Board meeting. The Board's decision will be based on the Department-developed official file and discussions at the Board meeting. In the case of a regulatory action, should the Board or Department decide that the new information was not reasonably available during the prior public comment period, is significant to the Board's decision and should be included in the official file, the Department may announce an additional public comment period in order for all interested persons to have an opportunity to participate.

**PUBLIC FORUM:** The Board schedules a public forum at each regular meeting to provide an opportunity for citizens to address the Board on matters other than those on the agenda, pending regulatory actions or pending case decisions. Those persons wishing to address the Board during this time should indicate their desire on the sign-in cards/sheet and limit their presentations to 3 minutes or less.

The Board reserves the right to alter the time limitations set forth in this policy without notice and to ensure comments presented at the meeting conform to this policy.

Department of Environmental Quality Staff Contact: Cindy M. Berndt, Director, Regulatory Affairs, Department of Environmental Quality, 629 East Main Street, P.O. Box 1105, Richmond, Virginia 23218, phone (804) 698-4378; fax (804) 698-4346; e-mail: [cindy.berndt@deq.virginia.gov](mailto:cindy.berndt@deq.virginia.gov).

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**Waste Management Regulations, 9VAC20-80, 9VAC20-101, and 9VAC20-170 Exempt Final Rule (Rev. A09w), Definition of Disclosure Statement; Coal Combustion Byproducts:** Chapter 27, 2009 Acts of the Assembly amended § 10.1-1400 of the Code of Virginia (Definitions, Virginia Waste Management Act) by revising the definition of “disclosure statement” to remove the requirement that social security numbers of key personnel be provided. The Waste Management Regulations affected by this action are 9VAC20-80 (Solid Waste Management Regulations), 9VAC20-101 (Vegetative Waste Management and Yard Waste Composting Regulations), and 9VAC20-170 (Transportation of Solid and Medical Wastes on State Waters).

Chapter 348, 2009 Acts of the Assembly added § 10.1-1402.02 to the Code of Virginia (Use, reuse, or reclamation of coal combustion byproduct in a flood plain). This provision provides that the board shall not exclude or exempt from the definition of solid waste or any solid waste permitting requirements the use, reuse, or reclamation of unamended coal combustion byproduct in an area designated as a 100-year flood plain. The Waste Management Regulations affected by this action are 9VAC20-80-160 (Conditional exemptions) of 9VAC20-80, and 9VAC20-85-70 (Locational restrictions) of 9VAC2-85.

§ 2.2-4006 A 4 a of the Code of Virginia allows the board to adopt the proposed final regulations without previous consideration, announcement or public participation because they are necessary to conform to Virginia statutory law or the appropriation act where no agency discretion is involved. The regulations

become final 30 days after publication in the Virginia Register. A draft Virginia Regulatory Town Hall document and a copy of the changes to the Virginia Code (HB2255 and HB1918) are also attached.

The department will request that the board adopt the amendments to the Waste Management Regulations, Revision A09w (9VAC20-80, 9VAC20-85, 9VAC20-101, and 9VAC20-170), and authorize its publication.

**Hazardous Waste Management Regulations, 9VAC20-60 Immediate Final Rule 2008-2009 (IFR2008-2009):** Each year the U. S. Environmental Protection Agency (USEPA) makes several changes to the federal rules regarding the management of hazardous waste in Title 40 of the Code of Federal Regulations. Since Virginia regulations incorporate the federal regulations, with certain exceptions, it is only necessary to change one item to bring Virginia's regulations up-to-date with the federal changes. The item that must be amended is 9VAC20-60-18, which specifies the date of the federal regulations that are incorporated into Virginia regulations. This date is most often July 1; however, each year the text is amended to change the year of the date to the current year, thus incorporating federal changes from July 1 of the previous year through June 30 of the current year. Additionally, in order for the chapter to operate properly, some additional specifications about what portions of the federal rules are not being adopted have been added to 9VAC20-60-260, 9VAC20-60-261, and 9VAC20-270.

§ 2.2-4006 A 4 (c) of the Code of Virginia allows the board to adopt the rule as a final regulations without previous consideration, announcement or public participation. The regulations would be final 30 days after publication in the *Virginia Register*. A draft Virginia Regulatory Town Hall document and a table of the amendment changes are also attached.

The department will request that the board adopt the amendment, IFR2008-2009, to the Hazardous Waste Management Regulations, 9VAC20-60, and authorize its publication.

**Virginia Solid Waste Management Regulations, Amendment 7, 9 VAC 20 – 81 – 10 et seq. - Final Regulations 2009:** Specifically the Department is recodifying the Virginia Solid Waste Management Regulation (VSWMR) 9 VAC 20-80 into a more cohesive and concise regulation. The recodified regulation will be 9 VAC 20-81. This regulation includes the incorporation of the Vegetative Waste Management and Yard Waste Composting Regulation, 9 VAC 20-101. Other substantive changes include provisions for a pre-approved alternate liner design that does not require a variance submission; a pre-approved alternate cover design without a demonstration; consolidation of related topics; consolidation of exemptions and exclusions into one section; and the addition of standards for Centralized Waste Treatment facilities. Substantive changes since the proposed stage include the addition of three definitions based on public comment. The three definitions are “land clearing activities”, “land clearing debris”, and “landfill mining”. One other substantive change was the removal of the requirement in 9 VAC 20-81-570 A 10 that would have resulted in permit revocation if the facility was not constructed within five years of obtaining the permit. Also revisions have been made to conform to existing statutes; the unauthorized waste control program is moved to the operation section of each type of facility; citation to the federal regulations is made where feasible; composting and other types of facilities that are higher in the waste hierarchy will have less burdensome standards; there is a change from full permit to permit by rule status for composting facilities; and the operations manual has been removed from the permit.

The Department will request that the Waste Management Board approve the amendment as a final regulation at 9 VAC 20-81 and repeal the existing Solid Waste Management Regulation at 9 VAC 20-80 and the Vegetative Waste Management And Yard Waste Composting Regulation at 9 VAC 20-101.

*Please summarize all comments received during the public comment period following the publication of the proposed stage, and provide the agency response. If no comment was received, please so indicate.*

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Jenny Johnson, Joyce Engineering, Inc. (JEI); Jeff Crate, Draper Aden Associates (DAA); Rip Ford, Draper Aden Associates (DAA (Rip Ford)); Terri Phillips, Golder Associates, Inc. (Golder); Mathew P. Appelget, The East End Landfill, LLC (TEEL); Gregory Cox, Mead WestVaco; Chip Hall, Natural Organic Process Enterprises, LLC (NOPE); Reynolds Brown, Waste Management of Virginia (Waste Management); Jocelyn Tice, Green Duck Compostables (Green Duck); Greg Evanylo; Jim Sharp, Campaign Virginia; Craig Coker, Coker Composting and Consulting; Bob Broom, McGill; Doug Decesare, HDR, Inc. (HDR); Lyn Richardson, Henrico County; Fouad Arbid, Solid Waste Association of North America, Virginia Chapter (SWANA)

Citation	Commenter	Comment	Agency Response
General	Waste Management	References to the open burning regulations are incorrect and need to be updated to reflect the new regulations effective in 2008. DEQ should also consider removing the specific open burning exemptions, as they appear to be verbatim to the open burning regulations. It is recommended DEQ simply reference those regulations for these exemptions.	The final regulation has been revised to reference the open burning regulation.
General	Waste Management	DEQ continues to specify, "as approved by the director" for several routine approval processes. The TAC had recommended that where appropriate, the term "director" be replaced with a more generic term such as "permit" or "the Agency" or "the DEQ".	The final regulation has been revised to replace approvals by the director with department approval where possible.
General	Waste Management	The term "information" is used in several of the record keeping sections of the regulation. To clarify this term should be replaced by the term "records".	The final regulation has been revised to replace "information" with "records" where appropriate.
General	Waste Management	The proposed regulation includes several regulatory standards that include the terms "sufficient" and "appropriate". These are difficult standards to achieve for both the applicant and DEQ when reviewing applications. It is requested DEQ review these standards to determine if "sufficient" and/or "appropriate" can be replaced with performance-based standards.	The final regulation has been revised to incorporate performance standards and remove "sufficient" or "appropriate" measures where possible.
General	Waste Management	When using the term "explain" related to applicant submittals it is suggested "an explanation of" be substituted in these standards.	The final regulation has been revised to incorporate comment.
General	Waste Management	The terms "should" and "could" are used numerous times throughout the regulations. It is unclear why these statements are included as regulation if they are optional activities. In accordance with DEQ's goals for this amendment the regulations should not be more prescriptive than necessary.	The final regulation has been revised to remove "should" or "could" wherever feasible in favor of a measurable performance based standard or removal or optional standards.
General	Green Duck	We currently have compostable packaging available and soon we will be able to compost pre and post-consumer food waste in Virginia...it is coming, it's just a matter of time...other States are doing it and finding it very successful.	No revision necessary. The final regulation and those currently effective in Virginia have never prohibited the composting of pre or

			post consumer food waste.
General	Green Duck	We've been told by our National and State government to become more environmentally savvy related to business, we've been told to start these green businesses. The DEQ needs to be supportive in making these efforts more easily attainable...loosening up these regulations can do that.	No revision necessary. The final regulation reduces the cost and difficulty of permitting a composting operation. It also increases the number of exempted composting activities and reduces the testing requirements for permitted composting operations.
General	NOPE	Although the VA DEQ has advised us there are no permit requirements regarding transportation, there are requirements for transferring materials that <u>require large capital investment in fixed facilities</u> and the proposed changes have not considered the unique status of Food Waste and its potential as feed stocks that differentiate for its current MSW classification.	No revision necessary. The final regulation does not include requirements for the transportation of solid waste. The regulation does continue to require design, siting, construction, permitting, operation, and closure standards for transfer stations. These requirements are not specific to MSW, but apply to all solid waste, unless exempted.
General	NOPE	We propose that <u>all</u> organic food residuals be recognized and classified separately from landfill bound MSW, by additional <u>expansion of the permit by rule method</u> to allow new and existing technologies in organic food waste handling to be used and developed to address the <u>needed efficiencies</u> in small batch collection and consolidation. Small energy efficient intercity collection trucks mated with larger line hauling vehicles is one example of existing methods that are currently and indefinitely not permitted by past and the proposed amendments to the regulations.	No revision necessary. The final regulation currently extends the permit by rule method to all composting facilities, unless exempted from permitting.
General	NOPE	We believe that while the amendment changes currently presented address <u>some reduction</u> of regulatory cost regarding small farm base composting. We feel <u>that opening the feed stock limitations</u> will help farmers realize the potential of growing compost as a new cash crop and benefiting the expansion of organic fertilizer use over potentially run off effect of chemicals in farm production	The final regulation has been revised to expand the feedstocks for exempt agricultural composting operations. See 9VAC20-81-397.

General	NOPE	Our company and staff support DEQ's efforts to protect Virginia's environment and understand that anti pollution measures are necessary to minimize risk but the department is also needing to recognize that <u>playing it safe and waiting to see what happens elsewhere</u> is not allowing Virginia and its commercial waste industries to advance and provide leadership in these changing times.	No regulatory revision is suggested in this comment.
General	NOPE	The proper recycling of organic food residuals is something we can do <u>Right Now</u> . Let's get <u>started Now</u> . The development of Food Waste management can have an <u>immediate effect</u> . We realize that we are fighting a uphill battle but firmly believe that recycling organics can be made economically viable by educating and proving to stakeholders that the environmental benefits (Methane reduction, resource conservation, fertilizer runoff reduction, and expansion of healthier food production) are worthy of development	The final regulation includes increased exemptions for the composting of food waste. In addition permitting and operation expenses for non-exempt facilities have been reduced.
9VAC20-81-10	Golder	"Capacity" means the maximum <u>permitted</u> volume of solid waste, inclusive of daily and intermediate cover, that can be disposed <u>of</u> in a landfill. This volume is measured in cubic yards.	Final regulation was revised to incorporate suggested text.
9VAC20-81-10	Golder	"Clean wood" means solid waste consisting of untreated wood pieces and particles that do not contain paint, laminate, bonding agents, or chemical preservatives, <u>or are</u> otherwise unadulterated.	Final regulation was revised to incorporate suggested text.
9VAC20-81-10	Golder	"Closure" means that point in time when a permitted landfill <u>has been is filled capped and</u> , certified as <u>properly closed final covered</u> by a professional engineer, inspected <u>by the department</u> , and closure notification is performed by the department in accordance with 9VAC20-81-160 D.	Final regulation was revised to incorporate suggested text.
9VAC20-81-10	JEI / Golder	Construction - add "earthwork" to excluded activities (2nd sentence), as facilities may use future cells for borrow soils for operations.	The final regulation was revised in response to this comment to include excavation for borrow purposes as an excluded activity.
9VAC20-81-10	JEI	Construction/demolition/debris landfill" or "CDD landfill" - revise definition to include "split tires, and white goods" to be consistent with 9VAC20-81-110.  Change: "Construction/demolition/debris landfill" or "CDD landfill" means a land burial	Final regulation was revised to incorporate suggested text.

		facility engineered, constructed and operated to contain and isolate construction waste, demolition waste, debris waste, split tires, and white goods or combinations of the above solid wastes.	
9VAC20-81-10	JEI	Revise 1st sentence to read as follows: "Disposal unit boundary" or "DUB" means the vertical plane located at the edge of the waste disposal unit.	Final regulation was revised to incorporate suggested text.
9VAC20-81-10	JEI	The term "institutional waste" is used in the definition for "municipal solid waste."  Re-insert "Institutional Waste" into definitions or revise the definition of "Municipal Solid Waste" so that "institutional waste" is not part of its definition.	Final regulation was revised to include definition of institutional waste.
9VAC20-81-10	JEI	"Interim cover systems" is a new definition. There is no mention of interim covers in 9VAC20-81-160.	Interim covers are discussed in the Research, Design, and Demonstration Plan portion of the final regulation (9VAC20-81-600.F.7)
9VAC20-81-10	Golder	"Daily maximum disposal limit" means the amount of solid waste that is permitted to be disposed <u>of</u> at the facility and shall be computed on the amount of waste disposed <u>of</u> during any <del>calendar</del> or <u>typical</u> operating day, <del>which ever is less.</del> <i>[Comment: Change is proposed to account for non-typical days such as holidays and storm events.]</i>	Comment incorporated in part. The final regulation has been revised to clarify operating day and the word "maximum" removed.
9VAC20-81-10	Waste Management / DAA / SWANA	Please review the definition for Daily Maximum Disposal Limit. The Waste Management Act uses the term "daily disposal limit". If these terms reference the same limit they should be consistent. In addition, it is requested DEQ review the calendar day versus operating day in this definition to ensure the proper timeframe is used for specific operations.	Comment incorporated. The definition has been revised to remove calendar day from the definition.
9VAC20-81-10	Golder	<u>"Expansion" means a horizontal expansion of the waste management boundary, an increase in permitted capacity, or a lateral or vertical expansion of the disposal unit boundary. If a facility's permit was issued prior to the establishment of the Part A process, a lateral expansion is a horizontal expansion of the disposal unit boundary. [Comment: Addition is proposed to more clearly distinguish between the terms "Expansion" and "Lateral Expansion" (see Lateral Expansion definition below.)]</u>	Comment incorporated in part. In accordance with the Waste Management Act (WMA) an expansion and increase in capacity are not synonymous. Not all requirements for expansions apply to both expansions and increases in capacity. This supports the two terms as separate. This was clarified in a May 27, 2009 guidance memo.

9VAC20-81-10	Golder	<p>"Interim cover systems" are temporary cover systems applied to a landfill area when landfilling operations will be temporarily suspended for an extended period (typically, longer than one year). The interim cover system may be removed and landfilling operations <u>may</u> resume, or final cover <u>may be</u> installed.</p>	<p>The final regulation was not revised in response to this comment. Interim cover is not a final action; therefore the facility must at some point remove, resume operations, or install final cover. The final regulation has been revised to clarify the action occurs at the end of the interim period for which interim cover was applied.</p>
9VAC20-81-10	Golder	<p>"Lateral expansion" means a horizontal expansion of the <del>disposal unit waste management</del> boundary as identified in the Part A application. <del>If a facility's permit was issued prior to the establishment of the Part A process, a lateral expansion is a horizontal expansion of the disposal unit boundary.</del></p>	<p>Comment incorporated in part. The final regulation has been revised to clarify the term "expansion". The term "lateral expansion" has been replaced by "expansion" to be consistent with the WMA.</p>
9VAC20-81-10	Golder	<p>"Monitoring wells" means a well point below the ground surface for the purpose of obtaining periodic water samples from groundwater for quantitative and qualitative analysis.</p>	<p>Final regulation was revised to incorporate suggested text.</p>
9VAC20-81-10	Golder	<p>"New solid waste <del>disposal management</del> facility" means a <u>solid waste disposal</u> facility or a portion of <u>such</u> a facility that was not included in a previous determination of site suitability (Part A approval).</p>	<p>The final regulation has not been revised in response to this comment. Although not required, facilities other than disposal facilities are eligible to apply for a full solid waste permit.</p>
9VAC20-81-10	Golder	<p>"Responsible official" means one of the following:</p> <ol style="list-style-type: none"> <li>1. For a business entity, such as a corporation, association, limited liability company, or cooperative: a duly authorized representative of such business entity if the representative is responsible for the overall operation of one or more operating facilities applying for or subject to a permit. The authority to sign documents must be assigned or delegated to such representative in accordance with procedures of the business entity;</li> <li>2. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;</li> </ol> <p style="text-align: center;">or</p>	<p>Final regulation was revised to incorporate suggested text.</p>

		3. For a municipality, state, federal, or other public agency: a duly authorized representative of <u>the</u> locality if the representative is responsible for the overall operation of one or more operating facilities applying for or subject to a permit. The authority to sign documents must be assigned or delegated to such representative in accordance with procedures of the locality.	
9VAC20-81-10	Golder	"Scrap metal" means <del>bits and pieces of metal parts such as bars, rods, wire, empty containers, or metal pieces that may be combined together with bolts or soldering that</del> are discarded material and can be used, reused, or reclaimed.	Final regulation was revised to incorporate suggested text.
9VAC20-81-10	Golder	"Unit" means a discrete area of land used for the <u>disposal</u> <del>management</del> of solid waste.	Final regulation was revised to incorporate suggested text.
9VAC20-81-10	Golder	"Vermicomposting" means the controlled and managed process by which live worms convert organic residues into <del>dark</del> fertile <u>granular</u> excrement.	Final regulation was revised to incorporate suggested text.
9VAC20-81-10	Waste Management	It is recommended that the Department add definitions for "land clearing activities" and "land clearing debris".	The final regulation was revised in response to this comment and the requested definitions were added to the final regulation.
9VAC20-81-10	Henrico County	<p>Section 9VAC20-81-10 includes definitions for Disposal unit boundary, Facility boundary, and Waste management boundary. I am particularly concerned with the definition for "Disposal Unit Boundary" (DUB).</p> <p>First of all, DUB is defined as the vertical plane located at the edge of the <i>disposal unit</i>; however "disposal unit" is not defined. This becomes a very important definition with regard to groundwater monitoring requirements, as the DUB is the point at which we are evaluating a landfill's impact on groundwater. Therefore, this needs clarification.</p> <p>Secondly, I believe the use the term "plane" is inaccurate. I suggest reference to a vertical <u>surface</u>, rather than a vertical <u>plane</u>.</p> <p>Third, as this term is used in the groundwater monitoring program requirements, I believe what you are referring to is equivalent to the 40CFR258 term "point-of-compliance". It has been my experience that the "point-of-compliance" occurs at a location hydraulically downgradient and is inclusive of leachate storage and ancillary features such as drainage controls.</p>	<p>The final regulation was not revised to incorporate this comment. The definition of "unit" was clarified in response to another public comment that resolves this comment.</p> <p>The final regulation was not revised to change "plane" to "surface". "Surface" refers to a physical object, where "plane" more accurately describes a geometric axis.</p> <p>Comment not incorporated. 40</p>

			CFR 258.51.(a).(2) requires the downgradient wells to be installed at the 'WMUB' or the relevant point of compliance, as long as that point is no further than 150 meters from the 'WMUB'. 40 CFR 258.2 defines 'WMUB'. The WMUB and point of compliance may be two different locations. Therefore; the department has defined disposal unit boundary.
9VAC20-81-10	DAA / SWANA	The inclusion of the interim cover system is helpful. However, its use in the regulations was not found. Where is this referenced and what criteria will be applied to by DEQ to approve this system?	No revision necessary. The final regulation uses the term interim cover in the Research Development and Demonstration section. (9VAC20-81-600.F.7)
9VAC20-81-10	Waste Management	Please review the definition for "lateral expansion". Both the proposed regulations and the Waste Management Act use the term "expansion". If these terms are meant to describe the same topic please revise the defined term to be consistent with other uses. It was clear during the presentation to the TAC that a vertical increase in airspace was not considered an expansion. Likewise, construction of new landfill cells provided they did not increase the permitted "Waste Management Boundary".	Comment incorporated. The term has been revised to revise the defined term from "lateral expansion" to "expansion".
9VAC20-81-10	DAA / SWANA	What is the expansion of a disposal unit boundary called? The contiguous expansion of a landfill liner system has informally been called a lateral expansion. This will no longer be applicable if the DUB is within the Part A area and the limits of the WM	No revision necessary. The final regulation does not include a term for the expansion of the disposal unit boundary (DUB). In accordance with the final regulation an expansion of the WMUB is an "expansion". Movement of the DUB within the WMUB is not considered an "expansion", but is an increase in capacity.

9VAC20-81-10	DAA / SWANA	Add definition of "property boundary"	The final regulation was not revised in response to this comment. The Technical Advisory Committee did not believe this definition was required as the generally accepted definition is understood.
9VAC-20-81-10	DAA / SWANA	Add definition of "Disposal Unit". Suggest: Area of land used for the disposal of solid waste.	The final regulation has been revised to clarify the definition of unit.
9VAC20-81-25, 30,35, and 40	Golder	<u>Comment regarding duplicative / confusing titles of 9VAC20-81-25 Purpose of Chapter, 9VAC20-81-30 Purpose of Chapter, 9VAC20-81-35 Applicability of Chapter, and 9VAC20-81-40 Administration of Chapter. Please clarify.</u>	Final regulation was revised to clarify section titles.
9VAC20-81-35.B.3.c	Golder	B.3.c. The facilities subject to the restrictions in this subsection are listed in Table 2.1. The closure dates <del>have already been were</del> established in: Final Prioritization and Closure Schedule for HB 1205 Disposal Areas (DEQ, September 2001). The publication of <del>these</del> tables is for the convenience of the regulated community and does not change established dates. Any facility, including, but not limited to those listed in Table 2.1, must cease operation if that facility meets any of the open dump criteria listed in 9VAC20-81-45 A 1.	Final regulation was revised to incorporate suggested text.
9VAC20-81-35.B.3.d	Golder	B.3.d. Those facilities assigned a closure date in accordance with § 10.1-1413.2 of the Code of Virginia shall designate on a map, plat, diagram, or other engineered drawing, areas in which waste will be disposed <del>of</del> in accordance with Table 2.1 until the latest cessation of waste acceptance date as listed in Table 2.1 is achieved. This map or plat shall be placed in the operating record and a copy shall be submitted upon request to the department in order to track the progress of closure of these facilities. If the facility already has provided this information under 9VAC20-81-160, then the facility may refer to that information.	Final regulation was revised to incorporate suggested text.
9VAC20-81-35-C.4	Waste Management	It appears the text "wastes containing free liquids for disposal" does not appear to belong in this sentence. Please review.	Final regulation was revised to incorporate suggested revision.
9VAC20-81-45.B.2.e	Golder	In addition to those exceptions found in 40 CFR 257.1(c), the open dump criteria does not apply to sites actively enrolled in the Voluntary Remediation Program (9VAC20-160) or sites that have successfully completed the Voluntary Remediation Program in accordance with all conditions and requirements of their Certificates of Satisfactory Completion.	Final regulation was revised to incorporate suggested text.

9VAC20-81-45.C.2.c	Golder	Removal of the wastes from the site and disposal at a facility permitted to accept the wastes <u>is required</u> . The department may require submission of evidence of proper management of the removed waste and may require evidence, including confirmatory sampling, of the removal of solid waste and any hazardous constituents. A site inspection will be performed by the department to confirm the removal of waste materials.	Final regulation was revised to incorporate suggested text.
9 VAC 20-81-95	DAA / SWANA	A general comment relative to exemptions – when a waste disposal activity or waste handling activity is considered acceptable by DEQ until it creates an open dump, nuisance or hazard, it places the burden of control on the local government and creates a situation in which a potential problem requiring remediation could occur. While regulations should not be burdensome and should not limit good ideas, it should also support local government control. For those activities that could impact adjoining property owners, notification to DEQ of the activity and local government approval should be required. Most of the exemptions would not impact adjoining property owners but some such as the application of gypsum could.	The final regulation was not revised in response to this comment. The department must distinguish which activities are and are not subject to regulation and permitting. It is not possible for the department to permit exempted activities.
9 VAC 20-81-95.C.	DAA / SWANA	Note that 9 VAC 20-81-95.C.7, should probably be 9 VAC 20-81-95.D.	The final regulation was not revised in response to this comment. Items listed in 9VAC20-81-95.C.7 are exempt and therefore consistent with 9VAC20-81-95.C. Items listed in 9VAC20-81-95.D are conditionally exempt materials.
9VAC20-81-95.C.6	Golder	<del>Materials that are B-beneficially used as determined by the department under this subsection. The department may consider other waste materials and uses to be beneficial. The generator or proposed user of such materials may request that the department make a case-specific determination that the solid waste may be beneficially used in a manufacturing process to make a product or as an effective substitute for a commercial product in accordance with the provisions of 9VAC20-81-97.</del>	Final regulation was revised to incorporate suggested text.
9VAC20-81-95.C.7.b	Coker Composting and Consulting	Clean wood combustion residues (wood ash) should be allowed as an absorbent for liquid wastes brought to a composting facility; it should also be allowed for use in a composting facility as a pH adjustment amendment.	The final regulation has been revised to expand the existing exemptions for clean wood combustion residues to include those used as an

			absorbent or pH adjustment in compost
9 VAC 20-81-95.C.7.o	DAA / SWANA	<p>Without requiring some type of DEQ regulatory approval for this disposal prior to initiating the activity, the responsibility will fall to local governments to add some type of control mechanism to their ordinances. This will add another activity for local governments to police. While using this material for soil augmentation is appropriate, placing the burden on local government to control does not. DEQ should require notification, local government approval, and some type of work plan to be submitted to the regional office for general approval. It might also be appropriate for the owner of the land to provide DEQ with an annual report. Dust and runoff could be issues.</p> <p>What were the application rates based on?</p>	<p>The final regulation was not revised in response to this comment. The department must distinguish which activities are and are not subject to regulation and permitting. It is not possible for the department to permit exempted activities.</p> <p>The application rates were using current rates effective in Georgia. These were reviewed and supported by Dept. of Crop &amp; Soil Environmental Sciences of Virginia Tech. The TAC also approved the application rates.</p>
9 VAC 20-81-95.D.4-9	DAA / SWANA	<p>9 VAC 20-81-95.4 indicates that the composting of animal carcasses onsite at the farm of generation is conditionally exempt provided that no open dump, hazard or public nuisance is created. There are no restrictions placed on type of animals, quantity, methodology, or health and safety. There is no requirement for meeting local ordinances. Depending on the types of animals and cause of death, this could create or be perceived to create a potential and significant health hazard. This activity would seem to be very similar to Category IV feedstocks under 9VAC20-81-310.A.3 and should be treated as such.</p>	<p>This conditional exemption is only for application of the solid waste management regulations. It does not grant exemptions from either local requirements or other state agencies' regulations. Additionally, DEQ has provided guidance on best management practices for on-site composting of animal carcasses.</p>
9VAC20-81-95.D.7	Coker Composting and Consulting	<p>On-site containerized composting of post-consumer food scrapes should be conditionally exempt from this chapter provided the composting operation can demonstrate compliance with the Process To Further Reduce Pathogens (PFRP) and Vector Attraction Reduction (VAR) requirements of 40CFR Part 503.</p>	<p>The final regulation provides a new exemption for pre-consumer food waste generated and composted on-site. However, this exemption does not include an exemption for post-consumer food waste due to pathogen potential. This waste stream</p>

			requires specific analysis, as the comment confirms, and therefore should be managed at a permitted composting facility.
9VAC20-81-95.D.10	Golder	D.10. Management of solid waste in appropriate containers at the site of its generation, provided that: a. Putrescible waste is not stored more than seven days between time of collection and time of removal for disposal; b. <del>All in</del> Nonputrescible wastes that are not stored more than 90 days between time of collection and time of removal for proper management; and c. Treatment of waste is conducted in accordance with the following:	Final regulation was revised to incorporate suggested text.
9 VAC 20-81-95.D.10.c	DAA / SWANA	9 VAC 20-81-95.D.10.c adds the treatment of waste provided that it is completed in accordance with a waste analysis plan to exemptions. While it is surmised that this is included relative to a very specific situation, it is unclear when this may be used and relative to what types of wastes. It would seem that additional specifics should be added to allow the regulated community a better understanding of its purpose	The final regulation closely mirrors similar allowances in 40 CFR 261 and applies to similar non-hazardous waste streams.
9VAC20-81-100.C	Golder	C. Hazardous wastes shall not be disposed <u>of</u> or managed in solid waste disposal facilities subject to this regulation unless specifically authorized by the facility permit or the director.	Final regulation was revised to incorporate suggested text.
9VAC20-81-100.E.1	Golder	E. Control program for unauthorized waste. 1. All landfills are required to implement a control program for unauthorized waste in accordance with the provisions of this section. A written description of the program will be placed in the operating record. Additional provisions for sanitary landfills required in subdivision <u>5</u> of this subsection are required to be placed in the landfill's operating record. The owner or operator shall institute a control program (including measures such as signs at all maintained access points indicating hours of operation and the types of solid waste accepted and not accepted, monitoring,	Final regulation was revised to incorporate suggested text.

		<p>alternate collection programs, passage of local laws, etc.) to assure that only solid waste authorized by the department to be treated, disposed of, or transferred at the landfill is being treated, disposed of, or transferred at that landfill. The owner or operator must develop and implement a program to teach the landfill's staff to recognize, remove, and report receipt of solid waste not authorized by the department to be treated, disposed of, or transferred at the landfill</p>	
9VAC20-81-100.E.5	Golder	<p>The owner or operator of all landfills (other than captive industrial landfills) shall implement an inspection program to be conducted by landfill personnel to detect and prevent disposal of those wastes prohibited in 9VAC20-81-40 and 9VAC20-81-140. In addition to implementing the requirements of the control program for unauthorized waste in subdivision <u>E</u> of this subsection, the program shall include, at a minimum</p>	<p>Final regulation was revised to incorporate suggested text.</p>
9VAC20-81-100.E.5.b.	JEI	<p>Clarify that 10% of incoming loads originate from outside of Virginia. Revise last sentence to read: "... The facility shall inspect a minimum of 10% of the incoming loads that originate from outside of Virginia;"</p>	<p>Comment not incorporated. The 10% included in the final regulation only applies to incoming waste from jurisdictions outside VA whose regulatory structure allows for the disposal or incineration of wastes as municipal solid waste that Virginia's laws and regulations prohibit or restrict.</p>
9VAC20-81-120.A	Golder	<p>A. Floodplains. No new landfill shall be sited in a 100-year floodplain. [Comment and recommendation: This siting prohibition was intended by the legislature to be applicable to new sanitary landfills (Code of Virginia §10.1-1408.4.B.1), not CDD and industrial landfills. We recommend limiting this prohibition to new sanitary landfills and expansions of sanitary landfills, and to allow engineering controls to be used to site CDD and industrial landfills in floodplains where appropriate (using the former regulatory language)].</p>	<p>The commenter's requested change has not been incorporated. The TAC reviewed the new requirement for CDD and industrials and agreed this revision was necessary to ensure consistency with current requirements for both industrial and sanitary landfills.</p>

9VAC20-81-120.B	Golder	Stable areas. New landfills shall be sited in geologically stable areas where adequate foundation support for the structural components of the landfill exists. At a minimum, <del>the following</del> factors to be considered when determining stable areas shall include:	Final regulation was revised to incorporate suggested text.
9VAC20-81-120.C.1.d	DAA / SWANA	The original 200' was adequate for protection for CDD landfills and it is requested that the 200' restriction be reinstated.	The Final regulation extended the 200' restriction to 500' for CDD landfills to make those siting requirements consistent with current industrial and sanitary restrictions.
9VAC20-81-120.C.3	Golder	<p>a. No new sanitary <del>area</del> landfill shall be constructed:</p> <p>(1) Within a one mile <del>upgradient</del> of any existing surface or groundwater public water supply intake or reservoir;</p> <p><i>[Comment: Change is proposed for consistency with Code of Virginia §10.1-1408.4.B.3, which was modified by the legislature to include a 1-mile siting prohibition from public water supply intakes or reservoirs in exchange for reducing the siting restriction from 5 miles to 3 miles.]</i></p>	Comment not incorporated. The final regulation include the term "upgradient" to clarify the department's understanding of 10.1-1408.4.B.3 of the Waste Management Act. This revision ensures consistent application of the restriction.
9VAC20-81-120 C.3.a.	Waste Management	Subparts (1) and (2) are over restrictive and should be modified. What is being proposed here in concept is consistent with other states; however, we suggest limiting the siting to a "5 year delineated public supply wellhead protection area" and allow a demonstration that the geology is protective of the water supply. If the water supply is using a deep aquifer and the proposed unit is underlain by a shallow formation with no hydrogeologic connection to the deep, then the restriction should not apply.	The restrictions included in the final regulation are required by the Virginia Waste Management Act (10.1-1408.4.B.3). To clarify there are provisions included in the Waste Management Act that allow a sanitary landfill to be located closer than 3 miles to a water supply, but require additional qualifications.
9VAC20-81-120c.3.a.(1) and (2)	HDR	initially appear to be contradictory	Comment not incorporated. The two citations do not appear to contradict each other.
9VAC20-81-120.C.3.b.(1)	Campaign VA	I also stated in the question and answer session that changing the solid waste regulations as is currently being done to allow the Director discretionary authority to site a landfill within 200 feet of a fault is something we also find objectionable especially in light of this permit decision	The final regulation did not revise the wording referenced in this comment. The text referenced in this comment has been included in the regulations since March 15, 1993. This

			text was taken directly from 40CFR258.13.
9VAC20-81-120.E.2	JEI	<p>The term "facilities" is vague. We recommend specifying CDD and industrial landfills as the facilities referenced herein.</p> <p>Proposed: New CDD or industrial landfills and lateral expansions of existing CDD and industrial landfills...</p>	Final regulation was revised to incorporate suggested text.
9VAC20-81-120 F	Waste Management	Limiting Site Characteristics section needs to either be stricken or clarified to explain that where these conditions exist an applicant will need to identify them and explain what steps will be taken to assure compliance with the provisions of the rules. As written, it is editorial in nature, provides no clear guidance to a permittee or the agency, and could be misinterpreted as to its effect.	The final regulation has been revised to incorporate this comment.
9VAC20-81-120 G	Waste Management	The underlined text should be added to the proposed language that reads "Specific site conditions, or technical approaches, not specifically identified in these rules, may be considered..." This will provide broad opportunity to introduce or propose approaches that are not presently considered or included in the rules, which are sound, and will provide the agency a mechanism to consider and approve them.	Comment not incorporated. Other technical approaches may contradict those specified in the regulation. As currently written the final regulation requires a facility to explain what steps will be taken to address limiting site conditions. This wording allows many technologies, unless specified elsewhere in the regulation.
9VAC20-81-130.A	DAA / SWANA	See previous comment on definition of daily maximum disposal limit.	Comment is addressed above.
9VAC20-81-130.H	Golder	<p>H. Surface water runoff. Facilities shall be designed to provide and maintain:</p> <ol style="list-style-type: none"> <li>1. A run-on control system to prevent flow onto the active portion of the landfill during the peak discharge from a 24-hour, 25-year storm;</li> <li>2. A run-off control system from the active portion of the landfill to collect and control at least the water volume resulting from a 24-hour, 25-year storm. Run-off from the active portion of the landfill unit shall be handled in a manner that will not cause the discharge of: <ol style="list-style-type: none"> <li>a. Pollutants into waters of the United States, including wetlands, that violates any</li> </ol> </li> </ol>	Comment not incorporated. This requirement was clarified to ensure the structures installed pursuant to this chapter are maintained in working order.

		<p>requirements of the Clean Water Act, including, but not limited to, the Virginia Pollutant Discharge Elimination System (VPDES) requirements; and</p> <p>b. A nonpoint source of pollution to waters of the United States, including wetlands, that violates any requirement of an areawide or statewide water quality management plan that has been approved under § 208 or 319 of the Clean Water Act, as amended; and</p> <p>3. Drainage structures <del>shall be installed and continuously maintained</del> to prevent ponding and erosion, and to minimize infiltration of water into solid waste cells.</p>	
9VAC20-81-130.I.	JEI	Limits of landfill is vague. Revise to read: "A fire break of 50 feet shall be designed between the limits of waste and all tree lines"	Final regulation was revised to incorporate suggested text.
9VAC20-81-130.J.1.a.(2)	HDR	Refers to 'compacted clay'. Could that term be replaced with compacted natural soil; referencing clay can be too restrictive b/c some silty soils can meet the permeability requirement.	The final regulation has been revised to place "compacted clay" with "compacted soil" to be consistent with existing regulation.
9VAC20-81-130.J.1.b.(3)	HDR	Refers to a geocomposite clay liner (GCL). Normally we refer to it as geosynthetic clay liner; geocomposites are typically geonets with geotextiles on both sides. Could the reference to geocomposite be confusing to some?	The final regulation has been revised to replace geocomposite with geosynthetic to avoid confusion.
9VAC20-81-130.J.2.b(3)	JEI	Base, as written, is not defined. Replace "base" with "surface". Revise to read: "The surface under the liner....."	Final regulation was revised to incorporate suggested text.
9VAC20-81-130.J.2.b.(3)	JEI	Limits of additional testing is unclear. Revise to read: "... a minimum of one additional laboratory permeability test shall be performed on each acre of non-conforming constructed liner"	The final regulation was not revised. It was not possible to locate text quoted within the citation provided.
9VAC20-81-130 J.2.e.	Waste Management	A provision similar to this double-liner exemption for groundwater monitoring should be included in 9VAC20-81-130 J.1. for sanitary landfills to allow double-liners where site conditions make fulfilling the narrow groundwater monitoring requirement difficult or impractical.	The final regulation has not been revised. The requirements of 40CFR258 prevent extending this allowance to sanitary landfills.
9VAC20-81-130.Q.3	Golder	Certification. Once construction is complete, the owner or operator <del>shall</del> has submitted to the department by certified mail or other equivalent method with a return receipt or hand delivery a certification signed by the CQA officer that the approved CQA plan has been successfully carried out and that the unit meets the requirements of this section. Documentation supporting the CQA officer's	Final regulation was revised to incorporate suggested text.

		certification shall be submitted to the department upon request. An additional professional engineer's certification is required under the provisions of 9VAC20-81-490 A. Wastes shall not be accepted until the facility receives a Certificate to Operate (CTO) per 9VAC20-81-490 A.	
9 VAC 20-81-140	DAA / SWANA	Moving the operations manual out of the permit is a very good idea and allows flexibility.	No change requested.
9VAC20-81-140.A.4	Golder	<p>4. Open burning at active landfills.</p> <p>a. Owners or operators shall ensure that the units do not violate any applicable requirements developed by the State Air Pollution Control Board or promulgated by the EPA administrator pursuant to § 110 of the Clean Air Act, as amended (42 USC §§ 7401 to 7671q).</p> <p>b. Open burning of solid waste, except for infrequent burning of agricultural wastes, silvicultural wastes, land-clearing debris, diseased trees, or debris from emergency cleanup operations is prohibited. There shall be no open burning permitted on areas where solid waste has been disposed <u>of</u> or is being used for active disposal.</p> <p>c. The owner or operator shall be responsible for extinguishing any fires that may occur at the facility. A fire control plan will be developed that outlines the response of facility personnel to fires. The fire control plan will be provided as an attachment to the emergency contingency plan required under the provisions of 9VAC20-81-485. The fire control plan will be available for review upon request by the public. <del>There shall be no open burning permitted on areas where solid waste has been disposed or is being used for active disposal.</del></p>	Final regulation was revised to incorporate the addition of "of" as requested. However, the last sentence was not stricken. This section is specific to active landfills and does not include those closed or undergoing post-closure care.
9 VAC 20-81-140.A.5	JEI	Delete the word, ensure, and replace with proposed text.  Except as provided in 9 VAC 20-81-130 K, owners or operators shall implement a gas management plan in accordance with 9 VAC 20-81-200 <del>that will ensure</del> to control landfill gas such that:	Final regulation was revised to incorporate suggested text.

<p>9VAC 20-81-140.A.16</p>	<p>DAA / SWANA</p>	<p>Comment: Self-inspection of leachate collection systems is not adequately defined. The periodicity of once-per-month inspection is appropriate for cursory efforts. However as a critical operational component of overall landfill performance, a more defined and rigorous inspection program should be conducted, including leachate collection and conveyance line inspections, pump performance, etc. Change: .....the following aspects of the facility shall be visually inspected on a monthly basis: ..... An inspection of leachate collection systems shall be conducted on a bi-annual basis to include camera inspection, and cleaning of collection and conveyance lines as needed.</p>	<p>The final regulation was not revised in response to the comment. The suggested text would increase regulatory restriction and increase the facility's cost without consideration of site specific conditions. It may be possible to inspect leachate lines and other conveyances without the aide of a camera. The current text allows the facility to develop a specific inspection plan unique to their facility's design and needs.</p>
<p>9VAC20-81-140.A.16</p>	<p>Mead WestVaco</p>	<p>Monthly inspections of the groundwater monitoring system (wells) are not needed as the wells are typically only subject to gradual changes. The locations of these wells may be widespread for some facilities, and this requirement creates an unnecessary burden. A minimum frequency of semiannual would be more reasonable for these inspections.</p>	<p>The final regulation has been revised to allow inspections on a quarterly or semiannual basis consistent with the facility's groundwater monitoring frequency.</p>
<p>9VAC20-81-140B.4.a   / 9VAC20-81-210.D.3</p>	<p>Waste Management / HDR</p>	<p>Free Liquids. This section restricts leachate recirculation to landfills underlain by liner systems constructed in accordance with 9VAC0-81-130J.1.a Subtitle D composite liner. The regulations have been modified to include an alternate composite liner system employing an FML and a geocomposite clay liner that requires no liner demonstration and is considered an approved liner system. Leachate recirculation should be permitted on both approved liner systems without performing a specific demonstration.</p>	<p>The final regulation has not been revised. The requirements of 40CFR258 and EPA guidance prevent recirculation or acceptance of free liquids over an alternate liner. However, free liquids and recirculation over an alternate liner may be approved under a Research, Development, and Demonstration.</p>

9VAC20-81-140.B.1.g.	Waste Management	This citation restricts all landfills to 33% or the final cover slopes if waste has not been placed for more than 30 days. However, DEQ has approved numerous active permits that allow facilities to construct slopes steeper than 33% to allow for settlement prior to final capping. It is suggested DEQ revise the citation to include "unless steeper slopes are approved in the facility's permit".	Final regulation was revised to incorporate suggested text.
9VAC20-81-140.D.1.c	HDR	allows 3 days of cover soil requirement to be waived if an offsite supply is readily available on a daily basis. Is this supposed to be onsite soils available? If not, what about onsite soils.	The final regulation was not revised. The allowance is specific to off-site. If the soils are available on-site the requirement to have daily cover stockpiled is met.
9VAC20-81-140.D.1.e	Golder	Final cover construction will be initiated in accordance with the requirements of 9VAC20-81-160 D 2 shall be applied when the following pertain:	Final regulation was revised to incorporate suggested text.
9 VAC 20-81-150	DAA / SWANA	This section appears to be missing.	The final regulation was not revised. This section was intentionally omitted to facilitate future amendments.
9VAC20-81-160.D.2.e(2)	Mead WestVaco	<p>The proposed language changes the requirements for an alternate final cover system for an industrial landfill to require a minimum thickness of 24 inches. The current regulation does not specify a minimum thickness. The proposed language is not consistent with Federal requirements for sanitary landfills that allows for alternative final cover designs without this minimum thickness requirement or current VDEQ guidance.</p> <p>Current VDEQ guidance ("Clarification of Required Final Cover Designs and Acceptable Alternate Designs" - May 18, 1993) specifies a minimum two foot erosion layer when a synthetic membrane is used for the infiltration layer. The proposed language would require a minimum thickness of 24 inches in cases where the alternate final cover system did not include a synthetic membrane and regardless of whether this thickness was needed to provide protection of the infiltration layer from the effects of erosion, frost and wind. The minimum thickness specification should be removed from the proposed language.</p>	Comment not incorporated. The basis for this clarification of a minimum of 24 inches was that when the infiltration layer was replaced with a geomembrane, as allowed, by 9VAC20-81-160.D.2.e(2), the geomembrane only replaced the barrier property (i.e. the $1 \times 10^{-5}$ cm/sec) of the infiltration layer as prescribed by 9VAC20-81-160.D.2.c(1) and did not replace the 18 inch thickness of the layer as prescribed by 9VAC20-81-160.D.2.c(1).
9 VAC 20-81-160.D.5.b	DAA / SWANA	Gas probes should be included on the plat or the term monitoring wells defined to include both groundwater and gas monitoring points.	Final regulation was revised to incorporate suggested text.

<p>9VAC20-81-170.C.1.b</p>	<p>JEI</p>	<p>This section requires the assessment and evaluation of the landfill's potential for increased risk to human health and the environment to be performed by a professional engineer. Preparing risk assessments is not necessarily a task that engineers are trained to complete, nor does the industry standard require engineers to be trained in performing such evaluations. We recommend adding a professional geologist and qualified groundwater scientist to the list of preparers to ensure the assessment and evaluation is prepared by the appropriately trained personnel.</p> <p>Revise to read: The certificate shall be accompanied by an evaluation, prepared by a professional engineer, professional geologist, or qualified groundwater scientist, assessing and evaluating the landfill's potential for increased risk to human health and the environment in the event that postclosure monitoring and maintenance are discontinued.</p>	<p>The final regulation has been revised to incorporate both professional engineers and professional geologist. There is no current state license for a qualified groundwater scientist and was therefore not included. The department believes a professionally licensed geologist or engineer is appropriate for the release of a facility from post-closure care requirements.</p>
<p>9VAC20-81-200.A.1.b / 9VAC20-81-200.C.2</p>	<p>HDR</p>	<p>indicate the action level for remedial action is an exceedance of the LEL at the facility boundary which appears to be inconsistent with 9VAC20-80-200.C.1 states the action level is 80% of the LEL at the facility boundary. Why is there a difference?</p>	<p>The final regulation does not appear to be contradictory or inconsistent. An exceedance of the action level requires the facility to take action to protect HH&amp;E and notify the department. A remediation plan is required if the compliance levels are exceeded.</p>
<p>9VAC20-81-200 A.1.b</p>	<p>Waste Management</p>	<p>The term "facility boundary" is unclear in identifying the true point-of-compliance. This sub rule should use the term "facility property boundary" to assure clarity and define the property line as the point-of-compliance.</p>	<p>The final regulation was not revised in response to this comment. Some facilities may own a substantially larger parcel of land than what is listed as the facility boundary in the landfill permit. The department is unable to permit monitoring wells or gas probes outside the permitted facility boundary as a point of compliance.</p>
<p>9VAC20-81-200.C.2</p>	<p>Waste Management</p>	<p>Please review the various timelines for reporting landfill gas concentrations in this section. There appears to be some confusion related to action versus compliance levels and the reporting requirements applicable to each level.</p>	<p>Final regulation was revised to clarify the reporting timelines.</p>

9VAC20-81-210.D	Golder	<p>D. The collected leachate shall be:</p> <ol style="list-style-type: none"> <li>1. Discharged directly or after pretreatment into a line leading to the publicly owned treatment works or other permitted wastewater treatment facility;</li> <li>2. Transported by a vehicle to an offsite permitted wastewater treatment facility;</li> <li>3. Recirculated within the landfill, provided that the irrigated area is underlain by a composite liner and that the operation causes no odors, runoff, or ponding, or nuisance odors. <i>[Comment: Change is proposed for consistency with the terminology in 9VAC20-81-200.D.]</i></li> </ol>	Final regulation was revised to incorporate suggested text.
9 VAC 20-81-210.D.3	JEI	<p>Add wording that allows leachate recirculation over other liner systems as may be approved by EPA in the future or as part of the RDD section.</p> <ol style="list-style-type: none"> <li>3. Recirculated within the landfill, provided that the irrigated area is underlain by a composite liner, or other liner system approved by EPA or RDD rules for recirculation, and that the operation causes no odors, runoff or ponding;</li> </ol>	Final regulation was revised to incorporate suggested text.
9VAC20-81-250	Mead WestVaco	<p>The proposed language significantly revises the current phases of the required groundwater monitoring programs. The requirements are clear for new facilities, but it is not completely clear where existing facilities would fall in the new programs including those facilities with existing variances. Please clarify how the modified programs will be implemented for existing facilities.</p>	<p>The final regulation was not revised in response to this comment. All Industrial, CDD, or state monitoring program landfills would be required to monitor the Table 3.1 Column A list of constituents at a minimum. However, the final regulation includes a provision for owner or operators of these landfills to request the director delete any Table 3.1 Column A constituents from the semi-annual sampling list if the owner or operator demonstrates that the proposed deleted constituents are not reasonably expected to be in or derived from the waste. If a facility has an existing approval for a reduced list of monitoring parameters such</p>

			<p>approval would remain in effect. However, the subset of constituents must be specific constituents listed in table 3.1 Column A and not indicator or water quality parameters as these constituents are no longer included in the final regulation.</p>
<p>9VAC20-81-250 A.1.c</p>	<p>Waste Management</p>	<p>The “no migration potential” of subdivision 1 c is (1) not well conceived and (2) should be expanded upon by adding subsection 1 d to this rule. It is not well conceived in that there is an assumption that an uppermost aquifer is present, by the rules as they stand, a landfill could not be sited at the perfect geologic location where no groundwater existed because one could not monitor groundwater or – if the regulators really wanted to make the interpretation -- show no migration to the aquifer because you cannot disprove a negative. We suggest revising 1 c to include the caveat of “<u>or the facility property boundary</u>” where the uppermost aquifer is used as a reference point.</p> <p>1 d should be added to allow the director to approve alternative groundwater monitoring, leak detection systems, or alternative monitoring systems that fulfill the intent of the rules to protect groundwater and the environment, detect impacts, and assure proper corrective action. An exemption for double-liners similar to that for CDD or industrial landfills should be included. This would allow technical innovation and utilization of current technology to meet the regulatory intent where site conditions are such that no clearly identifiable uppermost aquifer is present as narrowly defined by the rule.</p>	<p>Comment not incorporated. The “no migration potential” allowance originates from 40 CFR 258.50(b). The regulatory language is consistent with federal language.</p> <p>The uppermost aquifer is the entity EPA established as the monitoring endpoint for determining whether landfill constituents have entered the environment. There is no provision in 40 CFR 258.50(b) to substitute the ‘facility property boundary’ for the uppermost aquifer.</p> <p>There is no allowance within 40 CFR 258.50(a) to implement any form of ‘alternative’ groundwater monitoring or leak detection systems at landfills subject to RCRA Subtitle D.</p>
<p>9VAC20-81-250 A.3.a.</p>	<p>Waste Management</p>	<p>Sub rule (4) should be added which states, “Alternative monitoring may be approved by the director in lieu of the requirements of sections 1 and 2 of this part.”</p>	<p>Comment not incorporated. Monitoring system requirements originate from 40 CFR 258.51(a) and the Federal language under 40 CFR 258.50(a) does not allow for any ‘alternative’ type of groundwater monitoring.</p>

<p>9VAC20-81-250 A.3.a.3.</p>	<p>Waste Management</p>	<p>Monitoring wells should not be installed at the disposal unit boundary. This rule should be rewritten to specify installation of monitoring wells on property owned by the landfill, not more than 150 meters from the solid waste boundary. This will assure early detection of a release, assure that ample response time exists before an impact migrates off site and removes wells from the active work area where they can be affected by traffic, equipment, and storm water runoff.</p>	<p>Comment was not incorporated. The comment is applicable only to operating facilities. Closed facilities could have wells installed at the DUB without these monitoring points being considered in an 'active' work area. Because the regulatory language applies to all stages of landfill operational history, the wells should be installed as close as practical to the DUB as is already allowed under 9VAC20-81-250.A.3.a(3).</p>
<p>9 VAC 20-81-250.A.3.(3).b</p>	<p>DAA / SWANA</p>	<p>Change "Multiunit systems" to: Multiple waste disposal units"</p>	<p>The comment was not incorporated. The definition of unit was clarified in response to another comment. This revision addressed the concerns raised in this comment.</p>
<p>9 VAC 20-81-250.A.3.d</p>	<p>DAA / SWANA</p>	<p>*Comment: As proposed by DEQ, the passage does not require that well construction details be posted on the log; however, the relationship between the screened interval and the adjacent geologic units is important.</p> <p>*Comment: As proposed by DEQ, the passage does not indicate the accuracy to which the locations of wells are to be shown on the site plan. Are the wells to be surveyed – accurate to the nearest 0.01 ft vertically and 0.1 ft horizontally – in order to prepare the site plan? If so, then it will be difficult to meet the schedule associated with the certification requirement of A 3 g</p> <p>*Comment: As proposed by DEQ, the passage specifies only that the hydraulic conductivity of the geologic units be "described," but does not specifically require that such description be based upon data actually derived from the subject well. Given that slug tests, the most commonly used method of estimating hydraulic conductivity, provide estimates of average conductivity within a relatively short distance from the well screen, slug test data from multiple wells are necessary in order to represent the variation in hydraulic conductivity throughout the aquifer.</p> <p>Proposed wording change to text DAA:</p>	<p>Comment not incorporated.</p> <p>No construction details are required on the well log. A description of the soils or rock encountered and the hydraulic conductivity of the geologic units (formations) encountered is required content for boring logs. The well construction information is typically included as an attachment to the well certification as required 9VAC20-81-250.A.3.g.</p> <p>Wells must be surveyed to be located accurately on site plan. The final regulation does not specify the surveying methods required.</p>

		<p>&lt;delete current d. section and replace with the following:&gt;</p> <p>d. Well completion logs. A log shall be made of each newly installed monitoring well describing the soils or rock encountered, construction details (screened interval, top sand/gravel, top bentonite seal, top grout, as applicable). A copy of the final log(s), with a site plan showing the location of all monitoring wells associated with the subject waste disposal unit, shall be sent to the Department with the certification required under A 3 g of this section.</p> <p>An aquifer field test (slug test, pumping test, as applicable) shall be conducted in order to estimate hydraulic conductivity of the screened interval.</p>	<p>No change necessary. No further clarification is provided as justification for the suggested revision.</p>
9VAC20-81-250.A.3.d	Henrico County	<p>This section should also require the essential details of the monitoring well construction, including the total depth of the borehole and total depth of monitoring well, the location of the screened interval, the top and bottom of sand or gravel pack, the top and bottom of the seal, etc. I suggest this section be entitled "Well Completion Logs", rather than "Boring logs."</p> <p>The requirement for providing hydraulic conductivity is ambiguous and should be clarified. I suggest specifying that the hydraulic conductivity of the screened interval or saturated zone be identified, rather than the broader term "geologic units". Also, it is unclear how the hydraulic conductivity is to be derived. Are you seeking a "generally accepted" value for the type of environment being monitored, a laboratory-determined value, or a site-specific field test such as a slug or pumping test? Hydraulic conductivity is necessary to determine groundwater flow rates. Given the heterogeneous nature of most subsurface environments, "hydraulic conductivity" is most appropriately understood as a range, rather than a specific value. If a specific value is used, understand that it may apply to a very localized area. It may be best to leave this determination to the professional judgment of the groundwater scientist certifying the well and, if so, the regulations should specifically delegate this authority to the responsible groundwater scientist.</p>	<p>Boring Logs and Well Completion Diagrams are two separate items. Boring logs show the subsurface materials encountered during borehole advancement while completion logs identify the wells construction. As requested additional language has been incorporated to require the well construction details.</p> <p>EPA included hydraulic conductivity under 40 CFR 258.51(d)(ii). EPA did not define the method by which it was calculated.</p>
9 VAC 20-81-250.A.3.e	DAA / SWANA	<p>*Comment: As proposed by DEQ, the passage indicates only that the repairs or replacements should be coordinated with the Department for approval. Given the voluntary nature of such coordination, few facilities are likely to consult with DEQ. As proposed by DEQ, the passage does not offer a schedule for repairing or replacing such wells. The suggested schedule would allow most such changes to be accomplished within a 90-day compliance period, provided that DEQ provide prompt approval of proposed repair or</p>	<p>Final regulation revised to incorporate comment. "Should" was replaced with "shall" to require coordination, but a schedule for replacement was not incorporated. These changes should be completed before the next scheduled</p>

		<p>replacement.]</p> <p>Proposed wording change to text:          &lt;second paragraph to be deleted and replaced with the following:&gt;          Within 30 days of recognizing that a well does not appear to be functioning as designed, the facility shall submit a plan to repair or replace the well to DEQ for review and approval. The facility shall implement the repair or replacement plan within 60 days of receiving written approval from DEQ. The Director may grant an extension to the 30-day notification or 60-day implementation schedule for reasonable cause.</p>	<p>monitoring event. However, the regulatory text remains open to allow alternate timelines for unique conditions.</p>
9VAC20-81-250.A.3.e	Golder	<p>A.3.e. Well maintenance. The monitoring wells, piezometers, and other groundwater measurement, sampling, and analytical devices shall be operated and maintained in a manner that allows them to perform to design specifications throughout the duration of the groundwater monitoring program.</p> <p>Nonfunctioning monitoring wells must be <u>addressed</u> <del>replaced or repaired</del> upon recognition of damage or nonperformance. Well repair, <u>decommissioning</u>, or replacement <del>shall</del> <u>could</u> be coordinated with the department for approval prior to initiating the action.</p> <p>[Comment: Recommended changes are made to allow reasonable time for issues such as temporarily dry wells due to drought, and to allow for removing nonfunctioning wells from the network when appropriate and approved by the department.]</p>	<p>The comment was incorporated in part. The final regulation was not revised to replace “replaced or repaired” with “addressed”.</p>
9 VAC 20-81-250.A.3.f.(1).(d)	DAA / SWANA	<p>*Comment: As proposed by DEQ, it is difficult to understand how a facility might construct its initial monitoring wells, as the “calculated groundwater flow rate and direction within the uppermost aquifer” is generally determined using data derived from wells.</p>	<p>Comment not incorporated. The requirement as applied to all landfills cited after 1988 reflects the hydrologic characterization work to be conducted during the Part A process which yields groundwater data that is used to substantiate that groundwater can be effectively monitored and assist with the location and spacing of the proposed well network.</p>
9 VAC 20-81-250.A.3.f.(1).(d).(3)	DAA / SWANA	<p>*Comment: As proposed by DEQ, the passage is redundant in that A3f(1) specifically includes a reference to “spacing”, without regard to hydrogeologic position (that is, whether downgradient of upgradient).</p>	<p>The comment was not incorporated. The department sees no redundancy.</p>

		<p>Unless there is “more to the story,” the passage appears superfluous.]</p> <p>&lt;delete the entirety of section (3)&gt;</p>	
9 VAC 20-81-250.A.3.g	DAA / SWANA	<p>*Comment: As proposed by DEQ, the passage is confusing: what is the difference between “be certified by” and “completing this certification”?</p> <p>*Comment. As noted above, if such certification is to include a site plan, and if that site plan is to show surveyed well locations, then the prescribed schedule for certification is insufficient.</p>	<p>Comment not incorporated. Monitoring well certification requirement is derived from 40 CFR 258.51(d)(2)</p>
9VAC20-81-250.A.3.g	Henrico County	<p>This section is awkwardly worded as it refers back to subdivision 3 d, and the time limits established (30 days and 14 days) seem unnecessarily restrictive. A well completion log is very important documentation that needs to be properly and accurately prepared. This document may be equally if not more valuable several years in the future, than it is 30 or 60 days from the time a well is installed. Given the requirements in subdivision 3 d for a hydraulic conductivity determination, as well as a site plan, I recommend allowing at least double the timeframes proposed, in order to allow for adequate preparation and quality review.</p>	<p>The comment was not incorporated. A 14 day submission timeframe originates in 40 CFR 258.51(d)(2). The comment fails to document why additional time is needed when the data necessary to create the well completion logs is available immediately following installation. In addition, many times the specific memories and meaning of field notes may fade over time further strengthening the need for development of completion logs as soon as possible. There is nothing in the final regulation that prevents the log’s use at a later date. The log becomes part of the facility’s record and is available on an ongoing basis.</p>

<p>9 VAC 20-81-250.A.4.b</p>	<p>DAA / SWANA</p>	<p>*Comment: EPA recognizes the value of comparing the results derived from unfiltered samples to the results derived from unfiltered samples in helping to understand the distribution of metals in groundwater. VSWMR may require that unfiltered samples be analyzed for metals, but it is not appropriate for VSWMR to prevent the analysis of unfiltered samples for any purpose.</p> <p>Proposed wording change to text DAA:          &lt;between paragraph 2 and 3 add:&gt;          Data derived from the analysis of filtered samples for metals may be considered when preparing Alternate Source Demonstrations.          &lt;current paragraph 3 changed to the following:&gt;          The sampling, analysis and quality control/quality assurance methods set forth in EPA document SW-846, as amended, shall be used. The department may require re-sampling if it believes the samples were not sampled in accordance with an approved Plan or analyzed in accordance with one of the methods prescribed in SW-846.</p>	<p>Comment not incorporated. While EPA has some regulatory programs which utilize dissolved metals data for programmatic decision making, the prohibition against use of samples which are filtered prior to analysis in RCRA D originates in 40 CFR 258.53.(b)</p> <p>EPA defined the allowable reasons for Alternate Source Demonstration (ASD) approval and filtered (i.e. dissolved) sample results are not one of the allowed reasons under 40 CFR 258.54.(c).(3) or 55.(g).(2)</p>
<p>9VAC20-81-250 A.4.b.</p>	<p>Waste Management</p>	<p>The wording of this rule is unclear. Methods other than SW-846 are, and should be, used to perform analysis. The first part of the rule appears to allow the use of any method; however, it also appears that ONLY SW-846 methods may be used for analysis. The rule should be rewritten to specify the use of SW-846 methods, but allow approval of other methods for analysis.</p>	<p>Comment not incorporated. Reference to the use of SW-846 Methods for groundwater sampling in the Solid Waste Program was included in the 1988 VSWMR. 9 VAC 20-81-700.B.1 prohibits the department from accepting any variance related to using methods other than SW-846.</p>
<p>9VAC20-81-250.A.4.b</p>	<p>Henrico County</p>	<p>I disagree with not allowing filtering of groundwater samples prior to analysis. The EPA recognizes the value of comparing the results derived from unfiltered vs. filtered samples in helping to understand the distribution of metals in groundwater.</p>	<p>Comment not incorporated. While EPA has some regulatory programs which utilize dissolved metals data for programmatic decision making, the prohibition against use of samples which are filtered prior to analysis in RCRA D originates in 40 CFR 258.53.(b). The prohibition of filter samples applies to those collected in</p>

			accordance with the facility's compliance monitoring. There is no prohibition preventing the use of filtered samples as justification as part of an alternate source demonstration.
9VAC20-81-250.A.4.h	Golder	<p>A.4.h. Evaluation and response. After each sampling event required under B or C of this section, the owner or operator shall determine whether or not there is a statistically significant increase over background values for each groundwater constituent required in the particular groundwater monitoring program by comparing the groundwater quality of each constituent at each monitoring well installed pursuant to subdivision 3 a of this subsection to the background value of that constituent. In determining whether a statistically significant increase has occurred, the owner or operator shall:</p> <p>(1) Ensure the sampling result comparisons are made according to the statistical procedures and performance standards specified in subsection D of this section;</p> <p>(2) Ensure that within 30 days of completion of sampling and laboratory analysis actions, the determination of whether there has been a statistically significant increase over background at each monitoring well has been completed; and</p> <p>(3) If identified, <u>report</u> the statistically significant increase <del>shall be reported</del> to the department within the notification timeframes identified in subsection B or C of this section and <del>discussed</del> in the quarterly or semi-annual report submission described under subdivision E 2 c of this section. <del>Notifications qualified as being 'preliminary,' 'suspect,' 'unverified,' or otherwise not a final determination of a statistical exceedance will not be accepted.</del></p> <p><u>[Comment: Change is proposed for consistency with DEQ-requested notifications of actions to be taken to confirm or refute suspect findings, such as verification sampling, obtaining additional data points to allow for statistical evaluations, etc.]</u></p>	<p>Comment not incorporated. The final regulation requires a facility to determine if there has or has not been a statistically significant increase (SSI) for each constituent included in the facility's groundwater monitoring program. If the facility submits data labeled as preliminary, suspect, unverified, or otherwise not a final determination of whether there is or is not a SSI, the department can not verify the required determination has been completed. The facility's failure to make this determination could result in non-compliance. In an effort to provide compliance assistance and ensure consistency, the final regulation includes text to prevent submittal of data labeled preliminary, suspect, unverified, or otherwise not a final determination of whether there has or has not been a statistically significant increase.</p>
9VAC20-81-250.A.4.h	Henrico County	<p>Clarify "laboratory analysis actions". Better wording might be: Ensure that within 30 days of completion of sampling, chemical analysis, laboratory reporting, verification sampling, and validation of laboratory data, .....</p> <p>Allow facilities sufficient time and the</p>	<p>Comment not incorporated. Analytical Laboratories do not release analytical data under authorized signature</p>

		<p>opportunity to process results and <u>validate</u> the information shown on the laboratory certificate-of-analysis, prior to determining a statistically significant increase over background.</p>	<p>until the data has undergone the labs own QA/QC review. A permittee may undertake an independent third party QA/QC review, but this action is voluntary. The department believes that 30-days is a sufficient amount of time to conduct this voluntary review action.</p>
<p>9 VAC 20-81-250.A.4.h.(2)</p>	<p>DAA / SWANA</p>	<p>*Comment: As proposed by DEQ, the facility is not clearly afforded an opportunity to validate the information shown on the laboratory certificate-of-analysis (Form 1]. EPA recognizes the importance of independently validating the information provided by the laboratory.</p>	<p>Comment not incorporated. Analytical Laboratories do not release analytical data under authorized signature until the data has undergone the labs own QA/QC review. A permittee may undertake an independent third party QA/QC review, but this action is voluntary. The department believes that 30-days is a sufficient amount of time to conduct this voluntary review action.</p>
<p>9 VAC 20-81-250.A.4.h.(3)</p>	<p>DAA / SWANA</p>	<p>*Comment: As proposed by DEQ, the passage unfairly forces the facility to issue a finding of "exceedance" even in those cases where the information printed on the laboratory certificate of analysis have not, or cannot, be substantiated. Overt recognition of the data validation step above (in addition to its recognition below) would likely eliminate the need to present findings as 'preliminary' or 'suspect' in most cases. Conversely, in some cases, the facility will not be in a position to recognize and exceedance until such time as an Alternate Source Demonstration can be completed.</p> <p>Proposed wording change to text DAA:  <del>delete the 2<sup>nd</sup> paragraph that reads:&gt;</del>  Notifications qualified as being 'preliminary', 'suspect', 'unverified', or otherwise not a final determination of a statistical exceedance will not be accepted.</p>	<p>Comment not incorporated. Analytical Laboratories do not release analytical data under authorized signature until the data has undergone the labs own QA/QC review. A Permittee may undertake an independent third party QA/QC review, but this action is voluntary. The department believes that 30-days is a sufficient amount of time to conduct this voluntary review action.</p> <p>Recognition of an exceedance is an independent action unrelated to an</p>

			Alternate Source Demonstration, a demonstration which is not needed unless an exceedance has been determined.
9VAC20-81-250.A.4.h.(3)	JEI	<p>This section includes redundancy and is prescriptive. Specifically, the last sentence appears to be department preference and should more appropriately be addressed in a Submission Instruction or Guidance Document. No where else in the regulations is it specified what will not be accepted in a specific submittal. We recommend deleting the last sentence in its entirety.</p> <p>Delete: Notifications qualified as being 'preliminary,' 'suspect,' 'unverified,' or otherwise not a final determination of a statistical exceedance will not be accepted.</p>	<p>Comment not incorporated. The final regulation requires a facility to determine if there has or has not been a statistically significant increase (SSI) for each constituent included in the facility's groundwater monitoring program. If the facility submits data labeled as preliminary, suspect, unverified, or otherwise not a final determination of whether there is or is not a SSI, the department can not verify the required determination has been completed. The facility's failure to make this determination could result in non-compliance. In an effort to provide compliance assistance and ensure consistency, the final regulation includes text to prevent submittal of data labeled preliminary, suspect, unverified, or otherwise not a final determination of whether there has or has not been a statistically significant increase.</p>
9 VAC 20-81-250.A.4.i	DAA / SWANA	<p>*Comment: Overt recognition of the value of verification sampling appears to represent a significant improvement to VSWMR. As proposed by DEQ, however, the passage appears to place the cart before the horse. It may be preferable to include the voluntary verification sampling step as one of the measures to be completed – along with sampling, chemical analysis, and laboratory reporting – before the 30-day clock starts. In other words, the facility should be afforded the opportunity to complete voluntary data validation before being pressed to recognize a</p>	<p>Comment not incorporated. Analytical Laboratories do not release analytical data under authorized signature until the data has undergone the labs own QA/QC review. A permittee may undertake an independent third</p>

		<p>statistical exceedance, not after it has found a statistical exceedance.</p>	<p>party QA/QC review, but this action is voluntary. The department believes that 30-days is a sufficient amount of time to conduct this voluntary review action.</p> <p>To account for potential false 'positives' EPA allows the use of verification sampling. However, as noted in the regulatory text, the sampling action is voluntary and therefore should not otherwise revise the timeframe under which an exceedance is recognized and reported to the department</p>
<p>9 VAC 20-81-250.A.4.j</p>	<p>DAA / SWANA</p>	<p>*Comment: Overt recognition of the value of third-party data validation appears to represent a significant improvement to VSWMR. As proposed by DEQ, however, as with verification sampling, the passage appears to place the cart before the horse. It may be preferable to include the voluntary data validation step as one of the measures to be completed – along with sampling, chemical analysis, and laboratory reporting – before the 30-day clock starts. In other words, the facility should be afforded the opportunity to complete voluntary data validation before being pressed to recognize a statistical exceedance, not after it has found a statistical exceedance. After all, the data validation, much like verification sampling, may reveal that there has been no exceedance.</p> <p>*Comment: This statement recognizes the value of third party data validation to obtain data of adequate quality to support regulatory compliance activities. Third-party data validation efforts remain voluntary for the owner or operator.</p> <p>Proposed wording change to text by DAA: j. Data Validation. The owner or operator is responsible for ensuring that the groundwater monitoring results accurately represent groundwater quality for the facility. As part of the data evaluation process, the owner or operator may undertake third-party data validation of the analytical data received from the laboratory. Data validation is the process of reviewing the QA/QC data generated during the sampling and analysis procedures. The objective is to confirm that the analytical data is of adequate quality to support scientifically</p>	<p>Comment not incorporated.</p> <p>Analytical Laboratories do not release analytical data under authorized signature until the data has undergone the labs own QA/QC review. A Permittee may undertake an independent third party QA/QC review, but this action is voluntary. The department believes that 30-days is a sufficient amount of time to conduct this voluntary review action.</p> <p>To account for potential false 'positives' EPA allows the use of verification sampling. However, as noted in the regulatory text, the sampling action is voluntary and therefore should not otherwise the timeframe under which an exceedance is recognized and</p>

		<p>sound decisions or actions which will be protective of human health and the environment. Undertaking such validation efforts are a voluntary action on the part of the owner or operator and shall not alter the timeframes associated with determining or reporting a statistically significant increase as otherwise defined under A 4 h (2), B 2 or 3 or C 2 or 3 of this section.</p>	<p>reported to the department.</p>
<p>9VAC20-81-250.A.4.j</p>	<p>Golder</p>	<p>A.4.j. Data validation. The owner or operator may at any time within the 30-day statistically significant increases determination period defined under subdivision A 4 h (2) of this subsection, undertake third-party data validation of the analytical data received from the laboratory. Undertaking such validation efforts <del>is</del> <u>are</u> a voluntary action on the part of the owner or operator and shall not alter the timeframes associated with determining or reporting a statistically significant increase as otherwise defined under subdivision A 4 h (2), B 2 or 3, or C 2 or 3 of this section.</p>	<p>The comment was incorporated.</p>
<p>9VAC20-81-250 A.5</p>	<p>Waste Management</p>	<p>Recommend adding a sub rule d, which, states "An alternate source demonstration must be approved or denied by the director within 30 days of submittal. If the demonstration is not denied within 30 days it is considered approved."</p>	<p>Comment not incorporated. The Alternate Source Demonstration language originates in 40 CFR 258.54(c)(3) and 55(g)(2). No such clause for automatic approval is contained in the Federal language and the proposed comment language appears to be in direct conflict with the Federal language which notes that if a successful demonstration is not made within 90-days of triggering the need to submit to the ASD, the next phase of monitoring must be entered.</p>
<p>9 VAC 20-81-250.A.5.a.(1)</p>	<p>DAA / SWANA</p>	<p>Proposed wording change to text DAA: (1) a source other than leachate derived from the subject waste management unit caused the statistical exceedance;</p>	<p>Comment not incorporated. The Alternate Source Demonstration language originates in 40 CFR 258.54(c)(3) and 55(g)(2). The proposed comment language appears to be in direct conflict with the Federal language which does not restrict the cause of the release from the waste</p>

			management unit to that solely related to leachate. It is possible to have impacts to groundwater as a result of landfill gas migration.
9 VAC 20-81-250.A.5.a.(2)	DAA / SWANA	Proposed wording change to text DAA: (2) the exceedance resulted from error in sampling, chemical analysis, or evaluation; or,	Comment not incorporated. No justification for revision is included with comment.
9VAC20-81-250.A.5.c	Golder	A.5.c. Evaluation and response. Based on the information submitted in accordance with subdivision 5 a of this subsection, the director will:  (1) In <u>the</u> case of the successful demonstration of an error in sampling, analysis, or evaluation, allow the owner or operator to continue monitoring groundwater in accordance with the monitoring program in place at the time of the statistical exceedance;	Requested revision was incorporated.
9 VAC 20-81-250.A.5.c.(1)	DAA / SWANA	Proposed wording change to text DAA: (1) In case of the successful demonstration of an error in sampling, chemical analysis or evaluation, allow the owner or operator to continue monitoring groundwater in accordance with the monitoring program in place at the time of the statistical exceedance;	Comment not incorporated. No justification for the proposed wording is provided by the commenter.
9 VAC 20-81-250.A.5.c.(2)	DAA / SWANA	Proposed wording change to text DAA: (2) In the case of a successful demonstration where the alternate source is attributed to characteristics of the groundwater monitoring network:	Comment not incorporated. No justification for the proposed wording is provided by the commenter.
9 VAC 20-81-250.A.5.c.(2).(b)	DAA / SWANA	*Comment: In some instances, the time between the date on which the Director notifies the facility of the required changes and the date of the next sampling event is scheduled to occur, may not be sufficient to enact the necessary modifications.  Proposed wording change to text DAA: (b) require any changes to the monitoring system be completed prior to the next regularly scheduled groundwater monitoring event or within next 90 days (whichever allows more time); and,	Comment incorporated. Final regulation revised to incorporate suggested text.
9VAC20-81-250.A.6.b	Golder	A.6.b. Establishment process. The groundwater protection standards shall be established in the following manner: (1) For constituents for which a maximum contaminant level (MCL) has been promulgated under § 1412 of the Safe Drinking Water Act (40 CFR Part 141), the MCL for that constituent shall be automatically established as the groundwater protection standard upon submission of the proposed standards, <u>unless a site-specific background</u>	Comment incorporated in part.  9VAC20-81-250.A.6.b(1) has not been revised. The text included in the final regulation is consistent with 40CFR258.55(h)(1).  9VAC20-81-

		<p><u>concentration greater than the MCL is proposed as a groundwater protection standard pursuant to subdivision 6 b (2) of this subsection; [Comment: Qualifier is proposed to prevent a MCL-based GPS from being in effect pending DEQ approval of an appropriate background-based GPS, so as to avoid unnecessary advancement into corrective action.]</u></p> <p>(2) If the owner or operator determines that a site-specific background concentration is greater than the MCL associated with that constituent under subdivision 6 b (1) of this subsection, the background value may be substituted for use as the groundwater protection standard in lieu of the MCL for that constituent upon receiving written department approval;</p> <p>(3) For constituents for which no MCL has been promulgated, site-specific background concentration value(s) may be used upon receiving written department approval;</p> <p>(4) For constituents for which no MCL has been promulgated <del>and no site-specific background concentration values are available for use</del>, a risk-based alternate concentration levels may be used if approved by the director as long as: <i>[Comment: For consistency with 40 CFR Part 258.55.]</i></p>	<p>250.A.6.b(4) has been revised as requested.</p>
<p>9 VAC 20-81-250.A.6.b.(2)</p>	<p>DAA / SWANA</p>	<p>Comment: Timely approval of facility background concentrations as Groundwater Protection Standards may be necessary if the facility is to avoid notifying the Director of exceedances that are technically incorrect.</p> <p>Proposed wording change to text DAA:  (2) If the owner or operator determines that a site-specific background concentration is greater than the MCL associated with that constituent under A 6 b (1) of this section, the background value may be substituted for use as the groundwater protection standard in lieu of the MCL for that constituent upon receiving written department approval or within 90 days of submitting appropriate documentation to the director;</p>	<p>Comment not incorporated. Review of proposed groundwater protection standards is essential to protection of human health and the environment. To ensure accurate levels are established greater than 90 days may be necessary for complex conditions.</p>
<p>9VAC20-81-250.A.6.c</p>	<p>Golder</p>	<p>A.6.c. Implementation. Groundwater protection standards shall be considered established for the facility upon completion of the actions described under either subdivision B 6 b (1), (2), (3) or if necessary (4) and shall be placed in the facility Operating Record and shall be used during all subsequent comparisons of groundwater sampling data consistent with the requirements of subdivision B 3 f or C 3 e of this section.  <i>[Comment: Deleted "all" to account for future</i></p>	<p>Comment incorporated and suggested revision made to final regulation.</p>

		<i>updates to the groundwater protection standards.]</i>	
9VAC20-81-250.A.6.c	JEI	Change B 6 b (1), (2), (3), or if necessary (4) to A 6 b (1), (2), (3), or if necessary (4).	Comment incorporated and suggested revision made to final regulation.
9VAC20-81-250.A.6.d	Golder	d. MCL and background revisions. After establishment of groundwater protection standards under subdivision B 6 b, if the standards are modified as a result of revisions to any MCL or department-approved background, the facility shall update its listing of groundwater protection standards and shall place the new list in the Operating Record and shall use the new values during all subsequent comparisons of sampling data consistent with the requirements of subdivision B 3 f or C 3 e of this section. <i>[Comment: Deleted "all" to account for future updates to the groundwater protection standards.]</i>	Comment incorporated and suggested revision made to final regulation.
9VAC20-81-250.A.6.e	Golder	e. Alternate concentration <del>levels limits</del> revisions. After establishment of groundwater protection standards under subdivision B 6 b of this section, if the department-approved <del>alternate concentration levels ACLs</del> change based on information released by EPA, to the extent practical, the department will issue revisions to the alternate concentration levels for facility use no more often than a semi-annual basis. The facility shall use the <del>alternate concentration levels ACL</del> listing in effect at the time the sampling event takes place when comparing the results against the groundwater protection standards under subdivision B 3 f or C 3 e of this section.	Comment incorporated and suggested revision made to final regulation.
9 VAC 20-81-250.A.6.e	DAA / SWANA	Change the issuance of revisions from "no more often than a semi-annual basis", to "no more often than an annual basis".	Comment incorporated and suggested revision made to final regulation.
9VAC20-81-250.B.1.e	Golder	B.1.e. Proximity to wetlands. Owners or operators of sanitary landfills <del>that accepted</del> <u>accepted</u> waste after June 30, 1999, must: (1) Perform quarterly groundwater monitoring unless the director determines that less frequent monitoring is necessary consistent with the requirements of the special provisions regarding wetlands in § 10.1-1408.5 of the Code of Virginia. (2) The quarterly monitoring frequency shall remain in effect until <del>it is demonstrated to the department that</del> waste is no longer being accepted at the sanitary landfill. (3) This requirement will not limit the authority	Comment incorporated in part. The final regulation has been revised to remove the stricken text and replace with "...the department is notified..."

		of the Waste Management Board or the director to require more frequent groundwater monitoring if required to protect human health and the environment	
9VAC20-81-250 B.1.e	Waste Management	It is unclear from the rule which landfills this applies to: "proximity to wetlands" is undefined. The rule should identify what isolation distance is applicable and specify that only those wells in the hydraulic flow path to the wetland must be sampled quarterly.	The final regulation has been revised to clarify "proximity to wetlands" to be consistent with §10.1-1408.5.C.
9VAC20-81-250.B.2	Waste Management	Recommend addition of a sub rule that states: The director shall waive the sampling and analysis of some or all of the heavy metals in Table 3.1 if other inorganic indicator parameters provide a reliable indication of inorganic releases from the unit to groundwater. In determining whether to approve a waiver, the director shall consider all of the following factors: (a) The types, quantities, and concentrations of constituents in the wastes that are managed at the landfill unit. (b) The mobility, stability, and persistence of waste constituents or their reaction products in the unsaturated zone beneath the type II landfill unit. (c) The detectability of indicator parameters, waste constituents, and reaction products in the groundwater. (d) The concentration and variance of monitoring parameters in the groundwater background.	Comment not incorporated. The department believes it is not possible to demonstrate MSW does not contain the metals listed on Table 3.1 due to the diverse content of MSW.
9VAC20-81-250.B.2.a.(1)(a)	JEI	To be consistent with 40 CFR 257.24, there appears to be language missing from this section. We recommend adding the missing language at the end of the first sentence.  Revise to read: ...shall be collected and analyzed for the Table 3.1 Column A constituents during the first semi-annual sampling period.	Comment incorporated and suggested revision made to final regulation.
9VAC20-81-250.B.2.a.(1)(b)	JEI	Collecting four independent samples during a 3-month period is not practical in the majority of Virginia. Since quarterly monitoring is not required by 40 CFR 257, we recommend allowing the four independent samples to be collected during the first two quarterly sampling periods. In other words, for landfills monitored on a quarterly basis, the initial sampling period would be a semi-annual period, as defined under 9VA20-81-10.  Delete: The samples shall be collected within the first quarterly period, using a schedule that ensures, to the greatest extent possible, an accurate calculation of background concentrations.  Add: The samples shall be collected within the	Comment not incorporated. This language was created by the TAC groundwater subcommittee and accepted by the TAC. This language does not prohibit extensions approved by the department necessary to collect accurate background data.

		<p>first two quarterly periods (or first semi-annual period as defined under 9VAC20-81-10).</p> <p>B.3. Assessment monitoring program. The owner or operator shall implement the assessment monitoring program whenever a statistically significant increase over background has been detected during monitoring conducted under the detection monitoring program.</p> <p>a. Sampling requirements. Within 90 days of recognizing a statistically significant increase over background for one or more of the constituents listed in Table 3.1 Column A, the owner or operator shall, unless in receipt of an approval to an Alternate Source Demonstration under subdivision A 5 of this section or a director-approved extension, conduct the initial assessment monitoring sampling event for the constituents found in Table 3.1 Column B. A minimum of one sample from each well installed under subdivision A 3 a of this section shall be collected and analyzed during the initial and all subsequent annual Table 3.1 Column <u>B</u> A sampling events.</p> <p>b. Director provisions:</p> <p>(1) The owner or operator may request that the director approve an appropriate subset of monitoring wells that may remain in detection monitoring defined under subdivision 2 of this subsection, based on the results of the initial, or subsequent annual Table 3.1 Column B sampling events. Monitoring wells <u>are eligible may be considered</u> for the subset if:</p> <p>(a) They <u>have had display</u> no statistically significant increases over background for any <u>monitored solid waste constituents on the Table 3.1 Column A list for the previous two years</u>. If <u>such</u> an increase is subsequently <u>confirmed recognized</u> in a well approved for the subset, the well shall no longer be <del>considered</del> part of the detection monitoring subset, <u>unless an Alternate Source Demonstration for the increase is approved by the department.</u> <i>[Comment: Changes are proposed to account for whatever parameter list is being monitored at the time of the subset request, and for consistency with the 2-year provision in 9VAC20-81-250.C.3.b(3) and the ASD allowances in 9VAC20-81-250.A.5.]</i></p>	
9VAC20-81-250.B.3	Golder		<p>Comment incorporated in part.</p> <p>9VAC20-81-250.B.3.a has been revised to incorporate the suggested text.</p> <p>9VAC20-81-250.B.3.b has not been revised. The two years allowance included in the state monitoring program does not apply to sanitary landfills. The final regulation provides two conditions; the comment combines this creating confusion.</p>
9VAC20-81-250 B.3.a.	Waste Management	<p>This rule should be modified to allow the director to approve an appropriate subset of wells for the initial assessment-sampling event based upon the nature of the Exceedance and site-specific conditions.</p>	<p>Comment not incorporated. Suggested revision conflicts with 40 CFR 258.55.(b) which</p>

			requires each downgradient well to undergo the initial assessment monitoring event.
9VAC20-81-250.B.3.c(1)	DAA (Rip Ford)	Regulatory decisions should not be based on unquantifiable laboratory data (<LOQ), which are not defensible in a court of law	Comment not incorporated. 40 CFR 258.55.(d)(1) requires the owner/operator to place a notice in the operating record identifying the constituents that have been <u>detected</u> , not those that have exceeded limits of quantitation.
9VAC20-81-250.B.3.c(3)	DAA (Rip Ford)	A minimum of <del>four</del> eight independent samples from each background well ( <del>background and downgradient</del> ) shall be collected and analyzed to establish background for the detected constituents.  [Comment. We are not aware of any statistical method that would meet reasonable tests of robustness when based on only four samples. Facility background data are derived solely from upgradient wells, not downgradient wells. Unless intra-well comparisons are to be mandated, the reference to “downgradient” should be stricken]	Comment not incorporated. The final regulation is consistent with 40CFR258.55.b requiring a <u>minimum</u> of four independent samples. There is no restriction preventing the collection of additional background samples.  Requirement to sample background and downgradient wells as part of background data collection can be found in 40 CFR 258.55.(b).
9VAC20-81-250.B.3.d	DAA (Rip Ford)	Add wording: DEQ shall approve or disapprove the proposed GWPS within 30 days of the date on which the facility submitted the GWPS, or the GWPS will be deemed approved.	Comment not incorporated. Review of proposed groundwater protection standards is essential to protection of human health and the environment. To ensure accurate levels are established greater than 30 days may be necessary.
9VAC20-81-250.B.3.e (1)	DAA (Rip Ford) /Henrico County	What is “reflects current site conditions” supposed to mean? Clarification is warranted.	No revision is requested, only clarification. “Current” is defined as “occurring in or existing at the present time”. Therefore, current site conditions would be those site conditions present at

			when the groundwater monitoring plan is revised.
9VAC20-81-250.B.3.e(2)	DAA (Rip Ford)	DEQ shall approve or disapprove the proposed amendment to the permit within 30 days of the date on which the facility submitted the proposed amendment, or the amendment will be deemed approved.	Comment not incorporated. Permit modifications require the written approval of the department prior to issuance. Therefore, an automatic approval after an established time period is not possible.
9VAC20-80-250.B.3.f	DAA (Rip Ford)	If VSWMR are to require semi-annual and quarterly reports, then the requirement for an Annual GW Report should be removed from VSWMR as being superfluous and only causing facilities to occur additional, unwarranted expense	Comment not incorporated. The final regulation requires submittal of both semiannual or quarterly monitoring reports and an annual report. The majority of owner/operators currently submit both semi-annual or quarterly and annual reports. The final regulation reduces the content of both the annual and semiannual/quarterly reports to reduce redundancies. Timely submittal of semiannual/quarterly reports is necessary to protect human health and the environment.
9VAC20-81-250.C.2	Golder	C.2. First determination monitoring program. a. Sampling requirements. A first determination monitoring program shall consist of a <u>background-establishing period followed by</u> <del>include the semi-annual sampling and analysis</del> for the constituents shown in Table 3.1 Column A at all wells installed under subdivision A 3 a of this section. <del>After obtaining the results from the initial or subsequent sampling events required in subdivision 2 b of this subsection, the owner or operator shall:</del> (1) <u>Within 14 days of each sampling event during first detection monitoring,</u> notify the department identifying the Table 3.1 Column A constituents that have been detected; <del>and</del> (2) <del>Within 90 days, and on at least a semi-annual basis thereafter, collect at least one sample from each well (background and downgradient), conduct analyses for all</del>	Comment incorporated. The suggested revision does not change the implementation of the regulation, but increases clarity.

		<p>constituents in Table 3.1 Column A, and record their concentrations in the landfill operating record and describe the results in the semi-annual report. <i>[Comments: This sentence was moved; see below.]</i></p> <p>b. Development of background. Within 360 days of the initial first determination sampling event:</p> <p>(1) Establish background concentrations for any constituents detected pursuant to subdivision 2 a (1) of this subsection.</p> <p>(a) A minimum of four independent samples from each well (background and downgradient) shall be collected and analyzed to establish background concentrations for the detected constituents with the goal being to obtain sufficient information from downgradient wells to perform a statistical evaluation using the procedures in subsection D of this section.</p> <p>(b) In those cases where new wells are installed downgradient of waste disposal units that already have received waste, but these wells have not yet undergone their initial sampling event, collection of four independent samples for background development will not be required.</p> <p>(2) Within 30 days of completing the background calculations required under subdivision 2 b (1) (a) of this subsection, submit a first determination report, signed by a qualified groundwater scientist, to the department which must include a summary of the background concentration data developed during the background sampling efforts as well as the statistical calculations for each constituent detected in the groundwater during the background sampling events.</p> <p>c. Semi-annual sampling and analysis. Within 90 days of the last sampling event during the background-establishing period and at least semi-annually thereafter, sample each monitoring well in the compliance network for analysis of the constituents in Table 3.1 Column A. <i>[Comment: Changes are proposed for clarity.]</i></p>	
<p>9VAC20-81-250.C.3.e.(1)</p>	<p>JEI</p>	<p>This section appears to be more restrictive than its counterpart in 250.B.3.f.(1). The latter section allows the reinstatement of Detection Monitoring after all Table 3.1 Column B constituents are shown to be at or below background for two consecutive events. The two consecutive events are typically conducted within 420 days of each other. However, C.3.e.(1) allows the reinstatement of First Determination Monitoring after all Table 3.1 constituents are shown to be at or below background for two consecutive years. We</p>	<p>The suggested revision has been incorporated. The timeline included in the state monitoring program is now consistent the Detection monitoring program.</p>

		<p>recommend the language be changed to be consistent with the allowance in Assessment Monitoring.</p> <p>Delete: for two consecutive years of sampling events Add: for three consecutive semi-annual sampling periods.</p>	
9VAC20-81-260.C.1	JEI	<p>The referenced subdivisions are not subdivisions of section 260. The full citation of the referenced sections should be added.</p> <p>Revise to read: ...has been received as noted under 9VAC20-81-250 B 3 F (3) (a) (ii) or 9VAC20-81-250 C 3 c (3) (a) (ii).</p>	<p>Comment incorporated and suggested revision made to final regulation.</p>
9VAC20-81-260.C.1	Golder	<p>C. Characterization and assessment requirements.</p> <p>1. Upon notifying the department that one or more of the constituents listed in Table 3.1 Column B has been detected at a statistically significant level exceeding the groundwater protection standards, the owner or operator shall, unless department approval of an Alternate Source Demonstration has been received as noted under subdivision B 3 f (3) (a) (ii) or C 3 c (3) (a) (ii):</p> <p>a. Characterization. Within 90 days, install additional monitoring wells as necessary, including the installation of at least one additional monitoring well at the facility boundary in the direction of contaminant migration, sufficient to define the vertical and horizontal extent of the <u>release of constituents at statistically significant levels exceeding the groundwater protection standards</u> <del>exceeding release.</del></p>	<p>Comment incorporated and suggested revision made to final regulation.</p>
9VAC20-81-260.C.2	Golder	<p>C.2. Presumptive remedy allowance.</p> <p>a. Applicability. To expedite corrective action, in lieu of an analysis meeting the requirements of subdivision 3 of this subsection, the owner or operator of any facility monitoring groundwater in accordance with 9VAC20-81-250 <u>B or C</u> may propose a presumptive remedy for the landfill.</p> <p><i>[Comment: Otherwise, the applicability conflicts with 9VAC20-81-260.C.2.c(1).]</i></p>	<p>Comment not incorporated. The department was unable to locate the conflict referenced in the comment. In addition, the provisions of presumptive remedy do not apply to sanitary landfills subject to 9VAC20-81-250 B.</p>
9VAC20-81-260.C.2.e	JEI	<p>Since this section refers to subdivision D 1 of this section, it is confusing to use the terminology of "groundwater monitoring plan." We recommend using "Corrective Action Monitoring Plan" to provide more clarity.</p> <p>Revise to read: ...submitting a Corrective Action Monitoring Plan (CAMP) meeting subdivision D 1 of this section...</p>	<p>Comment incorporated and suggested revision made to final regulation.</p>

9VAC20-81-260.C.2.f	Golder	C.2.f. Evaluation and response. The owner or operator shall provide an evaluation of the performance of the implemented presumptive remedy every three years, unless an alternate schedule is approved by the Director, in a Corrective Action Site Evaluation report containing, at a minimum, the following information:	Comment incorporated and suggested revision made to final regulation.
9VAC20-81-260.C.3.c	JEI	It is unclear to which list of standards the reader is being directed.  Please clarify specifically to what section of the regulations "subdivision 2 of this subsection" is referring.	Comment incorporated and suggested revision made to final regulation..
9VAC20-81-260.C.4.c	JEI	It appears the intent of this section is to clarify that the public meeting must occur prior to the submission of a completed assessment of corrective measures or presumptive remedy. However, the selected wording will cause the public meeting to occur within 180 days of notifying the department of a groundwater protection standard exceedance, even if the director allowance specified in 260.C.1.g has been granted.  Revise to read: The owner or operator shall hold a public meeting within a timeframe that allows for the submission of a completed assessment of corrective measures or presumptive remedy within 180 days of notifying the department of a groundwater protection standeard exceedance, or within the timeframe allowed under subdivision 1.g of this subsection.	The suggested revision has been incorporated. The final regulation has been revised to state, "...exceedance or as granted under subdivision 1 g of this subsection."
9VAC20-81-260.D.1	JEI	If a proposal for presumptive remedy has been approved by the department, then there is no requirement for a CAP to be submitted as indicated in 260.D.1 (see 260.C.2.e). We recommend clarifying that only a CAMP is required to be submitted if a proposal for presumptive remedy has been approved by the department.  Delete: , or proposal for presumptive remedy described under subdivision C 2 of this section.  Add: The owner or operator shall submit to the department a CAMP consistent with the findings as presented in the proposal for presumptive remedy required under subdivision C 2 of this section.	Comment not incorporated. The proposal for presumptive remedy is, as the title suggests, a proposed action. If the department accepts the proposal, the actions outlined are written into a presumptive remedy-based Corrective Action Plan to be submitted under 260.E.1.
9VAC20-81-260.D.1.c	Golder	D.1.c. Corrective action monitoring program. Any groundwater monitoring program to be employed during the corrective action process shall:  (1) At a minimum, meet the requirements of the applicable groundwater monitoring program described under 9VAC20-81-250 B 3 or C 3;	The final regulation has been revised to state, "(2) Determine the horizontal and vertical extent of the plume of contamination for constituents at statistically significant

		<p>(2) Determine the horizontal and vertical extent of the <del>release plume of contamination for each constituents</del> <u>at statistically significant levels exceeding</u> under the groundwater protection standards that has been measured at concentrations that exceed background levels; <i>[Comment: For consistency with 40 CFR Part 258.55.]</i></p>	<p>levels exceeding background concentrations.</p>
9VAC20-81-285	TEEL	<p>The following new Subsection D should be added to this proposed section: D. Where the proposed landfill mining is to be conducted at a currently permitted and active sanitary landfill, CDD or industrial landfill, the owner or operator shall only be required to submit a landfill mining plan consistent with the requirements of subsection B of this section. In such cases, the mining plan shall be an addendum to the existing Operations Manual for that landfill as a minor amendment under 9VAC20-81-600.F.2.</p> <p>COMMENT: This change, along with requested companion changes below, help to ensure that landfill mining at active landfills is not overburdened with unnecessary restrictions and uncertainty as to process and conditions. Presently, the regulations' degree of complexity and uncertainty pertaining to such landfill mining at active landfills discourages such work, rather than encouraging it as would be consistent with the stated policy goals of the Waste Management Act and the VSWMR currently at 9VAC20-80-30 and as proposed at 9VAC20-81-20.</p>	<p>There is no section 9VAC20-81-285; it is presumed the intended regulatory reference is 9VAC20-81-385. The final regulation includes provisions to remove the operations manual from the permit. Therefore, it is not necessary to require a permit amendment to revise portions of the operations manual.</p>
9 VAC 20-81-300	DAA / SWANA	<p>While combining the landfills made sense, combining the wide variety of facilities here did not and it has made working with each facility very difficult. It is probably too late to separate each facility but please consider doing so. It did not facilitate the stated goal of clarity.</p>	<p>The final regulation was not revised in response to this comment. The technical advisory committee made up of industry representatives preferred consolidation to reduce repetitious text.</p>

<p>9VAC20-81-310.A.3.c</p>	<p>McGill</p>	<p>To help divert food waste from the landfill the differentiation of pre and post consumer food waste should be dropped. Whether it is a Type A or Type B facility the requirements for composting are the same and they are derived from EPA Part 503 rules for biosolids. Therefore the comment in 9VAC20-81-300, 3,c, "post-consumer food waste with pathogen potential" is irrelevant as all material composted in all commercial sized operations irrespective of whether they are Type A or Type B must be treated as if they have pathogen potential and are processed iaw Part 503 pathogen reduction requirements. My recommendation is therefore that irrespective of whether it is pre or post consumer all food waste is just categorized as "food waste".</p>	<p>The final regulation was not revised in response to this comment. The final regulation only requires pathogen reduction testing for compost containing Category III and/or IV solid waste. The suggested revision would be more restrictive and costly requiring compost containing Category I and/or II to also conduct this testing. The intent of this regulatory revision was to lessen regulatory restrictions and costs, where feasible, for composting facilities.</p>
<p>9 VAC 20-81-310.A.3.d</p>	<p>DAA / SWANA</p>	<p>Add the composting of sewage sludge to the list. Under 9 VAC 20-81-95, the composting of sewage sludge is exempt provided that it is regulated under VPA or VPDES programs and this may be 100% of the time. However, should a facility composting sewage sludge not be covered under these programs, it would end up in this category and should therefore be included with explanation.</p>	<p>The final regulation was not revised in response to this comment. In accordance with state law, if a facility land applies sewage sludge (biosolids) they must be permitted under VPA. The composting standards contained in the Virginia Pollution Abatement (VPA) regulations (based on 40CFR 503) closely mirror those included in the final regulation. To avoid double regulation and permitting under nearly identical standards, facilities permitted by VPA to compost sewage sludge will not be required to apply for a solid waste permit. Composting of sewage sludge under the authority of a Virginia Pollution Discharge Elimination System (VPDES) permit at the treatment plant of generation is currently exempted under the effective</p>

			regulation.
9VAC20-81-310.B.2	Waste Management	This section appears to be a duplication of text included in 9VAC20-81-95.D.14.	Final regulation was revised to remove the duplicative text.
9 VAC 20-81-310.C	DAA / SWANA	The purpose of this section is very unclear and obviously was written around a specific and unique circumstance. The name of the facility is not conducive to understanding when it is applicable and should be changed. Change "waste" to "sludge" and it is easier to use.	The final regulation has been revised to clarify the applicability of these facilities.
9VAC20-81-310.D.3 and E.3	Waste Management	These citations reference standards for material recovery facilities and waste to energy facilities in Part III. It is unclear which standards this is referencing.	Final regulation was revised to clarify the referenced citation.
9VAC20-81-320.F.3	Coker Composting and Consulting	Type B facilities should be allowed in areas where depth to the seasonal high ground water table is less than 2 feet provided the facility is equipped with hardened waste receipt, composting and product storage pads in accordance with the requirements at 9 VAC 20-81-330.A.2.d. and with stormwater management facilities in accordance with 9 VAC 20-81-330.A.2.i.	The final regulation has been revised to remove the 2 foot restriction for those facilities underlain by hard surfaces in accordance with 9VAC20-81-330 A 1 b.
9VAC20-81-330.A.2.d	Coker Composting and Consulting	A fourth alternative should be added. (4) A 12" compacted gravel pad underlain by a continuous impermeable membrane liner of minimum 60-mil thickness and equipped with leachate collection above the liner and leak detection below the liner.	The final regulation has been revised to include a fourth alternative utilizing a 60-mil HDPE liner.
9 VAC 20-81-330.A.2.d	DAA / SWANA	The frequency sampling table is in metric tons. Is the tonnage under this section metric?	The sampling frequency table has been converted from metric tons to tons.

<p>9 VAC 20-81-330.C</p>	<p>DAA / SWANA</p>	<p>See previous comments on name of facility.</p>	<p>See above response.</p>
<p>9 VAC 20-81-330.D</p>	<p>DAA / SWANA</p>	<p>MRF facilities should be required to provide a design description manual similar to that required for WTE facilities under 9 VAC 20-81-330.E.11 as these facilities can be a complex series of operations for which DEQ should have an understanding of the design assumptions, throughput, and emergency contingency plans. In particular the potential amount of residue and its disposal should be identified.</p>	<p>Comment incorporated to include suggested design description manual.</p>
<p>9VAC20-81-340.A.2.b</p>	<p>Coker Composting and Consulting/Greg Evanylo</p>	<p>Allowable testing standards should specifically include the U.S. Composting Council and U.S. Department of Agriculture <i>Test Methods for the Examination of Compost and Composting</i> (TMECC)</p>	<p>The final regulation was not revised to incorporate the Test Methods for the Examination of Compost and Composting (TMECC). The testing methods included in the final regulation mirror those required by 40 CFR Part 503 and those required by other states. The need to incorporate the TMECC is not clear.</p>
<p>9 VAC 20-81-340.A.2.b</p>	<p>DAA / SWANA</p>	<p>This section of the regulations indicates that sampling methodology should be referenced back to SW-846. However SW-846, Chapter 3, Section 9.1.1.4.1, Table 9-1, provides a methodology which is very difficult to utilize. Would it be better to include a methodology within the regulations? It may be appropriate to further define or clarify the methodology. Note that the last sentence before the table, states that "Samples to be analyzed for metals shall be "composted". This should be composited.</p>	<p>The final regulation has been revised to replace "composted" with "composited". The methodology has not been specified. The final regulation includes "other applicable standards". These tests are industry standards with clear procedures currently established. Including a specific methodology would be more restrictive and prevent new standards.</p>

<p>9 VAC 20-81-340.A.2.c</p>	<p>DAA / SWANA</p>	<p>Are there specific testing protocol that can be cited for the tests under 9 VAC 20-81-340.A.2.c?</p>	<p>The final regulation was not revised in response to this comment. The Dewars Compost Self-Heating Flask is an establish procedure.</p>
<p>9VAC20-81-340.A.2.c.(2)</p>	<p>Greg Evanylo</p>	<p>Reheat potential using the Dewar Compost Self-Heating Flask. The results must indicate a stable product. Temperature rise above ambient must not exceed 10°C for stable compost. Very stable compost will not exceed 10°C above ambient. -- While very stable compost will not exceed 10°C above ambient, the temperature rise for stable compost rise must not exceed <b>20°C</b> (according to the Dewar's Test interpretation).</p>	<p>Final regulation was revised to incorporate suggested text.</p>
<p>9 VAC 20-81-340.A.2.e</p>	<p>DAA / SWANA</p>	<p>Given the potential metals in animal feeds or other potential contaminants from collection of the composting materials, why are metals only monitored for Category IV materials?</p>	<p>The final regulation was not revised in response to this comment. The final regulation includes metals analysis only for Category IV feedstocks. This is due to the considerably lower risk of metal content coming from animal and plant derived feedstocks. The department has insufficient documentation to justify expanding the metals testing to animal and plant derived feedstocks.</p>
<p>9VAC20-81-340.A.2.g.5</p>	<p>Coker Composting and Consulting</p>	<p>The requirement to include anticipated daily traffic flow in the Operations Plan should be deleted as it doesn't allow the necessary flexibility for compost facilities to deal with new feedstocks (without a permit modification for each new feedstock), with unanticipated orders for large quantities of compost (VA DOT has ordered over 20,000 CY from one producer in 2007-2008, requiring over 500 tractor-trailer loads), or for accommodating incoming retail traffic that is entirely unpredictable.</p>	<p>The final regulation was not revised in response to this comment. The requirement to include the anticipated daily traffic flow is necessary to ensure on-site queuing capacity exists so that waiting vehicles do not back up onto the public road.</p>

9VAC20-81-340.B.2.b.	Waste Management	Citation references a “rated capacity”. Is this the same capacity as the “process capacity” defined in 9VAC20-81-10?	The final regulation was revised to replace both terms with “process rate”.
9VAC20-81-340.C.1.	Waste Management	This citation requires incoming sludge to “undergo immediate treatment”. However, there may be situations where the treatment process takes longer than one day. DEQ should evaluate this text to ensure facilities must <u>begin</u> treatment within one day of receipt, but not necessarily complete treatment.	Final regulation was revised to incorporate suggested text.
9VAC20-81-360.A.2.d	Coker Composting and Consulting	The minimum advance time required to notify VA DEQ of impending closure should be shortened to 90 days from 180 days. There are too many causes for rapid decisions to close (sudden death, medical emergencies, bankruptcies, loss of waste receipt contracts) and it is unrealistic to expect compost facilities to predict 6 months in advance.	The final regulation requires submittal of the closure plan 180 days prior to closure to provide adequate time for review and approval prior to closure activities. This review time is necessary to ensure the department fully evaluates the closure plan prior to approval and closure actions. This timeline does not relate to closure of the business operation, but applies to closure of the waste management facility.
9VAC20-81-370	Waste Management	Is this section necessary? 9VAC20-81-310.F appears to address the closure of these lagoons.	The final regulation was not revised in response to this comment. 9VAC20-81-310.F establishes applicability, 9VAC20-81-370 establishes closure requirements if subject to chapter.
9VAC20-81-385	Waste Management	This section is titled “landfill mining’. However, there is no definition for the term landfill mining.	The final regulation was revised in response to this comment. A definition of landfill mining was added to the final regulation.
9 VAC 20-81-397	DAA / SWANA	Why is this section not called “Yard waste composting” for ease of use? Please change. Manures have been added to this section. How does this relate to Category III compost facilities?  Who will monitor the ratios? How will they be reported?	The final regulation has been revised to change the title to “Exempt yard waste composting facilities”. The facility will be responsible for monitoring the carbon to nitrogen ratios.

<p>9VAC20-81-397</p>	<p>Waste Management</p>	<p>This section is titled “exempt facilities”. However, it would appear this section only incorporates the facilities currently exempted under the vegetative waste regulations. It is suggested the section title be changed to “conditionally exempt vegetative waste facilities”.</p>	<p>Final regulation was revised to change the title to “Exempt yard waste composting facilities”.</p>
<p>9VAC20-81-397.B.1</p>	<p>Coker Composting and Consulting/Greg Evanylo</p>	<p>The amount of off-site yard waste received by an agricultural operation should be increased to 10,000 cubic yards per year. This is equivalent to one 40-CY rolloff dumpster per day on a 5-day week, 52-week year schedule. This will help farmers find additional revenue sources and economic benefit from receiving off-site wastes for composting on-farm.</p>	<p>No revision to the regulation is necessary. To qualify for the exemption authorized under B.1 the facility must not receive greater than 6,000 cubic yards from off-site in any 12 months period. However this does not restrict agricultural operations from accepting more than 6,000 cubic yards, but they must comply with the additional siting and reporting requirements of B.2. This is required by 10.1-1408.1.K of the Virginia Waste Management Act.</p>
<p>9VAC20-81-397.B.2</p>	<p>Coker Composting and Consulting/Greg Evanylo</p>	<p>Farms authorized to take in yard waste and manures should also be allowed to take in Clean wood combustion residues (wood ash) up to 10,000 CY/year and pre-consumer food wastes up to 4,000 CY/year. This will help farmers find additional revenue sources and economic benefit from receiving off-site wastes for composting on-farm.</p>	<p>The final regulation has been revised to exempt clean wood combustion residues when used in compost for pH adjustment or as an absorbent material in response to a public comment regarding 9VAC20-81-95.C.7.b. Therefore, an additional exemption here is not necessary. The final regulation has been revised to allow agricultural operations to accept Category I feedstocks, but limited to quantities necessary to achieve a carbon to nitrogen ratio of 25:1 to 40:1.</p>

<p>9VAC20-81-397.B.2.b</p>	<p>Coker Composting and Consulting/Greg Evanylo</p>	<p>The space requirement should be increased from 150 CY finished compost per acre to 1,500 CY finished compost per acre. Assuming a 50% volume loss in composting (which is normal), this only allows 300 CY per acre of compostable feedstocks per acre. A small windrow composting operation is able to handle 4,000 – 6,000 CY/acre of compostable feedstocks. Existing VA DEQ permitted windrow composting operations on-farm are handling over 8,000 CY per acre without adverse impact.</p>	<p>No revision to the regulation is necessary. 10.1-1408.1.K of the Virginia Waste management Act requires, "the agricultural operation has at least one acre of ground suitable to receive yard waste for each 150 cubic yards of finished compost generated".</p>
<p>9VAC20-81-397.B.2.d</p>	<p>Coker Composting and Consulting/Greg Evanylo</p>	<p>As noted before the maximum amount of yard waste allowed to be brought on-farm should be increased to 10,000 CY.</p>	<p>No revision to the regulation is necessary. The 6,000 cubic yard threshold included in the final regulation is not a maximum limit. Those facilities that accept greater than 6,000 cubic yards in a 12 month period are must adhere to the requirements of 9VAC20-81-397.B.2, which includes specific siting criteria and a reporting requirements. This is required by 10.1-1408.1.K of the Virginia Waste Management Act.</p>
<p>9VAC20-81-397.B.3.a</p>	<p>Coker Composting and Consulting/Greg Evanylo</p>	<p>The amount of allowable yard waste receivable from off-site at a non-farm operation should be increased from its current limit of 500 CY to 1,000 CY. 1,000 CY is a pile 30 ft wide x 90 ft long x 10 ft high and is unlikely to cause an environmental or public health impact.</p>	<p>No revision to the regulation is necessary. This exemption is intended for those individuals who wish to generate compost for their own use, but require a yard waste feedstock from off-site. For this reason the department has limited the volume to 500 cubic yards. Non-agricultural composting operations that intend to generate compost as a business must first qualify for permit by rule coverage.</p>

<p>9VAC20-81-397.B.3.b</p>	<p>Coker Composting and Consulting/Greg Evanylo</p>	<p>Owners of non-farm property who receive yard wastes for composting should be allowed to earn compensation for their work. This will help increase the diversion of yard wastes from landfilling to composting and increase VA recycling rates as well as reduce greenhouse gas emissions of methane from landfilling.</p>	<p>The final regulation prohibits compensation for those facilities operating under 9VAC20-81-397.B.3.b. This exemption includes a 500 cubic yard limit to allow non-agricultural real property owners to compost on their property and accept up to 500 cubic yards of yard waste from off-site. This exemption is intended for those individuals who wish to generate compost for their own use, but require a yard waste feedstock from off-site. Non-agricultural composting operations that intend to generate compost as a business must first qualify for permit by rule coverage.</p>
<p>9VAC20-81-397.B.4</p>	<p>Coker Composting and Consulting/Greg Evanylo</p>	<p>As noted before the maximum amount of yard waste allowed to be brought on-farm should be increased to 10,000 CY.</p>	<p>No revision to the regulation is necessary. As stated above the 6,000 cubic yard threshold is not a maximum limit. Agricultural facilities which receive greater than 6,000 cubic yards of yard waste from off-site must adhere to the additional reporting and siting requirements of 9VAC20-81-397.B.2. This is required by 10.1-1408.1.K of the Virginia Waste Management Act.</p>
<p>9VAC20-81-410.A</p>	<p>Waste Management</p>	<p>This section does not include the newly created centralized waste treatment facilities. It is our understanding these new facilities would be allowed coverage under a permit-by-rule. However, with its omission from this section a full permit would be required.</p>	<p>The final regulation has been revised to include centralized waste treatment facilities in the list of facilities eligible for coverage under permit by rule status.</p>

9VAC20-81-410.A.2.e.(2)	JEI	This appears to be a new requirement. Is the PE only certifying the contents of the Closure Plan?	Yes, this is a new requirement. This change streamlines the permit by rule application process. The final regulation only requires a certification that a closure plan exists meeting the regulatory requirements.
9VAC20-81-410.A.3.b.	JEI	Schedule for public meeting is not clear.  Revise to read as follows: "The owner or operator shall hold a public meeting not earlier than 15 days after the first publication of the notice..."	Final regulation revised to incorporate suggested revision in part.
9VAC20-81-410.A.3.c.	JEI	Start of the public comment is not clear.  Revise the 2nd sentence to read as follows: "The comment period will begin on the date the owner or operator publishes the first notice in the local newspaper."	Final regulation revised to incorporate suggested revision.
9 VAC 20-81-410.A.4	DAA / SWANA	Does this section mean that a CTO is no longer necessary under a permit by rule prior to initiating the activity? Is an inspection by DEQ required prior to initiating the activity?	Certificates to operate are required by the final regulation for facilities with full solid waste permits, but not permit by rule facilities.
9 VAC 20-81-410.B.5	DAA / SWANA	Open burning of a significant amount of debris waste could compromise air quality. What would prevent a private, for profit business from accepting debris waste for a fee from a large service area and creating a problem? Again, without some prior authorization, the local government or adjoining property owners can be compromised without recourse until after the nuisance, hazard or open dump is proven. Local government approval should be required prior to initiating actions as well as notification to DEQ.	Comment not incorporated. The department must distinguish which activities are and are not subject to regulation and permitting. Open burning is regulated by 9VAC5-130-10 <i>et al.</i> The department's air division and the state air pollution control board enforce these regulations.
9VAC20-81-450.E	Waste Management	The text included in this section is confusing. It is unclear what the public comment period length will be for facilities that are not required to hold a public hearing. In addition, the regulatory path for facilities that issue a public notice without the intention of a public hearing, but in response to the criteria in subsection E.4 is later required to hold a public hearing. The timelines for the public comment period and public hearing process should be better defined.	The final regulation has been revised to clarify the public notice and public hearing procedures.

<p>9VAC20-81-450.E.2.</p>	<p>JEI</p>	<p>The start and length of the public comment period is unclear.</p> <p>Revise the 2nd sentence to read as follows: "A notice announcing the beginning of the 45 day public comment period and the availability of the draft permit...."</p>	<p>The final regulation has been revised to clarify the public notice and public hearing procedures.</p>
<p>9 VAC 20-81-450.E.7</p>	<p>DAA / SWANA</p>	<p>90 days is too long. Would suggest as a compromise considering 60 days.</p>	<p>No revision to the regulation is necessary. The regulation is consistent with the Administrative Process Act, § 2.2-4021.</p>
<p>9VAC20-81-450.E.7.</p>	<p>JEI</p>	<p>By increasing the department's decision time to 90 days, adds 60 days to an already protracted process.</p> <p>Revise to read as follows: "... shall be rendered by the director within 30 days of the close of the hearing comment period."</p>	<p>No revision to the regulation is necessary. The regulation is consistent with the Administrative Process Act, § 2.2-4021.</p>
<p>9 VAC 20-81-460.C</p>	<p>DAA / SWANA</p>	<p>Requirements to provide survey information for the facility and waste management boundaries prior to final design are inappropriate. The surveyed boundaries should be provided with the part B information once the specifics of the design are known. The purpose of the Part A is to delineate the general area approved for the facility, not to identify the specifics of the approved facility.</p> <p>Legal control may not be finalized until after the application is provided. The term "legal" control should be defined.</p>	<p>The final regulation was not revised to remove the final survey design. The height of the proposed landfill is an integral part of the Part A process with regards to Federal Aviation Administration restrictions, compliance with local ordinances, and soil stability.</p> <p>Legal control is necessary prior to the department issuing a permit. Legal control does not require ownership. Other arrangements are acceptable, but legal</p>

			<p>control of the property must be attained to receive a permit.</p>
<p>9VAC20-81-460.H</p>	<p>Golder</p>	<p>H. For a new sanitary landfill or an <u>lateral</u> expansion of an existing sanitary landfill <del>or an increase in capacity by expanding an existing facility vertically upward</del>, a Landfill Impact Statement (LIS). <i>[Comment: The Code of Virginia §10.1-1408.4 only applies this requirement to a “new municipal solid waste landfill” – since a lateral expansion of a landfill would also potentially impact sensitive receptors, adding lateral expansions seems appropriate. However, applying this requirement to an increase in capacity that does not involve any additional area is an unwarranted effort.]</i></p> <p>1. A report must be provided to the department that addresses the potential impact of the landfill on parks, recreational areas, wildlife management areas, critical habitat areas of endangered species as designated by applicable local, state, or federal agencies, public water supplies, marine resources, wetlands, historic sites, fish and wildlife, water quality, and tourism. This report shall comply with the statutory requirements for siting landfills <del>in the vicinity of public water supplies or wetlands</del> as set forth in § <del>40.1-1408.4 and</del> 10.1-1408.5 of the Code of Virginia. <i>[Comment: The public water supply provisions in §10.1-1408.4.B.3 are specific to a “new municipal solid waste landfill” – we recommend not adding this requirement to lateral expansions (or capacity increases either) since, in those cases, a landfill is already at that location, regardless of its proximity to public water supply intakes or reservoirs, and prohibiting an expansion (designed, constructed, and operated under current standards) based on an existing proximity is unwarranted.]</i></p>	<p>See above response regarding “expansion” and “lateral expansion”. The final regulation has not been revised to incorporate the suggested changes. An expansion is considered a new facility in accordance with 9 VAC20-81-10. Therefore, standards applicable to new facilities are also applicable to expansions.</p>

9VAC20-81-485.A	HDR	Indicates the certification page is signed by a responsible official. What is the definition of the responsible official and does the annual certification have to be submitted to the department or filed in the site records?	The final regulation has not been revised. A definition for "responsible official" was included in the proposed text.
9 VAC 20-81-490.B.1	DAA / SWANA	It is presumed that it is clear that this section does not apply to permit by rules.	The comment is correct.
9VAC20-81-570.A.10.	JEI	As long as the regulatory requirements have not changed, not clear on the benefit the department gains by revoking the permit.  Revise to read as follows: "If regulatory requirements and standards change, five years after permit issuance, the permittee ...."	The final regulation has been revised to remove this new requirement.
9VAC20-81-570.A.10	Golder	A.10. Five years after permit issuance, the permittee has never built or operated the permitted solid waste management facility, unless <u>the permittee has notified the department of an alternate timeframe to build or operate the facility has been approved by the department</u> ; or <i>[Comment: Significant resources are needed to obtain a permit, which is a long-term investment that remains a valid asset regardless of time. The permittee has obtained local government approval, and undergone a legal permitting process to obtain the permit. It is unclear what authority the department would have to revoke a valid permit solely because of the passage of time. Adequate provisions exist in the regulations to allow the department to take actions to protect human health and the environment; therefore, permit revocation should not be needed to address that situation. Therefore, we propose a notification requirement so that the department can track un-built / un-operated permitted facilities.]</i>	The final regulation has been revised to remove this new requirement.
9VAC20-81-600	TEEL	Table 5.2 (Permit Modifications) – Proposed Item 5 (Landfill Mining) under the Major permit category list should be removed from that list so that it will be considered a minor permit modification.  COMMENT: Landfill mining at existing active landfills where Operations Manuals already exist should be allowed by a minor permit amendment to facilitate such activities; the major permit amendment process now in place and as currently proposed is overly burdensome and discourages this useful activity that can result in recovery of recyclable and reclaimable materials, thereby creating valuable new air space and extending landfill lives. As alluded to the comment for item 1 above, changing the amendment process from major to minor	The final regulation has not been revised. Development of a landfill mining plan requires significant changes to existing operations. If the facility is active both incoming and outgoing wastes must be managed. In addition, uncovering and excavating disposed solid waste may lead to potential odor and dust nuisances. Therefore the department believes these

		is therefore consistent with the policy goals of the Waste Management Act and the VSWMR.	amendments are properly classified as major amendments and as such provide the opportunity for public participation through a public comment period.
9VAC20-81-600	HDR	Table 5.2 Item 6 regarding reduction in the post-closure care period. What if a reduction is requested after the initial post-closure care period is completed (termination of post-closure care activities); would that be considered a minor modification?	Comment not incorporated. A request to reduce the established post-closure period is a change to the existing permit shortening the time specified in the permit and would be a major modification. However, when terminating post-closure care at the end of the required post-closure care period, an amendment is not required as the permit will be revoked if approved.
9VAC20-81-600.F.2	HDR	Indicates minor modifications may be requested for changes that will result in a facility being more protective of hhe. What about cases where it is no less protective or equal to?	No revision to the regulation is necessary. In accordance with the final regulation all permit revisions not listed in Table 5.2 as a major modification or permittee change are considered minor modifications.
9VAC20-81-600.F.2.a	TEEL	This proposed subsection should be revised to add the following new last sentence: “Notwithstanding the foregoing, submissions of landfill mining plans as amendments to the Operations Manual pursuant to 9VAC20-81-285.D shall be considered a minor amendment.”	No revision to the regulation is necessary. The final regulation includes provisions to remove the operations manual from the permit. Therefore, requiring a permit amendment to revise portions of the operations manual can not be added to the final regulation.

9VAC20-81-600.F.2.c	TEEL	<p>This proposed subsection should be revised to add the following new last sentence:  “Notwithstanding the forgoing, if, after 60 days of the date of submission of a minor permit application, the Department has not provided in writing any comment or decision on such application to the applicant, the minor amendment shall be deemed to be acceptable and shall immediately take effect without further action by either the Department or the permittee, and the permit shall be amended and reissued accordingly.”</p>	<p>Minor permit modifications require the written approval of the department prior to issuance.  Therefore, an automatic approval after an established time period is not possible. However, the final regulation includes a provision for a new type of permit modification (permittee change) which allows some revisions to be implemented by the permittee without the agency's approval. It should also be noted as a result of removing the operation manual as a portion of the permit application and the reduction of revisions requiring a major permit modification a reduction in workload is expected.</p>
9VAC20-81-600.F.3.c, F.3.e, and F.4.a.	Waste Management	The regulatory citations included in these sections appear to be incorrect.	The final regulation was revised to correct the citations.
9VAC20-81-660	Waste Management	<p>This section is specific to soil contaminated with petroleum products. However, DEQ applies these standards to other similar materials such as booms or absorbents contaminated with petroleum products. If this is DEQ's intent going forward the section should be revised to include these materials.</p>	<p>The final regulations have been revised to include the additional language requested. However, the additional items included in this section are specific to those contaminated with petroleum products.</p>
9VAC20-81-660.A	TEEL	Add a new subsection A.3 as follows: “3. For the purposes of this Section 9VAC20-81-660, the term ‘soil’ shall include soil, sediment, dredge spoils and other earthen media.”	<p>The final regulation has been revised to include the additional language requested. However, the additional items included in this section are specific to those contaminated with petroleum products.</p>
9VAC20-81-660.B	TEEL	This proposed subsection should be struck in its entirety and replaced with the following: B. Sampling and testing requirements. Sampling methods, selection of analytes, and analytical methods to characterize soil suspected or	No revision to the regulation is necessary. 9VAC20-81-660 is written specifically for

		<p>known to be contaminated with petroleum products shall be consistent with EPA SW-846 methods and sufficient to demonstrate compliance with the requirements of 9VAC20-81-660.C and 9VAC20-81-660.D; provided, however, that the analytes to be tested for may be reduced to only those known or reasonably expected to be present in the soil based on facility operator or generator knowledge or prior adequate testing of that soil that is documented and maintained to demonstrate compliance with this section. Otherwise, specific testing requirements may be waived or changed if the department staff determines that the soil was contaminated from a specific source such as chlorinated solvents from a drycleaner or petroleum products from an underground storage tank.</p> <p>COMMENT: This section as currently proposed needs to be streamlined and simplified to comport with other regulatory program requirements and standard industry practices of utilizing EPA SW 846 for both testing and sampling methodologies. By requiring consistency with SW 846 in both respects and sufficiency of methods chosen to ensure compliance with the required information and disposal criteria standards in 9VAC20-81-660.C and 9VAC20-81-660.D, the Department's prior approval of testing parameters, which tends to create bottlenecks in achieving cleanups as the facility and contractors must wait for such determinations from the agency, becomes unnecessary. Reliance on facility operator and generator knowledge and prior suitable soil analysis to narrow the list of contaminants of concern for testing is appropriate (and used for other waste characterization determinations) and also minimizes costs and delays in achieving cleanups. Review of disposal facility records during facility inspections and the risk of enforcement action for non-compliance should serve as sufficient assurance of proper sampling and testing in this regard.</p>	<p>petroleum contaminated media. Therefore, testing specific to that waste stream is included in this section. Soils or other media contaminated by non-petroleum constituents should be managed in accordance with 9VAC20-81-610 as a special waste, unless the facility's permit allows for disposal of the contaminated media. It should be noted that the department is currently developing guidance to address evaluation of contaminated soils in an effort to standardize and streamline the testing, analysis, and department review of contaminated media</p>
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**Hazardous Waste Significant Non-Compliers And Solid Waste Final Orders In Federal Fiscal Year 2008 (October 1, 2008 Through September 30, 2009):**

*“Significant Non-Compliers (SNCs)...are those [alleged] violators that have caused actual exposure or a substantial likelihood of exposure to hazardous waste [HW] or HW constituents; are chronic or recalcitrant violators; or deviate substantially from the terms of a permit, order, agreement or from RCRA statutory or regulatory requirements...”*  
*Hazardous Waste Civil Enforcement Response Policy, December 2003.*

BRRO= Blue Ridge Regional Office  
 NRO = Northern Regional Office  
 PRO = Piedmont Regional Office

SWRO = Southwest Regional Office  
 TRO = Tidewater Regional Office  
 VRO = Valley Regional Office

**Active HW SNC Cases – Table A**

<b>Location (DEQ Region)</b>	<b>Case Name</b>	<b>Brief Description of Alleged Violations</b>	<b>Status</b>
Henrico Co. (PRO)	Advanced Technologies Processing, Inc., et als.	Failure to obtain permit to receive, store or recycle hazardous waste (HW). Failure to operate universal waste (UW) lamp processing equipment properly. Failure to contain releases from UW lamps. Other violations.	Consent Order signed by party on November 11, 2009. Draft in public notice. \$165,000 civil charge and Schedule of Compliance included. Consent Order requires RCRA closure at the facility.
Essex Co. (PRO)	SCER Supreme Inc. (New Jersey ID)	Failure to meet notification or storage requirements for HW and UW lamps in trailers at facility. Failure to obtain HW transporter permit.	Issues combined with Advanced Technologies Processing, Inc.
City of Roanoke (BRRO)	Chemicals and Solvents, Inc.	Failure to adhere to HW generator and transporter requirements. Possible releases.	Pending EPA enforcement action.
Campbell Co. (BRRO)	Georgia-Pacific Wood Products	Improper managing and labeling of HW. Failure to meet Land Disposal Restrictions.	Draft Consent Order sent to party on 10/27/2009.
Carroll Co. (SWRO)	Gary H. Parsons	Improper storage of HW. HW container violations.	EPA removal action at the site. NOV Issued.
Franklin Co. (BRRO)	HC Shively Jr. Excavating	Land disposal of used oil. Failure to determine whether HW.	Final Consent Order dated 9/18/06. One portion of order has not been completed.
Sussex Co. (PRO)	Indmar Coatings (2)	Unpermitted storage of HW. Container violations. Failure to do HW training. Other violations.	Draft order sent to party 11/5/09.
City of Radford (BRRO)	J & J Sales	Failure to make HW determination. HW Container violations.	Draft Consent Order sent to party on 9-25-2009.
City of Harrisonburg (VRO)	James Madison University	HW generator violations. HW storage violations. HW container violations. Failure to perform HW training. UW violations.	Executive Compliance Agreement under Development.
Accomack Co. (TRO)	KMX	Land Disposal Restrictions violations.	Pending EPA enforcement action.
Henrico Co. (PRO)	Oilfield Pipe and Supply, Inc.	Labeling violations. Failure to make HW determination. Failure to inspect containers.	Draft Consent Order sent to party on 11/2/2009.
City of Roanoke (BRRO)	Pragmatic Environmental Solutions Co.	Failure to make HW determination. HW container violations. Failure to perform HW training.	Consent Order under Development.
City of Richmond (PRO)	Sampson Coatings	HW Container violations. UW violations.	Consent Order under Development.
Russell Co. (SWRO)	Strata Mine Services Inc.	HW container violations. HW generator violations. Multi-media VPDES violations identified as well.	Waste and Water Consent order executed after end of FFY (10/09). \$8,400 civil charge for HW violations. Site returned to compliance.
City of Salem (BRRO)	Tecton Products	Failure to make HW determination. Improper HW treatment. HW generator violations.	Consent Order signed by party on November 16, 2009. Draft in public notice. \$44,642 civil charge. Schedule of Compliance included.
Amelia Co. (PRO)	The Amelia Lumber Co.	HW storage violations. HW generator violations.	Consent Order under Development.
City of Roanoke (BRRO)	Transformer Electric Co. Inc.	HW Container violations. Solid waste violations. HW emergency and preparedness violations.	Draft Consent Order sent to party on 9-25-2009.

**Resolved HW Cases – Table B**

<b>Location (DEQ Region)</b>	<b>Case Name</b>	<b>Brief Description of Alleged Violations</b>	<b>Status</b>
Hanover Co. (PRO)	AERC.COM.Inc.	Failure to obtain permit to treat or store HW. Failure to contain releases from	Consent Order effective April 22, 2009. \$38,000 civil charge with SEP.

Location (DEQ Region)	Case Name	Brief Description of Alleged Violations	Status
		UW lamps. Exceeded HW accumulation times.	Requires RCRA closure at the facility.
City of Charlottesville (VRO)	Coyne & Delany Co.	Generator violations. Failure to conduct HW training. Storage and handling of UW violations.	Consent Order effective April 21, 2009. No civil charge. Required closure of HW tanks and resulted in operator no longer generating HW.
City of Chesapeake (TRO)	Hazel Court Enterprises, former Bernuth	Storage of HW (creosote) without a permit.	EPA has properly disposed of stored waste through a Superfund "removal action." Final site clean-up to occur under EPA oversight. Case has been de-referred from formal enforcement action.
Scott Co. (SWRO)	J-W Filters Antifreeze Recycling	Exceeded accumulation times for HW. Failure to clean up used oil spills.	EPA removal action. Site has related tanks issues. Ability to pay showed neither RP could afford clean-up or pay civil charge. Residual clean-up handled under state funds. Case has been de-referred from formal enforcement action.
City of Virginia Beach (TRO)	Naval Air Station Oceana – Dam Neck Annex	Transportation of HW off-site without a permit. Receiving facility (also a Naval facility) self-reported to DEQ.	Consent Order effective March 9, 2009. \$8,400 civil charge. Schedule of Compliance included.
City of Roanoke (BRRO)	Office Outlet, Inc.	Disposal of HW by abandonment. Failure to adhere to Consent Order of 12/04. Successor corporation.	HW properly disposed of by landlord. Site returned to compliance. No viable RP to pursue enforcement. Case has been de-referred from formal enforcement action.
Henrico Co. (PRO)	Oilfield Pipe & Supply, Inc.	Exceeded HW accumulation times. Contingency plan violation. Weekly inspections of hw accumulation violation.	Consent Order effective October 6, 2008. \$28,248 civil charge including SEP. Schedule of Compliance included.
City of Woodbridge (NRO)	Palm Pools Service Corp.	Failure to maintain facility to reduce fire or explosion.	Consent Order effective March 20, 2009. \$9,945.60 civil charge. Schedule of Compliance included.
Louisa Co. (NRO)	Paul Decorative Products	Failure to determine whether HW. HW containers violations. Exceeded HW accumulation times.	Consent Order effective June 17, 2009. No civil charge based on finding that RP is unable to pay. Schedule of Compliance included.
Franklin Co. (BRRO)	Scott Manufacturing (Leo Scott Cabinets)	Storage of HW without a permit. HW drums in poor condition and exposed. EPA order of 9/07 not complied with.	Drums and equipment have been removed. Sampling indicated no further action warranted. No viable RP. Action has been de-referred from formal enforcement
Caroline Co. (NRO)	VSE-Ladysmith Blast & Paint Facility	Failure to follow generator requirements for notification, containers, training, fees, and contingency plans.	Consent Order effective October 31, 2008. \$17,400 civil charge. Schedule of Compliance included.

Total FFY 09 Hazardous Waste Consent Orders = 7

Total FFY 09 Civil Charges= \$101,933.60

#### Resolved Solid Waste Cases – Table C

*Note: SNC status does not apply to Solid Waste cases*

Location (DEQ Region)	Case Name	Brief Description of Alleged Violations	Status
Augusta Co. (VRO)	Augusta County Service Authority	Compacted waste not covered with approved material. Blowing litter not confined to refuse holding areas.	Consent Order effective June 16, 2009. \$4,950 civil charge. Schedule of Compliance included.
Henrico Co. (PRO)	The East End Landfill, LLC/Darybtown Road Landfill, Inc.	Elevation exceedances. Slopes exceedances. Cover violations. Closure and financial assurance updates. Lift	Consent Order effective August 24, 2009. \$110,000 civil charge with SEP of EMS. Schedule of

Location (DEQ Region)	Case Name	Brief Description of Alleged Violations	Status
		heights. Combustion visible at TEEL.	Compliance included for both facilities.
Rockbridge Co. (VRO)	Environmental Liability Transfer	Soil and groundwater contamination at closed landfill. Site taken over by new owner.	Consent Order effective November 3, 2008. No civil charge included. Schedule of Compliance included.
Bedford Co. (BRRO)	Kingery Brothers Associates	Unpermitted disposal of solid waste.	Consent Order effective August 3, 2009. \$20,000 civil charge. Schedule of Compliance included.
Lee Co. (SWRO)	Lee County	Exceedances for methane at facility boundary.	Consent Order effective August 3, 2009. \$11,130 civil charge including SEP. Schedule of Compliance included.
City of Danville; Pittsylvania Co. (BRRO)	Marshall Construction Co.	Open burning and unpermitted disposal of CDD Waste at various sites.	Consent Order effective June 16, 2009. \$38,000 civil charge including SEP. Schedule of Compliance included.
City of Chesapeake (TRO)	Meeks Disposal Corp.	Conducting MRF activities prior to issuance of permit.	Consent Order effective October 30, 2008. \$4,200 civil charge.
Henry Co. (BRRO)	Oscar L. Nunley	Unpermitted storage of solid waste.	Consent Order effective May 18, 2009. \$5,200 civil charge.
Frederick Co. (VRO)	Pine Knoll Construction Co.	Open burning. Unpermitted disposal of solid waste.	Air and Waste Consent Order. Consent Order effective April 20, 2009. \$5,123 civil charge for waste violations. Schedule of Compliance included.
Pittsylvania Co. (BRRO)	Pittsylvania County	Lechate entered into facility's storm water conveyance.	Consent Order effective March 6, 2009. \$1,300 civil charge. Schedule of Compliance included.
Amelia Co. (PRO)	Waste Management of Virginia	Acceptance of un-stabilized sludge from Camden, NJ Municipal Utilities Authority.	Consent Order effective December 17, 2008. \$52,100 civil charge. Schedule of Compliance included.

Total FFY 09 Solid Waste Consent Orders =11

Total FFY 09 Civil Charges= \$252,003