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## Periodic Review and Small Business Impact Review Report of Findings

<b>Agency name</b>	Virginia Department of Environmental Quality
<b>Virginia Administrative Code (VAC) Chapter citation(s)</b>	9 VAC20-130
<b>VAC Chapter title(s)</b>	Solid Waste Planning and Recycling Regulations
<b>Date this document prepared</b>	October 6, 2023

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

## Acronyms and Definitions

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

CFR- Code of Federal Regulation  
DEQ - Department of Environmental Quality  
EPA – Environmental Protection Agency  
EPR - Extended Producer Responsibility  
MRF – Materials Recovery Facility  
MSW – Municipal Solid Waste  
SWPU - Solid Waste Planning Units  
VAC – Virginia Administrative Code

## Legal Basis

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

*promulgating agency to regulate this specific subject or program, as well as a reference to the agency’s overall regulatory authority.*

Section 4002(b) of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 (42 U.S.C. 6942(b)), requires all states to develop and implement state solid waste management plans. 40 CFR Parts 255 and 256 contain requirements applicable to state solid waste management plans.

Section 10.1-1402 of the Code of Virginia directs the Virginia Waste Management Board to “Supervise and control waste management activities in the Commonwealth.” Section 10.1-1411 of the Code of Virginia authorizes the Virginia Waste Management Board to promulgate this regulation. The regulation is required to include all aspects of solid waste management including waste reduction, recycling and reuse, storage, treatment, and disposal. The board is also required to consider urban concentrations, geographic conditions, markets, transportation conditions, and other appropriate factors and provide reasonable variances and exemptions from regulatory requirements when adopting this regulation.

**Alternatives to Regulation**

*Describe any viable alternatives for achieving the purpose of the regulation that were considered as part of the periodic review. Include an explanation of why such alternatives were rejected and why this regulation is the least burdensome alternative available for achieving its purpose.*

Section 10.1-1411 of the Code of Virginia requires the regulation to include all aspects of solid waste management including waste reduction, recycling and reuse, storage, treatment, and disposal. The board is also required to consider urban concentrations, geographic conditions, markets, transportation conditions, and other appropriate factors and provide reasonable variances and exemptions from regulatory requirements when adopting this regulation.

One alternative considered was to require localities to coordinate with an adjacent locality to form a regional solid waste management plan. The regulation currently allows for localities to develop their own plan or to join together with other local governments to develop a regional plan. This alternative was rejected since it would remove a locality’s ability to develop a stand alone plan. Mandating localities to join together to develop a regional plan would not be beneficial for all localities, and would not automatically increase recycling rates or the marketability of recyclable materials, therefore this alternative was rejected.

The Board believes that the regulation, as currently written, is the least burdensome alternative available for achieving the purpose of the regulation.

**Public Comment**

*Summarize all comments received during the public comment period following the publication of the Notice of Periodic Review, and provide the agency’s response. Be sure to include all comments submitted: including those received on Town Hall, in a public hearing, or submitted directly to the agency. Indicate if an informal advisory group was formed for purposes of assisting in the periodic review.*

<b>Commenter</b>	<b>Comment</b>	<b>Agency response</b>
Rick Galliher, Faith Alliance For Climate Solutions	Current DEQ regulations have split the State into Solid Waste Planning Districts, with a 20 year old recycling requirement of 25% for the large planning districts. Fairfax County has exceed the requirement	The Agency appreciates your comment on increasing the recycling rate. However, this

	<p>in 19 out of the 20 years, currently we are at 46.5%. We have been stuck in the mid 40% for several years. Meaningful new programs to increase our recycling rate haven't been proposed in years.</p> <p><b>The legislature should increase the recycling requirement for large planning districts to 80%, phased in over 7 years.</b> There are municipalities that already achieve this, proving that this is doable. With a new goal to achieve, local municipalities will take the lead on introducing impactful recycling programs. Without a new goal, the recycling rate will continue to stagnate, as innovation is stifled.</p> <p>Kitchen food scraps are a large percentage of our trash stream. Arlington County has started collecting residential food scraps in with the yard waste and sending everything to the existing commercial compost facility. This should be done with all large solid waste planning districts. But we should start to incorporate the large food scrap generators such as restaurants and grocery stores. Counties won't do this unless a new goal is implemented.</p> <p>There are many examples of things we could be doing to increase our recycling, things other places are doing better than we are. But we don't have the incentive to change. Let's unleash the creative power to have Counties increase their recycling in the ways that they see best.</p>	<p>would require a statutory change.</p>
<p>Kristin Rosenthal</p>	<p>In Fort Worth, TX, a resident can get two compost pails for \$20 from the city: one for the kitchen and a 5 gallon one for a week's worth of food scraps; and residents then take that, and any other waste that needs special handling eg batteries, old paint etc to one of many locations in this sprawling area. If this can be done here, we can re-invent cost effective, land conserving, less pollution ways to manage waste in Virginia.</p> <p>Please pass legislation REQUIRING all jurisdictions to plan and enact capture of organic materials for composting, stop the burning of all plastics. Enact laws that require the recycling of all food grade glass back into food grade glass. We're squandering the resources we've been given.</p>	<p>The Agency appreciates your comment. Recycling activities/ programs are handled by Virginia localities directly. Agency acknowledges that a statutory change would be required for additional laws.</p>
<p>Daniel Baxter, President Virginia Recycling Association</p>	<p>1. DEQ Reporting requirements in 9VAC20-130-120 B. currently require only the reporting of Municipal Solid Waste. However, that is not consistent with the other language in the regulations which indicate a goal of a more comprehensive environmental approach to waste and recycling in the Commonwealth. Please see examples below.</p>	<p>The Agency appreciates your comment. However, this would require a statutory change.</p>

	<ul style="list-style-type: none"> <li>9VAC20-130-10. Policy states: “to develop comprehensive and integrated solid waste management plans that, at a minimum, consider and address <b>all components</b> of the following:             <ol style="list-style-type: none"> <li>1. Source reduction;</li> <li>2. Reuse;</li> <li>3. Recycling;</li> <li>4. Resource recovery (waste-to-energy);</li> <li>5. Incineration; and</li> <li>6. Landfilling</li> </ol> </li> <li>9VAC20-130-120. Planning requirements 3. States, “Estimates of solid waste generation from residential, commercial, institutional, <b>industrial, construction, demolition, debris and other types of sources</b>, including the amounts reused, recycled, recovered as a resource, incinerated, and landfilled. Entities engaged in the collection, processing and marketing of recyclable materials should provide data for incorporation into the recycling rate calculation when requested by the planning unit;</li> </ul>	
<p>Daniel Baxter, President Virginia Recycling Association</p>	<p>Chapter 14. Virginia Waste Management Act 10.1-1411. Regional and local solid waste management plans B. states, “The Board’s regulations shall include <b>all aspects</b> of solid waste management including waste reduction, recycling and reuse, storage, treatment, and disposal and shall require that consideration be given to the handling of <b>all types</b> of nonhazardous solid waste generation in the region or locality.”</p>	<p>The Agency appreciates your comment. See response below.</p>
<p>Daniel Baxter, President Virginia Recycling Association</p>	<p>Chapter 14. Virginia Waste Management Act - 10.1-1411. Regional and local solid waste management plans. Which defines and lays out the criteria for the minimum 25/15 percent recycling rate, is not limited to only Municipal Solid Waste. It states, “The Board’s regulations shall include <b>all aspects</b> of solid waste management including waste reduction, recycling and reuse, storage, treatment, and disposal and shall require that consideration be given to the handling of <b>all types</b> of nonhazardous solid waste generation in the region or locality.”</p>	<p>The Agency appreciates your comment. However, this would require a statutory change.</p>
<p>Daniel Baxter, President Virginia Recycling Association</p>	<p>We propose that the word municipal be removed from 9VAC20-130-120 B. Which would change it from, “A minimum recycling rate as specified in 10.1-1411 of the Code of Virginia for total municipal solid waste generated annually in each solid waste planning unit shall be met and maintained.</p> <p>To “A <i>minimum recycling rate as specified in 10.1-1411 of the Code of Virginia for total solid waste generated annually in each solid waste planning unit shall be met and maintained.</i></p>	<p>The Agency appreciates your comment. However, this regulatory language is derived from Subsection D of 10.1-1411 which specifies that solid waste planning units maintain a minimum recycling rate for municipal solid waste. A statutory change would be needed.</p>

	<p>Removing municipal from the language incentivizes planning units to invest in and make the effort to recover and recycle material outside of MSW such as construction and demolition debris and electronic waste as these efforts can then be reported potentially providing a direct impact on their overall recycling and recovery numbers.</p>	
<p>Daniel Baxter, President Virginia Recycling Association</p>	<p>9VAC20-130-10. Definitions. We recommend the following:</p> <p>“Principal recyclable materials” or “PRM” be expanded to include mattresses and box springs.</p> <p>“Material Recovery Facility” be expanded to include “Construction and Demolition (CDD) Material Recovery Facility” with a definition stating, “a facility for the collection, processing and marketing of recyclable materials including concrete, brick, block, metal, wood, plastic, shingles, and drywall.</p> <p><b>Gasification</b> is a process that converts biomass- or fossil fuel-based carbonaceous materials into gases, including as the largest fractions: nitrogen (N<sub>2</sub>), carbon onoxide (CO), hydrogen (H<sub>2</sub>), and carbon dioxide (CO<sub>2</sub>). This is achieved by reacting the feedstock material at high temperatures (typically &gt;700 °C), without combustion, via controlling the amount of oxygen and/or steam present in the reaction. The resulting gas mixture is called syngas (from synthesis gas) or producer gas and is itself a fuel due to the flammability of the H<sub>2</sub> and CO of which the gas is largely composed. Power can be derived from the subsequent combustion of the resultant gas, and is considered to be a source of renewable energy if the gasified compounds were obtained from biomass feedstock.</p> <p><b>Pyrolysis</b> is one of the technologies available to convert biomass to an intermediate liquid product that can be refined to drop-in hydrocarbon biofuels, oxygenated fuel additives and petrochemical replacements. Pyrolysis is the heating of an organic material, such as <u>biomass</u>, in the absence of oxygen. Biomass pyrolysis is usually conducted at or above 500 °C, providing enough heat to deconstruct the strong bio-polymers mentioned above. Because no oxygen is present combustion does not occur, rather the biomass thermally decomposes into combustible gases and bio-char. Most of these combustible gases can be condensed into a combustible liquid, called pyrolysis oil (bio-oil), though there are some permanent gases (CO-2, CO, H<sub>2</sub>, light hydrocarbons), some of which can be combusted to provide the heat for the process. Thus, pyrolysis of biomass produces three products: one liquid, <u>bio-oil</u>,</p>	<p>Current regulations are flexible to allow reporting of recycling of mattresses and box springs under the Other category.</p> <p>Gasification and pyrolysis are types of waste-to-energy. These regulations already reference to waste-to-energy for purposes of solid waste planning and recycling rate calculation and definitions for these specific technologies aren't needed.</p>

	<p>one solid, <u>bio-char</u> and one gaseous, syngas. The proportion of these products depends on several factors including the composition of the feedstock and process parameters. However, all things being equal, the yield of <u>bio-oil</u> is optimized when the pyrolysis temperature is around 500 °C and the heating rate is high (1000 °C/s) fast pyrolysis conditions.</p>	
<p>Daniel Baxter, President Virginia Recycling Association</p>	<p>9VAC20-130-165. Recycling data reporting. Rather than requiring reporting for planning units with a population of less than 100,000 to report every four years, we believe they should be required to report annually. The data is being collected in all the planning units annually already, and requiring the data to be reported annually will improve the quality of the data.</p>	<p>The Agency appreciates your comment. However, this would require a statutory change.</p>
<p>Daniel Baxter, President Virginia Recycling Association</p>	<p>Gasification as defined (in our previous comments) is an alternative method for waste management of MSW that is effective in high population areas with limited landfill space.</p> <p>Pyrolysis is an effective method to deal with plastics 3-7, tires construction debris (Including wood, composites and other organics and other constituent materials in the waste stream</p> <p>Green waste as diversion not recycling.</p>	<p>Gasification and pyrolysis are types of waste-to-energy. These regulations already reference to waste-to-energy for purposes of solid waste planning and recycling rate calculation and specific reference to these technologies aren't needed.</p> <p>For purposes of calculating a locality's recycling rate, the regulation only recognizes green waste (yard wastes and vegetative wastes) as recycled when they are composted or mulched.</p>
<p>Daniel Baxter, President Virginia Recycling Association</p>	<p>Consistency in planning and siting of compost facilities.</p> <p>Under current regulations, Compost facilities are required to be held up to the same standards as landfills. We believe that Virginia needs to look at the standards required for compost facilities to allow for more to be built around the state.</p>	<p>Requirements related to compost facilities are located in the Solid Waste Management Regulations (9VAC20-81).</p>
<p>Judith Usherson</p>	<p>I have lived in and have been a homeowner in Fairfax County for more than 50 years. I also spent most of my career as a consultant to the US EPA's Office of Solid Waste on recycling and sustainability. I deeply care about the County's recycling program and have seen it deteriorate over time. I think it's important to focus on the "big ticket" opportunities to divert materials from disposal, especially given that the Covanta WTE facility is aging. A big opportunity would be to divert the many tons of organic waste from the many grocery stores, schools, and restaurants in our county, by establishing a local</p>	<p>The Agency appreciates your comment on diverting waste from being disposed to being composted, however, the regulations as written are protective of public health, safety and welfare.</p>

	<p>industrial composting facility. The compost could be sold at a reasonable cost to subsidize some of the operation. It's a nice PR strategy to encourage residents to compost but that's really not going to make a big difference. Commercial composting will. I really hope this happens in my lifetime.</p>	
<p>Elly Boehmer Wilson, Environment Virginia</p>	<p>Virginia's solid waste and recycling regulations are unclear and lacking in ambition. Reducing waste is extremely important. The DEQ should first and foremost look at ways to incorporate source reduction into their regulations starting with the most littered as well as difficult to recycle products. The ultimate goal should be a truly circular economy and the plan should be in line with this mission.</p> <p>Other recommendations:</p> <ol style="list-style-type: none"> <li>1. Increase monitoring and benchmarks             <ol style="list-style-type: none"> <li>1. Right now, VA monitoring for recycling is lacking and gives an unclear picture of the current state of waste diversion in Virginia. Currently recycling rates are likely much lower than what is reported due to the fact that litter is not included in these metrics. Reporting is also not broken down by materials so we have no way to determine what areas of source reduction and waste diversion are the most important to focus on. It is unclear how recycling contamination impacts these rates as well.</li> <li>2. With no benchmarks or required improvements, waste diversion rates are unlikely to change or get better.</li> </ol> </li> <li>2. Measuring by weight rather than volume also complicates this picture.             <ol style="list-style-type: none"> <li>1. Some of the most harmful materials that cannot be recycled are lightweight, flimsy plastic. While they may be the most harmful, they do not weigh much. Land use for landfills is more impacted by volume of waste rather than the weight of it.</li> </ol> </li> <li>3. Comprehensive list of recyclables in Virginia             <ol style="list-style-type: none"> <li>1. If something is not recyclable in Virginia, the DEQ should look into ways to recover management money of these products. This cannot happen until we know what can be recycled and how accessible these recycling methods are.</li> </ol> </li> <li>4. Increase overall goal             <ol style="list-style-type: none"> <li>1. Once we have a clearer picture of what materials are in our waste stream and how much we are diverting waste, we need to increase the amount we are recycling. 80% mechanical recycling is more in line with where we should be.</li> <li>2. There should also be a goal on overall reduction of waste generated in Virginia.</li> </ol> </li> </ol>	<p>The Agency appreciates your comment. However, these recommendations would require a statutory change.</p>

	<p>5. Require producers to hit goals</p> <ol style="list-style-type: none"> <li>1. EPR is a popular option among cities and counties to include producers in the management of their products waste. If it cannot be sustainably managed in Virginia, producers should pay the costs in order to hit our goals. Localities should not continue to lose money when they have no ability to regulate the products sold or thrown away that they then have to deal with. (Example: set a goal of 50% plastic bottles recycled by 2028 or producers are fined, by 2030 if rate is not met then the product is banned in Virginia). Producers need to start designing products with localities and local waste programs in mind and DEQ should include any and all regulations that would achieve this.</li> </ol> <p>6. Eliminate greenwashing of recycling</p> <ol style="list-style-type: none"> <li>1. Contamination or wish-cycling is a waste of energy and resources. By requiring better labeling, Virginians would have a better understanding of what can and cannot be recycled which will help achieve goal recycling rates. Example: plastic bags cannot be recycled with curbside in VA and cause significant problems for recycling facilities. Yet many have the recycling symbol that people assume means it is recyclable. The recycling numbers do not translate to more informed recycling and need to be reevaluated.</li> </ol>	
<p>Eric Goplerud</p>	<p>Approximately 40 percent of the food produced in the United States goes uneaten. Much of this organic waste is disposed of in solid waste landfills, where its decomposition accounts for over 15% of our nation's emissions of methane. Jurisdictions that incinerate MSW emit roughly one ton of greenhouse gases for every ton of MSW. Food waste not recycled not only squanders natural resources, it also contributes to climate change.</p> <p>Recognizing the importance of food scraps to our environment, I recommend that 9VAC 20 130-165 and DEQ form 50-30 be modified to require collection and resorting of food waste recycling, whether by composting, diversion to animal feed, anaerobic digestion or other means of segregating and recycling food waste from MSW streams.</p> <p>9VAC 20 125, 120-165 and DEQ form 50-30 should be modified to encourage the prevention of food waste generation by commercial generators and residents, directing recovery of edible food from high volume commercial food waste generators, and ensuring that a significant portion of inedible food waste from large volume food waste generators is managed in a sustainable manner and does not end</p>	<p>The Agency appreciates your comment. However, this would require a statutory change.</p> <p>The Agency will consider updating Form 50-30 instructions to capture this information. Currently, this information is entered in the Other PRM category.</p>



	<p>up sent to landfills or incinerators. All solid waste planning units should be required to report annually on the tonnage of food waste and other vegetative waste not otherwise reported as Yard Waste or Waste Wood on DEQ form 50-30 that is recycled. The report should summarize the amount of food scraps that are recycled.</p>	
Eric Goplerud	<p>The required recycling rate for larger solid waste planning units is 25%, for smaller units it is 15%. These rates are inadequate and should be set much higher, as much as 80% for larger units and 50% for smaller units. California's SB54 sets up extensive recycling and reduction rates. Maryland mandates 35% recycling for larger jurisdictions and 20% for smaller jurisdictions.  <a href="https://www.rila.org/getmedia/2303cf37-d7d7-40f2-b4ae-41088067c9bf/Mandatory-Recycling-and-Disposal-Bans-Fact-Sheet-1-23.pdf?ext=.pdf">https://www.rila.org/getmedia/2303cf37-d7d7-40f2-b4ae-41088067c9bf/Mandatory-Recycling-and-Disposal-Bans-Fact-Sheet-1-23.pdf?ext=.pdf</a></p>	<p>The Agency appreciates your comment on increasing the recycling rate. However, this would require a statutory change.</p>
Eric Goplerud	<p>Modify credit for source waste reduction plans to require that jurisdictions that received 2% credits for source reduction plans in the previous 5 year plan must demonstrate actual reductions of 2% or more. Otherwise, simply having a plan that isn't carried out is not justifiable.</p>	<p>The Agency will update the Form 50-30 instructions to capture this information.</p>
Eric Goplerud	<p>Jurisdictions should not receive recycling credit for contaminated recycling or unmarketable recycling that is rejected by the MRFs and landfilled or incinerated. DEQ Form 50-30 should be modified to require jurisdictions report the tonnage of recycled materials that are contaminated and rejected by MRFs, or otherwise landfilled or incinerated. That amount should be subtracted from the total recycling. A 2019 DEQ report "Recycling in Virginia: An evaluation of recycling rates and recommendations (Chapter 615, 2018 Acts of Assembly" estimated that 23% of recycling in Virginia is contaminated. Local planning units should not receive recycling credit for materials that are contaminated, rejected by the MRFs, and ultimately landfilled or incinerated.  <a href="https://rga.lis.virginia.gov/Published/2019/SD7/PDF">https://rga.lis.virginia.gov/Published/2019/SD7/PDF</a></p>	<p>The Agency will update the Form 50-30 instructions to capture this information.</p>
Alexander Villazon, Waterkeepers Chesapeake	<p>Dear Waste Management Board,                  We are writing in strong support of keeping the false solution of advanced recycling out of Virginia on behalf of Waterkeepers Chesapeake, a coalition of seventeen Waterkeepers, including three in Virginia, working to make the waters of the Chesapeake and Coastal Bays swimmable and fishable. Currently, recycling regulations in the Commonwealth fail to specifically exclude practices that convert plastic waste to fossil fuels from their recycling definitions. This allows advanced recycling facilities to contribute harmful pollutants to the environment, burden already vulnerable communities, and waste economic development funds under the guise of a false solution to solving the plastic pollution problem. Advanced recycling is inherently a polluting activity as studies conducted by plastic manufacturers revealed that</p>	<p>Gasification, pyrolysis and advanced recycling are outside the scope of the Solid Waste Planning and Recycling Regulations unless there is a statutory change made.</p>

	<p>advanced recycling generates more harmful emissions than either landfilling plastic or burning it and “generates far more pollution than eliminating single-use plastics altogether.”</p> <p>At the federal level, the EPA’s recent Draft National Strategy to Prevent Plastic Pollution states that the federal agency does not consider “activities that convert non-hazardous solid waste to fuels or fuel substitutes (‘plastics-to-fuel’) or for energy production to be ‘recycling’ activities.” Virginia should not fall behind the slow-moving EPA as not only would Virginians’ health suffer but doing so prevents a true circular economy, which would turn plastic waste to new plastic products—not fuel, fuel ingredients, energy or other feedstock. These regulations should be reviewed with an eye towards improving Virginia’s environment and the health of its citizens, not guided by Executive Order 19 and its harmful stated goal of removing 25% of all regulatory requirements in the Commonwealth.</p> <p>For these reasons stated above, we urge the Board to revise the recycling definitions in a way to best protect the health of Virginians and the Commonwealth’s unique and beautiful environment, and not guided by the harmful principles of Executive Order 19.</p> <p>Sincerely,</p> <p>Waterkeepers Chesapeake</p> <p>Alex Villazon Climate &amp; Justice Legal Fellow <a href="mailto:alex@waterkeeperschesapeake.org">alex@waterkeeperschesapeake.org</a></p>	
<p>Laura Faeder</p>	<p>Good afternoon,</p> <p>I’m writing to reject efforts to encourage advanced recycling and instead use the taxpayers funds to increase education surrounding the reduction of the use of plastic.</p> <p>Laura</p>	<p>Advanced recycling is outside the scope of the Solid Waste Planning and Recycling Regulations unless there is a statutory change made.</p>
<p>Eleanor Kluegel, Clean Fairfax</p>	<p>The current solid waste planning and recycling regulations do <i>not go far enough</i> to adequately manage the plastic waste stream and protect Virginia’s residents and environment. The regulations, emboldened by recent Executive Orders, enable and <i>encourage</i> the development and operations of advanced recycling facilities in Virginia. Advanced recycling and pyrolysis are false and flawed solutions to the plastic pollution crisis which threaten local environmental and community health. The goal of waste management and recycling should</p>	<p>Gasification, pyrolysis and advanced recycling are outside the scope of the Solid Waste Planning and Recycling Regulations unless there is a statutory change made.</p>

	<p>be to achieve a truly circular economy; not just burn or combust waste into fuel or fuel substitutes. Contrary to its greenwashed advertising, advanced recycling technology will <i>not</i> reduce the use of single-use plastics, but instead will incentivize their continued use as a feedstock for plastics-to-fuel facilities (VCN, 2022).</p> <p>Additional comments:</p> <ul style="list-style-type: none"> <li>• True “circular economy” practices convert plastic waste into new plastic products—not fuel, fuel ingredients, energy or other feedstock. The EPA’s Draft National Strategy outlines the Agency’s efforts to promote a circular approach for plastics management in the U.S.; Virginia’s state regulations should support this national goal.</li> <li>• Advanced recycling is not <i>recycling</i> by any means. In their Draft National Strategy, the EPA reaffirms that the federal agency does not consider “activities that convert non-hazardous solid waste to fuels or fuel substitutes (‘plastics-to-fuel’) or for energy production to be ‘recycling’ activities.” If the federal government does not consider plastic to fossil fuel production to be recycling; <i>neither should Virginia</i>.</li> <li>• Plastic to fossil fuel production facilities are energy intensive and are still classified as incineration under the Clean Air Act. These facilities require a NPDES (National Pollutant Discharge Elimination System) Permit. Virginia’s taxpayers should not be footing the bill for these polluting, energy intensive facilities. Furthermore, rural communities should <b><i>not be burdened</i></b> by these dangerous, polluting facilities (as E.O. 17 emphasizes).</li> </ul> <p>Eleanor Kluegel Clean Fairfax Council / Litter Free Virginia</p>	
<p>Scott Peterson</p>	<p>There is no good option for disposing of waste. When we bury it, landfills leech toxins and emit methane gas. Burning trash, as is done in several Virginia jurisdictions, is damaging to our resources and is even more costly and polluting. Most often, our landfills and incinerators are located in communities of color. That’s why we need to reduce waste.</p> <p>The minimum recycle requirement should be raised for large solid waste planning districts from the current 25% to 80%, phased in over several years. Fairfax County, where I live, has exceeded the state minimum recycling rate in 19 out of the past 20 years. But the County’s recycling rate has been stagnant in the mid-40s for several years. No new impactful programs have been enacted to increase our recycling.</p>	<p>The Agency appreciates your comment on increasing the recycling rate. However, this would require a statutory change.</p>

	<p>80% diversion is achievable. We'll need to add composting and glass collection, not only in residential areas, but in the vastly underserved multifamily housing and restaurants and grocery stores. We can continue to nibble away at our waste problems, or we can change the rules to allow large scale meaningful changes.</p> <p>Other jurisdictions have set goals and are making progress. Gainesville, Florida's goal is to divert 90% of waste by 2040. Dallas's goals are to reduce single-family waste landfilled by 45% by 2040; recycle 80% of organic waste and 90% of paper waste by 2050. Dallas' goal is to divert 60% of recycling, organics and brush by 2025. Phoenix's goal is to divert 50% of waste from landfills by 2030 and at least 90% by 2050.</p>	
<p>Virginia Conservation Network</p>	<p>Virginia's solid waste and recycling policies and regulations are unclear and in need of specific improvements. DEQ should identify ways to incorporate source reduction into their regulations, and begin this process with the most-littered as well as the most difficult-to-recycle products. The ultimate goal should be an authentic, genuine circular economy, and the agency's plan should be in following with this goal.</p> <p>Recommendations to the Agency:</p> <p>The intent of Executive Order 19 (EO19) to reduce regulatory oversight by 25% is arbitrary and will not lead toward meaningful reduction or diversion of waste. EO19 should not serve as a guiding document in the Agency's Periodic Review process or considerations.</p> <p>Increase and improve upon monitoring and benchmarks.</p> <ul style="list-style-type: none"> <li>Monitoring and data for recycling is lacking and provides an unclear picture of the current state of waste diversion in the Commonwealth. Recycling rates are likely much lower than what is reported due to the fact that litter is excluded in these metrics. Reporting is also not broken down by material, so we have no means to determine what areas of source reduction and waste diversion are the most important to focus on. Furthermore, it is unclear how recycling contamination impacts these rates. Without benchmarks or required improvements, waste diversion rates are unlikely to improve.</li> </ul> <p>Measuring waste by weight rather than volume is misleading and inappropriate.</p> <ul style="list-style-type: none"> <li>Many of the most harmful materials that cannot be recycled are lightweight, flimsy plastic. Yet,</li> </ul>	<p>The Agency appreciates your comment. However, these recommendations would require a statutory change.</p> <p>Gasification, pyrolysis and advanced recycling are outside the scope of the Solid Waste Planning and Recycling Regulations unless there is a statutory change made.</p>

	<p>while these plastic products may be quite harmful, they are generally lightweight, relatively speaking. Land use for landfills is impacted by <i>volume</i> of waste rather than <i>weight</i>.</p> <p>Develop a comprehensive list of recyclables in Virginia.</p> <ul style="list-style-type: none"> <li>• If something is not recyclable in Virginia, the DEQ should look into ways to recover management money of these products. This cannot happen until we know what can be recycled and the accessibility to these recycling facilities and processes.</li> </ul> <p>Improve and increase goals.</p> <ul style="list-style-type: none"> <li>• Once we have a more clear picture of what materials are in our waste stream and to what extent we are diverting waste, Virginia should increase the amount we are recycling. 80% mechanical recycling is more in line with where we should be.</li> <li>• There should be a clear and measurable goal of overall <i>reduction of waste generation</i> in Virginia.</li> </ul> <p>Require producers to achieve goals.</p> <ul style="list-style-type: none"> <li>• Extended Producer Responsibility (EPR) is a growingly popular option among U.S. cities and counties to include producers in the responsible management of their products. If EPR cannot be sustainably managed in Virginia, producers should pay the costs in order to achieve goals. Localities should not be forced to continue to lose money when they have restricted authority to regulate products sold or discharged into their waste streams. (For instance, set a goal of 50% plastic bottles recycled by 2028 or producers are fined. If rate goal unmet in 2030, then ban the product). Producers should reduce undue burdens placed on Virginia localities by thoughtfully designing products with local waste programs in mind, and DEQ should expedite regulations to achieve this.</li> </ul> <p>Eliminate the greenwashing of recycling.</p> <ul style="list-style-type: none"> <li>• Contamination or "wish-cycling" of products is a polluting waste of both energy and resources. Through requirement of labeling, DEQ would empower Virginians with a meaningful understanding of what can and cannot be recycled, which in turn will help to achieve recycling rate goals. For instance, in Virginia, plastic bags cannot be recycled through curbside collection programs. This is a significant and costly problem for recycling</li> </ul>	
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	<p>facilities. Yet many such products misleadingly bear the recycling symbol. The marketed use of recycling numbers and symbols does not translate to more informed recycling, and should be seriously evaluated.</p> <ul style="list-style-type: none"> <li>As currently written, Virginia's Solid Waste Planning and Recycling Regulations do not specifically exclude practices that convert "plastic-to-fuels" from recycling definitions. Unfortunately, this enables highly polluting, unproven technologies labeled as "advanced recycling" (which are not recycling at all). In truth, "advanced recycling" is a fossil fuel industry term to describe the chemical breakdown of plastic waste through pyrolysis. This may include chemical reactions to produce oil- or gas-like feedstock (raw materials), and incineration for fuel. The U.S. EPA does not consider any plastic-to-fuel process to be "recycling." Virginia should follow this federal guidance and strengthen its regulations to affirm that any process that produces fuels is explicitly excluded from recycling definitions and references. DEQ should recognize and acknowledge through guidance and regulations that pyrolysis is incineration.</li> </ul> <p>Thank you for this opportunity to provide public comment. Virginia Conservation Network and our more than 150 Partner organizations look forward to working with DEQ to bring about meaningful and substantive reduction and diversion of wastes while protecting the Commonwealth's environmental and human health.</p>	
<p>Zach Huntington, Clean Virginia Waterways</p>	<p>Recycling is necessary for Virginia to achieve a true circular economy and the continued review of the Solid Waste Planning and Recycling Regulations ensures the regulations are responsive to the evolving needs of the Commonwealth as challenges and opportunities evolve. Solid Waste Planning and Recycling regulations should be a tool to help Virginia create a true circular economy and support recycling programs. As stated by the Environmental Protection Agency (EPA), "A circular economy keeps materials, products, and services in circulation for as long as possible."</p> <p>Source reduction is the top priority listed in Virginia's Planning Requirements Code and as such, Virginia's regulations should support this priority with the goal of conserving our natural resources and reducing the amount of recyclable materials and waste that goes into landfills. The regulations are a powerful tool to facilitate the most impactful and meaningful solutions pursued by the Commonwealth and communities within.</p>	<p>As noted, the Waste Management Act separately defined advanced recycling and related manufacturing processes which are outside the scope of the Solid Waste Planning and Recycling regulations unless there is a statutory change made.</p> <p>The Agency appreciates your comments on inconsistencies in definitions; however, many definitions in the Solid Waste Planning and Recycling regulations align with definitions provided in the Waste Management Act, thus statutory changes would be needed.</p>

	<p>Unfortunately, communities across the Commonwealth are reducing in size or eliminating their recycling programs due to funding and staff capacity reductions. Improving recycling rates in Virginia will require a financial investment in improved infrastructure but the general public should not shoulder the bulk of this funding burden. Producers and distributors of waste generating products should financially support recycling infrastructure.</p> <p>Data shared by the Northern Virginia Regional Commission showed that shifting the financial responsibility for recycling infrastructure from the general public to plastic producers and distributors is favored by 84% of local governments. A recent survey from Clean Virginia Waterways showed that 71% of Virginia voters support policies that shift the costs of recycling programs off community taxpayers and onto producers.</p> <p><b>Comment 1: Avoid Inconsistencies in Definitions Across Regulations.</b></p> <p>Definitions should remain consistent across Virginia codes to avoid confusion and disparate applications among various stakeholders. Changes should only be made to provide additional clarification and ensure consistent and successful application of current rules.</p> <p>For example, “Advanced recycling” has been clearly defined in Virginia code (§ 10.1-1400) as a manufacturing process. Facilities that use “advanced recycling” processes such as pyrolysis, gasification, depolymerization, reforming, hydrogenation, solvolysis, catalytic cracking, and similar processes for the conversion of post-use polymers and recovered feedstocks into basic hydrocarbon raw materials, feedstocks, chemicals, liquid fuels, waxes, lubricants, or other products should not be included in solid waste planning and recycling regulations because they are regulated as a manufacturing process under § 10.1-1400. If this process was to be defined differently in the Solid Waste Planning and Recycling Regulations than it already is in other regulatory contexts, incongruous enforcement of specific restrictions, oversight, and tax protocols may result in negative outcomes.</p> <p>The following are opportunities to clarify the current definitions in the Solid Waste Planning and Recycling Regulations.</p> <ul style="list-style-type: none"> <li>• Recommendation: Throughout the Definitions and other sections, it must be clearly stated that “advanced recycling,” pyrolysis, gasification, depolymerization, reforming, hydrogenation, solvolysis, catalytic cracking,</li> </ul>	<p>The Agency appreciates your comment on increasing the mandated recycling rates. However, this would require a statutory change.</p>
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	<p>and similar processes when used in the production of plastic-to-fuel, plastic-to-fuel substitute, and plastic-to-fuel additives are not considered recycling, and shall be subject to all applicable federal and state environmental laws and regulations. This is consistent with the U.S. EPA, and several other national policies related to solid waste.</p> <ul style="list-style-type: none"> <li>• Incineration: Pyrolysis is already defined as incineration (the controlled combustion of solid waste for disposal) in 9VAC5-40-7380. Municipal waste combustion units do not include pyrolysis or combustion units located at a plastics or rubber recycling unit because these units are regulated as part of a manufacturing process, not solid waste.</li> <li>• Recommendation - Clarify here the types of facilities using incineration to include: Any facility using pyrolysis, gasification, depolymerization, reforming, hydrogenation, solvolysis, catalytic cracking, and similar processes.</li> <li>• "Litter" is currently defined as "all waste material disposable packages or containers, but not including the wastes of the primary processes of mining, logging, farming, or manufacturing." Usually, "Litter" is defined as mis-managed waste or trash that ends up in the environment. Waste items, when correctly disposed of, are not considered "litter".</li> <li>• Recommendation: Rewrite this definition to be consistent with the EPA and the legal definition of litter. EPA states: "Littering is a type of pollution that occurs when garbage, including plastics, paper, and metal, are not disposed of properly and can enter coastal waters.</li> <li>• Another detailed definition is: "LITTER. Includes any man-made or man-used waste, which, if deposited otherwise than in a waste receptacle, tends to create a danger to public health, safety and welfare or to impair the environment. LITTER shall include, but is not limited to, garbage, trash, refuse, debris, grass clippings or other lawn or garden waste, paper products, glass, metal, plastic or paper containers, motor vehicle parts, furniture, carcasses of dead animals or any other waste material of an unsightly, unsanitary, nauseous or offensive nature."</li> </ul>	
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	<ul style="list-style-type: none"> <li>• "Materials recovery facility" is currently defined as "a facility for the collection, processing, and marketing of recyclable materials including metal, paper, plastics, and glass."</li>   <li>• Recommendation: Clarify this. Facilities using processes defined as "incineration" (9VAC5-40-7380) or "advanced recycling" (§ 10.1-1400) in Virginia code to produce plastic-to-fuel, plastic-to-fuel substitutes, and plastic-to-fuel additives can not be classified as materials recovery facilities.</li>   <li>• "Recycling" means the process of separating a given waste material from the waste stream and processing it so that it may be used again as a raw material for a product, which may or may not be similar to the original product. For the purpose of this chapter, recycling shall not include processes that only involve size reduction.</li>   <li>• Recommendation: Clarify this. Pyrolysis and other plastics-to-fuel technologies are not to be considered recycling, this will make Virginia consistent with the EPA that states: "Activities that convert non-hazardous solid waste to fuels or fuel substitutes ("plastics-to-fuel") or for energy production are not considered to be "recycling" activities. (Language is modified from the EPA Draft National Strategy to Prevent Plastic Pollution)</li>   <li>• Any processes defined as incineration in Virginia code can not be considered a recycling activity as incineration is listed as the fifth priority in the hierarchy set forth in 9VAC20-130-120 planning requirements.</li>   <li>• "Resource recovery system" is currently defined as "a solid waste management system that provides for collection, separation, recycling, and recovery of energy or solid wastes, including disposal of nonrecoverable waste residues."</li>   <li>• Recommendation: Clarify this. Any processes defined as incineration in Virginia code (9VAC5-40-7380) cannot be considered a resource recovery system. Plastic-to-fuel technologies are not resource recovery systems and their classification should be consistent with EPA guidance.</li> </ul>	
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	<ul style="list-style-type: none"> <li>• "Source reduction" is defined as "any action that reduces or eliminates the generation of waste at the source, usually within a process. Source reduction measures include process modifications, feedstock substitutions, improvements in feedstock purity, improvements in housekeeping and management practices, increases in the efficiency of machinery, and recycling within a process. Source reduction minimizes the material that must be managed by waste disposal or nondisposal options by creating less waste." "Source reduction" is also called "waste prevention," "waste minimization," or "waste reduction."</li>   <li>• Recommendation: Clarify this. Processes defined as incineration in Virginia code (9VAC5-40-7380) should be specifically excluded from "source reduction" strategies, as incineration is the fifth priority in the hierarchy set forth in 9VAC20-130-120 planning requirements. Source reduction strategies are the first priority.</li>   <li>• Plastic-to-fuel technologies should be specifically excluded from "source reduction" strategies as these technologies are classified as a manufacturing process and increase waste production.</li> </ul> <p><b>Comment 2: Increase the Minimum Recycling Rates and Tailor the Rates by Material</b></p> <p>The regulations currently outline minimum recycling rates stating "each solid waste planning unit shall maintain a minimum 25% recycling rate; or each solid waste planning unit shall maintain a minimum 15% recycling rate if it has (i) a population density rate of less than 100 persons per square mile according to the most recent United States Census or (ii) a not seasonally adjusted civilian unemployment rate for the immediately preceding calendar year that is at least 50% greater than the state average as reported by the Virginia Employment Commission for such year."</p> <p>There are seventeen Solid Waste Planning Units (SWPU) that are required to report annually. Their reported recycling rates varied from a low of 23.9% to a high of 57.9%. Sixteen of the seventeen SWPUs surpassed the 25% goal, and the seventeen SWPUs averaged 43.30%.</p>	
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	<p>Nineteen Solid Waste Planning Units (SWPU) with populations 100,000 or less voluntarily reported. Their reported recycling rates varied from a low of 17.5% to a high of 63.5%. All of the nineteen reporting SWPUs surpassed the 15% goal.</p> <ul style="list-style-type: none"> <li>• Recommendation: In the spirit of Executive Order 17, raise the minimum recycling rate to 40% for urban areas (eight of the seventeen annual reporting SWPUs are already surpassing the 40% mark). Implement a ten year mandate for all seventeen of these SWPUs to increase recycling rates to 80%. For rural areas of Virginia, raise the minimum recycling rate to 25%. Implement a ten year mandate for all SWPUs in lower population areas to achieve 60% recycling rates.</li> <li>• Recommendation: Mandate minimum recycling requirements by material: plastic, tires, glass, etc. This can help Virginia and localities develop programs to target specific recycling programs.</li> </ul> <p>Thank you for the opportunity to provide comments as you examine the future of this critical regulatory framework.</p>	
<p>Molly Riley - Lynnhaven River Now</p>	<p>Lynnhaven River Now is a 501(c)(3) organization that for over 20 years has been dedicated to protecting and restoring Virginia Beach’s waterways, which all flow into the Atlantic Ocean. Our diverse and complex waterway systems are significantly impacted by both runoff pollution and plastic pollution, including micro-plastics. In order to address this, one of our main priorities is to reduce plastic consumption in the Hampton Roads region through our public education and outreach efforts that includes engagement with local businesses and decision markers. We also organize monthly waterway cleanups that have removed over 35 tons of trash since 2003, much of which is plastic waste. In 2022 alone, we removed 10,000 pounds of trash and are concerned that the problem is growing due to the expanding demand and widespread use of plastics. According to the International Energy Agency, plastic production is anticipated to double by 2040 and become the biggest growth market for oil demand over the next decade.</p> <p>While it is worth noting that recycling in the United States has experienced significant cost increases and setbacks due to China’s 2018 “National Sword” policy, (which halted the import of plastics and other materials destined for its recycling processors) we maintain that we need to continue domestic recycling programs and <b>work to improve them</b> in order to help reduce plastic waste in our landfills and oceans. We</p>	<p>Thank you for your comments. Implementing EPR and increasing the mandated recycling rate both would require a statutory change.</p> <p>Gasification, pyrolysis and advanced recycling are outside the scope of the Solid Waste Planning and Recycling Regulations unless there is a statutory change made</p>

	<p>have outlined key policy recommendations we support to help address some of the cost and logistical hurdles of domestic recycling in the Commonwealth.</p> <ul style="list-style-type: none"> <li>• <b>Implement extended producer liability for plastic products (EPR).</b> <ul style="list-style-type: none"> <li>• The financial burden of plastic waste should not entirely fall on the public as it does now.</li> <li>• EPR model is very efficient for reducing waste because producers have the most influence over the design of products and packaging. If they are partially (if wholly) responsible for the cost of recycling or disposal, they will be incentivized to design their products to be more easily recovered and/or disposed of.</li> <li>• The Plastic Waste Makers Index, (developed with partners including Wood Mackenzie, and experts from the London School of Economics and Stockholm Environment Institute among others) has demonstrated that just 20 companies produce over 50% of the world's single use plastic. <ul style="list-style-type: none"> <li>• Many other industries are required to process their own waste, why should these plastic producers be an exception?</li> <li>• A 2017 survey by the Northern VA Waste Management board found that 84% of local governments indicated that they would like to see manufacturers, distributors and retailers take more responsibility for the management of difficult to handle waste.</li> </ul> </li> </ul> </li> <li>• <b>Improve transparency around recycling reporting by Solid Waste Planning Units (SWPU)</b> <ul style="list-style-type: none"> <li>• Under current practices, the actual statistics produced by SWPU do not provide a clear breakdown of what is being recycled or how.</li> <li>• This makes it harder to tackle our recycling issues since we do not have clear data on the actual breakdown of what is collected and processed.</li> </ul> </li> </ul>	
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	<ul style="list-style-type: none"> <li>• Raise Required Recycling Rates             <ul style="list-style-type: none"> <li>• According to the 2021 VA DEQ Annual Recycling Summary, current required recycling rates are being surpassed by all SWPU. This suggests that we should explore being more ambitious.</li> <li>• Urban areas, where most of the single use plastic is being collected, should observe a minimum of 40% for their recycling rate.</li> <li>• Rural areas should have the rate increased to 25%</li> <li>• This increase will be more achievable once measures are taken to improve SWPU data collection.</li> </ul> </li> </ul> <p>Furthermore, we cannot support any policies that would in any way entertain or encourage any type of advanced recycling programs that use dangerous pyrolysis methods which are known to produce hazardous waste such as dioxins and toxic air pollution. VA DEQ already codifies pyrolysis as incineration, not recycling, and the EPA has already affirmed that it does not consider activities that convert non-hazardous solid waste into fuel, fuel substitutes or energy production to be recycling activities. We feel that this categorization is both accurate and appropriate.</p> <p>In conjunction with the public health concerns posed by pyrolysis, a diverse range of studies on the viability of this process have demonstrated that it is a panacea for our plastic issue. In 2019, a study commissioned by Reynolds Consumer Products and completed by Sustainable Solutions Corporation examined the “Hefty EnergyBag” program which operated in 4 regions in the US (Cobb County, GA; Omaha, NE; Lincoln, NE; and Boise, ID). The study examined the environmental impact of recycling plastic waste through pyrolysis versus two conventional methods of disposal: burning it in cement kilns or landfill. In the Boise case, pyrolysis fared worst in terms of its overall global warming. Another analysis examining the final recycling process and its contribution to global warming, found that “pyrolysis scored better than landfilling but was worse than burning plastic in a cement kiln”. Pyrolysis is also known to be both highly energy intensive and inefficient because the energy required to heat plastics and extract chemicals from the waste is more than the energy produced by the chemicals.</p>	
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	<p>Therefore, at this point in time, it is a distraction from more viable alternatives and should not be pursued at the Commonwealth's expense or at the expense of the health and safety of its residents.</p> <p>Thank you for your time and consideration of our recommendations. If need be, we are available for further follow questions.</p> <ol style="list-style-type: none"> <li>1. <a href="https://www.iea.org/reports/the-future-of-petrochemicals">https://www.iea.org/reports/the-future-of-petrochemicals</a></li> <li>2. <a href="https://www.reuters.com/investigates/special-report/environment-plastic-oil-recycl">https://www.reuters.com/investigates/special-report/environment-plastic-oil-recycl</a></li> <li>3. <a href="https://www.epa.gov/circulareconomy/draft-national-strategy-prevent-plastic-pollution">https://www.epa.gov/circulareconomy/draft-national-strategy-prevent-plastic-pollution</a></li> </ol>	
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**Effectiveness**

*Pursuant to § 2.2-4017 of the Code of Virginia, indicate whether the regulation meets the criteria set out in the ORM procedures, including why the regulation is (a) necessary for the protection of public health, safety, and welfare, and (b) is clearly written and easily understandable.*

This regulation is necessary for the protection of public health, safety and welfare and is clearly written and easily understandable.

**Decision**

*Explain the basis for the promulgating agency's decision (retain the regulation as is without making changes, amend the regulation, or repeal the regulation).*

*If the result of the periodic review is to retain the regulation as is, complete the ORM Economic Impact form.*

The regulation continues to be needed and is being retained without changes.

**Small Business Impact**

*As required by § 2.2-4007.1 E and F of the Code of Virginia, discuss the agency's consideration of: (1) the continued need for the regulation; (2) the nature of complaints or comments received concerning the regulation; (3) the complexity of the regulation; (4) the extent to which the regulation overlaps, duplicates, or conflicts with federal or state law or regulation; and (5) the length of time since the regulation has been evaluated or the degree to which technology, economic conditions, or other factors have changed in the area affected by the regulation. Also, discuss why the agency's decision, consistent with applicable law, will minimize the economic impact of regulations on small businesses.*

This regulation continues to be needed. The regulation contains requirements for the content of solid waste management plans and details the options localities have when developing solid waste management plans. Localities may choose to develop their own plans or may join with other localities to

form solid waste planning units. These plans promote source reduction, reuse, and recycling of materials, thereby reducing the amount of solid waste that needs to be disposed of in landfills.

Twenty-three (23) comments were received during the public comment period. Nineteen (19) of the received comments would require a statutory change to address the comment. The regulation provides details concerning the content of solid waste management plans, required recycling rates, and the formation of solid waste planning units. The regulation is written in non-technical language.

This regulation is a state only regulation and there is no equivalent federal regulation. This regulation does overlap to an extent with the Solid Waste Management Regulation, 9VAC20-81-10 et. seq. Both regulations address solid waste and the need to properly manage solid waste at permitted facilities. Some facilities that manage solid waste receive permits from the department that are issued through the Solid Waste Management Regulation 9VAC20-81-10 et seq.

The regulation was last amended in 2019 to update references and be consistent with changes made to the Virginia Hazardous Waste Management Regulations. The regulation is currently undergoing review to update references and be consistent with changes made to the Regulated Waste Management Regulations. The final stage of that review will be published in The Virginia Register on October 23, 2023. Small businesses are not required to develop Solid Waste Management Plans. Localities may collect information from businesses and industries in their localities in developing and implementing their plans. This regulation has minimal impact on small businesses.

### Family Impact

*Please assess the potential impact of the regulation's impact on the institution of the family and family stability.*

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This regulation does not impact the institution of the family or family structure.