



LoveCentralVA
P.O Box 238
Cumberland, VA 23040

October 21, 2020

Norfolk District Corps of Engineers
ATTN: CENAO-WR-R
9100 Arboretum Parkway
Suite 235
Richmond, VA 23235
steven.a.vanderploeg@usace.army.mil

Re: Public Notice NAO-2018-00995

Dear Mr. Vanderploeg:

On behalf of the members of the non-profit corporation, Love Central Virginia, Inc., which operates under the name Cumberland County Landfill Alert (CCLA), we am submitting these comments regarding the water permit application filed by Green Ridge Recycling and Disposal LLC for the construction and operation of a mega-landfill in Cumberland County.

CCLA was started in June 2018 after the citizens of Cumberland and Powhatan counties became aware of the actions taken by the Cumberland County Board of Supervisors regarding a proposed 1200-acre mega landfill. The site for this landfill is in Cumberland County just west of the Powhatan county line. The proposed entrance to the site is off route 60 along a two-lane stretch of road. The site is an environmentally, historically, and culturally significant area that the Army Corps of Engineers (ACOE) is charged with protecting the waters in furtherance of public interest.

SUBSTANTIVE CONCERNS

CCLA has many concerns with the proposed Green Ridge 1200-acre mega landfill in Cumberland County. These concerns include, but not limited, to the following:

➤ Environmental Justice

+ Demographics - The siting of a mega-landfill in a relatively poor locality with a minority population that is a higher percentage than the national and Virginia percentages would violate the Commonwealth's environmental justice policy.

Cumberland County is among the poorest localities in the Commonwealth. The County also has a percentage of African American residents that is higher than the percentage of African Americans residing statewide. Either of these factors would qualify the

County for consideration under the Commonwealth's environmental justice policy, which was formally adopted at the veto session of the Virginia General Assembly on April 22, 2020.

The injustice of subjecting the residents of Cumberland County to the adverse effects of a mega-landfill that would receive most of its waste from other localities makes the location of that facility Cumberland County unsuitable. Waste that would be deposited in the proposed landfill will originate from localities as far away as 500 miles. Most of those exporting localities are wealthier and enjoy environmental regulations that are more rigorous than those applicable to the pending Green Ridge application. When the liner and leachate collection systems of the Green Ridge facility fail, as EPA has stated they ultimately will, the County residents will be profoundly affected. The damage to their groundwater supply would be devastating.

The fundamental unfairness of allowing relatively wealthier communities to transport their solid waste to a community that has a percentage of minority residents that exceeds that of Virginia as a whole and that is relatively less wealthy than the exporting communities cannot be ignored.

Further, there are serious concerns with the quality and scope of data submitted in the permit application, strongly indicating the need for further independent investigation. The demographics data presented by Green Ridge in the application are a flawed basis for understanding the area. The report does not present the degree of measurement error, a critical aspect to the interpretation of the statistics. In fact, the income levels of the area are highly estimated and based on small samples, and as such are highly imprecise and unreliable. This is easily demonstrated by examining income data by ZIP codes from the same survey (American Community Survey 5 year estimates 2014-2018), ZIP code regions being much larger than the 2.2, 4.2, and 6.2 mile radii circles submitted by Green Ridge. The income data from the ACS for ZIP codes for the site and the area immediately to the north have a margin of error of 22% and 52% respectively. Again, ZIP codes are much larger in area with more responses to the survey and so the margin of error for the small circles will be even greater. These very large margins indicate that the data presented cannot and should not be used to describe the community or any differences within it as pertains to the landfill's socioeconomic impact.

Green Ridge used the Magnum Report and when this data is compared to the US Census and the USA.com data which virtually report the same data, there are several observations.

- 1) The intent of the Magnum Report was “to measure and identify the intended and un-intended consequences of proposed legislation and policy initiatives “ not the Environmental Justice of Cumberland County citizens.
- 2). The Magnum Report used demographic information from a 1 mile, 2.2 mile, 4.2, and 6.2-mile radius from the perimeter of the Green Ridge property. The question one would have to ask is why? Why not 1, 2, 4, and 6 miles? It will become obvious very quickly, that Magnum is targeting specific demographic areas and is including that

specific information to “spin” their numbers for positive demographics on Green Ridge’s behalf.

3). RACE - Magnum states that Cumberland’s black population of 18% at 1 mile to 19% at 6.2 miles reflects the Virginia state black population. All my sources state Cumberland’s black population as 30.8%; some 40% higher than Magnum states.

4) Median household income- The Magnum Report states median household income from 1 mile \$52699 up to \$52948 at 6.2 miles. The US Census study, adjusted to 2014-2018 stated a median Cumberland household income of \$ 46221. Data USA stated \$43020 and USA.com stated Cumberland median household income as \$41484. All the data as shown was well below Virginia’s median income of \$63907, and the Mundi Index also reported \$46221. * Note * The Mundi Index and the US Census data are identical.

What was not included in the Magnum report, was median income by race. This is significant. The median income for white families according to USA.com \$47286. The same USA.com report stated black median family income of \$29375. Virginia median white income is \$69851 compared to \$44288 for black median income, and the US numbers were \$56900 white and \$35600 black.

5) The Magnum report failed to include that Cumberland County has a poverty rate of 15.7%; well above the Virginia poverty rate of 10.36% and the US poverty rate of 9.2%.


More significantly; as published by World Population Review 2020 data, Cumberland County’s black population is living at a 40% poverty rate,

6) Property Values -

The Magnum report states a county wide median home value of \$139570. According to the US Census Bureau, the Cumberland median home value is \$146300. Powhatan’s median home value is \$271400, and the median Virginia state home value is \$273400.

7) The Green Ridge/Magnum report is the first and only report generated that includes any data using Powhatan County. The 1mile, 2.2,4.2, and 6.2-mile data impacts virtually all of Magnums data.

In summary, the accuracy of the demographics data is highly imprecise to the point of nonutility, and incongruous with that from other sources.

 **Cultural - The 1,200-acre Green Ridge site contains at least twenty-two graves that the applicant does not propose to relocate, that should not be relocated and that should not be adversely affected by the construction and operation of a mega-landfill.**

The applicant’s consultant identified twenty-two graves of African Americans located within the Green Ridge site. The consultant acknowledges that the graves likely have historic significance. Relocation of the graves by Green Ridge, which its consultant recommends against, is unwarranted because there is no “more suitable repository” because of their

historical significance. Va. Code § 57-38.1. They are plainly an essential part of the history of the area, which included the community of freed slaves and their descendants who resided there and continue to identify with Pine Grove School as the heart of that community.

If the Green Ridge facility is constructed and becomes operational, appropriate access to these graves by the interested community and its oversight of the maintenance of the graves would be difficult to assure. Since Green Ridge acquired the site, it has imposed unreasonable burden on access to the graves, which the community has requested pursuant to Va. Code § 57-27.1.

The members whom I represent are opposed to relocation of the graves in any event. More to the point, we request your determination that the proposed location of the mega-landfill would be unsuitable because of its unacceptable impact on the historic graves within the site and to the community to which those graves are linked.

✚ **Historical - Siting a mega-landfill that would be immediately adjacent to a National and Virginia Historic Place and that would adversely affect other historic sites would be unacceptable.**

The U.S. Department of Interior has designated Pine Grove School, which is immediately across Pinegrove Road from the proposed Green Ridge facility, as a National Historic Place. The Virginia Department of Historic Resources has added Pine Grove School to the Virginia Landmarks Register. The construction and operation of a mega-landfill will have a significant, adverse effect of Pine Grove School, including realignment of Pinegrove Road, increased traffic, noise, dust, odor, visual impacts and the general incompatibility of a landfill adjacent to a historic resource.

The Virginia Department of Historic Resources has noted, and Green Ridge has acknowledged, that there are several other known historic resources within or adjacent to its 1,200-acre site. Several may be eligible for designation on the National Register of Historic Places.

The significant effect of the siting of a mega-landfill on these historic resources would be unacceptable and cannot be mitigated. For this reason, I request that you determine that the proposed site is unsuitable for a landfill.

➤ **Surface and Ground Water - The U.S. Geological Survey and the Virginia Department of Health have reported that the area in which the landfill would be located is 100% susceptible to groundwater contamination.**

In 2008, the U.S. Geological Survey, in cooperation with the Virginia Department of Health, published a report, Aquifer Susceptibility in Virginia, 1998-2000, concluding that the area in which Green Ridge proposes to construct and operate a landfill is 100% susceptible to groundwater contamination over a 50-year period. The U.S. Environmental Protection Agency has stated the “even the best liner and leachate collection systems will ultimately fail due to natural deterioration.” 53 Fed. Reg. 33345. The effect of these two, interrelated conclusions is to make the proposed site unacceptable for the location of a landfill.

Cumberland County is a relatively poor community situated more than 40 miles southwest of the City of Richmond and approximately 30 miles from its nearest urban locality, Chesterfield County. Cumberland County is predominantly rural and has only very limited central water service, which was installed for the Courthouse area in response to the contamination of groundwater there as a consequence of toxic leachate from the County's Madison sanitary landfill located in the Courthouse area. That landfill had been closed in 1995. Most of the residents of the County are dependent on private wells for their potable water needs. The County is financially and practically incapable of providing water to the residents in the vicinity of the proposed landfill because of the County's restricted ability to fund such service and the inordinate cost of providing service to such a dispersed population.

The risk to the residents of the area of contamination of their groundwater supply is significant. These residents have no practicable alternative to groundwater from their private wells. The inevitability of contamination of those wells due to the failure of a mega-landfill's liner and leachate collection systems, based upon the conclusions of the USGS, the Virginia Department of Health and EPA, disqualifies the proposed site for the construction and operation of a landfill, especially one of such size.

The location of the Green Ridge mega-landfill in Cumberland County would also pose an unacceptable risk to ground and surface water to the north, particularly to Muddy Creek and wells in that area because of the likelihood of failure of the facility's liner and leachate collection system. These water systems are hydrologically linked to the James River, which is the principal source of drinking water for the Richmond region. For the foregoing reasons, we request that you determine that the proposed site is unsuitable for a mega-landfill.

NOTE: We engaged and are working with a surface and ground hydrologist who is reviewing the data. We request an extension of time on this item so we can obtain his report.

- ✚ 100 Year Floodplain - Part of the environmental impact is that this landfill site is situated on a 100-year floodplain and a floodplain map has not been revised in 20 years. Also, the FEMA flood insurance study for Cumberland County has not been revised since 2009. Cumberland County's 2013-2018 Comprehensive Plan indicates that a reservoir (Cobbs Creek Reservoir) and additional residential homes will be built north and northwest between this proposed mega landfill and the James River. What impact will these three projects together have on possible flooding within and around the landfill site and washing debris and leachate into the waterways?

Additionally, the soil types map shown in the County's Comprehensive Plan was created by the Commonwealth Regional Council (CRC) using USDA Natural Resources Conservation Service data. Is their soil map correct for their timeframe and has the soil content in and around the landfill site been altered by any flooding caused by the changing weather patterns (increased rains, flooding, and tropical storms/hurricanes) brought on by climate change?

Furthermore, the County recently approved Braven Environmental's plastics recycling facility occupy a site in Cumberland, less than 10 miles from the proposed landfill site. Will this facility be affected by any flooding per the 2009, or newer, flood insurance

study? Has the County completed a new six-year Comprehensive Plan and continue to approve all these projects based on the same outdated floodplain map and outdated flood insurance study? Disturbing 1,200 acres of natural habitat for this mega landfill project will affect all these projects and have environmental effects, but to what extent? The answers to these questions warrant an updated floodplain map, flood insurance study, and environmental impact study.

A request was made to the Cumberland County Board of Supervisors in May 2019 asking them to request a FEMA floodplain map update, as the citizens cannot make the request. No action was taken. CCLA made a request in April 2020 for the FEMA floodplain map update. Again, no action by the Board of Supervisors – it was never even put on the agenda for discussion at a regular Board of Supervisors meeting as documented by a review of the meeting minutes.

✚ Flippen Pond Dam – Flippen Pond is a large body of water (1700 feet by 400 feet) impounded by a generations old dam on Muddy Creek immediately upstream of the proposed landfill. Assuming an average depth of 5 feet behind the impoundment, if the dam failed over 25,000,000 gallons of water would torrent down Muddy Creek and wash out a portion of the landfill.

We learned there was a breach in the dam during the last 20 years that was not properly repaired and inspected. There is no documentation to support any recent inspections of the dam. This is a major concern, especially if it breaches again. We are doing further research on this issue to determine if the dam is in violation of inspections and compliance and if so, who would be responsible for paying for the cost of the repairs.

- Wetlands and Streams – There are several concerns in this area to include, but not limited to, the following:
- The site was previously considered for a James River augmentation reservoir which, we believe, was not selected due to the number of wetlands on the property.
 - The site is bordered by Muddy Creek on the West, Maple Swamp Creek to the East, Maple Swamp at the North and to the South-West is a unnamed tributary that runs all year from a wetland/pond off of Brown Road that flows close to the property to join Muddy Creek, an area known local as Scott's Bottom. State documents show that this complex of waterways is responsible for draining forty-five square miles of land.
 - The site plan shows wetland between cells that will carry runoff from the property and empties into Muddy Creek. Since the leachate facility is by it, we see it as a major issue due to vehicle traffic, leachate transfers, run off from the cells and windblown trash.
 - The U. S. Fish and Game National Wetlands Inventory documents wetland in close proximity in all directions around the project.
 - Parts of the site are in the FEMA 100-year floodplain.
 - Proposed locations for storm runoff ponds indicate a significant amount of wetland acreage will be destroyed to build these ponds.

NOTE: After searching for over two years, within the last 15 days, CCLA engaged a wetlands specialist to review this area. The specialist is highly qualified, meet with us twice, and is scheduled to visit Cumberland County within the next 10 days. Therefore, we

request an extension of time to submit our comments in this area. The specialist input may be invaluable to all parties concerned with this issue.

- **Seismic - The Virginia Department of Mines, Minerals and Energy and the U.S. Geological Survey have concluded that earthquake epicenters in the Central Virginia Seismic Zone do not align with identified faults.**

Cumberland County is situated within the Central Virginia Seismic Zone, which experiences on average six earthquakes per year, of which one is severe enough to be felt at the earth's surface. A magnitude 5.8 earthquake occurred in this zone near Mineral, Va. approximately 40 miles northeast of the proposed site on August 23, 2011. The impact of that earthquake was experienced as far away as southeastern Canada and caused damage to the Washington Monument, among many other distant structures. An earthquake of that magnitude was not anticipated and has been studied extensively by numerous scientists since its occurrence.

Earthquakes in this zone, unlike earthquakes in California, "usually occur at depths anywhere from three to fifteen miles and it is not always possible to associate a specific earthquake with a specific fault." Since 1977, more than 195 earthquakes have been detected as originating beneath Virginia.

Solid waste landfills can be adversely affected by seismic activity. The tension in a landfill liner rises significantly during an earthquake and can cause tearing of the liner. The top of the landfill may crack, and methane collection systems can be compromised. There is a risk of landfill collapse during the shaking of an earthquake, which would result in the contamination of adjacent groundwater. Seismic waves and liquefaction of soil, as was observed in the region following the 2011 Mineral earthquake, -accompanying an earthquake can cause instability in a landfill that results in leachate and methane gas leaks.

To address the risks to landfills associated with earthquakes, EPA has promulgated regulations applicable to the Green Ridge proposal. 40 CFR Part 258, subtitle D. Those requirements provide that new landfills usually should not be sited within 200 feet of a known fault that has exhibited movement during the last 11,000 years. 40 CFR §258.13(a). Because of the inability to identify where earthquakes are likely to occur within the Central Virginia Seismic Zone by reference to fault lines, there is a risk of locating a landfill anywhere within this zone. Siting the Green Ridge mega-landfill in this zone, therefore, poses unacceptable risks that should disqualify the proposed site.

A consultant's report to EPA recommended that "caution is warranted in concluding unconditionally that landfills will perform well in earthquakes and investigations and analyses are required to demonstrate that landfills are properly designed to resist the effects of strong ground motions and liquefaction." That report also concluded that when knowledge and understanding of the seismology of a particular zone are affected by recent developments (such as the August 23, 2011, earthquake near Mineral, Va.), a site-specific analysis is warranted.

The risks to local groundwater supply adjacent to the proposed landfill in the event that seismic activity causes failure of the liner and leachate collection systems in the future makes the proposed site inappropriate for that use. For that reason, the ACOE should determine that the site proposed for the Green Ridge facility is unsuitable. At a minimum, ACOE should require a

site-specific analysis of the risks associated with locating a landfill in the Central Virginia Seismic Zone before making the determination required by Va. Code § 10.1-1408.4 of the suitability of the site for the proposed Green Ridge facility.

Endangered Species - Regarding Part VII. Threatened and Endangered Species Item 4 2020-1619 Part 4 09/02/2020 (link below), Pages 36-87

- Green Ridge hired “...Koontz Bryant Johnson Williams” (KBJW) to submit a report containing... “information obtained from the U.S. Fish and Wildlife Service” to “...identify the potential for the presence of any threatened and endangered species within the project area”. Per the application, this report was created “May 25, 2019” and updated “December 9th, 2019” and “received by VMRS September 2nd, 2020”; “Prepared for: CWV, LLC c/o James H. Martin” in “Cobbs Creek, Virginia”.
 - Question – what entity is CWV, LLC.? Who is James H. Martin? How are they connected with Green Ridge?
 - Question - When reviewing the Introduction section of this report, it states that “the site...contains both forested and unforested areas along with a wetland system that was delineated in March and April of 2018”. Questions - Who completed this delineation? Where is the report and/or map of the current boundary noted for this report?
 - Suggestion – as it seems apparent that the wetlands are underrepresented and the boundary questionable, it is requested that an unbiased party review the boundary and wetlands involved to ensure the wetlands are indeed accurately represented.

- In regards to the “property boundary / facility boundary” and as the report lists in Section II Step One “According to the USFWS, the action area includes ‘all areas to be affected directly or indirectly by the action and not merely the immediate area involved in the action (50 CFR 402.02)’”. As the report states in Section II Step Two – Four “An Official Species List (OSL) was produced via the USFWS ‘Information for Planning and Consultation (iPac)’ website.”
 - Concern – when a citizen replicated, to the best of their ability, through the IPac and OSL information, the information reported by KBJW was returned by the website. However, when the same citizen, expanded the boundary line to include, at least, the creeks and wetlands outside of the boundary, the list of species expanded to include six migratory birds, including Bald Eagles.
 - Question – regarding the migratory birds, has or will the Birds of Conservation Concern (BCC) be contacted to evaluate the potential impact of this project on migratory birds? The BCC has a list that identifies “species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing” under the ESA (FWS, 2008).
 - Question – regarding the border, as the EPA has clearly stated that all liner’s leak, all landfills fail at some point, beyond the border needs to be considered in this evaluation as well. Landfill leakage contamination will impact the land, waterways, animals, the overall environment beyond the border and, therefore, must be considered in relation to a project of this type. Air will also be affected and migratory birds including the Bald Eagle, will be negatively impacted. Water contamination will go into Muddy Creek which directly impacts highly valued and currently healthy wetlands. Not to mention the

private wells bordering the proposed site. What can we do to have the land outside the “project action area” included in this evaluation?

- Question – it is stated in the report, that the National Oceanic and Atmospheric Administration (NOAA) list of threatened and endangered species is not included. As this is a project with irreversible negative impacts to the environment, why haven’t all lists been considered?
- Suggestion – extend the timeframe for evaluation so all threatened and endangered plants and animals can be considered.
- Suggestion – conduct a full Biological Assessment of the “project action area” and, as Green Ridge used 6 miles in a demographic study, extend the project impacted area to 6 miles to adequately survey and consider all species.

Summary – at first blush, in regards to the KBJW report, from a laymen’s perspective, it appears that the minimal work required was completed and reported accurately as the steps were replicated by a local citizen, laymen, with the same results. However, the question regarding whether the applicant has described the appropriate “action area” needs to be seriously considered as a project of this magnitude will, without question, negatively impact the ecology and wildlife outside of the site boundaries.

- Suggestion – conduct a full Environmental Impact Study to ensure the area within the boundary noted on the Site Location and NWI Map and surrounding areas, within 5 miles, is properly evaluated and protected.
- Green Ridge also hired “... Dagona Consulting, LLC” for “Koontz Bryan Johnson Williams” who, if you recall reported for “CWV, LLC c/o James H. Martin” in “Cobbs Creek, Virginia”. Dagona Consulting reported on their findings on the presence of any threatened and endangered mussel species within the project area. Field work was conducted in May of 2019.
 - Question – the parties hired, were they aware the gravity of their research? Assuming they did not, would they have shared more vital information?
 - Suggestion – again, what do we need to do to have an unbiased, unpaid report to ensure confidence to the citizens?
- It is stated within the study that as the NLEB habitat is negligible the mussel study was completed as one species of clam is endangered, another under review, and a third proposed threatened. It is obvious that this species is the largest concern to Green Ridge. Note: Figure 1, page “9 of 23”, page 73 of report identifies the areas outside the border surveyed for mussels.
 - Concern – water contamination into Muddy Creek will feed into the James.
 - Suggestion – to have an unbiased study conducted to verify these reports along with the potential impact of mussels upon contamination.
 - Question – as areas outside of the boundary, “action area”, were surveyed for mussels, shall those areas be surveyed for other biodiversity?

- Question – as a “Live *Corbicula fluminea* (uncommon)” mussel was found, in addition to “...finding suitable habitat” how are those findings taken into consideration?
- Section III: Threatened and Endangered Species – Plants; The USFWS Endangered Species Project Review, OSL and the ECOS system was utilized for a county specific search for any threatened and endangered species. Wetland plants are the most critically endangered and, with this project, the most potentially negatively impacted.
 - Suggestion - evaluate the area in nearby wetlands, not just the boundary, for such endangered species as it is highly probable that these will be the most impacted.

Summary – as it is apparent that Green Ridge conducted this Mussel report after identifying species of concerns in their initial research and, in a laymen’s opinion, the survey completed well; it is suggested that additional surveys be conducted to rule out potential threatened and endangered species within the action area and outside.

Threatened and Endangered Species - Final Note - upon review of the expanded iPac citizens’ report, it became apparent that specific endangered plants and animals are likely within the area, including but not limited to the Carolina Northern Flying Squirrel, Mitchells’ Satyr, and the Red Cockaded Woodpecker. Without being aware of how species and habitat are identified for resources used for this report, it is suggested to complete a full survey of the land, with citizens’ and/or academia assistance, to ensure that all flora and fauna be protected. As stated previously, projects of this magnitude which could irreversibly negatively impact the environment, must be reviewed, and considered to the upmost. Please seriously consider the implementation of a full Biological Assessment, unbiased reporting, extension of the comment period, and most importantly The Environmental Impact Study.

➤ Other Areas

- ✚ Traffic - **The location of the proposed mega-landfill on a two-lane highway presents risks that make the site unsuitable because of the increased truck traffic it would generate.**

The entrance to the proposed Green Ridge mega-landfill would be off U.S. Route 60, which is a two-lane highway from just west of its intersection with U.S. Route 522 in Powhatan County to the landfill entrance and a two-lane highway west of its intersection with U.S. Route 45 near the Cumberland County Courthouse area and beyond that intersection to U.S. Route 15 and U.S. Route 24, which may be routes used to transport waste from a proposed Appomattox County transfer station to the Green Ridge mega-landfill. U.S. Route 522, U.S. Route 15 and U. S. Route 24 are two-lane highways. Each highway would likely experience increased truck traffic if the Green Ridge proposal is approved. If waste is transported over U.S. Route 522, the safety risk is enhanced because of the lack of adequate shoulders on that narrow highway.

The Powhatan County Board of Supervisors has opposed the Green Ridge proposed mega-landfill because of the adverse impact on the County’s highways of an increase of as many as 500 trips per day by large trucks hauling waste to the proposed mega-landfill. That number

of trips may be understated for a particular day because the facility will be limited to a weekly average of 5,000 tons per day, which means that on a particular day, the amount of waste could exceed 5,000 tons and require more than 500 trips.

Green Ridge has apparently assumed that all transport of waste to its mega-landfill would be by tractor-trailer. If the transport of waste to the facility is handled by a mix of tractor-trailers and smaller vehicles, the number of vehicles involved would likely be higher than the Green Ridge estimate.

✚ Needs Test - According to the Code of Virginia §10.1-1408.1.D.1(ii), the Director of the Department of Environmental Quality must determine that there is a need for additional waste disposal capacity before allowing a permit to be issued. Green Ridge's demonstration of need is completely inadequate. There is no organic need for the project; the impetus for the project is the financial interests of the applicant. As detailed below, an examination of the best quality capacity data clearly contradicts the need for additional capacity. Further, the Demonstration from Green Ridge does not consider any actual data concerning trends in waste disposal in the Commonwealth, waste imported, recycling rates, or tipping fees. All these data contradict the assertion of need for additional capacity. With no factual basis for requesting additional capacity, the applicant is left to attempt to invalidate the data (an ultimately unsuccessful attempt, as their alternative calculations obtain nearly the same values of capacity as DEQ). In reality:

- The host community planning region (Cumberland and Prince Edward) has no need for additional capacity.
- The surrounding geographic area has no need for additional capacity:
 - There is a very large multi-state landfill only 23 miles away from the proposed site with nearly 150 years of capacity remaining.
 - Seven of the 10 (70%) of the Commonwealth's largest landfills are in the same planning region (Piedmont) and all have more than 20 years capacity.
 - The closest waste management authority (Central Virginia) has no need for additional capacity for the next 20 years.
- The Commonwealth has no need for additional capacity, with more than 20 years remaining across all Virginia facilities.
- There is no "exponential" growth in waste production. Trends for waste generation are stable or declining, not increasing, for the past 20 years.
- There is no evidence that tipping fees are increasing as a result of capacity pressures. Tipping fees have declined over the past decade.
- There is no evidence for increasing pressure from out-of-state waste (OOSW). It has been stable for the past decade.
- Even if OOSW were increasing, the notion put forth by the applicant that Virginia should and would stand by and allow the landfills its citizens support with taxes and acceptance of environmental risks to be "inundated" by it, and so making their own capacity unavailable to them, is absurd.

- There is no evidence that waste production in the southwest Virginia area, a supposed market for the proposed landfill, will increase. This region is actually losing population and is projected to continue this pattern over the coming decades.
- Recycling is increasing, and in areas where it is tracked, increases in recycling are accompanied by declines in MSW generation.

Other issues relate to an inappropriate cost-benefit analysis of the demonstration.

- 1) The cite duopoly as a reason to permit the landfill to reduce disposal costs, however as described earlier it is not clear that under current condition, lack of competition is actually driving up fees. Even if it were, this is a rather expensive and risky way to correct a problem that could be addressed through policy. Additionally, consolidation is the rule for the waste management industry, and it is likely that today's "competition" will be tomorrow's monopoly.
- 2) The argument to build landfills NOW in anticipation of future "need" is not supported by cost-benefit considerations. There is no need to build a landfill now because there is adequate capacity for over at least 20 years. The only beneficiaries of a "build now, need later" approach are the landfill and its associated waste collection companies (County Waste of Virginia and Pennsylvania), and the host community (although Cumberland assumes outsized pollution and public health risks). The only benefits to building landfills far in advance of need are financial, and they are limited to a few parties. The risks are the known negative economic, environmental, traffic, and health impacts, and critically, the loss of the opportunity to utilize the best available technology which is of course better the longer you wait to build. These risks are assumed by the whole Central Virginia region. This is the reason why the need must be clearly demonstrable, and in the application from Green Ridge, it is not.

SUMMARY

There are many reasons why the proposed Green Ridge 1200-acre, mega landfill is not good for Cumberland County or Virginia. We have touched upon many of them above; however, there are still many others to consider such as:

- Financial condition of Green Ridge and affiliates as it is difficult to determine with whom local officials, state and federal agencies are dealing with.
- Inconsistencies by Green Ridge in their reporting to local government, the Virginia General Assembly, and their own documentation used in the application process.

CCLA asks the Army Corps of Engineers (ACOE) to require an Environmental Impact Study (EIS) and Public Hearing(s). We need viable, truthful answers and the only way we can obtain them is through an EIS. Local citizens of Cumberland and Powhatan counties, as well as other concerned citizens have a right for their voices to be heard.

CCLA has requested an extension on the comment period to November 13, 2020. We hope this request is granted as additional time is needed to document our findings, not only by CCLA, but other groups as well.

Sincerely,

Betty Myers

Betty Myers
CCLA Chairperson