

**DISTRICT COUNCIL FOR PRINCE GEORGE'S COUNTY, MARYLAND  
OFFICE OF THE ZONING HEARING EXAMINER**

**SPECIAL EXCEPTION**

**4765**

**AND**

**TCP II-105-90-01**

**DECISION**

Application: Sanitary Landfill (Fly Ash) and Tree  
Conservation Plan  
Applicant: Mirant MD Ash Management,  
LLC/Brandywine Ash Storage Site  
Opposition: Patuxent River Keeper, **et. al.**  
Hearing Dates: November 16, 2016, January 25, 2017,  
and July 19, 2017  
Hearing Examiner: Maurene Epps McNeil  
Disposition: Approval with Conditions

**NATURE OF PROCEEDINGS**

(1) Special Exception 4765 is a request for a 10-year extension to operate a Sanitary Landfill for Fly Ash Disposal (a by-product from burning coal) on approximately 42.8-acres (identified as the Phase II Fill Area) of a 178.78-acre parcel (Parcel 6 on Tax Map 146, Grid D-1) in the O-S (Open Space) Zone, located on the north side of North Keys Road, approximately 2,200 feet north of its intersection with Gibbons Church Road, at 11710 North Keys Road.

(2) The Technical Staff recommended disapproval. (Exhibit 28) The Planning Board did not hold a hearing on the request but adopted Staff's recommendations as its own. (Exhibit 32)

(3) The Patuxent River Keeper, represented by the University of Maryland Environmental Law Clinic, the Greater Baden Aquasco Civic Association, and several others appeared in opposition to the requested use.

(4) The record was left open at the close of the second hearing to allow the parties to submit written closing argument. All closing argument was received by March 1, 2017. Subsequent to that date I discovered that the use is no longer in the County's Ten-Year Comprehensive Solid Waste Management Plan. I researched the matter and discussed with Staff at the Department of Environmental Resources ("DER") to determine whether the use is required to be

in the Plan, and ultimately held an additional hearing to address this issue. Applicant's Counsel submitted a legal memorandum at the hearing and the record was left open to allow Counsel for some in opposition to submit a response. The record was closed on July 31, 2017, after receipt of the response. (Exhibit 98)

(5) This Examiner takes administrative notice of the record in the prior special exception for a fly ash fill at the subject property, SE-4520, and incorporates it by reference herein.

## **FINDINGS OF FACT**

### **Subject Property**

(1) The subject property is a large, irregularly-shaped parcel improved with an office trailer adjacent to a 2-door garage attached to a barn used for materials storage. An asphalt parking area is located in front and to the side of the office trailer. To the east are a temporary contractor trailer and adjacent diesel oil storage tank. These existing structures and parking spaces will be removed prior to completion of fill activities if the request is approved. (Exhibit 28, p. 119) There are mature trees on site nearly 80 feet in height. The water and sewer designation for the site is W-6/S-6.

(2) The site has been used for fly ash disposal since the early 1970's.<sup>1</sup> The most recent special exception (S.E. 4520), approved in 2007, allowed Applicant to use the site as a fly ash fill for a period of 8 years with four conditions attached to the approval. A Type II Tree Conservation Plan (TCP/105/90) was also approved at that time. Applicant advises that the "north and west portions of the property (Phase I) are no longer receiving fill material." (Exhibits 22(a) and 28, p. 4)

(3) The property will be accessed via a 30-foot wide paved private road that connects to North Keys Road. The private road is approximately 2,500 feet in length and is also utilized by an adjoining sand and gravel mining and wet processing facility.

### **Surrounding Uses/Neighborhood**

(4) The property is surrounded by the following uses:

- North – Mataponi Creek, and Potomac Electric Power Company ("PEPCO") power transmission line corridor and substation, and

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<sup>1</sup> The Technical Staff report includes an excellent summary of the history of the fill operations on site since its purchase by PEPCO. (Exhibit 28, pp. 5-6)

beyond that are mixed large acreage wooded parcels developed with single-family dwellings in the O-S Zone.

- South – The Brandywine North Keys Community Park owned by the Maryland-National Capital Park and Planning Commission (“MNCPPC”), and a former sand and gravel operation and wet processing facility (SE-3561) in the O-S Zone.
- East – unnamed tributaries of the Mataponi Creek and two forested parcels (one improved with a single-family home), and a closed Class 3 landfill (owned by GENON Ash Management, LLC) in the O-S Zone.
- West - A PEPCO high-voltage power line right-of-way and other property owned by Applicant previously used for fly ash disposal, in the O-S Zone.

(5) The neighborhood is bounded on the north by Mataponi Creek, on the east by MD 382 (Croom Road), on the south by North Keys Road, and on the west by Popes Creek Branch Railroad tracks.

(6) The neighborhood is rural in character. It contains sand and gravel mines; undeveloped agricultural and wooded fields; vacant parcels; and a few commercial, institutional and quasi-public uses. The subject property falls outside of the viewshed for North Keys Road (a historic road) and, therefore, does not impact the rural character of this area.

### **Master Plan/Sectional Map Amendment**

(7) The 2013 Subregion 6 Master Plan recommended rural land use for the property, with residential land use densities of up to 0.2 dwelling units per acre for the site.

(8) The 2013 Subregion 6 Sectional Map Amendment (“SMA”) retained the O-S zoning of the property.

(9) The 2014 General Plan (*Plan Prince Georges 2035*) designates the property as Rural and Agricultural and Parks and Open Space.

(10) The use is no longer required to be included in the County’s Comprehensive Ten-Year Solid Waste Management Plan since the Maryland Department of the Environment (“MDE”) has determined that it is not a refuse disposal facility (solid waste acceptance facility) requiring a permit from MDE. (Exhibit 93)

### **Applicant’s Proposal**

(11) The Applicant requests an extension of 10 years to continue operating its existing Fly Ash fill<sup>2</sup> in order to complete fill operations and restore the site.

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<sup>2</sup> The subject property is the only fly ash fill in Prince George’s County. (Exhibit 8(a))

Operations at the site consist of truck hauling and compacting fly ash generated at one of two facilities owned by Applicant - the Chalk Point Generating Plant to the south of the site in Prince George's County and the Morgantown Plant in Charles County (Newburg, Maryland). It is estimated that 35% of the fly ash will be trucked from the Chalk Point facility and the remainder from the Morgantown facility.

(12) Applicant wishes to begin using a smaller area (Phase II) within the footprint of the most recently approved Special Exception (SE-4520). The Phase II area is outlined in red on the aerial that shows all of the fill areas (inactive and active) on site. (Exhibits 22 (b)-(g)) Applicant will have to meet all of the Maryland Department of the Environment ("MDE") criteria for fills, including the requirement to install an impermeable membrane liner to prevent leachate from escaping into the groundwater or streams.

(13) As noted by Applicant in its revised Statement of Justification, since 1975 the Brandywine ash site has held a Water Appropriation and Use Permit through MDE's Water Management Administration. The water withdrawal currently permitted is limited to a daily average of 10,000 gallons on a yearly basis, and is to be used for a potable supply, dust control and truck washing. (Exhibit 29, p. 8)

(14) The hours of operation for the site are currently from 7:00 a.m. until 5:00 p.m., Monday through Friday. Trucks are loaded with fly ash at one of the two generating facilities and hauled to the site in marked trucks owned by Applicant's contractors. (November 16, 2016 T.57) The trucks coming from Chalk Point and Morgantown would use the following haul route: Eagle Harbor Road toward Brandywine Road (MD 381); right on MD 381 to North Keys Road; right on North Keys Road to Gibbons Church Road; left into the site. (November 16, 2016 T. 57) Exhibit 60 shows the maximum capped elevation of Phase II to be between 260 feet and 291 feet. Applicant is requesting to fill between the existing fill mounds in a manner that will shield it from view at the property line from the closest residence, from the adjacent park and from North Keys Road.

(15) Mr. Johnson also explained the procedure followed once an area is capped:

Mr. Johnson: It's a design process that we remove all the vegetation, remove the current soil cover, reshape the ash to meet the design. Go back with a membrane, a geo-synthetic membrane [with] composite material on top of that, a soil cover on top of that, 2 foot of soil cover and then benches for storm water control and management....

Mr. Shipley: And when you say benches, does that mean it's not a complete straight slope but it's stepped down in benches?

Mr. Johnson: Correct. There is a couple of benches around to manage storm water runoff, yes....

Mr. Shipley: And is it correct to assume that the maximum, Phase I is done. It's not going to be level is it?

Mr. Johnson: No sir. It's a 2 percent grade from the peak out, so it's not level.

Mr. Shipley: And MDE wouldn't allow it to be level, would they?

Mr. Johnson: No.

Mr. Shipley: So that when you say 291, that's the maximum height?

Mr. Johnson: That's the maximum height.

(November 16, 2016 T. 125-126)

(16) The trucks used for hauling are either tri-axles or tractor-trailers. (November 16, 2016, T. 35) A bulldozer is used to spread the ash in the active Phase 2 cell, a 12-ton vibratory roller is used to compact it, and a water truck is used for compaction and for dust control. A temporary, movable rock crusher will be utilized as necessary.

(17) All trucks accessing the site are operated by entities under contract to Mirant. Trucks are required to have full canvas covers, travel at certain speeds, and be washed down at the site. Applicant agreed to limit truck trips to no more than 200 daily<sup>3</sup> in the prior case (SE-4520), and Applicant is seeking to operate under the same condition in the instant Application.

(18) Mr. Walter Johnson has worked for Applicant since 1980. He testified that he is on site 2-3 times per week for two to four hours each visit. (November 16, 2016 T. 33) He explained the protocol for trucks exiting the fill:

Well they're required prior to leaving a generating station or the ash lake to be fully covered with a tarp and secured on all four sides. The trucks are rinsed off and inspected for cleanliness prior to leaving the site....

(November 16, 2016 T. 39) Mr. Johnson further noted that the haul road is paved, and a water truck is used to control the accumulation of dust/dirt on the road. (November 16, 2016 T. 39-40)

(19) The fly ash is also referred to as coal combustion residuals (CCRs). Both State and federal law regulate Applicant's management of CCR activity on site to minimize them from becoming airborne. (Exhibits 75(a) and (b)) Upon cross-examination Mr. Johnson explained that Applicant is required by the State to

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<sup>3</sup> The total number (round trips) would be 200.

have a dust control plan and as part of that plan they utilize a water truck on a daily basis, to control dust from the ash pile. Wind gusts in excess of 10-15 mph “may require additional water truck activity” and “additional soil covers....” (November 16, 2016 T. 47) If there’s a storm event after hours he or staff goes to inspect the property. In closing, Mr. Johnson testified that, to his knowledge, Applicant has not been cited for dust or odor violations.

(20) Francis Silberholz, accepted as an expert in land use planning, testified that he visited the site, photographed the area from several vantage points outlining the Phase I portion of the fill in green, and the Phase II area in red. (Exhibit 49; November 16, 2016 T. 13-14) An area of the fill, outlined in yellow (termed the “historic area”) is the original PEPCO fill area that began operation in 1971 and is currently being capped. (November 16, 2016 T. 23-24) Exhibits 51 (a)-(c) depict the gated entrance to the site and the nearly  $\frac{3}{4}$  mile access route within the property, the North Keys Road Cemetery, and the Brandywine Community Park. (November 16, 2016 T. 26-28)

(21) Exhibit 61 (a Photo Location Plan) was submitted in lieu of a balloon test. Mr. Silberholtz offered the following reasoning for not doing the balloon test:

It’s counterproductive to float a balloon that’s not visible from anything outside of the cell. I mean, it’s essentially we’re putting a balloon in a bucket and only letting it go up to the top of the bucket and try to see it from outside the bucket....

(November 16, 2016, T. 115)

(22) Mr. Silberholtz was aware of the Consent Decree entered into by Applicant and MDE as a result of water leachate on site. (November 16, 2016 T. 116-118) He does not believe that this incident should preclude a finding that the request satisfies all provisions of the Zoning Ordinance. He also noted that Applicant concurs with all of the conditions proposed by Staff. (November 16, 2016 T. 105)

(23) In its approval of the prior iteration of the instant request (SE-4520) the District Council imposed the following condition (Condition 1 (i)):

All future rubble mounds on the subject property shall be limited to a height of no more than 40 feet above the original grade, as measured from the base of the original barn on the subject site. The Applicant shall maintain all existing mounds at or below their current height.

(Exhibit 53)

(24) As noted below, the Technical Staff primarily recommended disapproval of the request because it believed Applicant failed to comply with this condition since the Site Plan filed in this Application shows the existing height for Phase I at 260 feet, with an ultimate height after capping of 291 feet. Mr. Kevin Caillouet, accepted as an expert in civil engineering, explained the apparent discrepancy between the mound height of Phase 1 approved by the District Council in 2007 and what exists today, and the conformance of the mound height proposed for Phase II with that 2007 approval:

Mr. Caillouet: The maximum purported elevation [for Phase II] is 260.

Mr. Shipley: Okay. Now you're familiar with the fact that in 2007 when the prior special exception was approved by the District Council that they imposed a Condition 1 ... to say that the height limitation for Phase 2 shall be no higher than 40 feet from the base of the original barn on the property.

Mr. Caillouet: That is correct... Based on the aerial topography, we presumed it to be in the 270 range but to be exact we ... have gone out and physically obtained the ... four corners of the existing barn and those elevations are shown on [Exhibit 24]. And they range from 233 to ... 231.1. So 40 feet would be approximately 271 feet....

Mr. Shipley: 271 feet. And you're aware that that condition, that 40 feet above would be 271 feet.

Mr. Caillouet: That is correct....

Ms. McNeil: [T]his is the question and you may not be able to answer it, [since] you took over for another engineer. If we had the case in 4520, the Site Plan does not show 291 feet for Phase 1, is that what the problem is?

Mr. Caillouet: That is correct.

Ms. McNeil: And do we know why?

Mr. Caillouet: No, we do not....

Mr. Horne: But Madam Examiner, we can through testimony demonstrate that Phase 1 was at a certain height at a certain time period.

Mr. Caillouet: Prior to that date.

Mr. Horne: Prior to that date, so therefore when the Council indicates don't go any higher than it is now, we can demonstrate what it was when the Council adopted that [condition]....

Mr. Shipley: Page 6 at the bottom of page 6 of your Staff Report going over to page 7.... Based on the original barn of the subject property ... the applicant

shall maintain all the existing mounds at or below their current height. So my question to the witness would be, if he knows in Phase 1 at that time, 2007, was the height of Phase 1 complete and ... what was it?

Mr. Caillouet: Okay. Our evidence is indirect, we obtained information from ... P.G. Atlas, maintained by the Maryland National Capital Park and Planning Commission, the other was the GIS Open Data Portal, also maintained by [MNCPPC].... [Exhibit 54] Okay. Just the green area which is the area of the fill for Phase 1, we've highlighted the high point at that time was approximately 280 feet. The red area is the Phase 2 fill area, and if you can see in the photograph from 1998, this area was stable in 1998. So it had reached this 280 elevation sometime prior to 1998.... The capping plan is what will take it to 291.

(November 16, 2016 T. 56, 57, 62-65)

(25) The Maryland Department of the Environment and intervenors filed a complaint in the United States District Court for the District of Maryland against the Brandywine Ash Management Facility and two other sites operated by GenOn (predecessor to the Applicant) alleging violations of the federal Clean Water Act and several provisions of the Maryland Code Annotated Environment Article. The parties eventually agreed to a Consent Decree that was ultimately approved by the United States District Court of Maryland. (Exhibits 55 and 62). The Consent Decree included the following injunctive relief and remedial measures for Applicant (as GenOn's successor) to accomplish:

Pursuant to this Consent Decree, the Department ["MDE"] will publish tentative determinations to renew the Discharge Permits for each Site and in conjunction therewith will propose a draft permit for review under the public participation process required for NPDES permits for each Site.... [T]he schedule of compliance imposed by this Consent Decree will form the basis for a schedule of compliance in the Proposed Permits as schedules of compliance to address discharges that do not comply with permit conditions, effluent limits or water quality standards during the period of implementation of the remedial measures.... Among other things, the Proposed Permits will contain water quality based effluent limitations ("WQBELs") based on standards set forth in COMAR 26.08.02/03-2 ... limitations for chlorides which will be based on EPA national surface water criteria requirements under the Clean Water Act, limitations based on Best Available Technology ..., monitoring requirements for chronic whole effluent toxicity, if necessary, and limitations for acute whole effluent toxicity... that become effective upon issuance of the final permits ... by MDE.... The permit may be reopened to address monitoring data indicating

potential violations of narrative water quality standards for chronic toxicity....

GenOn represents to the Department that it does not expect to be able to meet on a consistent basis all of the anticipated WQBELs, for arsenic, cadmium, copper, iron, selenium and zinc. In order to consistently achieve all such WQBELs, and also to meet [other] requirements ..., GenOn will perform the work set forth in ... this Consent Decree (Compliance Activities) pertaining to effluent discharges to surface water.... To the extent that the work set forth in ... this Consent Decree does not bring GenOn into compliance..., no provision of this Consent Decree shall limit [MDE's] authority to require additional remedial measures....

To abate the inadequately controlled discharge of pollutants to groundwater from the Sites so that applicable groundwater standards will be met at or within the property boundary of each Site over time, GenOn will perform the work set forth in ... this Consent Decree (Compliance Activities) relating to discharges to groundwater....

To the extent that the work set forth in ... this Consent Decree does not bring GenOn into compliance..., no provision of this Consent Decree shall limit [MDE's] authority to require additional remedial measures....

(Exhibit 55, pp.18-21)

(26) The Consent Decree required Applicant to do several things, including capping the closed cells; installing liner systems in the new cells and all leachate and stormwater collection ponds and ash-contaminate stormwater conveyances within 60 months; and assessing all drinking water wells legally in use for drinking water within a ½ mile radius of the subject property.

(27) Ms. Ann Wearmouth, employed by Applicant as a senior environmental engineer, testified on Applicant's behalf. Ms. Wearmouth listed the components of the ash on site (which are byproducts of burning the bituminous coal) as "essentially silica, aluminum and iron, followed by various minerals, calcium, magnesium, sulphate and then the trace metals, the arsenic, selenium, cambium and such." (November 16, 2016 T. 216-217). She then explained the steps Applicant takes to insure that fly ash components not impact the environment:

The key for managing this product is to keep water from percolating through the ash and leaching out metals and other

constituents .... We do this by compacting the ash to reduce water intrusion. The active cells are also lined so that any water that percolates through is captured in ponds and that water is treated and then released when we're sure it meets our discharge limits. We're in the process of putting in a new treatment system to make the more stringent limits on metals in the NPDES permit that we just received ... [f]rom MDE....<sup>4</sup>

(November 16, 2016 T. 217)

(28) Ms. Wearmouth explained that the Consent Decree refers to what is referenced as Phase 2 in this Application as Phase 2A and 2B. (Exhibit 55, p. 10; January 25, 2017 T. 14) Ms. Wearmouth noted that Applicant is in full compliance with the capping schedule required pursuant to the Consent Decree, and has completed a study (as permitted in the Consent Decree) which reviewed the well data in the area and found no evidence of contamination. (Exhibit 72(a) and (b)) MDE approved the scope of Applicant's study (Exhibit 77) and agreed with its findings:

The Maryland Department of the Environment ... Water Management Administration acknowledges receipt of the Drinking Water Well Analysis Reports submitted for the Brandywine and Westland Ash Management Sites. Based on the review of the well data provided, the Department found no evidence of contamination in the domestic wells related to the coal combustible byproduct (CCB) activities. Therefore, in accordance with paragraph 57 of Consent Decree CJ-13-1926, the Department acknowledges that no Action Plans are required for the aforementioned sites....

(Exhibit 76)

(29) As part of the Consent Decree MDE has issued a water discharge permit that must be applied for every 5 years – referred to as the NPDES permit. The one in effect will expire in 2021. (Exhibit 69) The permit includes special monitoring and reporting conditions. The Consent Decree also granted the State the right to assess a daily fine if Applicant fails to meet certain goals. Ms. Wearmouth affirmed that Applicant has not been issued a fine, nor has it been issued any notice of noncompliance.... (January 25, 2017 T. 18-19, 34) Provided no further violations occur Applicant will still have to monitor the surface and ground waters at the site to prevent or correct any contamination. (January 25, 2017 T. 20)

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<sup>4</sup> Ms. Wearmouth explained that the Consent Decree required Applicant to place an impervious layer over now inactive cells to preclude any leachate from forming.

(30) Ms. Wearmouth also noted the “nature and extent” study required by the Consent Decree has not been completed (although the backup materials for that study are nearly complete and included in the record under Exhibits 72(a) and (b)). One well on Phase 2 appears to be experiencing leakage under the liner. Ms. Wearmouth believes the water is traveling from the unlined capped area of the site (historic Phase 1), but admits no final analysis has been done. Ms. Wearmouth did not appear alarmed by the water from the historic site being found under Phase 2, and offered the following explanation for the phenomenon:

With the closed cells, the existing ash [is there] [and] we’re capping those... that’s the source control on the top. The active phase, we have essentially that same thing only on the bottom underneath it, so we have an impermeable liner under the ash fill that’s currently active, and because these old fills there was no requirement for that sort of control we’re putting a cap, so that will be a liner on top....

So, when the cap is complete there will be some water obviously still moving through the ash, but once that evacuates there will be no more leachate generated, so that’ll be the end of any new leachate generation....

I’m not talking about groundwater; I’m talking about rainwater percolating through the cells. But the ash and the groundwater are separated at the site, we don’t have groundwater in the ash, so when that water comes out of the cell there will be, still be groundwater moving under the site, but it won’t be collecting leachate from that, those existing mounds....

(January 25, 2017 T. 40-41)

(31) Applicant’s expert traffic planner, O.R. George (and O. R. George & Associates, Inc.) prepared a traffic study that analyzed the impact of the proposal on the following intersections:

- North Keys Road/Gibbons Church Road;
- Brandywine Road (MD 381)/ Gibbons Church Road;
- Brandywine Road (MD 381)/North Keys Road;
- Crain Highway (US 301)/ Brandywine Road (MD 381);
- Brandywine Road (MD 381)/ Cedarville Road;
- Brandywine Road (MD 381)/Baden Westwood Road; and
- Brandywine Road (MD 381)/Croom Road (MD 382)

The traffic study also involved video recordings of the truck movements along North Keys Road and at the site entrance to determine if there was a need for changes within the immediate area of the site. (Exhibits 10 and 17)

(32) The traffic study assumed that 35% of the ash will come from the Chalk Point Plant in Aquasco, Maryland and 65% would come from the Morgantown Plant in Newburg, Maryland (Charles County), and that the haul route would continue to be north along Brandywine Road and east on North Keys Road to the site. (Exhibit 17, pp. 1 and 18) The study concluded “that the operation of the site as a rubble fill fly ash disposal site has not had an adverse impact on vehicular traffic over the past nine (9) years....” (Exhibit 17, p. 3) The following was proffered in support of that finding:

- a) Traffic volumes on the study area roadways have remained quite stable and in some cases have decreased significantly when compared with 2005. This is based on traffic volumes covering this period, obtained from the Maryland State Highway Administration, and the Prince George’s County Department of Public Works and Transportation....
- b) There have been minor geometric changes at several intersections, which have enhanced the operational efficiency of the study area road network.
- c) The Applicant’s truck haulage records show that, during the majority of days when haulage activity occurred at the site, the truck trips were well below (i.e., 30-35%) the one hundred (100) truckloads projected. NRG has advised that this [is] due in large part to a new processing methodology introduced at its Morgantown Plant, which significantly reduces the fly ash residue. In addition, the last trucks typically leave the site between 3:00 – 4:00 PM, and as such do not impact the afternoon peak hour on the study area roadways....
- d) A number of the major background developments that were considered in 2005 have not materialized. These include particularly uses within the Brandywine Business Park, and the Brandywine Commerce Center which had long-standing approvals for well over 5 million square feet of industrial and commercial development....

(Exhibit 17, p. 3)

(33) Applicant’s transportation planner concluded that “the future traffic situation within the study area will be quite acceptable, even with the assumption that there could be an increase of 20% in truck traffic” and the Application “would not have an appreciable adverse impact on the capacity and operational efficiency of the local area road network.” (Exhibit 17, pp. 19-20) The following support was offered for this conclusion:

- a) The study area road network currently operates at acceptable levels of service, even when the truck traffic is factored for their increased impact on the operation of the local intersections.
- b) Review of traffic volume data from the State Highway Administration and County shows that over the period 2007 to 2014 traffic volumes within the area have been declining.
- c) The Applicant's records indicate that daily fly ash haulage activity is well below the 100 loads that have been approved. Data for daily haulage activity over the past fifteen (15) months (January 2014 to March 2015) shows that the activity averaged less than 20 truckloads per day. The data shows that February 2014 recorded between 50-60 truckloads per day, with 78 loads recorded on the highest day of activity. However, this was due to maintenance activity at the Morgantown site when the Applicant's enhanced power production/processing equipment had to be shut [down].
- d) In order to be conservative (i.e., on the high side), the study assumed that there could be a 20% growth in both site traffic and in prevailing through traffic on the study area roadways over the eight-to ten-year life of the Special Exception.
- e) The capacity analysis shows that traffic operations at all study area intersections would meet the County's planning standards except for US 301 (Crain Highway) at MD 381 (Brandywine Road) during the morning peak hour only. The analysis also showed that, with the shift in haulage of fly ash from the Potomac River Plant in Alexandria to the Morgantown Plant in Charles County, the new truck haulage routes would not impact the critical movements at that intersection.

(Exhibit 17, p.20)

(34) Section 27-406 of the Zoning Ordinance, *infra*, requires an analysis of need for the fill based on the most current available projections of residential and employment growth. Applicant provided a needs assessment for the use, prepared by Robert Brickner, recognized as an expert in the area of solid waste management. (Exhibit 8(a); November 16, 2016 T. 81, et. seq.) In the report, Mr. Brickner and his associates calculated the available volume remaining at the site currently, and determined that to be 180,000 cubic yards. The needs assessment concluded that the facility is needed at the location, reasoning as follows:

Coal-fired power plants generate both bottom ash and fly ash bi-products, the quantity of which is subject to the type of coal fired, the boiler system utilized, and the air pollution control device operated. In addition to ash fill receipts, the current and projected levels of reuse/recycling that achieve diversion prior to the ash fill is important for any site life and use

determination. Generally, when the generating point has a finite capacity, the higher the recycling rates, the longer the ash fill site life – assuming everything else stays the same....

The implementation of the STAR system at Morgantown, has allowed increased reuse/recycling to take place. Table 5 data indicates that [there are] 56,145 tons of ash requiring disposal in Prince George's County from the two sites at the Applicant's ash fill site. This is well below the previous historical annual ash landfill demand from just the Chalk Point Generating Facility as shown in years 2009-2011 of Table 5....

During 2015 and beyond, the generation of disposable coal ash quantities actually generated in Prince George's County is assumed to continue to follow the fixed constraints of utility power plant sizing and coal-combustion capacity, versus the population and employment growth of the County. Since the analysis initially is to review in-county needs, GBB has chosen to consider Chalk Point as a unique ash generator with disposal demands not provided by any third-party, including their own sister-generation plant in Morgantown. Thus, the benefit of the Morgantown STAR processing facility affording reuse/recycling was not considered in the Base Case. GBB's opinion of the starting point for these historical past and future forecasts to illustrate the 15-year impact of these assumption differences was previously presented as Table 5 with ash reductions indicated in Table 7 due to lower coal-firing rates in recent years at Chalk Point. Inherent in considering only these "disposed quantities" for the evaluation is a GBB decision to make an allowance for continuing the very limited "reuse/recycling rates" on the ash initially produced [at] the Chalk Point Generating Station site, and then forecasting what rates are deemed historically supportive. Without the benefits of being coupled with the STAR system at Morgantown, the in-county rates calculated in Table 9 otherwise show 5% reuse/recycle rate equal to a total 95% disposal rate of the total bottom ash and fly ash generated at Chalk Point....

The remaining NRG property ash fill, as reflected in the application for SE-4765, consists of two distinct phases of capacities within "Parcel 6." Phase 1, consisting of 78 acres, was designed with 3.6 million cubic yards of capacity; and Phase 2 consisting of 29 acres, was designed with 1.8 million cubic yards of capacity.... [T]he total volume available to fill as of December 2014, is only 180,000 of existing cubic yards of remaining capacity....

Assuming Chalk Point ash being generated and staying in-county with minimum reuse/recycling, the detailed analysis, complete with annual drawdown rates and remaining capacities for the 15-year "Base Case" scenario, is provided

as Table 9 of this Report. An ash rubblefill deficiency of almost 585,000 tons of in-county generated coal ash is forecast by the end of the 15-year period without the use of the Morgantown STAR facility and the additional volume noted in this new Special [Exception] SE-4765....

[T]he current parcels of the ash fill actually presents two different peaks with a valley between. The volume of the valley actually presents site capacity that is currently not used or noted in ... SE-4520.... NRG has had their engineers review the design criteria, demands, and available use life of the current air space and they have determined that using the volume between the peaks is a viable approach to increasing Site capacity without increasing the footprint or the site elevation.... GBB has been informed by NRG that 419,000 cubic yards of additional ash fill capacity exists between the two peaks that can be used at the Brandywine ash fill. The overall Phase 2 site with the In-Fill area would total 48.2 acres and the additional volume provided converts to 460,900 tons of ash and would extend the useful life of the site....

As seen in Table 10, adding the "In-Fill Capacity" noted in Line H will add about 419,000 cubic yards of volume, enough to accept an additional 460,900 tons as coal ash capacity. With this increase in overall site fill capacity, the GBB analysis indicates that the same acreage of the Applicant's property will now be able to provide capacity for the coal ash disposal tonnage needs of the Chalk Point in-county generated volumes (without any ash processing at the STAR system in Morgantown and associated increased reuse/recycling) into Year 2027, the 13<sup>th</sup> year of the 15-year Needs Assessment period....

The only current ash fill in the County serves the needs of the largest coal-fired power plant located in Prince George's County at Chalk Point as well as the NRG Morgantown plant in near-by Charles County. Currently this ash fill has a short-term life. The Base Case Scenario presented by GBB illustrates that the existing operational area of the ash fill, without extensive reuse/recycling, will only provide capacity for in-County generated coal ash through ... 2017....

As indicated in Table 9, if no new in-county ash fill sites were to open, the capacity deficit after year 2017 is calculated ... to be short almost 585,000 tons.

However, as depicted in Table 10, with the current site's additional In-Fill capacity, if the site were allowed to use all of Parcel 6 capacity, the 15-year capacity without any extensive reuse/recycling ... would be extended from Year 2017 well into Year 2027. Therefore, since no alternative in-county disposal

sites exist for this in-county generated coal ash material generated at Chalk Point, GBB's key finding is that the additional capacity of the Applicant's current ash fill site with the new In-Fill volume on the same landfill footprint adds almost 461,000 tons of ash fill capacity, and meets the intent of the County's Needs Assessment process....

GBB's additional key finding is that the additional capacity of the Applicant's current ash fill site with the new In-Fill volume scenario, placed on the same landfill footprint, meets the intent of the County's Needs Assessment process and provides capacity for the ash remaining and hauled to Brandywine for disposal after a very intensive reuse/recycling activity performed at the Morgantown location....

(Exhibit 8(a), pp. 10, 20-22, 26-27)

(35) Mr. Brickner did concede that Applicant is basing its request on the amount of airspace left between the existing mounds that will be or are being capped:

[At the end of 2014] [t]here was 180,000 cubic yards of material left, airspace left for the ash material. Okay. The exception that we're going after, or that NRG is looking for now is to fill ... a valley that exists in between the two cells which is 419,000 cubic yards of capacity in it. Therefore, what the needs assessment looks at is a 15 year, that's what all our numbers are, for 15 years what is the demand and the use of that airspace when it's added to what exists now plus that particular air space. So we have to do a 15 year forecast for purposes of the needs assessment and what the ... final exception requirements are or what the term is, is not within my [purview].

(November 16, 2016 T. 90-91)

### **Opposition's Concerns**

(36) Mr. Fred Tutman is an employee of the Patuxent River Keeper. His organization was the Plaintiff intervenor in an action brought by MDE against Applicant and the former operator GenOn Maryland Ash, and other entities. (November 16, 2016 T. 130-132, 137) The matter was settled through the Consent Decree and Order, addressed *supra*. (Exhibits 55 and 62)

(37) Mr. Tutman stated that the Consent Decree references the National Pollution Discharge Elimination Systems (NPDES) discharge monitoring reports that Applicant must submit quarterly and the fact that "monitoring points at Brandywine have at times exceeded ambient surface water quality standards for

cambium and/or selenium that “MDE has also determined that leachate has entered groundwater....” (November 16, 2016 T. 133-134) A required contamination study has not been completed, and any corrective measures (i.e., clean-up) will not occur until then. Mr. Tutman believes the instant Special Exception is, therefore, premature:

I think the precautionary [principle] applies here. It's really impossible to know exactly how much is ahead of this facility to clean it up until they've completed the first part of the consent decree requirements. So without that information, we're kind of flying blind, it's unclear what, how much work remains to be done and the extent of the work that needs to be done. And frankly, the extent of the risk to the surrounding community and the environment.

(November 16, 2016 T. 136-137)

(38) Dr. Henry Cole, accepted as an expert in the area of environmental and atmospheric science, testified in opposition to the request. He visited the site on December 7, 2010 and prepared a video of the ash blowing around the surface of the site and in the air beyond the site. (Exhibit 65; November 16, 2016 T. 141-142) It was a fairly windy day with wind speeds over 20 mph. After reviewing 30 years of weather data he determined that similar wind gusts occur “approximately 300-500 hours per year.” (November 16, 2016 T. 144) He offered the following testimony in support of his opposition:

As you can see the site which we've documented releases of ash from is ... directly adjacent within several hundred feet of a little league baseball field and just south of the baseball field is a playground area where little kids . . . [play] baseball and [play] in the playground there. There is another baseball field further to the south near North [Keys] Road and also the soccer field is labeled....

Every time I've been there, there have been kids playing.... [P]art of my concern from a zoning standpoint is not just the playgrounds ... [b]ut the fact that this particular area has a very dense assortment of either operating or planned energy units all of which are potential, which are polluters such as the existing Cedarville Road power plant ... and [t]he North [Keys] Energy Center, which is just a mile to the South, I guess ... of this site ... [and] is now under construction.

Then you have another facility being built in Brandywine. The Brandywine Mattawoman Power Plant within a mile of the

North [Keys] plant. So there is a cluster of polluting facilities and the kind of pollution that comes from the power plants, oxides of nitrogen, have an effect on surface water, on wetlands. The deposition occurs and any ash that's released will have another effect not only on any people who are exposed or properties who are exposed, but also the wetlands and the surface water that's been talked about previously....

[F]ly ash is very fine particles.... [T]he majority of particles are in the 10 micrometer[,] 2.5 micrometer, and less, and those are respirable particulates. Those go deep into the respiratory system, a number of them contain ... metals.... Things like arsenic, lead, chromium, cerium, barium, concentrated and in fact were detected by NRG's laboratory in the fly ash.... [These particles] would be either inhaled[,] and under certain conditions[,] or deposited.... [T]hese metals don't break down over time. This landfill has been operating for 40 – something plus years and we have seen the evidence ... that the materials ... can be blown off the coal ash surface and ... because these materials are probably deposited over many, many years, they build up in the soil, they build up on the wetlands, they build up in perhaps residential gardens in the area and I'm very concerned about another 10 years of adding more to that....

(November 16, 2016, T. 147-150)

(39) Upon cross-examination, Dr. Cole noted that the Consent Decree did not cite Applicant for airbourne pollution. (November 16, 2016 T. 152-153)

(40) Dr. Sacoby McGale Wilson, accepted as an expert in environmental health science, testified about the adverse impact the use has on those in the area from an environmental justice perspective. Dr. Wilson defined "environmental justice" as both a social and scientific movement that addresses the exposure profile for marginalized communities (poorer, or those on well and septic, or minority, etc.) to uses such as the one at issue.

(41) He agreed with Dr. Cole that the particulate matter associated with the fly ash fill could negatively impact the health of those that reside in the area, especially children. (November 16, 2016 T. 170-172) He was concerned with the cumulative impact of other similar uses such as the Panda facility and the planned Mattawoman facility and the proposed fill. (November 16, 2016, T. 174) Most worrisome was the fact that the Applicant isn't required to monitor the effect of different stressors:

In the case of this facility we have a church that's nearby, we have homes that are nearby, we have [a] recreational park that's nearby. So for me there's a lack of data.... I went to the park and I visited the site, I didn't see any monitoring devices measuring for a particular matter or other pollutants....

I think it's important that you use the federal reference method, if you don't have a federal reference method that can monitor around, use some other type of sensor so you can at least have data on these pollutants.... I think it would be important to have some type of risk assessment done, either health risk assessment done or a health impact assessment done ... [b]efore it can move forward....

(November 16, 2016 T. 176-177)

(42) Mr. Harry Roth, accepted as an expert in community planning (area of emphasis being the development of comprehensive plans and zoning ordinances), testified that Applicant has not met its burden of proof, since MDE and Applicant have entered into a consent agreement as a result of Applicant's past practices which have caused pollution. (November 16, 2016 T. 209)

### **Agency Comments**

(43) The Technical Staff found the request satisfies many of the applicable provisions of the Zoning Ordinance, but nonetheless recommended that the Application be denied, reasoning as follows:

The site does not have a previously approved NRI because the last special exception for the site predates the Zoning Code requirements that ... became effective in September 2010 for new special exception application[s]. NRI-142-2015 was approved October 16, 2015 for a gross tract area of 207.61 acres, containing 9.67 acres of 100-year floodplain, resulting in a net tract area of 197.91 acres. The existing woodland on the net tract is 64.79 acres, with 9.67 acres of woodlands location in the floodplain, for a total of 74.48 acres of woodland on the gross tract....

A Stormwater Management Concept Approval Letter and plan..., issued October 23, 2015, was submitted with this application, which expires on October 23, 2018.... Because the ultimate condition will decrease impervious area on the site, and will not increase the runoff, no environmental site design (ESD) measures are required on this site....

The proposed Phase II Fill Area does not have a detrimental effect on the adjacent or general neighborhood because the fly ash disposal facility is located in a rural area. It is located approximately one-half mile from [the] nearest public road. The 50-foot vegetative buffer to be maintained around the facility will serve to mitigate some of the obvious adverse impact, such as: noise, dust and partially obstruct the view of the facility from surrounding area. However, with respect to the rubble fill as a whole, the height of the mound located in Phase II Fill Area does not appear to comply with the height restriction imposed as a condition of approval for SE-4520. Therefore, staff believes the site is not in conformance with all the applicable requirements and regulations of this subtitle....

This plan is in conformance with the Subregion 6 Master Plan and SMA recommendation.... The site has been ... actively operating for more than 44 years without apparent harmful effect on the surrounding neighborhood. The State of Maryland's regulation of rubble fills and ash fill has become much stricter through the years. Today's fills are subject to regulations including liners, and capping upon completion.... [W]hen the original approval was done for this site, the elevation [was] established to be 260 feet per District Council for both Phase 1 and Phase II Fill Area. The applicants' site plan indicates a 31 feet elevation increase including new grading and capping for [P]hase I Fill Area. At the time of the last SE-4520 approval process, applicant failed to mention and validate this significant existing height increase. The District Council raised concern at the time of the approval that "the existing and proposed ash mounds at the site are (or will be) unacceptably high, detracting from views of the site on nearby roads and properties". [Citation omitted.] The current plan shows 31 feet existing illegal elevation increase for Phase I Fill Area (including new grading and capping), which is substantial. The height increase also caused steep slope and new grading to occur around Phase I.... [T]he applicant is seeking to renew the life of the fly ash operation by ten years for [P]hase II. Staff notes that the existing fill mound in Phase I has increased by 31 feet without any approval or revision to the site plan. The applicant needs to provide a valid explanation of why this elevation increase was not brought before the District Council for validation at the time of its previous application or as part of this application. Furthermore, the applicant has the burden to adequately prove how the substantial existing vertical expansion, steep slope and [new] grading of Phase I will not have any detrimental environmental effect on the uses or development of adjacent properties or the general neighborhood (Section 27-317(a)(5)).

During the former special exception (SE-4520), the District Council found that the use generally met both the specific

findings for rubble fills (Section 27-406) and the general and special exception findings.... The continuation of existing use of the fill site will eliminate the need for a new disposal site, [and] thereby will preserve the scenic beauty of the other undeveloped areas of the southern part of the County....

The applicant seeks approval of a special exception in order to continue operation of a fly ash fill which is needed for the residents in Prince George's County, Maryland. Phase II (42.8-acre southeastern portion) is currently being filled and needs a ten-year extension to complete its fill mounds including ... vegetative stabilization activity. The maximum height of the fill mounds should not exceed 260 feet above the existing grade level per previous Condition 1(i) set forth in ... SE-4520. However, the maximum height limit for Phase II grading and capping appears to be 265.5 feet near the south side of Phase II identified in this Special Exception....

Unfortunately, the applicant has filed a site plan that does not comply with the height restriction imposed via an earlier special exception approval. Staff must therefore, find that the use does not meet all applicable requirements and regulations as required in Section 27-317(a)(2). The applicant has offered no explanation for the unauthorized height increase and has not requested to validate the new height as part of this review. If the applicant can provide a compelling justification for the height increase, staff would recommend ... [approval with] conditions....

(Exhibit 28, pp. 22-26)

(44) Staff provided the "Inventory list for Mining, Landfill, Rubble Fill and Wash Plant Sites." (Exhibit 28, pp. 101-108) The Inventory includes all such uses within the County. There are several active mining operations, Class III Fills and Wash Plants in the vicinity of the subject property, along Cedarville Road, North Keys Road, Accokeek Road, McKendree Road and MD 381. The majority appear to be reclaimed mining operations.

(45) After review of Applicant's traffic study, the Transportation Planning Section agreed that approval of the Application will not adversely impact the transportation facilities in the area:

Based on information from a 2005 Traffic Study, the traffic consultant identified eight unbuilt developments whose impact would affect some or all of the study intersections. Additionally, the traffic study assumed an increase in through traffic of 1.05 percent along key roadways within the study area. A second analysis was done to evaluate the impact of the background developments on existing infrastructure. It is worth mentioning that this application represents a

continuation of an existing [fill]. Consequently, the site-generation traffic is already included in the existing traffic data....

In its conclusion, the traffic study stated that the proposed fly ash rubble fill operation would have a minimal or negligible traffic impact on the defined study area network.

In addition to the M-NCPPC Planning staff, the traffic engineering staff at the Maryland State Highway Administration (SHA) also reviewed the applicant's traffic study. In an April 6, 2016 letter, SHA identified a few technical errors in the applicant's traffic study. The applicant's traffic consultant did provide staff a response letter in which all of the concerns outlined in SHA's letter were addressed to the satisfaction of staff.

... [S]taff is in general agreement that the continued use of this existing facility will not have a negative impact from a transportation perspective. While some of the transportation facilities critical to the subject operation could see worsening levels of service, this is not attributable to rubble fill operation, but rather to other developments that are already approved. Many of the approved developments are approved with conditions to make commensurate improvements associated with their respective developments....

(Exhibit 28, p. 12)

(46) The Technical Staff also provided an analysis of need for the requested fly ash fill, as required by Section 27-406 of the Zoning Ordinance, which provides, in pertinent part, as follows:

[T]he applicant chose to submit a Rubblefill Needs Assessment – Ash Fill of NRG MD Ash Management LLC prepared by Gershman, Brickner & Bratton, Inc. (October 2015). The Environmental Planning Section staff reviewed the submitted assessment in order to provide a recommendation with regards to the requirements of Section 27-406(j), and determined the following:

The site is currently the only ash fill in the County and serves the needs of the coal-fired power plant located at Chalk Point in Prince George's County, as well as another NRG coal-fired plant located at Morgantown in Charles County. The 15-year Needs Assessment does not include the impact of out-of-county ash being brought into the County.

Three different scenarios were evaluate under the Needs Study. The ash fill was determined to have a short-term life

under a Base Case Scenario (without SE-4725) which assumes no expansion of operational area, and no extensive reuse/recycling of fly ash materials. Under this scenario, the facility would only provide capacity for in-County generated coal ash through CY2017. If no new in-county ash fill sites were to open, the capacity deficit is calculated to be short 585,000 tons per year.

Scenario 2 assumes the expansion of in-fill capacity under SE-4765, but no extensive reuse/recycling. This would extend the capacity of the site by adding almost 460, 900 tons of ash fill capacity. With this increase in fill capacity, the analysis demonstrates that the site will be able to provide capacity for the fly ash disposal tonnages of in-county and out-of-county non-recycled volumes through year 2027.

Under Scenario 3, with the additional in-fill capacity requested under SE-4765, the Needs Study also assumes the continuing extensive reuse/recycling use of the Stages Turbulent Air Reactor (STAR) Thermal Beneficiation plant at the NRG Morgantown plant, which also receives fly ash generated at the Chalk Point facility, and finds that the additional in-fill capacity is still critical to extend the ash fills needs of the in-county and nearby out-of-county coal-fired power generating station over the 15-year Needs Assessment Period.

The County's continued population growth dictates that adequate, affordable electric power service be provided. In order to meet this future demand, it is necessary [that] an adequate disposal site for the ash by-product be maintained close to the existing power generating facilities. The submitted report demonstrates that the proposed use as a rubblefill for fly ash is necessary to serve the generation of electricity to serve the projected growth in Prince George's County over the 15-year assessment period, because it is the only fly ash fill site available in the region.

The Rubblefill Needs Assessment was found to fulfill the requirements of Section 27-406 [j and k] by demonstrating the need for such a use, and the Environmental Planning Section recommends that the Rubblefill Needs Assessment – Ash Fill of NRG MD Ash Management , LLC, ... be incorporated into the Technical Staff Report for SE-4765.

(Exhibit 28, pp. 97-98)

(47) Pursuant to the Maryland Environment Code Annotated, the Maryland Department of Environment ("MDE") regulates operation of the fill and reviews noise and air emissions from vehicles used there, as well as the capture of leachate. The Consent Decree includes an excellent synopsis of the role that

MDE plays in regulating the fly ash fill, as well as the manner in which the public can have its concerns addressed:

1. MDE is empowered pursuant to the powers, duties, and responsibilities vested in and imposed upon the Secretary of the Environment by §§ 1-301 and 9-301 through 9-344, inclusive, of the Environment Article, Annotated Code of Maryland (2007 Repl. Vol.) (“Environment Article”), to implement and enforce State environmental laws, including water pollution control laws. Pursuant to authority delegated by the Administrator of the United States Environmental Protection Agency under § 402(b) of the Federal Water Pollution Control Act, 33 U.S.C. § 1342(b) (“Clean Water Act” or “CWA”), permits issued by MDE for point source discharges of pollutants to navigable waters under the Environment Article also satisfy requirements of the National Pollutant Discharge Elimination System (“NPDES”) provisions of the CWA.

2. Sections 9-322 and 9-323 of the Environment Article prohibit the discharge of any pollutant into the waters of the State of Maryland unless authorized by a discharge permit or schedule of compliance issued by MDE. Waters of the State includes both surface and underground waters, Md. Code Ann., Envir. § 9-101(1).

3. The term “discharge” is defined as the “addition, introduction, leaking, spilling or emitting of a pollutant into the waters of the State” or the “placing of a pollutant in a location where the pollutant is likely to pollute.” Md. Code Ann., Envir. § 9-101(b).

4. Code of Maryland Regulations (“COMAR”) 26.08.02.09C (1) provides that the discharge of pollutants may not cause groundwater to exceed the drinking water standards established in COMAR 26.04.01 at the edge of a mixing zone determined by MDE. COMAR 26.04.01.06A establishes the drinking water standards, known as maximum contaminant levels (“MCLs”), for inorganic chemicals in drinking water.

5. COMAR 26.08.02.03-2 establishes the numerical acute and chronic criteria for toxic substances in surface waters of the State.

6. COMAR 26.04.10, adopted in 2009, provides the general requirements for the management of coal combustion byproducts in Maryland, and references other specific regulations that are applicable to the management of coal combustion byproducts.

7. COMAR 26.04.10.04E provides that “a coal combustion byproducts disposal facility that the Department has authorized for the disposal of coal combustion byproducts before December 1, 2008, may continue to operate under the Department’s authorization, except that the Department reserves the right to modify an existing authorization to require additional controls or requirements

as it considers necessary to protect public health and the environment or to prevent nuisance conditions.”

8. COMAR 26.04.10.04F provides that “an existing coal combustion byproducts disposal facility that intends or proposes to expand beyond its current authorization or operations shall notify the Department in writing. The Department may impose additional controls or requirements on the expansion of the facility as it considers necessary to protect public health and the environment or to prevent nuisance conditions.

9. COMAR 26.04.07 establishes the requirements for solid waste disposal facilities in Maryland, including industrial waste landfills. These regulations have been in place since 1987. COMAR 26.04.07.03 establishes the general restrictions and specifically prohibited acts that are applicable to all solid waste management activities, whether or not they are covered under a permit. COMAR 26.04.07.19 specifically addresses the requirements for the construction and operation of industrial waste landfills. COMAR 26.04.07.21H provides the minimum standards for the closure of industrial waste landfills that close after the effective date of the regulations.

10. Section 505 of the CWA, 33 U.S.C. § 1365, authorizes any “citizen” to bring an action in federal district court against any person who is alleged to be in violation of an effluent standard or limitation under the CWA, so long as (1) timely notice required by § 505(b)(1)(A) is given, and (2) neither EPA nor the State has commenced and is diligently prosecuting a case for such violations in federal or state court. EPA has not commenced an action, and the state is diligently prosecuting by bringing these actions....

(Exhibit 55, pp. 2-4)

(48) MDE has issued a discharge permit thereby acknowledging Applicant’s use of the site subject to the effluent limitations and monitoring requirements therein. (Exhibit 71) MDE has also “found no evidence of contamination in the domestic wells related to the coal combustible by product (CCB) activities” and therefore “acknowledges that no action [plan is] required for [the subject property....]”. (Exhibit 76)

### **APPLICABLE LAW**

(1) The State defines “solid waste” as “any garbage, refuse, sludge, or liquid from industrial, commercial, mining or agricultural operations or from community activities. (Maryland Annotated Code, Environment Article Section 9-101(j)) Section 9-289 of the Environment Article defines a “coal combustion byproduct” to include “fly ash”. The State has determined that the fly ash deposited on site

does not meet the definition of “refuse” and, therefore, the fill is not a solid waste acceptance facility under State law. (Exhibit 92) However, Subtitle 21 of the County Code considers “cinders from power plants” a form of industrial refuse and a fly ash fill for the disposal of such refuse is a “sanitary landfill.”

(2) The Application may only be approved if it meets the requirements of Sections 27-317, 27-323 and 27-406 of the Zoning Ordinance which set forth the specific findings to be met in approving the instant request.

(3) Section 27-317 provides as follows:

(a) A Special Exception may be approved if:

- (1) The proposed use and site plan are in harmony with the purpose of this Subtitle;
- (2) The proposed use is in conformance with all the applicable requirements and regulations of this Subtitle;
- (3) The proposed use will not substantially impair the integrity of any validly approved Master Plan or Functional Master Plan, or, in the absence of a Master Plan or Functional Master Plan, the General Plan;
- (4) The proposed use will not adversely affect the health, safety, or welfare of residents or workers in the area;
- (5) The proposed use will not be detrimental to the use or development of adjacent properties or the general neighborhood; and
- (6) The proposed site plan is in conformance with an approved Type 2 Tree Conservation Plan; and
- (7) The proposed site plan demonstrates the preservation and/or restoration of the regulated environmental features in a natural state to the fullest extent possible in accordance with the requirement of Subtitle [24-130](#)(b)(5).

(b) In addition to the above required findings, in a Chesapeake Bay Critical Area Overlay Zone, a Special Exception shall not be granted:

- (1) where the existing lot coverage in the CBCA exceeds that allowed by this Subtitle, or
- (2) where granting the Special Exception would result in a net increase in the existing lot coverage in the CBCA.

(4) Section 27-323 provides, in pertinent part, as follows:

(a)

All alterations, enlargements, extensions or revisions of Special Exception uses (including enlargements in land area and area of improvements, revisions of a site plan and in the configuration of land area, and extensions of time) shall require the filing and approval of a new application for the applicable Special Exception use, except as specifically provided for in this Subdivision.

(b)

The new application shall include the entire land area covered by the original application, unless the new application is only for the purpose of adding land not covered by the original application. In this case, the new application may include only the land area being added, provided that the application fully demonstrates the relationship of development shown on both the new and originally approved site plans.

\* \* \* \* \*

(5) Section 27-406 provides as follows:

(a) A sanitary landfill or rubble fill may be permitted as a temporary Special Exception.

(b) The District Council shall determine the period of time for which the Special Exception is valid.

(c) In the R-E Zone, the landfill is only allowed if the neighborhood is substantially undeveloped and the landfill is an extension of an existing sanitary landfill on abutting land for which the approved Special Exception has not expired. This is not an amendment to an approved Special Exception under Subdivision 10 of Division 1, above.

(d) An application for a sanitary landfill or rubble fill that includes a "rock crusher" on the site must show the location of the proposed rock crusher on the site plan.

(e) The applicant shall provide a traffic study that is prepared in accordance with Planning Board Guidelines for Analysis of Traffic Impact of Development Proposals.

(f) The applicant shall provide a visual analysis of any proposed mounds and should include cross sections and results from balloon tests.

(g) The applicant shall address how odors emanating from fill materials will be mitigated.

(h) The Technical Staff Report prepared in response to the application shall include a current, Countywide inventory of the locations, dates of approval, and conditions of approval concerning haul routes and estimated loads per day for all approved and pending Special Exceptions for sand and gravel wet-processing, sanitary landfills and rubble fills, and surface mining, as indicated by the record in the case. The inventory shall also include the locations of all nonconforming sand and gravel wet-processing, sanitary landfills and rubble fills, and surface mining operations throughout the County that were certified after September 6, 1974.

(i) In reviewing the application for compliance with the required findings set forth in Sections [27-317\(a\)\(4\)](#) and [27-317\(a\)\(5\)](#), the District Council shall consider the inventory required in [Section 27-406\(e\)](#).

(j) The Technical Staff Report prepared in response to an application for a rubble fill shall include an analysis of need based on the most current available projections of residential and employment growth in Prince George's County over a fifteen-year period. The District Council shall consider this analysis when determining compliance with the finding required in Subsection (h), below, and when determining the period of time for which the Special Exception is valid.

(k) When approving a Special Exception for a rubble fill, the District Council shall find that the proposed use is necessary to serve the projected growth in Prince George's County, by applicant proof that without the proposed use the County's projected growth will be adversely affected. Proof of a future deficit in or absence of County-wide fill capacity does not by itself constitute proof that a proposed fill is necessary to serve the projected growth in the County.

(6) The Prince George's County Code and the Zoning Ordinance do not define "necessary". However Section 27-108.01(a) notes that any word "not specifically defined or interpreted in [Subtitle 27] or the Prince George's County Code shall be construed according to the common and generally recognized usage of the language." Webster's New World Dictionary (2<sup>nd</sup> College Edition) defines "necessary" as "that cannot be dispensed with; essential; indispensable."

(7) The Application must also further the purposes of the O-S Zone set forth in Section 27- 425 (a) of the Zoning Ordinance:

(a) Purposes.

(1) The purposes of the O-S Zone are:

(A) To provide for low density and development intensity as indicated on the General or Area Master Plans; and

(B) To provide for areas which are to be devoted to uses which preserve the County's ecological balance and heritage, while providing for the appropriate use and enjoyment of natural resources.

(2) The use of the O-S Zone is intended to promote the economic use and conservation of agriculture, natural resources, residential estates, nonintensive recreational uses, and similar uses.

(8) The Court of Appeals provided the standard to be applied in the review of a Special Exception application in *Schultz v. Pritts*, 291 Md 1, 432 A2d 1319, 1325 (1981):

Whereas, the applicant has the burden of adducing testimony which will show that his use meets the prescribed standards and requirements, he does not have the burden of establishing affirmatively that his proposed use would be a benefit to the community. If he shows to the satisfaction of the

[administrative body] that the proposed use would be conducted without real detriment to the neighborhood and would not actually adversely affect the public interest, he has met his burden. The extent of any harm or disturbance to the neighboring area and uses is, of course, material . . . . But if there is no probative evidence of harm or disturbance in light of the nature of the zone involved or of factors causing disharmony to the operation of the comprehensive plan, a denial of an application for a special exception use is arbitrary, capricious, and illegal.

(9) The Court of Appeals recently noted that *Schultz* is “the bellweather case regarding conditional uses and special exceptions in the state of Maryland”, reiterating that

Schultz and its progeny established that if a conditional use applicant demonstrates compliance with the prescribed standards and requirements ..., then there is a presumption that the use is in the interest of the general welfare, a presumption that may only be overcome by probative evidence of unique adverse effects.

*(Clarksville Residents Against Mortuary Defense Fund, Inc. v. Donaldson Properties*, No. 70 September Term 2016, pp. 18, 22 (June 22, 2017))

(10) The State has enacted legislation that creates an Environmental Justice Commission. (Maryland Annotated Code Environment Article, Section 1-701). Some of the Commission’s duties are to “[d]evelop criteria to assess whether communities in the State may be experiencing environmental justice issues”; “[a]ssess the adequacy of state and local government laws to address the issue of environmental justice and sustainable communities”, and to “[r]ecommend options to the Governor for addressing issues, concerns or problems related to environmental justice that surface after reviewing State laws and policies....” (Maryland Annotated Code, Environment Article, Section 1.701(h)). Neither party presented any evidence that the Commission has addressed the possibility that the District Council’s regulation of the subject fly ash fill, or other similar uses in the area, have raised environmental justice issues for residents in the area of the subject property.

## CONCLUSIONS OF LAW

(1) A fly ash fill has operated at the subject property since approximately 1991. (Exhibits 8 (a) and 28) Before the instant request to extend its operation for an additional 10 years can be approved the Applicant must show that the Application meets the purposes of the Zoning Ordinance, in general, and the strictures of Sections 27-317 and 27-406, in particular.

(2) The Opposition argues that some of the byproducts of fly ash “contain arsenic, cadmium, lead, mercury, copper, selenium, zinc, and other pollutants that can be toxic to humans, aquatic life, and wildlife.” (Exhibit 55) It stresses Applicant has been allowed to operate its “temporary” special exception for over 40 years, and therefore should not be allowed to expose the residents in the area, and the children regularly in attendance at the adjacent Brandywine North Keys Community Park, and the adjoining Mattaponi Creek, to these toxics for an additional 10 years. The Opposition also believes the Application should be denied due to the cumulative effect that other industrial uses have on the residents in the neighborhood, which include several sand and gravel mines, a Superfund site, major highways, and planned fossil fuel-fired power plants. (Exhibit 56, pp. 7-9)

(3) The Opposition is cognizant of MDE’s authority over the fly ash facility, and the fact that MDE’s permitting authority preempts local regulation unless state law provides otherwise. (Exhibit 83) Nonetheless, those in opposition believe that Applicant has failed to meet its requisite burden of proof to show that the request satisfies all applicable provisions of the Zoning Ordinance. They also argue that the request must be reviewed in light of the impact it has on the neighborhood as it exists today, and cannot be rubber-stamped simply because it has been approved over the years. See, *Forks of the Patuxent Improvement Ass’n v. National Waste Managers*, 230 Md. App. 349, 230 A.2d 36 (2016). It notes that a recent decision, *East Star, LLC. V. County Commissioners of Queen Anne’s County*, 203 Md. App. 477, 38 A.3d 524 (2012), in no way limits the ZHE’s ability to deny or condition the instant request given the holding in *Maryland Reclamation Associates, Inc. v. Harford County*, 414 Md. 1, 994 A.2d 842 (2010), that rubble landfills must meet both state and County requirements.

(4) The Applicant counters that it has met its burden, and has shown that the request satisfies all applicable environmental laws, reasoning as follows:

At Brandywine there are requirements included in the current water discharge permit (National Pollutant Discharge Elimination System or NPDES permit) to monitor surface and ground waters. The results are provided quarterly to MDE. As discussed by opposition and Applicant, MDE and the Applicant entered into a Consent Decree in May of 2013 that requires the Applicant to seal all of the closed ash cells with an impermeable geomembrane (cap) and to thoroughly examine the nature and extent that pollutants from the site might impact the environment and health of the surrounding communities.

At the Brandywine site, unrefuted testimony demonstrates steps have already been taken to minimize the water entering the active cells; aside from compacting ash as it is placed in the fill, a smaller footprint is open to accept new ash, thereby allowing less area through which water can infiltrate the fill. Applicant demonstrated that the active portion of the site is

underlain with an impervious geomembrane that meets both the Maryland and new Federal rules for new ash landfills.

As for air quality, in addition to current dust control practices (truck washing, wetting working surfaces of fill and roads) Applicant's witness testimony indicated a Fugitive Dust Plan was produced to satisfy requirements of the CCR rule. The plan has been in place since October 19, 2015.

As for the storage tanks, testimony and submitted exhibits show the facility has two 500-gallon above ground storage tanks (ASTs) on site for the storage of diesel fuel. In fact, Applicant discussed the site spills that had occurred. Testimony indicated that these ASTs are maintained by the operations and maintenance contractor at the facility.... On direct examination and cross examination, there have been no reportable oil spills at the site since its beginning....

(Exhibit 90, p.5)

(5) This Examiner believes that the State and federal regulation of airborne or water/groundwater pollutants exhaust the field, thereby precluding the denial of the request on the assumption that the use might result in air/water pollution. Moreover, the record is replete with proof that the federal/state governments are actively monitoring the use and stepping in whenever environmental violations occur.

(6) Staff recommended disapproval solely because it believes that the height of the mound in the proposed Phase II Fill area exceeds the height restriction imposed by the District Council in its conditional approval of SE-4520. Assuming, *arguendo*, Staff's belief that the condition was violated is correct, the instant request can be approved since: (a) this is a new Application and is being reviewed as such; (b) the condition imposed in the approval of SE 4520 was inartfully drafted and Applicant presented evidence from public records that indicate that the height of the fill areas had already reached 280 feet in elevation at the time of the District Council's review; and (c) the pictures submitted in the instant record reveal that the mounds will not be too obtrusive once capped. Finally, the recommended condition that Applicant expressly note the maximum height of the mounds will avoid any future interpretive disagreements.

(7) If the conditions addressed below are imposed, the use meets Section 27-317(a)(1) since it is in harmony with the following purposes of the Zoning Ordinance:

- *To protect and promote the health, safety, morals, comfort, convenience, and welfare of the present and future inhabitants of the County*

The proposed use is regulated under state and federal laws and State permits have been issued pursuant to an extensive review process. Neither streams nor wetlands in the area are likely to be impacted by the use given the State's monitoring of the wells required on site and the ponds. The closest intersections will not be impacted by the truck traffic that is already visiting the site and is not slated to increase. Thus, this purpose is met.

- *To implement the General Plan, Area Master Plans, and Functional Master Plans*

The proposed continuation of the fly ash fill and the reclamation of the site upon completion of fill activities will satisfy the Subregion 6 Master Plan's recommendation of rural land use with low density, and the General Plan's vision of Rural and Agricultural and Parks/Open Space use.

- *To promote the conservation, creation, and expansion of communities that will be developed with adequate public facilities and services*
- *To guide the orderly growth and development of the County, while recognizing the needs of agriculture, housing, industry, and business*

A fly ash fill is a necessary component to the provision of electric power, and communities and public facilities are dependent upon its existence. Accordingly, this purpose is furthered by the Application.

- *To provide adequate light, air, and privacy*

The proposal will result in the creation of acres of permanent green space, thereby, satisfying this purpose.

- *To provide sound, sanitary housing in a suitable and healthy living environment within the economic reach of all County residents*

The proposed use will accommodate the disposal of fly ash, a necessary component to the provisions of electricity to homes. Accordingly, this purpose is met.

- *To encourage economic development activities that provide desirable employment and a broad, protected tax base*

The proposal will provide employment opportunities since there are a certain number of jobs associated with the use. It will also indirectly create employment opportunities by its support of the electricity-generating industry. Thus, this purpose is furthered.

- *To lessen the danger and congestion of traffic on the streets, and to insure the continued usefulness of all elements of the transportation system for their planned functions*

The proposal will not add any additional truck trips in the area which should insure a lessening of danger and congestion on nearby roadways.

(8) The Application is in conformance with all applicable requirements of the Zoning Ordinance and does not require the grant of a variance or waiver. (Section 27-317(a)(2))

(9) A Sanitary Landfill/Rubble Fill is permitted as a temporary use in the O-S Zone and will, therefore, not substantially impair the integrity of the 2013 Subregion 6 Master Plan that recommends low-rural residential land use densities. (Section 27-317(a)(3))

(10) If operated in accordance with applicable State and County regulations, and the conditions noted below, the use should not adversely impact the health, safety, or welfare of residents or workers in the area, nor be detrimental to the use or development of adjacent properties. The continued monitoring of wells and ponds on site will reduce the likelihood of leachate escaping into the aquifer. The placement of ash within the valley between two existing mounds should also minimize any adverse impact. (Section 27-317(a)(4) and (5))

(11) The proposal is subject to the requirements of the Woodland Conservation and Tree Preservation Ordinance, and is in conformance with TCP II/105-90-01. (Section 27-317 (a)(6)) The record indicates that no regulated environmental feature will be impacted by the request. (Section 27-317(a)(7)). The subject property does not lie within a Chesapeake Bay Critical Area Overlay Zone. (Section 27-317(b))

(12) The requisites of Section 27-406(a) – (i) are satisfied by the Application since:

- A temporary, movable rock crusher is proposed and a condition addressing it will be added.
- The use is requested to operate for a set period of years. The Technical Staff prepared the required inventory of uses and adopted Applicant's analysis of need. Its analysis indicated there will be a deficit in capacity for in-County fly ash and that the use is necessary to address the deficit.
- A traffic study was submitted, was prepared in accordance with the Planning Board Guidelines, and indicates that the continuance of the use will not negatively impact the roadways utilized by the fill.

- A visual analysis of the mounds was submitted, although balloon tests were not performed, and the new fill area will not be visible from adjacent properties.
- No odors are generally associated with the storage of fly ash and there is no indication in the record that odor has ever been a concern at the site.

(13) The use will promote the conservation of agriculture and non-intensive recreational uses once the site is stabilized and reclaimed. (Section 27-425)

(14) A Rubble Fill inherently results in some adverse impact on any neighboring properties since the equipment generates noise, the fly ash could result in bothersome dust if not properly watered, and the resulting mounds affect the viewshed. The use has operated on site for several decades and has been monitored throughout that time by various federal, State and County agencies (as proven by the Consent Decree entered into the record), and will continue to be. Other than the problem which resulted in the issuance of the Consent Decree, Applicant has operated within the strictures of state and federal laws that govern this use. The mound that will result from the instant request will have minimal impact on the community since it is screened by the existing mounds, and surrounding vegetation, and will have to meet applicable state and federal laws.

(15) Applicant has requested a ten-year extension of the use in part because it is able to recycle/reuse the fly ash. However, the District Council has approved the fill as a temporary use recognizing the impact it will have on any community in which it is located. The Applicant is requesting to fill the valley between the existing mounds which will add approximately 419,000 cubic yards/460,900 tons of capacity. The expert witness noted that whatever number of years that translates into is past anything that he does. Accordingly, it does not appear that continuing to operate the fill for ten more years is necessary to serve the projected growth in the County. (Section 27-406(h)) I, therefore, recommend a lesser period of 8 years and would urge that this be the final request, since a use that has operated for over 40 years cannot truly be considered temporary in nature.

### **DISPOSITION**

Special Exception 4765 and TCP II-105-90-01 are Approved, subject to the following conditions:

1. Prior to the issuance of permits Special Exception SE-4765 and Type II Tree Conservation Plan TCP II-190-90-01, shall be revised as follows:

- a. Revise the EPS approval block on all plan sheets to indicate the associated DRD case, and the reason for the revision.
- b. Remove Natural Regeneration from the legend on all plan sheets.
- c. Add a woodland conservation sheet summary table to all sheets.
- d. Label woodland conservation areas on all sheets by area and methodology.
- e. Remove the following elements from Sheet 1 of 5:
  - (1) Remove the natural regeneration area table from the sheet.
  - (2) Remove the table in the lower left hand corner, which does not accurately described how the woodland conservation requirement was determined, and is inconsistent with the woodland conservation worksheet.
  - (3) Remove the NRA-1 from the cover sheet key map.
  - (4) Provide additional woodland conservation needed to fulfill the requirement, which is less than one acre in area, to be fulfilled either through fee-in-lieu or off-site woodland conservation.
  - (5) Add a disposition column to the Specimen Tree Table. No variances are required for the removal of specimen trees because the plan is grandfathered under the 1989 ordinance.
  - (6) After all revisions are made to the plan, revise the woodland conservation worksheet to reflect the woodland conservation requirement and its fulfillment.
    - (a) Remove WRA-A from Sheet 3 of 5.
    - (b) Have the plan signed and dated by the Qualified Professional who prepared it.

- f. Prior to certification of the TCPII, the Final Erosion and Sediment Control Plan shall be submitted.
- g. Provide a note on the plan regarding the applicable exemption from the Tree Canopy Coverage Ordinance.
- h. The boundaries of the Special Exception shall be outlined in red.
- i. The maximum height of fill mounds for Phase I, including capping and grading shall not exceed 291 feet and for Phase II 265.5 feet. Any increase in height shall require a new special exception approval by the District Council. Note 15 on the Site Plan shall be revised to expressly state these maximum heights.
- j. This Special Exception shall expire 8 years after final approval action or upon reaching site capacity to accept fly ash rubble. Applicant shall notify DER and the District Council, in writing, upon cessation of the use.
- k. The number of truck trips visiting the site on a daily basis shall not exceed 200, and a Note to this effect shall be added to the Site Plan.
- l. The hours of operation shall be 7:00 AM – 5:00 PM, Monday through Friday. The facility shall be closed on weekends and public holidays. A Note to this effect shall be added to the Site Plan.
- m. Applicant shall confer and cooperate with owners of the cemetery across North Keys Road from the site entrance, for the purpose of limiting truck trips during funeral ceremonies.
- n. The conflicting language on the Site Plan that states that the capped area is “not part of this Special Exception” will be removed.

2. The revised Special Exception Site Plan and Tree Conservation Plan shall be submitted to the Office of the Zoning Hearing Examiner for review, approval and inclusion in the record prior to the issuance of permits.

Note: The Special Exception Site Plan is Exhibit 24(a), the Type II Tree Conservation Plan is Exhibit 79(b) and the mound elevation limits are set forth in Exhibit 8.