BRICK UTILITIES
THE BRICK TOWNSHIP MUNICIPAL UTILITIES AUTHORITY
50 YEARS 1969 - 2019

1551 Highway 88 West * Brick, New Jersey 08724-2399
(732) 458-7000 * FAX (732) 206-0526
www.brickmua.com

CHRIS A. THEODOS, PE, PP, CME, CPWM, CFM
Executive Director

March 12, 2025

Kathleen Preston
New Jersey Department of Environmental Protection
Division of Land Resource Protection
801 E. State Street
Mail Code 501-02A, P.O. Box 420
Trenton, New Jersey 08625-0420

RE: CAFRA & FLOOD HAZARD AREA INDIVIDUAL PERMITS
FILE/P.I. NO. 1506-05-0061.1, ACTIVITY NO. LUP 240001
STAVOLA ASPHALT PLANT, BRICK TOWNSHIP, OCEAN COUNTY

Dear Ms. Preston,

The Brick Township Municipal Utilities Authority (Brick Utilities) would like to herein provide comments on the above-referenced Coastal Area Facility Review Act (CAFRA) and Flood Hazard Area individual permit applications. Brick Utilities provides drinking water to Brick Township and several surrounding communities in northern Ocean and southern Monmouth Counties. Our primary water supply source is the Metedeconk River, which accounts for approximately 70% of our overall supply, the remainder coming from groundwater sources. Brick Utilities' Metedeconk River intake provides water directly to our 16 million gallon per day conventional water treatment plant, as well as the 860 million gallon Brick Reservoir, an offline pumped raw water storage reservoir. The Metedeconk is a critical coastal water supply source. The entire freshwater portion of the Metedeconk River, with a watershed area of 70 square miles, has been designated a Category One waterway due to its exceptional water supply significance to the region. The Metedeconk River is also a major tributary to the Barnegat Bay estuary.

The Stavola Asphalt Plant site is located on the South Branch Metedeconk River approximately one-half (1/2) mile upstream of Brick Utilities' surface water intake. The land use authorizations being sought by the permittee are for intensive industrial activities that are to be located in close proximity (<400 feet) from the river. Brick Utilities has significant water quality-related concerns with this project, as it has the potential to jeopardize the drinking water supply for more than 100,000 coastal residents.

Accordingly, we offer the following comments for the NJDEP's consideration as it reviews the permit applications.

Site History, Location and Surrounding Area

1. The application documents describe the project site as "currently developed with an asphalt plant." The asphalt plant was originally built to support construction of the Garden State Parkway in the 1950s. Its existence pre-dates environmental protection laws and regulations, comprehensive coastal zone management, and the use of the Metedeconk River for drinking water supply. It is an industrial land use that does not conform to Brick Township's current zoning and has not since a municipal zoning ordinance adoption in 1960.

2. This industrial site is located adjacent to the South Branch Metedeconk River, the confluence of the North and South Branches, and the main stem of the Metedeconk River. The river would be categorized as "Medium rivers, creeks and streams" per N.J.A.C 7:7-12.1(b). The extent of the river in this area is not depicted clearly on the site plans, to include shallow, ponded and intermittent water areas.

3. The Environmental Impact Statement (EIS) submitted for the permit applications indicates in Section II that "commercial land use exists to the south and west." It fails to mention the site is located adjacent to the Brick Township municipal complex, across the street from the Ocean County Vocational School and Brick Township High School, and less than 2000 feet from the Ocean County Library, Forge Pond Golf Course and single-family residential communities.

4. The asphalt plant is located in an Environmental Justice Overburdened Community and its operation has or currently contributes to several Community Stressors including fine particulate matter, diesel particulate matter, traffic from heavy-duty trucks, known contaminated sites, groundwater classification exception areas and permitted air sites.

Flood Hazard Area

5. There are inconsistencies in the permit application documents regarding the Flood Hazard Area. The EIS references FEMA's Effective FIRM mapping (2006) while the Flood Hazard Area Engineering Report references the FEMA's Preliminary FIRM mapping (2014) with different design flood elevations presented. In addition, the FHA Engineering Report does not adequately demonstrate that the project will not affect water supply and water quality per N.J.A.C. 7:13-12.1. In fact, there is no mention of the Metedeconk River's use for water supply with a nearby drinking water intake just downstream of the site.

Water Quality and Water Supply

6. It is well documented that hot mix asphalt plants release dozens of hazardous pollutants to water and air and have a likelihood of resulting in environmental contamination, as has been established by USEPA in *Compilation of Air Pollutant Emissions Factors from Stationary Sources (AP-42)*, and by NJDEP though its inclusion of the industry in Industrial Site Recovery Act rules (N.J.A.C. 7:26B; NAICS Code 324121). Water-borne pollutants result primarily from stormwater runoff, and airborne pollutants are released as manufacturing process emissions (ducted sources) and as fugitive emissions from the manufacturing process, materials handling, and vehicular traffic including diesel trucks. There are numerous hazardous water and air pollutants associated with asphalt plants, including VOCs (e.g., Benzene, Formaldehyde, Xylene), PAHs (e.g., Chrysene, Fluoranthene, Indeno(1,2,3-cd)pyrene), metals (e.g., arsenic, lead, mercury), and petroleum hydrocarbons, as well as particulates/dust and nuisance odors. The emissions from the plant, whether process or fugitive, will reach the Metedeconk River and either dissolve in the water or remain as particulate matter. Stormwater BMPs, including the infiltration basins proposed, would be ineffective at filtering water-soluble pollutants, which would migrate directly through the sandy soils to the adjacent Metedeconk River via groundwater discharge. Process air emission control technologies typically perform at less than 100%, require extensive upkeep and maintenance, and would not address fugitive air emissions.

7. A Remedial Investigation Report/Remedial Action Report, dated March 2015, prepared for the site by Environmental Waste Management Associates, describes a 1.0-1.5 feet thick peat layer that is continuous across the entire site and acts as a confining layer (Appendix 4 - AOC 29 Investigation). The existence of such a peat layer raises questions about whether the proposed infiltration-type stormwater BMPs will function as proposed, including stormwater calculations, and whether infiltrated water from the industrial operation will migrate more readily to the river as shallow groundwater discharge.

8. Recycled Asphalt Pavement (RAP) was introduced to this operation in 2011 and is primarily made up of road millings and pieces of asphalt pavement. The RAP stockpile, situated along the property's frontage with Chambersbridge Road, has grown significantly over the past several years and presently encompasses a sizable portion of the site. From a water quality perspective, RAP is different from virgin asphalt materials in that it commonly incorporates pollutants from vehicle usage (e.g., heavy metals, PAHs and petroleum hydrocarbons from tire wear, exhaust and fluid leaks) that have the potential to leach into soil and groundwater or be carried offsite by stormwater runoff.

9. The project will expand the capacity of the asphalt plant from its existing capacity. The activities associated with asphalt production will, likewise, be expanded including delivery, storage and handling of raw materials; the production processes; loading and transport of finished product; local truck traffic, etc. The result will be increased releases of small amounts of nonpoint source and fugitive pollutants to the environment which will find their way into the Metedeconk River water supply.

10. Contaminants of emerging concern, many of which emanate from industrial operations, are an ever-present concern for water purveyors like Brick Utilities. Chemical compounds that present a threat to public health are continually being identified, particularly as laboratory techniques become more sophisticated and able to detect the presence of contaminants at lower levels. Water purveyors are typically on the front lines in protecting public health and must contend with these contaminants once they have been released into the environment. The proximity of this industrial operation to Brick Utilities' intake presents concerns about potential contaminants of emerging concern. For instance, the USEPA's drinking water Contaminant Candidate List (CCL) lists contaminants that present the greatest public health concern related to exposure from drinking water and that may require future regulation under the Safe Drinking Water Act (SDWA). The compound n-Propylbenzene, a constituent of asphalt, appears on USEPA's Contaminant Candidate List 3 (CCL3).

11. There are numerous cases of explosions, fires and spills at asphalt plants across the United States, including at another Stavola asphalt facility in New Jersey in 2015. The Brick asphalt plant site is also particularly vulnerable to extreme weather and flooding events. Such incidents at this location could be catastrophic for Brick Utilities' water supply.

12. Brick Utilities has evaluated the resilience of its water supply intake infrastructure to sea-level rise and proactive measures are required due to increasing river salinity from the estuary. A project is currently underway to evaluate moving our Metedeconk River intake further upstream (other alternatives such as desalination or construction of a dam are not feasible options). The intake relocation will place the water supply intake closer to this industrial operation.

13. A review of Stavola's compliance history via NJDEP's DataMiner website reveals numerous violations at Stavola facilities, including the Brick site, involving water quality, land use/wetlands, air quality and solid waste. The record of compliance should be considered for this application, particularly with respect to the applicant's competence in maintaining systems intended to be protective of the environment.

CAFRA Special Areas, General Location Rules, Use Rules and Resource Rules

14. The Metedeconk River in the vicinity of the site is a tidal watercourse that is important habitat for migratory fish (e.g., river herring and American eels). In its discussion of Critical Wildlife Habitat per N.J.A.C.7:7-9.37, the EIS indicates the property is surrounded by commercial and industrial development which is inaccurate. Roughly half of the property is surrounded by a natural river corridor, with important ecotone areas in close proximity associated with the waterway, wetlands, upland forests, and the Barnegat Bay estuary. The EIS states that "the project will not result in any adverse impacts to critical wildlife habitat on the site" but offsite impacts are likely, particularly with such an intensive industrial land use. In addition, there is an area of sedimentation in the South Branch Metedeconk River from historical operations of this facility that is clearly visible in aerial photography.

15. Roughly half of the site is surrounded by public open space. Ocean County's Metedeconk River Conservation Area, which is designated for public recreational uses including canoeing, kayaking and fishing, is located along the northern and eastern property boundaries. Brick Township's Pinewood Park, which includes natural areas along the river and youth soccer fields, is located northeast of the site within 500-1000 feet. These areas were either not included or erroneously called "Ocean County Golf Course Open Space" in the EIS discussion of Public Open Space Special Areas. This project is a particularly intensive industrial land use that will result in the emission of hazardous air pollutants, odors and noise that would adversely affect public open space per N.J.A.C. 7:7-9.38.

16. The project site should be considered a Special Hazard Area in accordance with N.J.A.C. 7:7-9.39. Environmental degradation and contamination have occurred at the subject asphalt plant property and a neighboring Ocean County property as a result of historical operations at this site. Stavola was required to remediate onsite environmental contamination present at the time it acquired the property from the prior owner in April 2002, as required by ISRA. However, offsite areas of environmental contamination from the prior owner(s) remains. Encroachment and landfilling have been documented on the adjacent Ocean County property (Bl. 755.07, Lot 3) along the easterly border of the Stavola property, to include asphalt, concrete, tires, and at least one crushed drum and fuel tank. Chlorinated solvent contamination, primarily Tetrachloroethylene (PCE), has been documented in this area and has directly affected the Metedeconk River. Between 2005-2006, a period of elevated PCE concentrations in the river resulted from site disturbance on the asphalt plant property. Specifically, Brick Utilities water quality monitoring data documented a gradual increase in river PCE concentrations following earthwork at the asphalt plant site, which peaked at 186 ppb (NJ Surface Water Quality Standard and NJ Drinking Water Maximum Contaminant Level are each set at 1 ppb) before a gradual decline over the next several years. Brick Utilities collaborated extensively with NJDEP during this period, as it presented a serious water quality concern. While monitoring data show that site conditions have since stabilized and PCE concentrations in the river have diminished, no remediation has occurred to date. Without remediation of this contamination, the site disturbance associated with the project will likely trigger further release of PCE to the river and contaminate BTMUA's primary water supply source. This contamination constitutes a special hazard to public safety, health and welfare due to its potential to affect Brick Utilities' drinking water supply.

17. This project is inconsistent with the Basic Location Rule at N.J.A.C. 7:7-14.2. Its proximity to a critical regional water supply, schools, civic facilities, residences and sensitive natural areas compromises public health, safety and welfare, negatively affects surrounding public and private properties, and degrades the natural environment. The EIS statement that "the development has been appropriately sited...consistent with commercial and industrial development within the vicinity" is inaccurate in that it avoids mention these other important facilities and land features that are in close proximity.

18. Similar to Comment No. 17 above, the EIS discussion of Secondary Impacts per N.J.A.C. 7:7-14.3 avoids discussion of sensitive surrounding land uses other than commercial and industrial development (note that there is no other industrial land use in Brick Township in the surrounding

area). The proposed asphalt plant is larger than the plant that currently exists. As such, it would be reasonable to expect increased vehicular traffic, noise, nonpoint source pollution, fugitive industrial emissions of hazardous pollutants to air and water, dust and odors. Such secondary impacts would not be "negligible" as described in the EIS given the actual surrounding land uses.

19. The EIS discusses Use Rules for Industry per N.J.A.C. 7:7-15.17 stating that "the site is and will be used for asphalt production." As a land use that does not conform to the municipalities' zoning, the project would allow this industrial use to continue in perpetuity when the intent is for it to cease at some point in the future. This is the only industrial site in Brick Township in this area. The EIS states that "no new industrial upgrades are proposed," though the new asphalt plant will be larger. As discussed herein, this industrial use does not comply with all applicable location and resource rules and is incompatible with existing uses in the area, particularly a drinking water supply intake immediately downstream. The existing and proposed buffers are inadequate to offset impacts given the scale of this industrial operation.

20. The project will affect several resources surrounding the site as listed in the Resource Rules at N.J.A.C. 7:7-16.
    a. Water Quality (16.3) – Coastal development that would violate surface and ground water quality standards is prohibited. Prior remediation of the site that was triggered by ISRA demonstrates that contamination above these standards is likely at the asphalt plant. The adjacent Ocean County property has documented chlorinated solvent contamination (i.e. PCE) above the groundwater quality standards as a result of historical operations by a former asphalt plant owner, and there are serious water quality implications for the public water supply if this site is disturbed.
    b. Stormwater Management (16.6) – As discussed above, while the project complies with the Stormwater Management Rules, any water-soluble pollutants will not be filtered out and ultimately reach the Metedeconk River and impact Brick Utilities' water supply.
    c. Air Quality (16.8) – As discussed above, process and fugitive emissions of hazardous pollutants and particulates will affect the local area and reach the Metedeconk River. Nuisance odors will also affect the surrounding area. There is no mention of these air quality concerns in the EIS.
    d. Scenic Resources and Design (16.10) – The project proposes an asphalt plant height of 75 feet, the current plant height being 50 feet. The current plant is not visibly compatible with its surroundings and a 50% increase in height will further detract from visual landscape. Contrary to what is stated in the EIS, there is no similar land use in the vicinity.
    e. Buffers and Compatibility of Uses (16.11) – The asphalt plant, both existing and as proposed, is incompatible with surrounding land uses. The existing and proposed buffers are inadequate to mitigate impacts on the surrounding area, particularly the Metedeconk River.
    f. Traffic (16.12) – The increased capacity of the asphalt plant will likely result in increased traffic with heavy diesel trucks, generating additional nonpoint source pollution and threatening public health, safety and welfare.
    g. Solid and Hazardous Waste (16.14) – As discussed above, asphalt plants emit and are prone to environmental contamination with hazardous substances, and an adjacent property has documented contamination with hazardous substances that have the potential to affect the public drinking water supply. A review of compliance history at this site shows egregious disregard for solid waste rules (and other regulations and permits) in recent years.

In light of the above, this project is inconsistent with the New Jersey Coastal Zone Management Program goals and policies in N.J.A.C. 7:7-1.1. Specifically, the project will diminish the health of the coastal ecosystem, environment and local natural resources including water quality; degrade open space recreation and aesthetics; undermine thoughtful coastal community planning; jeopardize a critical drinking water supply; increase the consequences of natural hazards to life and property; and threaten public health, safety and welfare.

The project does not meet the CAFRA permit standards per N.J.A.C. 7:7-1.4 because:

- Conformance with all applicable air and water emission and effluent standards requires thorough operation and maintenance of pollution prevention systems, including stormwater management BMPs and air emission controls. A review of the operator's compliance history shows a clear lack of adherence to the required maintenance procedures and regulatory and permit requirements.

- The application does not clearly demonstrate that air emissions and water effluents in excess of the existing dilution, assimilative and recovery capacities of the air and water environments at the site and within the surrounding region will be prevented, particularly with the close proximity of a public drinking water supply intake which is more susceptible to low levels of contaminants, both currently regulated and yet to be regulated or emerging. In fact, there is no mention of process or fugitive emissions in the EIS.

- The applicant has disregarded solid waste regulations in recent years, and its record of compliance should be considered for this application.

- While the project will not affect water quantity and the regenerative capacity of water aquifers or other ground or surface water supplies, it will affect water quality of a critical regional water supply source as outlined herein.

- The application does not clearly demonstrate that the project would cause minimal feasible interference with the natural functioning of plant, animal, fish and human life processes at the site and within the surrounding region. Brick Utilities has outlined concerns about water quality and human health impacts above. Degradation of wetlands, surface water and groundwater has occurred as a result of historical operations at this site. Aside from being a critical regional water supply, the Metedeconk River is important habitat for migratory fish. The EIS does not mention the scale of the operation or the nuisance odors that will affect community aesthetics, which buffers cannot address. The project is clearly not compatible with surrounding land use, contrary to what is stated in the EIS.

- The project is located such that it has the potential to endanger human life or property. It will impair public health, safety and welfare.

- The project would result in the degradation of unique or irreplaceable land types, specifically in public open space areas and the aesthetic attributes of the surrounding region. The site is clearly visible from the surrounding areas and will become more so with the proposed expansion.

The CAFRA rules establish that the coastal area should be dedicated to land uses which promote public health, safety and welfare, and aims to encourage the development of compatible land uses. Despite some minor environmental improvements that would be incorporated into the asphalt plant design, Brick Utilities maintains that this industrial land use, due to its close proximity to our drinking water intake, is incompatible with the Metedeconk River's use as a drinking water supply and that it jeopardizes the health, safety and welfare of more than 100,000 residents of the coastal zone. The project is also not compatible with surrounding land uses.

Brick Utilities respectfully requests a public hearing on this application be held locally in Brick Township to allow the public an opportunity to comment on the land use permit authorizations being sought.

If you have any questions or need additional information pertaining to the above comments, please contact me at extension 4237. Similarly, any additional information we may obtain regarding this application will be immediately submitted to your attention.

Respectfully,

Chris A. Theodos, PE, PP, CME, CPWM, CFM
Executive Director

ec: Brett Kosowski, NJDEP
Steve Specht, P.E., Brick Utilities
Joseph Maggio, P.E., Brick Utilities
Alina Ferreira, P.E., P.P., C.M.E., Brick Utilities
Robert Karl, Brick Utilities