MARYLAND DEPARTMENT OF THE ENVIRONMENT

AIR AND RADIATION ADMINISTRATION

RESPONSE TO COMMENTS REGARDING TOLSON AND ASSOCIATES, LLC PERMIT TO CONSTRUCT FOR A CONCRETE CRUSHING AND SCREENING PLANT

Purpose of the Hearing: The purpose of the public hearing was to receive public comment on a permit to construct application submitted by Tolson and Associates, LLC for one (1) concrete crushing and screening plant to be located at Tolson Rubble Landfill on 1451 Capitol Raceway Road in Crofton, Maryland 21114.

Date and Location: The public hearing was held on May 22, 2019 at 7 pm at Nantucket Elementary School located at 2350 Nantucket Drive in Crofton, Maryland 21114.

Attendance: Ms. Shannon Heafey served as Hearing Officer for the Air and Radiation Administration (ARA) and presented ARA's public hearing statement. Ms. Karen Irons, Mr. Matt Hafner, and Ms. Sarah Wells from ARA were also present. Tolson and Associates, LLC was represented by Mr. Mike Ensor, Charlie Jones, and Adam Gray. Ms. Carol Vasques from For the Record, Inc. served as the court reporter for the hearing.

Comment Period: The public comment period on the application expired on August 6, 2019 after a 60 day extension was requested. Comments were received from the public both at the hearing and in writing.

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Issues Related to Air Quality

1. Dirt and Dust (Particulate Matter)

Multiple comments were received concerning dirt and dust becoming airborne outside of the Tolson premises, and travelling to nearby homes, schools, and parks.

Response:

The Department requires the facility to provide reasonable control measures against fugitive dust. In this regard, State and Federal regulations require Tolson and Associates, LLC (Tolson) to use wet suppression systems as needed. The wet suppression systems must be inspected monthly to ensure that water is flowing to the discharge spray nozzles. If water is not flowing properly during an inspection, Tolson must initiate corrective actions within 24 hours and complete these actions as expediently as practical. Tolson and Associates, LLC must maintain a log of the inspections and any corrective actions taken, and the log must be made available to the Department upon request.

In addition, Tolson must also comply with a site-specific Fugitive Dust Plan that the company has developed and which has been reviewed and approved by the Department. The plan outlines the methods that Tolson will use to control emissions of particulate matter from roadways, stockpiles, and materials handling operations. This plan has been incorporated into Part D(9) of the air quality permit to construct. The Fugitive Dust plan includes the following:

- The Permittee shall minimize work of stockpiles on windy days.
- Wet suppression systems shall be used whenever necessary to control fugitive dust from materials handling operations, including prior to crushing and prior to being dispersed to stockpiles.
- If a wet suppression system fails, then all associated crushing and screening shall stop until repairs are made.
- The Permittee shall avoid overfilling loader buckets and shall minimize drop heights of material onto stockpiles.
- The Permittee shall flush sweep roadways as necessary.

The following requirements have been added to the Fugitive Dust Plan in order to further control the effects of fugitive dust on the surrounding areas:

- Water trucks and water cannons shall be used as necessary and maintained at the facility in order to control dust on roads and stockpiles.
- The Permittee shall maintain stockpile heights such that water sprays from wet suppression systems are accessible to the top of the pile.
- All vehicles operating at the facility shall comply with a speed limit of 15 miles per hour (mph), and signs shall be posted to notify drivers of this requirement.
- All vehicles leaving the site shall be required to cover their loads and only travel on designated roadways. A sign shall be posted to notify drivers of this requirement.

2. Compliance/Enforcement

Multiple comments were received concerning monitoring Tolson and enforcing compliance with air permit requirements. There were also some weather related concerns raised, related to operations in windy conditions at the facility.

Response:

The Department possesses the necessary legal tools to require the company to comply with applicable environmental laws and regulations and to operate in compliance with all permit conditions, including the Fugitive Dust Plan mentioned in the Dirt and Dust response above. Although air quality permits contain conditions requiring companies to monitor operations, keep records, and submit reports, these are not the only methods by which the Department determines compliance. To ensure that the facility is operating in compliance with regard to air pollution control requirements, the Department conducts announced and unannounced inspections and reviews information in the operating records required to be kept by the company. If violations occur, appropriate action is taken to bring the facility back into compliance. The type of action taken is a function of the severity and type of violation and several other factors, such as the willfulness of the violation and the degree of harm to public health or the environment. Enforcement actions can range from the issuance of a notice of violation to the imposition of civil and criminal penalties.

Given the concerns of the citizens and the fact that the equipment is located on an active rubble fill, the Department will visit the site frequently for several months following the issuance of the air quality permit to construct. A long-term inspection schedule will be developed, and adjusted as necessary, to ensure all permit requirements are being met over the life of the facility.

Another useful tool is citizen observations. During operation of the facility, if anyone observes a situation that leads them to believe the facility is not operating in compliance with its air quality permit a call should be made to The Department's air pollution complaint line at (410) 537-3215. Concerned citizens should also call the Anne Arundel County Office of Planning and Zoning at (410) 222-7437 to report suspected operational or environmental concerns at the rubble landfill. During operation, if anyone has general questions regarding air quality or non-air quality issues relating to the installation of the crushing and screening operation contact should be made with the Compliance Field Services Division by phone at (410) 537-3231 or by email at sally.smith@maryland.gov. Additionally, information can be requested at any time via the Public Information Act (PIA). A PIA request can be sent to the attention of the PIA Coordinator at alison.ray@maryland.gov and the request will then be distributed throughout the Department.

Tolson has agreed to implement a hotline for the facility in order to directly respond to citizen concerns about noise and dust. If a citizen wishes to voice a concern directly to the facility please call Mr. Mike Ensor at (301)639-4413 during operating hours and leave a message with your name, address, phone number, email address, and a brief description of your concern.

3. Ambient Air Monitoring

Comments were received concerning Maryland's air emissions monitoring methods. Concerns were also raised about the distance of air monitoring locations to the facility.

Response:

Maryland is required by the Clean Air Act to install and maintain an ambient air quality network. The Act requires the U.S. Environmental Protection Agency (EPA) to set National Ambient Air Quality

Standards (NAAQS) for pollutants considered harmful to public health and environment. The ambient air quality network monitors for the six criteria pollutants—ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, lead and particulate matter (PM_{10}, $PM_{2.5}$). The primary purpose of the network is to ascertain whether air quality over a broad geographic area within the state complies with the NAAQS. In cases where an area does not comply, the monitoring network is designed to establish the geographic extent and severity of non-compliance.

Maryland's ambient air quality network is designed using uniform criteria established by the EPA, which is incorporated in the Code of Federal Regulations (40 CFR Part 58). The existing network is reviewed and approved annually by the EPA Region III Administrator. This network plan is published annually on the Department website and is available for public review and comment as a draft for 30 days prior to being finalized and submittal to the EPA Administrator. The current Annual Network Plan for Calendar Year 2020 is available on the Department's website: http://www.mde.maryland.gov/programs/Air/AirQualityMonitoring/Pages/Network.aspx

The Department feels confident that the existing air monitoring network adequately characterizes the air quality throughout the state of Maryland. The network design guidance and constraints allow for the assumption that monitors will not operate in every time and space. Monitors located in areas with similar population densities, similar emission source characteristics, and similar meteorological conditions should measure similar concentrations of air pollution. A best effort is made to sample according to prescribed scales of space and population density. This rests on the concept of "representativeness". The premise is that if the network design criteria are followed closely, then ideally a thorough cross-section of the state is monitored including a mix of high pollution areas, low pollution areas, areas under the immediate influence of significant sources, and areas that make up the other site types and spatial scales as prescribed in 40 CFR 58, Appendix D.

The monitoring system is supported by federal funding, and the limited funding is not available to support monitoring activities that do not comport with federal ambient monitoring criteria. Air quality stations are sited to avoid undue influences from a particular emission source, which would interfere with a determination of air quality for a broad geographic area. The air quality stations are also placed to avoid interference from surrounding buildings, structures and other interferences that could invalidate air quality data. Population criteria also guide the number and the placement of the monitoring stations. Although political boundaries have some consideration, stations are not established on a county-by-county basis. Stations are not established to monitor pollution from individual sources or facilities. Facility specific monitoring is expensive, requires secure locations to prevent vandalism, requires access to power, and requires multiple monitoring sites outside of the facility. The Department can make a reasonable, conservative estimate of the facility specific impact on the surrounding area by using air dispersion modeling. In doing so, the measured concentrations from the ambient air monitoring network are added to the modeled air pollution impact from the facility.

Maryland's Air Monitoring network has been found to be very reliable in producing valid air quality data. The data these monitors generate are validated and quality assured using EPA guidance and quality assurance procedures. The reviewed data are placed in the EPA National Air Quality Database AIRS. Field technicians maintain these monitors. They are required to make sure the instruments are working in accordance with EPA standards. The technicians precision check each instrument every two weeks and calibrate each instrument once per quarter unless otherwise needed. The monitors are also audited by both State and EPA auditors.

4. Concerns about Crystalline Silica

Comments were received concerning respirable crystalline silica becoming airborne outside of the Tolson premises and endangering people in the surrounding areas.

Response:

Maryland has stringent program requirements to address emissions of toxic air pollutants. The proposed plant is a source of respirable crystalline silica, a state regulated toxic air pollutant. Respirable crystalline silica is a component of waste concrete that can be emitted when the material is mechanically processed by the plant. It is a portion of the respirable fraction of total fugitive particulate matter emissions from the proposed plant.

To determine the emissions of respirable crystalline silica, the Department used U.S. EPA approved emissions factors for particulate matter with a nominal diameter of 10 micrometers or less (PM-10) for crushing and screening plants and average respirable particulate matter and crystalline silica fractions based on Material Safety Data Sheets specific to waste concrete. This method is consistently used by the Department to estimate emissions of crystalline silica from waste concrete crushing and screening plants in Maryland. Using this method, the Department estimated that the proposed project would emit 0.0036 pounds of respirable crystalline silica per hour. The Department then used the U.S. EPA-approved SCREEN3 air dispersion model to predict the maximum off-site concentration of respirable crystalline silica based on this estimate. The model predicted a maximum off-site, eight-hour average concentration of 0.15 micrograms per cubic meter, which is less than the eight-hour screening level for respirable crystalline silica of 0.25 micrograms per cubic meter. As specified in the Department's regulations for control of toxic air pollutants, the screening level for crystalline silica is set at $1/100^{th}$ of the maximum exposure level that a worker at the Tolson site could be exposed to for 8 continuous hours. The 1/100 value represents a safety factor to account for exposure to the pollutant by more sensitive populations, such as children, and in consideration of any potential additional source or sources of the same pollutant existing in the area. Based on the Department's evaluation, the projected impact of crystalline silica emissions from the proposed project at the property line of the site and beyond will not endanger public health.

The exercise described above is the standard means by which the Department demonstrates that a proposed plant will comply with applicable air quality regulations at the maximum level of operation. Tolson will be required to certify their actual emissions from the plant annually based on actual hours of operation and material throughput. This annual report is reviewed and approved by the Department to ensure that compliance is achieved.

5. Future Permitting Issues

One comment wanted to know the application process Tolson would be subject to if they wished to add a second crusher.

Response:

Tolson would be required to submit an application and obtain a permit to construct for all new crushing and screening equipment at the facility. The application for the addition of another crusher would be required to undergo public review. Everyone who attended the informational meeting, the public hearing, or commented to the Department about this current project, will be considered an

"Interested Person" regarding Tolson and will receive direct correspondence for future Tolson applications requiring public review.

Other Issues

1. Health Issues

Multiple comments were made expressing concern for individuals in the area who have various health issues, or are more susceptible to airborne health risks.

Response:

Except for using the screening process mentioned in the response for Ambient Air Monitoring as a means to gauge whether silica emissions from the facility present a health risk, it is beyond the regulatory scope of this permit review to assess health impacts, such as cancer and asthma. As a starting point for this issue, it is suggested that contact be made with the Anne Arundel County Health Department and/or the Maryland Department of Health. Both agencies have access to county-wide and sub-county health data that may be useful.

The Maryland Department of Health has a Center for Cancer Prevention and Control, which is responsible for assessing cancer in Maryland. The Maryland Cancer Registry is a Division in the Center:

Maryland Cancer Registry
201 W. Preston Street
Baltimore, MD 21201

https://phpa.health.maryland.gov/cancer/Pages/faq_combined.aspx

The following information is from the Maryland Cancer Registry website:

(a) What are the risk factors for cancer?

The risk of developing cancer increases as we grow older. Most cancers affect adults 40 years of age and older. Among the known risk factors for cancer, tobacco stands out. Cigarette smoking is associated with more than 85% of all lung cancers and with a substantial proportion of cancers of the bladder, mouth and throat, stomach, pancreas and others. Diet is also a risk factor; higher cancer rates are seen in people who eat a diet high in fat and low in fresh vegetables and fruits. It is estimated that diet and tobacco together may account for approximately 2 out of every 3 cancer deaths.

(b) Does the environment cause cancer?

The answer depends in part on how environment is defined. Many cancer researchers use the word to mean hereditary factors, and therefore, consider things such as tobacco use, diet, alcohol, a woman's age when she has her first child, lifestyle factors, infections and exposure to sunlight. In this very broad sense, it is likely that a large percentage of cancers are environmental in their origin. However, if environment is defined more narrowly as one's surroundings, then the percentage of cancers that can be attributed to the environment is probably small. Most geographic differences in cancer rates seem to result more from the differences between people than from anything in their physical surroundings.

(c) What if I'm concerned about the number of cancer cases in my neighborhood?

Cancer is common enough that one can expect to see many cases, usually a combination of common and less common types, in any neighborhood. The number of cases that can be expected to occur will depend on the mix of the ages and the ethnic origins of the individuals who live in the neighborhood. For example, in a community of about 1,000 people which includes many young families and persons of all races, one can expect that about 1 to 10 new cases of some type of cancer will be diagnosed every year. In a retirement community of 1,000 people, one can expect many more cases per year, between 12 and 35. The number will also be higher if the neighborhood includes many people with a history of smoking or consuming a lot of alcohol. Because over 50 percent of people diagnosed with cancer will still be alive at least five years after their diagnosis, the number of people in a neighborhood who have ever had cancer will be several times higher than the number of new cases. Cases of cancer among individuals, like many other events, do not necessarily occur in a regular fashion throughout the community; they may appear in little groups among neighboring houses, or people in the same office. This does not necessarily mean that they have the same underlying cause; the grouping may have occurred by chance.

(d) What if I'm still concerned?

You can call your local health department. The local health department will coordinate with the Cancer Registry staff to evaluate whether the cancers you are concerned about conform to the usual types and numbers that can be expected to occur in the neighborhood, or whether they seem unusual.

In addition, the Maryland Asthma Control Program addresses both adult and childhood asthma. It is located in the Center for Maternal and Child Health at the Maryland Department of Health.

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The Maryland Asthma Control Program has developed a Maryland Asthma Plan to provide a common vision for individuals, organizations, and communities to address the burden of asthma in Maryland. The Plan serves as a roadmap to implement and evaluate local and statewide actions based on best practices of medical and environmental asthma management. The Program has also published surveillance reports regarding asthma in Maryland. Information about the Asthma Control Program, including links to the most recent reports and statistics, can be found at the following website address: https://phpa.health.maryland.gov/mch/pages/asthma.aspx

The American Lung Association is actively engaged in the fight against lung diseases including asthma, emphysema, and lung cancer. Information about emphysema and programs related to air quality and lung diseases may be obtained at the following website address: http://www.lung.org/

2. Truck Traffic

Multiple comments were made concerning increased truck traffic in the Crofton area due to the waste concrete crushing operation.

Response:

When reviewing an application for an Air Quality Permit to Construct, the Department cannot take issues such as truck traffic volume, truck routes, and traffic lights into consideration, and the Department does not have the authority to direct a permit applicant or a state or local agency to address such matters. The Department's permit application review is based strictly on a project's air quality impact. The State Highway Administration and the Anne Arundel County Department of Public Works and Transportation can best address traffic related issues. In addition, the Department cannot dictate which routes trucks can take coming to and going from the facility.

Per an agreement with a neighboring community that was made a part of the original Special Exception approval order for the rubble landfill, all traffic is to enter and exit along Race Track Road, not smaller local roads.

3. Impact on Property Values/Zoning

Several comments were made with respect to property values in the surrounding neighborhoods near the Tolson facility. Multiple comments were made concerned about the distance from the facility to local parks.

Response:

The Department cannot specify where a source may be located nor base its review of the permit application on land use concerns and possible economic impacts on the local economy or individual citizens. The Department's decision on the air quality permit application is based solely upon the projected air pollution related environmental impact on the area. Local issues such as zoning and land use are under the purview of Anne Arundel County. State law precludes the Department from considering these land-use issues. As long as the facility meets local zoning and land-use requirements, the Department is obligated to review an air quality permit application for activities related to the facility.

Anne Arundel County has stated that as conditions of their zoning approval, the facility may only operate Monday through Friday, from 7 a.m. to 5 p.m., and that noise level at the property line shall not exceed an average of 55 dBA or a peak of 60 dBA. To ensure compliance, the County will conduct inspections of the site every month for six months. After the initial six-month period, inspections will be on an annual basis.

4. Noise

Multiple comments were made concerning noise from the proposed crushing operation.

Response:

As of October 2012, the Department no longer enforces noise regulations. During the 2012 legislative session, House Bill 190 effectively transferred noise enforcement authority to local governments. In

Anne Arundel County, noise complaints should be referred to the police department at (410) 222-8050.

As to noise concerns, Mike Ensor of Tolson has informed the Department that noise will be mitigated as follows: operational equipment will be placed to provide optimum reduction of sound towards residential areas, berms and buffers areas are in place, and all equipment is equipped with a muffler system. Mr. Ensor has also agreed to install white noise backup alarms on loaders and excavators associated with the crushing and screening equipment to further reduce noise at the facility. Additionally, the facility hours of operation are Monday through Friday, 7:00am until 5:00pm and the proposed equipment will be nearly 2300 feet from the nearest neighborhood and about 600 feet from the nearest residence that is not part of a developed neighborhood.

5. Hours of Operation

Several comments were made concerning the 6,000 hour operational limit Tolson will be subject to.

Response:

The Department has no basis to limit the number of hours a source can operate, the production at a source, or the time of day a source can operate unless the Department determines that a violation of an applicable air quality standard or emission limit would otherwise occur if the hours of operation were not limited. For the application in question, it was determined that the facility could operate 6,000 hours per year without exceeding any emissions standards.

The original Special Exception to the Zoning Regulations granted to Tolson and Associates, LLC did not limit the hours of operation of the rubble landfill, but stated that the hours of operation would be limited by code, which prohibits operations in the evenings and on Sundays. Tolson has stated that their maximum operating hours would be 2,600 hours per year. As noted in the Noise section above, the facility hours of operation are Monday through Friday, 7:00am through 5:00pm.

6. Water Pollution Concerns

Multiple comments were received concerning local water contamination due to runoff from the proposed concrete crushing and screening.

Response:

Although the Department appreciates the concerns related to watersheds and groundwater contamination, these issues are not relevant to issuance of the air quality permit.

For issues concerning water pollution, please contact the Wastewater Permits Program at (410) 537-3163. In response to the concerns raised regarding water pollution, the Wastewater Permits Program said that run-off resulting from the use of wet suppression systems is a small volume of water, and groundwater contamination would be unlikely as the wet suppression system would not operate at a pH that could cause problems, nor would the total suspended solids (TSS) from the wet suppression system be high enough to cause trouble.

7. Public Notice Questions/Concerns

Several comments were made regarding party notifications and type of notifications received during the permitting process.

Response:

In accordance with Maryland law, for any permit to construct application subject to public participation, public notices shall be published at least once a week for two consecutive weeks in a daily or weekly newspaper of general circulation in the geographical area in which the proposed facility will be located. In addition, notices shall be posted on the Department's website.

As required by law, all informational meeting and public hearing notices required for this permit application were published in The Capital Gazette, a daily newspaper of general circulation in Anne Arundel County and on the Department's website. In addition, notices were sent to the following local elected officials representing the area where the plant will be located: Council Chairman Andrew Pruski, County Executive Steuart Pittman, Jr., Delegate Sid Saab, Delegate Heather Bagnall, Delegate Michael Malone, Delegate Joseline Pena-Melnyk, Delegate Mary Lehman, Delegate Benjamin Barnes, Senator Edward Reilly, and Senator James Rosapepe. During the application review process, notices were also sent to any parties expressing interest in the permit application.

8. Past Site History

Several comments were received describing prior issues with the landfill both with Tolson and with a separate company, Cunningham.

Response:

From the Department's Land & Materials Administration's Solid Waste Program regarding the past site history:

The refuse disposal permit application that was previously submitted to the Department for the proposed Tolson & Associates Rubble Landfill met the regulatory requirements for a rubble landfill as specified in Code of Maryland Regulations 26.04.07. These requirements have been established to protect public health and the environment at any permitted rubble landfill. The issuance of a permit for the operation of the landfill does not relieve the Permittee from complying with any additional local, State or Federal laws and regulations. Decisions regarding the appropriateness of a proposed landfill relative to surrounding land uses are strictly within the province of the local zoning and land-use authority. In accordance with Section 9-210(a) of the Environment Article, the Department cannot issue a refuse disposal permit for a landfill unless the local county provides the Department with a written statement that the proposed landfill meets local zoning and land-use requirements. The Department received a letter from Anne Arundel County confirming that the proposed Tolson & Associates Rubble Landfill met all applicable zoning requirements.

The Tolson & Associates Rubble Landfill and the Cunningham Rubble Landfill are separate landfills located adjacent to each other. The Tolson Landfill is owned and operated by Tolson & Associates, LLC, which is a separate entity from Cunningham Excavation Inc, who was the operator of the Cunningham Landfill. A proposal to expand the Cunningham Landfill was denied by the Department in the 1990's due to past violations that occurred while Cunningham Excavation Inc. was operating that landfill, and the landfill was closed and capped in the late 1990's. Any violations which occurred

during the operation of the Cunningham Landfill are not relevant to the Tolson Landfill, as this landfill is owned and operated by a separate entity.

9. Miscellaneous Questions/Concerns

Several comments were made regarding the usage and location of the concrete following crushing and screening. One commenter wanted to know about emission control measures for the transport of crushed concrete.

One commenter wanted to know about other Tolson owned landfills and their compliance history. Compliance for the Crofton facility was also brought up, and contact information was requested.

Some comments received discussed the 1993 Special Exception granted to Tolson, and one in particular asked if the crushing and screening operation would be held to the conditions from the Special Exception.

Response:

Mike Ensor of Tolson informed the Department that the crushed concrete will be separated by size and then sold as "recycled aggregate products."

Mr. Ensor stated that "the crushing operation is not a landfill although it is located within the footprint of the landfill." About the transporting of crushed concrete, Mr. Ensor said that "[The] transportation of the recycled concrete aggregate is governed by Maryland Department of Transportation laws which require that the loads using the roads and highways of the State of Maryland be secure and covered (tarped)."

Mr. Ensor has stated that Tolson does not own any other landfill sites. The landfill located in Crofton began landfill operations in December of 2016 and has never been given a Notice of Violation from the Department. For contact information see the response in the Compliance/Enforcement section of this document. For information on submitting a Public Information Act (PIA) request, please see the Compliance/Enforcement section above.

The Special Exception conditions approved on December 8, 1993 will apply to the crushing and screening operation Tolson and Associates, LLC is installing at the facility. As stated in part D(2) of the air quality permit to construct, Tolson must operate the proposed installation in accordance with local zoning laws as well as any applicable conditions of the Special Exception.