**MARYLAND DEPARTMENT OF THE ENVIRONMENT**

**RESPONSE TO COMMENTS**

**FOR THE**

**AGGREGATE INDUSTRIES**

**5850 SHERIFF ROAD**

**CAPITOL HEIGHTS MARYLAND 20743**

**Hearing Dates**: October 26, 2015

 Prince George’s Ballroom

 2411 Pinebrook Avenue

 Landover, MD 20785

 December 10, 2015

 Prince George’s Ballroom

 2411 Pinebrook Avenue

 Landover, MD 20785

**Purpose of the Hearings:** The purpose of the public hearings were to receive comment on the Maryland Department of the Environment’s (MDE’s) Tentative Determination for an air quality permit to construct for the installation of a Recycled Asphalt Product (RAP) crushing, screening and fractionation plant to be located at 5850 Sheriff Road in Capitol Height, Maryland.

**Tentative Determination:** The Department’s Tentative Determination for the air related permit to construct concluded that the emissions from the proposed project would meet all applicable regulatory requirements and the air quality permit to construct should, therefore, be issued.

**Attendance:**

1. October 26, 2015 Hearing

Approximately 20 members of the general public attended the hearing. Ms. Shannon Heafey of the Air and Radiation Management Administration (ARMA) of MDE presided as Hearing Officer. Aggregate Industries was represented by Tim Bevard and Lisa Hunt. Mr. Dennis Borie presented ARMA’s hearing statement. ARMA was also represented by: Ms. Karen Irons and Ms. Suna Sariscak.

1. December 10, 2015 Hearing

Approximately 40 members of the general public attended the hearing. Ms. Shannon Heafey of ARMA presided as Hearing Officer. Aggregate Industries was represented by Tim Bevard and Lisa Hunt. Mr. Dennis Borie presented ARMA’s hearing statement. ARMA was also represented by: Mr. Angelo Bianca, Ms. Karen Irons and Ms. Suna Sariscak.

**Comment Information:** The Department received oral and written comments on Aggregate Industries’ application.

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**Comments, Questions and Responses**

1. **Issues Related to Zoning**

*Comments*

“As you are aware, our residents have expressed concerns regarding poor air quality, traffic congestion and noise pollution in the vicinity of the project site. Much of their concern pertains to the concentrations of dust, truck traffic and debris associated with the industrial operations in the 5800 block of Sheriff Road.”

“”…it’s a bad site to put any more industry in. It’s just a terrible site.”

“…we know that part of the problem is the zoning. And you’re going to say, well, the zoning is there, we have to more or less approve what’s going on. But there has to be a way where we can say enough is enough, when do we stop.”

 “DPIE recommends that the applicant verify with M-NCPPC whether or not a Special Exception approval is required.”

*Response*

Local issues such as zoning and land use are under the purview of the zoning authority for Prince George’s County. State law precludes the Department from considering these land use issues, as the Department’s legal authority is limited to determining the air quality impacts a project may have on public health and the environment. 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. The Department is in receipt of a letter dated August 21, 2014 from the Maryland-National Capital Park and Planning Commission regarding zoning for 5858 Sheriff Road in Capitol Heights, Maryland. The letter states the following:

*The subject property is zoned I-2 (Heavy Industrial). Specific uses allowed in the I-2 Zone may be found in Part 7, Section 27-473(b) of the Prince George’s County Zoning Ordinance (Ordinance). Per this Section, a recycling plant is a permitted use in the I-2 Zone. A rock crusher is permitted as part of a recycling operation and does not require a Special Exception.*

1. **Truck Traffic**

*Comments*

“As you are aware, our residents have expressed concerns regarding poor air quality, **traffic congestion** and noise pollution in the vicinity of the project site. Much of their concern pertains to the concentrations of dust, truck traffic and debris associated with the industrial operations in the 5800 block of Sheriff Road.”

“The trucks that you’re talking—your company, this Aggregate now, they have what, 25 trucks that are supposed to be rolling in there every day and making two or three trips a day—50, 50 trucks. There’s going to be a back-up at that hopper producing all of that particulate matter and the stuff that they’re producing over there. And these trucks are going to also be idling. Are these trucks going to be equipped with five minute idling time, where they’ll shut down, so there drivers won’t be just sitting in line with the trucks running?”

“Truck traffic in the area is already dangerous, causing accidents with local traffic and pedestrian. It is also loud and disruptive when trucks drive through residential areas and hazardous when trucks unintentionally drop materials on roads.”

“Trucks from this facility will add to the current problem of truck emissions, especially when trucks idle as they wait to drop off or pick up materials in the industrial area.”

*Response*

The Department when reviewing an application for an Air Quality Permit to Construct 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 Prince George’s 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 plant.

We offer, however, that Aggregate Industries has provided the following additional information regarding truck traffic:

*Aggregate Industries, in consultation with the Maryland-National Capital Park and Planning Commission has agreed to utilize the major road networks for access and prohibit the use of residential neighborhood streets for truck traffic. The site access roads would include Route 202, Martin Luther King Jr. Highway (Route 704), Cabin Branch Drive, Sheriff Road, and Eastern Avenue. The prohibited roads would include residential streets fronting Sheriff Road and the section of Columbia Park Road between South Club Drive and Martin Luther King Jr. Highway (Route 704).*

1. **Noise Issues**

*Comments*

“As the permitting authority, MDE is encouraged to assess how an additional industrial facility would further aggravate current air quality conditions, **noise pollution** and traffic congestion.”

“…we don’t want the noise…”

 “Given our concerns, the Town of Cheverly is interested in identifying conditions--- if a permit is granted—in the areas of **noise pollution**, traffic limitations and hours of operation.”

“Noise from the industrial area bothers local residents and adding this facility and many truck trips per day to the industrial area will only make the problem worse.”

*Response*

As of October 2012, MDEno longer enforces noise regulations. During the 2012 legislative session, House Bill 190 effectively transferred noise enforcement authority to local governments. In Prince George’s County, noise complaints should be referred to the Prince George’s County Department of Permitting, Inspections and Enforcement.

The applicant has provided the following information as to what it is planning to do with regard to noise mitigation:

*The truck traffic noise is mitigated by the State of Maryland and Aggregate Industries’ requirements that all trucks be equipped with working unmodified muffler systems. It is company policy that all trucks associated with Aggregate Industries’ sites have working sound reducing muffler systems. Trucks identified as not in compliance with the policy are banned from accessing Aggregate Industries facilities until such time as the vehicle is inspected and found to be in compliance with the policy. In addition, internal haul road speeds are set and monitored at 15 miles per hour (mph) to assist in the mitigation of noise and dust. The crushing plant noise will be mitigated by site location and the berms and walls that surround the industrial site. The crushing plant is powered by electricity and the construction equipment associated with the plant operation is equipped with factory installed sound reducing muffler systems. The operation will meet all regulatory noise standards.*

1. **Dust/Particulate Matter Issues**

*Comments*

“As you are aware, our residents have expressed concerns regarding poor air quality, traffic congestion and noise pollution in the vicinity of the project site. Much of their concern pertains to the concentrations of **dust**, truck traffic and debris associated with the industrial operations in the 5800 block of Sheriff Road.”

“…there are days in which the dust is so severe that you can barely see your way through there.”

“Most of these things are done out in the open, dust going everywhere, they spray some water and hope that somehow suppresses it enough, and, of course, it never does. If this process should ever be built—and we all hope it won’t and we’re going to make sure it won’t—but it at least needs to be contained. You need to make sure that there’s a containment around it, they can have HEPA filters on it and make sure that no dust is getting out. And I’m not seeing that part in there either. So I encourage you to do so.”

“…it says it’s going to be 11 tons of particulate matter that’s going to be place in the community down here.”

“The dust flies freely across, straight across the highway in your face.”

“And to think that somebody wants to bring another plant in here, when we don’t have trees to take off the dust and the dirt that’s in the air now is ridiculous.”

“Particulate matter, specifically PM 10 and PM 2.5, can exacerbate the effects of respiratory diseases, including asthma, and cardiovascular disease, among other things.”

*Response*

With regard to the existing facilities located or that were located in the same block of Sheriff Road (Brandywine Enterprises, Aggregate and Dirt Solutions and Lafarge (which is now closed)), the Department does not have a record of any dust complaints since 2008.

The Department recognizes, however, that the types of industries along Sheriff Road and the nature of their operations can and do create dust, which, if not controlled, can become airborne and be transported to the neighboring communities. The Department has worked with several of the industries in the area over the years to get them to improve their dust control measures. Some improvements have been made, such as paving the entrance road and utilizing water trucks on site.

In addition to the specific requirements that are in the permit for Aggregate Industries, the Department is committed to taking the following steps to address broader overall dust issues from the various industries in the Sheriff Road area:

1. Ensuring that the current dust control measures are being used and that any dust control related equipment is being maintained and used effectively. To do this, the Department has been frequently visiting the area and will continue to do so in the upcoming months, which is the time period when the material these industries process and handle are needed most, to ensure that the companies are adhering to their permits, with a focus on the provisions of the permit that relate to controlling dust and other forms of particulate matter.
2. Also, the Department has initiated a dialogue with Prince George’s County as the County expressed an interest in helping to address the issues in the area by exercising its environmental and zoning oversight authority. An initial meeting between Department of the Environment air permitting and compliance staff and Prince George’s County staff from multiple agencies was held on March 10, 2016. The effort will be ongoing.

With regard to specific requirements for Aggregate Industries, the company is required to take reasonable precautions to prevent particulate matter (dust) from the Recycled Asphalt Product (RAP) crushing, screening and fractionation plant from becoming airborne. The Air Quality Permit to Construct includes requirements for both initial and continuous compliance as follows:

1. Within 60 days after achieving the maximum production rate at which the proposed plant will operate, but not later than 180 days of initial startup of the proposed plant, Aggregate Industries must conduct opacity observation tests to demonstrate initial compliance with all applicable opacity and fugitive particulate matter requirements. The tests must be conducted in accordance with U.S. EPA established test methods. Aggregate Industries must notify the Department of the intended test dates so that an inspector from the Department’s Air Quality Compliance Program can observe the tests, and all test results must be submitted to the Department for review and approval.
2. To demonstrate continuous compliance, Aggregate Industries must use wet suppression systems, as needed, to comply with all applicable fugitive opacity and particulate matter emissions standards. 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, Aggregate Industries must initiate corrective actions within 24 hours and complete these actions as expediently as practical. Aggregate Industries must maintain a log of the inspections and any corrective actions taken, and the log must be made available to the Department upon request.

1. In addition, Aggregate Industries must also comply with a site-specific Fugitive Dust Plan, reviewed and approved by the Department, which outlines the methods that Aggregate Industries will use to control emissions of particulate matter from roadways, stockpiles, and materials handling operations. See the Department’s response to the following comment for more information on the Fugitive Dust Plan.
2. **Fugitive Dust Plan**

*Comments*

“The…permit…calls for a fugitive dust plan…These things are left to Aggregate Industries to develop and the public has no comment—no ability to comment on them and no ability to bring to your attention possible deficiencies in them. These things should be part of the open records and the open meeting, not set aside and made private.”

 “MDE should include specific conditions in the Dust Control Plan (“Plan”) to adequately protect the citizens in the neighboring communities…Finally, applications for air permits to construct issued under 2-404 of the Environment Article must go through a public participation process in which MDE makes permit limitations and conditions available to the public for comment before issuing the final determination. Recently, the Maryland Court of Special Appeals held that MDE must provide the public with an opportunity to comment on plans developed under a permit after the permit goes into effect, explaining that “[t]he public can’t comment about decisions that have yet to be made…Since AI’s air quality control permit to construct falls within the scope of 2-404 of the Environment Article, the draft permit and the conditions therein, including the terms in the Plan, are subject to the public participation process. Thus, MDE must make the Plan available for public comment before MDE approves it.”

*Response*

Aggregate Industries submitted a fugitive dust plan to the Department on February 8, 2016.

Part D(5) of the air quality permit to construct has been revised as follows:

The Permittee shall comply with the following requirements of Department-approved Fugitive Dust Plan, unless an alternate plan is approved by the Department:

1. OPERATION AND MAINTENANCE OF PROCESSING EQUIPMENT AND ASSOCIATED AIR POLLUTION CONTROL EQUIPMENT
2. Spray bars and nozzles shall be kept in good working order.

i) The spray bars shall be operated continuously during crushing and screening at the OEM’s recommended water delivery pressure (PSI) and volumetric flow rate (GPM).

ii) The spray bar nozzles shall be checked at least once daily for clogs and cleaned as needed to maintain a uniform spray pattern.

1. Accumulated material around the crusher shall be removed from the immediate area on a regular basis. Spillage and residual materials from the process shall be picked up daily and returned to the raw material stockpiles for reuse.
2. SITE MAINTENANCE
3. Dust on the unpaved areas where vehicular traffic will travel shall be controlled by application of water. Water shall be applied at least once each hour that there is vehicular traffic moving about on the site. Additional water shall be applied as needed to control fugitive dust. In the event alternative dust suppressant aids are used, they will be applied according to the manufacturer’s specifications for quantity and frequency.
4. The speed of vehicles associated with the RAP crushing and screening operation on the site shall be limited to 15 miles per hour (MPH) while on-site.
5. Roadways on the site shall be controlled with application of water from a water spray truck. The roadways shall be watered at least once per operating day when there has not been natural precipitation. Additional applications of water shall be made, as needed, to prevent a dust nuisance beyond the property lines.
6. Dust from stockpiles associated with the RAP crushing and screening operation shall be controlled. The stockpiles are built up as material is discharged from the conveyors. During this phase, any dust that might rise off the stockpiles shall be controlled with water, as needed, to prevent a dust nuisance beyond the property lines.
7. All trucks leaving the site shall be required to cover their loads and travel via designated roadways. Trucks shall not travel through residential neighborhoods.
8. Complaints by community members of spillage, excessive speed, etc. can be reported to the site manager and the problem will be corrected as appropriate.
9. OTHER
10. The front-end loader operator shall be directed to avoid overfilling the bucket of the loader and the feed hopper, and to minimize the drop height of the material when loading the feed hopper and haul vehicles to prevent spillage and fugitive dust.
11. The stockpiles shall not be worked any more than necessary to keep the materials contained within their defined areas. Stockpile heights shall be kept to the minimum necessary.
12. RECORD KEEPING
13. Records of nozzle inspections, spray bar inspections, site-wide fugitive dust control activities (site watering), loads or quantity of feed materials delivered to the feed hopper shall be maintained. The feed materials shall be recorded on a daily basis. Site-wide fugitive dust control activities shall be recorded as they occur. The nozzles and spray bars shall be inspected at a minimum once per month, and more often as needed. The records shall indicate the date, time, quantities involved (if applicable) and action taken (if necessary).
14. **Cumulative Impact/Environmental Justice**

*Comments*

“I mean, clearly, we think there’s a case here for cumulative impact.”

“And what has been said over and over again is not this one facility, but the cumulative impact of all the facilities there.”

 “We understand that cumulative impact is not something that MDE typically considers in this permitting process. However, we ask MDE to consider the relatively small size of this industrial park. Its proximity to residential neighborhoods and the fact that it already has two uses that create more particulate airborne matter through crushing processes.”

“So while we understand that MDE does not consider cumulative impact, we believe it could and should in this instance.”

“Thus, MDE has the authority to look at cumulative impacts that would prevent the Permittee from creating any additional new nuisance or air pollution.”

“…this is another of the issues of environmental impact that plagues the neighborhood…. This is the kind of state action that had damaged minorities--- particularly, the black communities—all over this nation since the beginning of this nation.”

“Historically, these kinds of plants have been placed in communities where there are people of color, low income.”

“So, I did not see anything showing that you made any effort to identify whether this was an environmental justice community, whether there is environmental justice impact from this.”

“The communities of Fairmont Heights and Cedar Heights, historic African-American communities, border the industrial area to the West and South, respectively. Approximately 96% of the residents in the communities immediately surrounding the industrial park are minorities.”

*Response*

The Department’s regulatory focus in evaluating an application for a permit for the construction of an air pollution source is limited to air quality impacts associated with the equipment presented in the application. Water, land use, solid waste, noise and other such issues are not considered within the context of the air quality permit application review, but are or may be considered in conjunction with other required MDE, state or local permits. As part of its evaluation of the air quality permit application, the Department reviews technical information contained in both the application and the Department’s files and in published reference materials. A determination is then made as to whether the estimated emissions from the equipment under review will or will not cause or create:

1. A violation of any of the National Ambient Air Quality Standards (for federal criteria pollutants) or regulatory requirements associated with those standards.
2. An adverse effect on public health (for toxic air pollutants).
3. A nuisance.

Cumulative air quality impacts for federal criteria pollutants are not taken into account directly, except in the case of very large sources whose emissions could possibly cause a significant deterioration in air quality. Cumulative impacts for criteria pollutants relative to existing sources are taken into account indirectly in that the emissions from all existing sources are reflected in the ambient air pollutant concentrations measured by monitors located around the state. From a permit review standpoint, the monitored value for a criteria pollutant is considered to be a background level (more detail regarding this is provided in the next paragraph). If an existing source or a collection of existing sources has an adverse impact on air quality it would be reflected in the monitoring data.

Cumulative impacts associated with toxic air pollutants are also not taken into account directly, but are done so indirectly in the setting of the standard: the regulatory standards established for toxic air pollutants are set conservatively (1/100th of the worker safety level) to, among other things, account for the presence of multiple sources. For criteria pollutants, the Department reviews modeling information (or conducts its own modeling) and determines the maximum ambient pollutant concentration that the proposed equipment is expected to generate. This maximum concentration is then added to the background (monitored) concentration to determine an overall estimated impact. If the overall impact is estimated to be below the federal ambient air quality standard, the determination is that the equipment will not adversely impact air quality.

For toxic air pollutants, the Department reviews modeling information to determine whether the maximum ground-level concentration is below state regulatory standards, which are protective of public health. If the modeling determines that the maximum concentration is below the standards, the Department’s conclusion is that the equipment will not harm public health. For Aggregate Industries, the conclusion reached by the Department is that the emissions from the facility would not cause a violation of any ambient air quality standard and the maximum concentration of any toxic air pollutant would be below any threshold that the Department considers injurious to public health.

With regard to Environmental Justice, the Maryland Advisory Council on Environmental Justice, which had been charged with examining a wide variety of issues related to environmental justice, has prepared a report addressing various sub issues associated with the broader issue of environmental justice. A copy can be provided upon request. The report does not provide guidance on tackling environmental justice issues at the project level. Also, the Council’s charge does not include review of individual projects.

Currently, data and data evaluation tools for multiple pollutant effects are not fully developed and the science needed to determine whether a negative health impact will occur in certain situations does not yet exist. Also, there is no consensus on what data are needed and what evaluation mechanisms to use to meaningfully assess the health of an area and its residents and to determine whether the health of the assessed community is disproportionate to that of other communities. The Department, as a result, is limited to evaluating projects on an individual basis and strictly on the basis of their technical merits relative to meeting existing regulatory requirements.

We do, however, recognize that the communities of Fairmont Heights and Cedar Heights have had a longstanding concern about the impacts that the neighboring businesses may have on their health and welfare.  With this recognition in mind, the Department has recently been collaborating with Prince George’s County to evaluate what measures can be put in place to better oversee the operations of the neighboring companies, as neither level of government is able to provide 24-hour oversight.  Our combined efforts are aimed at securing commitments from the companies to operate full time in a manner that minimizes adverse impacts to the communities and to begin to consider operational measures that go beyond the current practices to control dust and to also consider measures that may help address issues that are beyond our regulatory authorities, such as trucking related matters and noise.  The collaborative effort is ongoing.  As the process unfolds and measures are firmly developed and agreed to, the agencies intend to then meet with community representatives to share the information and to seek their input.

1. **Public Notice Issues**

*Comments*

“…a better job could have been applied here publicizing the meeting.”

*Response*

In response to citizen concerns expressed at the first hearing, the Department scheduled a second public hearing on this permit. The two hearings were held in the evening on October 26, 2015 and December 10, 2015. The public comment period was also extended to January 8, 2016 to allow additional time for submittal of written comments.

1. **Enforcement/Compliance Issues**

*Comments*

“Prince George’s County repeatedly receives complaints about dust rubble, and truck traffic in the area and MDE should consider these longstanding concerns when setting permit conditions.”

*Response*

The Department possesses the necessary legal tools to require the company to operate properly so as to comply with applicable environmental laws and regulations. Although air quality permits contain conditions requiring companies to conduct monitoring, reporting and record keeping, these are not the only methods by which the Department determines compliance. The Department also conducts announced and unannounced inspections to ensure that a company is operating in compliance with air pollution control requirements. 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.

1. **Ambient Air Monitoring**

*Comments*

“Air quality in the local area bothers local residents and adding this facility and many truck trips per day to the industrial area will only make the problem worse.”

“Air quality in the local area is not monitored, even with so many sources of particulate emissions.”

*Response*

Maryland is required by the Clean Air Act to install and maintain an ambient air quality network. The Act requires 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 (PM10, PM2.5). 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). 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 of monitoring stations and the placement of the stations. Although political boundaries have some consideration, stations are not established on a county-by-county basis. The monitoring system is supported by federal funding, and the funding, which is limited, is not available to support monitoring activities that do not comport with federal ambient monitoring criteria.

The monitoring network was initially established to determine compliance with the NAAQS, and the network in place serves that purpose. The network was not established to monitor pollution from individual sources. Maryland’s Air Monitoring network is audited by the state and EPA on a regular schedule and has been found to be very reliable in producing valid air quality data. At this time, EPA is examining the network and evaluating how to improve it.

There are various sites throughout Maryland that monitor for carbon monoxide (CO), nitrogen dioxide (NO2) and sulfur dioxide (SO2) on an hourly interval, 24 hours a day, 365 days a year. There are other sites that monitor for ozone (O3), but do so only during Maryland’s EPA designated ozone season, April 1 through September 30. During the ozone season, monitoring for ozone takes place on an hourly interval, 24 hours a day, seven days a week. The monitored data is collected using a central data polling and collection system. This system polls the various sites periodically and telemeters the data to the Department.

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 state Auditors on a set schedule and by EPA auditors. 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.

ARMA’s policy for requests to set up facility specific monitoring has historically been to deny the requests based on the difficulties associated with facility specific monitoring and the lack of available staff and funds. First and foremost, ambient monitors require a source of electricity and access to a source of power is often not readily available. Secondly, security of the monitoring equipment is a serious concern because the sites are unmanned and are susceptible to vandalism. Because the monitoring equipment is very expensive, it is only prudent that they be located at a secure site. Finally, if the goal of ambient monitoring is to determine the impact of a single facility, a network of monitors is necessary. Specifically, a ring of monitors is needed to collect pollutants both upwind and downwind of the facility in order to separate background contributions from the total measured concentrations. The need for multiple monitoring sites compounds the logistics of finding power and providing security for the sites.

The Department can make a reasonable determination of off-site concentrations of air pollutants surrounding a facility by modeling the emissions from the facility and adding this concentration to the concentration of the pollutants measured at one or more of the Department’s established ambient monitoring sites.

It has been established that the current network of ambient air monitors that the Department operates provides an adequate measure of air pollutant concentrations across the state. For example a few citizens that lived in an area surrounding a stone quarry near Havre de Grace, Maryland expressed serious concerns that particulate emissions from the quarry were endangering public health. The owners of the quarry set up ambient monitors to measure ambient concentrations of particulate matter in order to address the public’s concerns. Ambient monitoring was conducted for over a year beginning in early 1997. The results of the ambient monitoring showed that the ambient concentrations of particulate matter in the area surrounding the quarry were essentially the same as was measured at the Department’s monitoring sites across the state. The concentrations were actually lower than in urban areas of the state. In 2006, the issue by the local citizens was raised again during a permitting hearing. The citizens believed that monitoring in 1997 would not be reflective of current conditions. Ambient monitors were once again set up to measure particulate matter concentrations. The results once again confirmed that the particulate matter concentrations around the quarry are essentially the same as the concentrations measured at the Department’s ambient monitoring sites. Again the concentrations were lower than in urban areas. By using mathematical air dispersion models, the Department is able to conservatively estimate the contribution of air pollution from a specific facility on the surrounding area by adding the modeled increases to the measured concentrations from the Department ambient air monitoring network.

With regards to the comment about any pending plans by the Department for the installation of new ambient monitoring stations around the state, there are no plans to add additional air monitoring stations beyond the second near-road NO2 monitoring station required for the Baltimore metropolitan area which became operational in August 2015.

1. **Toxic Air Pollution**

*Comments*

“AI’s RAP crushing facility has the potential to emit toxic air pollutants, especially since certain types of asphalt are coated with toxic coal tar sealant.”

“AI estimated in its permit application that the facility would emit 0.00295383 pounds of crystalline silica per hour. However, MDE’s fact sheet indicated that this facility will emit a maximum of 0.00027 pounds per hour and did not explain the reason for the dramatic difference.”

“If the estimated emissions of crystalline silica in the application are correct, then MDE should require the facility to model its dispersion to ensure the emissions from the facility will not endanger the health of local residents.”

*Response*

The proposed plant will mechanically process reclaimed asphalt pavement (RAP) at outdoor, ambient temperatures. The RAP will not be heated to temperatures that could cause the RAP to release fumes of toxic air pollutants contained in coal tar sealant.

The proposed plant is a source of respirable crystalline silica, a state regulated toxic air pollutant. Respirable crystalline silica is a component of RAP that can be emitted when the RAP 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 RAP material. This method is consistently used by the Department to estimate emissions of crystalline silica from RAP crushing and screening plants in Maryland. Using this method, the Department’s estimated that the proposed project would emit 0.00027 pounds of respirable crystalline silica per hour. The Department then used the U.S. EPA approved SCREEN3 model to predict the maximum off-site concentration of respirable crystalline silica based on this emissions estimate. The model predicted a maximum off-site, eight-hour average concentration of 0.015 micrograms per cubic meter which is less than the eight-hour screening level for respirable crystalline silica of 0.25 micrograms per cubic meter.

Aggregate Industries used a different method to determine the emissions of respirable crystalline silica from the proposed plant. The emissions estimate was based on U.S. EPA approved emissions factors for both PM-10 and PM 2.5 (particulate matter with a nominal diameter of 2.5 micrometers or less) for crushing and screening plants and an average respirable crystalline silica fraction in RAP. This resulted in an emissions estimate of 0.00295383 pounds of respirable crystalline silica per hour, an order of magnitude higher than the Department’s estimate. The method that Aggregate Industries used to estimate emissions of respirable crystalline silica emissions is not consistent with the Department’s method and therefore, it was not presented in the Department’s Tentative Determination and Fact Sheet.

However, it should be noted that even at an emissions rate of 0.00295383 pounds of respirable crystalline silica per hour, the corresponding maximum off-site, eight-hour average concentration is 0.16 micrograms per cubic meter, which is still less than the eight-hour screening level for respirable crystalline silica of 0.25 micrograms per cubic meter.

These emissions estimates provided by the Department and Aggregate Industries are used to demonstrate that the proposed plant will comply with applicable air quality regulations at worst case operating conditions, but they do not represent enforceable numeric limits or actual emissions. Aggregate Industries 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.

1. **Concrete Batch Plant- Special Exception SE-4502**

*Comments*

“In 2008, Prince George’s County approved a zoning Special Exception to construct a new concrete batching plant under the condition that it conduct an air quality analysis of the area. This study has yet to be started much less completed.”

“The Maryland-National Capital Park and Planning Commission (M-NCPPC) and the Prince George’s County Council issued Special Exception Approval SE-4502 for a concrete batching plant at 5800 Sheriff Road. This was approved in 2008. DPIE recommends that MDE require applicant to provide a written narrative to explain compliance with all conditions of the Special Exception Approval SE-4502.”

*Response*

These comments are related to a separate facility that is not the subject of the air quality permit in question. The Department, however, is working with Prince George’s County to try and improve communication between County agencies and the state so that these types of issues can be addressed by the agency that has the appropriate authorities to deal with the particular concern.

1. **Monitoring Requirements**

*Comments*

“I also didn’t see anything specific about what continuous emission monitors will be used… You can require that in any kind of air permit that they continuously monitor the site and you can actually know if they’re in compliance.”

“”MDE should explicitly require, both in this permit and the permit to operate, regular performance tests to ensure that the facility is not emitting more than 12% opacity from the crusher and 7% opacity from all other fugitive sources.”

*Response*

Continuous emissions monitors and continuous opacity monitors are used for point sources where emissions are vented through a duct or a stack prior to discharging to the atmosphere. The monitors are installed inside the duct or stack to monitor emissions prior to discharge.

The proposed plant is a fugitive source of dust emissions. Continuous emissions or opacity monitors cannot be used to monitor emissions from this type of source. To demonstrate compliance with applicable opacity and particulate matter requirements, Aggregate Industries must conduct initial opacity observation tests as specified in the permit. Subsequent opacity observations will be conducted by inspectors from the Department’s Air Quality Compliance Program to confirm continuous compliance.

1. **State Permit to Operate**

*Comments*

“…the Clients request that, should MDE issue the permit to construct and should the facility apply for a permit to operate, MDE provide the draft permit to the public for comment.”

*Response*

The State Permit to Operate is not subject to expanded public participation. Conditions from the permit to construct (which is subject to public comment) will be carried over into the permit to operate when and if this facility is constructed and commences operation.

1. **Water Issues**

*Comments*

“The run-off goes into the Anacostia River, the most polluted river in America, and it’s creating nothing but problems over there.”

*Response*

The Aggregate Industries site has a current General Discharge Permit 10MM issued by the Maryland Department of the Environment for the covered operations of the site. The purpose of the General Discharge Permit is to insure that all waters leaving the site meet or exceed the state standards to protect the waters of the state.

1. **Miscellaneous Issues**

*Comments*

“DPIE recommends that MDE condition the permit to require that the permittee secure a County permit for hauling across County roads and upgrading County roadways.”

“And I just want to present the concept to MDE that it should include the Prince George’s County Health Department, as we are the local agency that’s going to receive the complaints from the community that are filed with the county. And we have the experience and the expertise to respond to those kinds of complaints.”

*Response*

On March 10, 2016 the Department met with the Prince George’s Department of the Environment, Prince George’s Health Department, Prince George’s Department of the Permitting, Inspections and Enforcement, Maryland Capital National Parks and Planning, in order to better coordinate our efforts in use, permitting and monitoring of facilities in Prince George’s County in general and Sheriff Road specifically.

Prince George’s County Health Department has been included in the permit as an agency that may be granted access to the Permittee’s property.