

Answers to Community Questions
Posed at the 5/15/2006 Community Meeting

Notes:

1. Questions have been transcribed exactly as they appear on the cards received.
2. Each card we received was given a number; if the card had multiple questions, those questions are broken out under the card number (Q1, Q2, etc.)
3. In early versions of these answers, the numbering will not be sequential. Some questions may have been skipped in early postings while City staff, the applicant or a consultant was working on an answer.
4. The entity answering the question is referenced in [brackets] When multiple parties respond to a question, each party's portion of the answer is prefaced by text in [brackets] indicating the party who is responding.
5. Check back to see if additional questions/answers are posted or additional information is provided for questions previously answered.

1. *Q: Has the City assess[ed] the expected impact on appraisal values should the SUP be approved? Based on appraisal guidance this type of action should be considered when appraisals are completed at the first assessment period.*

A: [Provided by the City] The City assumes this question has to do with tax assessments, rather than appraisals in the context of a sale. City tax assessments are based on large numbers of sales that are analyzed to determine values for large groups of properties. An individual sales price is the actual price a buyer pays for a particular property. While the individual sales price is one indicator of market value, there are numerous additional sales in the same general area that are also relied upon to determine any specific assessment. Given this process, if an amended SUP for the asphalt plant has the impact of lowering sales prices in the area, then that will be reflected in subsequent assessments.

2. *Q: All the "proposed landscaping" photos did not show the taller proposed stacks. Why can't we see them? Please show the real view Virginia Paving will create!*

A: [Provided by Virginia Paving] Virginia Paving will provide rendered photos of the stack additions on the Lane Construction website (<http://www.laneconstruct.com>) as soon as they are completed. See also, No. 26, Q2 answer below.

3. *Q: What taxes are paid by Virginia Paving? [Please answer for the following years] 1995, 2000 and 2005*

A: [Provided by Virginia Paving] In 2005 Virginia Paving paid \$293,972.10 in taxes. They did not own the plant in 1995 or 2000.

4. *Q: When will the Cameron Station Civic Association get a response to their letter to the Mayor and City Council dated October 12, 2005 which requested, with respect to the City Attorney's letter dated October 26, 2004 to Virginia [Paving], a document listing "each and every one of the 22 violations in the October 26, 2004 City Attorney letter, identifying remedial actions being taken on each and every violation, identifying time frames for completion of remedial actions on each and every violation and sets forth which specific department or individual is responsible for ensuring that such remedial action has been completed?"*

A: [Provided by the City] The City has provided the Cameron Station Civic Association with Code Enforcement's September 12, 2005 Re-Inspection Report, both as part of a memo to Council in September of 2005 and separately. In addition, the City has prepared a chart matching the Code violations listed in the October 2004 letter with the remedial steps listed in the September 2005 Re-Inspection Report. This question has been asked and answered repeatedly – the Code violations listed in the October 2004 letter have been addressed to the satisfaction of Code Enforcement and the SUP issues identified in the letter are part of the SUP process that is ongoing.

5. *Q: Up until very recently, there were times when the odor emissions were so noxious that we had to close our windows. At these times, the wind was blowing from the direction of the plant. This was always at night, usually a weekend night when no enforcement was available. So, what can be done if this continues when no one is available to witness this from the City?*

A: [Provided by Virginia Paving] First, the plant is not operated any differently during nighttime hours or on the weekend than it is during the daytime. Second, Virginia Paving has already installed an anti-odor additive injection system to treat some possible odor points and will install further anti-odor equipment as part of the SUP permit conditions. The fugitive emissions system should have a significant impact and will capture and treat possible odor causing emissions from the silo top area and the truck loading area which is believed to be a source of odor to the neighbors. Condensers will be installed on asphalt tanks to help as well. As you are aware, Virginia Paving has had limited night shift operations since June 2005. The Plant Manager's cell phone number is available and was distributed at the various community association meetings to help address any complaints as they arose. Virginia Paving's goal in providing this emergency contact number is to determine what, if any, of their operations were on-going when particular odor complaints are made in order to modify specific operations.

[Provided by City] The extended hours as requested by VA Paving apply only for months between April 1 through October 31. Outside of these months, no nighttime work is being requested. Additionally, within the months where nighttime work is being requested, there will be no nighttime work on Fridays and Saturdays between the hours of 7 pm and 12 midnight. The proposed SUP requires that the operations be carried out in a manner that prevent migration of odors off the property. There are several specific controls and operational practices proposed within the staff recommendations that are intended to address the odor issues. These include, but are not limited to, installation of enclosures on loadout areas, conveyor system, transfer points, and product silo vents that will all be ducted to “Blue smoke filtration system”. Additionally low odor anti strip additive will be added as part of the process to reduce odors. In the event that asphalt odors from the operations are experienced in the community, there will be two 24 hour numbers provided to the community. One will be Virginia Paving’s Plant Manager. The Plant manager will be required to immediately identify the source of odors at the plant and take immediate actions to abate. Additionally, a 24 hour City nuisance abatement hotline number 703-836-0041 is also available to the community. The responding Fire Marshall, upon determining the source of the odors can take appropriate action including directing the Plant Manager to stop odor causing activities. The complaints will be recorded, and because meteorological data is also being proposed to be recorded as part of this SUP, it will be possible to relate the operations at the plant and prevailing wind directions to the location of the complaint. Upon validation of the complaint and determination that it was caused by VA Paving operations, appropriate enforcement actions can also be initiated.

6. *Q1: If Virginia Paving is not a power plant then why do they continuously compare themselves to one?*

A: [Provided by Virginia Paving] Virginia Paving does not continuously compare itself to a power plant. However, when Virginia Paving is compared to a power plant in the press and in other public forums, they feel compelled to show the fact that there is no comparison.

Q2: Instead of inspections once every 3 years, why not unscheduled visits at least 3 times per year?

[Provided by City] Historically, Alexandria - Division of Environmental Quality has inspected the facility one to two times a year for purposes of compliance with the VA state-operating permit. Additionally plant inspections are done as part of complaint investigations and are typically unannounced. As part of the proposed conditions of the amendment to the Special Use Permit, the facility is required to

have rigorous record keeping and reporting requirements. Additionally, the Division of Environmental Quality plans 3-4 inspections at this facility for purposes of insuring compliance with the environmental requirements within the special use permit and State Operating Permit.

Q3: Can the SUP be limited to 5 years so that it can be re-evaluated for re-approval at that time?

A: [Provided by the City] The City will consider having a fixed re-evaluation date for this SUP. SUP conditions are recommended by staff and are ultimately determined by City Council.

Q4: How can VA Paving's short/long term goals work with Alexandria's 10-20 year redevelopment plans of the West End and Van Dorn areas?

A: [Provided by the City] The City's current land use and zoning plan shows industrial use for the Virginia Paving site as well as for numerous other sites in the vicinity of Virginia Paving. The decision as to what the future land use and zoning should be for this area will be determined as part of a separate process, known as the Small Area Planning process. The Small Area Planning process is a comprehensive process, involving citizens and businesses in the area, that will look at and evaluate land use, transportation, recreation, open space and other community issues and make recommendations to the Planning Commission and City Council on land use and zoning policies for the future, taking into account existing uses and compatibility issues. It is anticipated that the Small Area Planning process for this part of the City will begin in mid 2007.

7. *Q1: Why is there only one public meeting on this topic? The Brenman Park playground has required 3 public meetings to date – this seems more important. More public meetings would allow those of us with kids to attend – instead of hiring babysitters. Most spouses don't get home until 7:30 or later. A weekend meeting would allow more residents to be informed and share their input.*

A: [Provided by the City] As a threshold matter, this application has been pending for 14 months. During that time, both the City and the applicant have met and shared information extensively with leaders of community organizations representing communities near the plant. Secondly, after the initial community meeting, the applicant worked with the community and the City to extend the time before this matter comes before Planning Commission and City Council. With this additional time, additional opportunities for community input, including the possibility of additional community meetings, are available.

Q2: If the SUP isn't awarded, will VA Paving still make the environmental improvements outlined in the SUP – if not, why not?

A: [Provided by Virginia Paving] The action by the city restricting operations to only daytime has drastically impacted Virginia Paving revenues. However, Virginia Paving has already committed to and implemented many environmental improvements on the site. Investing in unprecedented environmental studies of their plant emissions and other areas of concern shows their commitment to the community and the process. However, many of the improvements outlined in the SUP conditions are major investments that are above and beyond those required for compliance with their existing permits and with existing environmental regulations that control asphalt production plants. A commitment from the city and the community to allow nighttime operations will help restore revenues and will permit Virginia Paving to proceed with the additional improvements the extensive studies identified would make their operation even more environmentally efficient.

[Provided by the City] The Virginia Department of Environmental Quality is the primary regulatory agency on environmental issues. The facility is currently in compliance with their Virginia DEQ state operating permit. The City's Special Use Permit (1960) under which they currently operate has two conditions that the facility is currently not in compliance with: one related to prohibiting trucks leaving the site after hours of darkness, and the other relates to providing stormwater treatment. If the amendment is denied, VA Paving will still be required to comply with the conditions of the existing Special Use Permit and the City will encourage, but can not require other additional conditions that are recommended as part of the proposed SUP. Apart from the conditions related to night-time vehicular activity and storm water treatment, if the SUP is not amended, the City really has little legal ability for requiring many of the things it is currently asking the applicant to do.

8. *Q: VA Paving should fund pedestrian and bicycle access improvements on Van Dorn from Pickett St. to Eisenhower Ave. (both sides).*

A: [Provided by Virginia Paving] Virginia Paving has stated they will support efforts to construct pedestrian and bike paths in the city as the development of these plans proceeds. As most of the paths and walkways are asphalt covered, the supply of asphalt material offers an excellent opportunity for Virginia Paving to "give back" to the community.

9. *Q: How many more community meetings will we have to further discuss Va Paving concerns?*

A: [Provided by the City] After the initial community meeting, the applicant worked with the community and the City to extend the time before this matter

comes before Planning Commission and City Council. With this additional time, additional opportunities for community input, including the possibility of additional community meetings, are available.

10. *Q: How will City monitor enforcement of conditions?*

A: [Provided by the City] Built into the proposed SUP conditions are numerous opportunities for both scheduled and unscheduled inspection, review and enforcement by City staff. Moreover, under the proposed SUP conditions, the applicant would have extensive record-keeping requirements to provide the City with specific records to track and investigate plant operations in the context of complaints and compliance reviews. In addition, all SUP's including this one, will be regularly reviewed for compliance, rather than waiting for complaints, as had been the prior practice. See also, the City's response to No. 6, Q 2.

In the event of a zoning violation, Section 11-200, *et seq.*, of the City zoning ordinance outlines the City's enforcement procedures. Specifically, Section 11-204 discusses the City's options for action upon violation of a specific provision of the zoning ordinance:

(A) If an authorized official shall finds that any of the provisions of this ordinance are being violated, he may notify in writing the owner of the property, his agent, or those persons who control or maintain the property responsible for such violation, indicating the nature of the violation, and, where the violation is correctable, ordering the action necessary to correct it. He may order discontinuance of illegal use of land, buildings or structures; removal of illegal buildings or structures or of additions, alterations or structural changes thereto; discontinuance of any illegal work being done; or may take any other action that is necessary to correct the violation.

(B) If the violation of the ordinance is not corrected within ten days of the day that notification of violation was given, the official may cause appropriate action or proceedings to be instituted and prosecuted to prevent such unlawful act and to restrain, correct or abate such violation or to prevent any unlawful act, conduct or use of such property.

For failure to comply with the conditions of an SUP, Section 11-506(A) of the zoning ordinance states that after notice and a public hearing, the city council may revoke or suspend any special use permit approved by it.

Beyond the enforcement regulations in the zoning ordinance set forth above, SUP's typically include the following condition, allowing staff to bring the case

back to city council one year after the initial approval if there are any issues, so that additional requirements conditions or limitations can be considered:

"The Director of Planning and Zoning shall review the special use permit after it has been operational for one year, and shall docket the matter for consideration by the Planning Commission and City Council if (a) there have been documented violations of the permit conditions which were not corrected immediately, constitute repeat violations or which create a direct and immediate adverse zoning impact on the surrounding community; (b) the director has received a request from any person to docket the permit for review as the result of a complaint that rises to the level of a violation of the permit conditions, (c) the director has determined that there are problems with the operation of the use and that new or revised conditions are needed."

Since the existing SUP for Virginia Paving is so old, this language is not in place, but we would expect something similar to this to be included in any amendment to the SUP.

12. *Q: When will the City provide an itemized response regarding the code violations, as requested by the Cameron Station Civic Association in its October 12, 2005 letter?*

A: See response to No. 4.

13. *Q: Why wasn't it discussed that the 1960 SUP has a provision that allows the City to shut the plant down for creating a public nuisance and why wasn't that enforced?*

A: [Provided by the City] A public nuisance is an unreasonable interference with a right common to the general public. Unreasonable interference with a public right is could be determined by (a) whether the conduct involves a significant interference with the public health, safety or convenience, or (b) whether the conduct is proscribed by a statute, ordinance or administrative regulation, or (c) whether the conduct is of a continuing nature or has produced a permanent or long-lasting effect, and, as the actor knows or has reason to know, has a significant effect upon the public right. Based upon the scientific data and other information presently before the City, there is no basis for proceeding under a nuisance theory at this time.

14. *Q: I have a question about perception. The knowledge of the existence of the asphalt plant is spreading. The perception is also spreading of its ill effects on the quality of the air in Cameron Station. This area is a rich tax base for the City*

of Alexandria. Aren't you concerned about losing that tax base when the price of homes goes down because people won't buy here?

A: [Provided by the City] As set forth in the answer to Question No. 1, the current assessed value of the properties near the plant are determined by actual sales data for many properties in the area. Those sales have all taken place with the full knowledge that the plant is in existence and operational. The City does not expect an amended

15. *Q1: How many idling cars equals Virginia Paving's emissions level (current and proposed)?*

A: [Provided by Virginia Paving] Virginia Paving has submitted a PowerPoint presentation that includes a slide comparing vehicle emissions to the plant. The presentation is available on the application website (<http://www.laneconstruct.com/AboutUs/SUPApplication>) in section 2,C. Vehicle emissions should be a much greater concern than the emissions from Virginia Paving Company.

Q2: How many trucks per hour leave and enter VA Paving a) during current operating hours; and b) under the 1,200,000 tons/year proposal?

A: [Provided by Virginia Paving] Trucks are used to ship the finished product to the paving operations in the area and return recycled asphalt pavement to the plant site. A typical truck hauls 15-20 tons of material per load. During current operating hours approximately 20-25 trucks per hour or 150-250 trucks per day leave the site. Although not expected to be typical, under the 1,200,000 tons/year proposal, approximately 25-35 trucks per hour or 200-300 trucks per day would leave the site. The 1,200,000 tons per year and 10,000 tons per day are maximum case scenarios used for the modeling analysis. Those maximums most likely will never be achieved.

16. *Q: Timeline when inputs accomplished?*

A: [Provided by Virginia Paving] See the timeline submitted to the city under Addendum, section 4 in the presentation on the applicant's website at <http://www.laneconstruct.com/About Us/Environmental.aspx>.

[Provided by the City] The summary of proposed SUP conditions was just that – a summary. Specific conditions, with specific proposed implementation dates for all improvements, will be made available to the community for review and comment in the near future. That being said, the goal of the proposed schedule of implementation of conditions is to require installation of all air quality related controls and practices that were incorporated into the model prior to

raising the production above VA Paving's historical level of 900,000 tons per year to a new annual production cap of 1,200,000 tons. (Note that this is 20% lower than the plant's Virginia DEQ State Operating Permit, which caps the production at 1,500,000 tons.)

17. *Q: I understand that Virginia Paving provides a necessary service at a reasonable price, but nobody likes a loud, ugly, smelly neighbor. Isn't it time to rezone the West End to commercial & residential only? To a lot of residents, we'd be happy to pay extra in the price of City paving contracts if it means that our end of Alexandria would be lovely and peaceful.*

A: [Provided by the City] See response to #6, Question 4.

18. *Q: SUP should require 1) stipulated penalties for violations; if condition violated, payment is immediate; 2) require an Environmental Management System (plan) under ISO 14001; covers many other environmental parameters than permit; 3) require continuous emissions monitors on stacks (CEM); and 4) require automatic extinguishers for fire sources.*

A: [Provided by Virginia Paving] 1) One penalty includes potential revocation of the SUP if conditions are violated. 2) Virginia Paving is already implementing an EMS as part of our commitment to the environment and our neighbors. 3) Visible Emission evaluations by a certified emissions evaluator are the better indicator of proper emission control operation on asphalt plants. These evaluations are done regularly now and Virginia Paving has proposed a condition requiring documented visible emission evaluations on a regular basis as part of the SUP conditions. Monitors will be constructed at Tucker School to assess impacts on a regular basis. 4) Our operations are in compliance with the local and state fire codes. The Fire Marshall performs regular inspections to ensure compliance. Should the codes be modified to include automatic extinguishers, Virginia Paving would comply with the requirements.

[Provided by the City] Regular stack testing is proposed as part of the proposed SUP conditions. Additionally, the City is pursuing the installation of a PM 10 monitor in Cameron Station to enable City to better assess the impacts. CEMs on stacks are typically required on major emission sources. In case of VA Paving, the impact results are from a combination of stack and fugitive emissions. The combined stack testing and ambient monitoring will provide a good dataset of both emissions from the plant and the impacts on the community from the fugitive and stack emissions. Also, please see the answer previously provided to No. 10 regarding zoning and SUP enforcement in general.

19. *Q: Need complete analysis of used oil being burned. Is any of the oil mixed with hazardous waste (as allowed by EPA RCRA regulation)?*

A: [Provided by Virginia Paving] Virginia Paving has analysis certificates for each load of recycled oil being received. The oil consists of vehicle crankcase oil which is filtered and tested before being delivered to Virginia Paving’s plant. It is not mixed with hazardous waste. The SUP proposes limits on oil contaminants stricter than those required by EPA for specification recycled oil.

[Provided by the City] The recycled oil utilized as fuel at the VA Paving plant is a processed oil and conforms to U.S. EPA and Virginia DEQ standards. These standards, shown in the table below, are specified in the plant’s operating permit issued by Virginia DEQ. The table also shows the limits required by the proposed SUP that are more stringent than the Federal and State requirements and also shows the limits proposed in the proposed SUP. The recycled oil burned by VA Paving is not mixed with hazardous waste. A mixture of used oil and hazardous waste is regulated as hazardous waste and not as used oil. Such a mixture is not allowed to be burned at the VA Paving plant.

Parameter	State Limit	Proposed SUP Limit
Arsenic	5	3
Cadmium	2	2
Chromium	10	7
Lead	100	50
Halogens	1,000	1,000
PCB	49	2
Sulfur	0.5%	0.5%

20. Q: *Why not use #2 oil all the time?*

A: [Provided by Virginia Paving] The use of recycled oil at an asphalt plant that is equipped with baghouse air pollution controls provides an optimal facility for properly utilizing this waste stream. The plant burner and preheater are designed for this application allowing for proper combustion of the recycled oil to keep emissions at an acceptable level, and the baghouse efficiently captures metals and other pollutants, minimizing their emissions to the atmosphere. Testing on asphalt plants with proper conditions and controls, such as at Virginia Paving, has determined that recycled oil can emit lower levels of certain pollutants than #2 fuel oil. The waste stream of oil is generated locally from vehicle oil changing stations and therefore it makes sense to utilize it locally. The use of recycled oil, like recycled asphalt, reduces the amount of consumed natural resources. Recycled oil also offers a cost savings over #2 oil which is passed on to the consumer, the taxpayer, through lower finished product costs.

21. Q: *Do we know of any cities across nation that allow asphalt plants near school, residential areas (even if plant there first)?*

A: [Provided by Virginia Paving] There are over 3600 asphalt plants in the country. Many are in urban areas and near schools and residential areas. The fact that schools and residential areas are built near existing plants should serve as an indicator that they are minor sources of emissions. The National Asphalt Pavement Association (www.hotmix.org) is a source of information on asphalt plants nationally. The modeling was based on high production and still showed acceptably small impacts. Virginia Paving will provide further information as soon as they complete their review of similar operations in urban areas.

[Provided by the City] Many counties and cities have recently adopted ordinances related to the location of asphalt plants relative to schools and residences. These ordinances apply to **new** asphalt plants. Existing asphalt plants are typically allowed to continue operation and are considered to be grandfathered from the ordinance. For example, the Watauga County, North Carolina ordinance states that a pre-existing asphalt plant “which does not conform to this ordinance may continue so long as the use is not discontinued for more than two years.”

These ordinances prevent construction of new asphalt plants near residences, schools, hospitals, child-care centers, etc. For example, Ashe County, North Carolina, prohibits a new asphalt plant from locating within 1,000 feet of a residence. Similarly, Ashe and Jackson Counties in North Carolina prohibit a new asphalt plant from locating within 1,320 feet (¼-mile) of a school or daycare facility. Watauga County, North Carolina requires that a new plant be a minimum distance of 1,500 feet from a school or daycare facility.

22. *Q1: In the environmental monitoring and modeling, what are the initial conditions or assumptions of influencing factors (i.e. prevailing wind height speed and direction, air temperature- day and night – humidity, etc.?)*

A: [Provided by Virginia Paving] Consistent with standard, regulatory evaluations, initial air quality modeling (performed in September 2005) utilized a five-year set of meteorological data from the Washington National Airport (the closest official meteorological station to Alexandria) to capture the long-term array of meteorological data. The Washington National Airport surface observations were processed along with upper air data collected at Sterling, Virginia, within the U.S. EPA’s PCRAMMET program.

Since multiple pollutants were modeled, the ISCST3 model was run with nominal emission rates for each source, and the results were scaled according to pollutant-specific emission rates. Outputs were generated for a variety of different averaging periods (1-hour, 3-hour, 8-hour, 24-hour, and long-term), consistent with pollutant-specific standards and toxicity data.

Pollutant concentrations were modeled at a variety of receptor locations in the vicinity of the Virginia Paving Company facility. Categories of receptors included residential, industrial/commercial, and special interest (schools and parks). The nearby residential and industrial/commercial receptor areas were modeled using a grid of locations; special receptors were modeled at single locations. The base elevation of each receptor was determined using the electronic topographic maps and TOPO! software (National Geographic Society). Additionally, flagpole receptors were considered at various locations, since much of the housing stock in the Cameron Station and Summer's Grove developments is multistory.

Additional air quality modeling, performed in December 2005, utilized the AERMOD modeling system. *Per* U.S. EPA, AERMOD is "a steady-state plume model that incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of both surface and elevated sources, and both simple and complex terrain." It is the regulatory model that EPA currently prefers for this type of application. This additional modeling was for receptors that included: (1) an outer polar grid that extends from distances of 300 meters to 2,000 meters (~1,000 ft to 1¼ miles) from the main asphalt plant, (2) an intermediate Cartesian grid set at a spacing of 50 meters (160 ft) at locations close to the asphalt plant property, and (3) a fence-line grid of locations along the perimeter of the asphalt plant property. Receptors were spaced at close intervals so that the highest modeled impacts of the facility could be identified.

[Provided by the City] The air quality impacts analysis uses the US EPA's AERMOD model. AERMOD uses a pre-processor called AERMET that reads in local meteorological and surface conditions. For this analysis, AERMET processed twice-daily samples of upper air data from Dulles Airport, the closest upper air station, and hourly surface data from Reagan National Airport, the closest surface air station. Upper air and surface station data are processed to provide hourly data that AERMOD uses, including wind speed, direction, atmospheric stability, air temperature, humidity, and solar radiative effects. Surface conditions are defined in AERMOD by another processor, called AERMAP, that reads US Geological Survey data files to describe the underlying terrain in sectors around the site. Sectors are defined to enclose common land use characteristics. In this case, sectors were defined that enclose the surface conditions consistent with roadways, rivers, residential zoning and wooded area characteristics. These surface characteristics impact the way that pollutants disperse, so it is important that they represent the site's features.

Q2: Is City tax revenue (or other) related to plant production?

A: [Provided by the City.] Yes and no – one component of taxes, real estate taxes, are based upon the value of the property as assessed and is not related to

revenues. Another component of taxes, business license taxes, are based upon revenues and could change based upon changes in revenue.

Q3: If the SUP “improvements” are so beneficial, why is implementation of these improvements contingent upon approval of the SUP?

A: Please see response to No. 7, Q2, above.

23. *Q1: Please provide rationale for not monitoring on the side of Summers Grove. Particulate matter (PM) from VA Paving is so bad that carpets cannot be professionally cleaned from Summers Grove homes. The big piles of dry matter on site on facility is the most likely source of pollution.*

A: [Provided by Virginia Paving] The piles of stone and sand are generally in a moist condition and wind erosion is kept to a minimum. The pile of darker material is Recycled Asphalt Pavement or “old road” which consists of heavier coated particles that are not nearly as susceptible to wind erosion as other materials. Numerous other industrial facilities are located in the vicinity of Virginia Paving, including a crematorium located on Vine Street on the other side of the Van Dorn Metro Station and the train traffic itself would certainly also be another source of emissions.

[Provided by the City] The ambient air quality analysis included simulation of all of the facility’s sources, including fugitive emissions from the recycled asphalt pile on the west side of the facility and from the trucks accessing that pile, which appears to be located approximately due north of Summer’s Grove. The analysis shows, based on simulation of dust emissions from all of the facility’s emissions and five years of local meteorological conditions, that maximum impacts from the facility occur to the northeast of the facility’s fenceline. The selection of the proposed monitoring location was done with the goal of capturing the worst impacts on the community and therefore protective of the rest of the community. The selection of the location was done through a consultative process between the City staff, VA Department of Environmental Quality staff, and the community members and community’s independent consultant. The selected location is very close to that maximum impact point. The intent of the monitoring program is to ensure that the plant’s dust impacts do not violate ambient standards in the community, so it is important that the point of maximum impact be monitored.

24. *Q: Why wasn’t VOC looked at?*

A: [Provided by Virginia Paving] Volatile organic compounds (VOC’s) are a large class of individual compounds, and they were indeed evaluated in the air quality modeling and health risk evaluations that have been performed, both by Cambridge Environmental and by AERO Engineering. These evaluations, which began in the summer of 2005, have been reviewed by David Sullivan, City staff,

and staff's consultants. In keeping with standard, accepted, air quality modeling and health risk assessment, impacts from each individual VOC were modeled and compared to health-based guidelines. The detailed calculations were presented in spreadsheets and other documentation, which was extensively reviewed. More broadly, according to USEPA figures (AirData), highway vehicles operating just within the City of Alexandria contribute some 1,800 tons of VOC's per year, and these have not received any comparable level of evaluation.

[Provided by the City] The impacts of volatile organic compounds, called VOCs, were evaluated in the air quality analysis. VOCs are an entire class of pollutants, not just one pollutant. Their common characteristic, for air pollutant analyses, is that they are photo-chemically reactive and that they are composed of carbon-based molecular chains, excluding certain carbon-chain compounds that are either not air pollutants or are regulated as criteria pollutants. Many different compounds that Virginia Paving emits fall into this definition.

To evaluate the quantities of VOC, the City's consultant first calculated the facility's maximum potential emissions under worst-case conditions for each of the existing and the proposed SUP scenario. Emissions were calculated using different factors for each of the different types of sources at the facility. More specifically, for the asphalt plants, VOC rates that these sources used are limited to within the VDEQ air permit. These factors were confirmed through testing. For the other types of sources, US EPA's AP-42 emission factors were used, which are derived through testing of large numbers of sources. This includes mobile sources. A total VOC annual emission rate in tons was then calculated for the facility. This total annual emission rate is compared against major source levels that are defined by VDEQ according to the existing air quality in the area

To evaluate the impacts of VOCs, US EPA's AP-42 emission factors were used to determine the emission rate of each separate VOC compound. For each VOC compound that each source category emits, i.e, from the plants, mobile sources or trucks, and asphalt storage tanks, calculations were made as to how each emission rate compared to each of the respective health-based Significant Ambient Air Concentration (SAAC) guideline level. These SAAC guideline levels are specified for hazardous air pollutants (HAPs) that are regulated by US EPA. Many VOC compounds are also HAPs, and therefore these SAAC guideline levels were used to determine how impacts compare to health-based standards for many VOC compounds. For those pollutants for which emissions were highest in comparison to the standard, i.e, for those pollutants with the greatest potential to violate standards, short-term and annual emission rates were calculated and AERMOD used to determine impacts. These pollutants are formaldehyde, acrolein, benzene, acetaldehyde, and quinone. Comparisons were made of the maximum potential impacts for each of these pollutants against the SAAC guidelines. For each pollutant, impacts fall below SAAC guidelines.

25. *Q: Why require taller stack height instead of having more source-level controls?*

A: [Provided by Virginia Paving] Taller stack heights, source level controls and best management practices will all be combined to minimize impacts.

[Provided by the City] The question is related to the proposed SUP scenario. While this stack height increase does enhance the dispersion of pollutants from Virginia Paving's dryer stacks, it only affects the stack emissions. The fugitive emissions from the plant are a significant portion of the total emissions. This major component of the total emissions i.e. fugitive emissions are source controlled. These source controls include use of lower sulfur fuel oil in the heater and mobile sources, best management practices that reduce fugitive dust from the roadways and aggregate handling processes, an emission control system around the load-out and asphalt storage tanks, and daily and annual production limitations.

26. *Q1: The EPA numbers quoted by VA Paving; when were they generated (the date)?*

A: [Provided by Virginia Paving] The EPA data are from the year 2001 and are specific to Alexandria. See the applicant's PowerPoint presentation on the City's website for details.

Q2: How much higher will the stack be? Will it be only one stack?

A: [Provided by Virginia Paving] There are two baghouse stacks; they will each be 20 meters high. The currently are approximately 14 meters high, so this will be an increase of 6 meters or about 20'.

27. *Q1: Is the 1.69 ton/yr. VOC emission number calculated using EPA factors from AP-42? If not, how confident are you with your utilized factors?*

A: [Provided by Virginia Paving] The 1.69 tons/year VOC number is from actual stack testing performed in 2004. AP-42 is usually conservative and is used when actual test data are not available. The air quality modeling and health evaluation work for *individual* VOC's in fact utilized the AP-42 factors: VOC's as a class of compounds are not regulated pollutants (the way that SO₂ and CO are, for example), and are best modeled according to their individual constituents, which is what was done in this case.

Q2: What are all of the pollutants produced by the burning of 1.7 gallons of waste oil per ton of produced asphalt? Use AP-42 factors.

A: [Provided by Virginia Paving] This answer is set forth in the applicant's power point presentation available on both the Lane Construction and City Planning Commission web sites.

28. *Q: I attended the Virginia Paving SUP community meeting last night and walked away unsatisfied with the City's presentation. As a resident of Summers Grove, my main area of concern about the plant is the high volume of truck traffic that currently serves the asphalt plant and other area businesses. I felt like both the city and Virginia Paving gloss over the truck situation because it's harder to control than a central source of air pollution.*

We are surrounded by businesses served by very large trucks. On our east side there is the waste-to-energy plant visited by hundreds of garbage trucks a week. To the north of us there is Virginia Paving and Vulcan Aggregates. And even farther to the east is the UPS and FedEx distribution centers. It's not the fact that the trucks are there, but it's the way they are driven which is infuriating. Specifically, the noise from engine brakes is out of control. Other than laziness, there is absolutely no reason for these drivers to use their engine brakes within the city limits if they are driving the speed limit, not tailgating other motorists, and have properly maintained wheel brakes. I invite you to stand on the corner of Eisenhower and Van Dorn from 6:00 AM to 10:00 AM any week day and listen for yourself. You will see that half of the offending trucks are empty which is even more ridiculous.

Why would the city even consider allowing MORE trucks on the area roads by allowing Virginia Paving to increase capacity to 10,000 tons per day? That's almost 50 dump trucks per hour! The only break from the cacophony we get is in the middle of the night and on weekends - and we will lose even this if this SUP is approved.

To solve this problem the city must:

- 1. Enact policies that move towards the long-term goal of reducing heavy truck traffic in residential areas.*
- 2. Think about the problem in its entirety. In order to reduce truck traffic and noise, each source will need to be dealt with separately. By not approving the SUP, the city can deal with a significant offender, Virginia Paving.*
- 3. Enact and vigorously enforce a complete ban on the use of engine brakes within the city limits. Put up large signs with yellow flashing lights on Van Dorn and Eisenhower streets to announce this ordinance.*
- 4. Triple the fines for heavy trucks speeding in residential areas.*

I would appreciate a response to my concerns from the appropriate authority for this issue. Feel free to submit it to Virginia Paving as well if they want a chance to respond to citizens' questions.

A: [Provided by Virginia Paving] The 10,000 tons per day is used for the air modeling to estimate the potential emissions at some elevated level to ensure public safety. Controls on truck operations are generally a training and awareness issue and Virginia Paving has significant training requirements for all of its truck operators. Signs and fines could be an effective control measure. Virginia Paving supports efforts to reduce engine brake usage and the SUP conditions include signage requirements not only in the plant yard but also on Van Dorn Street. We have already erected signs in the plant yard instructing trucks not to use engine brakes. Virginia Paving representatives would be happy to work with the community to improve this situation including standing on the corner with residents and listening for ourselves. Our Environmental Coordinator or Plant Manager will arrange for this meeting at your convenience. We have provided a number for contacting the Plant Manager and Environmental coordinator for whenever these types of issues arise.