

GOVERNMENT OF THE DISTRICT OF COLUMBIA
Department of Energy and Environment

COMMENT RECONCILIATION MEMORANDUM

TO: File

FROM: Stephen S. Ours, P.E. *SSO*
Chief, Permitting Branch

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Environmental Engineer

SUBJECT: **Comment Reconciliation Memo – Roubin & Janeiro, Inc.**

DATE: January 2, 2019

BACKGROUND

On December 4, 2017, the Air Quality Division (AQD) received an application to construct and operate a McCloskey R155 High Energy Screener, with up to three integral conveyors, powered by a 129 hp Caterpillar diesel-fired engine, for processing of recycled asphalt pavement (RAP) at the Roubin & Janeiro, Inc. hot mix asphalt plant site located at 4901 Shepherd Parkway SW.

Public comments for the permit action were solicited from March 23, 2018 through April 23, 2018. One set of comments was submitted by Merrit Drucker, a private citizen residing in the District of Columbia. These comments were received on April 23, 2018 by email. They also included a request for a public hearing.

The request for a public hearing was granted. A public hearing was scheduled for September 17, 2018. This hearing was announced 30 days in advance by publication in the D.C. Register and on the DOEE website. The hearing was held as scheduled. Mr. Drucker appeared at the hearing and testified. His was the only testimony offered at the hearing.

The table below addresses each of the comments Mr. Drucker submitted both in the original set of email comments and in his hearing testimony.

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AIR QUALITY DIVISION RESPONSES TO COMMENTS

All of the following comments were submitted by Merritt Drucker, a private citizen residing in the District of Columbia. In some cases, two variants of a comment were submitted during the public comment period and during the public hearing. Where this is the case, both versions of the comment have been included in the comment column of the table with the date of the comment listed in italics. Where comments were not duplicated, the specific comment submittal is not identified.

Comment No.	Comment Location (pg. no., condition no., etc.)	Comment	AQD Response
1		<p><i>September 17, 2018 Public Hearing</i> <i>Comment:</i> The Permit should contain a requirement for fence line monitoring for PM_{2.5}, and hydrocarbon emissions from the existing asphalt plant. The air monitoring system needs to be put in place and be fully operational before the McCloskey R-155 High Energy Screener is placed into operation, and before the Permit is issued.</p> <p><i>April 23, 2018 Comment Period Emailed</i> <i>Comment:</i> The facility should be required to install and operate air monitoring equipment at the property line or fence line to ensure compliance with the permit conditions.</p>	<p>The existing asphalt plant is already subject to a previously issued, and current, Title V operating permit (issued June 30, 2016). The subject of this comment period and hearing is the screener. This is not a timely comment as it relates to the asphalt plant as a whole.</p> <p>There are no federal or District regulations that require installation of a fence line monitoring system for this operation.</p> <p>The estimated maximum additional emissions of PM_{2.5} and volatile organic compounds (VOCs) from the screener are 3.01 and 0.28 tons per year, respectively. In actual practice, it is highly likely that emissions will be well below these levels because the calculations that are the basis of these estimates assume continuous operation of the unit for eight</p>

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2		<p><i>September 17, 2018 Public Hearing</i> <i>Comment:</i> The permit needs to require that the Permittee obtain a complete Title V modification application before being granted a permit. The length of time allowed (12 months) is far too long. The Title V permit should include permitting for the proposed Portable Screener as well as re-issuance of the Title V permit for the Hot Mix Asphalt Plant.</p> <p><i>April 23, 2018 Comment Period Emailed</i> <i>Comment:</i> The permittee should be required to submit a complete Title V application for this facility within 30 days of the issuance of this permit. They should not be allowed to operate without a current and complete Title</p>	<p>hours per day, six days per week, and 36 weeks per year.</p> <p>These small estimated maximum emission rates, combined with the location of the facility, well away from residences, do not warrant requiring the facility to incur the substantial expense of installing a fence-line monitoring system.</p> <p>Condition (g) of the permit requires that Roubin & Janeiro Inc. applies for a Title V permit amendment within 12 months of issuance of the Chapter 2 permit. This is at least as stringent as the requirement in 20 DCMR 301.1(a)(2) which requires that "A source that becomes subject to the operating permit program established by [20 DCMR Chapter 3] at any time following the effective date [of 20 DCMR Chapter 3] shall file a complete application within twelve (12) months of the date on which the source first becomes subject to the program". This is the regulatory basis for the 12 month deadline. There is no regulatory basis to require submission of a Title V modification application or issuance of a final Title V permit before a permit to construct the source is issued.</p> <p>AQD did, however, note that the regulatory citation had a typographical error. It should have referenced 20 DCMR</p>

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		V permit.	301.1(a)(2) rather than 20 DCMR 301.1(a)(3). This has been corrected. Additionally, review of this comment identified an oversight in the draft permit that has been corrected. Specifically, the equipment covered by this permit should be included in all relevant reporting for the facility, as set forth in the facility's Title V permit. As such, Condition VI(b) has been added to require such reporting.
3		The permit needs to specify specific control measures to be implemented to control the release of PM _{2.5} . At no point in the Permit is PM _{2.5} mentioned or listed as an air pollutant. The permit needs to specify: a. The amount of PM _{2.5} that will be emitted by the facility; b. Specific control measures to ensure no emissions of PM _{2.5} ; c. Fenceline air monitoring for PM _{2.5} , lead, and emissions from the Hot Mix Asphalt Plant.	There are no specific PM _{2.5} (fine particulate matter) emission limits specified in the regulations relevant to this equipment. This permit, as well as the regulations relevant to screener equipment, focuses primarily on fugitive dust control and control of larger diameter particulate matter, with the exception of the regulatory requirement related to emissions from the diesel engine. This is because particulate matter from aggregate screening operations is generally characterized by larger diameter particles. These requirements covering larger diameter particulate matter are extensive (see Conditions II(b) through II(f) of the permit). With the exception of specific visible emissions limits, these requirements take the form of work practices to minimize emissions. For fugitive dust control purposes, work practices are generally considered more effective limits than specific emission limits.

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4	September 17, 2018 Public Hearing Comment: As lead (from past uses of leaded gasoline and from lead wheel weights) is often a contaminant in recycled asphalt pavement, the Permittee needs to require that the Permittee be required to monitor and control lead emissions and lead discharges to waterways.		<p>Regarding the diesel engine, there is a specific particulate matter standard contained in Condition II(a) of the permit. This requirement comes directly from the federal regulations. While the expected diameter is not specified, particulate matter from diesel engines is usually assumed to be of a small diameter (usually < 1 micron). This particulate matter standard is stated in Condition II(a) of the permit. The Permittee must demonstrate compliance by maintaining a copy of the EPA Certificate of Conformity at the site pursuant to Condition V(h) of the permit.</p> <p>Regarding the comment about fence line monitoring, please see the response to Comment 1. Emissions from the asphalt plant are not the subject of this permitting action, only the screener. See the response to Comment 4 with regard to lead.</p>
			<p>This permit is not being issued pursuant to water discharge regulations. Any such requirements, if they exist, would be addressed by another program and would not be addressed in an air quality permit.</p> <p>Regarding lead, the commenter is correct that it is common for trace amounts of lead to be found in recycled asphalt pavement. There is very little literature available assessing air emissions of lead from RAP processing, but from what</p>

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		<p>Comment</p> <p><i>April 23, 2018 Comment Period Emailed</i></p> <p><i>Comment:</i> The permit should be revised to include a requirement for the control of lead and lead compounds, and for the emission of polyaromatic hydrocarbons, which are present in recycled asphalt.</p>	<p>an AQD review could find, these emissions are expected to be negligible from the screening operation. The most representative emission factor AQD could locate was from EPA's AP-42 compilation of emission factors. Table 11.1-12 of AP-42 lists an emission factor for lead of 0.000015 lb lead per ton of asphalt processed in a drum mix hot mix asphalt plant controlled by a fabric filter and fired on fuel oil. Footnote (a) of that table indicates that these factors are applicable to facilities processing a combination of virgin aggregate and RAP. At the maximum allowable facility-wide production rate of 800,000 tons per year of asphalt, this would amount to an estimated 12 pounds of lead per year (or 0.006 tons per year) from the entire facility. It is likely that the facility will, in reality, produce far less than the maximum allowable amount of asphalt, thus this number is likely to be an overestimate of actual future emissions.</p> <p>Similar to the discussion about PM2.5 fence-line monitoring, these small estimated maximum emission rates for lead, combined with the location of the facility, well away from residences, do not warrant requiring the facility to incur the substantial expense of installing a fence-line monitoring system for lead.</p>

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<p>5</p>	<p>P 5, Section III, f.</p>	<p>While the permit requires (Page 5, Section III., f.) that “[t]he screener and associated engine shall be operated and maintained in accordance with the recommendations of the equipment manufacturer,” there are no manufacturer’s guidance, recommendations, instructions, or technical information provided for public review or comments. The manufacturer’s technical information must be provided and made part of the permit.</p>	<p>Regarding polyaromatic hydrocarbons (PAHs), it is unlikely that there will be any significant evaporation of PAHs to the atmosphere during screening of RAP in the screener that is the subject of this permit as the screened material is unheated. As such, there is no need for PAH emission limits from the screening operation.</p> <p>This is a standard requirement in most air quality permits used to ensure that the equipment is being maintained and operated correctly. Per Condition V(f) of the permit, the Permittee is required to maintain a copy of these manufacturer’s recommendations at the site. In most cases, including this one, AQD does not need to review these recommendations in order to write a permit that is complete and protective of public health and welfare. As such, AQD did not request such documentation in the application, nor was it submitted for inclusion in the public file. In most cases, the air quality engineers in AQD are not qualified to second guess what the manufacturer determines are appropriate maintenance and operating requirements for the equipment they manufacture. It is, however, important that the Permittee follow those recommendations, whatever they are, to ensure that the equipment operates as designed.</p>

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6		<p>The Permittee should be required to contact the equipment manufacturer and determine what emissions controls can be made part of the R155 High Energy Screener. These emissions controls must be made a permit condition.</p>	<p>AQD has ensured that all relevant air quality regulatory requirements are contained in the permit. These requirements have been written to be enforceable as a practical matter.</p> <p>AQD disagrees with this comment. There are no regulatory requirements in place that require that the most effective emission control equipment be used in every situation. AQD has reviewed the proposed levels of control and found them to comport with all regulatory requirements.</p> <p>If the equipment had triggered certain other regulations such as Non-Attainment New Source Review (20 DCMR 204) or Minor New Source Review (20 DCMR 209), the applicant would have been required to do an assessment of available emission control strategies and select one that complies with the relevant regulatory requirements. However, none of these regulations were triggered by the type of equipment and its emissions profile. As such, this type of control strategy evaluation is not required.</p>
7		<p>Please note that the McCloskey Company web site contains the following information at https://www.mccloskeyinternational.com/company/social_responsibility “Preserving the environment</p>	<p>As noted in response to Comment 6, above, AQD has evaluated the application and found that the equipment is expected to comply with all air quality regulatory requirements as proposed. There is no requirement to install all available levels of emission control.</p>

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		<p>As a company that is involved in the handling and processing of the earth's resources, our company is committed to protect the environment. Examples of relevant activities include:</p> <ul style="list-style-type: none"> ● Ongoing assessment of our product's environmental impact ● Engagement in the programs and policies implemented by governments around the world ● Recycling and Conserving energy ● Using environmentally-friendly technologies, e.g., Eco-Mode on our crushers' <p>Note that the Company offers an Eco-Mode on its crushers. The permit should require that the R155 High Energy Screener be required to have the Eco-Mode installed. I have contacted the manufacturer twice, by email, and have received no response.</p>	<p>AQD is not familiar with McCloskey's "Eco-mode", or whether it is relevant to screeners as well as crushers, however, there is no regulatory requirement to ensure that it is installed and operating on the screener subject to this permit.</p>
8		<p>The Permittee should be required to submit a dust control plan that both controls dust and meets the technical requirements for RAP</p>	<p>Dust control plans are not required by regulation. 20 DCMR 605, the requirements of which are incorporated into the permit in Condition III(b), specifies methods for</p>

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		<p>production. According to the FHWA, at https://www.fhwa.dot.gov/publications/research/infrastructure/structures/97148/rap131.cfm</p> <p>“Information on the moisture content of RAP stockpiles is sparse but indications are that the moisture content of the RAP will increase while in storage. Crushed or milled RAP can pick up a considerable amount of water if exposed to rain. Moisture contents up to 5 percent or higher have been measured for stored crushed RAP.⁽⁴⁾ As noted earlier, during periods of extensive precipitation, the moisture content of some RAP stockpiles may be as high as 7 to 8 percent.⁽⁵⁾ Lengthy stockpiling of crushed or milled RAP should, therefore, be kept to a minimum.”</p> <p>The dust control methods proposed in the permit require wetting of the stockpiles. It would seem that wetting the piles of milled asphalt would degrade the quality of the final product, and may make it more expensive to produce. An alternative method needs to be evaluated. The Permittee should be required</p>	<p>controlling dust, but leaves details up to the regulated entity (in this case, Roubin & Janeiro, Inc.). In the past, pursuant to analysis based on 20 DCMR 201, AQD has required that dust control plans be submitted where past compliance by the regulated entity has shown that extra oversight is required or at locations where there is a particular need for extra precautions due to nearby residences or other sensitive receptors. In this case, neither of these situations is present and emissions are expected to be low from the equipment in question. As such, no dust control plan has been required. Should future compliance issues arise, AQD could consider requiring a dust control plan to address an enforcement action or in a subsequent permit renewal.</p> <p>Regarding the moisture content of RAP stockpiles, large amounts of moisture are not generally needed to minimize dust, and are generally applied only when the stockpile is dry. As such, it is not expected that the small amounts of water needed to control dust will significantly affect the quality of the product. If it were a problem, the permit language gives the Permittee leeway to use a variety of methods, as necessary to control the emissions.</p>

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9		<p>The Permit is silent on the matter of the effect on the environment, particularly the effect on plants, animals, and water ways. Note that the plant is located about 2000 feet from Oxon Cove, part of the Potomac River. As the permit, incredibly, allows the emissions of considerable amounts of particulates to be released, some will be transported into the river. There needs to be an assessment of the natural resources damage that will inevitably result from this operation.</p>	<p>As noted previously, this permit covers emissions to the air and does not address any stormwater runoff issues. Such issues are addressed by other regulatory programs at DOEE.</p> <p>This permit does allow emission of some pollutants to the air, as do all air quality permits. Equipment that has no related emissions is generally exempt from air quality permitting because it does not constitute a "source" (see 20 DCMR 199). However, AQD has evaluated the emission rates and determined that they comply with all relevant air quality regulations. No relevant air quality regulation envisions the type of natural resources damage assessment raised in the comment, and as such, none is required.</p>
10		<p>The permit needs to do much more than compare the amount of pollutant estimated to be emitted with the CAA and DCMR requirements. The Permittee must be required to take positive action to offset both negative health effects and environmental damage. These should include:</p>	<p>This comment is demanding inclusion of permit requirements that are outside the jurisdiction of the air quality regulations in 20 DCMR and the federal clean air act for this type of source. AQD has no legal basis for requiring these types of actions from the Permittee, and as such, they are not included in the conditions of the permit.</p>

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		<p>1. The planning and care over time of native trees and shrubs to improve air quality by removing PM_{2.5} from the air.</p> <p>2. Supplemental environmental projects that would reduce or offset emissions from other sources, and which would improve the local environment. These could include:</p> <ul style="list-style-type: none">a. Providing funding for their customers to purchase low emissions diesel trucks.b. Providing funding to local non-profits to replace older, inefficient HVAC systems with newer, more efficient, and less polluting systems. The DC housing Authority would a worthy recipient of such support. Area hospitals would benefit as well.c. Purchasing and closing gasoline filling stations as way of reducing hydrocarbon emissions.d. Providing emissions control for non-profits with large, particulate emitting food service operations.e. The creation of wildlife habitat at	

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11		<p>locations near the existing plant.</p> <p>f. Construction and long term maintenance of storm water bio-retention practices within the non-tidal Anacostia watershed.</p> <p>3. Please note that the property at 4901 Shepherd Parkway SW is owned by the District of Columbia. The tenant should be required to improve the biological productivity of this property, which now resembles an industrial waste land.</p> <p>The facility should be required to conduct an epidemiological study at the nearest residential area to measure the rate of cancer, heart disease, and asthma, for a five year period.</p>	This comment is demanding inclusion of an extensive permit requirement that is outside the jurisdiction of the air quality regulations in 20 DCMR and the federal clean air act for this type of source. AQD has no legal basis for requiring this type of action from the Permittee, and as such, it is not included in the conditions of the permit.
12		<p>The facility should be allowed to operate for no more than one year, after which a new permit should be issued, if the facility has remained in compliance for one year.</p>	While AQD has the authority to issue permits for terms shorter than the standard five year permit term, as a matter of practice, this is only done in somewhat extraordinary circumstances. AQD has no reason to believe that this equipment will not be able to comply with the requirements of the permit. Should significant non-compliance occur, AQD has the authority to revoke a permit. In this case, AQD has not identified any reason to issue a short-term

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			permit to require re-permitting in a year. The permit will be issued for the standard five-year term.

Recommendations:

We recommend issuance of the Chapter 2 permit as revised according to the comment responses above.

ATH/SSO