STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: 042009-013  Project Number: 2008-09-069

Parent Company: Charah Stone Processing

Parent Company Address: 307 Townepark Circle, Unit M, Suite 100 Louisville, KY 40243

Installation Name: Charah, Inc.

Installation Address: 13588 Brickeys Road, Bloomsdale, MO 63627

Location Information: Ste. Genevieve County, S13, T39N, R7E

Application for Authority to Construct was made for:
The installation of a new pulverized limestone processing plant. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, Construction Permits Required.

☐ Standard Conditions (on reverse) are applicable to this permit.

☑ Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

APR 20 2009
EFFECTIVE DATE

DIRECTOR OR DESIGNEE
DEPARTMENT OF NATURAL RESOURCES
STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devises shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the departments’ Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant sources(s). The information must be made available not more than 60 days but at least 30 days in advance of this date. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources’ personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, Attention: Construction Permit Unit.
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. “Conditions required by permitting authority.”

Charah, Inc.
Ste. Genevieve County, S13, T39N, R7E

1. Best Management Practices
Charah, Inc. shall control fugitive emissions from all of the haul roads and stockpiles at this site by performing Best Management Practices, which include the usage of paving, chemical dust suppressants, or documented watering. These practices are defined in Attachment AA.

2. Annual Emission Limit of Particulate Matter Less Than Ten Microns in Diameter (PM$_{10}$)
   A. Charah, Inc. shall emit less than 15.0 tons of PM$_{10}$ into the atmosphere in any 12-month period from the equipment listed in Table 1 (see the Installation Description).
   B. Charah, Inc. shall maintain a monthly record of material processed and PM$_{10}$. Attachment A, Monthly PM$_{10}$ Emissions Tracking Record, or another equivalent form, will be used for this purpose.
   C. Charah, Inc. shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten (10) days after the end of the month during which the records from Special Condition 2.B indicate that the source exceeds the limitation of Special Condition 2.A.

3. Moisture Content Testing Requirement for Inherent Moisture Content
   A. Charah, Inc. shall verify that the inherent moisture content of the processed rock is greater than or equal to 1.5 wt.% by testing.
   B. Testing shall be conducted according to approved methods, such as those prescribed by the American Society for Testing Materials (ASTM D-2216 or C-566), EPA AP-42 Appendix C.2, or another method approved by the Director. The first test shall be no later than 45 days after startup. Testing shall be conducted at least once every two years after the initial test, during the months of June through September, while the concrete plant is active at this site.
SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

C. Test samples shall be obtained after processing by the primary crusher. During the sample processing run only, any spray devices shall be turned off during the processing from which test samples are obtained. The written analytical report shall include the raw data and moisture content (wt.%) of each sample, the test date, and the original signature of the individual performing the test. Within 30 days of completion of the required tests, the report shall be kept on site and made available to any Department of Natural Resources employee on verbal request, and a copy shall be sent to the Regional Office.

D. If the inherent moisture content result of the first test is less than 1.5 wt.%, a second test must be performed within 30 days. If the result of the second test is less than 1.5 wt.%, Charah, Inc. shall apply for a new construction permit to account for the revised information and install wet spray devices on the affected units.

4. Control Device Requirement-Baghouses

A. Charah, Inc. shall control emissions from the following equipment using baghouses as specified in the permit application.
   i. Conveyor to Silo (EU-7)
   ii. Milling (EU-8)
   iii. Classifiers (EU-9)
   iv. Transfer to Dome Storage (EU-10)
   v. Pneumatic Conveyor to Silo (EU-11)
   vi. Truck Loading (EU-12)

B. The baghouses shall be operated and maintained in accordance with the manufacturer's specifications. The baghouse shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that the Department of Natural Resources' employees may easily observe them. Replacement filters for the baghouses and drum filters shall be kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).

C. Charah, Inc. shall monitor and record the operating pressure drop across the baghouses at least once every 24 hours. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.

D. Charah, Inc. shall maintain an operating and maintenance log for the baghouses and drum filters which shall include the following:
   i. Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
   ii. Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW
Project Number: 2008-09-069
Installation ID Number: 186-0049
Permit Number:

Charah, Inc. Complete: October 1, 2008
13588 Brickeys Road
Bloomsdale, MO 63627

Parent Company: Charah Stone Processing
307 Townepark Circle
Unit M, Suite 100
Louisville, KY 40243

Ste. Genevieve County, S13, T39N, R7E

REVIEW SUMMARY

• Charah, Inc. has applied for authority to install a new pulverized limestone processing plant.

• Hazardous Air Pollutant (HAP) emissions are expected from the combustion of propane at levels below the Screen Modeling Action Levels.

• Subpart OOO of the New Source Performance Standards (NSPS) applies to this nonmetallic mineral processing plant.

• None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) or currently promulgated Maximum Achievable Control Technology (MACT) regulations apply to the proposed equipment.

• Baghouses are being used to control the particulate matter less than ten (10) microns in aerodynamic diameter (PM$_{10}$) emissions from the mills, classifiers and truck loading equipment in this permit.

• This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM$_{10}$ are limited below de minimis levels.

• This installation is located in Ste. Genevieve County, an attainment area for all criteria air pollutants.

• This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2].
• Ambient air quality modeling was performed to determine the ambient impact of PM$_{10}$.

• Emissions testing is not required for the equipment.

• A Basic Operating Permit application is required for this installation within 30 days of equipment startup.

• Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Charah, Inc. has applied for authority to construct a new pulverized limestone processing facility. The facility will process shot-rock in a primary crusher and convey the crushed limestone to three mills that grind the limestone into a fine powder and dry it. The pulverized limestone is then classified and stored in a concrete silo. The finished product is pneumatically conveyed to overhead loaders for shipment. Table 1 lists the equipment permitted to operate at the site.

Charah, Inc. is leasing their property from APAC Brickey Stone. These installations are not considered the same installation because they are not under common control and Charah, Inc. is not a support facility for APAC nor is APAC a support facility for Charah, Inc.

Table 1: Emission Units

<table>
<thead>
<tr>
<th>EU-Number</th>
<th>Description</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Truck unloading</td>
<td>75 tons/hr</td>
</tr>
<tr>
<td>2</td>
<td>Transfer to hopper</td>
<td>75 tons/hr</td>
</tr>
<tr>
<td>3</td>
<td>Hopper to conveyor</td>
<td>75 tons/hr</td>
</tr>
<tr>
<td>4</td>
<td>Conveyor to crusher</td>
<td>75 tons/hr</td>
</tr>
<tr>
<td>5</td>
<td>Primary crushing</td>
<td>75 tons/hr</td>
</tr>
<tr>
<td>6</td>
<td>Crusher to conveyor</td>
<td>75 tons/hr</td>
</tr>
<tr>
<td>7</td>
<td>Conveyor to silo</td>
<td>75 tons/hr</td>
</tr>
<tr>
<td>8a</td>
<td>Milling</td>
<td>25 tons/hr</td>
</tr>
<tr>
<td>8b</td>
<td>Milling</td>
<td>25 tons/hr</td>
</tr>
<tr>
<td>8c</td>
<td>Milling</td>
<td>25 tons/hr</td>
</tr>
<tr>
<td>9a</td>
<td>Classifier</td>
<td>25 tons/hr</td>
</tr>
<tr>
<td>9b</td>
<td>Classifier</td>
<td>25 tons/hr</td>
</tr>
<tr>
<td>9c</td>
<td>Classifier</td>
<td>25 tons/hr</td>
</tr>
<tr>
<td>10</td>
<td>Transfer to dome storage</td>
<td>75 tons/hr</td>
</tr>
<tr>
<td>11</td>
<td>Pneumatic conveyor to silo</td>
<td>75 tons/hr</td>
</tr>
<tr>
<td>12</td>
<td>Truck loading</td>
<td>75 tons/hr</td>
</tr>
<tr>
<td>13</td>
<td>Haul roads</td>
<td>0.80 VMT/hr</td>
</tr>
<tr>
<td>14</td>
<td>Propane heaters (3)</td>
<td>18 MMBtu/hr</td>
</tr>
</tbody>
</table>

No permits have been issued to Charah, Inc. from the Air Pollution Control Program.
EMISSIONS/CONTROLS EVALUATION

The emission factors and control efficiencies used in this analysis were obtained from the Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 11.19.2 “Crushed Stone Processing and Pulverized Mineral Processing,” August 2004 and Section 1.5 “Liquefied Petroleum Gas Combustion,” July 2008. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8,760 hours per year.) The new installation conditioned potential is based on the daily production limit for NAAQS compliance. The following table provides an emissions summary for this project.

Table 2: Emissions Summary (tons per year)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$_{10}$</td>
<td>15.0</td>
<td>N/A</td>
<td>N/A</td>
<td>17.61</td>
<td>&lt; 15</td>
<td>0.0563</td>
</tr>
<tr>
<td>SO$_x$</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>0.00</td>
<td>0.00</td>
<td>N/A</td>
</tr>
<tr>
<td>NO$_x$</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>11.33</td>
<td>9.65</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>0.70</td>
<td>0.6</td>
<td>N/A</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>N/A</td>
<td>N/A</td>
<td>6.53</td>
<td>5.56</td>
<td>N/A</td>
</tr>
<tr>
<td>HAPs</td>
<td>10.0/25.0</td>
<td>N/A</td>
<td>N/A</td>
<td>0.16</td>
<td>0.14</td>
<td>N/A</td>
</tr>
</tbody>
</table>

N/A = Not Applicable; N/D = Not Determined

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM$_{10}$ are below de minimis levels.

APPLICABLE REQUIREMENTS

Charah, Inc. shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
  The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required June 1 for the previous year's emissions.
• **Operating Permits**, 10 CSR 10-6.065

• **Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin**, 10 CSR 10-6.170

• **Restriction of Emission of Visible Air Contaminants**, 10 CSR 10-6.220

• **Restriction of Emission of Odors**, 10 CSR 10-3.090

**SPECIFIC REQUIREMENTS**

• **Restriction of Emission of Particulate Matter From Industrial Processes**, 10 CSR 10-6.400


**AMBIENT AIR QUALITY IMPACT ANALYSIS**

Ambient air quality modeling was performed to determine the ambient impact of PM$_{10}$. The Air Pollution Control Program’s quarry nomograph and EPA’s Screen3 were used to calculate the ambient impact of PM$_{10}$. The maximum PM$_{10}$ concentration occurs at the property boundary, 30 feet from the mills. The modeled impact does not exceed the National Ambient Air Quality Standard (NAAQS) for PM$_{10}$ of 150 µg/m$^3$ on a 24-hour average. The fugitive sources were modeled using the nomograph and the non-fugitive point sources were modeled using Screen3. The maximum modeled impact of the point sources was located beyond the property boundary, approximately 450 feet from the stack. To insure that the NAAQS was not exceeded at this point, the plant’s impact was also modeled at 450 feet. The impacts from the haul roads were not modeled. These impacts were accounted for using a background concentration of 20 µg/m$^3$ in accordance with the Air Pollution Control Program’s Best Management Practices policy. The stack parameters used in the Screen3 model are listed in Table 3, and the results of the ambient air quality impact analysis are listed in Table 4.

**Table 3: Stack Parameters**

<table>
<thead>
<tr>
<th>Control Device</th>
<th>Emission Units</th>
<th>Stack Height (m)</th>
<th>Stack Inside Diameter (m)</th>
<th>Stack Gas Exit Velocity (m/s)</th>
<th>Stack Gas Exit Temp. (K)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silo Top R01</td>
<td>11A-C</td>
<td>12.8016</td>
<td>0.8900</td>
<td>1.1379</td>
<td>293.0000</td>
</tr>
<tr>
<td>WAM FC3J</td>
<td>12A-C</td>
<td>12.8016</td>
<td>0.8900</td>
<td>1.1379</td>
<td>293.0000</td>
</tr>
<tr>
<td>Downflo Oval DFO 2-4</td>
<td>7</td>
<td>14.0208</td>
<td>0.9053</td>
<td>2.3098</td>
<td>293.0000</td>
</tr>
<tr>
<td>Williams with MAC Bags</td>
<td>8A-C, 9A-C, 10A-C, 14</td>
<td>7.4676</td>
<td>0.5334</td>
<td>22.9112</td>
<td>355.3722</td>
</tr>
</tbody>
</table>
Table 4: PM$_{10}$ Ambient Air Quality Impact Analysis, 24-hour Average

<table>
<thead>
<tr>
<th>Distance (ft)</th>
<th>Modeled Impact ($\mu g/m^3$)</th>
<th>¹Background ($\mu g/m^3$)</th>
<th>NAAQS ($\mu g/m^3$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>55.94</td>
<td>20</td>
<td>150</td>
</tr>
<tr>
<td>450</td>
<td>28.74</td>
<td>20</td>
<td>150</td>
</tr>
</tbody>
</table>

¹Background is from impacts associated with haul roads

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

Michael Mittermeyer  
Environmental Engineer  

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated September 24, 2008, received September 29, 2008, designating Charah Stone Processing as the owner and operator of the installation.


- Southeast Regional Office Site Survey, dated October 2, 2008.
<table>
<thead>
<tr>
<th>Month</th>
<th>Monthly Production (tons)</th>
<th>Composite PM$_{10}$ Emission Factor (lbs/ton)</th>
<th>Monthly PM$_{10}$ Emissions (lbs)</th>
<th>Monthly PM$_{10}$ Emissions (tons)</th>
<th>12-Month PM$_{10}$ Emissions (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example</td>
<td>24,791.04</td>
<td>0.0536</td>
<td>1328.8</td>
<td>0.66</td>
<td>9.08</td>
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<td></td>
<td></td>
<td>0.0536</td>
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<td>0.0536</td>
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</tbody>
</table>

Note 1: The Monthly Emissions (lbs) are calculated by multiplying the Monthly Production (tons) by the Composite Emission Factor (lbs/ton).  
Note 2: The Monthly Emissions (tons) are calculated by dividing the Monthly Emissions (lbs) by 2,000.  
Note 3: The 12-Month Emissions (tons/year) are a rolling total calculated by adding the Month’s Emissions (tons) to the Monthly Emissions (tons) of the previous eleven (11) months. A total of less than 15.0 tons in any consecutive 12-month period indicates compliance.
Attachment AA: Best Management Practices (BMPs)- Construction Industry Fugitive Emissions

Construction Industry Sites covered by the Interim Relief Policy shall maintain Best Management Control Practices (BMPs) for fugitive emission areas at their installations when in operation. Options for BMPs are at least one of the following:

**For Haul Roads:**

1. **Pavement of Road Surfaces** –
   
   A. The operator(s) may pave all or any portion of the haul roads with materials such as asphalt, concrete, and/or other material(s) after receiving approval from the program. The pavement will be applied in accordance with industry standards for such pavement so as to achieve “Control of Fugitive Emissions” while the plant is operating.
   
   B. Maintenance and/or repair of the road surface will be conducted as necessary to ensure that the physical integrity of the pavement is adequate to achieve control of fugitive emissions from these areas while the plant is operating.
   
   C. The operator(s) shall periodically water, wash and/or otherwise clean all of the paved portions of the haul road(s) as necessary to achieve control of fugitive emissions from these areas while the plant is operating.

2. **Usage of Chemical Dust Suppressants** –
   
   A. The operator(s) shall apply a chemical dust suppressant (such as magnesium chloride, calcium chloride, lignosulfonates, etc.) to all the unpaved portions of the haul roads. The suppressant will be applied in accordance with the manufacturer’s suggested application rate (if available) and re-applied as necessary to achieve control of fugitive emissions from these areas while the plant is operating.
   
   B. The quantities of the chemical dust suppressant shall be applied, re-applied and/or maintained sufficient to achieve control of fugitive emissions from these areas while the plant is operating.
   
   C. The operator(s) shall record the time, date and the amount of material applied for each application of the chemical dust suppressant agent on the above areas. The operator(s) shall keep these records with the plant for not less than five (5) years, and the operator(s) shall make these records available to Department of Natural Resources personnel upon request.

3. **Usage of Documented Watering** –
   
   A. The operator(s) shall control the fugitive emissions from all the unpaved portions of the haul roads at the installation by consistently and correctly using the application of a water spray. Documented watering will be applied in accordance with a recommended application rate of 100 gallons per day per 1,000 square feet of unpaved/untreated surface area of haul roads as necessary to achieve control of fugitive emissions from these areas while the plant is operating. For example, the operator(s) shall calculate the total square feet of unpaved vehicle activity area requiring control on any particular day, divide that product by 1,000, and multiply the quotient by 100 gallons for that day.
   
   B. The operator(s) shall maintain a log that documents daily water applications. This log shall include, but is not limited to, date and volumes (e.g., number of tanker applications and/or total gallons used) of water application. The log shall also record rationale for not applying water on day(s) the plant is in operation (e.g., meteorological situations, precipitation events, freezing, etc.).
   
   C. Meteorological precipitation of any kind, (e.g., a quarter inch or more rainfall, sleet, snow, and/or freeze thaw conditions) which is sufficient in the amount or condition to achieve control of fugitive emissions from these areas while the plant is operating.
   
   D. Watering may also be suspended when the ground is frozen, during periods of freezing conditions when watering would be inadvisable for traffic safety reasons, or when there will be no traffic on the roads. The operator(s) shall record a brief description of such events in the same log as the documented watering.
   
   E. The operator(s) shall record the date and the amount of water applied for each application on the above areas. The operator(s) shall keep these records with the plant for not less than five (5) years, and the operator(s) shall make these records available to Department of Natural Resources personnel upon request.

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1 For purposes of this document, Control of Fugitive Emissions means to control particulate matter that is not collected by a capture system and visible emissions to the extent necessary to prevent violations of the air pollution law or regulation. (Note: control of visible emission is not the only factor to consider in protection of ambient air quality.)
For Vehicle Activity Areas around Open Storage Piles:

1. **Pavement of Stockpile Vehicle Activity Surfaces** –
   A. The operator(s) may pave all or any portion of the vehicle activity areas around the storage piles with materials such as asphalt, concrete, and/or other material(s) after receiving approval from the program. The pavement will be applied in accordance with industry standards for such pavement so as to achieve control of fugitive emissions while the plant is operating.
   B. Maintenance and/or repair of the road surface will be conducted as necessary to ensure that the physical integrity of the pavement is adequate to achieve control of fugitive emissions from these areas while the plant is operating.
   C. The operator(s) shall periodically water, wash and/or otherwise clean all of the paved portions of the vehicle activity areas around the storage piles as necessary to achieve control of fugitive emissions from these areas while the plant is operating.

2. **Usage of Chemical Dust Suppressants** –
   A. The operator(s) shall apply a chemical dust suppressant (such as magnesium chloride, calcium chloride, lignosulfonates, etc.) to all the vehicle activity areas around the open storage piles. The suppressant will be applied in accordance with the manufacturer’s suggested application rate (if available) and re-applied as necessary to achieve control of fugitive emissions from these areas while the plant is operating.
   B. The quantities of the chemical dust suppressant shall be applied, re-applied and/or maintained sufficient to achieve control of fugitive emissions from these areas while the plant is operating.
   C. The operator(s) shall record the time, date and the amount of material applied for each application of the chemical dust suppressant agent on the above areas. The operator(s) shall keep these records with the plant for not less than five (5) years, and the operator(s) shall make these records available to Department of Natural Resources personnel upon request.

3. **Usage of Documented Watering** –
   A. The operator(s) shall control the fugitive emissions from all the vehicle activity areas around the storage piles at the installation by consistently and correctly using the application of a water spray. Documented watering will be applied in accordance with a recommended application rate of 100 gallons per day per 1,000 square feet of unpaved/untreated surface area of vehicle activity areas around the storage piles as necessary to achieve control of fugitive emissions from these areas while the plant is operating. (Refer to example for documented watering of haul roads.)
   B. The operator(s) shall maintain a log that documents daily water applications. This log shall include, but is not limited to, date and volumes (e.g., number of tanker applications and/or total gallons used) of water application. The log shall also record rationale for not applying water on day(s) the plant is in operations (e.g., meteorological situations, precipitation events, freezing, etc.)
   C. Meteorological precipitation of any kind, (e.g. a quarter inch or more rainfall, sleet, snow, and/or freeze thaw conditions) which is sufficient in the amount or condition to achieve control of fugitive emissions from these areas while the plant is operating.
   D. Watering may also be suspended when the ground is frozen, during periods of freezing conditions when watering would be inadvisable for traffic safety reasons, or when there will be no traffic on the roads. The operator(s) shall record a brief description of such events in the same log as the documented watering.
   E. The operator(s) shall record the date and the amount of water applied for each application on the above areas. The operator(s) shall keep these records with the plant for not less than five (5) years, and the operator(s) shall make these records available to Department of Natural Resources personnel upon request.
Mr. Nathan Boone  
Vice President  
Charah, Inc.  
13588 Brickeys Road  
Bloomsdale, MO 63627

RE: New Source Review Permit - Project Number: 2008-09-069

Dear Mr. Boone:

Enclosed with this letter is your permit to construct. Please study it carefully. Also, note the special conditions, if any, on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions, your new source review permit application and with your operating permit is necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you have any questions regarding this permit, please do not hesitate to contact Michael Mittermeyer at the departments’ Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, or by telephone at (573) 751-4817. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale  
New Source Review Unit Chief

KBH:mmk

Enclosures

c: Southeast Regional Office  
   PAMS File: 2008-09-069  
   Permit Number: