

Kathleen Hartnett White, *Chairman*  
R. B. "Ralph" Marquez, *Commissioner*  
Larry R. Soward, *Commissioner*  
Glenn Shankle, *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

May 26, 2006

TEXAS  
COMMISSION  
ON ENVIRONMENTAL  
QUALITY  
2006 MAY 26 PM 3:38  
CHIEF CLERKS OFFICE

LaDonna Castanuela  
Chief Clerk  
Texas Commission on Environmental Quality  
P.O. Box 13087  
Austin, TX 78711-3087

Re: TCEQ Docket No. 2004-0839-AIR; SOAH Docket No. 582-05-1040; Application by Southern Crushed Concrete, Inc. to Change the Location of a Concrete Crushing Facility in Harris County

Dear Ms. Castanuela:

Enclosed you will find the original and eleven copies of the Executive Director's Response to OGC Letter of May 10, 2006.

If you have any questions about this matter, please call me at 239-1201.

Sincerely,

A handwritten signature in cursive script, appearing to read "Brad Patterson".

Brad Alan Patterson  
Staff Attorney  
Environmental Law Division  
TCEQ Office of Legal Services

Attachments

SOAH DOCKET NO. 582-05-1040  
TCEQ DOCKET NO. 2004-0839-AIR

MAY 26 PM 3:38

APPLICATION BY SOUTHERN § BEFORE THE STATE OFFICE  
CRUSHED CONCRETE, INC., TO § CHIEF CLERK'S OFFICE  
CHANGE THE LOCATION OF A § OF  
CONCRETE CRUSHING FACILITY §  
IN HARRIS COUNTY § AMINISTRATIVE HEARINGS

**ED'S RESPONSE TO OGC LETTER OF MAY 10, 2006**

On May 10, 2006, the Office of General Counsel (OGC) of the Texas Commission on Environmental Quality (TCEQ or Commission) issued a letter continuing this matter from the Commission's public meeting for May 17, 2006 until June 28, 2006.

The May 10, 2006 letter from OGC requests the ED review the record and file a brief to address the following issue that was referred to the State Office of Administrative Hearings (SOAH): Whether the Applicant's Emissions Calculations and Modeling are Accurate. The Executive Director (ED) files this brief in response the OGC letter.

As an initial matter, as required by TCEQ rule, the ED did not participate as a party in the contested case hearing.<sup>1, 2</sup> For this reason, and pursuant to the limitation in 30 TAC § 80.257,<sup>3</sup> the ED will respond to the May 10, 2006 OGC letter in the context of the applicable law and/or policy.

<sup>1</sup> ALJ's PFD at 13.

<sup>2</sup> 30 TAC § 80.108(a)(3) states, "Except to the extent superseded by subsection (b) of this section, the executive director shall not participate as a party in the following contested case hearings concerning permitting matters: ... (3) an application for an air quality permit to authorize emissions from facilities which solely emit the types of emissions that do not require health and welfare effects review as specified on the Toxicology and Risk Assessment (TARA) Section Emissions Screening List..."

The Commission developed 30 TAC § 80.108 to implement HB 2912, 77<sup>th</sup> Legislature. Texas Water Code § 5.228, as amended by HB 2912, provides the ED is required to be a party in a contested case hearing only in a matter where the ED bears the burden of proof. Further, Texas Water Code § 5.228(c) states, "The executive director may participate as a party in contested case permit hearings for the sole purpose of providing information to complete the administrative record. The commission by rule shall specify the factors the executive director must consider in determining, case by case, whether to participate as a party in a contested case permit hearing. In developing the rules under this subsection the commission shall consider, among other factors: 1) the technical, legal, and financial capacity of the parties to the proceeding; 2) whether the parties to the proceeding have participated in a previous contested case hearing; 3) the complexity of the issues presented; and 4) the available resources of commission staff." 30 TAC § 80.108 sets out the criteria for determining ED participation as a party in contested permit hearings.

<sup>3</sup> 30 TAC § 80.257 states, "Unless right of review has been waived, any party may within 20 days after the date of issuance of the proposal for decision, file exceptions or briefs. For permit hearings in which the executive director has not participated as a party, the commission or general counsel may request in writing that the executive director file briefs concerning legal or policy issues. The request shall be served on the parties and the judge, shall specify the issues to be briefed and shall set reasonable deadlines for the executive director's response and the parties replies to that response, avoiding delay of the matter to the

**1. Whether Applicant's use of the AP-42 unpaved road factor is consistent with agency practice and/or guidelines, and whether it was appropriate in this case.**

Use of the unpaved road factor is consistent with agency practice and/or guidelines provided by the Air Permits Division (APD) for these types of matters. The Concrete Batch Plants Guidance Document indicates the use of an emission factor for paved roads could be determined by using the unpaved road equation.<sup>4</sup> The unpaved road equation includes a parameter for a percentage of silt content of road surface material. The guidance provides an Applicant could use the unpaved road equation for paved roads by changing the equation's parameters for silt content to the paved road value. With this modification, the equation should provide a good representation of the paved road emission rate.

**2. Whether Applicant's exclusion of road emissions from its short-term modeling runs is consistent with agency practice and/or guidelines, and whether it was appropriate in this case.**

Exclusion of road emissions from short-term modeling is consistent with agency practice and/or guidelines provided by APD for these types of matters. The TCEQ *Air Quality Modeling Guidelines* recommends the exclusion of "road emissions in permit modeling analyses for short-term averaging periods – periods less than annual."<sup>5</sup> This recommendation is based on the fact there are a number of parameters in the calculation of road emissions, and most of those parameters cannot be accurately estimated without a site-specific analysis.<sup>6</sup> Additionally, the guidance states, "The modeling process is based on the assumption that emissions are continuous."<sup>7</sup> Road emissions are determined by the type and amount of traffic, which is usually not continuous.<sup>8</sup>

Furthermore, an Air Permits Division memorandum provides guidance on short-term and long-term modeling requirements for roads.<sup>9</sup> The memo states, "Road dust emissions should be calculated and impacts evaluated for long-term periods (annual) only. Since there is no reliable calculation methods for shorter time periods (24-hour, 3-hour, 1-

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extent practicable. Proposed findings of fact may be filed when permitted or requested by the commission. Any replies to exceptions, briefs, or proposed findings of fact shall be filed within 30 days after the date of issuance on the proposal of decision."

<sup>4</sup> App. Ex. 30.

<sup>5</sup> App. Ex. 23

<sup>6</sup> App. Ex. 23, at 59.

<sup>7</sup> *Id.*

<sup>8</sup> *Id.*

<sup>9</sup> App. Ex. 32

hour), emission from road dust should not be calculated or impacts analysis performed. Instead, all project reviews should include the application of Best Management Practices (BMP) to minimize the creation of road dust and prevent nuisance conditions. This practice follows previous precedent and current guidance from the Commissioners...<sup>10</sup>

**3. Whether Applicant's use of the paved road control factor for milled asphalt roads is consistent with agency practice and/or guidelines, and whether it was appropriate in this case.**

Use of the paved road control factor for milled asphalt roads is consistent with agency practice and/or guidelines provided by APD for these types of matters.<sup>11</sup> The Applicant's permit requires, "Plant roads shall be paved with a cohesive hard surface which can be cleaned by sweeping or washing." If the Applicant is representing that milled asphalt roads meet the requirement specified above, then it would be consistent to use the paved road control factor.

**4. Whether Applicant's failure to take into account stockpile heights when modeling stockpile emissions is consistent with agency practice and/or guidelines, and whether it was appropriate in this case.**

Exclusion of stockpile heights when modeling stockpile emissions is consistent with agency practice and/or guidelines provided by the APD for these types of matters.<sup>12</sup> The Rock Crushing Plants Guidance Document does not take stockpile height into account when estimating stockpile emissions.<sup>13</sup> Modeling stockpiles while disregarding height would be the most conservative approach and would potentially over-predict the contribution of particulate matter from stockpiles to the total particulate concentration. The taller (higher) the source of emissions, the better dispersion the contaminant receives. That is, taller stacks get better dispersion and consequently reduced concentrations than shorter ones. The concept would apply to stockpiles as well. Increasing the stockpile heights in the model would result in greater dispersion with a decrease in the ground level concentration at the property line. Therefore, if no stockpile height was considered, then the emissions calculations would reflect the worst-case scenario.

**5. Whether Applicant's use of the "Bissonnet" monitor to provide background concentrations for PM<sub>2.5</sub> is consistent with agency practice and/or guidelines, and whether it was appropriate in this case.**

Use of the Bissonnet monitor to provide background concentrations for PM<sub>2.5</sub> is consistent with agency practice and/or guidelines provided by the APD for these types of

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<sup>10</sup> *Id.*

<sup>11</sup> App. Ex. 30.

<sup>12</sup> App. Ex. 24

<sup>13</sup> *Id.*

matters.<sup>14</sup> This question implicates two separate issues: determining background concentration and evaluating PM<sub>2.5</sub>.

The first issue is the use of the Bissonnet monitor to provide background concentrations for the proposed location of the concrete crusher. Current guidance by memorandum suggests the ideal use of a network of monitors (if available) within approximately one kilometer (km) for the area of maximum concentrations from existing sources or the area of the combined maximum impact from existing and proposed sources should be used in the analysis.<sup>15</sup> The memo states existing monitors within ten km of the proposed sources can also be used.<sup>16</sup> If the "Bissonnet" monitor is closest to the proposed site, and collecting information on the contaminant of interest, it would be the most desirable. Therefore, use of the Bissonnet monitor is consistent with agency practice and/or guidelines.

Regarding PM<sub>2.5</sub>, the agency's current guidance is to use the PM<sub>10</sub> National Ambient Air Quality Standards (NAAQS) as a surrogate for PM<sub>2.5</sub> until the TCEQ Air Dispersion Modeling Team posts the new review procedures once they become effective.<sup>17, 18</sup> Consequently, a specific review of PM<sub>2.5</sub> would not be expected by the agency.

**6. Whether Applicant's inclusion in the screen modeling of the "empty areas" between the various aspects of the rock crushing operations is consistent with agency practice and/or guidelines, and whether it was appropriate in this case.**

Inclusion in the screen modeling of the "empty areas" between the various aspects of the concrete crushing operations is consistent with agency practice and/or guidelines.<sup>19</sup> It is appropriate for a volume source characterization to simulate emissions from multiple sources.<sup>20</sup> The "empty areas" are typically attributed to front-end loader operations between crushing equipment and stockpiles. The stockpile emission factor includes the use of the front-end loader; therefore, the "empty areas" can be a contributor to the overall plant emissions due to front-end loader operation which have been included in the stockpile emissions.

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<sup>14</sup> App. Ex. 33

<sup>15</sup> *Id.*

<sup>16</sup> *Id.*

<sup>17</sup> App. Ex. 23, at 17.

<sup>18</sup> Finding of Fact 32, Commission Order Granting the Application of Frontier Materials Concrete for Permit by Rule No. 43288; TNRCC Docket No. 1999-1526-AIR & 2000-1462-AIR; SOAH Docket No. 582-01-2303.

<sup>19</sup> App. Ex. 23, at 55-56.

<sup>20</sup> *Id.*

Conclusion

In conclusion, the ALJ found the Applicant's modeling was properly conducted and the emissions modeling and calculations were accurate.<sup>21</sup> In accordance with the OGC's request, the ED has reviewed the record and concludes the Applicant's emissions calculations and modeling are consistent with Agency practice and/or guidelines and the ED's preliminary decision.

Respectfully submitted,

Texas Commission on Environmental Quality

Glen Shankle  
Executive Director

Stephanie Bergeron Perdue, Deputy Director  
Office of Legal Services

Robert Martinez, Acting Division Director  
Environmental Law Division



Brad Alan Patterson, Staff Attorney  
Environmental Law Division

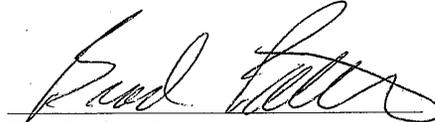
Representing the Executive Director of the Texas  
Commission on Environmental Quality

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<sup>21</sup> ALJ's PFD at 21.

**CERTIFICATE OF SERVICE**

On the 26<sup>th</sup> day of May, 2006, a true and correct copy of the foregoing instrument was served on all persons on the attached mailing list by the undersigned via deposit in the U.S. Mail, facsimile, inter-agency mail, or hand delivery.

  
Brad Alan Patterson