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June 20, 2008

US Environmental Protection Agency  
Docket Center (6102T)  
New Source Performance Standards for Nonmetallic Mineral Plants Docket  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

Attention: Docket ID No. EPA-HQ-OAR-2007-1018

**Re: Comments Submitted on Behalf of the National Stone, Sand & Gravel Association Regarding Proposed Rule: New Source Performance Standards, Review for Nonmetallic Mineral Processing Plants; and Amendment to Subpart UUU Applicability**

The National Stone, Sand & Gravel Association (NSSGA) submits the following comments on EPA's proposed rule concerning revisions to the New Source Performance Standards for Nonmetallic Mineral Processing Plants.

Based near the nation's capital, NSSGA is the world's largest mining association by product volume. Its member companies represent more than 90 percent of the crushed stone and 70 percent of the sand and gravel produced annually in the U.S. and approximately 118,000 working men and women in the aggregates industry. During 2006, a total of about 2.95 billion metric tons of crushed stone, sand and gravel, valued at \$21 billion, were produced and sold in the United States.

NSSGA offers the following comments on specific sections of the proposal.

**Table 2 to Subpart OOO – Stack Emission Limits for Affected Facilities Without Capture Systems**

EPA seems to have the misguided perception that this industry sector is experiencing widespread non-compliance with NSPS Subpart OOO and therefore the opacity standards must be ratcheted even lower to improve compliance. There is no data from EPA that backs up this assertion. In fact, during the past 11 years since the last update of NSPS Subpart OOO (June 9, 1997) there have not been any national enforcement initiatives by EPA against this industry sector due to widespread noncompliance with the existing standards. Also, emission factors from the latest updated version of the crushed stone chapter of AP-42 (2004) are currently being used by state and federal agencies in emission inventories and air dispersion modeling to demonstrate the aggregates industry is in fact a minor source of particulate matter emissions and, with few exceptions, do not fall into Title V permitting requirements for sources emitting greater than 100 tons per year of PM.

The comparison below illustrates the differences in perceived emissions from 1973 and actual emissions from field testing in 2004.

EPA's Background Information Document for NSPS (November 1982)  
 Table 3.5\*  
 Particulate Emission Factors for Stone Crushing Process

<u>Process Operation</u>	<u>Uncontrolled Emission Factor (lb/ton) TSP</u>
Primary Crushing	0.5
Secondary Crushing and Screening	1.5
Tertiary Crushing and Screening	6.0
Recrushing and screening	5.0
Fines Mill	6.0
Screening, Conveying and Handling	2.0

\*From Compilation of Air Pollutant Emission Factors, 2<sup>nd</sup> Edition, U.S. EPA publication No. AP-42, April 1973.

Table 11.19.2-2\*  
 Emission Factors for Crushed Stone Processing Operations

<u>Process Operation</u>	<u>Uncontrolled Emission Factor (lb/ton) TSP</u>
Primary Crushing <sup>n</sup>	0.0024
Secondary Crushing <sup>n</sup>	0.0024
Tertiary Crushing	0.0024
Screening	0.025
Fines Screening	0.30
Fines Crushing	0.0390
Conveying	0.0030

\*From Compilation of Air Pollutant Emission Factors, U.S. EPA, No. AP-42, August 2004

Footnote n: EPA states in the 8/04 version of AP-42, "Emission factors for PM-10 for tertiary crushers can be used as an upper limit for primary or secondary crushing."

The enormous difference between emission factors for each affected source from 1973 to 2004 can be attributed to continuing empirical emissions testing of actual aggregate processing sources from 1991-2004 by NSSGA in cooperation with EPA's Office of Air Quality Planning and Standards. Prior to 1991, aggregate processing emission factors were derived from limited field studies of aggregate, iron and steel and surface coal mining operations. Results of NSSGA/EPA industry source testing lead to AP-42 updates for aggregate processing in 1995 and in 2004.

In fact, EPA admits that the emission reductions associated with lowering the fugitive opacity limit is not quantifiable based on available information (Federal Register Vol. 73, No. 78, April 22, 2008, page 21563). EPA does not seem to have a legitimate technical or legal reason for lowering the fugitive opacity standards other than the outdated and outmoded standard NSPS response that the industry “causes or contributes significantly to air pollution which may reasonably be anticipated to endanger public health or welfare.” (44 FR 492222, August 21, 1979, Clean Air Section 111(b)(1)(A)). This perception of the industry in 1979 was due to the use of outdated emission factors and assumptions of industry PM output that were not based on actual aggregate industry field tests. Since 1979, there have been three updates to the crushed stone processing chapter of AP-42 (1985, 1995 and 2004) that have continually demonstrated a lowering of actual emissions from this industry sector. This is due primarily from the fact that actual field tests at aggregate plants have been conducted using EPA-approved Federal Reference Methods under supervision and approval of EPA personnel. The characterization of this industry as one that “significantly contributes to air pollution” is no longer accurate and must be challenged.

With the exception given to NSSGA’s arguments above that the industry should not even be considered under the NSPS regulations, NSSGA is generally supportive of EPA’s proposal to reduce the emission limits for crushers from 15% to 12% and for screens and conveyors from 10% to 7% as long as the test duration is also reduced to 30 minutes and compliance will now be determined based on the average of the five 6-minute Method 9 averages rather than on one 6-minute Method 9 visible emissions set.

NSSGA also supports the 30 minute test due to the fact that state and/or federal inspectors will now be required to also complete a 30-minute Method 9 compliance test on an affected facility prior to issuing any applicable notice of violation.

In previous correspondence (2/24/08) with EPA on this matter, NSSGA provided data from 3-hour, 1-hour and 30-minute Method 9 tests of similar affected facilities that clearly show no significant difference in Method 9 visible emission readings over these time periods, thus supporting the proposed 30-minute test duration and compliance based on that new test duration.

Method 9 is based solely on opacity. Data is recorded by a certified visible emissions evaluator in increments of 5%. Readings are taken every 15-seconds and the data is averaged in 6-minute sets (24 observations). Many factors can influence the accuracy of the opacity readings during a test. Those factors include particle density and size distribution, color, plume background, sun angle, lighting conditions, and the line of sight between the evaluator and the plume.

The EPA understood these variables when the test method was developed. To better understand the magnitude of the positive error that can be made by a qualified observer, the EPA conducted a series of studies. The results of these field trials are discussed in 40 CFR Part

60, Appendix A on Method 9. Based on this study it was determined that a positive observational error of as much as 7.5% existed. The EPA goes on to say in Appendix A that “The accuracy of the method must be taken into account when determining possible violations of applicable opacity standards”.

To set an opacity standard within this range of positive error of 7.5% is basically establishing a “no visible emission” standard for these sources. NSSGA supports an opacity limit of 12% with the determinate 30-minute averaging test duration for crushers. However, we think a limit of 7% for screens, conveyors and other transfers points is close to establishing a “no visible emissions” limit for these fugitive sources. However, we support a 30-minute compliance test base on the average readings from the five 6-minute averages rather basing compliance on one 6-minute test.

### **Table 2 to Subpart OOO – Stack Emission Limits for Affected Facilities With Capture Systems**

The minority of NSSGA members control fugitive emissions via a baghouse or other means of dry collection. Therefore, rather than address this portion of EPA’s proposal directly, NSSGA supports the comments of the Georgia Mining Association submitted to EPA on June 6, 2008, that offer clear and concise comments on EPA’s proposal to lower the stack emission limit to 0.014 gr/dscf.

### **§60.670(a)(2) Applicability and designation of affected facility**

NSSGA supports EPA’s proposal to exempt wet material processing. Operations processing saturated material are currently exempt from the initial performance testing requirement of 60.11 and 60.675 (*page 85, EPA Regulatory and Inspection Manual for Subpart OOO*). The reporting and recordkeeping requirements for these exempt sources should also be removed from the Subpart as they serve no useful purpose.

Subpart OOO was developed to cover sources of emissions at non-metallic mineral processing plants. If the source processes saturated material then it is not a source of emissions and should not be covered by NSPS. The current subpart agrees with the fact that there are no emissions and therefore there is no reason for the reporting and recordkeeping requirements. The Subpart covers the situation where these items may process non-saturated material at a later date (*pages 85 and 88 of EPA’s Regulatory and Inspection Manual for Subpart OOO.*)

### **§60.671 Definitions – (Buildings)**

EPA’s defines a building as “Any frame structure with a roof.” EPA’s Regulatory and Inspection Manual for Nonmetallic Mineral Processing Plants defines a building as “any frame structure with a roof as long as the roof is constructed solely as a weather barrier.”

NSSGA suggests the definition of a building be amended to reflect the differences between noise barriers constructed around aggregate processing equipment with large opening for material flow and from fully enclosed, accessible and occupied buildings. Aggregate processing

equipment is generally located outdoors due to the unrealistic idea of enclosing a processing plant the size of most aggregate plants and the fact that aggregate processing equipment is designed for rugged, outdoor, weatherproof uses. Enclosures at aggregate processing plants are usually constructed as a visual barrier to the general public and as noise abatement, not as a primary means of dust control or because the equipment must be protected from the weather.

#### **§60.671 Definitions – (Storage Bins – Correction and Clarification)**

EPA currently defines storage bin as “a facility for storage (including surge bins) or nonmetallic minerals prior to further processing or loading.” The word “or” should be changed to “of”.

Also, the EPA Regulatory and Inspection Manual for Nonmetallic Mineral Processing Plants on page 38 states, “Feed or collection hoppers that continuously discharge material are not considered storage bins and are exempt from the NSPS requirements. This additional language should be added to the rule’s definition of storage bin as a point of clarification.

#### **§60.672(e) Standard for Particulate Matter – (Buildings)**

NSSGA supports EPA’s proposal to replace Method 22 no visible emissions standard for building openings with 7% opacity for ingress and egress of buildings using a 30-minute Method 9 test with compliance determined as stated in §60.675(c)(3).

However, for affected facilities located inside buildings and controlled by direct water sprays, a repeat performance test should not be required. A building is often used for noise abatement and visual barriers rather than for primary dust control. Therefore, either wet suppression or dry collection devices are often employed inside buildings on affected facilities.

#### **§60.675 (d)(1)(2) Test Methods and Procedures – (Repeat Method 9 Performance Test)**

One of the proposed changes to the NSPS would be repeat Method 9 tests every 5 years for future affected facilities that do not employ direct water sprays. Repeat performance testing would affect sources that are controlled by water carryover or those that utilize partial enclosure. The number of sources that would be required to conduct repeat tests over the coming decades would be enormous. These repeat tests would be an unnecessary burden to both industry (from a time and cost standpoint) and to the administering agency that must witness and review this data.

To repeat Method 9 test of each of these affected facilities every five years is an enormous task for industry as well as regulatory agencies to process and verify such results. This exercise is neither cost-effective nor does it offer any additional protection of public health and welfare.

In the 2004 version of AP-42, Chapter 11.19.2 for Crushed Stone Processing, Table 11.19.2-2 “Emission Factors for Crushed Stone Processing Operations, footnote b reads:

***Controlled sources (with wet suppression) are those that are part of the processing plant that employs current wet suppression technology similar the study group. The moisture content of the study group without wet suppression systems operating (uncontrolled) ranged from 0.21 to 1.3 percent, and the same facilities operating wet suppression systems (controlled) ranged from***

**0.55 to 2.88 percent. Due to carry-over of the small amount of moisture required, it has been shown that each source, with the exception of crushers, does not need to employ direct water sprays (emphasis added).**

It is evident from this footnote that EPA admits that carry over moisture from direct water sprays is sufficient to control fugitive emissions from aggregate processing up to the next crusher. In fact, the empirical testing of these affected sources that led to the publication in 2004 of the updated AP-42 emission factors for crushed stone processing, has been used in emission inventories to demonstrate that the aggregates industry is not a major source (> 100 tons per year) of particulate emissions as EPA once believed.

NSSGA feels strongly that repeat testing every five years of affected sources not controlled by direct water sprays is unnecessary. Carry over moisture has been demonstrated to control fugitive emissions from these sources and thus dramatically limit the particulate matter measured using AP-42 emission factors. Any additional draconian control measures applied to industry sources that EPA admits in the above highlighted footnote are not needed to control fugitive emissions, is unnecessary.

If transfer points/affected facilities are not controlled by direct water sprays yet meet the initial performance test requirements of the subpart using carry-over moisture from previous direct water sprays, and the water sprays are inspected monthly for proper working order, then additional repeat Method 9 testing is once again, unnecessary.

A state delegated authority should also be allowed the on-site flexibility under this portion of the proposal to make decisions whether a Method 9 test should be required for those affected facilities/transfer points that do not have direct water sprays, rather than having a federal dictate of requiring a test when specific operational circumstances negate the need for such a test.

#### **§60.675(e)(2) Test Methods and Procedures – (Multiple Point Readings Using Method 9)**

EPA is proposing to allow Method 9 testing of up to three emission points at one time as long as the following conditions are met:

- (1) No more than three emission points may be read concurrently;
- (2) All three points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points; and
- (3) If an opacity reading for any one of the three points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point.

NSSGA agrees with the first two conditions. However, given the EPA proposal to lower the fugitive emission standards from 10% to 7% for screens, conveyors and transfer points, this allowance fails to meet the third condition above if at any one point in test a reader observes **ANY** visible emission from the affected source. Since Method 9 certified readers must observe plumes in 5% increments, and since a minimum reading of 5% would be within a 5 percent opacity of the existing 7% standard for transfer points and screens, a method 9 reader would

then be forced to read each affected screen and transfer point separately, thus eliminating the applicability of this multiple point reading “allowance” for any such source.

NSSGA suggests that if EPA finalizes this rule and maintains a 7% opacity for these certain affected sources, EPA should eliminate the third condition of this allowance.

This proposal from EPA was taken from an April 22, 1999 EPA memo from J. David Mobley, Acting Director of the Emissions Monitoring and Analysis Division, that outlined the three conditions above. It is important to keep in mind that at that time, the opacity standards were 15% for crushers and 10% for transfer points and screens. Having a condition that required additional testing if the reader was observing visible emissions within 5% of the then 10% limit for screens, made sense. Now having a proposed limit of 7% with the same condition of stopping a test if the reader is within 5% of the new 7% opacity limit, would in essence, limit the affected facility in question to a zero opacity limit.

#### **§60.675(e)(3) Test Methods and Procedures – (Facilities Operating Less Than 1 Hour)**

NSSGA supports EPA’s proposal to use Method 5I of Appendix A-3 to determine compliance for affected facilities that operate less than 1 hour at a time, such as storage bins or enclosed railcar or truck loading stations.

#### **§60.675(g) Test Methods and Procedures – (Notification of Anticipated Date for Conducting Initial Performance Test)**

NSSGA supports EPA’s proposal to reduce the 30-day advance notice to a 7-day notice prior to performance testing for Method 9 tests. Many states are already relaxing this requirement and no longer send staff out to witness this type of testing, therefore a 30-day advance notice is no longer appropriate to delay performance testing.

#### **§60.675(i) Test Methods and Procedures – (Seasonal Shut Downs)**

NSSGA supports EPA’s proposal to postpone initial performance testing until no later than 60 calendar days after resuming operation of the affected facility. Shut down means shut down of an affected facility for a period of at least 45 consecutive days due to seasonal market conditions.

The thresholds for testing should reflect periods when a nonmetallic mineral processing plant may be shut down for the winter, have a lack of demand for product, a lack of sufficient inventory, processing malfunctions, or winter closures. If an aggregate plant is located in a northern climate and begins initial production anytime between June 1 and September 1, for example, 180 calendar days from those dates would be between December 1 and March 1 when most aggregate plants in these geographic areas are closed for the winter for maintenance and lack of demand. It would be impossible to comply with the current regulatory reporting and performance testing requirements if a maximum production rate is not achieved during a shortened calendar-driven 180 day deadline of June 1 to December 1.

Requiring initial performance testing no later than 60 days after resuming operation would allow the company the flexibility of either trying to reach maximum achievable production during the few warmer months prior to seasonal shut down or waiting until after winter maintenance and completing their initial performance test when production resumes in the spring.

**§60.676 (h) Reporting and Recordkeeping – (Notification Requirements for Anticipated and Actual Dates of Startup for Affected Facilities)**

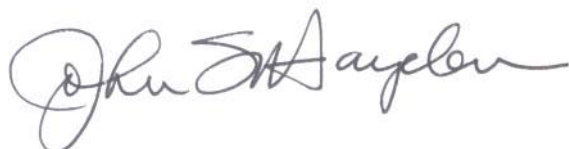
NSSGA supports EPA’s proposal to waive the notification of the date construction commenced under Subpart A Section 60.7(a)(1). This letter serves no purpose in the regulation. The date construction commenced does not trigger any requirement. EPA should be concerned with date of start-up of the affected facility, not dates of construction, since start-up equates to the potential or actual release of air emissions to the atmosphere.

**§60.676 (k) Reporting and Recordkeeping - (Requirements Under Delegated Enforcement Authority)**

NSSGA supports EPA’s proposal to eliminate duplicative reporting notifications. The rule should be made clear that copies of required notifications are not to be sent to the EPA if authority has been delegated to a state or local agency. Duplicative copies to multiple regulatory offices create unnecessary paperwork. A proper notification to a state or local agency that has been delegated NSPS authority by EPA streamlines the entire process.

NSSGA appreciates the opportunity to submit comments on this proposed rule. If you have any questions please contact me at 703/526-1065 or [jhayden@nssga.org](mailto:jhayden@nssga.org).

Sincerely,

A handwritten signature in cursive script that reads "John S. Hayden". The signature is written in dark ink and is positioned above the typed name and title.

John S. Hayden, PG, REM  
Vice President, Environmental Services