OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

MEMORANDUM August 9, 2007

TO: Dawson Lasseter, P.E., Chief Engineer, Air Quality

THROUGH: Phillip Fielder, P.E., Engineering Manager, Permit Section
Dave Dimick, P.E., Engineering Manager, Existing Source Permit Section
Richard Kienlen, P.E., Engineering Manager, New Source Permit Section

THROUGH: Matt Paque, Supervising Attorney, Air Quality

THROUGH: Kendal Stegmann, Senior Environmental Manager, Air Quality

THROUGH: Rick Groshong, Environmental Program Manager

THROUGH: Peer Review

FROM: Jena Mach, E.I., Existing Source Permit Section

SUBJECT: General Permit for Minor Source Nonmetallic Mineral Processing Facilities

INTRODUCTION

The Nonmetallic Mineral Processing Facilities (NMPF) General Permit (GP), issued May 9, 2000, was developed to authorize construction and/or operation of facilities whose primary air pollutant (particulate matter) emissions are from the mining or quarrying of nonmetallic minerals. The minor facility GP as originally issued has an indefinite term—it is effective until modified or cancelled. However, because of significant changes in regulations since its issuance, e.g., incorporating a Notice of Intent to Construct option for obtaining permit coverage for new facilities into OAC 252:100-7, rescinding the toxic air contaminant requirements of OAC 252:100-41, updating 40 CFR Part 60 Subpart Kb to exclude certain smaller storage tanks, and adding new 40 CFR Part 60 Subpart IIII requirements, modification of the GP would be beneficial. In addition, over 5 years of experience in issuing and enforcing Authorizations issued under this GP has allowed both agency staff and the regulated community to identify other changes needed to clarify and streamline the permitting and compliance approach for this source category.

The format for this memorandum will not provide a comprehensive discussion of the source category and basis for every condition in the permit, since this was done previously in the memorandum for the current NMPF GP (issued May 9, 2000). Instead, changes to the permit will be identified, and rule applicability will be discussed.

PROPOSED CHANGES TO THE EXISTING GENERAL PERMIT

Notice of Intent to Construct

It is proposed to incorporate the Notice of Intent to Construct option for obtaining permit coverage for new facilities into this GP. This option is provided at OAC 252:100-7-15(c)(2). While it is not mandatory to provide this option in a GP, this source category has a good compliance record with timely obtaining permits and permit modifications. A review of the compliance history for the source category (approximately 141 inspections of approximately 55 facilities since 2001) indicates only one instance since 2001 where enforcement action was taken against a facility for not applying for the proper permit. In this particular instance, a facility covered by an individual permit did not timely apply for an operating permit. However, the facility did self-disclose the violation and finally obtained an Authorization to Operate under the NMPF GP. Considering the good compliance history for this source category it is recommended to allow the Notice of Intent to Construct option for obtaining permit coverage for new facility under this GP.

Removing Toxic Air Contaminant Requirements

The Toxic Air Contaminant requirements of OAC 252:100-41 were deleted from our rules through a permanent rule change, dated June 15, 2006. These requirements are addressed in the current permit in the eligibility section (Part 1, Section II.D.3). This condition will be deleted from the permit since it is no longer an applicable requirement.

Updated 40 CFR NSPS Kb Requirements

40 CFR Part 60 Subpart Kb has been updated to exclude certain smaller storage tanks. A review of facilities covered by the current GP (55 authorizations issued since May 9, 2000) indicates that no storage tanks are present that have the capacity and vapor pressure higher than the NSPS Kb thresholds for these smaller storage tanks. As shown in the table below, most of the storage tanks authorized under the GP have a rated capacity less than 20,000 gallons. There are only 4 facilities with storage tank capacities greater than 20,000 gallons. However, all 4 storage tanks contain Diesel, which has a vapor pressure of 0.022 psia @ 100 °F. As a result, none of the storage tanks authorized under the GP are close to the threshold of NSPS Subpart Kb (VOC storage tanks with capacity >20,000 gallons and VOC vapor pressure more than 2.2 psia). Thus, removing these NSPS requirements from the permit would appear to be appropriate in that it will simplify the permit, clarify requirements applicable to emissions units typically used at these facilities, and still provide the regulated community a permit with the flexibility to cover the types of activities typically performed at these facilities.

Table 1--Storage Tanks Authorized under the NMPF GP

Number of authorizations	Storage Tank Capacity (gallons)	Materials Stored
4	>20,000	Diesel
55	<20,000	Diesel, Gasoline, and Fuel Oil.

The current permit incorporates by reference NSPS Subpart Kb requirements in Part 1, Section II.C. This condition will be deleted from the permit. In addition, a condition will be added to the eligibility section (Part 1, Section III.D.3) to restrict eligibility to those storage tanks not subject to an NSPS.

Compliance Approach for Engines

Since the current permit was issued, the AQD has completed several more milestones in instituting the Regulatory Oversight Continuum (including the Permit Continuum). In general, the Regulatory Oversight Continuum recognizes that the higher the environmental risk, the greater the resources that should be allocated to address the risk. Thus, a relatively few facilities pose a large potential environmental threat, and a much larger number of facilities individually pose a limited potential threat. While the cumulative effect of the smaller, low risk facilities may be significant enough to warrant attention, they do not warrant the same level of attention on a facility to facility basis. This concept is implemented in various ways, including regulatory changes addressing permitting requirements, state-wide compliance strategies, as well as source-category tailored permit conditions.

AQD Rule changes have been made since the current permit was issued to institute a "permit exempt" category (generally facilities with emissions less than 40 TPY). Permit exempt facilities, while still subject to applicable state and federal air quality control rules and standards, are not required to obtain a permit, submit an annual emissions inventory, and pay annual operating fees. In addition, no or minimal monitoring is necessary to document compliance with applicable requirements for permit exempt facilities.

EPA rule changes have also been made since the current permit was issued to address emissions from reciprocating internal combustion engines. Sufficient information is now available to accurately quantify emissions from most types of engines. Specific monitoring requirements have been built into EPA rules for particular engine types. In general, the types of engines used at a NMPF will not be required to meet any additional new requirements under EPA rules at this time—their size is typically smaller than the threshold used in the rule to establish any type of monitoring or control.

Finally, the AQD has developed a protocol for portable engine analyzers (PEA) that can be used to assure more accurate measurement of emissions. This provides both the regulated community and AQD staff a valuable and useful tool for assuring compliance with permit limits as well as providing credible evidence of emissions rates.

As shown in the table below, a review of permits issued for the NMPF source category shows that all engines are powered by diesel fuel. None utilize a control device to reduce emissions, e.g., nonselective catalytic reduction or oxidation catalyst systems. Most are relatively small in size. Using EPA's breakpoint criteria of 600 HP, most are considered small engines. The PTE of either NOx or CO from these engines is typically less than 80% of the major source thresholds, and actual emissions are much less—usually less than 40 TPY.

Table 2--Engines Authorized under the NMPF GP

Number of authorizations	Rating (Horsepower)	# of Engines	Fuel	Controls (e.g., catalyst)
5	>600	7	Diesel	None
26	<600	36	Diesel	None
25	No Engine	-	NA	NA

Considering that the facilities in this source category typically don't operate 24 hours a day, 365 days a year, the relatively small size and low emissions from the engines, it is proposed to modify the permit to restrict eligibility for an Authorization to Construct to only diesel or natural gas-fired engines w/o controls, e.g., NSCR or oxidation catalysts. Thus the need for limits, and associated monitoring and recordkeeping can be eliminated or reduced. Specifically, the manufacturer's data can be used for estimating emissions, and the permittee will be required to properly operate and maintain the engine—as documented with O&M records. No initial or periodic testing will be required since the associated cost is disproportionate to the benefit. A more cost effective compliance approach recognizes the ability of AQD staff to perform PEA testing of suspect engines during inspections.

New 40 CFR 60 NSPS IIII Requirements

EPA promulgated new standards of performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE) on July 11, 2006. The affected source for the CI ICE NSPS IIII is each stationary CI ICE whose construction, modification or reconstruction commenced after July 11, 2005. The date of construction is the date the engine is ordered by the owner or operator. The NSPS requires meeting an output-based emission standard for PM, NOx, CO, and NMHC (gms/KW-hr) and smoke standards (as a percentage). The emission standards are generally modeled after EPA's standards for nonroad and marine diesel engines. The standards are phased in over several years with increasing levels of stringency. New engines must either be certified, or initial performance testing is required (Manufacturer's/Vendors data may be used in lieu of performance testing). Existing engines are not affected, unless modified or reconstructed, at which time they must also meet the emission standards as well as perform initial and periodic testing (depending upon the size of the engine).

In order to streamline permitting requirements (primarily to avoid having to include initial and periodic performance testing requirements), eligibility for an Authorization to Construct for a facility that utilizes stationary CI engine(s) will be limited to those that are either (a) not subject to NSPS Subpart IIII, or (b) subject to NSPS Subpart IIII, but certified by the manufacturer as compliant with NSPS Subpart IIII. Any engine constructed, modified, or reconstructed so that it becomes subject to the initial testing requirements of NSPS Subpart IIII will have to be authorized using an individual construction permit. Once this is done, a GOP Authorization to Operate can be obtained, as NSPS Subpart IIII does not mandate ongoing periodic testing after initial certification.

Updated 40 CFR NSPS OOO Requirements

The approach taken in the current permit is to incorporate by reference 40 CFR NSPS OOO requirements. However, comments from both the regulated community and AQD staff indicate it would be beneficial to list all requirements in one place—the permit. This is especially the case since there apparently has been some confusion concerning "performance testing scheduling requirements." For example, when an existing facility is replaced by a piece of equipment of equal or smaller size, having the same function as the existing facility, the new facility is not required to do performance tests (40 CFR 60.675). However, when all existing facilities in a production line are replaced with new facilities, an owner or operator must comply with performance tests (40 CFR 60.675). Including this language directly in the permit will hopefully clarify exactly when a facility needs to do performance tests.

The approach of incorporating these requirements by reference was previously taken because NSPS standards are required to be reviewed and updated by EPA every 8 years. 40 CFR NSPS OOO was first promulgated February 25, 1985, amended February 14, 1989 and June 9, 1997 and October 17, 2000. The February 14, 1989 amendments only addressed previously proposed changes to EPA reference test methods. No new emission requirements were added nor standards changed under NSPS OOO. The amendments only clarified emission measurement requirements that would otherwise apply. The June 9, 1997 amendments again did not add any new emission requirements, nor change any standards. The affected industries remained unchanged. However, several changes were made to the applicability section, definitions, test methods and procedures, and reporting and recordkeeping requirements. The revisions were primarily made to clarify the original intent of the NSPS, reduce or eliminate paperwork requirements, and reduce the costs of emission testing. The October 17, 2000 amendments only made minor, non-substantive changes to the regulations, i.e. clarifications to English/metric units.

Thus, it appears unlikely that NSPS OOO will change significantly in the near future. The benefit of listing all of the requirements in one place would appear to outweigh the disadvantage of having to update the permit periodically. Therefore, the permit was updated to list the NSPS OOO requirements in Part 1, Section III (Nonmetallic Mineral Processing Equipment). Separate conditions were included in this section addressing the opacity requirements for new and existing facilities, particulate matter requirements for new and existing facilities, scrubber requirements, and saturated/unsaturated material processing notifications.

Compliance Approach for Opacity and Particulate Matter Requirements

The approach taken in the current permit is to apply different opacity and particulate matter requirements to NSPS and non-NSPS nonmetallic mineral processing equipment. This was done because of the differing applicable requirements and because NSPS requirements are more stringent than state requirements.

For example, NSPS opacity requirements for nonmetallic mineral processing equipment typically range from 7 to 15%, and non-NSPS equipment is subject to the OAC 252:100-25 opacity requirements that range from 20 to 60%. The NSPS specifies that compliance with the

opacity requirements be demonstrated only with an initial performance test and generally recognizes (see 62 FR 31355, June 9, 1997) that no further periodic monitoring is necessary by the facility if the nonmetallic mineral processing equipment is properly operated and maintained (e.g., use of wet suppression). An opacity test periodically performed by State and local air pollution agency personnel is generally sufficient to assure continuing compliance. The state rule, OAC 252:100-25, does specify that compliance be determined using a Certified Visible Emission Evaluator using Test Method 9 (40 CFR Part 60, Appendix A) or a COM installed, calibrated, operated and maintained in accordance with Performance Specification 1 (40 CFR Part 60, Appendix B). The approach taken in the current permit is to require periodic visual observations of emissions of non-NSPS equipment using Method 22, and if visual observations are present, Method 9 testing. This "initiating event" approach to periodic monitoring was used since it appeared to be consistent with the NSPS rationale, would lower compliance costs for these facilities, and has been previously used in other states.

Likewise NSPS requires that particulate emissions from a stack from nonmetallic mineral processing equipment meet 0.022 gr/dscf, and non-NSPS equipment is subject the OAC 252:100-19-13 particulate matter requirements (expressed as a lb/hr emissions rate associated with a Tons/hr process weight rate). While the NSPS specifies that compliance with the particulate matter requirements be demonstrated only with an initial (no continuing periodic monitoring) performance test of certain nonmetallic mineral processing equipment (i.e., that discharges through a stack), no specific compliance method is specified by the state rule. Initially in issuance of a permit, compliance with OAC 252:100-19-13 has typically been done in the past through use of AP-42 emissions factors, or a material balance. However, a review of authorizations issued under GP indicates that no facility has ever had the potential to violate the OAC 252:100-19-13 requirement (i.e., an actual emissions rate >80% of the limit). Thus, no limits, or initial or continuing compliance requirements were ever established in an Authorization to Construct or Operate under the GP.

It is proposed to use a consistent, simplified approach in assuring compliance with opacity and particulate matter requirements for both NSPS and non-NSPS nonmetallic mineral processing equipment. The approach differs slightly for opacity and particulate matter. For opacity, conditions will be established in the permit requiring NSPS opacity criteria be met for all nonmetallic mineral processing equipment. Thus, any nonmetallic mineral processing equipment constructed, modified or reconstructed under the permit will be subject to the NSPS opacity requirements (e.g., that typically range from 7 to 15%) as well as the initial Method 9 performance test for such equipment, regardless of when constructed or the capacity of the equipment. For particulate matter, conditions will be established in the permit requiring NSPS particulate matter criteria be met for all nonmetallic mineral processing equipment, unless exempted by capacity. Thus, any nonmetallic mineral processing equipment constructed, modified or reconstructed under the permit will be subject to the NSPS particulate matter requirements (i.e., emissions from a stack meet 0.022 gr/dscf) as well as the initial performance test for such equipment, regardless of when constructed. However, the equipment capacity exemptions still apply. In addition, a condition is included in the permit that allows limits to be established in an Authorization if facility has the potential to violate the OAC 252:100-19-13 requirement (i.e., an actual emissions rate >80% of the limit).

Continuing compliance with both the opacity and particulate matter requirements shall be demonstrated through periodic inspections of wet suppression equipment, and daily monitoring of operating parameters for scrubbers and baghouses. These requirements will apply to all wet suppression equipment, scrubbers and baghouses authorized under the permit.

Compliance Approach for Fugitive Emissions

The approach taken in the current permit to control fugitive emissions consists of two components. The first, similar to the approach taken in the current permit for opacity from nonmetallic mineral processing equipment, is to require periodic visual observations of emissions of non-NSPS equipment using Method 22, and if visual observations are present, Method 9 testing. As mentioned previously, this "initiating event" approach to periodic monitoring was used since it appeared to be consistent with the NSPS rationale, would lower compliance costs for these facilities, and has been previously used in other states. The second component is a general requirement to implement reasonable precautions to minimize fugitive emissions (primarily directed to not harming adjacent property). Continuing compliance with this requirement is demonstrated by the permittee responding to citizen complaints, either by performing their own investigation or by referring the complaint to DEQ for investigation, and taking corrective action.

A review of the compliance history for the source category (approximately 141 inspections of approximately 55 facilities since 2001) indicates there have been no instances since 2001 where enforcement action was taken against a facility for fugitive dust problems. However, a number of complaints have been received about several facilities for fugitive dust leaving the property. A review of the DEQ complaint database indicates that 39 complaints have been received concerning 10 different facilities since 2001 (See Table 3). Review of individual complaints indicates they are intermittent, and when confirmed, typically result from inoperable or malfunctioning wet suppression equipment on the process equipment, or non-use or non-working water trucks. The majority of the problems appear to occur as the result of malfunctioning wet suppression equipment—either on the process line, or when used to control road dust. In all cases, fugitive dust problems appeared to be identified through the citizen complaint process made directly to DEQ. None were self-disclosed by the facility and none were identified as a result of a periodic inspection. In addition, there are no indications from the inspection database

Table 3—Analysis of Complaints Received

Complaint #	Complaint Date	Company /Facility	Complaint	Confirm	Cause
38873	2/19/04	1/1	Fugitive Dust	Yes	High Winds--water trucks being used
23657	9/13/01	2/1	Fugitive Dust	Yes	Unknown
25301	1/17/02	2/1	Fugitive Dust	No	Unknown
30653	1/22/03	2/2	Fugitive Dust	No	Unknown
37519	12/8/03	3/1	Fugitive Dust	No	Unknown
25737	2/28/02	4/1	Fugitive Dust	Yes	Water Truck Broken Down—repaired
26150	3/26/02	4/1	Fugitive Dust	No	Unknown--roads being watered
33611	6/6/03	4/1	Fugitive Dust	No	Unknown
34543	7/18/03	4/1	Fugitive Dust	Yes	Dust from County Road--will water county road

34589	7/22/03	4/1	Fugitive Dust	Yes	Dust from County Road--will water county road
35930	9/16/03	4/1	Fugitive Dust	No	Blasting
39651	3/22/04	4/1	Fugitive Dust	No	Blasting
42547	7/13/04	4/1	Fugitive Dust	Yes	Roads not watered--now being watered
46518	3/22/05	4/1	Fugitive Dust	Yes	Roads not watered--now being watered
48647	7/28/05	4/1	Fugitive Dust	Yes	Roads not watered--now being watered
21314	5/1/00	5/1	Fugitive Dust	Yes	Water Truck Broken Down—repaired
22395	6/26/01	5/1	Fugitive Dust	No	Roads being watered
35959	9/16/03	5/1	Fugitive Dust	Yes	High Winds--water trucks being used
35929	9/16/03	6/1	Fugitive Dust	No	Blasting
49857	10/14/05	6/2	Mobile Source Diesel Exhaust	Yes	Mobile Equipment at site—AQD doesn't regulate mobile sources
49908	10/17/05	6/2	Fugitive Dust	No	Blasting
50239	11/10/05	6/2	Fugitive Dust	No	Unknown--roads being watered
50311	11/18/05	6/2	Fugitive Dust	Yes	Blasting
50350	11/22/05	6/2	Fugitive Dust	Yes	Blasting
50373	11/27/05	6/2	Fugitive Dust	No	High Winds--water trucks being used
50693	12/29/05	6/2	Fugitive Dust	No	High Winds--water trucks being used
50768	1/4/06	7/1	Fugitive Dust	Yes	No water truck--will purchase truck
52161	4/7/06	7/1	Fugitive Dust	Yes	Water Truck Not Being Used
31791	3/24/03	8/1	Fugitive Dust	Yes	Unknown
49315	9/7/05	8/1	Fugitive Dust	No	Unknown
49515	9/21/05	8/1	Fugitive Dust	No	Unknown--possibly dust from City street sweeper
50582	12/16/05	8/1	Fugitive Dust	No	Unknown
50644	12/23/05	8/1	Fugitive Dust	Yes	Dust suppression equipment not being used
50789	1/5/06	8/1	Fugitive Dust	Yes	Dust suppression equipment not being used
50871	1/11/06	8/1	Fugitive Dust	Yes	Dust suppression equipment not being used
50884	1/11/06	8/1	Fugitive Dust	No	Unknown
50760	1/14/06	8/1	Fugitive Dust	No	Unknown
51620	3/7/06	8/1	Fugitive Dust	No	Unknown
51825	3/20/06	8/1	Fugitive Dust	No	Unknown

that the permittee is not properly investigating (or referring to DEQ) and maintaining records of complaints reported to the facility.

It is proposed to use a slightly different, more consistent approach for fugitive dust, similar to that taken previously for opacity. The requirement to perform Method 22 observations has been removed from the permit. Specifically, a new, modified or reconstructed facility shall meet the initial performance test requirements for opacity for both nonmetallic mineral processing equipment and for fugitive emissions. Continuing compliance shall be demonstrated through periodic inspections of wet suppression equipment, and daily monitoring of operating parameters for scrubbers and baghouses. These requirements will apply to all wet suppression equipment, scrubbers and baghouses authorized under the permit. In addition, the general requirement to implement reasonable precautions to minimize fugitive emissions (primarily directed to not harming adjacent property) is retained. Continuing compliance with this requirement is demonstrated by the permittee responding to citizen complaints, either by performing their own investigation or by referring the complaint to DEQ for investigation. Finally, a new condition

will be added that requires that a permittee maintain on-site, an operable water-spray vehicle or other equipment capable of wetting the roads, and a readily available, sufficient supply of water.

The permittee is required to keep records of when, and for how long, equipment is inoperable or malfunctioning. Failure to maintain these records, as well as records of complaints, is a violation of the permit. The potential penalty for not maintaining these records, as well as not maintaining water-spray vehicle or other equipment capable of wetting the roads on-site should give the AQD an adequate tool to enforce fugitive dust conditions of the permit, and assure that air quality and adjacent property is adequately protected.

Updated Testing Requirements

AQD rules at OAC 252:100-43-3 (Testing, Monitoring and Recordkeeping) now require (effective June 1, 2003) that a permittee required to perform an EPA Reference Method stack test notify the DEQ AQD in writing thirty (30) calendar days prior to the planned date of the test to provide an opportunity for DEQ personnel to observe the test. In addition, the permittee is required to submit a pre-test plan to the DEQ AQD at least thirty calendar days prior to the test. Note that, for this source category, a stack test is associated with emissions from a stack, and not from fugitive sources, e.g., a Method 5 test of particulate matter from a scrubber, and not a Method 9 opacity measurement from a drop point on a conveyor (unless the conveyor is enclosed and discharges through a vent). The permit was updated to add conditions to assure compliance with these requirements in Part 4, Section IV (Monitoring, Recordkeeping & Reporting) of the Standard Conditions. The conditions also clarify that no such notification, or test-plan, is required for initial or periodic monitoring of opacity, using Method 9 or Method 22, unless performed in conjunction with another Reference Method stack test.

Notifications

Notifications to the DEQ are required by the permit for various events at the facility. These include notifications of changes or modifications to the facility for certain emissions units, notification of proposed performance testing, notification of excess emissions, and notification of change in ownership.

In general, changes at a facility covered by a GP are handled in the same manner as a facility covered by an individual permit, with certain exceptions. For example, construction of a new facility requires an applicant to obtain either an Authorization (or NOI) to Construct, or an individual construction permit. Likewise commencing operation of a facility requires either an Authorization to Operate, or an individual operating permit.

Changes at an existing facility, covered by an Authorization to Operate, also don't result in a modified Authorization to Operate (although a permittee may request a new Authorization to Operate to reflect previous changes made to a facility). In fact, most modifications at a facility covered by a GP do not typically require an Authorization to Construct or a new Authorization to Operate. These include increasing the production rate, if such increase does not exceed the operating design capacity of the source, increasing hours of operation, and using an alternative fuel or raw material if the facility is designed to accommodate the alternative use. Likewise, they include adding or modifying equipment that results in an increase in emissions and adding

equipment (even equipment subject to NSPS or NESHAP), if those emissions units are "pre-approved" in the permit. In other words, the GP was developed to address all of the applicable requirements for that type of emissions unit, e.g., nonmetallic mineral processing equipment, storage tanks engines, etc., and the GP utilizes a facility-wide emissions cap so that emissions increases do not trigger any additional applicable requirements until the cap is reached, e.g., a synthetic-minor GP with a cap set at the major source thresholds. Thus, most modifications are pre-approved in the GP.

However, to provide a practically enforceable method of assuring that the permittee is only adding/modifying equipment pre-approved in the permit, the NMPF GP does require notification of such changes to be made to DEQ within 7 days of the start of operation of the change. In addition, certain notifications required by NSPS are required to be made, e.g., date of commencing construction, date of initial start-up, a physical or operational change that increases emissions, and the date of a performance test for a CEMS. However, except for the performance test notification, the other NSPS notifications may be met using a Notice of Modification that is timely submitted within 10 days of startup.

Due to comments received since the permit was issued, the notification requirement has been changed from "within 7 days of the start of operation of the change" to "within 10 days of the start of operation of the change." Since there is no applicable condition establishing the time limit, then it need only be reasonable. 10 days seems reasonable, considering the amount of recordkeeping required by the permit—that will allow an inspector to confirm documentation of the change even during the 10 days prior to the notification. In addition, the 10 day period is consistent with other similar requirements for minor facilities, e.g., the 10 day notice following transfer of a minor permit.

APPLICABLE RULES AND REGULATIONS

Applicable rules and regulations are given below for each emission unit authorized in this permit, including facility-wide requirements, processing equipment, storage tanks, engines, and fugitive emissions. For brevity, only those applicable requirements that are specific to the particular emissions unit, and not addressed in the Facility-wide requirements, are covered in each section. In addition, the description of the applicable requirement may also be abbreviated, to save space. For a more lengthy description, refer to the particular rule.

FACILITY-WIDE REQUIREMENTS

Oklahoma Air Pollution Control Rules

OAC 252:100-1 (General Provisions) **[Applicable]**
Subchapter 1 includes definitions but there are no regulatory requirements.

OAC 252:100-3 (Air Quality Standards and Increments) **[Applicable]**
Subchapter 3 enumerates the primary and secondary ambient air quality standards and the significant deterioration increments. At this time, all of Oklahoma is in attainment of these standards.

OAC 252:100-5 (Registration, Emissions Inventory, & Annual Operating Fees) [Applicable]
Subchapter 5 requires sources of air contaminants to register with Air Quality, file emission inventories annually, and pay annual operating fees based upon total annual emissions of regulated pollutants.
This permit assures compliance with this regulation using the following approach:
A standard condition in the permit requires the permittee to file an annual emissions inventory and pay annual fees based on either emission inventories or allowable emissions.

OAC 252:100-7 (Permits for Minor Facilities) **[Applicable]**
Part 1 includes definitions and subjects all permitting to the tiered Uniformed Permitting Act. Permits are required to meet public review requirements consistent with the Tier System given in the Uniform Permitting Act.
Part 2 establishes fees for construction and operating permits, Authorizations issued under General Permits, and applicability determinations.
Part 3 establishes construction permit categories and requirements, including that a construction permit require the permittee to comply with all applicable air pollution rules, federal NSPS, and NESHAP established under Sections 111 and 112 of the Federal Clean Air Act and to not exceed ambient air quality standards. A construction permit and subsequent operating permit is required for new facilities. A permit modification is also required when making certain modifications to a facility.
Part 4 establishes operating permit requirements and requires demonstration of compliance with the emission limits and air pollution control requirements of the construction permit. No specific emission limitation, work practice condition, or other emission standard, or criterion is specified in this subchapter.
This permit assures compliance with this regulation using the following approach:
The permit is designed to allow minor facilities to fulfill the requirement to obtain an Authorization to Construct and an Authorization to Operate before starting construction and operation of an eligible facility, or for modifications to existing eligible facilities. A *Notice of Intent (NOI) to Construct* is required prior to commencing construction or installation of any new facility other than a de minimis facility. Coverage under the general permit is effective upon receipt of the *NOI to Construct* by the AQD. After construction is complete, a *NOI to Operate* must be submitted within 60 days of start-up.

Tier II review will be provided for this permit and Tier I review will be provided for any Authorizations issued hereunder. In lieu of an Authorization to Construct, an applicant may obtain a minor source construction permit, and then apply for an Authorization to Operate under this permit. Permit conditions have been included in the permit that provide that conditions from a minor source construction permit can be incorporated into the Authorization to Operate as long as the conditions are equivalent to or more stringent than the corresponding conditions in the General Permit. Operational conditions have been included in the permit to require a source to construct and operate all emission units and associated control equipment within a practical range of operating conditions so as to achieve, on a continuous basis, a level of emissions that complies with applicable requirements. Operating and compliance requirements, as well as monitoring and recordkeeping requirements for control devices are specifically addressed in the permit (see Appendix A). An initial compliance inspection of the facility may be conducted by the AQD prior

to issuance of the Authorization to Operate. Conditions have also been included in the permit to require a compliance demonstration prior to issuance of an Authorization to Operate and continuing compliance demonstrations to assure that the source continues to meet applicable requirements. Compliance with the facility-wide emissions cap shall be determined by calculating the actual emissions from all emission units located at the facility. Such emissions estimates shall be calculated as specified in the specific conditions for each particular emissions unit, or for equipment not specified, using manufacturer's data, EPA approved emissions software, DEQ approved estimation methods, testing data, or the latest approved version of AP-42, Compilation of Air Pollution Emission Factors. Emissions limitations are required for those sources that have the potential to violate an applicable requirement. These limitations are established as part of the facility-wide emissions cap, not to equal or exceed 100 TPY of any criteria pollutant, nor to equal or exceed 10 TPY of any single HAP, or 25 TPY of all HAP. Specific conditions are also included in the permit to address any ambient air quality standards or NSPS and NESHAP requirements. Currently, under Oklahoma's State Implementation Plan (SIP), minor facilities are not required to demonstrate compliance with the NAAQS. However, a permit condition is included in the permit that requires the facility to meet the ambient air quality standards. The permit allows facilities that become subject to an NSPS or NESHAP to incorporate those requirements into an Authorization to Operate. A minor source construction permit must be issued for the modification of an existing facility that is adding equipment subject to an NSPS or NESHAP not otherwise addressed in the permit or that is making modifications that require a case-by-case determination. After construction is complete, a *NOI to Operate* must be submitted within 60 days of start-up and a new Authorization to Operate will be issued. All other facility modifications may be constructed without a minor source construction permit, an Authorization to Construct, or a new Authorization to Operate. For certain modifications, the permittee must send a Notice of Modification to AQD within 10 days of the start of operation of the modification.

OAC 252:100-9 (Excess Emission Reporting Requirements) **[Applicable]**

Subchapter 9 requires an owner or operator of a regulated facility to report all excess emissions from an air pollution source that are in violation of the applicable air pollution control rule, permit, or order of the DEQ. No specific emission limitation, standard, or criterion is specified in this subchapter.

The permit assures compliance with this regulation using the following approach:

Conditions are included in the standard conditions of the permit that require prompt reporting to AQD should excess emissions occur.

OAC 252:100-13 (Open Burning) **[Applicable]**

This subchapter prohibits open burning of refuse and other combustible material except in compliance with OAC 252:100-13-7 and 9. No specific emission limitation or criterion is specified in this subchapter. However, work practice conditions and standards are specified.

The permit assures compliance with this regulation using the following approach:

Subchapter 13 applies to all facilities. Therefore, the permit includes a condition that requires compliance with this subchapter. However, open burning is not expected to take place at facilities covered under this permit. Therefore, no initial compliance demonstration or continuing monitoring, recordkeeping, or reporting requirements associated with this subchapter are included in the permit.

OAC 252:100-25 (Smoke, Visible Emissions and Particulates) **[Applicable]**

This subchapter states no person shall allow or permit the discharge of any fumes, aerosol, mist, gas, smoke, vapor, particulate matter, or any combination thereof, exhibiting greater than 20 percent equivalent opacity except for short-term occurrences. At no time may the opacity exceed 20 percent for more than one six-minute period in any consecutive 60 minutes nor more than three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity.

The permit assures compliance with this regulation using the following approach:

The permit is structured so that all nonmetallic mineral processing equipment is subject to the opacity requirements of NSPS OOO, regardless of size or date of construction. These opacity requirements are more stringent than the Subchapter 25 opacity requirements. Other equipment and/or activities must meet the 20%/60% opacity requirement of Subchapter 25. A new, modified or reconstructed facility shall meet the initial performance test requirements for opacity for both nonmetallic mineral processing equipment and for fugitive emissions. Continuing compliance shall be demonstrated through periodic inspections of wet suppression equipment. Continuing compliance with this requirement is demonstrated by the permittee responding to citizen complaints, either by performing their own investigation or by referring the complaint to DEQ for investigation. Finally, a new condition has added that requires that a permittee maintain on-site, an operable water-spray vehicle or other equipment capable of wetting the roads, and a readily available, sufficient supply of water.

OAC 252:100-29 (Fugitive Dust) **[Applicable]**

This subchapter prohibits any person from causing or allowing any fugitive dust source to be operated, or any substances to be handled, transported, or stored, or any structure constructed, altered, or demolished to the extent that such operation or activity may enable fugitive dust to become airborne and result in air pollution, without taking reasonable precautions to minimize or prevent pollution. Subchapter 29 further prohibits discharge of visible fugitive dust beyond the property line on which the emissions originated in such a manner as to damage or interfere with the use of adjacent properties, or cause air quality standards to be exceeded, or to interfere with the maintenance of air quality standards. A list of reasonable precautions is specified in this subchapter.

The permit assures compliance with this regulation using the following approach:

Any complaint from a citizen about the release of fugitive dust from any facility shall be responded to by the facility within 48 hours. The facility shall take any necessary action, including any needed corrective action, to investigate the cause and to resolve the complaint, or they may refer the complaint to DEQ for response and investigation.

OAC 252:100-43 (Specific Sampling and Testing Methods) **[Applicable]**

This subchapter provides general requirements for testing, monitoring and recordkeeping and applies to any testing, monitoring or recordkeeping activity conducted at any stationary source. To determine compliance with emissions limitations or standards, the Air Quality Director may require the owner or operator of any source in the state of Oklahoma to install, maintain and operate monitoring equipment or to conduct tests, including stack tests, of the air contaminant source. All required testing must be conducted by methods approved by the Air Quality Director and under the direction of qualified personnel. A notice-of-intent to test and a testing protocol shall be submitted to Air Quality at least 30 days prior to any EPA Reference Method stack tests.

Emissions and other data required to demonstrate compliance with any federal or state emission limit or standard, or any requirement set forth in a valid permit shall be recorded, maintained, and submitted as required by this subchapter, an applicable rule, or permit requirement. Data from any required testing or monitoring not conducted in accordance with the provisions of this subchapter shall be considered invalid. Nothing shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

The permit assures compliance with this regulation using the following approach:

A standard condition is included which states that all required tests shall be made and the results calculated in accordance with test procedures described or referenced in the permit and approved by Air Quality. Permit specific conditions establish minimum monitoring requirements for control devices associated with emission units addressed in this permit. In addition, testing must be performed as specified in 40 CFR Parts 51, 60, 61, 63, and 75, as applicable, unless otherwise specified in an Authorization under this permit.

OAC 252:100-45 (Monitoring of Emissions) **[Applicable]**

Subchapter 45 outlines the basic requirements for monitoring of emissions and their recording and reporting. The use of any credible evidence in establishing a violation is also addressed. However, no specific emission limitation, work practice condition, standard, or criteria is specified in this Subchapter.

The permit assures compliance with this regulation using the following approach:

Conditions have been included which establish minimum monitoring requirements for control devices associated with emission units addressed in this permit. In addition, testing is required to be performed as specified in 40 CFR Parts 51, 60, 61, 63, and 75, as applicable, unless otherwise specified in an Authorization under this permit.

2. Federal Regulations

Certain state regulations require compliance with federally promulgated regulations. OAC 252:100-7-15(d) requires that construction permits include all applicable requirements, including NSPS and NESHAP. In addition, OAC 252:100-43 provides that any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of the State Implementation Plan (SIP).

Credible Evidence, 40 CFR Part 51 **[Applicable]**

This regulation clarifies that "any credible evidence," including data gathered from means other than the use of a specified "reference test method," can be used to prove an alleged emission limitation violation.

The permit assures compliance with this regulation using the following approach:

Conditions are included in the Standard Conditions of the permit to address the credible evidence requirements.

New Source Performance Standards (NSPS), 40 CFR Part 60 **[Applicable]**

NSPS means a standard of emissions of air pollutants that reflects the degree of emission limitation achievable through the application of the best system of emission reduction that, taking into

account the cost of achieving such reduction and any non-air quality health and environmental impact and energy requirements, the Administrator of EPA determines has been adequately demonstrated. NSPS apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication of the standard applicable to that facility. Certain notification, recordkeeping, emissions limitations, performance tests, and monitoring requirements are specified in these NSPS regulations.

The permit assures compliance with this regulation using the following approach:

Conditions are included to address the NSPS general notification, recordkeeping, emissions limitations, performance test, and monitoring requirements. Language in the permit emphasizes that NSPS notification and performance test requirements are separate, stand-alone, and independent federal requirements that must be met in addition to any other permit requirements, e.g., equipment addition or change notifications. However, a timely submitted Notice of Modification shall suffice as a notice of the actual date of initial start-up, and as a notice of a physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies as required by an NSPS (40 CFR 60.7(a)). Conditions specific to a particular NSPS are included for each emissions unit that may be determined to be an affected unit. Unless incorporated by reference into the Authorization, eligibility for this permit is restricted to facilities whose emissions units are not subject to any NSPS subpart other than; Subpart A, General Provisions; Subpart OOO, Nonmetallic Mineral Processing, and Subpart IIII (only engines certified according to §60.4201(a) through (d) and §60.4202(a) through (d)).

Stratospheric Ozone Protection, 40 CFR Part 82 [Subpart A and Subpart F Applicable]

These standards require phase out of Class I & II substances, reductions of emissions of Class I & II substances to the lowest achievable level in all use sectors, and banning use of nonessential products containing ozone-depleting substances (Subparts A & C); control servicing of motor vehicle air conditioners (Subpart B); require Federal agencies to adopt procurement regulations which meet phase out requirements and which maximize the substitution of safe alternatives to class I and class II substances (Subpart D); require warning labels on products made with or containing Class I or II substances (Subpart E); maximize the use of recycling and recovery upon disposal (Subpart F); require producers to identify substitutes for ozone-depleting compounds under the Significant New Alternatives Program (Subpart G); and reduce the emissions of halons (Subpart H). Subparts A and F are potentially applicable to OGF facilities.

The permit assures compliance with this regulation using the following approach:

Facilities subject to 40 CFR Part 82, Subparts B, C, D, E, G, and H are ineligible for an Authorization to Construct. A standard condition of the permit requires compliance with 40 CFR Part 82, Subparts A and F.

Subpart A identifies ozone-depleting substances and divides them into two classes. Facilities may use one or more regulated refrigerants either in a process cooler or condenser, a building air conditioner, or in motor vehicles. Class II chemicals, which are hydrochlorofluorocarbons (HCFCs), are generally seen as interim substitutes for Class I CFCs. Class II substances consist of 33 HCFCs. A complete phase-out of Class II substances, scheduled in phases starting by 2002, is required by January 1, 2030.

Subpart F requires that any persons servicing, maintaining, or repairing appliances except for motor vehicle air conditioners; persons disposing of appliances, including motor vehicle air conditioners; refrigerant reclaimers, appliance owners, and manufacturers of appliances and

recycling and recovery equipment comply with the standards for recycling and emissions reduction. Conditions are included in the permit to address the requirements specified at §82.156 for persons opening appliances for maintenance, service, repair, or disposal; §82.158 for equipment used during the maintenance, service, repair, or disposal of appliances; §82.161 for certification by an approved technician certification program of persons performing maintenance, service, repair, or disposal of appliances; §82.166 for recordkeeping; § 82.158 for leak repair requirements; and §82.166 for refrigerant purchase records for appliances normally containing 50 or more pounds of refrigerant.

3. Non-applicable Oklahoma and Federal Regulations

Table 4 and Table 5 list the Oklahoma Air Quality Rules and Federal Regulations that are not applicable to facilities covered under this permit on a facility-wide basis. Rules applicable to a specific emission unit are listed separately.

Table 4--Facility-wide Summary
Non-applicable Oklahoma Air Quality Rules

OAC 252:100-8	Permits for Major Sources	Not a major source
OAC 252:100-11	Alternative Emissions Reduction	Ineligible*
OAC 252:100-15	Mobile Sources	Not a covered source
OAC 252:100-17	Incinerators	Not a covered source
OAC 252:100-19-10 & 11	PM from Wood waste Burning	Not a covered source
OAC 252:100-23	Cotton Gins	Not a covered source
OAC 252:100-24	Grain Elevators	Not a covered source
OAC 252:100-33	Nitrogen Oxides	Ineligible *
OAC 252:100-35	Carbon Monoxide	Not a covered source
OAC 252:100-37, Part 5	Control of Organic Solvents	Not a covered source
OAC 252:100-37, Part 7	Control of Specific Processes	Not a covered source
OAC 252:100-39, Part 7 Sections 40, 42, 43, 44-47, 49	Emissions of VOCs in Nonattainment Areas and Former Non Attainment Areas	Ineligible*

* Ineligible for an Authorization to Construct. May be addressed in a minor source construction permit by specific conditions that are then incorporated into the Authorization to Operate.

Table 5--Non-applicable Federal Regulations

40 CFR Part 52	Prevention of Significant Deterioration	Not applicable
40 CFR Part 59	Consumer/Commercial Products	Not a covered source
40 CFR Part 64	Compliance Assurance Monitoring	Not a major source
40 CFR Part 68	Chemical Accident Prevention	Ineligible
40 CFR Part 82, Subpart B	Stratospheric Ozone for Servicing of MVACs	Ineligible *
40 CFR Part 82, Subpart C	Ban on Nonessential Products	Ineligible *
40 CFR Part 82, Subpart D	Stratospheric Ozone for Federal Procurement	Ineligible *
40 CFR Part 82, Subpart E	Stratospheric Ozone for Labeling of Ozone-Depleting Products	Ineligible *
40 CFR Part 82, Subpart G	Stratospheric Ozone for the Significant New Alternatives Policy Program	Ineligible *
40 CFR Part 82, Subpart H	Stratospheric Ozone for Halon Emissions Reduction	Ineligible *

UNIT-SPECIFIC REQUIREMENTS

NONMETALLIC MINERAL PROCESSING EQUIPMENT REQUIREMENTS

Oklahoma Air Pollution Control Rules

OAC 252:100-19 (Control of Emissions of Particulate Matter) **[Applicable]**
This Subchapter requires the control of emissions of particulate matter from fuel-burning equipment and from industrial processes. Section 19-12 limits particulate emissions from new and existing directly fired fuel-burning units (and/or) emission points in an industrial process based on process weight rate, as specified in Appendix G.
The permit assures compliance with this regulation using the following approach:
A permit condition is included which requires the permittee to monitor and keep records of the equipment ID, hourly process weight rate, annual throughput, type of control device used if any, efficiency of the control device, and the hours of operations. In addition, hourly limitations are established in the authorization for those emission points that have the potential to exceed allowable rates.

Federal Regulations

New Source Performance Standards (NSPS), 40 CFR Part 60 **[Applicable]**
Subpart OOO (Nonmetallic Mineral Processing) applies to nonmetallic mineral processing operations with rated capacities of greater than 25 TPH for fixed/stationary facilities and 150 TPH for portable facilities. Underground mines and stand-alone screening operations at plants without crushers or grinding mills are not subject to this requirement. The following facilities at a nonmetallic minerals processing plant which commenced construction or modification after August 31, 1983, are affected by Subpart OOO: each crusher, grinding mill, bucket elevator, screening operation, belt conveyor, bagging operation, storage bin, and enclosed truck or railcar loading operation. Excluded from the list of affected facilities are truck dumping and transfer points from belt conveyors to stockpiles.
The permit assures compliance with this regulation using the following approach:
Specific conditions are included that specifically list these requirements. Generally, when these affected sources begin to process unsaturated material, they will become subject to the 10% opacity limit for any crusher and 15% opacity limit for any other affected facility, and be required to perform Method 9 testing within 60 days of achieving the maximum production rate, but no later than 180 days after initial start-up.

STORAGE TANK REQUIREMENTS

Oklahoma Air Pollution Control Rules

OAC 252:100-37 (VOCs) **[Applicable]**

Part 3 requires storage tanks (except pressure tanks) built after 12/28/74, and with a capacity of 400 gallons or more storing a VOC with a vapor pressure of 1.5 psia or greater under actual conditions to be equipped with a submerged fill pipe or a vapor-recovery system.

Part 3 requires storage tanks (except pressure tanks) built after 12/28/74, with a capacity greater than 40,000 gallons to be equipped with a floating roof or a vapor-recovery system capable of collecting 85% or more of the uncontrolled VOCs.

The permit assures compliance with this regulation using the following approach:

Tanks constructed after July 1, 1972, storing a VOC with a vapor pressure greater than 1.5 psia, with a capacity greater than 400 gallons must be equipped with a submerged fill pipe. Compliance with this rule requires that the permittee maintain records of the types of volatile petroleum liquids stored, the true vapor pressure of the liquid as stored, and the dimension and capacity of the tank. An Authorization to Construct is not allowed for a facility using a vapor-recovery/vapor disposal system as required by OAC 252:100-37-15(a)(2), or other equipment of equal efficiency, as required by 252:100-37-15(a)(3). Such facilities must obtain a minor source construction permit for these vapor-recovery/vapor disposal systems and operational requirements developed in that construction permit must be incorporated into an Authorization to Operate. Thus, requirements do not need to be included in the general permit for vapor recovery/vapor disposal systems and their associated control devices. No conditions are included in the permit for storage tanks with a capacity greater than 40,000 gallons since they are ineligible for coverage under this permit.

OAC 252:100-39 (VOCs in Non-Attainment Areas) **[Applicable]**

Part 5 sets control requirements for petroleum liquid storage vessels equipped with external floating roofs, having capacities greater than 40,000 gallons and located in Tulsa and Oklahoma counties.

Part 7 requires that each VOC vessel with a capacity greater than 40,000-gal shall be a pressure vessel or shall be equipped with a floating roof or a vapor-recovery system that consists of a vapor-gathering system capable of collecting 90 percent by weight or more of the uncontrolled VOCs.

Part 7 requires that each VOC storage vessel with a nominal capacity greater than 400-gal and less than 40,000-gal shall be equipped with a submerged fill pipe or be bottom filled. The displaced vapors from each storage vessel with an average daily throughput of 30,000 gal or greater which stores VOCs shall be processed by a system that has a total collection efficiency no less than 90 percent by weight of total VOCs in the vapors.

Part 7 requires that each VOC storage vessel (located in Tulsa County only) with a nominal capacity greater than 2,000-gal and less than 40,000-gal, in addition to being equipped with a submerged fill pipe or being bottom loading, shall be equipped with a vapor control system.

The permit assures compliance with this regulation using the following approach:

Eligibility is restricted to those gasoline or other VOCs (with vapor pressure greater than 1.5 psia) tanks constructed in Tulsa County with a capacity less than 2,000 gallons. Thus, the only requirement that applies is the installation and operation of a permanent submerged fill pipe for any tank with capacity greater than 400 gallons. An Authorization to Construct is not allowed for a facility using a vapor-recovery/vapor disposal system as required by 100-39-41(a)(2), 100-39-

41(b)(2), or 100-39-41(c)(5), or other equipment of equal efficiency, as required by 100-39-41(a)(3). Such facilities must obtain a minor source construction permit for these vapor-recovery/vapor disposal systems and operational requirements developed in that construction permit must be incorporated into an Authorization to Operate. Thus, requirements do not need to be included in the general permit for vapor recovery/vapor disposal systems and their associated control devices.

Federal Regulations

None are applicable.

INTERNAL COMBUSTION ENGINE REQUIREMENTS

Oklahoma Air Pollution Control Rules

OAC 252:100-19 (PM Emissions from Fuel-burning Equipment) **[Applicable]**
Subchapter 19 requires that the maximum allowable emissions of particulate matter from engines not exceed the following amount:

Y = 0.6	Pounds Per MMBTU	For Heat Input < 10 MMBTU/hr
Log(Y) =	-0.259Log(X) + 0.037	For 10 < Heat Input < 10,000 MMBTU/hr
Y = 0.1	Pounds Per MMBTU	For Heat Input > 10,000 MMBTU/hr

Where Y = Pounds per MMBTU
X = MMBTU/hr

The permit assures compliance with this regulation using the following approach:
AP-42, Table 3.2-2 (10/96) lists natural gas PM_{10} emissions to be about 0.046 lbs/MMBTU for 2-cycle engines and 0.007 lbs/MMBTU for 4-cycle engines which is in compliance for all heat input ranges. For gasoline fuel, AP-42, Table 3.3-1 (10/96) lists PM_{10} emissions to be about 0.10 lbs/MMBTU which is also in compliance for all heat input ranges. For diesel fuel, AP-42, Table 3.3-1 (10/96) lists PM_{10} emissions to be about 0.31 lbs/MMBTU, which corresponds to an engine(s) of 50,237 H.P. or larger. No fuel-burning equipment rated at 128 MMBTU/hr (i.e. 50,237 H.P. based on NOx emissions limitations) is expected to be present at these sites. No specific conditions are needed in the permit to address these requirements since all engines expected to be present at these sites should have emissions that never exceed the above limits. In addition, a condition has been placed in the eligibility section that reserves the right of DEQ to refuse issuance of an Authorization under this permit.

OAC 252:100-31 (Sulfur Compounds) **[Applicable]**
Part 2 limits emissions of sulfur dioxide from any one existing source or any one new petroleum and natural gas process source subject to OAC 252:100-31-26(a)(1). Ambient air concentration of sulfur dioxide at any given point shall not be greater than 1,300 $\mu g/m^3$ in a 5-minute period of any hour, 1,200 $\mu g/m^3$ for a 1-hour average, 650 $\mu g/m^3$ for a 3-hour average, or 130 $\mu g/m^3$ for a 24-hour average.

Part 5 limits SO_2 emissions from any new gas-fired fuel-burning equipment to 0.2 lb/MMBtu heat input for a three-hour average. Part 5 limits SO_2 emissions from any new liquid-fired fuel-burning equipment to 0.8 lb/MMBtu heat input for a three-hour average.

The permit assures compliance with this regulation using the following approach:

Eligibility for an Authorization to Construct under the permit is restricted to those facilities using liquid petroleum gas, natural gas with no greater than 20 grains/100 scf total sulfur content, diesel fuel with a sulfur content less than 0.6% by weight, or No. 2 through No. 6 fuel oil with a sulfur content less than 0.6% by weight. Appendix A documents compliance with Subchapter 31 for any engine eligible for the permit and combusting these restricted fuels.

OAC 252:100-37 (Control of VOCs) **[Applicable]**

This subpart, as applied to engines, provides that all fuel-burning equipment shall be operated so as to minimize emissions of hydrocarbons or other organic materials. The equipment should be operated such that it is not overloaded, that it is properly cleaned and maintained, and that temperature and available air are sufficient to provide essentially complete combustion.

The permit assures compliance with this regulation using the following approach:

Specific conditions are included in the permit that require that the permittee properly operate and maintain engines and associated control systems in a manner that will minimize emissions. Operational and maintenance records are required to be kept to document compliance with this requirement.

TIER CLASSIFICATION AND PUBLIC REVIEW

Processing of a new General Permit has been classified as Tier II based on OAC 252:2-15-41(c)(1). A request for an Authorization under this General Permit will typically be classified as Tier I, unless a compliance schedule required by OAC 252:100-8-5(d)(8)(C)(iii) is included, in which case it will be classified as Tier II.

DEQ published the "Notice of Tier II Draft Permit" in the *Daily Oklahoman* and the *Tulsa World* on June 27, 2007. The notice stated that the draft permit was available for public review at the AQD office in Oklahoma City and Tulsa, and on the Air Quality section of the DEQ web page at www.deq.state.ok.us. Comments were received during the 30-day comment period. A summary of the comments, and DEQ responses are included below.

RESPONSE TO COMMENTS

The Oklahoma Department of Environmental Quality (DEQ) published notice on June 27, 2007, that the draft Nonmetallic Mineral Processing Facility General Permit was available for public review and comment. The public comment period expired July 26, 2007. Timely written comments were received from the Dolese Brothers Company. The following is a summary of those comments and staff's responses.

1. The new General Permit does not address grandfathered status for equipment, which is covered in the 2000 General Permit, *Part* 4, *Standard Conditions, Section XI Reopening, Modification, and Revocation, Item* C.

We recommend that older equipment, manufactured before 31 August 1983, used in processing non-metallic minerals should be allowed to remain classified under the grandfathered status, as current regulations allow. A small percentage of plants in this industry still operate older equipment in its original configuration, and we believe that they should be allowed to continue to do so until the facility is modified in such a way that triggers a change of status.

Response

As noted in the permit memorandum, pg. 5-7, "Compliance Approach for Opacity and Particulate Matter Requirements," the permit uses a streamlined approach for nonmetallic mineral processing equipment in that both equipment subject to, or otherwise exempt from NSPS OOO are required to meet the NSPS opacity requirements. Likewise, both NSPS and non-NSPS equipment are required to meet the NSPS particulate matter requirements, unless such equipment is exempted from the NSPS by capacity. The rationale was that if a facility had some combination of both NSPS and non-NSPS equipment, it would be reasonable to expect that it would be difficult to control the NSPS equipment w/o controlling the non-NSPS equipment to the same level. This approach is implemented in the permit primarily through the eligibility section, Section III.A.D.1, in that facilities with a combination of NSPS and non-NSPS equipment cannot obtain an Authorization to Construct unless they meet the NSPS requirements for both NSPS and non-NSPS equipment. However, that does not preclude a facility from specifically requesting that non-NSPS equipment be identified as not being required to meet NSPS requirements. Any permittee may obtain an individual permit, instead of an Authorization to Construct, to allow use of such equipment (or allow use of other equipment not specifically pre-approved in the permit). For example, if you want to construct a new facility, containing both NSPS and non-NSPS OOO equipment, you would request an individual construction permit that would specifically identify that the non-NSPS equipment meet OAC:252:100-25 opacity requirements instead of NSPS OOO opacity requirements, and the requirements of that construction permit could then be incorporated into an Authorization to Operate under the GP.

2. The new General Permit eliminates the allowance of a 20% opacity for any facility equipment, including grandfathered equipment, as was stated in the 2000 General Permit, *Part* 2, *Specific Conditions, Section V. Facility-wide Requirements, Item D.* We recommend that the grandfathered status equipment be allowed to emit particulates up to a 20% opacity-rather that the stricter limits of 10-15% opacities. This recommendation is made in consideration that the dust suppression control systems are already in place for this equipment, and attempting to reduce emissions by 25-50% with retrofitted equipment may be difficult and costly.

Response

See the response to comment #1.

3. Page 18 of the Memorandum, second paragraph, states that generally the opacity limit for crushers is 10%, and the opacity limit for any other affected facility is 15%. But, in the Permit, on Page 10, Part D(2), it states that a crusher at which a capture system is not used shall not exhibit greater than 15% opacity, and that conveyors, screens, etc. shall not exhibit greater than 10% opacity. Please make corrections to resolve any conflicting information if one of these items is in error.

Response

The language in the memorandum was corrected to be consistent with the permit (and the NSPS).

4. Page 11, Part 4(a) and Page 13, Part 6(a), of the Permit states that Method 9 observations are not required for *Wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to, but not including the next crusher, grinding mill or storage bin.* We fully understand why Method 9 observations are not required for wet screening operations, and subsequent screening operations, up to, but not including the next crusher or grinding mill. However, we cannot understand why Method 9 observations would be required for this saturated material placed in an enclosed bin. Please understand that this wash plant material is dripping wet when it is placed in bins, and water continually drips out of the bottom of the bin until the material is loaded into a vehicle for transport. We recommend removing this requirement for Method 9 observations for material stored in storage bins.

Response

This is a specific standard of NSPS OOO. The DEQ does not have authority to delete this requirement from the permit. However, EPA, in Applicability Determination 9700005, dated 7/20/1995, http://cfpub.epa.gov/adi/, recognized that Method 9 testing of certain affected facilities may be waived if the nonmetallic mineral in those affected facilities remains saturated with water. Thus, it may be possible for a facility to waive testing, consistent with this Applicability Determination, if they can demonstrate a similar situation. Note that this is a case-by-case determination that would require separate approval from DEQ. However, the request may be made in submittal and approval of your testing protocol.

5. Clarification is necessary on *Section IV, Internal Combustion Engines.* We are uncertain if Parts A, B, C, D, and E of this section all apply to stationary engines. Part E is the only item that mentions the word "stationary." If Parts A through D involves stationary engines only, then we are interested in knowing this fact. Also, the first sentence in Section IV states that the following specific conditions apply to IC engines, including those that qualify as a *de minimis* facility. This implies to us that any IC engine, of any size, whether stationary or not, is subject to conditions A through E.

Take for example a 5 horsepower stationary diesel engine at a facility- we are unclear if you are recommending that we log the hours of operation for this small engine, and if we are required to keep track of the sulfur content of the fuel used to power this engine. Additionally, let's say that you have a 690-hp wheel-loader-would these requirements apply to this piece of mobile equipment?

If such recordkeeping is required for either of these two examples, we think that the proposed regulations are too restrictive. As mentioned in our letter to the DEQ on 30 November 2006 (06-DES-2613), Item 1, we understood this section to indicate that no monitoring or controls are necessary for any stationary engine that is less than 600 horsepower, nor for any sized engine in mobile equipment. We would like to know if our interpretation is correct.

Response

The language in the heading of Section IV was changed to "Stationary Internal Combustion Engines" to clarify that these requirements apply only to stationary engines. These requirements do not apply to emissions from engines in mobile equipment, e.g., wheel-loaders. Monitoring hours of operation of any stationary internal combustion engine is required by the permit to

assure that a facility remains a minor source. Note that we expect that hours of operation for an engine at the facility to be the same as hours of operation of the facility (which is required to be kept for the nonmetallic mineral processing equipment at Section II.A). Thus, the requirement does not appear to be overly burdensome.

6. Page 18, Part C, of the Permit states, "The permittee shall maintain a record of inspections of wet suppression equipment, including the date and times of each inspection and the date and times during which any wet suppression equipment is inoperable. In addition, the record shall show the date and description of any repairs made to such equipment."

If requirements are already in place that restrict fugitive emissions and point source emissions for non-metallic mineral processing facilities, why is it necessary to create additional recordkeeping concerning the operability of water trucks, wet suppression systems, and the availability of water sources?

Upon inspection of any facility by DEQ, the concern of the inspector should be whether the facility is in compliance with fugitive emissions regulations – an inspection of records kept of how the facility achieved compliance with emission requirements is not necessary. This additional recordkeeping would be repetitive and excessive. We recommend removing this requirement from the new General Permit.

Response

Current EPA guidance on enforceable limitations on Potential to Emit requires that permit conditions provide a method to document continuous compliance with applicable requirements. NSPS OOO only requires initial performance testing, and no periodic monitoring. Thus, recordkeeping of wet suppression equipment seems the least burdensome method to document continuing compliance. An alternative would be to establish periodic Method 22/Method 9 and/or particulate matter testing. However, while providing a more accurate measurement of continuous compliance with the standards, the cost would be excessive. Since a simplified method, e.g., a checklist, could be developed to meet this requirement, it seems to be the best approach.

7. Page 20 of the Permit lists *Items A, B, D, E, and F.* They should be corrected to read A, B, C, D, and E-because Item C was accidentally omitted.

Response

This has been corrected to read A, B, C, D, and E.

8. Page 22 of the Permit, *Section IV, Part A, Monitoring, Recordkeeping & Reporting,* requires that records, including monitoring data and support information, shall be retained on site or at a nearby field office for a period of five years; whereas, previously records were required to be kept for two years. What prompted the 250% increase in the recordkeeping timeframe requirement? Two years of recordkeeping seemed more than adequate in previous years, and five years seems disproportionate. We recommend that the recordkeeping requirements remain at 2 years.

Response

The rule at OAC 252:100-5-1.1(c), Emission Inventory Documentation, was changed several years ago to require that records of emissions and other associated data be maintained for at least

5 years by the owner of the facility. Thus, a condition in all permits, both general and individual permits, now requires 5 years of recordkeeping.

SUMMARY

Applicants must demonstrate eligibility for coverage under this General Permit and that they are able to comply with applicable air quality rules and regulations. Ambient air quality standards are not threatened at any of the sites eligible for coverage under this General Permit. Issuance of the permit is recommended.