

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

MEMORANDUM

January 14, 2008

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SUBJECT: General Permit for Dry Cleaning Facilities

INTRODUCTION

The Dry Cleaning Facility (DCF) General Permit (GP), issued August 12, 1999, was developed to authorize construction and/or operation of facilities whose primary air pollutant emissions are from the use of solvents used in the process of dry cleaning fabrics. 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, and adding new 40 CFR Part 63 Subpart M 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.

A cursory review of the source category indicates the relative number of facilities is still the same as identified in issuance of the original DCF GP. The US Environmental Protection Agency (EPA) estimates there are approximately 34,000 dry cleaning facilities in the United States, of which approximately 28,000 are using Perchloroethylene (PCE). Only 12 are major sources of PCE. (Federal Register, Volume 71/No. 144/Page 42725/July 27, 2006) The majority of dry cleaning facilities in Oklahoma use PCE, which is classified as a Hazardous Air Pollutant (HAP). As of December 7, 2006, the ODEQ database indicated that there are 138 permitted dry cleaning facilities in the state of Oklahoma, including 107 facilities subject to only National Emission Standards for Hazardous Air Pollutants (NESHAP M), 14 facilities subject to only New Source Performance Standards (NSPS) JJJ, 10 facilities subject to both NESHAP M and

NSPS JJJ, and 7 petroleum solvent cleaning facilities that are not subject to JJJ either because the total rated dryer capacity is less than 84 pounds and/or the equipment was installed prior to the effective date of the rule. There is no information available on Oklahoma facilities that would indicate the number of facilities using PCE that are exempt from NESHAP M because they are coin operated. However, it is known from inspection reports that some facilities that are subject to Subpart M have been treated as grandfathered from permitting because of the construction dates. Additionally, as of December 7, there were active applications for permits for 4 facilities subject to NESHAP M. All permitted facilities listed in the ODEQ database are minor and synthetic minor facilities.

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 DCF GP (issued August 12, 1999). 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

While it is not mandatory to provide this option in a GP, this source category has a greatly improved compliance record with timely obtaining permits and permit modifications. A review of the compliance history for the source category (approximately 125 inspections of approximately 103 facilities since 1998) shows multiple enforcement actions (54) taken in the early years of the program for facilities not applying for the proper permit (See Table 1 & 2). However, in later years, after considerable permitting and compliance efforts through inspections, education, and outreach, only 12 enforcement actions were taken for not obtaining the proper permit (with 8 occurring in 2005 and only 4 in 2006). Considering the improved compliance history for this source category it is recommended to allow the Notice of Intent to Construct option for obtaining permit coverage for new facilities 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 NESHAP M Requirements

40 CFR Part 63 NESHAP M has been updated to include implementation of an enhanced Leak Detection And Repair (LDAR) program using a halogenated hydrocarbon detector or PCE gas analyzer to locate perceptible leaks and to include monitoring requirements for dry cleaning systems equipped with pressure gauges on the condenser. Area (non-major) sources that consume less than 140 gallons (dry-to-dry and transfer machines) and less than 200 gallons (transfer machines only) of PCE annually continue to be exempt from the monitoring standards

of §63.323. However, all facilities are subject to the new LDAR requirements of §63.322. While existing vented dry-to-dry machines are not prohibited by the new rule, they are subject to the new LDAR requirements.

Under the new emissions standard of Section §63.322(o)(2) of the new rule, new dry cleaning systems installed after December 21, 2005, must be equipped with a refrigerated condenser and pass the air-PCE gas-vapor stream from inside the dry cleaning machine drum through a non-vented carbon adsorber or equivalent control device immediately before the door of the dry cleaning machine is opened, thereby eliminating the installation of any new vented machines. The carbon adsorber must be desorbed in accordance with manufacturer's instructions. While installation of new transfer machines was prohibited under the 1993 NESHAP M, the revised rule requires owners or operators of existing transfer machines to eliminate any PCE emissions from clothing transfer between the washer and dryer two years from the effective date of the final rule.

New requirements imposed on co-residential sources will essentially prohibit the use of new PCE machines as well as existing PCE machines after December 21, 2020. Dry cleaning systems that commenced construction or reconstruction on or after December 21, 2005, but before July 13, 2006, in a residential building must implement the following operational requirements and controls in accordance with the specified required compliance schedule: (A) Operate the dry cleaning system inside a vapor barrier enclosure. The exhaust system for the enclosure shall be operated at all times that the dry cleaning system is in operation and during maintenance. The entry door to the enclosure may be open only when a person is entering or exiting the enclosure; (B) Route the air-perchloroethylene gas-vapor stream contained within each dry cleaning machine through a refrigerated condenser and pass the air-perchloroethylene gas-vapor stream from inside the dry cleaning drum through a carbon adsorber or equivalent control device immediately before the door of the dry cleaning machine is opened. The carbon adsorber must be desorbed in accordance with manufacturer's instructions; and (C) Conduct the vapor leak inspections weekly while the component is in operation.

Updated Part 82 - Protection Of Stratospheric Ozone

Dry-to-dry cleaning machines and reclaimers are manufactured and operated with refrigerants in the vapor condensers. Since maintenance and repair of the refrigerated condensers is typically performed by outside contractors, the DCF GP has been updated to include a standard condition for compliance with 40 CFR Part 82, Subparts A and F.

Compliance Emphasis

A review of compliance activity over the period from 1998 through 2006 was done to determine what changes, if any, needed to be made to the permit to emphasize any particular compliance issue. Following is a summary of those issues. In addition, needed changes to the permit are identified.

Violations for both permitted and unpermitted facilities are similar, and are mostly related to recordkeeping. Several facilities, especially in the earlier years, were found to have

malfunctioning or nonexistent temperature gauges. However, as the universe of facilities was inspected and permitted, this problem was corrected. Recordkeeping continues to be a significant problem, followed by failure to perform initial performance testing when adding new equipment. In order to address these continuing problems, the following changes to the compliance approach are proposed.

The permit will be revised to include a requirement to post condenser temperature logs, carbon adsorber logs, leak detection and repair logs, and equipment repair logs on each dry cleaning machine. The perc/petroleum solvent usage log may be kept in a central location. Existing log forms will be updated to include the name of the person performing the monitoring/inspection.

The permit will be revised to include a requirement that the facility owner submit, within 60 days of startup of any new machine or facility, a copy of each log/record for every dry cleaning machine located at the facility. The record shall include monitoring/inspections for at least the period of record of the prior 30 days, as well as any performance testing results.

A checklist will be prepared for both facility operators and DEQ staff to use as a reminder of what monitoring and recordkeeping is required to be performed at a facility. DEQ permitting staff will be required to obtain an owner/operator's signature during the initial permitting inspection acknowledging that the owner/operator is aware of the recordkeeping requirements. The checklist and acknowledgement shall be referenced in the memorandum for the Authorization to Operate.

Updated Operating and Maintenance Requirements

The permit will be revised to apply the requirements of OAC 252:100-39-45, which are applicable to only facilities located in Tulsa County, to all petroleum solvent dry cleaning facilities, wherever located in the state. These requirements are essentially good housekeeping and safety precautions and provide a reasonable and consistent means of controlling emissions from these sources. Thus, it is not unreasonable to streamline the permit and apply them to all facilities. The requirement to drain the filter in the housing for at least 24 hours prior to removal is duplicative of, and more stringent than the NSPS Subpart JJJ requirement for an 8 hour filter drain time. Thus again, it is not unreasonable to streamline the permit and require it of all facilities. Documentation of continuing compliance will consist of maintaining records of operation and maintenance, including gasket inspection and replacement, leak identification and repair, a description of the work performed and the date on which it was performed, the increase, if any, in emissions as a result and records documenting filter and still residue disposal and/or recycling.

Minor modifications were made to Appendix A to clarify the monitoring requirements that are already in place in the existing permit.

Updated Testing Requirements

NESHAP M now requires that area sources conduct inspections using a halogenated hydrocarbon detector or PCE gas analyzer that is operated according to the manufacturer's

instructions. This also satisfies the leak inspection requirements of this subpart. NESHAP M also requires that EPA Method 21 be used for gas analyzer testing at NESHAP M facilities that are major sources. However, this permit does not cover major sources.

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 at 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 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, including PCE dry cleaning machines, petroleum solvent dry cleaning machines, and boilers. 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 DCF 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 NESHAP and NSPS are required to be made, e.g., for NESHAP M - a notification of compliance status including such information as PCE usage, whether a major source, whether located in a building with a residence, and whether in compliance with control standards of NESHAP Subpart M, as well as other general information. Changes to NESHAP and NSPS equipment 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, dry cleaning equipment, boilers, and fugitive emissions. Facility-wide requirements typically apply to all emissions units, for example the requirements to file emission inventories and pay fees, ambient air quality standards and facility-wide emissions caps. Examples of unit-specific requirements are typically emissions or equipment standards, work practices, and testing that apply to a particular category of emissions unit such as certain types and classes of dry cleaning equipment or boilers. 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 Rules of Practice and Procedure

OAC 252:004-7 (Environmental Permit Process)

[Applicable]

The rules of Subchapter 7 implement the Oklahoma Uniform Environmental Permitting Act, 27A O.S. § 2-14-101 *et seq.*, and apply to applicants for and holders of DEQ permits and other authorizations. Permits are required to meet public review requirements consistent with the Tier System given in the Uniform Permitting Act.

Part 3 - Air Quality Division Tiers And Time Lines, Section 7-33(c)(1), establishes the Tier II permitting process for general permits by which the public and regulated community may review a draft version of the permit and submit comments to DEQ for consideration. Section 7-32(c)(1), establishes the Tier I permitting process for individual authorizations under general operating permits for which a schedule of compliance is not required by 252:100-8-5(e)(8)(B)(i). Thus, a Tier II review will be provided for the DCF GP while only a Tier I application will be required for each Authorization issued under the DCF GP.

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. OAC 252:100 defines "construction" to mean fabrication, erection, or installation of a source. A construction permit and subsequent operating permit are 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 a permit (an Authorization to Construct, an Authorization to Operate, or an individual permit) before starting construction and operation of an eligible facility, or for modifications to existing eligible facilities. A *Notice of Intent (NOI) to Construct* (or an individual construction permit) 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 application form* 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 will 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 other than NSPS JJJ or NESHAP M, or that is making modifications that require a case-by-case determination. After construction is complete, a *NOI to Operate application form* 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 caused by malfunction, shutdown, start-up, or regularly scheduled maintenance 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 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:

Subchapter 25 applies to all facilities. Therefore, the permit includes a condition that requires compliance with this subchapter. However, most eligible emissions units at dry cleaning facilities have negligible potential to violate any of these requirements. Therefore, no initial compliance demonstration or continuing monitoring, recordkeeping, or reporting requirements associated with this subchapter are included in the permit. The reporting requirements of OAC 252:100-9 (Excess Emission and Malfunction Reporting) apply.

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:

Under normal operating conditions, a dry cleaning facility would have negligible potential to violate this requirement, therefore it is not necessary to require specific precautions to be taken.

OAC 252:100-43 (Testing, Monitoring, and Recordkeeping)

[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.

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 and Subpart JJ, Standards of Performance for Petroleum Dry Cleaners.

NESHAP, 40 CFR Part 63

[Applicable]

NESHAP contain standards which regulate specific categories of stationary sources that emit one or more hazardous air pollutants. These standards require all owners or operators of major sources and certain area (non-major) sources in certain source categories that are constructed or reconstructed to install maximum achievable control technology (MACT) unless specifically exempted. These standards may also require the owner or operator of such a source to obtain a Part 70 (major source) operating permit.

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

Conditions are included in the facility-wide section of the permit to address the general compliance, performance testing, monitoring, notification, recordkeeping and reporting, and control device requirements under this regulation. Conditions specific to a particular MACT standard are included in the separate sections for each emissions unit which may be determined to be an affected unit. Eligibility for this permit is restricted to those facilities whose emissions units are not subject to any MACT other than those listed, unless incorporated by reference into the Authorization.

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 dry cleaning 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. Petroleum liquid storage 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. Conditions are included in this section of the permit to address the recordkeeping requirements specified at §82.13 of this regulation. Recordkeeping requirements specific to dry cleaning facilities include those for importers of Class I substances, or for persons who destroy class I controlled substances.

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

* 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

PETROLEUM DRY CLEANING FACILITIES

Oklahoma Air Pollution Control Rules

OAC 252:100-39 (VOC in Nonattainment/Former Nonattainment Areas)[Part 7 Applicable]

This subchapter imposes additional requirements beyond those of Subchapter 37 on emissions of organic materials from new and existing facilities in Tulsa and Oklahoma Counties.

Part 7, covers Specific Operations. Subsection 45, Petroleum solvent dry cleaning, applies to petroleum solvent washers, dryers, filters, settling tanks, vacuum stills, and other containers and conveyors of petroleum solvent that are used in petroleum solvent dry cleaning facilities in Tulsa County only. This rule imposes operating requirements that would apply to all petroleum solvent dry cleaning facilities regardless of construction date or whether they are affected facilities under NSPS JJJ. Additionally, this rule requires that cartridge filters containing paper or carbon or a combination thereof be drained in the filter housing for at least 24 hours prior to removal.

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

Permit conditions, incorporating the requirements of OAC 252:100-39-45, are included in the petroleum solvent dry cleaning equipment section of the permit. However, in order to streamline permit requirements, they have been applied to all facilities, wherever located in the state. The 24 hour filter drain requirement is duplicative of, and more stringent than the NSPS Subpart JJJ requirement for an 8 hour filter drain time. Thus, requiring it of all facilities will also assure compliance with the NSPS. Continuing compliance is demonstrated by requiring that a log be maintained on-site to document operational and maintenance activities associated with these conditions.

Federal Regulations

New Source Performance Standards (NSPS), 40 CFR Part 60

[Subpart A and Subpart JJJ Applicable]

Subpart JJJ, Standards of Performance for Petroleum Dry Cleaners, applies to petroleum solvent dry cleaning dryers, washers, filters, stills, and settling tanks that commence construction or modification after December 14, 1982 located at a petroleum dry cleaning plant with a total manufacturers' rated dryer capacity equal to or greater than 38 kilograms (84 pounds), except dryers installed between December 14, 1982, and September 21, 1984, in a plant with an annual solvent consumption level of less than 17,791 liters (4,700 gallons). Definitions for "commenced", "construction", and "modification" are found in NSPS Subpart A. The standards of this subpart require that each affected petroleum solvent dry cleaning dryer installed after the effective date be a solvent recovery dryer, and that it be properly installed, operated, and maintained. Solvent filters must be the cartridge filter type and must be drained in their sealed housings for at least 8 hours prior to their removal. The manufacturer of the dryer is required to include leak inspection and leak repair cycle information in the operating manual and on a clearly visible label posted on each affected facility with the following notification: *"To protect against fire hazards, loss of valuable solvents, and emissions of solvent to the atmosphere, periodic inspection of this equipment for evidence of leaks and prompt repair of any leaks is*

recommended. The U.S. Environmental Protection Agency recommends that the equipment be inspected every 15 days and all vapor or liquid leaks be repaired within the subsequent 15-day period."

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

Specific conditions that address compliance with these requirements are included in the permit. In order to streamline permit conditions the 24-hour filter drain requirement of SC39, which is duplicative of, and more stringent than the NSPS Subpart JJJ 8-hour filter drain time, is required of all facilities.

PERCHLOROETHYLENE DRY CLEANING FACILITIES

Oklahoma Air Pollution Control Rules

There are no state rules at this time imposing additional requirements on perchloroethylene dry cleaning facilities.

Federal Regulations

NESHAP, 40 CFR Part 63

[Subpart A and Subpart M Applicable]

Subpart A, General Provisions. Terms used throughout this part are defined in §63.2 or in the Clean Air Act (Act) as amended in 1990, except that individual subparts of this part may include specific definitions in addition to or that supersede definitions in §63.2. No emission standard or other requirement established under this part shall be interpreted, construed, or applied to diminish or replace the requirements of a more stringent emission limitation or other applicable requirement established by the Administrator pursuant to other authority of the Act (section 111, part C or D or any other authority of this Act), or a standard issued under State authority. Each relevant standard in this Part 63 must identify explicitly whether each provision in this subpart A is or is not included in such relevant standard. If a relevant Part 63 standard incorporates the requirements of 40 CFR Part 60, part 61 or other Part 63 standards, the relevant Part 63 standard must identify explicitly the applicability of each corresponding Part 60, Part 61, or other Part 63 subpart A (General) provision.

At this time, no federal or state emission limitations or other applicable requirements that are more stringent than those in Subpart M have been established for PCE dry cleaning facilities. Unless incorporated by reference into the Authorization, eligibility for this permit is restricted to facilities whose emissions units are not subject to any NESHAP subpart other than; Subpart A, General Provisions; and Subpart M, National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities.

Subpart M, National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities, applies to each dry cleaning facility that uses perchloroethylene. This subpart requires enhanced leak detection and repair using a halogenated hydrocarbon detector or PCE gas analyzer to locate perceptible leaks for all source categories. It requires monitoring standards for condensers equipped with pressure gauges on the condenser. Condensers not equipped with pressure gauges continue to be subject to requirements for temperature monitoring. Area (non-major) sources that consume less than 140 gallons and less than 200 gallons of PCE annually are still exempt from the monitoring standards of §63.323.

§63.322(o)(2) requires that new dry cleaning systems installed after December 21, 2005, be equipped with a refrigerated condenser and pass the air-PCE gas-vapor stream from inside the dry cleaning machine drum through a non-vented carbon adsorber or equivalent control device immediately before the door of the dry cleaning machine is opened, thereby eliminating the installation of any new vented machines. The carbon adsorber must be desorbed in accordance with manufacturer's instructions. While installation of new transfer machines was prohibited under the 1993 NESHAP M, the revised rule under §63.322(o)(3) requires owners or operators of existing transfer machines to eliminate any PCE emissions from clothing transfer between the washer and dryer two years from the effective date of the final rule.

§§63.322(o)(4) & (5) prohibit the use of new PCE machines installed after December 21, 2005, as well as existing PCE machines after December 21, 2020. Existing dry cleaning systems installed in a residential building must: (A) Operate the dry cleaning system inside a vapor barrier enclosure with an exhaust system in operation when the dry cleaning system is in operation and during maintenance. The entry door to the enclosure may be open only when a person is entering or exiting the enclosure; (B) Route the air-perchloroethylene gas-vapor stream contained within each dry cleaning machine through a refrigerated condenser and pass the air-perchloroethylene gas-vapor stream from inside the dry cleaning drum through a carbon adsorber or equivalent control device immediately before the door of the dry cleaning machine is opened. The carbon adsorber must be desorbed in accordance with manufacturer's instructions; and (C) Conduct the vapor leak inspections weekly while the component is in operation. Compliance dates for requirements of this subpart depend on the date of construction or reconstruction. Certain exemptions are allowed for facilities that consume less than 140 gallons (dry-to-dry and transfer machines) of PCE annually and for facilities that consume less than 200 gallons (transfer machines only) of PCE annually. Complete details of the requirements of this rule applicable to area sources are included in the permit.

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

Specific operational conditions are included in Appendix A to ensure that the owner/operator of affected facilities maintain compliance with this subpart.

BOILERS & WATER HEATERS

Oklahoma Air Pollution Control Rules

OAC 252:100-19 (Particulate Matter (PM))

[Applicable]

Section 19-4 regulates emissions of PM from new and existing fuel-burning equipment, with emission limits based on maximum design heat input rating. Appendix C specifies PM emission limitations for fuel-burning equipment. Fuel-burning equipment is defined in OAC 252:100-19 as any internal combustion engine or gas turbine, or other combustion device used to convert the combustion of fuel into usable energy. Thus, boilers and water heaters are subject to the requirements of this subchapter.

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

The only fuel-burning equipment expected to be present at these facilities, except as a de minimis, or insignificant or trivial activity, are natural gas-fired boilers or heaters, and possibly some propane-fired equipment. AP-42 (7/98) Table 1.4-2 lists natural gas total PM emissions to be 7.6 lbs/million scf or about 0.0076 lbs/MMBTU, which is in compliance for all heat input

ranges. A condition is included in the permit which requires the use of pipeline natural gas (or propane) for all fuel-burning equipment to ensure compliance with this Subchapter. The compliance demonstration only requires certification in the application that equipment will be fueled by pipeline natural gas (or propane).

OAC 252:100-31 (Sulfur Compounds)

[Part 2 Applicable/Part 5 Applicable]

Part 2 limits emissions of sulfur dioxide (SO₂) from any one existing source to ambient air concentrations not greater than 1,300 µg/m³ in a 5-minute period of any hour, 1,200 µg/m³ for a 1-hour average, 650 µg/m³ for a 3-hour average, 130 µg/m³ for a 24-hour average, or 80 µg/m³ for an annual average.

Part 5 limits sulfur dioxide emissions from new fuel-burning equipment (constructed after July 1, 1972). For gaseous fuels the limit is 0.2 lb/MMBTU heat input averaged over 3 hours. For fuel gas having a gross calorific value of approximately 1,000 Btu/scf, this limit corresponds to fuel sulfur content of 1,203 ppmv.

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

The permit requires the use of pipeline natural gas as defined in Part 72 having 0.5 grains TRS/100 scf (or propane) to ensure compliance with Subchapter 31.

OAC 252:100-37 (Organic Materials)

[Applicable]

Subpart 7, as applied to heaters and boilers, provides that all fuel-burning equipment shall be operated as to minimize emissions of volatile organic compounds. 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 the permittee to properly operate and maintain heaters and boilers in a manner that will minimize emissions. Operational and maintenance records are required to be kept to document compliance with this requirement.

Federal Regulations

None are applicable since permit eligibility is restricted to those heaters and boilers with a capacity less than 10 MMBTUH. The permit is designed to limit facility-wide emissions below major source thresholds.

TIER CLASSIFICATION AND PUBLIC REVIEW

Processing of a new General Permit has been classified as Tier II based on OAC 252:4-7-33(c)(1) & (2). 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.

A public notice of a 30-day public review opportunity for this draft permit was published in the Tulsa World and The Oklahoman newspapers on November 30, 2007, and was posted on the Air Quality Section of the DEQ web page at www.deq.state.ok.us. No comments were received.

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.

