DRAFT/PROPOSED

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

MEMORANDUM **June 16, 2016**

TO: Phillip Fielder, P.E., Permits and Engineering Group Manager

THROUGH: Rick Groshong, Enforcement and Compliance Manager

THROUGH: Phil Martin, P.E., Existing Source Permits Section

THROUGH: Peer Review

FROM: Ellis Fischer, P.E., Existing Source Permits Section

SUBJECT: Evaluation of Permit Application No. **2015-0383-TVR2**
Tinker Air Force Base Fac ID: 1518
Facility-Wide Operating Permit
Tinker AFB, Oklahoma County

SECTION I. INTRODUCTION & REQUESTED CHANGES

Tinker Air Force Base (Tinker AFB) located in Oklahoma County, Oklahoma, is an existing major facility (North American Industry Classification System 928110) with permitted emissions of nitrogen oxides (NOx), carbon monoxide (CO), and volatile organic compounds (VOCs) exceeding 250 tons per year (tpy) each. Facility-wide operations at Tinker AFB are currently authorized by Permit Number 2009-394-TVR, issued by the Oklahoma Department of Environmental Quality (ODEQ) on September 2, 2010. Title V permits require renewal every five years with an application for renewal submitted to the regulatory agencies at least six months prior to expiration. An application fulfilling that requirement was submitted to ODEQ on March 2, 2015; ODEQ assigned the identifier 2015-0383-TVR2 to the permit renewal. Subsequently, construction permit applications were submitted to ODEQ in August 2015; ODEQ issued Permit No. 2009-394-C (M-3) PSD on November 18, 2015 and Permit No. 2009-394-C (M-4) (PSD) on November 19, 2015. This Title V renewal requests the following changes in relation to the current Title V Operating Permit No. 2009-394-TVR:

a. Remove certain specific conditions related to burning of fuel oil containing up to 0.3% sulfur by weight, because Tinker AFB has used or recycled its entire inventory of this fuel oil and all subsequent and future fuel oil purchases and deliveries were and are limited to sulfur content of no more than 0.05% sulfur by weight.
b. Incorporate the requirements of National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR 63 Subpart DDDDD, also known as "Boiler MACT"), which was published in the Federal Register 21 March 2011. This includes establishing a new Emission Unit Group (ExtComb-11), modifying the definitions of certain existing EUGs, and adding specific

conditions to the existing EUGs.

c. Remove reference to requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Defense Land Systems and Miscellaneous Equipment, also known as the DLSME NESHAP. The requirements of the DLSME NESHAP (as provided as a draft rule to OMB) had been incorporated into the previous renewal in anticipation of its expected promulgation; in the intervening time it has become apparent that the promulgation of this rule has been postponed, and may not occur during the next five-year period. Removal of these requirements includes removal of a number of Emission Unit Groups (EUGs) that had been established in anticipation of the DLSME NESHAP; complete removal of these EUGs from this Title V permit is appropriate because these EUGs were never actually used:

   - ChemDpnt-4 (CD4) for DLSME methylene chloride-based depainting
   - ClnSpray-2 (CS2) for DLSME spray gun cleaning
   - SrfCoat-5 (SC5) for DLSME surface coating,
   - Solvent-3 (SV3) DLSME substrate cleaning

d. Incorporate the construction permit No. 2009-394-C (M-4) (PSD) for the new KC-46A project. The construction project, which is planned to occur over an extended time period (projected completion 2030), is needed to support a new workload of overhaul and maintenance for as many as 40 KC-46A aircraft per year; these maintenance activities will be similar to activities currently occurring at Tinker AFB. New emission units will include natural-gas-fired boilers and heaters, diesel-fueled fire pump engines, aerospace cleaning, depainting, and painting operations, and testing of jet engines in a new, 10-meter stationary jet engine test cell. This Title V renewal includes specific conditions from the construction permit and appropriate increases to the aggregated emissions limits for the affected EUGs, to accommodate the increased workload as described in the application for permit No. 2009-394-C (M-4) (PSD). Construction Permit No. 2009-394-C (M-4) (PSD) was issued on November 19, 2015.

e. Revise the discussion of EUG CalTest-1 (CT1) to reflect the shutting down of EU 5015 (building 3108) and the completion of EU 5417 (building 3907).

f. Note that EUGs Ext Comb-1 (EC1) and ExtComb-9 (EC9) are now completely empty, as all of the boilers formerly in those EUGs have been decommissioned or removed. All specific conditions associated with these EUGs have been deleted. The EUGs will, however, remain in place as empty placeholders, not to be used again by Tinker AFB, to prevent confusion when referring to conditions existing under previous Title V permits.

g. Note that EUGs Halog-1 (Halogenated Solvent Batch Cold Cleaning) and Vapor-Deg-2 (Vapor Degreasers, Vacuum) are both now completely empty and are expected to remain so, because Tinker AFB has no intentions of installing any vacuum vapor degreasers or any new halogenated solvent cold cleaning processes in the foreseeable future. All specific conditions associated with these EUGs have been deleted, and the EUGs will remain in place only as empty placeholders, to prevent confusion when referring to conditions existing under previous permits. Existence of the empty placeholders in no way implies that Tinker AFB is authorized to install any new halogenated solvent cold cleaning processes or vacuum vapor degreasers under the flexibility options.

h. Update requirements for EUG Chromium-1 (CR1) to reflect the most recent revision of the National Emission Standards for Hazardous Air Pollutants for Source Categories Subpart N –

National Emission Standards for Chromium Electroplating Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (40 CFR 63 Subpart N).

i. Incorporate the provisions of construction permit No. 2009-394-C (M-3) PSD. The request for this permit was driven by a recent necessary change in the materials used for chemical depainting (stripping) activities, which has resulted in an increase in VOC emissions. Construction Permit No. 2009-394-C (M-3) PSD was issued on November 18, 2015.

Other parts of the permit memorandum and specific conditions of 2009-394-TVR not associated with items (a) through (i) above have been carried over to this permit and updated with new language as necessary. In an attempt to streamline the permit and eliminate redundant or hollow requirements, Tinker AFB has requested a number of minor modifications to the current Title V permit issued on September 2, 2010. Most of the changes are administrative in nature and do not relax compliance.

SECTION II. FACILITY DESCRIPTION

Tinker AFB is located on the southeastern edge of the Oklahoma City metropolitan area and adjacent to Midwest City and Del City. The Base encompasses approximately 5,400 acres of slightly rolling terrain. There are two active runways for aircraft operations and numerous support activities for maintaining facilities, aircraft, and motor vehicles. As a small community, the Base has personnel support activities that include housing, eating, shopping, recreation, and a medical clinic.

Tinker AFB is a multi-mission/multi-faceted installation that serves the U.S. Air Force, U.S. Navy, and other Department of Defense (DoD) organizations. The primary Standard Industrial Classification (SIC) code is 9711, National Security. It is home to the Oklahoma City Air Logistics Complex (OC-ALC) and a number of associated organizations, including the U.S. Navy E-6 Strategic Communications Wing One, the 552nd Air Control Wing, the 507th Air Refueling Wing, the 38th Cyberspace Engineering Installation Group, the Defense Information Systems Agency, the Defense Accounting Office, the Materials Systems Group, the Defense Printing Service Detachment Office, and the Defense Logistics Agency. This inter-servicing results in integration of both U.S. Air Force and U.S. Navy personnel in the security police, hospital, chaplain, and maintenance organizations.

The functions of the associated organizations are as follows.

- The OC-ALC is one of the three depot repair complexes in the Air Force Materiel Command (AFMC) and is the largest organization at Tinker AFB. Its extensive area includes 215 acres of ramp space for the U.S Air Force and 19 acres for the U.S. Navy. Tinker AFB is tasked with, among other things, managing and repairing fifteen different types of jet engines (over 17,000 total) used by the Air Force. OC-ALC repairs, overhauls, and manufactures a wide variety of aircraft and engine components in support of global defense requirements. Commodity management includes responsibility for over 50,000 different commodity items. Each year over

250,000 components are repaired for return to the field.

- The 552nd Air Control Wing (552 ACW) is part of the Air Combat Command (ACC) and operates the E-3 "Sentry" aircraft (AWACs) with unique airborne radar that also provides command and electronic communications worldwide.
- The 507th Air Refueling Wing is Oklahoma's only flying reserve unit. The wing converted from F-16 fighters to KC-135R refueling aircraft (tankers) in the spring of 1994. The 507th supports the Air Mobility Command (AMC) mission requirements by providing mid-air refueling support to all DoD aircraft and the North Atlantic Treaty Organization (NATO) allies.
- The 38th Cyberspace Engineering Installation Group (38EIG) is headquartered at Tinker AFB and has a worldwide mission. It is the only wing in the U.S. Air Force that engineers, installs, removes, and relocates command, control, communications, and computer systems.
- The U.S. Navy Strategic Communications Wing One (STRATCOMMWING ONE) operates the E-6A "Mercury" aircraft to provide a reliable, survivable, and endurable communications link between the National Command Authority and strategic forces. STRATCOMMWING ONE maintains administrative and operational control over the two Take Charge and Move Out (TACAMO) aircraft squadrons.
- The Defense Accounting Office processes all of Tinker AFB's accounting records and reports.
- The Defense Printing Service Detachment Office (Navy operated) handles the majority of the printing needs of the base.
- The Defense Information System Agency provides real time IT and communications support to the President, Vice President, Secretary of Defense, the military services, and the combatant commands.

SECTION III. AIR PERMIT HISTORY

Tinker AFB is a "grandfathered" facility having been in continuous operation since 1942. From the inception of environmental regulatory requirements until the issuance of the original Title V permit, Tinker AFB operated under numerous individual permits, issued to accommodate operational modifications as they evolved. Tinker AFB submitted its initial Title V Operating Permit Application on March 4, 1999. ODEQ issued the Title V permit on May 10, 2005. The facility-wide Title V permit consolidated and superseded all outstanding operating permits. After the original Title V permit was issued, operational changes have required additional construction permits to authorize modifications at Tinker AFB. Once constructed and completed, the modified sources were incorporated in subsequent Title V permits issued by ODEQ. Significant modifications included installation of three new boilers, large emergency generators, operations of seasonally-leased diesel generators for cooling, and subsuming the former General Motors (Oklahoma Arcadian Utilities Permit) boiler plant permit. These subsequent Title V permits also removed decommissioned sources such as the classified waste incinerator, the halogenated solvent batch cold cleaning tank, and vacuum degreasers. In addition, some restrictions were added such as limiting the number of combustion units which could simultaneously burn fuel oil as a backup, to support compliance with the Oklahoma

ambient air quality standards. Finally, requirements in construction Permits No. 99-104-C (M-4) and No. 99-104-C (M-8) were incorporated into the revised Title V permit.

During the previous Title V renewal process, Tinker AFB anticipated several reasonably foreseeable actions expected to occur during the term of the renewal permit, and requested and received Advance Approval for these activities, in accordance with draft guidance proposed by the United States Environmental Protection Agency (USEPA). Tinker AFB supplied reasonably projected emission estimates and identified applicable regulations as required. In addition, the permit included a flexibility clause in the specific conditions that authorizes minor changes without requiring additional regulatory or public review.

Currently, Tinker AFB operates under the Title V Operating Permit No. 2009-394-TVR, Construction Permit No. 2009-394-C (M-3) PSD issued on November 18, 2015, and Construction Permit No. 2009-394-C (M-4) (PSD) issued on November 19, 2015. Because Oklahoma has a dual permitting system requiring both construction and operating permit applications for significant changes, the construction permits are needed until the specified projects are completed. Post-construction, the facility submits an operating permit application identifying any changes from the construction permit specific conditions and requests the Title V permit be updated to include the operating permit for the completed project. Permit No. 2009-394-C (M-3) PSD issued on November 18, 2015 authorizes a change in material used for chemical depainting (stripping) and the resulting increase in VOC emissions. Permit No. 2009-394-C (M-4) (PSD) authorizes construction of required facilities for the planned maintenance and overhaul of KC-46A aircraft at Tinker AFB. The KC-46A project will entail construction of a number of buildings over an extended period of time and will cause increased air emissions from a number of previously-established EUGs. Tinker AFB requests that the operating permit and applicable conditions for the construction permits be incorporated into the facility-wide Title V renewal permit in accordance with EPA's flexible permit rule

SECTION IV. EMISSION SOURCES

Tinker AFB primarily operates, maintains, and reworks military aircraft. Emissions from aircraft operations both in flight and on the ground are not evaluated in this renewal permit application, because aircraft are considered mobile sources, not subject to the Title V permitting. Also excluded from the Title V permitting are the operations of the associated ground-support equipment (GSE) or aerospace-ground equipment (AGE), mobile sources that support aircraft operations. However, the Title V renewal permit does cover maintenance of aircraft and GSE, specifically the use of solvents, depainting, and surface coating of aircraft and ground-based equipment, where these operations are subject to relevant federal and Oklahoma regulations.

Maintenance and rework activities also include testing of jet engines and inspection and repair of fuel cells, tanks, and other systems. Activities that have the potential to cause significant air pollutant emissions include solvent use, surface coating, and burning of fuel in the engine test cells. Other support activities that may lead to emissions of air pollutants include fuel combustion in boilers, heaters, and emergency generators, and evaporation of volatile compounds from fuel storage and handling.

Of over 1,500 identified sources of air pollutants at Tinker AFB, approximately 500 were identified as significant. These emission units (EUs) have applicable state and/or federal requirements such as emission or usage limits, or monitoring, recordkeeping, reporting, and work practice requirements. The significant emission units were grouped together into EUGs based on similarity of sources and requirements, as described in Table 2.

Table 2

Description of Emission Unit Groups		
EUG Number	**EUG Name**	**Description**
CD1	ChemDpnt-1	Aerospace depainting – zero Hazardous Air Pollutant (HAP) stripper
CD2	ChemDpnt-2	Aerospace depainting – spot depainting (HAP containing)
CD3	ChemDpnt-3	Aerospace depainting – exempt (radomes and parts)
CF1	ClnFlush-1	Aerospace cleaning – flush
CH1	ClnHWipe-1	Aerospace cleaning – hand wipe
CH2	ClnHWipe-2	Aerospace cleaning – hand wipe, exempt
CR1	Chromium-1	Chromium electroplating
CS1	ClnSpray-1	Aerospace cleaning – spray gun cleaning
CT1	Caltest-1	Calibration fluid test stands
EC1	ExtComb-1	FORMERLY "Dual Fuel Boilers, > 10 MMBtu/hr and < 100 MMBtu/hr, Not Subject to NSPS" – NO LONGER IN USE
EC2	ExtComb-2	Dual Fuel Boilers, > 100 MMBtu/hr, Subject to NSPS Subpart Db (Installed prior to February 28, 2005), Subject to NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters
EC3	ExtComb-3	Natural Gas External Combustion > 10 MMBtu/hr, Subject to NSPS Subpart Dc, Subject to NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters
EC4	ExtComb-4	Dual Fuel Boilers, > 10 MMBtu/hr, Subject to NSPS Subpart Dc, Subject to NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters
EC5	ExtComb-5	Dual Fuel Boilers, < 10 MMBtu/hr, Subject to NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters
EC6	ExtComb-6	Natural Gas External Combustion Units Greater Than 5 MMBtu/hr, Not Subject to NSPS, including Units > 10 MMBtu/hr, Subject to NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters
EC7	ExtComb-7	Dual Fuel Boilers > 100 MMBtu/hr, Subject to NSPS Subpart Db (Installed after Feb 28, 2005) , Subject to NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters
EC8	ExtComb-8	Dual Fuel Boilers > 10 MMBtu/hr and < 100 MMBtu/hr, Subject to NSPS Subpart Dc, Subject to NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters
EC9	ExtComb-9	FORMERLY "ExtComb-9, Dual-Fuel Boilers, Installed Prior to 1960 (Grandfathered)" – NO LONGER IN USE
EC10	ExtComb-10	Dual-Fuel Boilers > 100 MMBtu/hr, not subject to NSPS, Subject to NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters
EC11 (New)	ExtComb-11	Natural Gas External Combustion < 5 MMBtu/hr, Subject to NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters
ET1	EngTest-1	Jet Turbine Engine Testing
HL1	Halog-1	FORMERLY "Halogenated solvent batch cold cleaning" – NO LONGER IN USE

Description of Emission Unit Groups		
EUG Number	**EUG Name**	**Description**
IC1	IntComb-1	Compression Ignition ICE < 500-bhp, non-emergency
IC2	IntComb-2	Stationary RICE, emergency power
IC3	IntComb-3	Compression Ignition ICE > 500-bhp, non-emergency
ND1	NCDepnt-1	Non-chemical Depainting
SC1	SrfCoat-1	Aerospace surface coating, with dry filters
SC2	SrfCoat-2	Aerospace surface coating, brush or spray touch up
SC3	SrfCoat-3	Surface Coating, Aerospace Specialty Coatings
SC4	SrfCoat-4	Non-aerospace surface coating
SV1	Solvent-1	Cold cleaning, non-aerospace
SV2	Solvent-2	Solvent usage, spray gun pattern testing
TK1	Tank-1	Tanks subject to NSPS Subpart Kb, MOGAS
TK2	Tank-2	Tanks subject only to Oklahoma Air Pollution Control Rules
VD1	VaporDeg-1	Vapor degreasers, conventional
VD2	VaporDeg-2	FORMERLY "Vapor degreasers, vacuum" – NO LONGER IN USE

Note: Emission Units (EUs) for each Emission Unit Group (EUG) are listed in:
Appendix A: Significant Combustion Sources Listed by EUG, and
Appendix B: Significant Non-Combustion Sources Listed by EUG.

The following descriptions provide a brief overview of the emission sources and operations in each EUG, and discuss regulatory applicability under various federal and state requirements. Detailed discussions regarding standards, and monitoring, recordkeeping and reporting, requirements applicable to each EUG are presented in the specific conditions of the Permit. In addition, emissions limits established for significant emission units are presented in Table 1 of the Permit Specific Conditions. The referenced appendix for each EUG lists the emissions units (EUs) in the EUG, and provides the following information for each EU: the EU number, a brief description of the source, the building, the current location, shop name and/or organization, and the effective date.

CD1, ChemDpnt-1, Aerospace Depainting – Zero HAP Stripper

This EUG represents numerous EUs that are located throughout the facility. These EUs are engaged in depainting operations for aerospace components using zero HAP strippers, and result in evaporative losses of volatile organic compounds. This facility-wide EUG is considered to be the affected source, as defined in 40 CFR 63, Subpart GG, 63.741(c).

The VOC emission limit presented in Table 1 of the Permit Specific Conditions is applicable to the aggregate of all emissions from chemical depainting units operating under CD1, CD2, and CD3, on a facility-wide basis. This aggregate emission limit is based on combining previously issued permit limits (if established), actual historical emission levels scaled up to accommodate a 50% fluctuation in workload for those units not previously permitted, and allowing for additional sources to be commissioned during the duration of the Permit (subject to limitations outlined in Section A of the Permit). Appendix B lists the ChemDpnt-1 emission units, and the alternative operating scenarios, if applicable, will be included in the EUG specific conditions.

CD2, ChemDpnt-2, Aerospace Depainting – Spot Depainting (HAP-Containing)

This EUG represents numerous EUs that are located throughout the facility. These EUs are engaged in spot depainting operations for aerospace components, using HAP-containing strippers, and resulting in evaporative losses of volatile organic compounds. This facility-wide EUG is considered to be the affected source, as defined in 40 CFR 63, Subpart GG, 63.741(c).

As described in the EUG description for CD1, the VOC emission limit presented in Table 1 of the Permit Specific Conditions is applicable to the aggregate of all emissions from chemical depainting units operating under CD1, CD2, and CD3, on a facility-wide basis.
Appendix B lists the ChemDpnt-2 emission units, and the alternative operating scenarios, if applicable, will be included in the EUG specific conditions.

CD3, ChemDpnt-3, Aerospace Depainting – Exempt (Radomes and Parts)

This EUG represents numerous EUs that are located throughout the facility. These EUs are engaged in depainting operations for exempt aerospace components, such as radomes and parts, and result in evaporative losses of volatile organic compounds. This facility-wide EUG is considered to be the affected source, as defined in 40 CFR 63, Subpart GG, 63.741(c).

As described in the EUG description for CD1, the VOC emission limit presented in Table 1 of the Permit Specific Conditions is applicable to the aggregate of all emissions from chemical depainting units operating under CD1, CD2, and CD3, on a facility-wide basis. Appendix B lists the ChemDpnt-3 emission units, and the alternative operating scenarios, if applicable will be included in the EUG specific conditions.

CF1, ClnFlush-1, Aerospace Cleaning – Flush

This EUG represents numerous emission units that are located throughout the facility. The EUs clean aerospace components through flush operations using various solvents, resulting in evaporative losses of volatile organic compounds. This facility-wide EUG is considered to be the affected source, as defined in 40 CFR 63, Subpart GG, 63.741(c). Appendix B lists the ClnFlush-1 emission units, and the alternative operating scenarios, if applicable, will be included in the EUG specific conditions.

The VOC emission limit presented in Table 1 of the Permit Specific Conditions is applicable to the aggregate of all emissions from solvent cleaning operations under CF1, CH1, CH2, CS1, CS2, SV1, and SV3, on a facility-wide basis. Because these activities have historically not been subject to permitting limitations, this aggregate emission limit is based entirely on actual recent emission levels scaled up to accommodate a 50% fluctuation in workload and resultant emissions. This emission limit does not represent an increase in emissions compared to the current Title V permit.

CH1, ClnHWipe-1, Aerospace Cleaning – Hand Wipe

This EUG represents numerous emission units that are located throughout the facility. The EUs

are primarily engaged in cleaning aerospace components through hand-wipe operations utilizing rags and cleaning solutions, and results in evaporative losses of volatile organic compounds. This EUG contains the operations using solvents meeting the composition requirements for approved cleaning solvents (see 40 CFR 63, Subpart GG) or operations using solvents with a composite vapor pressure of 45 mmHg or less. Operations comply with 40 CFR 63.744(b). This facility-wide EUG is considered to be the affected source, as defined in 40 CFR 63, Subpart GG, 63.741(c).

As described in the EUG description for CF1, the VOC emission limit presented in Table 1 of the Permit Specific Conditions is applicable to the aggregate of all emissions from solvent cleaning operations under CF1, CH1, CH2, CS1, CS2, SV1, and SV3, on a facility-wide basis. Appendix B lists the ClnHWipe-1 emission units, and the alternative operating scenarios, if applicable, will be included in the EUG specific conditions.

CH2, ClnHWipe-2, Aerospace Cleaning – Hand Wipe, Exempt

This EUG represents numerous EUs that are located throughout the facility. The EUs are primarily engaged in cleaning components through hand-wipe operations utilizing rags and cleaning solutions, and results in evaporative losses of volatile organic compounds. These EUs are expressly exempt from the standards contained within the Aerospace NESHAP. This facility-wide EUG is considered to be the affected source, as defined in 40 CFR 63, Subpart GG, 63.741(c).

As described in the EUG description for CF1, the VOC emission limit presented in Table 1 of the Permit Specific Conditions is applicable to the aggregate of all emissions from solvent cleaning operations under CF1, CH1, CH2, CS1, CS2, SV1, and SV3, on a facility-wide basis. Appendix B lists the ClnHWipe-2 emission units, and the alternative operating scenarios, if applicable, will be included in the EUG specific conditions.

CR1, Chromium-1, Chromium Electroplating

This EUG represents emission unit number 4416, in Building 3001, Plating Shop. This EU includes a series of electroplating and rinse tanks that are used in chromium electroplating of metal aerospace components. Emissions from the process tanks are exhausted through packed-bed scrubbers/composite mesh pads (PBS/CMP).

Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to each EUG are presented in the Permit. Furthermore, because the units in this EUG are subject to a technology-based standard or emission rate limit, no applicable PTE limit has been established. Appendix B lists the Chromium-1 emission unit.

CS1, ClnSpray-1, Aerospace Cleaning – Spray Gun Cleaning

This EUG represents numerous EUs that are located throughout the facility. These EUs are for clean spray gun equipment that is used for aerospace applications using solvents, resulting in evaporative losses of volatile organic compounds.

As described in the EUG description for CF1, the VOC emission limit presented in Table 1 of the Permit Specific Conditions is applicable to the aggregate of all emissions from solvent cleaning operations under CF1, CH1, CH2, CS1, CS2, SV1, and SV3, on a facility-wide basis. Appendix B lists the ClnSpray-1 emission units, and the alternative operating scenarios, if applicable, will be included in the EUG specific conditions.

CT1, CalTest-1, Calibration Fluid Test Stands

This EUG contains the fuel system components testing operations that use calibration fluid in numerous aircraft fuel system component test stations, also called test stands. Evaporative emissions of VOC occur during change out and flushing of the unit under test. This EUG used to include Building 3108 (EU 5015); fuel system component testing in Building 3108 has ceased and has been reassigned to either Building 3902 or Building 3907. In Building 3902 (EU 5415), all ventilation and process purge air supplied to equipment, rooms, and areas where calibration fluid may be present, is exhausted to the atmosphere through two exhaust plenums, which are 45 feet above ground level. Building 3907 (EU 5417) was constructed to accommodate equipment to be relocated from 3108 and also accommodates some shops supporting the fuel component testing operation.

Emission limits are provided for EUs 5415 and 5417 in Table 1 of the Permit Specific Conditions, and represent the emission limits previously established under PSD permitting. To accommodate fluctuations in workload and promote flexibility, the permittee may replace existing test stations within each existing source with new or modified stands, as long as the resulting emissions do not exceed the limits established for each EU in Table 1 of the Title V Operating Permit. Although equipment may be added, the emissions are limited to the already permitted levels. Appendix B lists the CalTest-1 emission units.

EC1, FORMERLY "ExtComb-1, Dual-Fuel Boilers, > 10 MMBtu/hr and < 100 MMBtu/hr, Not Subject to NSPS" – NO LONGER IN USE

This EUG contained three boilers with identical applicable requirements, based on similar heat input ratings and installation dates. They were fired primarily on natural gas (primary operating scenario), with the capability of burning No. 2 fuel oil (alternative operating scenario). All of these units have subsequently been decommissioned; none of these units will ever be used again. Because this EUG was specific to these units, the EUG will also never be used again by Tinker AFB. The EUG, however, will continue to be mentioned in documentation such as the Title V permit to prevent potential confusion when comparing historical operations with conditions existing under this and subsequent permits.

EC2, ExtComb-2, Dual-Fuel Boilers, > 100 MMBtu/hr, Subject to NSPS Subpart Db (Installed prior to February 28, 2005), Subject to NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters

This EUG contains two boilers with identical applicable requirements, based on similar heat input ratings and installation dates. They are fired primarily on natural gas (primary operating

scenario), with the capability of burning No. 2 fuel oil (alternative operating scenario) during periods of gas curtailment or supply interruption. Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to each operating scenario for this EUG are presented in the Permit.

Emission limits, presented in Table 1 of the Permit Specific Conditions, were established separately for each of the boilers in EC2, and are equal to the previously permitted limits. Appendix A lists the ExtComb-2 emission units.

EC3, ExtComb-3, Natural Gas External Combustion > 10 MMBtu/hr, Subject to NSPS Subpart Dc, Subject to NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters

Currently, there are no permanent EUs currently assigned to this EUG and therefore no listing in Appendix A for this EUG. This EUG has been retained as a placeholder to accommodate new units, if installed in the future.

EC4, ExtComb-4, Dual-Fuel Boilers, > 10 MMBtu/hr (and < 100 MMBtu/hr), Subject to NSPS Subpart Dc, Subject to NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters

This EUG contains three boilers with identical applicable requirements, based on similar heat input ratings and installation dates. They are fired primarily on natural gas (primary operating scenario), with the capability of burning No. 2 fuel oil (alternative operating scenario) during periods of gas curtailment or supply interruption. As of February 2009, EUs 0051 and 0052 were decommissioned, and new, smaller satellite boilers and heaters were installed. Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to each operating scenario for this EUG are presented in the Permit.

Emission limits presented in Table 1 of the Permit Specific Conditions were established separately for each of the boilers in EC4, and are equal to the previously permitted limits. Appendix A lists the ExtComb-4 emission units and includes the two decommissioned boilers because they have not been removed from the facility.

EC5, ExtComb-5, Dual-Fuel Boilers < 10 MMBtu/hr, Subject to NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters

This EUG currently contains four dual-fuel boilers fired primarily on natural gas (primary operating scenario), with the capability of burning No. 2 fuel oil (alternative operating scenario) during periods of gas curtailment or supply interruption. As of February 2009, EUs 0053 and 0054 were decommissioned but not removed, and new, smaller satellite boilers and heaters were installed. EUs 0055 and 0056, in Building 1094, are in operation. Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to each operating scenario for this EUG are presented in the Permit.

The emission limits in Table 1 of the Permit Specific Conditions apply to the listed EUs in EC5, as a plant-wide aggregate to allow for operational flexibility. Appendix A lists EU 0053 and EU 0054, the two decommissioned ExtComb-5 emission units, because they have not been removed from the facility.

EC6, ExtComb-6, Natural Gas External Combustion Units > 5 MMBtu/hr, Not Subject to NSPS, Subject to NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters

This EUG contains four boilers and two process heaters fired on natural gas, operated in three separate buildings (two units in each building). Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to this EUG are presented in the Permit. Emission limits have been established for the boilers, and are presented in Table 1 of the Permit Specific Conditions. Plant-wide emission limits were established for the aggregate of the boilers. The process heaters have not been subject to emission limits because they have not previously been issued permits and are not subject to NSPS (see next paragraphs). They are subject to certain OAC emission standards.

The process heaters were replacement units for similar size process heaters which were grandfathered; i.e., they were installed prior to any effective regulatory requirements. Both the old and replacement units were natural gas-fired units rated at 14 MMBtu/hr each. Therefore, the replacement of like units did not result in an emission increase for any criteria pollutant greater than 1 lb/hr, the permitting threshold for replacement units in the 1980s (OAC rules). Therefore, no permit was issued and no limits were assigned.

NSPS Subpart Dc applies to boilers/process heaters rated between 10 and 100 MMBtu/hr, but only units installed/constructed after June 9, 1989 are subject to this regulation.

Under Title V, combustion units rated greater than 5 MMBtu/hr are considered significant sources. The furnaces are considered significant air emission units, but have not had limits imposed due to their status as like-kind replacements for grandfathered units. Appendix A lists the ExtComb-6 emission units.

EC7, ExtComb-7, Dual-Fuel Boilers > 100 MMBtu/hr, Subject to NSPS Subpart Db (Installed after February 28, 2005), Subject to NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters

This EUG contains one boiler installed in 2006 in building 3001. This boiler replaced the previously grandfathered emission unit EU 0063. This new unit is a 121 MMBtu/hr boiler primarily fired on natural gas (primary operating scenario) with the capability of burning No. 2 fuel oil (alternative operating scenario) during periods of gas curtailment or supply interruption. This EU is an affected unit under NSPS Subpart Db. Emission limits were established in Permit No. 99-104-C (M-7) and have been incorporated in the specific conditions of the current Title V permit.

Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to each EUG are presented in the Permit. Operating permit emission limits have been established and compliance confirmed with the performance and RATA tests. Appendix A lists the ExtComb-7 emission unit.

EC8, ExtComb-8, Dual Fuel Boilers >10 MMBtu/hr & <100 MMBtu/hr, Subject to NSPS Subpart Dc, Subject to NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters

This EUG previously contained two boilers (EUs 0015 and 0016) in building 208, each 14.3 MMBtu/hr, primarily fired on natural gas (primary operating scenario), with the capability of burning No. 2 fuel oil (alternative operating scenario). These units, however, were permanently shut down in March 2014 and are in the process of being decommissioned and removed.

This EUG is thus empty at this time. In addition, Tinker AFB has no present plans to purchase any boiler units exhibiting the characteristics of this EUG; note that the boiler units pre-approved under construction permit 2009-394-C (M-4) (PSD) are all natural gas fired units, rather than dual fuel, and would fall into one of EUGs EC3, EC6, or EC11. In spite of the lack of current plans to install this category of boiler at Tinker AFB, the appropriate specific conditions for this EUG are being retained in the permit.

Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to each EUG are presented in the Permit. Emission limits are listed in Table 1 of the Permit Specific Conditions.

EC9, FORMERLY "ExtComb-9, Dual-Fuel Boilers, Installed Prior to 1960 (Grandfathered)" – NO LONGER IN USE

This EUG represented the dual-fuel external combustion units that were grandfathered from permitting requirements in the last Title V permit iteration. All of these units have subsequently been decommissioned and some have been physically removed; none of these units will ever be used again. Because this EUG was specific to these grandfathered units, the EUG will also never be used again by Tinker AFB. The EUG, however, will continue to be mentioned in documentation such as the Title V permit to prevent potential confusion when comparing historical operations with conditions existing under this and subsequent permits.

EC10, ExtComb-10, Dual-Fuel Boilers (> 100 MMBtu/hr) not subject to NSPS, Subject to NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters

This EUG includes the external combustion units contained in the subsumed permit for the General Motors Assembly Plant. This EUG contains three boilers at the Tinker Aerospace Complex. Two units (EUs 0091 and 0092) are fired only on natural gas; EU 0093 is capable of burning both natural gas and landfill gas but has recently operated solely on natural gas. Appendix A lists the ExtComb-10 emission units. Note that these units were not operated during 2014 or 2015, and Tinker AFB does not anticipate operating these units in future.

EC11, ExtComb-11, Natural Gas External Combustion < 5 MMBtu/hr, Subject to NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters

This EUG represents small natural gas fired boiler units subject to tune-up requirements under the Boiler MACT. Appendix A lists the current emission units, previously "Insignificant," that fall under in the new ExtComb-11 EUG. Hot water heaters with capacity of no more than 120 gallons are excluded from regulation under the Boiler MACT and thus remain as Insignificant units.

HL1, FORMERLY "Halog-1, Halogenated Solvent Batch Cold Cleaning" – NO LONGER IN USE

This EUG originally represented emission unit number 4428, a halogenated solvent batch-cleaning machine. Use of halogenated solvent in EU 4428 was halted years ago, before that cleaning tank was replaced. Tinker AFB has no intention of installing any new halogenated solvent cold cleaning processes in the foreseeable future. The specific conditions associated with this EUG have been deleted. The EUG, however, will continue to be mentioned in documentation such as the Title V permit to prevent potential confusion when comparing historical operations with conditions existing under this and subsequent permits.

IC1, IntComb-1, Compression Ignition Internal Combustion Engines < 500-bhp, Subject to 40 CFR 60 Subpart IIII, Non-Emergency Use

This EUG represents numerous EUs potentially affected by NSPS Subpart IIII and/or NESHAP ZZZZ. Currently, this EUG contains generators with identical applicable requirements, under EU number 5289, used at various locations on base. These diesel-fueled internal combustion engines have been used on a temporary basis since 2001, primarily during the summer months to supply power for chillers. Tinker AFB is unable to supply sufficient power to several buildings such as 2121 and 2211, and uses these generator units as needed during the summer months. This is a general EUG not limited by the number of units employed, but rather must comply with emission limits established by Permit No. 2002-484-C, and retained in the Title V Operating Permit. The horsepower size may vary because these units are leased for seasonal use. Specific Conditions of the Permit require periodic testing to verify vendor emissions data and emission calculations to demonstrate compliance with permitted limits.

Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to this EUG are presented in the Permit. In addition, emission limits have been established for these units as a plant-wide aggregate, and are presented in Table 1 of the Permit Specific Conditions. Appendix A provides some information on the emission units for this EUG.

The non-road engines do not meet the definition of a stationary internal combustion engine in either 40 CFR 60 Subpart IIII §60.4219 or 40 CFR 63 Subpart ZZZZ §63.6585(a); therefore, they are exempted from these federal regulations.

NOTE: The permit conditions for this EUG also contain specific conditions that will apply if engines not qualifying as non-road engines are installed.

IC2, IntComb-2, Stationary Reciprocating Internal Combustion Engines (RICE), Subject to 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ, Emergency Use Engines

This EUG includes all stationary RICE Tinker AFB proposes to install to provide emergency power. Tinker AFB has requested and been granted advance approval for inclusion of these engines in the Title V Operating Permit. Emission limits have not been established for these EUs, because of their emergency status and limited hours of operation. Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to each EUG are presented in the Permit. Appendix A lists the IntComb-2 emission units.

IC3, IntComb-3, Compression Ignition Internal Combustion Engines > 500-bhp, Non-Emergency

This EUG represents numerous EUs potentially affected by NSPS Subpart IIII and/or NESHAP ZZZZ. Limits and conditions were incorporated from Permit No. 99-104-O (M-3). Currently, these diesel-fueled internal combustion engines have been used on a temporary basis, primarily during the summer months to supply sufficient power for chillers since 2001. Tinker AFB is unable to supply sufficient power to several buildings and utilizes these units as needed during the summer months. Although the specific number of units may vary, depending on operational requirements, all units >500-bhp will have identical requirements and will be subject to an aggregate emission limit for this EUG.

Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to this EUG are presented in the Permit. In addition, emission limits have been established for these units as a plant-wide aggregate, and are presented in Table 1 of the Permit Specific Conditions. Appendix A provides some information on the emission units for this EUG.

These non-road engines do not meet the definition of a stationary internal combustion engine in either in 40 CFR 60 Subpart IIII §60.4219 or 40 CFR 63 Subpart ZZZZ §63.6585(a); therefore, they are exempted from these federal regulations.

NOTE: The permit conditions for this EUG also contain specific conditions that will apply if engines not qualifying as non-road engines are installed.

ET1, EngTest-1, Jet Turbine Engine Testing

This EUG represents all jet turbine engine testing operations at Tinker AFB. Previously grandfathered sources included test operations in buildings 3703 and 3234, EUs 4403 and 4404, respectively. The previous Title V renewal referenced the requirements from construction permit number 99-104-C M-4, authorizing updating of facility infrastructure, testing software/hardware, and installation of additional test facilities; this construction activity has been completed. This permit contains aggregate emissions limits for all current and authorized future

test operations for jet turbine engines; the emissions limits are in Table 1 of the Permit Specific Conditions. Appendix A provides some details on the emission units for this EUG..

In addition to EU 4600 which was added for the T-9 test cells constructed under construction permit No. 99-104-C M-4, a new 10-meter stationary jet engine test cell, to be assigned EU 4800, will be constructed in the future as part of the KC-46A project construction Permit No. 2009-394-C (M-4) (PSD). Tinker AFB shall keep ODEQ apprised of the progress of the KC-46A project, including discussions of details such as location and unit description for the new 10-meter test cell. Any increase in emissions above the permitted limits in Table 1 of the Permit Specific Conditions shall be evaluated for potential permitting requirements. Appendix B lists the EngTest-1 emission units.

ND1, NCDpnt-1, Non-chemical Depainting

This EUG represents numerous EUs that are located throughout the facility. The EUs are engaged in non-chemical depainting of the outer surfaces of completed aerospace vehicles, including the fuselage, wings, and vertical and horizontal stabilizers of aircraft, and the outer casing and stabilizers of missiles and rockets. This facility-wide EUG is considered to be the affected source, as defined in 40 CFR 63, Subpart GG, 63.741(c). Detailed discussions regarding applicable standards, and monitoring, recordkeeping and reporting requirements are presented in the Permit. For nonchemical depainting operations, a PM emission limit has been established (see Table 1 of the Permit Specific Conditions), applicable to the aggregate of all emissions from units operating under ND1. Appendix B lists the NCDpnt-1 emission units.

SC1, SrfCoat-1, Aerospace Surface Coating, with Dry Filters

This EUG represents numerous EUs that are located throughout the facility. The paint booth EUs are primarily engaged in surface coating (primer and topcoat) of aerospace vehicles or components, resulting in evaporative losses of volatile organic compounds, and emissions of particulate matter, if spray guns are utilized. A reasonably expected alternate operating scenario for painting of non-aerospace vehicles or components has been established for these EUs. Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to this EUG are presented in the Permit. It should be noted that the facility has been operating in compliance with the Aerospace NESHAP regulations since 1998. Emission limits for surface coating operations (see Table 1 of the Permit Specific Conditions), are applicable to the aggregate of all emissions from units operating under SC1, SC2, SC3, SC4, and SV2 on a facility-wide basis. This aggregate emission limit is based on a combination of previously issued permit limits and actual historical emission levels, scaled up to accommodate a 50% fluctuation in workload for those units not previously permitted.

In addition, these EUs may be required to accommodate some coating operations, such as brush and touch-up on exempt aerospace components, which would be exempt from part or all of the Aerospace NESHAP requirements (as presented in the specific conditions for this EUG). The requirements governing the brush and touch-up activities would be those presented for the EUG SrfCoat-2, and the requirements governing the aerospace exempt activities would be those presented for the EUG SrfCoat-3 in this facility permit. Appendix B lists the SrfCoat-1 emission

units, and alternative operating scenarios, will be included in the EUG specific conditions.

SC2, SrfCoat-2, Aerospace Surface Coating, Brush or Spray Touch-Up

This EUG represents numerous EUs that are located throughout the facility. The EUs are primarily engaged in surface coating operations (primer and topcoat) of aerospace vehicles or components, using brush or touch-up techniques, resulting in evaporative losses of volatile organic compounds. This facility-wide EUG is considered to be the affected source, as defined in 40 CFR 63, Subpart GG, 63.741(c). A reasonably expected alternate operating scenario, for painting of non-aerospace vehicles or components, has been established for these EUs. These EUs include activities listed in 40 CFR 63.745(g)(4) as coating activities exempt from control requirements, including but not limited to painting activities where it is not technically feasible to paint in a booth. The ODEQ has approved SC2 operations in maintenance areas where it is not technically feasible to paint in a booth.

Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to units operated under this EUG are presented in the Permit. For surface coating operations, VOC and PM emission limits are applicable to the aggregate of all emissions from units operating under SC1, SC2, SC3, SC4, and SV2 on a facility-wide basis.

In addition, these EUs may be required to accommodate some coating operations, such as those performed on exempt aerospace components, which would be exempt from part or all of the Aerospace NESHAP requirements presented as standard conditions for this EUG. The requirements governing the aerospace exempt activities would be those presented for the EUG SrfCoat-3 in this facility permit. Appendix B lists the SrfCoat-2 emission units, and the applicable alternative operating scenarios, are included in the EUG specific conditions.

SC3, SrfCoat-3, Surface Coating, Aerospace Specialty Coatings

This EUG represents surface coating EUs that are located throughout the facility. The EUs are engaged in surface coating of aerospace components using specialty coatings (as defined in Appendix A of Subpart GG). Subpart GG states, "This subpart does not contain control requirements for the use of specialty coatings …" These coating operations are subject to the Oklahoma rules, including the limits established for specialty coatings in Subchapter 39, Appendix N. These activities result in evaporative losses of volatile organic compounds and emissions of particulate matter, if spray guns are utilized. Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to units operated under this EUG are presented in the Permit. The surface coating emission limits in Table 1 of the Permit Specific Conditions are applicable to the aggregate of all emissions from units operating under SC1, SC2, SC3, SC4, and SV2 on a facility-wide basis. Appendix B lists the SrfCoat-3 emission units, and the alternative operating scenarios, if applicable, will be included in the EUG specific conditions.

SC4, SrfCoat-4, Non-Aerospace Surface Coating

This EUG represents surface coating EUs that are engaged in surface coating operations for non-

aerospace vehicles and equipment, such as ground support equipment and automobiles. These activities result in evaporative losses of volatile organic compounds and emissions of particulate matter if spray guns are utilized. Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to units operated under this EUG are presented in the Permit. The surface coating emission limits in Table 1 of the Permit Specific Conditions are applicable to the aggregate of all emissions from units operating under SC1, SC2, SC3, SC4, and SV2 on a facility-wide basis. Appendix B lists the SrfCoat-4 emission units, and the alternative operating scenarios, if applicable, will be included in the EUG specific conditions.

SV1, Solvent-1, Cold Cleaning, Non-aerospace

This EUG represents numerous emission units that are cold cleaning tanks containing solvents. Operation of these tanks results in evaporative losses of volatile organic compounds.

As described in the EUG description for CF1, the VOC emission limit presented in Table 1 of the Permit Specific Conditions is applicable to the aggregate of all emissions from solvent cleaning operations under CF1, CH1, CH2, CS1, and SV1, on a facility-wide basis. Appendix B lists the Solvent-1 emission units, and specifies the alternative operating scenarios under which these EUs may operate.

SV2, Solvent-2, Solvent Usage, Spray Gun Pattern Testing

This EUG represents two EUs that perform a spray gun pattern testing activity using a solvent. These units were installed prior to 1994, and result in evaporative losses of volatile organic compounds.

Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to these emission units are presented in the Permit. The VOC emission limit in Table 1 of the Permit Specific Conditions is applicable to the aggregate of all emissions from units operating under SC1, SC2, SC3, SC4, and SV2 on a facility-wide basis. Appendix B lists the Solvent-2 emission units.

TK1, Tank-1, Tanks Subject to NSPS Subpart Kb, MOGAS

This EUG includes one above ground storage tank, equipped with an internal floating roof, which stores motor gasoline (MOGAS). Due to its size, content, and/or installation date, this tank is subject to NSPS, 40 CFR 60, Subpart Kb. The activities associated with filling and emptying this tank, along with the diurnal heating and cooling cycles, result in evaporative losses of VOCs. Emission limits have been established for this EU in Table 1 of the Permit Specific Conditions. Appendix B lists the Tank-1 emission unit.

TK2, Tank-2, Tanks Subject Only to Oklahoma Air Pollution Control Rules

This EUG represents tanks considered significant because they are subject to the submerged fill requirements of OAC 252:100-37-15(b). These tanks are not subject to NSPS, 40 CFR 60. The activities associated with filling and emptying these tanks, along with the diurnal heating and

cooling cycles, result in evaporative losses of volatile organic compounds.

Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to this EUG are presented in the Permit. The units in this EUG are subject to only to the submerged fill requirement. No emissions limits are applicable to these tanks. Appendix B lists the Tank-2 emission units.

VD1, VaporDeg-1, Vapor Degreasers, Conventional

This EUG includes a single conventional vapor degreaser that used perchloroethylene; this unit is no longer in use, but remains in place. Use of this perchloroethylene vapor degreaser has been eliminated as a result of significant engineering process modifications. In spite of Tinker AFB's success in eliminating regular use of this vapor degreaser, the unit is maintained as a back-up unit in the event of a failure of the alternative non-halogenated solvent process that has been put in place to fulfill the function. Detailed discussions regarding standards, and monitoring, recordkeeping and reporting requirements applicable to this EUG are presented in the Permit. Furthermore, because the unit in this EUG is subject to a technology-based standard, no applicable emission limit has been established. Tinker AFB tested and demonstrated compliance with the idling emission standard in May 1998. The NESHAP does not limit emissions from this unit. Appendix B lists the VaporDeg-1 emission unit.

VD2, FORMERLY "VaporDeg-2, Vapor Degreasers, Vacuum" – NO LONGER IN USE

This EUG once included three vacuum vapor degreasers that previously used perchloroethylene. All vacuum vapor degreasers have been removed or permanently decommissioned. Tinker AFB has no intention of installing any new vacuum vapor degreasers in the foreseeable future. The specific conditions associated with this EUG have been deleted. The EUG, however, will continue to be mentioned in documentation such as the Title V permit to prevent potential confusion when comparing historical operations with conditions existing under this and subsequent permits.

SECTION V. INSIGNIFICANT ACTIVITIES

The U.S. EPA issued a memorandum signed by Dr. John Seitz, Office of Air Quality Planning and Standards (OAQPS), dated August 2, 1996, which applies to major source determinations for military installations. Such activities have been identified and included in the listing of Insignificant Activities pursuant to Oklahoma Administrative Code (OAC) 252:100-8. The second paragraph of the memorandum on page 18 states:

> "Military installations include numerous activities that are not normally found at other types of sources. These types of activities include residential housing, schools, day care centers, churches, recreational parks, theaters, shopping centers, grocery stores, gas stations, and dry cleaners. These activities are located on military installations for the convenience of military personnel (both active duty and retired), their dependents, and

DoD civilian employees working on the base, and they often do not represent essential activities related to the primary military activity(ies) of the base. Therefore, the U.S. EPA believes these types of activities may appropriately be considered not to be support facilities to the primary military activities of a base. As such, these activities may be treated as separate sources for all purposes for which an industrial grouping distinction is allowed. Such activities should be separately evaluated for common control, SIC Code, and support facility linkages to determine if a major source is present. This approach is limited to activities that are provided solely as amenities for active duty and retired personnel, their dependents, and DoD civilian employees on an individual transaction, pay-for-service basis; in lieu of a housing allowance; for religious or recreational purposes; or for the education or care of dependent children."

Insignificant and Trivial Activities

Tinker AFB operates a myriad of insignificant/trivial sources varying from small hydrocarbon storage tanks and chemical cleaning/processing tanks to small welding and self-contained abrasive cleaning operations. Most of these operations have been conducted since air depot maintenance and repair operations began. A list of insignificant sources contained in the Base's air inventory management system and a database of active air emissions sources is maintained on site.

Table 3 summarizes insignificant or trivial activities, which are listed in Appendix I or Appendix J, respectively, of OAC 252:100-8. Table 3 also lists the justification and any monitoring required to verify the status.

Table 3

Insignificant and Trivial Activities				
ID	**Description**	**Justification**	**Action**	**Location**
0500	Space heaters, furnaces, expansor torches, foundry/ process ovens, ranges/deep fat fryers, less than or equal to 5 MMBtu/hr heat input and not subject to Boiler MACT	Per ODEQ Appendix I, combustion sources with less than or equal to 5 MMBtu/hr heat input are considered insignificant.	Maintain fuel usage records for insignificant natural gas fuel sources and calculate emissions for the AEI.	Various base-wide locations
0501	Ovens, steam or electric, emissions accounted for elsewhere	Per ODEQ Appendix J, electric or steam-heated drying ovens and autoclaves are considered trivial.	No further action is needed.	Various base-wide locations
0502	Storage tanks, less than 400 gallon capacity	Per ODEQ Appendix I, storage tanks not subject to NSPS and standards in OAC 252:100-37-15, 252:100-39-30, and 252:100-39-41 are considered insignificant.	Maintain records on number and capacity of units.	Various (~25 total)
0503	General adhesive/sealant use	Per ODEQ Appendix I, activities having the potential to emit no more than 5 tpy (actual) of any criteria pollutant are considered insignificant.	Maintain records of usage to verify insignificance.	Various (~110 total)
0504	Grinding and sanding operations for aircraft rework, located basewide	Per ODEQ Appendix I, activities having the potential to emit no more than 5 tpy (actual) of any criteria	Maintain operation records to verify insignificance.	Various (~80 area sources

Table 3

Insignificant and Trivial Activities				
ID	**Description**	**Justification**	**Action**	**Location**
		pollutant are considered insignificant.		total)
0505	Welding operations for aircraft rework, basewide	Per ODEQ Appendix I, welding operations utilizing less than 100 pounds of solder and 53 tpy of electrodes are considered insignificant.	Maintain records of usage to verify insignificance.	Various (~20 area sources total)
0506	Soldering operations for aircraft rework, basewide	Per ODEQ Appendix I, soldering operations uses less than 100 pounds of solder and 53 tpy of electrodes are considered insignificant.	Maintain records of usage to verify insignificance.	Various (~35 area sources total)
0507	Hazardous material/ hazardous waste temporary storage sites, hazardous waste accumulation points	Per ODEQ Appendix I, hazardous waste and hazardous materials drum staging areas are considered insignificant.	Maintain records on number of sources.	Various (~750 total)
0508	Storage tanks, 500-15,000 gallon capacity, used to temporarily store hazardous waste/spent hazardous material/fuel prior to offsite disposal	Per ODEQ Appendix I, storage tanks at gasoline and aircraft fuel handling facilities are considered insignificant, except those subject to NSPS and standards in OAC 252:100-37-15, -39-30 and -39-41.	Maintain records on number of units.	Various (~15 total)
0509	Curing of resins	Per ODEQ Appendix J, processes used for the curing of fiberglass or paint products are considered trivial.	No further action is needed.	Various (~20 total)
0510	Fugitive emissions: defuel operations	Per ODEQ Appendix I, activities having the potential to emit no more than 5 tpy (actual) of any criteria pollutant are considered insignificant.	Maintain records of throughput to verify insignificance.	Ramp
0511	Fuel dispensing operations	Per ODEQ Appendix I, emissions from fuel dispensing equipment operated solely for facility-owned vehicles are considered insignificant if fuel throughput is not more than 2,175 gal/day, averaged over a 30-day period.	Maintain records of throughput to verify insignificance.	Various (~20 total)
0512	Storage tanks associated with auxiliary emergency use generators	Per ODEQ Appendix I, storage tanks at gasoline and aircraft fuel handling facilities are considered insignificant, except those subject to NSPS and standards in OAC 252:100-37-15, 232:100-39-30 and 252:100-39-41.	No further action is needed.	Various (~90 total)
0513	Storage tanks (Note that most storage tanks have been previously justified as insignificant in 1997 AEI turnaround documents submitted March 1998)	Per ODEQ Appendix I, storage tanks at gasoline and aircraft fuel handling facilities are considered insignificant, except those subject to NSPS and standards in OAC 252:100-37-15, 232:100-39-30 and 252:100-39-41.	No further action is needed.	Various (~50 total)
0514	General solvent use for facility/equipment	Per ODEQ Appendix J, maintenance activities including those not	No further action is needed.	Various (~25 total)

Table 3

Insignificant and Trivial Activities				
ID	**Description**	**Justification**	**Action**	**Location**
	maintenance, warehousing, Vo-Tech, and Hobby Shop activities, not subject to Aerospace MACT	altering the capacity of process, combustion or control equipment, and which do not increase regulated pollutant emissions are considered trivial unless subject to NESHAP or NSPS.		
0515	Emergency use generators or fire pump engines	Stationary reciprocating internal combustion engines (RICE) that are not subject to the RICE MACT or NSPS Subpart IIII are considered insignificant.	Maintain records of rating, date of installation, annual operating hours to verify insignificance.	Various (~75 total)
0516	Woodworking	Woodworking operations not associated with the primary process operation are considered insignificant.	No further action required.	Various
0517	Solvent use, from containers less than 1 liter	Hand wiping and spraying of solvents from containers with less than 1-liter capacity used for spot cleaning and/or degreasing are considered insignificant.	No further action required.	Various (~15 total)
0518	General solvent use, not subject to NESHAPS (non-Aerospace)	Activities having the potential to emit no more than 5 tpy (actual) of any criteria pollutant are considered insignificant.	Maintain records of usage to verify insignificance.	Various (~15 total)
0519	Electroplating operations, not subject to NESHAPS	Activities having the potential to emit no more than 5 tpy (actual) of any criteria pollutant are considered insignificant.	These sources demonstrated to be insig. in 1997 AEI. No further action required.	Various (~5 total)
0520	Specialty coating usage, exempt from Aerospace NESHAP	Per ODEQ Appendix I, surface coating operations that do not exceed 60 gals/month of coatings, thinners, and clean-up solvents are considered insignificant. Furthermore, these operations must not be subject to any federal (Aerospace NESHAP) or state (must be under 100 lb/day of VOC emissions) applicable requirements to be considered insignificant.	Maintain records of usage to verify insignificance.	Various
0521	Stripper usage, non-HAP containing, not subject to Aerospace NESHAP	Activities having the potential to emit no more than 5 tpy (actual) of any criteria pollutant are considered insignificant, provided that there are no other state or federal applicable requirements.	Maintain records of usage to verify insignificance.	Various
0522	Diesel Tanks	Emissions from storage tanks constructed with a capacity less than 39,894 gallons which store VOC with a vapor pressure less than 1.5 PSIA at maximum storage	Maintain records of usage to verify insignificance.	Various

Table 3

Insignificant and Trivial Activities				
ID	**Description**	**Justification**	**Action**	**Location**
		temperature		

Units with recordkeeping requirements to verify their insignificance are noted in the appendix. Although the many of these sources are insignificant, similar sources collectively are reported in the air emission inventory. An example is the insignificant combustion sources such as hot water heaters not subject to the Boiler MACT. These emissions are estimated based on AP-42 emission factors based on total natural gas usage.

Appendix C provides a table of the aggregated Insignificant Sources category with a description of the groupings and an estimate of individual units within that category. Appendix D lists individual insignificant emission sources which do not fall into any of the general classifications of the aggregated sources.

Grandfathered Sources

Tinker AFB became subject to Oklahoma Air Quality permitting requirements as of August 7, 1977. Currently, Tinker AFB operates a number of emission units that were constructed prior to this date, and are considered grandfathered from permitting requirements. These sources are listed in Table 5 of this memorandum. Although these emissions units are not subject to permitting requirements, DEQ requests that the emissions from these sources be calculated and submitted with the annual Air Emissions Inventory. Turnaround documents have been and will continue to be prepared and submitted for all grandfathered sources. Table 4 contains a detailed list of the grandfathered sources currently in operation.

Table 4

Summary of Grandfathered Sources			
EU ID	**Description**	**Location**	**Installation Date**
3832	Emissions From Firing Rounds of Ammunition at Firing Range	Bldg 1023, Firing Range	~ 1950
5401	F107/F112 Missile Engine Test Cells, Four	Bldg 214	1943

SECTION VI. EMISSIONS

Title V applicability is based on whether a facility is considered a "major" stationary source. A major stationary source in an attainment area is defined as having the potential to emit (PTE) criteria pollutants in quantities greater than 100 tpy, or hazardous air pollutants greater than 10 tpy for any single HAP, or 25 tpy for any combination of HAPs. As shown in Table 5, Tinker AFB is a major source of NOx, CO, VOC, and HAPs, and therefore is subject to Title V.

Table 5

Potential Emissions, in tons per year (TPY)						
PM_{10}	**NO_X**	**SO_2**	**CO**	**VOC**	**Single Largest HAP**	**All HAPs**
95	1,080	81	910	1,538	15	46

Annual PTE emissions are typically based on full utilization of each EU at its design capacity. For EUs that have been issued an operating permit from the DEQ with enforceable maximum permitted emission limits, these levels remain in effect and are the PTE for those emission units. Emissions from mobile sources, such as on- and off-road vehicles, ground support equipment (GSE) and aircraft engines in flight operations, are not included in PTE calculations.

Tinker AFB conducts an Annual Emission Inventory of HAP and Toxic Air Contaminants (TAC), in accordance with Oklahoma Administrative Code, OAC 252:100-5. This Oklahoma rule states that the "emission inventory means a compilation of all point source, storage and process fugitive air emissions for all regulated air pollutants at a given facility.

The actual emissions reported on the recent Annual Emission Inventories (AEI) are considerably less than the total PTE levels. PTE levels are included here primarily for the purpose of documenting Title V applicability.

As a major source for HAP emissions, certain activities at Tinker AFB may be subject to NESHAP regulations, including various Maximum Achievable Control Technology (MACT) standards. Specific applicability determinations for the NESHAPs and other state, local, and federal regulations, are discussed in more detail in Sections VII and VIII below.

For the purpose of determining Tinker AFB's status as a "major source" under Prevention of Significant Deterioration (PSD) regulations, a summary of estimated actual annual criteria emission levels is presented in Table 6. These emission estimates are based on various methodologies, depending on the availability of data for the numerous sources, and do not include "insignificant" sources. The data presented in Table 6 are not permit limits, and should not be construed as such.

Table 6

Summary of Annual Emissions Inventories, tpy					
Year	**PM_{10}**	**NO_X**	**SO_2**	**CO**	**VOC**
2004	12.5	228.8	16.8	188.9	511.6
2005	11.8	195.7	12.6	176.1	326.6
2006	7.3	181.3	8.9	132.6	304.2
2007	8.7	194.3	11.8	140.3	259.1
2008	15.4	200.5	14.0	139.4	275.5
2009	17.7	216.8	13.6	154.9	275.1
2010	16.9	217.3	16.7	149.5	275.6
2011	17.1	208.4	17.1	155.6	232.6
2012	13.1	156.0	10.9	119.2	286.1
2013	12.9	151.3	9.1	115.6	245.7
2014	12.7	128.1	10.8	112.8	425.4

PSD thresholds of 250 tpy for these pollutants have been established. Based on the permitted levels of emissions which can exceed those presented in Table 5, Tinker AFB is a PSD major source for NO_X, CO and VOC.

Oklahoma now regulates HAP and TAC under Subchapter 42. Subchapter 42 reduced the

number of TAC regulated, developed a process for identifying potential areas of concern for individual TAC, and incorporated a methodology to resolve verified maximum acceptable ambient concentration (MAAC) exceedances which present a potential environmental hazard. The process applies only to the TAC listed in Appendix O of Oklahoma Administrative Code, OAC 252:100, and subject to this Oklahoma toxics rule. Tinker AFB will continue to monitor regulated pollutants, calculate emissions, and report associated emissions in their annual air emission inventory (AEI) report.

SECTION VII. OKLAHOMA AIR POLLUTION CONTROL RULES

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

OAC 252:100-2 (Incorporation by Reference) [Applicable]
This subchapter incorporates by reference applicable provisions of Title 40 of the Code of Federal Regulations. These requirements are addressed in the "Federal Regulations" section.

OAC 252:100-3 (Air Quality Standards and Increments) [Applicable]
Primary standards are included in Appendix E and Secondary Standards are included in Appendix F of the Air Pollution Control Rules. At this time, all of Oklahoma is in attainment of these standards. Significant emission sources have been modeled to confirm compliance with National Ambient Air Quality Standards (NAAQS) for both NOx and SO_2. Modeling was not performed for PM, because Tinker AFB is a minor source of PM and Oklahoma monitoring results indicate that background ambient concentrations for PM are far below the NAAQS for PM2.5 and PM10.

OAC 252:100-5 (Registration, Emission Inventory and Annual Operating Fees) [Applicable]
Subchapter 5 requires sources of air contaminants to register with ODEQ Air Quality Division (AQD), file emission inventories annually, and pay annual operating fees based upon total annual emissions of regulated pollutants. Emission inventories have been submitted and fees paid for previous years as required.

OAC 252:100-8 (Permits for Part 70 Sources) [Applicable]
Part 5 includes the general administrative requirements for Part 70 permits. Any planned changes in the operation of the facility that result in emissions not authorized in the permit or emissions at levels that exceed the thresholds for "Insignificant Activities" or "Trivial Activities" require prior notification to ODEQ and may require a permit modification. Insignificant activities refer to those individual emission units either listed in Appendix I or whose actual calendar year emissions do not exceed the following limits:

- 5 tpy of any one criteria pollutant
- 2 tpy of any one hazardous air pollutant (HAP) or 5 tpy of multiple HAPs or 20% of any threshold less than 10 tpy for a single HAP that the EPA may establish by rule

Tinker AFB submitted a Title V permit application on March 5, 1999. The Title V operating

permit for Tinker AFB was issued on May 11, 2005, with subsequent updates. Currently, Tinker AFB is operating under Permit No. 2009-394-TVR issued on September 2, 2010. In addition the ODEQ has issued an open construction Permit No. 2009-394-C (M-4) (PSD) issued November 19, 2015, for the KC-46A project. The KC-46A Permit No. 2009-394-C (M-4) (PSD) authorizes a long-term multi-building construction effort at Tinker AFB to provide appropriate facilities for overhaul and maintenance of the KC-46A aircraft, including construction of a new 10-meter stationary jet engine test cell. The activities supported for KC-46A will be similar to activities already performed at Tinker AFB. That permit was considered a Tier II permit and was subject to public and EPA review. The permit establishes increases in emission limits for the affected EUGs.

The permittee has requested and been granted a "permit shield" for this facility. All applicable air pollution control rules and regulations are listed in the "Specific Conditions" or in the "Standard Conditions." Compliance with the terms and conditions of this operating permit will be deemed compliance with the applicable requirements identified and included in this permit. Those rules and regulations that have been determined to not apply are listed in specific conditions #6.

Emission limitations for all the sources are taken from the permit application and the previous permits.

All Title V permit renewal applications are classified as Tier II permits requiring both public and EPA review. This renewal deletes several removed/decommissioned sources from the permit specific conditions. In addition, this renewal permit incorporates the requirements from the new construction permit for the KC-46A project, mentioned above.

OAC 252:100-9 (Excess Emission Reporting Requirements) [Applicable]
Except as provided in OAC 252:100-9-7(a)(1), the owner or operator of a source of excess emissions shall notify the Director as soon as possible but no later than 4:30 p.m. the following working day of the first occurrence of excess emissions in each excess emission event. No later than thirty (30) calendar days after the start of any excess emission event, the owner or operator of an air contaminant source from which excess emissions have occurred shall submit a report for each excess emission event describing the extent of the event and the actions taken by the owner or operator of the facility in response to this event. Request for affirmative defense, as described in OAC 252:100-9-8, shall be included in the excess emission event report. Additional reporting may be required in the case of ongoing emission events and in the case of excess emissions reporting required by 40 CFR Parts 60, 61, or 63.

OAC 252:100-11 (Alternate Emissions Reduction Plans & Authorizations) [Not Applicable]
Allows for alternative emissions reductions. This has not been requested by the permittee.

OAC 252:100-13 (Open Burning) [Applicable]
Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in this subchapter. Operation of the fire training facility is authorized.

OAC 252:100-17 (Incinerators) [Not Applicable]
The previously permitted Therm-Tec Model AR-89 classified waste incinerator was decommissioned on November 12, 2007. The EUG IN1 has been deleted from the Permit and specific conditions. Tinker AFB does not have any other incinerators.

OAC 252:100-19 (Particulate Matter (PM) [Applicable]
This subchapter specifies PM emission limits based on heat input capacity and applies to the combustion of fuel in any new or existing fuel-burning unit. Emissions shall not exceed the limits specified in Appendix C, also shown below.

Table 7

Particulate Matter Compliance with Appendix C				
Unit	**Heat Input Capacity (MMBtu)**	**PM Emission Limit from OAC 252:100-19 APP C (lb PM/MMBtu)**	**Estimated Emission Rate Fuel Oil [(a)] (lb PM/MMBtu)**	**Estimated Emission Rate Natural Gas [(b)] (lb PM/MMBtu)**
Boilers - B3001	121	0.332	0.0236	0.0076
Boiler - B3001	75	0.372	0.0236	0.0076
Boiler - B821	20	0.510	0.0236	0.0076
Boiler - B964	9.68	0.600	NA	0.0076
Boilers – B9301	190	0.298	NA	0.0076

(a): Emission rate calculated using emission factor from USEPA, AP-42 (7/98), Section 1.3
(b): Emission rate calculated using emission factor from USEPA, AP-42 (7/98), Section 1.4

Emission factors from AP-42 for fuel oil combustion are rated "A" for filterable and "D" for condensable PM, and these emission factors were combined to provide an emission factor for total PM. Similarly, natural gas emission factors from AP-42 are rated "A" for filterable and "D" for condensable PM, and were combined to provide an emission factor for total PM. These emission factors are considered representative of expected emission rates in absence of specific manufacturers' data, and are well below emission rates listed as limits in Appendix C of the regulation.

OAC 252:100-25 (Visible Emissions and Particulates) [Applicable]
No discharge of greater than 20% opacity is allowed except for short-term occurrences which consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity.

OAC 252:100-29 (Fugitive Dust) [Applicable]
No person shall cause or permit the discharge of any visible fugitive dust emissions beyond the property line on which the emissions originate in such a manner as to damage or to interfere with the use of adjacent properties, or cause air quality standards to be exceeded, or interfere with the maintenance of air quality standards. Under normal operating conditions, all activities at this facility will have insignificant fugitive dust emissions, therefore it is not necessary to require specific precautions to be taken.

OAC 252:100-31 (Sulfur Compounds) [Applicable]
Part 2, Ambient air concentration limits or impacts for new and existing equipment, sources or

facilities, Section 31-7 contains concentration limits for sulfur dioxides. Previously, the only combustion sources affected by the requirements of paragraph "(a) Sulfur oxides" were the grandfathered boilers in EUG EC9, which qualified as existing equipment per the definition in Section 31-2. The affected steam plants included four 116-MMBtu/hr boilers in building 208 and the two 29-MMBtu/hr boilers in building 5802. As all of these units have been decommissioned and/or removed, no further discussion is necessary.

Part 5, New equipment standards, Section 31-25 contains emission limits for fuel-burning equipment. These standards apply to all new equipment as defined in Section 31-2. With the exception of the four units in building 208 and the two in building 5802, the other boilers are subject to the gas-fired and liquid-fired fuel-burning new equipment standards. The limits are:

(a) Gas-fired. The gas-fired standard states that no person shall cause, suffer, or allow the discharge into the atmosphere of sulfur oxides measured as sulfur dioxide in excess of 0.2 lb/MMBtu heat input, maximum three-hour average from gas fuel-burning equipment. This rule is considered separately within the respective EUG discussion. Commercial natural gas has a maximum sulfur content of 2,000 grains/MMscf which is significantly less than 0.001 lb/MMBtu. Therefore sulfur dioxide emissions in excess of 0.2 lbs/MMBtu are not expected when using natural gas.
(b) Liquid-fired. No person shall cause, suffer, or allow the discharge into the atmosphere of sulfur oxides measured as sulfur dioxide in excess of 0.8 lb/MMBtu heat input, maximum three-hour average from liquid fuel-burning equipment. Tinker AFB uses very low sulfur fuel oil limited to a maximum of 0.05% sulfur by weight. This limit is more restrictive than the 0.8 lb/MMBtu in this rule. Therefore liquid-fired boilers will be in compliance with this standard.

OAC 252:100-33 (Control of Emissions of Nitrogen Oxides) [Applicable]
This subchapter sets limits of NOx emissions from fuel-burning equipment with a rated heat input of 50 MMBtu/hr or more. Limits for NOx emissions are 0.2 lb/MMBtu for natural gas and 0.3 lb/MMBtu for fuel oil. Tinker AFB operates 7 boilers that exceed the 50-MMbtu threshold and has 3 additional units located in TAC which are currently idle. In an effort to streamline this permit renewal, Tinker AFB has provided data in Table 1 in Section I (Introduction & Requested Changes) under the Oklahoma 3-hr NOx standard with compliance summary with the standard. Based on the data in the table, compliance with the subchapter requirements should not present any future issues. However, to ensure that all regulatory requirements are addressed in the specific conditions, specific conditions have been added for applicable units. These conditions list the compliance verification by specifying recognized methodology under the monitoring, recordkeeping and reporting section of each applicable EUG.

OAC 252:100-35 (Control of Emissions of Carbon Monoxide) [Not Applicable]
This facility operates of the affected sources: gray iron cupola, blast furnace, basic oxygen furnace, petroleum catalytic cracking unit, or petroleum catalytic reforming unit.

OAC 252:100-37 (Control of Emissions of Volatile Organic Compounds (VOCs)) [Applicable]
This rule is considered separately for each activity likely to produce VOC emissions within the respective EUG discussion.

Part 3 requires storage tanks constructed after December 28, 1974, with a capacity of 400 gallons or more and storing a VOC with a vapor pressure greater than 1.5 psia to be equipped with a permanent submerged fill pipe or with an organic vapor recovery system. All gasoline storage tanks subject to this rule are in EUG Tanks 2 and are equipped with a permanent submerged fill pipe, and thus are in compliance. Tinker AFB also has one 42,000-gallon gasoline storage tank (EUG Tank 1) which is subject to 40 CFR 60 Subpart Kb and thus exempt from Section 37-15(a) and (b).

Part 5 limits the VOC content of coatings used in coating lines and operations. Coating of parts and products is considered under OAC 252:100 Section 37-25, while coating of aerospace components is addressed by OAC 252:100-39-47 and 40 CFR 63 Subpart GG. Tinker shall comply with those requirements. The facility shall use compliant coatings for sources not addressed in 39-47 or GG. Routine maintenance of the facility and equipment is exempt.

OAC 252:100-39 (VOCs in Nonattainment and Former Nonattainment Areas) [Applicable]
This rule is considered separately for each activity likely to produce VOC emissions within the respective EUG discussion.
This subchapter imposes additional conditions beyond those of Subchapter 37 on emissions of organic materials from new and existing facilities in Tulsa and Oklahoma Counties.
Section 39-41 requires storage tanks with a capacity of 400 gallons or more and storing a VOC with a vapor pressure greater than 1.5 psia to be equipped with a permanent submerged fill pipe or with an organic vapor recovery system. Tinker AFB has one 42,000-gallon gasoline tank equipped with a floating roof meeting the requirements of this rule. In addition, seven smaller tanks exceed the capacity and store gasoline with a vapor pressure greater than the threshold. These tanks are equipped with a submerged fill pipe to comply with this rule.
Subsection 39-42(a) covers cold cleaning units, noting standards for construction and operation of such equipment. Paragraph 1 outlines equipment standards, including doors or covers, closed drainage, and conspicuous labeling. Paragraph 2 describes operating requirements; namely, appropriate draining procedures and times, keeping the unit covered when not in use, proper storage and disposal of waste solvent, and stipulates that spraying of VOC can only be in a solid stream. Paragraph 3 outlines requirements for controls if the solvent's vapor pressure exceeds certain limits. Paragraph 4 lists compliance and recordkeeping criteria.
The facility cleans aerospace parts utilizing cold cleaning units which meet the definition of clean flush operations as defined in the Aerospace MACT, 40 CFR 63, Subpart GG. In addition, a number of cold cleaning tanks are used for cleaning non-aerospace parts. All of the cold cleaning units are subject to this subsection.
Subsection 39-42(b) covers vapor type metal degreasers, noting standards for construction and operation of such equipment. Paragraph 1 outlines equipment standards including doors and covers in Subparagraph A; safety switches in Subparagraph B; equipment specifications such as freeboard, chillers, etc., in Subparagraph C; and conspicuous labeling of the equipment in Subparagraph D. Paragraph 2 describes the labeling information required to comply with Subparagraph 1(D). Paragraph 3 lists compliance and recordkeeping criteria. The facility complies with the requirements in (b)(1)(C), stating that compliance with the Halogenated Solvent Cleaning MACT (40 CFR 63, Subpart T) demonstrates efficiency greater than or equal to any of the other options. Compliance with the MACT constitutes compliance with this rule and further discussion is included under the MACT regulation. All other listed standards are met

for each of the machines.

Section 47 covers VOC emissions from aerospace industries coating operations, with requirements specifically applicable to aerospace vehicle and component coating operations at aerospace manufacturing, rework, or repair facilities located in Tulsa County that have the potential to emit more than 10 TPY of VOC from coating operations. Coating operations include associated cleaning operations and surface preparation. This section is modeled on, and closely tracks, the Aerospace MACT found in federal NESHAP, 40 CFR 63 Subpart GG. With the exception of "specialty coatings," as that term is defined in §39-47(c)(5), standards and requirements for VOC content, application equipment, control equipment, housekeeping measures, solvent cleaning operations, and general standards reference appropriate sections of GG. Standards for specialty coatings are addressed in §39-47(d). With the exception of specialty coatings, each of these areas has been addressed in Section V (Federal Regulations). Note that the low volume exemption is modified in §39-47 to include specialty coatings in the 50-gallon/200 gallon standard. In similar fashion, monitoring, recordkeeping, and test methods reference appropriate sections of GG, excepting specialty coatings. These topics were also addressed in Section V. The compliance date provisions of §39-47(h) also reference GG, stating that compliance with GG constitutes a demonstration of compliance with §39-47, again with particular attention paid to specialty coatings.

The VOC content of specialty coatings must meet the specifications listed in OAC 252:100 Appendix N. These standards shall be met by as-applied coatings, but do not apply to touch-up, aerosol, or DOD "classified" coatings. Compliance with the specialty coating VOC limits may be achieved through the use of control equipment, provided that the equipment has a combined capture and control efficiency of 81% or greater by weight. If control equipment is used to comply with the Appendix N standards, a monitoring plan describing the parameter and its range shall be submitted, and the equipment must be installed, calibrated, operated and maintained according to the manufacturer's specifications. Monitoring records of the parameter(s) shall be maintained. Spray gun cleaners used for specialty coatings shall be visually inspected for leaks and all other potential sources of leaks at least once per month, while the cleaner is in operation. The facility shall maintain a current list of all Appendix N coatings in use, showing category, and as-applied VOC content. Monthly paint logs track usage of all specialty coatings and are used to report emissions in the annual air emissions inventory report.

OAC 252:100-40 (Friable Asbestos During Demolition & Renovation Operations) [Applicable]
The purpose of this subchapter is to control the release of friable asbestos to the ambient air during demolition and renovation operations. Tinker AFB is subject to NESHAP, 40 CFR Part 61, Subpart M.

OAC 252:100-42 (Toxic Air Contaminants (TAC)) [Applicable]
This subchapter regulates toxic air contaminants (TAC) that are emitted into the ambient air in areas of concern (AOC). Any work practice, material substitution, or control equipment required by the Department prior to June 11, 2004, to control a TAC, shall be retained, unless a modification is approved by the Director. Because no Area of Concern (AOC) has been designated there are no specific requirements for the facility at this time.

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.

OAC 252:100-47 (Municipal Solid Waste Landfills) [Not Applicable]
The definition of such a facility means a municipal solid waste (MSW) landfill that commenced construction, modification, or reconstruction before May 30, 1991, and accepted waste after November 8, 1987. Tinker AFB has old landfills but they have not received MSW since November 8, 1987.

SECTION VIII. FEDERAL REGULATIONS

PSD, 40 CFR Part 51 [Not Applicable to Title V Renewal]
Total facility-wide emissions of NO_X, CO and VOC each exceed the threshold of 250 tpy of any single regulated pollutant. Therefore, the facility is considered a PSD-major source. However, this permit does not authorize any changes that would exceed a PSD significance threshold. Any future projects with emission increases must be evaluated for PSD if they exceed a significance level (100 TPY CO, 40 TPY NO_x, 40 TPY SO_2, 40 TPY VOC, 25 TPY PM, 15 TPY PM_{10}, 0.6 TPY LEAD).

NSPS, 40 CFR Part 60 [Subparts A, Db, Dc, Kb, and IIII Applicable]
Any subpart that is not listed or discussed below has been determined to not apply to this facility.

Subpart A. "General Provisions" applies to this facility.

Subpart Db. "Industrial-Commercial-Institutional Steam Generating Units" applies to three units with a heat input capacity greater than 100 million Btu/hr and constructed, reconstructed or modified after June 19, 1984. Such units are considered in the section for EUGs "ExtComb-2 and ExtComb-7." Compliance is demonstrated through CEMS monitoring and appropriate recordkeeping.

Subpart Dc. "Small Industrial-Commercial-Institutional Steam Generating Units" applies to units with a heat input capacity of between 10 and 100 million Btu/hr and constructed,

reconstructed or modified after June 9, 1989. Such units are considered in the sections for EUG "ExtComb-3", EUG "ExtComb-4", and EUG "ExtComb-8." Compliance is demonstrated by fuel usage and sulfur content records.

Subpart Kb. "Volatile Organic Liquid Storage Vessels" applies to tanks with a storage capacity above 75 cubic meters (m^3) (19,813 gals.) and constructed after July 23, 1984. EUG "Tank-1" is subject to this subpart.

Subpart IIII. "Stationary Compression Ignition Internal Combustion Engines (CI ICE)" was published in the *Federal Register* as a final rule on July 11, 2006, with an effective date of September 11, 2006. The rule has phased-in requirements by date. For owners and operators the date that construction commences is the date the engine is ordered by the owner or operator. Applicability dates for owners and operators of stationary CI ICE are units that commence construction (ordered) after July 11, 2005, where the engine is manufactured after April 1, 2006. CI ICE modified or reconstructed after July 11, 2005, are also affected sources. The rule includes engines of all horsepower; however, emission standards vary by power rating. The rule has a greater impact on manufacturers than owners and operators. Temporary units on-site are exempted under the referenced definitions in §60.4219. These engines do not meet the definition of stationary internal combustion engines because they are not a non-road engine, thus they are not subject to this Subpart IIII. This rule will apply if permanent units are installed. Tinker AFB will comply with this rule.

The EPA revised requirements under 40 CFR 63 Subpart ZZZZ in the final rule promulgated on January 18, 2008. That rule affects RICE units regardless of horsepower and establishes both emission limitations and operating limitations. However, the rule stated that compliance with Subpart ZZZZ for CI engines rated at less 500-bhp meet the requirements by complying with 40 CFR 60 Subpart IIII. Tinker AFB will ensure affected units comply with this rule and the permit specific conditions modified as required.

NESHAP, 40 CFR Part 61 [Subpart M Applicable]
Subpart M. "National Emission Standards for Asbestos." The following sections are applicable to activities that may occur at Tinker AFB:

40 CFR 61.145, governing the demolition of material containing asbestos.
40 CFR 61.148, governing the use of asbestos for insulating.
40 CFR 61.150, governing the disposal of asbestos-containing material after removal or demolition.

There are no emissions of any of the other regulated pollutants: arsenic, benzene, beryllium, coke oven emissions, mercury, radionuclides, or vinyl chloride except for trace amounts of benzene. Subpart J, Equipment Leaks of Benzene, concerns only process streams that contain more than 10 percent benzene by weight. Unleaded gasoline contains no more than 5 percent by weight.

NESHAP, 40 CFR Part 63 [Subparts A, N, T, GG, JJ, and ZZZZ Applicable]
Any subpart that is not listed or discussed below has been determined not to apply to this facility.

Subpart A. "General Provisions" includes sections on topics such as circumvention, performance testing, monitoring, recordkeeping, and control devices. Sections of this subpart do apply to the facility.

Subpart N. "Chromium Electroplating and Anodizing" applies because the facility operates sources meeting the applicability criteria. Discussion of the applicable requirements is provided for EUG "Chromium-1." Performance testing was conducted in January and June 2008 due to replacement of the scrubbers. On-going compliance is documented through submission of semi-annual reports. EUG "Chromium-2" has been retired; the facility no longer performs chromium anodizing.

Subpart T. "Halogenated Solvent Cleaning" applies because the facility maintains one currently-idle source that used perchloroethylene and thus met the applicability criteria. Tinker AFB will continue to maintain this unit, EU 4050, even though it is not expected to be used in the future unless a failure of the alternative (non-halogenated solvent) process occurs. EU 4050, a Detrex conventional degreaser, complies with the idling emission standard in §63.464. The EU 4050 idling emission test on May 13-14, 1998, resulted in an emission rate of 0.000288 lb/ft^2-hr which is less than the standard of 0.045 lb/ft^2-hr of solvent/air interface area. Semi-annual reports required by this rule indicate that the unit is in compliance with the standard.

Subpart GG. "Aerospace Manufacturing and Rework Facilities" applies because the facility is at this time a major source for HAPs and performs operations meeting the applicability criteria. Discussion of the applicable requirements is presented in sections covering the specific emission unit groups. Compliance is demonstrated by the use of compliant solvents, installation, operation, and maintenance of appropriate filters and surface coating equipment, and use of logs to track usage. Routine inspections and training are performed.

Subpart JJ. "Wood Furniture Manufacturing Operations" does apply because the facility operates sources meeting the applicability criteria. The section of this subpart that applies to the facility includes recordkeeping requirements (purchase and usage records for finishing materials or adhesives used in the manufacture of wood furniture and components), as needed to demonstrate the definition of an incidental furniture manufacturer.

Subpart ZZZZ. "Reciprocating Internal Combustion Engines (RICE)," applies to any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

Tinker operates only two types of CI RICE: leased units and emergency generators. Tinker currently contracts leased units during the summer months to power chillers. The leased units are exempted under the referenced definitions in §63.6585 because they meet the definition of non-road engines, they are not subject to this Subpart ZZZZ. The second category is emergency generators. Emergency CI RICE generators are subject to various requirements depending on siting (area or major sources of HAPs), date of installation (existing or new), and rated brake horsepower (at or below 500 bhp or above 500 bhp).

CI emergency generators >500 bhp:

- A new or reconstructed emergency stationary RICE with a site rating of more than 500 bhp located at a major source of HAP emissions does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f) and §63.6590(b).
- An existing CI emergency stationary RICE with a site rating of more than 500 bhp located at a major source of HAP emissions does not have to meet the requirements of this subpart and of subpart A. No initial notification is necessary. §63.6590(b)(3).

CI emergency generators ≤500 bhp:

- A new emergency stationary RICE with a site rating of less than or equal to 500 bhp, or a compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP, must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part. §63.6590(c).
- Existing CI RICE with a site rating of less than or equal to 500 bhp located at major sources must comply with the requirements in Table 2c. This table requires compliance with work practices including oil changes, inspection of air cleaner, and inspection of hoses and belts. §63.6602. Note that per §63.6695(a)(1), existing stationary CI RICE with a site rating less than or equal to 500 brake horsepower must comply with this subpart no later than May 3, 2013.

Specific conditions have been included under the EUGs that have engines subject to the rule. Seasonal leased units remain exempted under the referenced definitions in §63.6585. Because these engines meet the definition of non-road engines, they are not subject to this Subpart ZZZZ.

Subpart DDDDD. "Industrial, Commercial, and Institutional Boilers and Process Heaters." This subpart was proposed on March 21, 2011, and became effective on May 20, 2011. This subpart establishes emission limitations and work practice standards for HAP emitted from industrial, commercial, and institutional boilers and process heaters within a fuel subcategory located at major sources of HAP. A boiler or process heater is new or reconstructed if it commenced construction or reconstruction after June 4, 2010. A boiler or process heater is existing if it is not new or reconstructed. A new or existing boiler or process heater with a heat input capacity of less than 10 MMBTUH or a limited use boiler or process heater must conduct a tune-up of the boiler or process heater biennially as specified in § 63.7540. A new or existing boiler or process heater in the gaseous fuel 1 subcategory with heat input capacity of 10 MMBTUH or greater must conduct a tune-up of the boiler or process heater annually as specified in § 63.7540. Gaseous fuel 1 category includes, but is not limited to, natural gas, process gas, landfill gas, coal derived gas, refinery gas, and biogas. An existing boiler or process heater located at a major source facility must have a one-time energy assessment performed by a qualified energy assessor. New boilers and process heaters must comply with this subpart by startup. Existing boilers and process heaters must comply with this subpart by January 31, 2016. Under this subpart, Tinker AFB is subject to specific requirements for notification upon startup of new boilers and is required to perform tune-ups of its natural gas fired boilers on a regular basis. Compliance with work practice standards will be demonstrated in accordance with 40 CFR

63.7540, and reported in accordance with 40 CFR 63.7550.

Additional MACTs
A brief discussion of MACTs that may apply to Tinker AFB in the future follows.

Subpart GGGGG. "Site Remediation," promulgated on October 8, 2003, exempts corrective action at RCRA sites, CERCLA remedial and non-time critical removal actions, and gasoline service station UST remediation per Sections 63.7881(a) and (b)(2)-(b)(4). Tinker AFB does not currently have any remediation subject to this regulation. If remediation projects are initiated that do not qualify for this exemption, Tinker AFB will meet and comply with the MACT.

While Tinker AFB does have operations similar to those covered by the following four subparts, none of the four are currently applicable.

Subpart WWWW. "Reinforced Plastics Composites Production," as promulgated on April 21, 2003, states that a facility is exempt if it only repairs reinforced plastic composites. Reinforced plastic composite operations at Tinker AFB are exempted under this regulation.

Subpart YYYY. "Combustion Turbines," promulgated on March 5, 2004, only applies to stationary combustion turbines rated at one-megawatt or greater. Tinker AFB does not operate any such turbines.

Subpart EEEEE. "Iron and Steel Foundries," promulgated in the Federal Register on April 22, 2004, defines iron and steel foundry as:

> "Iron and steel foundry means a facility or portion of a facility that melts scrap, ingot, and/or other forms of iron and/or steel and pours the resulting molten metal into molds to produce final or near final shape products for introduction into commerce. Research and development facilities and operations that only produce non-commercial castings are not included in this definition."

Tinker AFB's foundry is a low temperature foundry and will only melt "non-ferrous" material (i.e., brass, aluminum, zinc, and lead, although requirements for lead are very low). Tinker AFB does not produce any final or near final products for introduction into commerce. Commerce is defined in Webster's dictionary as "the buying and selling of goods, especially on a large scale." The specialty foundry does not meet this definition. Therefore, this regulation does not apply to the foundry operations at Tinker AFB.

Subpart PPPPP. "Engine Test Firing," promulgated on May 27, 2003, states that existing sources do not have to meet the requirements of this subpart or Subpart A according to section 63.9290(b). Also, Section 63.9290(d) exempts any portion of an affected source used exclusively for testing of combustion turbine engines.

Compliance Assurance Monitoring (CAM), 40 CFR Part 64 [Not Applicable]
CAM, as published in the Federal Register on October 22, 1997, applies to any pollutant specific emission unit at a major source that is required to obtain a Title V permit, if it meets all of the

following criteria.

- It is subject to an emission limit or standard for an applicable regulated air pollutant
- It uses a control device to achieve compliance with the applicable emission limit or standard
- It has potential emissions, prior to the control device, of the applicable regulated air pollutant of 100 TPY.

No emission units at Tinker AFB meet all of the criteria for CAM.

Chemical Accident Prevention Provisions, 40 CFR Part 68 [Not Applicable]
This facility does not process or store more than the threshold quantity of any regulated substance. Although significant quantities of various fuels are stored on base, EPA published an exemption for "flammable substances used as fuel" in the Federal Register on March 13, 2000, which applies to the situation at Tinker AFB. More information on this federal program is available at the web site: http://www.epa.gov/ceppo/.

Stratospheric Ozone Protection, 40 CFR Part 82 [Applicable]
This rule affects facilities, which produce, consume, import, or export any controlled substances or controlled products as defined in this part. 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 ban the 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).

Subpart A identifies ozone-depleting substances and divides them into two classes. Class I controlled substances are divided into seven groups; the chemicals typically used by the manufacturing industry include carbon tetrachloride (Class I, Group IV) and methyl chloroform (Class I, Group V). A complete phase-out of production of Class I substances is required by January 1, 2000 (January 1, 2002, for methyl chloroform). 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.

Because facility personnel perform service on industrial cooling units, comfort cooling, and motor (fleet) vehicles containing Class I and II refrigerants, the facility is subject to this rule. (see Standard Conditions, Section XX).

SECTION IX. COMPLIANCE

Inspection

A full compliance evaluation was issued August 20, 2013; issues identified in that evaluation have been corrected or resolved. Subsequently, Jennie Brixey, AQD compliance/enforcement specialist, visited Tinker AFB on June 25, 2014, March 11, 2015, and November 9, 2015 for partial compliance evaluations. During the visits equipment and operations in several shops were observed, records reviewed, and compliance methodologies were discussed.

Tier Classification and Public Review

This application has been determined to be Tier II, based on the request for a renewal of a major source operating permit. The permittee submitted a landowner affidavit that they are not seeking a permit for land use or for any operation upon land owned by others without their knowledge. The affidavit certified that the applicant owns ~4900 acres of the land and leases ~430 acres from Oklahoma County. This 50-year lease dated September 24, 2008, authorizes Tinker AFB to conduct permitted operations on the leased property.

The applicant published a "Notice of Filing a Tier II Application" in *The Oklahoman*, a daily newspaper printed in Oklahoma County, on March 20, 2015. The notice stated that the application can be reviewed at the Midwest City Library at 8143 East Reno, Midwest City, Oklahoma or at the Air Quality Division's Main Office in Oklahoma City, Oklahoma.

The applicant will publish a "Notice of Filing a Tier II Draft Permit" in *The Oklahoman*, a daily newspaper printed in Oklahoma County, as soon as practical after the draft permit is issued. The notice will state that the application can be reviewed at the Midwest City Library at 8143 East Reno, Midwest City, Oklahoma or at the Air Quality Division's Main Office in Oklahoma City, Oklahoma.

The 30-day public review of the draft permit will run concurrently with the 45-day EPA Region 6 review.

Information on all permit actions is available for review by the public in the Air Quality section of the ODEQ Web page: http://www.deq.state.ok.us/.

The facility is not located within 50 miles of the border of any state adjacent to the state of Oklahoma. Therefore, notification to the bordering states for this permit is not required.

Fees Paid

A permit renewal fee will be submitted by the applicant upon receipt of an invoice.

SECTION X. SUMMARY

Tinker AFB has requested a Tier II Title V permit renewal for continued operation of a facility. This permit also incorporates the operating permit for a project authorized under a construction permit issued by the ODEQ after both public and EPA review. Only minor changes to the original permits have been incorporated in this renewal Title V operating permit. The applicant has demonstrated the ability to comply with the applicable Air Quality rules and regulations. Ambient air quality standards are not threatened at this site. There are no outstanding air quality compliance/enforcement actions associated with Tinker AFB. Recommend issuance of the Title V permit renewal contingent on both public and EPA review.

SECTION XI. APPENDICES OF EMISSION SOURCES

Table 8 contains a list of appendices attached that provide lists of significant and insignificant air emission sources.

Table 8

APPENDICES OF EMISSION SOURCES	
NAME OF APPENDIX	**APPENDIX**
SIGNIFICANT COMBUSTION SOURCES (Listed by EUG)	A
SIGNIFICANT NON-COMBUSTION SOURCES (Listed by EUG)	B
AGGREGATED INSIGNIFICANT SOURCES	C
NON-AGGREGATED INSIGNIFICANT SOURCES	D

DRAFT/PROPOSED

PERMIT TO OPERATE
AIR POLLUTION CONTROL FACILITY
SPECIFIC CONDITIONS

TINKER AIR FORCE BASE **PERMIT NO. 2015-0383-TVR2**
FACILITY-WIDE OPERATING PERMIT

The permittee is authorized to operate in conformance with the specifications submitted to Air Quality on March 2, 2015 and at various other times. The Evaluation Memorandum dated June 16, 2016, explains the derivation of applicable permit requirements and estimates of emissions; however, it does not contain specific operational standards, or monitoring, reporting, and recordkeeping (MRR) requirements. Continuing operations under this permit constitutes acceptance of, and consent to, the conditions contained herein.

SECTION A. FACILITY-WIDE SPECIFIC CONDITIONS

1. The permittee shall be authorized to operate all facility activities continuously (24 hours per day, every day of the year) unless otherwise specified.

2. The permittee shall use commercial-grade natural gas as the primary fuel in fuel-burning external combustion devices, with No. 2 fuel oil as backup fuel to be available in case of gas curtailment or gas supply interruptions. The fuel oil is limited to a maximum of 0.05% sulfur by weight. Compliance shall be documented either by periodic testing of the existing fuel oil inventory or verification of fuel oil deliveries containing a maximum sulfur content of 0.05% by weight.

3. The permittee is authorized to implement the following types of "operational flexibility" at the facility subject to the following restrictions. Such changes shall not require a construction permit or change to the existing operating permit but will be incorporated administratively into the next regular Title V permit update.

   Flexibility Options:

   a. Addition of new sources (units) of emissions is allowed. Examples include natural gas fired boilers and process heaters individually under 10 MMBtu/hr input heat capacity, internal combustion engines (such as emergency and non-emergency generators), calibration test stands, and emission units engaged in cleaning, depainting, surface coating operations including paint booths, and petroleum storage subject to the specific conditions in EUGs Tank-1 and Tank-2. These additional sources would be subject to the category specific emission limit(s) established in Table 1, as appropriate, and generally would represent a redistribution of current workload and not an increase in total potential emissions.
   b. Modification of existing sources (units) of emissions and control devices is allowed.
   c. Substitution or introduction of new materials and production of new products is allowed. Permittee has been granted advance approval to implement specific

proposed activities. Descriptions of additional, modified, or deleted monitoring, recordkeeping, and reporting (MRR) requirements are provided within each affected EUG section.

Restrictions:

a. The change shall meet the applicable requirements of Part 7 or Part 9 of Subchapter 8. This means that the increase in emissions from any individual change shall be less than the significance level for Prevention of Significant Deterioration (PSD) (100 tpy CO, 40 tpy NO_x, 40 tpy SO_2, 40 tpy VOC, etc.)

b. The change shall not result in the creation of a new major source by itself. This means that the increase in emissions from any individual source shall not exceed the threshold of 100 tpy for any criteria pollutant or an increase of Hazardous Air Pollutant (HAP) emissions beyond the 10/25 tpy threshold.

c. A record of such changes and the associated emissions increase shall be maintained on-site or at a local field office. The record shall be maintained for at least five years after the date of occurrence.

d. The change shall not be considered a reconstruction of a major affected source under 40 CFR Part 63. Reconstruction means the replacement of components of an affected or previously unaffected stationary source to the extent that:
   (1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source.
   (2) It is technologically and economically feasible for the reconstructed source to meet the relevant standard(s) established by the Administrator (or Oklahoma DEQ) pursuant to section 112 of the Act. Upon reconstruction, an affected source, or stationary source that becomes an affected source, is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous pollutants from that source.

e. The change shall not be considered a physical change that would be a "significant" modification under OAC 252:100-8-7.2(b)(2). Significant modification procedures shall be used for applications requesting permit modifications that:
   (1) Involve any significant changes in existing monitoring requirements.
   (2) Relax any reporting or recordkeeping requirements.
   (3) Change any permit condition that is required to be based on a case-by-case determination of an emission limitation or other standard, on a source-specific determination of ambient impacts, or on a visibility or increment analysis.
   (4) Seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement or state-only requirement which the source has assumed to avoid some other applicable requirement or state-only requirement to which the source would otherwise be subject.
   (5) Are modifications under any provision of Title I of the Act. Such changes would be "modifications" as defined under NSPS, NESHAP, PSD, and non-attainment areas.
   (6) Do not qualify as minor permit modifications or administrative amendments.

f. Installation and operation of new [boiler] units designed to use natural gas or other gas 1 fuels (as defined in 40 CFR 63.7575) shall be reported ("initial

notification") to ODEQ and EPA not later than 15 days after the actual date of startup of the new boiler, in accordance with 40 CFR 63.7545(c).

g. Permanently switching fuels to a category other than gas 1 [40 CFR 63.7499(l)] or modifying single-fuel (natural gas) boilers to accommodate fuels other than gas 1 fuels shall not be authorized under the flexibility options.

h. The permittee shall ensure that any unit installed at and for the KC-46A facility shall be equipped with low-NOx burners and be manufacturer-guaranteed for emission factors not to exceed the following:
   (1) 0.015 pound NOx per MMBtu
   (2) 0.065 pound CO per MMBtu

4. The permittee has requested and been granted a "permit shield" for this facility. All applicable air pollution control rules and regulations are listed in the Specific Conditions or in the Standard Conditions. Compliance with the terms and conditions of this permit shall be deemed compliance with the applicable requirements identified and included in this permit. Rules and regulations, which have been determined inapplicable are also listed and discussed in the Evaluation Memorandum.

5. Emission limits for criteria pollutants contained within previously issued air quality permits have been incorporated in this renewal permit. To allow greater flexibility and simplify recordkeeping and reporting, permittee has requested emission limits be aggregated for the members of certain EUGs, or groups of EUGs. In addition, permittee has agreed to include significant sources that have operated lawfully without an applicable DEQ-issued permissible emission limit in these EUG and EUG group emission limits. The emission limits are summarized by EU, EUG, or EUG group, as appropriate, in Table 1. Annual emissions are to be calculated monthly for the twelve (12) preceding calendar months.

6. The Permit Shield (Standard Conditions, Section VI) is extended to the following requirements that have been determined to be inapplicable to this facility.

[OAC 252:100-8-6(d)(2)

Regulation	Description	Notes
OAC 252:100-7	Permits For Minor Facilities	Not in source category
OAC 252: 100-11	Alternative Reduction	Not eligible
OAC 252: 100-15	Mobile Sources	Not in source category
OAC 252: 100-23	Cotton Gins	Not type of emission unit
OAC 252: 100-24	Feed & Grain Facility	Not in source category

7. The permittee shall maintain records of purchase and/or usage records of finishing materials or adhesives used in the manufacture of wood furniture and components to demonstrate that Tinker AFB operations continue to use less than 100 gallons per month, and thus continue to meet the definition of an incidental wood furniture manufacture.

[40 CFR 63, Subpart JJ, 63.801 & 806]

8. No later than 30 days after each anniversary date of the issuance of the original Title V

permit (May 11, 2005), the permittee shall submit to Air Quality Division of DEQ, with a copy to the US EPA, Region 6, a certification of compliance with the terms and conditions of this permit. [OAC 252:100-8-6 (c)(5)(A) & (D)]

9. Any new sources authorized under the flexibility option (specific condition 3) shall comply with applicable conditions for that EUG. [OAC 252:100-8]

10. Title V permit conditions apply to all air emission sources new or relocated in accordance with the specific conditions of the Title V permit or authorized to be constructed under ODEQ issued construction permits. [OAC 252:100-8]

11. New emission sources not authorized under the flexibility clause or qualifying as insignificant or trivial in accordance with OAC 252:100 and its appendices are subject to normal permitting requirements. A permit application must be submitted if sources that otherwise qualify under the flexibility options have the potential, after installation, to exceed the applicable emission limits shown in Table 1. [OAC 252:100-8]

12. Emissions from both the TAC and Tinker AFB Title V air emission sources shall be considered as one facility for modeling and NAAQS compliance demonstrations. [OAC 252:100-8]

13. Emissions shall be calculated and recorded as a 12-month rolling total. [OAC 252:100-8]

14. This permit supersedes all previous Air Quality operating permits for this facility, which are now cancelled. Permit 2009-394-C (M-3) PSD and Permit 2009-394-C (M-4) (PSD) have been incorporated into Tinker AFB's Title V permit as specified in Specific Condition #11.

Table 1 - EU and EUG Emission Limits

EU(s)	EUG(s)	Description	PM_{10} TPY	VOC TPY	NOx TPY	SO_2 TPY	CO TPY
acility Wide	CD1, CD2, CD3 (note 1)	Chemical Depainting Grouping		707.5			
405 412 052 053 406 413	CD1, CD2, CD3 (note 2)	Chemical Depainting in Building 2122		300.0			
031 032 051	CD1, CD2, CD3 (note 2)	Chemical Depainting in Building 2280		300.0			
157 158 BD	CD1, CD2, CD3 (note 2)	Chemical Depainting in Building 3225		300.0			
435 437 436	CD1, CD2, CD3 (note 2)	Chemical Depainting in Building 3228		300.0			
052 053 600 BD	CD1, CD2, CD3 (note 2)	Chemical Depainting in Building 9001		300.0			
acility-wide	CF1, CH1, CH2, CS1, SV1 (note 1)	Clean Flush, Chemical Hand-Wipe, Clean Spray, and General Solvent Usage Grouping		201.5			
416	CR1	Chromium Electroplating	(note 3)				
415	CT1 (note 4)	Fuel Component Testing Operation: Calibration Fluid		70.0			
417	CT1 (note 4)	Fuel Component Testing Operation: Calibration Fluid		162.0			
061	EC2 (notes 4, 8)	Boiler	4.13	2.92	51.97	20.0	43.6
062	EC2 (notes 4, 8)	Boiler	4.13	2.92	51.97	20.0	43.6
051	EC4 (notes 4, 8)	Boiler	0.69	0.45	4.28	20.0	6.98
052	EC4 (notes 4, 8)	Boiler	0.69	0.45	4.28	20.0	6.98
065	EC4 (notes 4, 8)	Boiler	2.62	2.85	21.23	20.0	27.64
053 054	EC5 (notes 5, 8)	Boilers	1.38	0.89	8.56	20.0	13.96
EU(s)	**EUG(s)**	**Description**	**PM_{10} TPY**	**VOC TPY**	**NOx TPY**	**SO_2 TPY**	**CO TPY**
041 042	EC6 (note 5)	Boilers	1.56	1.12	18.03	0.12	17.08
100 101	EC6 (note 6)	Furnaces	n/a	n/a	n/a	n/a	n/a
170 311	EC6 (note 7)	Boilers	0.54	0.39	7.10	0.042	6.18
063	EC7 (note 8)	Boiler	4.95	2.92	39.5	20.0	99.5
091	EC10	Boiler	6.12	4.43	112.7	0.48	67.6
092	EC10	Boiler	6.12	4.43	112.7	0.48	67.6
093	EC10 (note 9)	Boiler	3.5	1.7	55.4	5.0	26.6
093	EC10 (note 9)	Boiler	3.44	2.49	55.4	0.27	38.0
BD	TBD	Aggregate for New Boilers for KC-46A Project		7.1	19.7		85.3
403	ET1 (notes 1, 10)	Jet Turbine Engine Testing	40.0	219.7	431.9	48.0	283.9

404 600 800							
lone currently	HL1 (note 4)	Halogenated Solvent Batch Cold Cleaning	---	---	---	---	---
289	IC1 (note 4)	Diesel Generators	3.0	5.0	38.0	5.0	38.0
642	IC3 (note 4)	Diesel Generators	4.0	10.0	38.0	1.0	30.0
acility-wide	ND1 & ND2 (note 1)	Non-Chemical Depainting	1.2				
acility-wide	SC1, SC2, SC3, SC4, & SV2 (note 1)	Surface Coating Grouping	10.0	119.5			
333	TK1 (note 4)	MOGAS AST, 42,000 gals		6.864			
908 105 114 115 415 418 702	TK2	MOGAS ASTs		(note 3)			

Notes for Table 1:

1: Emission limit(s) were established for all EUs operated under the listed EUG(s), as a facility-wide aggregate. These limits incorporate provisions of construction permit 2009-394-C (M-4) (PSD). Emission limits derived from construction permit 2009-394-C (M-4) (PSD) do not include emission limits for PM_{10} or SO_2 emissions.

2. Emission limit(s) were established for all EUs operated under the listed EUG(s), as a building-wide aggregate. The building-wide emission limit (300 TPY for the building) is subordinate to the facility-wide aggregate emission limit.

3: Subject to a technology-based standard or emission rate limit. See applicable Specific Conditions in CR1 and TK2.

4: Emission limit(s) apply only to the listed EU.

5: Emission limit(s) apply to the listed EUs, as a plant-wide aggregate.

6: These units do not have any limits assigned to them (see the Permit Memorandum for explanations).

7: These units were reassigned from "Insignificant" to EUG EC6 in 2013 when it was discovered they had been mischaracterized and misidentified. These units had not been in operation for a number of years prior to being correctly recategorized, and were not in operation between 2008 and 2013. These emission limits reflect the PTE of these boilers using AP-42 factors.

8: All dual fuel external combustion boilers have aggregate SO_2 emission limit of 20 tpy. This does not include the TAC boilers.

9: The first line entry for EU 0093 represents limits when firing natural gas and landfill gas; the second entry line shows the limits when firing only natural gas.

10: This is aggregate limit for all jet engine turbine testing operations on the facility, including those described in construction permit 2009-394-C (M-4) (PSD).

SECTION B. EUG - SPECIFIC CONDITIONS

CD1, ChemDpnt-1, Aerospace Depainting - Zero HAP Stripper

Specific Conditions
Scenario 1 (Primary) and Scenario 2 (Advance approval)

CD1-1. The permittee shall use only non-organic HAP-containing strippers in these emission units. [40 CFR 63, Subpart GG, 63.746(b)(1)]

Compliance Monitoring, Reporting and Recordkeeping
Scenario 1 (Primary) and Scenario 2 (Advance approval)

CD1-2. The permittee shall insure that the HAP content is reviewed and verified periodically (at least annually). Any proposed product changes must be reviewed for compliance with this requirement. [40 CFR 63, Subpart GG, 63.746(b)(1)]

CD1-3. The permittee shall maintain records of the name and volume for all chemical strippers used in depainting operations. [40 CFR 63, Subpart GG, 63.752(e)(1)]

CD1-4. The permittee shall maintain a list of the parts, subassemblies and assemblies removed from the aircraft for each aircraft depainting.
[40 CFR 63, Subpart GG, 63.752(e)(4)]

CD1-5. The permittee shall submit semiannual compliance reports containing the required information regarding any new chemical strippers that are used, starting May 1, 1999.
[40 CFR 63, Subpart GG, 63.753(d)(1)(ii)]

CD1-6. The permittee shall report the organic HAP content of new chemical strippers semiannually. [40 CFR 63, Subpart GG, 63.753(d)(1)(iii)]

CD1-7. The permittee shall report the organic HAP content for each chemical stripper that undergoes reformulation semiannually. [40 CFR 63, Subpart GG, 63.753(d)(1)(iv)]

Additional Specific Conditions
Scenario 2 (Advance approval)

CD1-8. The permittee is required to provide initial notification to DEQ for a newly constructed or reconstructed source that is a major source.
[40 CFR 63, Subpart A, 5(b)]

CD1-9. This EUG is the total of all depainting operations at the facility covered by this EUG. As such, depainting operations covered by this EUG may be added, removed, and relocated at this facility under advance approval provided that any such change meets the facility-wide specific conditions in Section A of this permit.

[40 CFR 63, Subpart GG, 63.741(c)]

CD2, ChemDpnt-2, Aerospace Depainting – Spot Depainting (HAP containing)

Specific Conditions
Scenario 1 (Primary) and Scenario 2 (Advance approval)

CD2-1. The quantity of organic HAP-containing strippers used for each military aircraft shall be limited to 50 gallons or 365 pounds of organic HAP for spot stripping and decal removal per military aircraft depainted. [40 CFR 63, Subpart GG, 63.746(b)(3)]

CD2-2. The permittee shall minimize spills while handling HAP containing waste.
[40 CFR 63, Subpart GG, 63.748]

Compliance Monitoring, Reporting and Recordkeeping
Scenario 1 (Primary) and Scenario 2 (Advance approval)

CD2-3. The permittee shall maintain records in accordance with 63.752(e)(6) that demonstrate, on an average annual basis that no more than 50 gallons of organic HAP containing stripper or 365 pounds of organic HAP is used per aircraft for spot stripping and decal removal. [40 CFR 63, Subpart GG, 63.752(b)(3)]

CD2-4. The permittee shall maintain records for a minimum of 5 years.
[40 CFR 63, Subpart GG, 63.752(a)]

CD2-5. The permittee must maintain records of the name and volume for all chemical strippers used in depainting operations. [40 CFR 63, Subpart GG, 63.752(e)(1)]

CD2-6. The permittee shall maintain a list of the parts, subassemblies and assemblies removed from the aircraft for each aircraft depainting.
[40 CFR 63, Subpart GG, 63.752(e)(4)]

CD2-7. The permittee shall maintain records of the volume of HAP-containing stripper or weight of organic HAP used, annual average volume of stripper or weight of organic HAP used per aircraft and the annual number of aircraft stripped.
[40 CFR 63, Subpart GG, 63.752(e)(6)]

CD2-8. The permittee shall fulfill notification requirements in 63.9(a)-(e) and (h)-(j) as applicable and §63.10 (a), (b), (d) and (f), recordkeeping and reporting requirements.
[40 CFR 63, Subpart GG, 63.753(a)(1)]

CD2-9. The permittee shall submit semiannual compliance reports containing the required information regarding any new chemical strippers that are used, starting May 1, 1999.
[40 CFR 63, Subpart GG, 63.753(d)(1)(ii)]

CD2-10. The permittee shall report the organic HAP content of new chemical strippers semiannually. [40 CFR 63, Subpart GG, 63.753(d)(1)(iii)]

CD2-11. The permittee shall report the organic HAP content for each chemical stripper that undergoes reformulation semiannually. [40 CFR 63, Subpart GG, 63.753(d)(1)(iv)]

Additional Specific Conditions
Scenario 2 (Advance approval)

CD2-12. The permittee is required to provide initial notification to DEQ for a newly constructed or reconstructed source that is a major source.
[40 CFR 63, Subpart A, 5(b)]

CD2-13. This EUG is the total of all depainting operations at the facility covered by this EUG. As such, depainting operations covered by this EUG may be added, removed, and relocated at this facility under advance approval provided that any such change meets the facility-wide specific conditions in Section A of this permit.
[40 CFR 63, Subpart GG, 63.741(c)]

CD3, ChemDpnt-3, Aerospace Depainting – Radomes and Parts

Compliance Monitoring, Reporting and Recordkeeping
Scenario 1 (Primary) and Scenario 2 (Advance approval)

CD3-1. The permittee shall conduct, register, and submit an annual inventory of regulated pollutants. [OAC 252:100-5]

Additional Specific Conditions
Scenario 2 (Advance approval)

CD3-2. The permittee is required to provide initial notification to ODEQ for a newly constructed or reconstructed source that is a major source.
[40 CFR 63, Subpart A, 5(b)]

CD3-3. This EUG is the total of all depainting operations at the facility covered by this EUG. As such, depainting operations covered by this EUG may be added, removed, and relocated at this facility under advance approval provided that any such change meets the facility-wide specific conditions in Section A of this permit.
[40 CFR 63, Subpart GG, 63.741(c)]

CF1, ClnFlush-1, Aerospace Cleaning - Flush

Specific Conditions
Scenario 1 (Primary) and Scenario 2 (Advance approval)

CF1-1. The permittee shall conduct cleaning operations in accordance with specified housekeeping measures including the storage of solvent laden materials, fresh and spent solvent in closed containers, and conducting handling/transfer of solvents in a manner that minimizes spills. [40 CFR 63, Subpart GG, 63.744(a)]

CF1-2. The permittee shall store flush cleaning solvents in enclosed container system after each use. [40 CFR 63, Subpart GG, 63.744(d)]

CF1-3. The permittee shall minimize spills while handling HAP-containing waste. [40 CFR 63, Subpart GG, 63.748]

CF1-4. The permittee shall generate and maintain a cleaning solvent list. [40 CFR 63, Subpart GG, 63.752(b)(1)]

CF1-5 The permittee shall equip the units with a cover/door, operable with one hand, internal or external drainage facilities, and a label summarizing operating practices shall be attached in a conspicuous position. Clean flush units using an aqueous ($\geq$ 80% water) or semi-aqueous ($\geq$ 60% water) as defined in §63.744 and §63.742 of the Aerospace NESHAP) for cleaning operations are not subject to this Oklahoma rule. [OAC 252:100-39-42(a)(1)(A),(B,)(C)]

Additional Specific Conditions
Scenario 2 (Advance approval)

CF1-6. The permittee is required to provide initial notification to ODEQ for a newly constructed or reconstructed source that is a major source. [40 CFR 63, Subpart A, 5(b)]

CF1-7 This EUG is the total of all flush cleaning operations covered by this EUG at the facility. As such, flush cleaning operations covered by this EUG may be added, removed, and relocated at this facility under advance approval provided that any such change meets the facility-wide specific conditions in Section A of this permit. [40 CFR 63, Subpart GG, 63.741(c)]

Compliance Monitoring, Reporting and Recordkeeping
Scenario 1 (Primary) and Scenario 2 (Advance approval)

CF1-8 The permittee shall fulfill recordkeeping requirements in §63.10 (a), (b), (d) and (f) and maintain these records for a minimum of 5 years. [40 CFR 63, Subpart GG, 63.752(a)]

CF1-9 The permittee will supply required data for all products applied to aerospace parts. [40 CFR 63, Subpart GG, 63.752(b)(1)]

CF1-10 The permittee shall fulfill notification requirements in 63.9(a)-(e) and (h)-(j) as applicable and §63.10 (a), (b), (d),(f), and recordkeeping and reporting requirements.

All recordkeeping and reporting will be conducted in accordance with 40 CFR 63 Subpart A. [40 CFR 63, Subpart GG, 63.753(a)(1)]

CF1-11 The permittee shall submit semi-annual reports, containing the required information, every 6 months beginning May 1, 1999. [40 CFR 63, Subpart GG, 63.753(b)(1)(v)]

CH1, ClnHWipe-1, Aerospace Cleaning – Hand Wipe

Specific Conditions

Scenario 1 (Primary) and Scenario 3 (Advance approval)

CH1-1. The permittee shall use only solvents that meet the requirements of Table 1 of the NESHAP regulation. [40 CFR 63, Subpart GG, 63.744(b)(1)]

CH1-2. The permittee shall minimize spills while handling HAP-containing waste. [40 CFR 63, Subpart GG, 63.748]

Scenario 2 (Alternative Operating Scenario)

CH1-3. The permittee shall conduct cleaning operations in accordance with specified housekeeping measures including the storage of solvent laden materials, fresh and spent solvent in closed containers, and conducting handling/transfer of solvents in a manner that minimizes spills. [40 CFR 63, Subpart GG, 63.744(a)]

CH1-4. The permittee shall use only solvents in these operations that have a composite vapor pressure of 45 mmHg or less. [40 CFR 63, Subpart GG, 63.744(b)(2)]

CH1-5. The permittee shall minimize spills while handling HAP-containing waste. [40 CFR 63, Subpart GG, 63.748]

Additional Specific Conditions

Scenario 3 (Advance approval)

CH1-6. The permittee is required to provide initial notification to ODEQ for a newly constructed or reconstructed source that is a major source. [40 CFR 63, Subpart A, 5(b)]

CH1-7. This EUG is the total of all hand wipe cleaning operations covered by this EUG at the facility. As such, hand wipe cleaning operations covered by this EUG may be added, removed, and relocated at this facility under advance approval, provided that any such change meets the facility-wide specific conditions in Section A of this permit. [40 CFR 63, Subpart GG, 63.741(c)]

Compliance Monitoring, Reporting and Recordkeeping

Scenario 1 (Primary) and Scenario 3 (Advance approval)

CH1-8 The permittee shall use only approved cleaning solvents in these operations. Compliance will be determined using manufacturer supplied data.
[40 CFR 63, Subpart GG, 63.744(b)(1)]

CH1-9. The permittee shall fulfill recordkeeping requirements in §63.10(a), (b), (d) and (f). Records will be maintained a minimum of 5 years.
[40 CFR 63, Subpart GG, 63.752(a)]

CH1-10. The permittee shall generate and maintain a cleaning solvent list. Organizations using cleaning solvents will supply required data for all products applied to aerospace parts. [40 CFR 63, Subpart GG, 63.752(b)(1)]

CH1-11. The permittee shall ensure that records are maintained of the name, background data demonstrating that the solvent meets the compositional requirements, and annual volume used for the cleaning solvents used in these cleaning operations.
[40 CFR 63, Subpart GG, 63.752(b)(2)]

CH1-12. The permittee shall ensure that all recordkeeping and reporting are conducted in accordance with 40 CFR 63 Subpart A. [40 CFR 63, Subpart GG, 63.753(a)(1)]

CH1-13. The permittee shall submit semiannual reports listing instances of noncompliant solvent usage. [40 CFR 63, Subpart GG, 63.753(b)(1)(i)]

CH1-14. The permittee shall submit semiannual reports listing new cleaning solvents used, and, if appropriate, their composite vapor pressure.
[40 CFR 63, Subpart GG, 63.753(b)(1)(ii)]

CH1-15. The permittee shall submit semiannual reports, signed by a responsible official, stating compliance. [40 CFR 63, Subpart GG, 63.753(b)(1)(v)]

CH1-16. The permittee shall conduct, register, and submit an annual inventory of regulated pollutants. [OAC 252:100-5]

Scenario 2 (Alternative Operating Scenario)

CH1-17. The permittee shall ensure that the vapor pressure of cleaning solvents will be reviewed by Environmental Management personnel to ensure that the composite vapor pressure meets the requirement. [40 CFR 63, Subpart GG, 63.744(b)(2)]

CH1-18. The permittee shall fulfill recordkeeping requirements in §63.10(a), (b), (d) and (f) and maintain records for a minimum of 5 years. [40 CFR 63, Subpart GG, 63.752(a)]

CH1-19. The permittee shall generate and maintain a cleaning solvent list. The permittee will ensure that organizations using cleaning solvents will supply required data for all products applied to aerospace parts. [40 CFR 63, Subpart GG, 63.752(b)(1)]

CH1-20. The permittee shall maintain hand-wipe cleaning usage records including vapor pressures of each cleaning solvent. [40 CFR 63, Subpart GG, 63.752(b)(3)]

CH1-21. The permittee shall ensure that all recordkeeping and reporting will be conducted in accordance with 40 CFR 63 Subpart A. [40 CFR 63, Subpart GG, 63.753(a)(1)]

CH1-22. The permittee shall submit semiannual reports listing instances of noncompliant solvent usage beginning May 1, 1999. [40 CFR 63, Subpart GG, 63.753(b)(1)(i)]

CH1-23. The permittee shall submit semiannual reports listing new cleaning solvents used, and, if appropriate, their composite vapor pressure.
[40 CFR 63, Subpart GG, 63.753(b)(1)(ii)]

CH1-24. The permittee shall submit semiannual reports, signed by a responsible official, stating compliance. [40 CFR 63, Subpart GG, 63.753(b)(1)(v)]

CH1-25. The permittee shall conduct, register, and submit an annual inventory of regulated pollutants. [OAC 252:100-5]

CH2, ClnHWipe-2, Aerospace Cleaning – Hand Wipe, Exempt

Specific Conditions

Scenario 1 (Primary)

CH2-1. The permittee shall minimize spills while handling HAP-containing waste.
[40 CFR 63, Subpart GG, 63.748]

CH2-2. The permittee shall conduct cleaning operations in accordance with specified housekeeping measures including the storage of solvent laden materials, fresh and spent solvent in closed containers, and conducting handling/transfer of solvents in a manner that minimizes spills. [40 CFR 63, Subpart GG, 63.744(a)]

Scenario 2 (Advance approval)

CH2-3. The permittee is required to provide initial notification to ODEQ for a newly constructed or reconstructed source that is a major source.
[40 CFR 63, Subpart A, 5(b)]

CH2- 4. This EUG is the total of all hand wipe cleaning operations covered by this EUG at the facility. As such, hand wipe cleaning operations covered by this EUG may be added, removed, and relocated at this facility under advance approval provided that any such

change meets the facility-wide specific conditions in Section A of this permit.
[40 CFR 63, Subpart GG, 63.741(c)]

Compliance Monitoring, Reporting and Recordkeeping
Scenario 1 (Primary) and Scenario 2 (Advance approval)

CH2-5. The permittee shall fulfill recordkeeping requirements in §63.10(a), (b), (d) and (f); and maintain records for a minimum of 5 years. [40 CFR 63, Subpart GG, 63.752(a)]

CH2-6. The permittee shall ensure that organizations using cleaning solvents will supply required data for all products applied to aerospace parts.
[40 CFR 63, Subpart GG, 63.752(b)(1)]

CH2-7. The permittee shall ensure that all recordkeeping and reporting will be conducted in accordance with 40 CFR 63 Subpart A. [40 CFR 63, Subpart GG, 63.753(a)(1)]

CH2-8. The permittee shall submit semiannual reports listing instances of noncompliant solvent usage as of May 1, 1999. [40 CFR 63, Subpart GG, 63.753(b)(1)(i)]

CH2-9. The permittee shall submit semiannual reports listing new cleaning solvents used, and, if appropriate, their composite vapor pressure.
[40 CFR 63, Subpart GG, 63.753(b)(1)(ii)]

CH2-10. The permittee shall submit semiannual reports, signed by a responsible official, stating compliance. [40 CFR 63, Subpart GG, 63.753(b)(1)(v)]

CR1, Chromium-1, Chromium Electroplating

Specific Conditions
Scenario 1 (Primary)

CR1-1. Emissions from hard chromium electroplating tanks installed prior to February 8, 2012 shall not exceed 0.011 milligrams of total chromium per dry standard cubic meter (mg/dscm) of ventilation air. Initial compliance must be demonstrated by a performance test using procedures as required by 40 CFR §63.7 and test methods outlined in 40 CFR §63.344. [40 CFR 63, Subpart N, 63.342(c)(1)(i)]

CR1-2. Emissions from hard chromium electroplating tanks installed after February 8, 2012 shall not exceed 0.006 milligrams of total chromium per dry standard cubic meter (mg/dscm) of ventilation air. Initial compliance must be demonstrated by a performance test using procedures as required by 40 CFR §63.7 and test methods outlined in 40 CFR §63.344. [40 CFR 63, Subpart N, 63.342(c)(1)(iv)]

CR1-3. The permittee shall operate and maintain any source, including associated air pollution control devices and monitoring equipment, in a manner consistent with

good air pollution control practices. [40 CFR 63, Subpart N, 63.342(f)(1)]

CR1-4. The permittee shall make changes to the operation and maintenance plan if required by Administrator. [40 CFR 63, Subpart N, 63.342(f)(2)]

CR1-5. The permittee shall establish site-specific operating parameters according to the procedures outlined in 63.344 (d)(2-5). [40 CFR 63, Subpart N, 63.344(d)]

Compliance Monitoring, Reporting and Recordkeeping
Scenario 1 (Primary)

CR1-6. Ensure that monitoring of site-specific operating parameters pressure drop across packed bed scrubber/composite mesh pad [PBS/CMP] system is used to determine continuing compliance as specified in 40 CFR §63.343(c)(2) and 40 CFR §63.344(d). [40 CFR 63, Subpart N, 63.343(c)(1)(i)]

CR1-7. The permittee shall follow procedures in 63.344(e)(1-6) to measure the outlet chromium concentration from an add-on air pollution control device used to control multiple sources. [40 CFR 63, Subpart N, 63.344(e)]

CR1-8. The permittee shall complete recordkeeping requirements outlined in Subparts A and N on inspections and maintenance of the source. [40 CFR 63, Subpart N, 63.346(b)]

CR1-9. The permittee shall maintain records on the inspection for the add-on air pollution control device. [40 CFR 63, Subpart N, 63.346(b)(1)]

CR1-10. The permittee shall maintain records of all maintenance performed on the source, the add-on air pollution control device and monitoring equipment. [40 CFR 63, Subpart N, 63.346(b)(2)]

CR1-11. The permittee shall maintain records of the occurrence, duration and cause of each malfunction of process, add-on air pollution control, and monitoring equipment. [40 CFR 63, Subpart N, 63.346(b)(3)]

CR1-12. The permittee shall maintain records of actions taken during malfunction periods when actions are inconsistent with the operation and maintenance plan. [40 CFR 63, Subpart N, 63.346(b)(4)]

CR1-13. The permittee shall maintain records necessary to demonstrate consistency with the provisions of the operation and maintenance plan. [40 CFR 63, Subpart N, 63.346(b)(5)]

CR1-14. The permittee shall maintain records on the results of all performance tests. [40 CFR 63, Subpart N, 63.346(b)(6)]

CR1-15. The permittee shall maintain records necessary to determine the compliance of performance tests. [40 CFR 63, Subpart N, 63.346(b)(7)]

CR1-16. The permittee shall maintain records of monitoring data required by 63.346(c) used to demonstrate compliance with the standard. [40 CFR 63, Subpart N, 63.346(b)(8)]

CR1-17. The permittee shall maintain records on the specific identification of each period of excess emissions that occurs during periods of malfunction of the process. [40 CFR 63, Subpart N, 63.346(b)(9)]

CR1-18. The permittee shall maintain records on the specified identification of each period of excess emissions that occurs during periods other than malfunction of the process. [40 CFR 63, Subpart N, 63.346(b)(10)]

CR1-19. The permittee shall maintain records on the total process operating time of the affected source during the reporting period. [40 CFR 63, Subpart N, 63.346(b)(11)]

CR1-20. The permittee shall maintain records to demonstrate whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements. [40 CFR 63, Subpart N, 63.346(b)(15)]

CR1-21. The permittee may request to reduce the frequency of compliance status reports to semiannually if the emission limit is not exceeded for 1 year and if approved by the Administrator. [40 CFR 63, Subpart N, 63.347(g)(2)(i-ii)]

CR1-22. The permittee shall revert to the quarterly frequency of reporting if the source is not in compliance with the relevant emission limit. [40 CFR 63, Subpart N, 63.347(g)(2)(iii)]

CR1-23. The permittee shall submit to the Administrator a summary report to document the ongoing compliance status of the source. [40 CFR 63, Subpart N, 63.347(g)(3)]

CR1-24. The permittee shall submit to the Administrator a report on the results from the monitoring device(s) used to comply with the continuous compliance monitoring required by §63.343(c). [40 CFR 63, Subpart N, 63.347(g)(3)]

CS1, ClnSpray-1, Aerospace Cleaning - Spray Gun Cleaning

Specific Conditions

Scenario 1 (Primary) and Scenario 2 (Advance approval)

CS1-1. The permittee shall conduct cleaning operations in accordance with specified housekeeping measures including the storage of solvent laden materials, fresh and spent solvent in closed containers, and conducting handling/transfer of solvents in a manner that minimizes spills. [40 CFR 63, Subpart GG, 63.744(a)]

CS1-2. The permittee shall clean spray guns using one or more of the approved methods.

Repair any leaks found in monthly inspection of an enclosed system within 15 days or shutdown the system until repaired. [40 CFR 63, Subpart GG, 63.744(c)]

CS1-3. The permittee shall minimize spills while handling HAP-containing waste. [40 CFR 63, Subpart GG, 63.748]

CS1-4. The permittee shall report emissions of VOC solvents from cleanup of equipment used to apply coatings controlled in 252:100-37-25(a)-(d) with the emissions of solvents from the coating lines. [OAC 252:100-37-26]

Additional Specific Conditions
Scenario 2 (Advance approval)

CS1-5. The permittee is required to provide initial notification to ODEQ for a newly constructed or reconstructed source that is a major source. [40 CFR 63, Subpart A, 5(b)]

CS1-6. This EUG includes all aerospace spray gun cleaning operations at the facility. As such, spray gun cleaning operations may be added, removed, and relocated at this facility under advance approval, provided that any such change meets the facility-wide specific conditions in Section A of this permit. [40 CFR 63, Subpart GG, 63.741(c)]

Compliance Monitoring, Reporting and Recordkeeping
Scenario 1 (Primary) and Scenario 2 (Advance approval)

CS1-7. The permittee shall ensure that spray guns used for aerospace operations are cleaned according to one of the four approved methods. All enclosed systems will be repaired within 15 days of any leak detection or shutdown until repaired. Monitoring of enclosed systems will be carried out according to 63.751(a). [40 CFR 63, Subpart GG, 63.744(c)]

CS1-8. The permittee shall visually inspect each enclosed cleaner for leaks at least once per month, while system is in operation. Records of all leaks and repair actions will be maintained according to 63.752(c). The date of the inspection shall also be recorded. [OAC 252:100-43; 40 CFR 63, Subpart GG, 63.751(a)]

CS1-9. The permittee shall fulfill recordkeeping requirements in §63.10(a), (b), (d) and (f); and maintain records for a minimum of 5 years. [40 CFR 63, Subpart GG, 63.752(a)]

CS1-10. The permittee shall ensure that organizations using cleaning solvents will supply required data for all products applied to aerospace parts. [40 CFR 63, Subpart GG, 63.752(b)(1)]

CS1-11. The permittee shall maintain records of all leaks from enclosed spray gun cleaners that include source identity, dates of leak discovery and repair.

[40 CFR 63, Subpart GG, 63.752(b)(5)]

CS1-12. The permittee shall ensure that all recordkeeping and reporting will be conducted in accordance with 40 CFR 63 Subpart A. [40 CFR 63, Subpart GG, 63.753(a)(1)]

CS1-13. The permittee shall ensure that all notification requirements are met. [40 CFR 63, Subpart GG, 63.753(a)(1)]

CS1-14. The permittee shall submit semiannual reports listing new cleaning solvents used, and, if appropriate, their composite vapor pressure. [40 CFR 63, Subpart GG, 63.753(b)(1)(ii)]

CS1-15. The permittee shall submit semiannual reports, signed by an official, stating compliance. [40 CFR 63, Subpart GG, 63.753(b)(1)(v)]

CS1-16. The permittee shall conduct emissions inventories for this section that are consistent with the requirements of OAC 252:100-37-25(a)-(d). [OAC 252:100-37-26]

CS1-17. The permittee shall conduct, register, and submit an annual inventory of regulated pollutants. [OAC 252:100-5]

CT1, CalTest-1, Calibration Fluid Test Stands

Specific Conditions

Scenario 1 (Primary) and Scenario 2 (Advance approval)

CT1-1. Alternative products may be used which have equal or less solvent content and toxicity as the calibration fluid. The permittee shall notify Air Quality of any change in the quantity and types of products used at the facility that will increase the emission rate of any solvent. This notification shall be made in writing at least 7 days prior to the change and may, at the discretion of Air Quality, require permit modification. [OAC 252:100-8-6(f)]

Compliance Monitoring, Reporting and Recordkeeping

Scenario 1 (Primary) and Scenario 2 (Advance approval)

CT1-2. The permittee shall keep records of operations as listed below. These records shall be retained on-site for a period of at least five years and shall be made available to regulatory personnel upon request. [OAC 252:100-8-6(a)(1)]

a. Calibration fluid purchases and waste shipments (monthly and 12-month rolling total).
b. Current MSD sheet for calibration fluid.
c. Mass balance and emission calculations demonstrating compliance with Table 1 (monthly and 12-month rolling total).

EC1, FORMERLY "ExtComb-1, Dual-Fuel Boilers, > 10 MMBtu/hr and < 100 MMBtu/hr, Not Subject to NSPS" – NO LONGER IN USE

This EUG contained three boilers in building 2122 with identical applicable requirements, based on similar heat input ratings and installation dates. They were fired primarily on natural gas (primary operating scenario), with the capability of burning No. 2 fuel oil (alternative operating scenario). All of these units have subsequently been decommissioned; none of these units will ever be used again. Because this EUG was specific to these units, the EUG will also never be used again by Tinker AFB. The EUG, however, will continue to be mentioned in documentation such as the Title V permit to prevent potential confusion when comparing historical operations with conditions existing under this and subsequent permits.

EC2, ExtComb-2, Dual-Fuel Boilers, > 100 MMBtu/hr, Subject to NSPS Subpart Db, Subject to NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters

Specific Conditions

Scenario 1 (Primary) – Natural Gas and Scenario 3 (Advance approval)

EC2-1. The emission unit shall be considered a unit designed to burn gas 1 fuels and the permittee shall be permitted to use fuel oil for a combined total of no more than 48 hours during any calendar year for activities such as periodic testing, maintenance, or operator training without specific notification to ODEQ of such limited fuel oil usage. [40 CFR 63.7545(f)]

EC2-2 The permittee shall not allow emissions to exceed 0.1 lb/MMBtu as determined by a NOx Continuous Emission Monitoring System (CEMS) on a 30-day rolling average. Continued compliance with NOx standards shall be demonstrated by CEMS. (Note: Installation and performance testing of CEMS systems was conducted on all affected boilers by 1/30/97). [40 CFR 60, Subpart Db, 60.44b(a),(i)]

EC2-3. The permittee shall install, calibrate, and operate the CEMS for measuring NOx emissions. CEMS shall be operated continuously during boiler operations except during times of breakdown and repairs. [40 CFR 60, Subpart Db, 60.48b(b),(c)]

EC2-4. The CEMS shall be installed and operational prior to conducting performance tests. Zero and span calibration drifts shall be checked at least once daily in accordance with a written procedure and adjusted as required. Continuous monitoring systems are in continuous operation, except during zero and span adjustments. [40 CFR 60, Subpart A, 60.13]

EC2-5. The CEMS shall be installed such that representative emissions are obtained. Proper procedures have been used to determine the appropriate location of the system. The

method for determining relative accuracy of continuous monitoring system shall be documented. [40 CFR 60, Subpart A, 60.13]

EC2-6. The permittee shall provide sampling ports, inspection platform, safe access and accessible utilities for sampling and testing equipment. [40 CFR 60, Subpart A, 60.8(e)(1)-(e)(4)]

EC2-7. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr. [OAC 252:100-19]

EC2-8. The permittee shall not allow NOx emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three-hour average. [OAC 252:100-33-2]

EC2-9. The permittee shall perform an annual tune-up of each existing emission unit beginning no later than 31 Jan 2016. Each "annual" tune-up shall be performed no later than 13 months after completion of the previous tune-up. [40 CFR 63.7540(a)(10) and 40 CFR 63 Subpart DDDDD Table 3]

EC2-10. The permittee shall perform an annual tune-up of each new (installed after 31 Jan 2013) emission unit within the first year of its installation date. Each "annual" tune-up shall be performed no later than 13 months after completion of the previous tune-up. [40 CFR 63.7540(a)(10) and 40 CFR 63 Subpart DDDDD Table 3]

Monitoring, Reporting and Recordkeeping

Scenario 1 (Primary) – Natural Gas and Scenario 3 (Advance approval)

EC2-11. The permittee shall provide initial notification of performance test data for NOx and performance evaluation of CEMS, which shall be submitted to Oklahoma DEQ. [40 CFR 60, Subpart Db, 60.49b(a),(b)]

EC2-12. The permittee shall maintain records of the daily amounts of natural gas burned and calculate the 12-month rolling average annual capacity factor at the end of each calendar month. [40 CFR 60, Subpart Db, 60.49b(d)]

EC2-13. The permittee shall maintain records of NOx emissions and submit quarterly reports of CEMS NOx emission data as specified in 60.49(b). [40 CFR 60, Subpart Db, 60.49b(g),(i),(o)]

EC2-14. The permittee shall maintain records of occurrence and duration of start-up, shutdown, and malfunction operations; maintain and submit Excess Emission Semiannual Reports. [40 CFR 60, Subpart A, 60.7]

EC2-15. The permittee shall maintain records of start-up date and maximum production date. The permittee shall also maintain records of administrator-approved alterations to performance test methods, records of process throughput to determine representative

performance, and documentation on performance test date and notification.
[40 CFR 60, Subpart A, 60.8(a)-(d)]

EC2-16. Compliance with the three-hour 0.2 lb/MMBtu NOx standard in OAC 252:100-33 shall be confirmed by either the annual RATA or stack test.
[OAC 252:100-8-6(a)(1)]

EC2-17. The permittee shall notify EPA of the startup of a new or reconstructed unit no later than 15 days after the actual startup date of the unit. [40 CFR 63.7545(c)]

EC2-18. The permittee shall report performance of each annual tune-up to EPA in a compliance report no later than the next 31 January after the tune-up.
[40 CFR 63.7550]

Specific Conditions
Scenario 2 (Alternate) – Diesel Fuel No. 2

EC2-19. The permittee shall not allow emissions to exceed 0.1 lbs/MMBtu as determined by a NOx continuous emission monitoring system (CEMS) on a 30-day rolling average. Installation and performance testing of CEMS systems was conducted on all affected boilers by 1/30/97. Continued compliance with NOx standards shall be demonstrated by CEMS. [40 CFR 60, Subpart Db, 60.44b(a),(i)]

EC2-20. The permittee shall install, calibrate, and operate the CEMS for measuring NOx emissions. CEMS shall be operated continuously except during times of breakdown and repairs. [40 CFR 60, Subpart Db, 60.48b(b),(c)]

EC2-21. The permittee shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.
[40 CFR 60, Subpart Db, 60.43b(f)]

EC2-22. CEMS shall be installed and operational prior to conducting performance tests. Zero and span calibration drifts shall be checked at least once daily in accordance with a written procedure and adjusted as required. Continuous monitoring systems are in continuous operation, except during zero and span adjustments.
[40 CFR 60, Subpart A, 60.13]

EC2-23. CEMS shall be installed such that representative emissions are obtained and proper procedures have been used to determine the appropriate location of the system. The method for determining relative accuracy of continuous monitoring system shall be documented. [40 CFR 60, Subpart A, 60.13]

EC2-24. The permittee shall provide sampling ports, inspection platform, safe access and accessible utilities for sampling and testing equipment.
[40 CFR 60, Subpart A, 60.8(e)(1)-(e)(4)]

EC2-25. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr. [OAC 252:100-19]

EC2-26. The permittee shall not allow SO_2 emissions from fuel oil fired equipment to exceed 0.8 lbs/MMBtu heat input, three-hour average. [OAC 252:100-31-25]

EC2-27. The permittee shall not allow NOx emissions from fuel oil fired equipment to exceed 0.3 lbs/MMBtu heat input, three-hour average. [OAC 252:100-33-2]

Monitoring, Reporting and Recordkeeping
Scenario 2 (Alternate) – Diesel Fuel No. 2

EC2-28. In order to maintain classification of the emission unit as a unit designed to burn gas 1 fuels, the permittee shall submit a notification of alternative fuel use to ODEQ and EPA no later than 48 hours after declaration of a period of gas curtailment or supply interruption. [40 CFR 63.7545(f)]

EC2-29. The permittee shall provide initial notification of performance test data for NOx, and performance evaluation of CEMS shall be submitted to Oklahoma DEQ.
[40 CFR 60, Subpart Db, 60.49b(a),(b)]

EC2-30. The permittee shall maintain records of the daily amounts of fuel burned and calculate the 12-month rolling average annual capacity factor at the end of each calendar month. [40 CFR 60, Subpart Db, 60.49b(d)]

EC2-31. The permittee shall maintain records of NOx emissions and submit quarterly reports of CEMS NOx emission data as specified in 60.49(b).
[40 CFR 60, Subpart Db, 60.49b(g),(i),(o)]

EC2-32. Compliance is demonstrated by visual observations as read by a Certified Visible Emission Evaluator using USEPA Method 9. Inspections shall be performed periodically (at least annually). [OAC 252:100-25]

EC2-33. The permittee shall maintain records of occurrence and duration of start-up, shutdown, and malfunction operations; maintain and submit Excess Emission Semiannual Reports. [40 CFR 60, Subpart A, 60.7]

EC2-34. The permittee shall maintain records of start-up date and maximum production date. The permittee shall also maintain records of administrator-approved alterations to performance test methods, records of process throughput to determine representative performance and documentation on performance test date and notification.
[40 CFR 60, Subpart A, 60.8(a)-(d)]

EC2-35. The permittee shall use very low sulfur fuel oil (< 0.5 wt%) and demonstrate that it

meets this definition by maintaining fuel receipts. Quarterly reports shall be submitted. [40 CFR 60, Subpart Db, 60.42b(j), 60.47b(f), 60.49b(r)]

EC2-36. The permittee shall conduct performance testing to verify emission standards set forth in this permit and it will be conducted using promulgated federal testing procedures. [OAC 252:100-43)]

EC2-37. Compliance with the three-hour 0.3 lb/MMBtu NOx standard in OAC 252:100-33 shall be confirmed by conducting a stack test, manufacturer guarantee, or AP-42. [OAC 252:100-8-6(a)(1)]

EC3, ExtComb-3, Natural Gas External Combustion > 10 MMBtu/hr, Subject to NSPS Subpart Dc, Subject to NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters

Specific Conditions

Scenario 1 (Primary) – Natural Gas

EC3-1. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr. [OAC 252:100-19]

EC3-2. The permittee shall not allow SO_2 emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three hour average. [OAC 252:100-31-25]

EC3-3. The permittee shall not allow NOx emissions from fuel oil-fired equipment to exceed 0.2 lbs/MMBtu heat input, three-hour average. This applies only to units rated at 50 MMBtu/hr or greater. [OAC 252:100-33-2]

EC3-4. The permittee shall ensure that any unit installed at and for the KC-46A facility shall be equipped with low-NOx burners and be manufacturer-guaranteed for emission factors not to exceed the following:

- 0.015 pound NOx per MMBtu
- 0.065 pound CO per MMBtu

EC3-5. The permittee shall perform an annual tune-up of each new (installed after 31 Jan 2013) emission unit within the first year of its installation date. Each "annual" tune-up shall be performed no later than 13 months after completion of the previous tune-up. [40 CFR 63.7540(a)(10) and 40 CFR 63 Subpart DDDDD Table 3]

Monitoring, Reporting and Recordkeeping

Scenario 1 (Primary) – Natural Gas

EC3-6. The permittee shall record and maintain records of the amounts of natural gas

combusted per day. All required records shall be kept for a minimum period of 2 years. [40 CFR 60, Subpart Dc, 60.48c(g),(i)]

EC3-7. The permittee shall maintain records of occurrence and duration of start-up, shutdown, and malfunction operations. The permittee shall also maintain and submit Excess Emission Semiannual Reporting. [40 CFR 60, Subpart A, 60.7]

EC3-8. The permittee shall notify EPA of the startup of a new or reconstructed unit no later than 15 days after the actual startup date of the unit. [40 CFR 63.7545(c)]

EC3-9. The permittee shall report performance of each annual tune-up to EPA in a compliance report no later than the next 31 January after the tune-up. [40 CFR 63.7550]

EC4, ExtComb-4, Dual-Fuel Boilers, > 10 MMBtu/hr, Subject to NSPS Subpart Dc, Subject to NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters

Specific Conditions

Scenario 1 (Primary) – Natural Gas

EC4-1. The emission unit shall be considered a unit designed to burn gas 1 fuels and the permittee shall be permitted to use fuel oil for a combined total of no more than 48 hours during any calendar year for activities such as periodic testing, maintenance, or operator training without specific notification to ODEQ of such limited fuel oil usage. [40 CFR 63.7545(f)]

EC4-2. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr. [OAC 252:100-19]

EC4-3. The permittee shall not allow SO_2 emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three hour average. [OAC 252:100-31-25]

EC4-4. The permittee shall not allow NOx emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three-hour average. This applies only to units rated at 50 MMBtu/hr or greater. [OAC 252:100-33-2]

EC4-5. The permittee shall perform an annual tune-up of each existing emission unit beginning no later than 31 Jan 2016. Each "annual" tune-up shall be performed no later than 13 months after completion of the previous tune-up. [40 CFR 63.7540(a)(10) and 40 CFR 63 Subpart DDDDD Table 3]

EC4-6. The permittee shall perform an annual tune-up of each new (installed after 31 Jan 2013) emission unit within the first year of its installation date. Each "annual" tune-

up shall be performed no later than 13 months after completion of the previous tune-up. [40 CFR 63.7540(a)(10) and 40 CFR 63 Subpart DDDDD Table 3]

Monitoring, Reporting and Recordkeeping
Scenario 1 (Primary) – Natural Gas

EC4-7. The permittee shall record and maintain monthly records of the amounts of natural gas combusted. [40 CFR 60, Subpart Dc, 60.48c(g),(i)]

EC4-8. The permittee shall maintain records of occurrence and duration of start-up, shutdown, and malfunction operations. The permittee shall also maintain and submit Excess Emission Semiannual Reports. [40 CFR 60, Subpart A, 60.7]

EC4-9. The permittee shall notify EPA of the startup of a new or reconstructed unit no later than 15 days after the actual startup date of the unit. [40 CFR 63.7545(c)]

EC4-10. The permittee shall report performance of each annual tune-up to EPA in a compliance report no later than the next 31 January after the tune-up.
[40 CFR 63.7550]

Specific Conditions
Scenario 2 (Alternate) – Diesel Fuel No. 2

EC4-11. Compliance with the three-hour 0.3 lb/MMBtu NOx standard in OAC 252:100-33 shall be confirmed by either a stack test or manufacturer's guarantee.
[OAC 252:100-8-6(a)(1)]

EC4-12. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr. [OAC 252:100-19]

EC4-13. The permittee shall not allow SO_2 emissions from fuel oil fired equipment to exceed 0.8 lbs/MMBtu heat input, three hour average. [OAC 252:100-31-25]

EC4-14. The permittee shall not allow emissions to result in an opacity of a shade or density of 20% or greater except during short term occurrences, which is no more than one 6-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. The average of any 6-minute period shall not exceed 60% opacity. This condition applies to EUs 0051 and 0052. [OAC 252:100-25]

EC4-15. The permittee shall not allow emissions to result in an opacity of a shade or density greater than 20% (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. This condition applies only to EU 0065.
[40 CFR 60, Subpart Dc, 60.43c(c)]

EC4-16. The permittee shall not allow NOx emissions from fuel oil-fired equipment to exceed

0.2 lbs/MMBtu heat input, three-hour average. This applies only to units rated at 50 MMBtu/hr or greater. [OAC 252:100-33-2]

EC4-17. The permittee shall use very low sulfur fuel oil (< 0.5 wt%) and demonstrate that it meets this definition by obtaining and maintaining records of fuel certifications from suppliers. The fuel oil sulfur limits apply at all times, including periods of start-up, shutdown and malfunction. [40 CFR 60, Subpart Dc, 60.42c(d),(h),(i)]

Monitoring, Reporting and Recordkeeping
Scenario 2 (Alternate) – Diesel Fuel No. 2

EC4-18. In order to maintain classification of the emission unit as a unit designed to burn gas 1 fuels, the permittee shall submit a notification of alternative fuel use to ODEQ and EPA no later than 48 hours after declaration of a period of gas curtailment or supply interruption. [40 CFR 63.7545(f)]

EC4-19. Compliance is demonstrated by visual observations as read by a Certified Visible Emission Evaluator using USEPA Method 9. Inspections shall be performed periodically (at least annually). [OAC 252:100-25]

EC4-20. The permittee shall record and maintain monthly records of the amounts of fuel combusted, and all the fuel capacity factor calculations.
[40 CFR 60, Subpart Dc, 60.48c(g),(h)]

EC4-21. The permittee shall submit quarterly reports which include records of fuel supplier certifications and a signed statement that the records represent all of the fuel combusted during that quarter. Fuel supplier certification shall include the name of the oil supplier along with a statement that the oil complies with the specifications for distillate oil for fuel oil No. 1 or 2 according to ASTM D396-78.
[40 CFR 60, Subpart Dc, 60.48c(d),(e),(f),(i)]

EC4-22. Compliance with the three-hour 0.3 lb/MMBtu NOx standard in OAC 252:100-33 shall be confirmed by conducting a stack test, manufacturer guarantee, or AP-42.
[OAC 252:100-8-6(a)(1)]

EC4-23. The permittee shall maintain records of occurrence and duration of start-up, shutdown, and malfunction operations. The permittee shall also maintain and submit Excess Emission Semiannual Reports. [40 CFR 60, Subpart A, 60.7]

EC5, ExtComb-5, Dual-Fuel Boilers, Less Than 10 MMBtu/hr, Subject to NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters

Specific Conditions
Scenario 1 (Primary) – Natural Gas

EC5-1. The emission unit shall be considered a unit designed to burn gas 1 fuels and the permittee shall be permitted to use fuel oil for a combined total of no more than 48 hours during any calendar year for activities such as periodic testing, maintenance, or operator training without specific notification to ODEQ of such limited fuel oil usage. [40 CFR 63.7545]

EC5-2. The permittee shall not allow particulate matter emissions to exceed 0.6 lbs/MMBtu heat input per Appendix C of OAC 252:100. [OAC 252:100-19]

EC5-3. The permittee shall not allow SO_2 emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three hour average. [OAC 252:100-31-25]

EC5-4. For existing units with a heat input capacity less than 5 MMBtu/hr, the permittee shall perform a periodic (5-year) tune-up of each emission unit beginning no later than 31 Jan 2016. Each periodic tune-up shall be performed no later than 61 months after completion of the previous tune-up.
[40 CFR 63.7500(e) and 40 CFR 63 Subpart DDDDD Table 3]

EC5-5. For existing units with a heat input capacity greater than 5 MMBtu/hr (and less than 10 MMBtu/hr), the permittee shall perform a biennial tune-up of each emission unit beginning no later than 31 Jan 2016. Each "biennial" tune-up shall be performed no later than 25 months after completion of the previous tune-up.
[40 CFR 63.7500(e) and 40 CFR 63 Subpart DDDDD Table 3]

EC5-6. For new (installed after 31 Jan 2013) units with a heat input capacity less than 5 MMBtu/hr, the permittee shall perform a tune-up of each emission unit within five years of its installation date, followed by subsequent periodic tune-ups. Each subsequent periodic tune-up, shall be performed no later than 61 months after completion of the previous tune-up.
[40 CFR 63.7500(e) and 40 CFR 63 Subpart DDDDD Table 3]

EC5-7. For new (installed after 31 Jan 2013) units with a heat input capacity greater than 5 MMBtu/hr (and less than 10 MMBtu/hr), the permittee shall perform a biennial tune-up of each emission unit within two years of its installation date. Each "biennial" tune-up shall be performed no later than 25 months after completion of the previous tune-up. [40 CFR 63.7500(e) and 40 CFR 63 Subpart DDDDD Table 3]

Monitoring, Reporting and Recordkeeping
Scenario 1 (Primary) – Natural Gas

EC5-8. The permittee shall perform and maintain annual emission calculations and report them in the Annual Emission Inventory. [OAC 252:100-5]

EC5-9. The permittee shall notify EPA of the startup of a new or reconstructed unit no later than 15 days after the actual startup date of the unit. [40 CFR 63.7545(c)]

EC5-10. The permittee shall report performance of each tune-up to EPA in a compliance report no later than the next 31 January after the tune-up. [40 CFR 63.7550]

Specific Conditions
Scenario 2 (Alternate) – Diesel Fuel No. 2

EC5-11. The permittee shall not allow particulate matter emissions to exceed 0.6 lbs/MMBtu heat input per Appendix C of OAC 252:100. [OAC 252:100-19]

EC5-12. The permittee shall not allow SO_2 emissions from fuel oil-fired equipment to exceed 0.8 lbs/MMBtu heat input, three hour average. [OAC 252:100-31-25]

Monitoring, Reporting and Recordkeeping
Scenario 2 (Alternate) – Diesel Fuel No. 2

EC5-13. In order to maintain classification of the emission unit as a unit designed to burn gas 1 fuels, the permittee shall submit a notification of alternative fuel use to ODEQ and EPA no later than 48 hours after declaration of a period of gas curtailment or supply interruption. [40 CFR 63.7545(f)]

EC5-14. Compliance is demonstrated by visual observations as read by a Certified Visible Emission Evaluator using USEPA Method 9. Inspections shall be performed periodically (at least annually). [OAC 252:100-25]

EC5-15. The permittee shall perform and maintain annual emission calculations and report them in the Annual Emission Inventory. [OAC 252:100-5]

EC6, ExtComb-6, Natural Gas External Combustion Units > 5 MMBtu/hr Not Subject to NSPS, Subject to NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters

Specific Conditions
Scenario 1 (Primary) – Natural Gas

EC6-1. For EUs 0041 and 0042, the permittee shall not allow particulate matter emissions to exceed 0.6 lbs/MMBtu heat input per Appendix C of OAC 252:100. [OAC 252:100-19]

EC6-2. The permittee shall not allow SO_2 emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three hour average. [OAC 252:100-31-25]

EC6-3. The permittee shall ensure that any unit installed at and for the KC-46A facility shall be equipped with low-NOx burners and be manufacturer-guaranteed for emission factors not to exceed the following:

- 0.015 pound NOx per MMBtu
- 0.065 pound CO per MMBtu

EC6-4. For existing units with a heat input capacity greater than 5 MMBtu/hr and less than 10 MMBtu/hr, the permittee shall perform a biennial tune-up of each emission unit beginning no later than 31 Jan 2016. Each "biennial" tune-up shall be performed no later than 25 months after completion of the previous tune-up.
[40 CFR 63.7500(e) and 40 CFR 63 Subpart DDDDD Table 3]

EC6-5. For existing units with a heat input capacity greater than 10 MMBtu/hr, the permittee shall perform an annual tune-up of each emission unit beginning no later than 31 Jan 2016. Each "annual" tune-up shall be performed no later than 13 months after completion of the previous tune-up.
[40 CFR 63.7540(a)(10) and 40 CFR 63 Subpart DDDDD Table 3]

EC6-6. For new (installed after 31 Jan 2013) units with a heat input capacity greater than 5 MMBtu/hr and less than 10 MMBtu/hr, the permittee shall perform a biennial tune-up of each emission unit beginning no later than 31 Jan 2016. Each "biennial" tune-up shall be performed no later than 25 months after completion of the previous tune-up. [40 CFR 63.7500(e) and 40 CFR 63 Subpart DDDDD Table 3]

EC6-7. For new (installed after 31 Jan 2013) units with a heat input capacity greater than 10 MMBtu/hr, the permittee shall perform an annual tune-up of each emission unit beginning no later than 31 Jan 2016. Each "annual" tune-up shall be performed no later than 13 months after completion of the previous tune-up.
[40 CFR 63.7540(a)(10) and 40 CFR 63 Subpart DDDDD Table 3]

Monitoring, Reporting and Recordkeeping
Scenario 1 (Primary) – Natural Gas

EC6-8. The permittee shall perform and maintain annual emission calculations and report them in the Annual Emission Inventory. [OAC 252:100-5]

EC6-9. The permittee shall notify EPA of the startup of a new or reconstructed unit no later than 15 days after the actual startup date of the unit. [40 CFR 63.7545(c)]

EC6-10. The permittee shall report performance of each annual tune-up to EPA in a compliance report no later than the next 31 January after the tune-up.
[40 CFR 63.7550]

EC7, ExtComb-7, Dual-Fuel Boilers > 100 MMBtu/hr, Subject to NSPS Subpart Db, Subject to NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters

Specific Conditions
Scenario 1 (Primary) – Natural Gas

EC7-1. The emission unit shall be considered a unit designed to burn gas 1 fuels and the permittee shall be permitted to use fuel oil for a combined total of no more than 48 hours during any calendar year for activities such as periodic testing, maintenance, or operator training without specific notification to ODEQ of such limited fuel oil usage. [40 CFR 63.7545]

EC7-2. The permittee shall not allow emissions to exceed 0.2 lbs/MMBtu as determined by a NOx Continuous Emission Monitoring System (CEMS) on a 30-day rolling average. Continued compliance with NOx standards shall be demonstrated by CEMS. [40 CFR 60, Subpart Db, 60.44b(a),(i)]

EC7-3. The permittee shall install, calibrate, and operate the CEMS for measuring NOx emissions. CEMS shall be operated continuously except during times of breakdown and repairs. [40 CFR 60, Subpart Db, 60.48b(b),(c)]

EC7-4 The CEMS shall be installed and operational prior to conducting performance tests. Zero and span calibration drifts shall be checked at least once daily in accordance with a written procedure and adjusted as required. Continuous monitoring systems are in continuous operation, except during zero and span adjustments. [40 CFR 60, Subpart A, 60.13]

EC7-5. The CEMS shall be installed such that representative emissions are obtained. Proper procedures have been used to determine the appropriate location of the system. The method for determining relative accuracy of continuous monitoring system shall be documented. [40 CFR 60, Subpart A, 60.13]

EC7-6. The permittee shall provide sampling ports, inspection platform, safe access and accessible utilities for sampling and testing equipment. [40 CFR 60, Subpart A, 60.8(e)(1)-(e)(4)]

EC7-7. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr. [OAC 252:100-19]

EC7-8. The permittee shall not allow SO_2 emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three hour average. [OAC 252:100-31-25]

EC7-9. The permittee shall not allow NOx emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three-hour average. [OAC 252:100-33-2]

EC7-10. The permittee shall perform an annual tune-up of each existing emission unit beginning no later than 31 Jan 2016. Each “annual” tune-up shall be performed no later than 13 months after completion of the previous tune-up. [40 CFR 63.7540(a)(10) and 40 CFR 63 Subpart DDDDD Table 3]

EC7-11. The permittee shall perform an annual tune-up of each new (installed after 31 Jan 2013) emission unit within the first year of its installation date. Each "annual" tune-up shall be performed no later than 13 months after completion of the previous tune-up. [40 CFR 63.7540(a)(10) and 40 CFR 63 Subpart DDDDD Table 3]

Monitoring, Reporting and Recordkeeping
Scenario 1 (Primary) – Natural Gas

EC7-12. The permittee shall provide initial notification of performance test data for NOx and performance evaluation of CEMS, which shall be submitted to Oklahoma DEQ.
[40 CFR 60, Subpart Db, 60.49b(a),(b)]

EC7-13. The permittee shall maintain records of the daily amounts of natural gas burned and calculate the 12-month rolling average annual capacity factor at the end of each calendar month. [40 CFR 60, Subpart Db, 60.49b(d)]

EC7-14. The permittee shall maintain records of NOx emissions and submit quarterly reports of CEMS NOx emission data as specified in 60.49(b).
[40 CFR 60, Subpart Db, 60.49b(g),(i),(o)]

EC7-15. The permittee shall maintain records of occurrence and duration of start-up, shutdown, and malfunction operations; maintain and submit Excess Emission Semiannual Reports. [40 CFR 60, Subpart A, 60.7]

EC7-16. The permittee shall maintain records of start-up date and maximum production date. The permittee shall also maintain records of administrator-approved alterations to performance test methods, records of process throughput to determine representative performance, and documentation of performance test date and notification.
[40 CFR 60, Subpart A, 60.8(a)-(d)]

EC7-17. Compliance with the three-hour 0.2 lb/MMBtu NOx standard in OAC 252:100-33 shall be confirmed by either a RATA, stack test or manufacturer's guarantee.
[OAC 252:100-8-6(a)(1)]

EC7-18. The permittee shall notify EPA of the startup of a new or reconstructed unit no later than 15 days after the actual startup date of the unit. [40 CFR 63.7545(c)]

EC7-19. The permittee shall report performance of each annual tune-up to EPA in a compliance report no later than the next 31 January after the tune-up.
[40 CFR 63.7550]

Specific Conditions
Scenario 2 (Alternate) – Diesel Fuel No. 2

EC7-20. The permittee shall not allow NOx emissions to exceed 0.20 lbs/MMBtu as determined by a NOx continuous emission monitoring system (CEMS) on a 30-day rolling

average. Compliance with NOx standards shall be demonstrated by CEMS. [40 CFR 60, Subpart Db, 60.44b(a),(i)]

EC7-21. The permittee shall install, calibrate, and operate the CEMS for measuring NOx emissions. CEMS shall be operated continuously except during times of breakdown and repairs. [40 CFR 60, Subpart Db, 60.48b(b),(c)]

EC7-22. The permittee shall not allow emissions to result in an opacity of a shade or density greater than 20% (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. [40 CFR 60, Subpart Db, 60.43b(f)]

EC7-23. CEMS shall be installed and operational prior to conducting performance tests. Zero and span calibration drifts shall be checked at least once daily in accordance with a written procedure and adjusted as required. Continuous monitoring systems shall be in continuous operation, except during zero and span adjustments. [40 CFR 60, Subpart A, 60.13]

EC7-24. CEMS shall be installed such that representative emissions are obtained and proper procedures have been used to determine the appropriate location of the system. The method for determining relative accuracy of continuous monitoring system shall be documented. [40 CFR 60, Subpart A, 60.13]

EC7-25. The permittee shall provide sampling ports, inspection platform, safe access and accessible utilities for sampling and testing equipment. [40 CFR 60, Subpart A, 60.8(e)(1)-(e)(4)]

EC7-26. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr. [OAC 252:100-19]

EC7-27. The permittee shall not allow SO_2 emissions from fuel oil-fired equipment to exceed 0.8 lbs/MMBtu heat input, three hour average. [OAC 252:100-31-25]

EC7-28. The permittee shall not allow NOx emissions from fuel oil-fired equipment to exceed 0.3 lbs/MMBtu heat input, three-hour average. [OAC 252:100-33-2]

Monitoring, Reporting and Recordkeeping
Scenario 2 (Alternate) – Diesel Fuel No. 2

EC7-29. In order to maintain classification of the emission unit as a unit designed to burn gas 1 fuels, the permittee shall submit a notification of alternative fuel use to ODEQ and EPA no later than 48 hours after declaration of a period of gas curtailment or supply interruption. [40 CFR 63.7545(f)]

EC7-30. The permittee shall provide initial notification of performance test data for NOx and

performance evaluation of CEMS shall be submitted to Oklahoma DEQ.
[40 CFR 60, Subpart Db, 60.49b(a),(b)]

EC7-31. The permittee shall maintain records of the daily amounts of fuel burned and calculate the 12-month rolling average annual capacity factor at the end of each calendar month. [40 CFR 60, Subpart Db, 60.49b(d)]

EC7-32. The permittee shall maintain records of NOx emissions and submit quarterly reports of CEMS NOx emission data as specified in 40 CFR 60.49(b).
[40 CFR 60, Subpart Db, 60.49b(g),(i),(o)]

EC7-33. Compliance is demonstrated by visual observations as read by a Certified Visible Emission Evaluator using USEPA Method 9. Inspections shall be performed periodically (at least annually). [OAC 252:100-25]

EC7-34. The permittee shall maintain records of occurrence and duration of start-up, shutdown, and malfunction operations; maintain and submit Excess Emission Semiannual Reports [40 CFR 60, Subpart A, 60.7]

EC7-35. The permittee shall maintain records of start-up date and maximum production date. The permittee shall also maintain records of administrator-approved alterations to performance test methods, records of process throughput to determine representative performance and documentation on performance test date and notification.
[40 CFR 60, Subpart A, 60.8(a)-(d)]

EC7-36. The permittee shall use very low sulfur fuel oil (< 0.5 wt%) and demonstrate that it meets this definition by maintaining fuel receipts. Quarterly reports shall be submitted. [40 CFR 60, Subpart Db, 60.42b(j), 60.47b(f), 60.49b(r)]

EC7-37. Compliance with the three-hour 0.3 lb/MMBtu NOx standard in OAC 252:100-33 shall be confirmed by conducting a stack test, manufacturer guarantee, or AP-42.
[OAC 252:100-8-6(a)(1)]

EC7-38. The permittee shall conduct performance testing to verify emission standards set forth in this permit, and tests will be conducted using promulgated federal testing procedures. [OAC 252:100-43]

EC8, ExtComb-8, Dual-Fuel Boilers > 10 MMBtu/hr and < 100 MMBtu/hr Subject to NSPS Subpart Dc, Subject to NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters

Specific Conditions
Scenario 1 (Primary) – Natural Gas

EC8-1. The emission unit shall be considered a unit designed to burn gas 1 fuels and the

permittee shall be permitted to use fuel oil for a combined total of no more than 48 hours during any calendar year for activities such as periodic testing, maintenance, or operator training without specific notification to ODEQ of such limited fuel oil usage. [40 CFR 63.7545]

EC8-2. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr. [OAC 252:100-19]

EC8-3. The permittee shall not allow SO_2 emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three hour average. [OAC 252:100-31-25]

EC8-4. The permittee shall perform an annual tune-up of each existing emission unit beginning no later than 31 Jan 2016. Each "annual" tune-up shall be performed no later than 13 months after completion of the previous tune-up.
[40 CFR 63.7540(a)(10) and 40 CFR 63 Subpart DDDDD Table 3]

EC8-5. The permittee shall perform an annual tune-up of each new (installed after 31 Jan 2013) emission unit within the first year of its installation date. Each "annual" tune-up shall be performed no later than 13 months after completion of the previous tune-up. [40 CFR 63.7540(a)(10) and 40 CFR 63 Subpart DDDDD Table 3]

Monitoring, Reporting and Recordkeeping
Scenario 1 (Primary) – Natural Gas

EC8-6. The permittee shall record and maintain monthly records of the amounts of natural gas combusted. [40 CFR 60, Subpart Dc, 60.48c(g),(i)]

EC8-7. The permittee shall maintain records of occurrence and duration of start-up, shutdown, and malfunction operations. The permittee shall also maintain and submit Excess Emission Semiannual Reports. [40 CFR 60, Subpart A, 60.7]

EC8-8. The permittee shall notify EPA of the startup of a new or reconstructed unit no later than 15 days after the actual startup date of the unit. [40 CFR 63.7545(c)]

EC8-9. The permittee shall report performance of each annual tune-up to EPA in a compliance report no later than the next 31 January after the tune-up.
[40 CFR 63.7550]

Specific Conditions
Scenario 2 (Alternate) – Diesel Fuel No. 2

EC8-10. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr. [OAC 252:100-19]

EC8-11. The permittee shall not allow SO_2 emissions from fuel oil-fired equipment to exceed 0.8 lbs/MMBtu heat input, three hour average. [OAC 252:100-31-25]

EC8-12. The permittee shall not allow emissions to result in an opacity of a shade or density greater than 20% (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. [40 CFR 60, Subpart Dc, 60.43c(c)]

EC8-13. The permittee shall not allow NOx emissions from fuel oil-fired equipment to exceed 0.2 lbs/MMBtu heat input, three-hour average. This applies only to units rated at 50 MMBtu/hr or greater. [OAC 252:100-33-2]

EC8-14. The permittee shall use very low sulfur fuel oil (< 0.5 wt%) and demonstrate that it meets this definition by obtaining and maintaining records of fuel certifications from suppliers. The fuel oil sulfur limits apply at all times, including periods of start-up, shutdown and malfunction. [40 CFR 60, Subpart Dc, 60.42c(d),(h),(i)]

Monitoring, Reporting and Recordkeeping
Scenario 2 (Alternate) – Diesel Fuel No. 2

EC8-15. In order to maintain classification of the emission unit as a unit designed to burn gas 1 fuels, the permittee shall submit a notification of alternative fuel use to ODEQ and EPA no later than 48 hours after declaration of a period of gas curtailment or supply interruption. [40 CFR 63.7545(f)]

EC8-16. Compliance is demonstrated by visual observations as read by a Certified Visible Emission Evaluator using USEPA Method 9. Inspections shall be performed periodically (at least annually). [OAC 252:100-25]

EC8-17. The permittee shall record and maintain monthly records of the amounts of fuel combusted, and all the fuel capacity factor calculations.
[40 CFR 60, Subpart Dc, 60.48c(g),(h)]

EC8-18. The permittee shall submit quarterly reports which include records of fuel supplier certifications and a signed statement that the records represent all of the fuel combusted during that quarter. Fuel supplier certification shall include the name of the oil supplier along with a statement that the oil complies with the specifications for distillate oil for fuel oil No. 1 or 2 according to ASTM D396-78.
[40 CFR 60, Subpart Dc, 60.48c(d),(e),(f),(i)]

EC8-19. The permittee shall maintain records of occurrence and duration of start-up, shutdown, and malfunction operations. The permittee shall also maintain and submit Excess Emission Semiannual Reports [40 CFR 60, Subpart A, 60.7]

EC9, FORMERLY "ExtComb-9, Dual-Fuel Boilers, Installed Prior to 1960 (Grandfathered)" – NO LONGER IN USE

This EUG represented the dual-fuel external combustion units in buildings 208 and 5802 that were grandfathered from permitting requirements in the last Title V permit iteration. All of these units have subsequently been decommissioned and some have been physically removed; none of these units will ever be used again. Because this EUG was specific to these grandfathered units, the EUG will also never be used again by Tinker AFB. The EUG, however, will continue to be mentioned in documentation such as the Title V permit to prevent potential confusion when comparing historical operations with conditions existing under this and subsequent permits.

EC10, ExtComb-10, Dual-Fuel Boilers > 100 MMBtu/hr, not subject to NSPS, Subject to NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters

Specific Conditions

Scenario 1 (Primary) – Natural Gas

EC10-1. The emission unit shall be considered a unit designed to burn gas 1 fuels and the permittee shall be permitted to use alternate fuel (landfill gas) for a combined total of no more than 48 hours during any calendar year for activities such as periodic testing, maintenance, or operator training without specific notification to ODEQ of such limited alternate fuel usage. [40 CFR 63.7545]

EC10-2. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr. [OAC 252:100-19]

EC10-3. The permittee shall not allow SO_2 emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three hour average. [OAC 252:100-31-25]

EC10-4. The permittee shall not allow NOx emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three-hour average. [OAC 252:100-33-2]

EC10-5. The NOx emissions from Boiler #3 (EU 0093) shall be limited to 55.4 tons per 12-month rolling period. [OAC 252:100-8-6(a)(1)]

EC10-6. Each emission unit at the facility (EUs 0091 through 0093) shall have a permanent identification plate attached which shows the make, model number, and serial number. [OAC 252:100-43]

EC10-7. The permittee shall perform an annual tune-up of each operating existing emission unit beginning no later than 31 Jan 2016. Each "annual" tune-up shall be performed no later than 13 months after completion of the previous tune-up. [40 CFR 63.7540(a)(10) and 40 CFR 63 Subpart DDDDD Table 3]

EC10-8. The permittee shall perform an annual tune-up of each new (installed after 31 Jan 2013) emission unit within the first year of its installation date. Each "annual" tune-

up shall be performed no later than 13 months after completion of the previous tune-up. [40 CFR 63.7540(a)(10) and 40 CFR 63 Subpart DDDDD Table 3]

Monitoring, Reporting and Recordkeeping

Scenario 1 (Primary) – Natural Gas

EC10-9. Compliance with the 55.4 tons NOx limit per 12-month rolling period shall be based on limiting the NOx emissions from Boiler #3 (EU 0093) to 0.12 lbs/MMBtu and limiting the heat input to 923,333 million BTUs per 12-month rolling period. [OAC 252:100-8-6(a)(1)]

EC10-10. The permittee shall record the total natural gas usage for each boiler. The permittee shall record the operating hours of each boiler. Compliance with the Heat Input cap shall be based on monthly fuel usage. [OAC 252:100-8-6(a)(1)]

EC10-11. Boilers #1 and #2 (EUs 0091 and 0092) have not been in operation for a number of years prior to issuance of this permit renewal, and it is not expected that either of these boilers will be used during the operative time period of this permit. In the event that either or both of these two boilers are restarted and operated during the term of this permit, the permittee shall, within 24 months after the boiler restart, perform exhaust gas stack testing to verify and demonstrate compliance with the NOx emission limit of 0.2 lbs/MMBtu heat input, three-hour average.[OAC 252:100-8-6(a)(1)]

EC10-12. The permittee shall maintain records of operations as listed below. These records shall be maintained on-site for at least five years after the date of recording and shall be provided to regulatory personnel upon request. [OAC 252:100-8-6 (a)(3)(B)]

a. Total natural gas usage for each boiler (annually).
b. Total operating hours for each boiler (annually).
c. Operation, maintenance, and inspection log for EUs 0091 through 0093.
d. The heat input of EU 0093 (MMBtu, monthly, 12-month rolling total).

EC10-13. The permittee shall perform and maintain annual emission calculations and report them in the Annual Emission Inventory [OAC 252:100-5]

EC10-14. The permittee shall notify EPA of the startup of a new or reconstructed unit no later than 15 days after the actual startup date of the unit. [40 CFR 63.7545(c)]

EC10-15. The permittee shall report performance of each annual tune-up to EPA in a compliance report no later than the next 31 January after the tune-up. [40 CFR 63.7550]

Specific Conditions

Scenario 2 (Alternate) – Natural Gas in EUs 0091 and 0092; Natural Gas and Landfill Gas in EU 0093

EC10-16. In order to maintain classification of the emission unit as a unit designed to burn gas 1 fuels, the permittee shall utilize the alternative fuel as a maximum of 10% of the total annual heat input to EU 0093. [40 CFR 63.7575]

EC10-17. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr. [OAC 252:100-19]

EC10-18. The permittee shall not allow SO_2 emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three hour average. [OAC 252:100-31-25]

EC10-19. The permittee shall not allow NOx emissions from gas fuel-burning equipment to exceed 0.2 lbs/MMBtu heat input, three-hour average. [OAC 252:100-33-2]

EC10-20. The NOx emissions from Boiler #3 (EU 0093) shall be limited to 55.4 tons per 12-month rolling period. [OAC 252:100-8-6(a)(1)]

Monitoring, Reporting and Recordkeeping

Scenario 2 (Alternate) – Natural Gas in EU0091 and 0092; Natural Gas and Landfill Gas in EU 0093

EC10-21. Compliance with the 55.4 tons NOx limit per 12-month rolling period shall be based on limiting the NOx emissions from Boiler #3 to 0.12 lbs/MMBtu and limiting the heat input to 923,333 million BTUs per 12-month rolling period. [OAC 252:100-8-6(a)(1)]

EC10-22. The permittee shall record the total natural gas and/or landfill gas usage for each boiler. The permittee shall record the operating hours of each boiler. Compliance with the Heat Input cap shall be based on monthly fuel usage, and monthly heat content of landfill gas. The heat content of landfill gas shall be based on monthly fuel analysis. [OAC 252:100-8-6(a)(1)]

EC10-23. Boilers #1 and #2 (EUs 0091 and 0092) have not been in operation for a number of years prior to issuance of this permit renewal, and it is not expected that either of these boilers will be used during the operative time period of this permit. In the event that either or both of these two boilers are restarted and operated during the term of this permit, the permittee shall, within 24 months after the boiler restart, perform exhaust gas stack testing to verify and demonstrate compliance with the NOx emission limit of 0.2 lbs/MMBtu heat input, three-hour average.[OAC 252:100-8-6(a)(1)]

EC10-24. The permittee shall maintain records of operations as listed below. These records shall be maintained on-site for at least five years after the date of recording and shall be provided to regulatory personnel upon request. [OAC 252:100-8-6 (a)(3)(B)]

a. Total natural gas and/or landfill gas usage for each boiler (annually).
b. Total operating hours for each boiler (annually).

c. Operation, maintenance, and inspection log for EUs 0091 through 0093.
d. The heat input of EU 0093 (MMBtu, monthly, 12-month rolling total).

EC10-25. The permittee shall perform and maintain annual emission calculations and report them in the Annual Emission Inventory. [OAC 252:100-5]

EC11, ExtComb-11, Natural Gas Boilers, Less Than or equal to 5 MMBtu/hr, Subject to NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters

Specific Conditions

EC11-1. The permittee shall perform a periodic (5-year) tune-up of each existing emission unit beginning no later than 31 Jan 2016. Each periodic tune-up shall be performed no later than 61 months after completion of the previous tune-up.
[40 CFR 63.7500(e) and 40 CFR 63 Subpart DDDDD Table 3]

EC11-2. The permittee shall perform a tune-up of each new (installed after 31 Jan 2013) emission unit within five years of its installation date, followed by subsequent periodic tune-ups. Each subsequent periodic tune-up shall be performed no later than 61 months after completion of the previous tune-up.
[40 CFR 63.7500(e) and 40 CFR 63 Subpart DDDDD Table 3]

EC11-3. The permittee shall ensure that any unit installed at and for the KC-46A facility shall be equipped with low-NOx burners and be manufacturer-guaranteed for emission factors not to exceed the following:

- 0.015 pound NOx per MMBtu
- 0.065 pound CO per MMBtu

Monitoring, Reporting and Recordkeeping

EC11-4. The permittee shall ensure that emissions from these small boilers are calculated (on an aggregate basis) and reported in the Annual Emission Inventory. [OAC 252:100-5]

EC11-5. The permittee shall notify EPA of the startup of a new or reconstructed unit no later than 15 days after the actual startup date of the unit. [40 CFR 63.7545(c)]

EC11-6. The permittee shall report performance of each annual tune-up to EPA in a compliance report no later than the next 31 January after the tune-up.
[40 CFR 63.7550]

ET1, EngTest-1, Jet Engine Turbine Testing

This EUG includes all existing and future modifications for engine test cell operations as listed

in the specific conditions below.

Specific Conditions

ET1-1. The permittee shall be authorized to construct additional engine test stands subject the following conditions: [OAC 252:100-8-6(a)(1)]

a. The permittee shall notify the ODEQ of the proposed number and location (e.g. building number), prior to beginning construction.
b. The permittee shall notify the ODEQ when each unit becomes operational.
c. Emissions from any additional testing units are limited to aggregated emission limits in Table 1 of the Specific Conditions for all jet engine testing operations.

ET1-2. The permittee shall limit fuel combusted to JP-5/8 or Jet A/A-1 meeting Department of Defense military specifications. By doing so, no recordkeeping of sulfur content is required. [OAC 252:100-8-6(a)(1)]

ET1-3. Alternative fuel may be combusted provided emissions are equal or less than those from combustion of JP-5/8 or Jet A/A-1. The permittee shall notify ODEQ of any change in the quantity and fuel type used at the facility that will increase the emission rate of any pollutant. This notification shall be made in writing at least 7 days prior to the change and may, at the discretion of the ODEQ/Air Quality Division, require permit modification. [OAC 252:100-8-6(f)]

Compliance Monitoring, Reporting and Recordkeeping

ET1-4. The permittee shall keep records of operation as listed below: These records shall be retained on-site for a period of at least 5 years and shall be made available to regulatory personnel upon request. [OAC 252:100-8-6(a)(3)(B)]

a. Monthly total number of test runs per engine type.
b. Emissions calculations (monthly and 12-month rolling totals).

ET1-5. The permittee shall conduct, register, and submit an annual inventory of regulated pollutants. [OAC 252:100-5]

ET1-6. Construction of any engine test facilities other than the test facilities required for the KC-46A project (construction permit 2009-394-C (M-4) (PSD)) require a construction permit application be submitted to the ODEQ. [OAC 252:100-8-6]

HL1, FORMERLY "Halog-1, Halogenated Solvent Batch Cold Cleaning" – NO LONGER IN USE

This EUG originally represented emission unit number 4428, a halogenated solvent batch-cleaning machine. Use of halogenated solvent in EU 4428 was halted years ago, before that

cleaning tank was replaced. Tinker AFB has no intention of installing any new halogenated solvent cold cleaning processes in the foreseeable future. The specific conditions associated with this EUG have been deleted. The EUG, however, will continue to be mentioned in documentation such as the Title V permit to prevent potential confusion when comparing historical operations with conditions existing under this and subsequent permits.

IC1, IntComb-1, Compression Ignition Internal Combustion Engines, < 500 bhp, Subject to 40 CFR 60 Subpart IIII, Non-Emergency Units

The permittee is authorized to add or replace non-emergency generators rated at less than 500 bhp, subject to the applicable specific conditions for EUG IC1, per Specific Condition #3.

Specific Conditions
Scenario 1 (Primary) – Diesel Fuel No. 2

IC1-1. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr. [OAC 252:100-19-4]

IC1-2. The permittee shall not allow SO_2 emissions from liquid fuel-burning equipment to exceed 0.8 lbs/MMBtu heat input, three hour average. [OAC 252:100-31-25]

IC1-3. This EUG is the total of all small diesel-fueled internal combustion engines installed and operated in referenced locations. The number, make, model, and serial number of covered engines may be changed without prior notification. No individual engine under this EUG will have a ton per year limit. These engines collectively must meet the aggregate emission limits for EUG IC1 in Table 1. [OAC 252:100-8-6(a)(1)]

Monitoring, Reporting and Recordkeeping
Scenario 1 (Primary) – Diesel Fuel No. 2

IC1-4. Permittee shall keep records of operations as listed below.
[OAC 252:100-8-6-(a)(1)]

a. Fuel usage per generator unit (monthly and calendar year totals).
b. Spreadsheet of emission calculations based on fuel usage and emission data to demonstrate compliance with EUG emission limits.
c. Hours of operation for each generator unit measured by a non-resettable hour meter.
d. Vendor or manufacturer's emission data for each generator set.
e. Results of testing of NO_X and CO exhaust in grams/hp-hr from each engine to verify vendor's emission data.

IC1-5. At least once each year, in July or August, the permittee shall conduct tests of NO_x and CO concentration in exhaust gases from the generator engines when operating

under representative conditions for the season. Testing shall be conducted using portable engine analyzers or an equivalent method approved by the ODEQ.
[OAC 252:100-8-6(a)(3)(A)]

IC1-6. Compliance with the sulfur emission standards shall be fulfilled by using only ultra low sulfur diesel oil (0.0015 weight percent or less). [OAC 252:100-8-6(a)(1)(C)]

For 40 CFR 60 Subpart IIII

NOTE: The temporary units on-site are exempted under the referenced definitions in 40 CFR §60.4219. These engines do not meet the definition of stationary internal combustion engines because they are non-road engines, therefore they are not subject to Subpart IIII. [40 CFR 60 Subpart IIII §60.4219]

The following conditions apply if engines that meet the definition of stationary source (not a non-road engine) are installed at the facility.

IC1-7. The permittee shall ensure that pre-2007 model year engines manufactured after April 1, 2006, or modified or reconstructed after July 11, 2005, comply with the emission standards in Table 1 of 40 CFR 60 Subpart IIII.
[40 CFR 60 Subpart IIII §60.4204(a)]

IC1-8. Engines with 2007 model year and later must comply with the emission standards for new CI engines in 40 CFR §60.4201 for the model year 2007 and later stationary CI ICE, as applicable. [40 CFR 60 Subpart IIII §60.4204(b)]

IC1-9. Any modified or reconstructed non-emergency stationary CI ICE subject to 40 CFR 60 Subpart IIII must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed non-emergency stationary CI ICE that are specified in paragraphs (a) through (d) of 40 CFR §60.4204. [40 CFR 60 Subpart IIII §60.4204(e)]

IC1-10. Affected sources under Subpart IIII shall operate and maintain stationary CI RICE that achieve the emission standards in 40 CFR §60.4204 and §60.4205 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine. [40 CFR 60 Subpart IIII §60.4206]

IC1-11. The permittee shall use only diesel fuel meeting the requirements specified in 40 CFR §60.4207. [40 CFR 60 Subpart IIII §60.4207]

IC1-12. Engines installed shall comply with the dates specified for applicable model year engines in 40 CFR §60.4208. [40 CFR 60 Subpart IIII §60.4208]

IC1-13. If the permittee installs an engine equipped with a diesel particulate filter to comply with the emission standards in 40 CFR §60.4204, the diesel particulate filter must be

installed with a backpressure monitor that notifies the operator when the high backpressure limit of the engine is approached.
[40 CFR 60 Subpart IIII §60.4209(b)]

IC1-14. If engines are installed which are subject to Subpart IIII emission standards, the permittee shall operate and maintain the stationary compression ignition (CI) internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator and approved by the manufacturer. [40 CFR 60 Subpart IIII §60.4211]

IC1-15. Applicable engines under 40 CFR §60.4211 shall demonstrate compliance according to one of the methods listed therein. [40 CFR 60 Subpart IIII §60.4211(b)]

IC1-16. If performance testing is required, then the permittee shall follow the methods and other procedures listed in 40 CFR §60.4212.
[40 CFR 60 Subpart IIII §60.4211(b)(5)]

IC1-17. If an affected unit is equipped with a diesel particulate filter, the permittee shall keep records of any corrective action taken after the backpressure monitor has notified the operator that the high backpressure limit of the engine is approached.
[40 CFR 60 Subpart IIII §60.4214(c)]

40 CFR 63 Subpart ZZZZ

Note: Temporary units leased on a seasonal basis are exempted under the referenced definitions in 40 CFR §63.6585. Because these engines meet the definition of non-road engines, they are not subject to Subpart ZZZZ. [40 CFR 63 Subpart ZZZZ §63.6585(a)]

If in the future units are installed permanently, they will be affected sources and specific conditions listed below apply. On January 18, 2008, EPA promulgated changes to 40 CFR 63 to include requirements for RICE rated at less than 500 brake horsepower. The definitions in 40 CFR §63.6590 defined new sources less than 500 hp as those that commenced construction on or after June 12, 2006. On March 3, 2010, EPA promulgated additional changes to 40 CFR 63 Subpart ZZZZ.

New RICE (rated at ≤ 500 bhp and commenced construction or reconstruction of the stationary RICE on or after June 12, 2006).

IC1-18. Compression ignition stationary RICE with a site rating equal to or less than 500 brake horsepower must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines. No further requirements apply for such engines under this part. No further requirements apply for such engines under this part. [40 CFR 63 Subpart ZZZZ §63.6590(c)]

Existing RICE (rated at ≤ 500 bhp and commenced construction or reconstruction of the stationary RICE before June 12, 2006).

Tinker AFB does not own nor operate any existing RICE that would be subject to this rule. All CI existing units are emergency use units (generators and fire pump engines) which have their respective requirements listed under EUG IC2. Therefore, no specific conditions are shown below.

IC2, IntComb-2, Stationary Reciprocating Internal Combustion Engines (RICE), Subject to 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ, Emergency Use Engines

The permittee is authorized to add or replace emergency-use engines subject to conditions in IC2 per Specific Condition #3. This EUG includes diesel-fired (compression ignition) units only. The following conditions include the applicable changes/requirements in 40 CFR 60 (Subpart IIII) and 40 CFR 63 Subpart ZZZZ.

Specific Conditions
Scenario 1 (Primary) – Diesel Fuel No. 2

For units with a site rating greater than 500 brake horsepower:

40 CFR 63 SUBPART ZZZZ
Existing Sources (Commenced construction or reconstruction prior to Dec 19, 2002)

IC2-1. An existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions does not have to meet the requirements of this subpart and of subpart A of this part. No initial notification is necessary.
[40 CFR, Subpart ZZZZ, §63.6590(b)(3)]

New Sources (Commenced construction or reconstruction on or after to Dec 19, 2002)

IC2-2. A new or reconstructed emergency stationary RICE does not have to meet the requirements of this subpart and of Subpart A of this part except for the initial notification requirements of 40 CFR §63.6645(f).
[40 CFR, Subpart ZZZZ, §63.6590(b)(1)(i)]

IC2-3. Permittee shall submit an Initial Notification that includes the information specified in 40 CFR 63.9(b)(2)(i) through (v), and a statement that the new stationary emergency RICE covered by this EUG are subject to limited requirements pursuant to 40 CFR 63.6590(b), including a basis for the determination.
[40 CFR 63, Subpart ZZZZ, §63.6590(b) and 63.6645(f)]

IC2-4. Units installed prior to June 12, 2006, shall operate only during emergency situations as defined at 40 CFR 63.6675. The emergency stationary RICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Permittee shall minimize the required testing, but there is no time

limit on the use of emergency stationary RICE in emergency situations and for routine testing and maintenance. These engines may also operate an additional 50 hours per year in non-emergency situations. Only EUs 7221, 7222, 7223, 7226 and 7227 are subject to these requirements. [40 CFR 63, Subpart ZZZZ, §63.6675]

IC2-5. Units installed on or after June 12, 2006, must comply with requirements specified in 40 CFR §63.6640(f). Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak-shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial agreement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited. [40 CFR 63, Subpart ZZZZ, §63.6675 & §63.6640(f)]

For units with a site rating less than or equal to 500 brake horsepower:

Existing Sources (Commenced construction or reconstruction prior to June 12, 2006)

IC2-6. An existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions must comply with the applicable work practice requirements of Table 2c as follows:
[40 CFR 63, Subpart ZZZZ, §63.6602(a)(1) and Table 2c]

a. Change oil and filter every 500 hours of operation or annually whichever comes first
b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first and replace as necessary.

IC2-7. Existing emergency stationary RICE must be equipped with a non-resettable hour meter. [§63.6625(f)]

IC2-8. Emergency stationary ICE may be operated for the purpose of maintenance checks

and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak-shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial agreement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.

[40 CFR 63, Subpart ZZZZ, §63.6675 & §63.6640(f)]

IC2-9. Continuous compliance for existing stationary CI RICE not subject to any numerical emissions limitations must comply with the following work or management practices as follows: [§63.6640(a) and Table 6]

a. Operating and maintaining the stationary RICE according to the manufacturer's emission related operation and maintenance instructions, OR
b. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

IC2-10. Each existing stationary emergency RICE must be operated and maintained including control devices (if any) according to the manufacturer's emission-related written instructions or according to facility-specific maintenance plan which must provide for the maintenance and operation of the engine in a manner that minimizes emissions to the extent practicable. [40 CFR 63, Subpart ZZZZ, 63.6625(e)]

IC2-11. The permittee shall minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limits apply. [40 CFR 63, Subpart ZZZZ, Table 2a]

New Sources (Commenced construction or reconstruction on or after to Jun 12, 2006)

IC2-12. Stationary RICE reconstructed or for which construction was commenced on or after June 12, 2006, are affected sources subject to 40 CFR 63, Subpart ZZZZ.

[40 CFR 63, Subpart ZZZZ, §63.6590(a)]

IC2-13. An affected source that is a new or reconstructed stationary RICE located at a major source of HAP emissions and is an emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP, or a compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP, must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines. No further requirements apply for such engines under this part. [40 CFR 63, Subpart ZZZZ, §63.6590(c)]

40 CFR 60 SUBPART IIII

Subpart IIII applies only to new stationary compression ignition (diesel) internal combustion engines. The date that construction commences is the date that the engine is ordered by the owner or operator.

IC2-14. Affected sources for owners and operators of stationary CI ICE that commence construction or modification/reconstruction after July 11, 2005 where the stationary CI ICE are: [40 CFR 60 Subpart IIII §60.4200(a)(2) &(3)]

a. Manufactured after April 1, 2006 and are not fire pump engines, or
b. Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

IC2-15. Table 1 of 40 CFR 60 Subpart IIII emission limits apply to pre-2007 model year engines that are not fire pump engines. [40 CFR 60 Subpart IIII §60.4205(a)]

IC2-16. Owners and operators of 2007 model year and later emergency engines that are not fire pump engines must comply with the manufacturer standards specified in 40 CFR §60.4202 for new non-road CI engines, for all pollutants.
[40 CFR 60 Subpart IIII §60.4205(b)]

IC2-17. Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants as listed by engine size and model year.
[40 CFR 60 Subpart IIII §60.4205(c)]

IC2-18. Affected sources under Subpart IIII shall operate and maintain stationary compression ignition internal combustion engine (CI ICE) that achieve the emission standards in 40 CFR §60.4205 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine. [40 CFR 60 Subpart IIII §60.4206]

IC2-19. Owners and operators shall comply with the diesel fuel standards in 40 CFR 80.510(b) for nonroad diesel. [40 CFR 60 Subpart IIII §60.4207 (b)]

IC2-20. Owners and operators must comply with the monitoring requirements in Subparagraph (a) of 40 CFR §60.4209. This requires that the unit be equipped with a non-resettable hour meter prior to startup of the engine. If the diesel unit is equipped with a PM filter, subparagraph (b) requires the installation of a back pressure monitor with a warning system. [40 CFR 60 Subpart IIII §60.4209]

IC2-21. Owner and operator compliance requirements in §60.4211 subparagraph (a) requires that the owner or operator operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions. Subparagraph (b) states that for pre-2007 model year engines or fire pump manufactured prior to the model years in table 3 and must comply with the emission standards in 40 CFR §60.4205(c), compliance must be demonstrated by one of five methods. Tinker AFB shall retain records to demonstrate compliance with one of the options listed therein. For model year 2007, a certified engine must be installed. Maintenance checks and readiness testing is limited to 100 hours per year per subparagraph (e). [40 CFR 60 Subpart IIII §60.4211]

IC2-22. This section specifies testing methods and procedures for performance testing, however "certified" engines with less than 30 liter displacement do not require testing. If performance testing is required, the permittee shall follow the methods and procedures listed in this section. [40 CFR 60 Subpart IIII §60.4212]

IC2-23. The owner or operator of an emergency stationary internal combustion engine is not required to submit an initial notification. Starting with the model years in table 5 of 40 CFR §60.4214, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60 Subpart IIII §60.4214(b)]

IC2-24. If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached. [40 CFR 60 Subpart IIII §60.4214(c)]

The following conditions apply to all units:

IC2-25. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr. [OAC 252:100-19-4]

IC2-26. The permittee shall not allow SO_2 emissions from liquid fuel-burning equipment to exceed 0.8 lbs/MMBtu heat input, three hour average. [OAC 252:100-31-25]

Monitoring, Reporting and Recordkeeping
Scenario 1 (Primary) – Diesel Fuel No. 2

IC2-27. A model number or other acceptable form of permanent (non-removable) identification shall be on each engine. [OAC 252:100-8-6(a)(1)]

IC2-28. Permittee shall keep records of hours of operation for each unit, specifying emergency, maintenance, or non-emergency usage. [OAC 252:100-8-6]

IC2-29. Compliance with the sulfur emission standards shall be fulfilled by using ultra low sulfur diesel oil (0.0015 weight percent or less). [OAC 252:100-8-6(a)(1)(C)]

IC2-30. The permittee shall keep records of operation as listed below. These records shall be retained on-site for a period of at least five years and shall be made available to regulatory personnel upon request. [40 CFR 63 Subpart ZZZZ, OAC 252:100-8-6]

a. Dates, hours, and purpose of operation of the unit (maintenance, testing, or emergency).
b. Fuel records to verify compliance.
c. Corrective action records for PM filter, if so equipped.
d. Manufacturer's engine certification verification, if applicable.
e. Documentation of the engine manufacturer's written operating instructions and procedures.

IC3, IntComb-3, Compression Ignition Internal Combustion Engines > 500-bhp, Subject to 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ, Non-Emergency Units

The permittee is authorized to add or replace non-emergency generators rated ≥ 500-hp subject to the applicable specific conditions for IC-3, per facility-wide specific condition #3.

IC3-1. The permittee shall not allow particulate matter emissions to exceed the emission limits stated in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr. [OAC 252:100-19-4]

IC3-2. This EUG is the total of all diesel-fueled, internal combustion engines > 500-hp installed and operated seasonally in referenced locations. The number, make, model, and serial number of covered engines may be changed without prior notification. No individual engine under this EUG will have a ton per year limit. All engines collectively will have the aggregate limits for each EU shown in Table 1.
[***State enforceable***; OAC 252:100-8-6(a)(1)]

IC3-3. The permittee shall keep records of operation for units as listed below. These records shall be retained on-site for a period of at least five-years and shall be made available to regulatory personnel upon request. [OAC 252:100-8-6 (a)(3)(B)]

a. Fuel usage per generator unit (monthly and calendar year totals).
b. Spreadsheet of emission calculations based on fuel usage and emission data to demonstrate compliance with the EUG emission limits.
c. Hours of operation for each generator unit measured by a non-resettable hour meter.
d. Vendor or manufacturer's emission data for each generator set.

e. O & M records to demonstrate good combustion practices are being used.
f. Records required by NSPS Subpart IIII and NESHAP Subpart ZZZZ.

IC3-4. The permittee shall not allow particulate matter emissions to exceed the emission limits in Appendix C of OAC 252:100, as determined by the heat input rating in MMBtu/hr. Good combustion practices should assure compliance with this limit. [OAC 252:100-19]

IC3-5. The permittee shall not allow SO_2 emissions from liquid fuel-burning equipment to exceed 0.8 lbs/MMBtu heat input, three hour average. Use of fuel meeting Specific Condition 10 standards will assure compliance with this limit. [OAC 252:100-31-25]

40 CFR 60 Subpart IIII

Note: The temporary units on-site are exempted under the referenced definitions in 40 CFR §60.4219. These engines do not meet the definition of stationary internal combustion engines because they are non-road engines, therefore they are not subject to Subpart IIII. [40 CFR 60 Subpart IIII §60.4219]

The following conditions apply if engines qualifying as stationary internal combustion engines are installed at the facility:

IC3-6. The permittee shall ensure that pre-2007 model year engines manufactured after April 1, 2006, or modified or reconstructed after July 11, 2005, comply with the emission standards in Table 1 of 40 CFR 60 Subpart IIII. [40 CFR 60 Subpart IIII, §60.4204(a)]

IC3-7. Engines with 2007 model year and later must comply with the emission standards for new CI engines in 40 CFR §60.4201 for the model year 2007 and later stationary CI ICE, as applicable. [40 CFR 60 Subpart IIII, §60.4204(b)]

IC3-8. Affected sources under 40 CFR 60 Subpart IIII shall operate and maintain stationary compression ignition internal combustion engine (CI ICE) that achieve the emission standards in 40 CFR §60.4204 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine. [40 CFR 60 Subpart IIII, §60.4206]

IC3-9. The permittee shall use only diesel fuel meeting the requirements specified in 40 CFR §60.4207. [40 CFR 60 Subpart IIII, §60.4207]

IC3-10. Engines installed shall comply with the dates specified for applicable model year engines in 40 CFR §60.4208. [40 CFR 60 Subpart IIII, §60.4208]

IC3-11. If the permittee installs an engine equipped with a diesel particulate filter to comply with the emission standards in 40 CFR §60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the operator when the high

backpressure limit of the engine is approached.
[40 CFR 60 Subpart IIII, §60.4209(b)]

IC3-12. If engines are installed which are subject to 40 CFR 60 Subpart IIII emission standards, the permittee shall operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator and approved by the manufacturer. Permittee must meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to the installed engine. [40 CFR 60 Subpart IIII, §60.4211(a)]

IC3-13. Engines subject to 40 CFR §60.4211 shall demonstrate compliance according to one of the methods listed therein. [40 CFR 60 Subpart IIII, §60.4211(b)]

IC3-14. If performance testing is required, then the permittee shall follow the methods and other procedures listed in 40 CFR §60.4212.
[40 CFR 60 Subpart IIII, §60.4211(b)(5)]

IC3-15. If an affected unit is equipped with a diesel particulate filter, the permittee shall keep records of any corrective action taken after the backpressure monitor has notified the operator that the high backpressure limit of the engine is approached.
[40 CFR 60 Subpart IIII, §60.4214(c)]

IC3-16. The permittee shall submit an initial notification for non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified. Required notification details are in subparagraphs of this section. [40 CFR 60.4214(a)]

40 CFR 63 Subpart ZZZZ

Under Subpart ZZZZ, units which commenced construction on or after December 19, 2002, are defined as new sources. Tinker AFB does not own or operate any permanently installed non-emergency RICE that would be subject to this rule. The facility operates only emergency units (generators and fire pump engines rated at ≥ 500-bhp) which have their respective requirements listed under EUG IC2.

Note: Temporary units leased on a seasonal basis are exempted under the referenced definitions in 40 CFR §63.6585. Because these engines meet the definition of non-road engines, they are not subject to 40 CFR 63 Subpart ZZZZ.
[40 CFR 63 Subpart ZZZZ §63.6585(a)]

The following conditions apply if engines that do not qualify as non-road engines are installed at the facility:

IC3-17. New stationary RICE must comply with applicable emission limitations and operating limitations upon start-up. [40 CFR 63 Subpart ZZZZ, §63.6595(a) (3)]

IC3-18. CI stationary RICE shall comply with the emission limitations in 40 CFR 63 Subpart ZZZZ Table 2a and the operating limitations in Table 2b.
[40 CFR 63 Subpart ZZZZ, §63.6600(b)]

IC3-19. During periods of startup emissions limitations for CI stationary RICE in 40 CFR 63 Subpart ZZZZ Table 2a are: [40 CFR 63 Subpart ZZZZ, Table 2a]

a. Reduce CO emissions by 70 percent or more; OR
b. Limit concentration of formaldehyde in the exhaust to 580 parts per billion by volume dry or less at 15 percent O_2.

IC3-20. The permittee shall minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63 Subpart ZZZZ, Table 2a]

IC3-21. If the permittee elects to comply with the emission limitations for CO or formaldehyde using an oxidation catalyst to reduce CO emissions or limit the concentration of formaldehyde in the RICE exhaust, the permittee shall:
[40 CFR 63 Subpart ZZZZ, Table 2b(1)]

a. Maintain catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and
b. Maintain the temperature of stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350°F.

IC3-22. If the permittee elects to comply with the emission limitations for CO or formaldehyde using an oxidation catalyst to reduce CO emissions or limit the concentration of formaldehyde in the RICE exhaust, the permittee shall comply with any operating limitations approved by the Administrator.
[40 CFR 63 Subpart ZZZZ, Table 2b(2)]

IC3-23. This general requirement for compliance with this subpart requires that the permittee be in compliance with emission limitations and operating limitations at all times.
[40 CFR 63 Subpart ZZZZ, §63.6605(a)]

IC3-24. The permittee must operate and maintain any affected source, including air pollution control and monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions.
[40 CFR 63 Subpart ZZZZ, §63.6605(b)]

IC3-25. The permittee shall conduct an initial performance test or any other applicable initial compliance demonstration in 40 CFR 63 Subpart ZZZZ Table 4 within 180 days of the compliance date in 40 CFR §63.6595 and according to the provisions of 40 CFR

§63.7(a)(2). [40 CFR 63 Subpart ZZZZ, §63.6610(a)]

IC3-26. The permittee is not required to conduct an initial performance test on an engine for which a performance test was previously conducted and meets all of the requirements of 40 CFR §63.6610(d). [40 CFR 63 Subpart ZZZZ, §63.6610(d)]

IC3-27. The permittee shall conduct subsequent performance tests as specified in Table 3, if applicable. [40 CFR 63 Subpart ZZZZ, §63.6615]

IC3-28. The permittee shall comply with subsequent performance tests and other procedural requirements listed in this section. [40 CFR 63 Subpart ZZZZ, §63.6620]

IC3-29. If the permittee elects to install a continuous emission monitoring system or a continuous parameter monitoring system as specified in 40 CFR 63 Subpart ZZZZ Table 5, the permittee shall comply with applicable monitoring, installation, operation, and maintenance requirements listed in this section. [40 CFR 63 Subpart ZZZZ, §63.6625]

IC3-30. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in 40 CFR 63 Subpart ZZZZ Tables 2a and 2c. [40 CFR 63 Subpart ZZZZ, §63.6625(h)]

IC3-31. The permittee shall demonstrate initial compliance with each applicable emission and operating limitation that applies according to 40 CFR 63 Subpart ZZZZ Table 5. [40 CFR 63 Subpart ZZZZ, §63.6630(a)]

IC3-32. During the initial performance test, the permittee shall establish each operating limitation in 40 CFR 63 Subpart ZZZZ Table 2b that applies. [40 CFR 63 Subpart ZZZZ, §63.6630(b)]

IC3-33. The permittee shall submit notification of compliance status containing the results of the initial compliance demonstration according to the requirements in 40 CFR §63.6645. [40 CFR 63 Subpart ZZZZ, §63.6630(c)]

IC3-34. The permittee shall monitor and collect data to demonstrate continuous compliance with emission and operating limitations as listed in this section. [40 CFR 63, Subpart ZZZZ §63.6635]

IC3-35. The permittee shall demonstrate continuous compliance with each emission and operating limitation in 40 CFR 63 Subpart ZZZZ Tables 2a and 2b that apply according to methods specified in 40 CFR 63 Subpart ZZZZ Table 6. [40 CFR 63 Subpart ZZZZ, §63.6640(a)]

IC3-36. The permittee shall report each instance that the engine did not meet an emission or

operating limitation in 40 CFR 63 Subpart ZZZZ Tables 2a, 2b, and 8. Note that for new, reconstructed, or rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup are not violations. [40 CFR 63 Subpart ZZZZ, §63.6640(b), (d), and (e)]

IC3-37. The permittee shall comply with notification requirements listed in 40 CFR §63.6645 to include but are not limited to applicable notifications required under 40 CFR 63 Subpart A per 40 CFR 63 Subpart ZZZZ Table 8, initial notification of start-up within 120 days, performance testing notifications, initial compliance demonstrations and Notification of Compliance Status. [40 CFR 63 Subpart ZZZZ, §63.6645]

IC3-38. The permittee shall submit reports as listed and required in 40 CFR §63.6650 which include but are not limited to applicable reports listed in 40 CFR 63 Subpart ZZZZ Table 7, compliance reports, deviation reports, and include information in Title V semi-annual monitoring/compliance reports. [40 CFR 63 Subpart ZZZZ, §63.6650]

IC3-39. The permittee shall maintain records as listed in 40 CFR §63.6655 to verify compliance with applicable emission and operating limitations, copies of all notifications, records of each continuous emission monitoring system or continuous parameter monitoring system, and applicable records in 40 CFR 63 Subpart ZZZZ Table 6. [40 CFR 63 Subpart ZZZZ, §63.6655]

IC3-40. The permittee shall have a start-up, shutdown, and malfunction plan if an engine is equipped with a continuous monitoring system.
[40 CFR 63 Subpart ZZZZ, §63.6665 and 40 CFR Subpart A, §63.6(e)(3)]

ND1, NCDepnt-1, Non-chemical Depainting

Specific Conditions
Scenario 1 (Primary) and Scenario 2 (Advance approval)

ND1-1. The permittee shall operate and maintain the unit according to manufacturer's specifications. During periods of malfunction, substitute materials may be used provided that they minimize organic HAP emissions and are not used for more than 15 days annually. [40 CFR 63, Subpart GG, 63.746(b)(2)]

ND1-2. The permittee shall operate the units in accordance with start-up, shutdown, and malfunction plans. [40 CFR 63, Subpart GG, 63.743(b)]

ND1-3. This EUG includes all non-chemical depainting cleaning operations at the facility. As such, non-chemical depainting operations may be added, removed, and relocated at this facility under advance approval, provided that any such change meets the facility-wide specific conditions in Section A of this permit.
[40 CFR 63, Subpart GG, 63.741(c)]

Compliance Monitoring, Reporting and Recordkeeping
Scenario 1 (Primary) and Scenario 2 (Advance approval)

ND1-4. The permittee shall fulfill notification requirements in 40 CFR §63.9(a)-(e) and (h)-(j) as applicable, and 40 CFR §63.10(a), (b), (d) and (f), recordkeeping and reporting requirements. All recordkeeping and reporting will be conducted in accordance with 40 CFR 63 Subpart A. [40 CFR 63, Subpart GG, 63.753(a)(1)]

ND1-5. The permittee shall submit semiannual reports identifying any new non-chemical depainting techniques used since the last report.
[40 CFR 63, Subpart GG, 63.753(d)(1)(v)]

ND1-6. The permittee shall submit semiannual reports including the required information on the malfunction of non-chemical depainting methods as well as notification of instances when filters/water wash systems were operating outside of specifications.
[40 CFR 63, Subpart GG, 63.753(d)(1)(vi)]

ND1-7. The permittee shall submit semiannual reports of all periods when a depainting operation was not immediately shut down when the pressure drop was outside the specified limits. [40 CFR 63, Subpart GG, 63.753(d)(1)(vii)]

Specific Conditions
Scenario 2 (Advance approval)

ND1-8. The permittee is required to provide initial notification to DEQ for a newly constructed or reconstructed paint booth (or booth/hangar) that is a major source.
[40 CFR 63, Subpart A, 5(b)]

SC1, SrfCoat-1, Aerospace Surface Coating, With Dry Filters

Specific Conditions
Scenario 1 (Primary) – Aerospace Coating Operations

SC1-1. This operating scenario may be implemented by the facility without the need for a permit revision or notification to DEQ. When an operating scenario is changed, the permittee shall record in a log at the facility the scenario under which it is operating.
[OAC 252:100-8]

SC1-2. Transfer of primers and topcoats shall be conducted in accordance with good housekeeping measures, so as to minimize spills.
[40 CFR 63, Subpart GG, 63.745(b)]

SC1-3. Only primers and topcoats meeting the following organic HAP and VOC content limits as applied, may be used: [40 CFR 63, Subpart GG, 63.745(c)]

Category	Organic HAP Content	VOC Content
Primer	≤ 2.9 lbs/gal (less water)	≤ 2.9 lbs/gal (less water)
Topcoat	≤ 3.5 lbs/gal (less water)	≤ 3.5 lbs/gal (less water)

SC1-4. Primers and topcoats shall be applied using an application method or combination of methods as specified in 40 CFR 63.745(f)(1) or (2), including but not limited to brush coating and HVLP spraying, except for exempt situations as listed in 40 CFR 63.745(f)(3). Spray guns shall be operated in accordance with the facility's and/or manufacturers' specifications. [40 CFR 63, Subpart GG, 63.745(f)]

SC1-5. Coating operations shall be performed in a booth equipped with the following, in accordance with applicable standards: [40 CFR 63, Subpart GG, 63.745(g)]

a. Air flow directed downward onto or across the part being coated and exhausted through one or more outlets, and
b. Appropriate (2- or 3-stage) dry filter controls, based on date of installation. The filter system must be maintained in good working order and equipped with a continuously monitored differential pressure gauge. If the pressure drop is outside the specified limits, the coating operation shall be shut down immediately.

NOTE: Listed in 40 CFR 63.745(g)(4) are coating activities exempt from these control requirements, including but not limited to painting activities in an area where it is not technically feasible to paint in a booth. Tinker AFB submitted a list of several SC1 and SC2 operations with a request to be officially exempted by EPA and EPA approved their exemption. DEQ has determined that spraying minor amounts of primer in SC1 and SC2 emission units is therefore permissible.

SC1-6. The permittee shall conduct the handling and transfer of HAP containing waste in a manner that minimizes spills. [40 CFR 63, Subpart GG, 63.748]

SC1-7. The permittee shall use coatings that contain VOCs equal to or below the listed limits. [OAC 252:100-39-47]

SC1-8. This EUG includes all surface coating operations at the facility. As such, surface coating operations may be added, removed, and relocated at this facility under advance approval provided that any such change meets the facility-wide specific conditions in Section A of this permit. [40 CFR 63, Subpart GG, 63.741(c)]

Compliance Monitoring, Reporting and Recordkeeping
Scenario 1 (Primary) – Aerospace Coating Operations

SC1-9. The permittee shall record the pressure drop across the dry particulate filter system at the start of each shift during which coating operations occur. These records shall be retained for at least 5 years from the date of recording.
[40 CFR 63, Subpart GG, 63.752]

SC1-10. The permittee shall submit semiannual reports that identify any instance when a primer or topcoat, as applied, exceeds the applicable organic HAP or VOC content limit specified in 40 CFR §63.745(c). Permittee shall submit annual reports listing the number of times the pressure drop was outside specified limits.
[40 CFR 63, Subpart GG, 63.753]

SC1-11. The permittee shall use coatings that contain VOCs equal to or below the listed limits.
[OAC 252:100-39-47]

Specific Conditions
Scenario 2 (Secondary) – Non-Aerospace Coating Operations

SC1-12. This operating scenario may be implemented by the facility without the need for any permit revision or any notification to DEQ. When an operating scenario is changed, the permittee shall record in a log at the facility the scenario under which it is operating. [OAC 252:100-8]

SC1-13. The permittee shall use coatings that contain VOCs equal to or below the listed limits.
[OAC 252:100-39-47]

Compliance Monitoring, Reporting and Recordkeeping
Scenario 2 (Secondary) – Non-Aerospace Coating Operations

SC1-14. The permittee shall maintain material safety data sheets (or equivalent) documenting volatile organic content of coatings used. [OAC 252:100-39-47]

Specific Conditions
Scenario 3 (Alternate) - SrfCoat-2 or SrfCoat-3

SC1-15. These operating scenarios may be implemented by the facility without the need for any permit revision or any notification to DEQ. When an operating scenario is changed, the permittee shall record in a log at the facility the scenario under which it is operating. [OAC 252:100-8]

Compliance Monitoring, Reporting and Recordkeeping
Scenario 3 (Alternate) - SrfCoat-2 or SrfCoat-3

See applicable requirements under the applicable EUG (SrfCoat-2 or SrfCoat-3).

SC2, SrfCoat-2, Aerospace Surface Coating, Brush or Spray Touch up

Specific Conditions
Scenario 1 (Primary) – Aerospace Coating Operations

SC2-1. Transfer of primers and topcoats shall be conducted in accordance with good housekeeping measures, so as to minimize spills.
[40 CFR 63, Subpart GG, 63.745(b)]

SC2-2. Only primers and topcoats meeting the following organic HAP and VOC content limits as applied, shall be used: [40 CFR 63, Subpart GG, 63.745(c)]

Category	Organic HAP Content	VOC Content
Primer	≤ 2.9 lbs/gal (less water)	≤ 2.9 lbs/gal (less water)
Topcoat	≤ 3.5 lbs/gal (less water)	≤ 3.5 lbs/gal (less water)

SC2-3. The permittee is authorized to conduct coating activities exempted from control requirements in 40 CFR 63.745(g)(4). This includes painting activities in an area where it is not technically feasible to paint in a booth.
[40 CFR 63, Subpart GG, 63.745(g)]

SC2-4. The permittee shall conduct the handling and transfer of HAP containing waste in a manner that minimizes spills. [40 CFR 63, Subpart GG, 63.748]

SC2-5. This EUG includes all surface coating operations at the facility. As such, surface coating operations may be added, removed, and relocated at this facility under advance approval provided that any such change meets the facility-wide specific conditions in Section A of this permit. [40 CFR 63, Subpart GG, 63.741(c)]

SC2-6. The permittee shall use coatings that contain VOCs equal to or below the listed limits.
[OAC 252:100-39-47]

Compliance Monitoring, Reporting and Recordkeeping
Scenario 1 (Primary) – Aerospace Coating Operations

SC2-7. The permittee shall maintain records of the name, VOC content as received and as applied of each primer and topcoat used; maintain records of the mass of organic HAP emitted, all background data and the volume used in each coating category per month for each uncontrolled primer used; and maintain these records for at least 5 years. [40 CFR 63, Subpart GG, 63.752]

SC2-8. The permittee shall submit semiannual reports that identify any instance when a primer or topcoat, as applied, exceeds the applicable organic HAP or VOC content limit specified in §63.745(c). The permittee shall submit annual reports listing the number of times the pressure drop was outside specified limits.
[40 CFR 63, Subpart GG, 63.753]

SC2-9. The permittee shall maintain material safety data sheets (or equivalent) documenting volatile organic contents of coatings used. [OAC 252:100-39-47]

Specific Conditions
Scenario 2 (Secondary) – Non-Aerospace Coating Operations

SC2-10. This operating scenario may be implemented by the facility without the need for any permit revision or any notification to DEQ. When an operating scenario is changed, the permittee shall record in a log at the facility the scenario under which it is operating. [OAC 252:100-8]

SC2-11. The permittee shall use coatings that contain VOCs equal to or below the listed limits. [OAC 252:100-39-47]

Compliance Monitoring, Reporting and Recordkeeping
Scenario 2 (Secondary) – Non-Aerospace Coating Operations

SC2-12. The permittee shall maintain material safety data sheets (or equivalent) documenting organic contents of coatings used. [OAC 252:100-37 & 100-43]

SC2-13. The permittee shall conduct, register, and submit an annual inventory of regulated pollutants. [OAC 252:100-5]

Specific Conditions
Scenario3 (Alternate) – SrfCoat-3

SC2-14. These operating scenarios may be implemented by the facility without the need for any permit revision or any notification to DEQ. When an operating scenario is changed, the permittee shall record in a log at the facility the scenario under which it is operating. [OAC 252:100-8]

Compliance Monitoring, Reporting and Recordkeeping
Scenario3 (Alternate) – SrfCoat-3

See applicable requirements under the EUG SrfCoat-3.

Scenario 4 (Advance approval) - SrfCoat-2 or SrfCoat-3

SC2-15. DEQ has granted advance approval to the permittee to construct and operate any combination of EUs covered by EUGs SC-2, SC-3, and SC-4, as long as the PTE for the additional EUs does not exceed the PSD thresholds. [OAC 252:100-8]

SC3, SrfCoat-3, Surface Coating, Aerospace Specialty Coatings

Specific Conditions
Scenario 1 (Primary)

SC3-1. The permittee shall use specialty coatings that contain VOCs equal to or below the

listed VOC limits as listed in Appendix N. These limits do not apply to coatings applied via aerosol. [OAC 252:100-39-47]

Compliance Monitoring, Reporting and Recordkeeping
Scenario 1 (Primary)

SC3-2. The permittee shall maintain material safety data sheets (or equivalent) documenting volatile organic contents of coatings used. [OAC 252:100-43]

SC3-3. The permittee shall conduct, register, and submit an annual inventory of regulated pollutants. [OAC 252:100-5]

Scenario 2 (Advance approval) - SrfCoat-2 or SrfCoat-3

SC3-4. DEQ has granted advance approval to the permittee to construct and operate any combination of EUs covered by EUGs SC-2, SC-3, and SC-4 so long as the PTE for the additional EUs does not exceed the PSD thresholds. [OAC 252:100-8]

SC4, SrfCoat-4, Non-aerospace Surface Coating

Note: When the EPA promulgates the DLSME NESHAP, many of the emissions unit sources assigned to this EUG will be subject to additional requirements and therefore be redesignated as emission units in SC5.

Specific Conditions
Scenario 1 (Primary)

SC4-1. The permittee shall use coatings that contain VOCs equal to or below the applicable limits in OAC 252:100-37-25. [OAC 252:100[37-25]

Compliance Monitoring, Reporting and Recordkeeping
Scenario 1 (Primary)

SC4-2. The permittee shall maintain material safety data sheets (or equivalent) documenting organic contents of coatings used. [OAC 252:100-37 & 100-43]

SC4-3. The permittee shall conduct, register, and submit an annual inventory of regulated pollutants. [OAC 252:100-5]

SV1, Solvent-1, Cold Cleaning, Non-aerospace

Specific Conditions
Scenario 1 (Primary)

SV1-1. The permittee shall equip the units with a cover/door, operable with one hand, internal or external drainage facilities, and a label summarizing operating practices shall be attached in a conspicuous position. [OAC 252:100-39-42(a)(1)(A),(B,)(C)]

Compliance Monitoring, Reporting and Recordkeeping

Scenario 1 (Primary)

SV1-2. The permittee shall conduct, register, and submit an annual inventory of regulated pollutants. [OAC 252:100-5]

SV2, Solvent-2, Solvent Usage, Spray Gun Pattern Testing

Specific Conditions

Scenario 1 (Primary)

SV2-1. Exemption. Owners or operators of sources that emit less than 100 pounds of VOC per 24-hour day are exempt from the requirements of this section. [OAC 252:100-37-25(c)]

Compliance Monitoring, Reporting and Recordkeeping

Scenario 1 (Primary)

SV2-2. The permittee shall maintain monthly records of solvent usage. [OAC 252:100-43]

SV2-3. The permittee shall conduct, register, and submit an annual inventory of regulated pollutants. [OAC 252:100-5]

TK1, Tank-1, Tanks Subject to Subpart Kb, MOGAS

Specific Conditions

Scenario 1 (Primary)

TK1-1. The permittee shall equip the tank(s) with an internal floating roof. [40 CFR 60, Subpart Kb, 112b(a)(1)]

TK1-2. The permittee shall equip the tank(s) with an internal floating roof and a permanent submerged fill pipe. [OAC 252:100-37-15]

Compliance Monitoring, Reporting and Recordkeeping

Scenario 1 (Primary)

TK1-3. The permittee shall perform a visual inspection of the internal floating roof every 12 months and repairs shall be made prior to filling the tank. The permittee shall perform a visual inspection of the internal floating roof, slotted membranes, gaskets, and sleeve seals each time tank is emptied and degassed, or at least once every 10

years. [40 CFR 60, Subpart Kb, 60.113b(a)]

TK1-4. The permittee shall notify the ODEQ in writing at least 30 days prior to the filling or refilling of each storage vessel for which an internal floating roof inspection is required, to afford the ODEQ the opportunity to have an observer present. If the inspection is not planned and the permittee could not have known about the inspection 30 days in advance of refilling the tank, the permittee shall notify the ODEQ at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone, immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the ODEQ at least 7 days prior to the refilling.
[40 CFR 60, Subpart Kb, 60.113b(a)(5)]

TK1-5. The permittee shall maintain records of the volatile organic liquid (VOL) stored, period of storage and maximum true vapor pressure for 5 years per Title V requirements and keep records of the tank dimensions and capacity for the life of the tank. [40 CFR 60, Subpart Kb, 60.116b(a),(b),(c)]

TK1-6. The permittee shall maintain records of tank design parameters, floating roof inspections, and true vapor pressure of the VOL stored. [OAC 252:100-39-41]

TK1-7. The permittee shall conduct, register, and submit an annual inventory of regulated pollutants. [OAC 252:100-5]

TK2, Tank-2, Tanks Subject only to Oklahoma Air Pollution Control Rules

Specific Conditions
Scenario 1 (Primary)

TK2-1. The permittee shall equip these tanks with a permanent submerged fill pipe or a vapor-recovery system as required in 252:100-37(a)(2). [OAC 252:100-37]

Compliance Monitoring, Reporting and Recordkeeping
Scenario 1 (Primary)

TK2-2. The permittee shall conduct, register, and submit an annual inventory of regulated pollutants. [OAC 252:100-5]

VD1, VaporDeg-1, Vapor Degreasers, Conventional

Specific Conditions
Scenario 1 (Primary)

VD1-1. The permittee shall equip the degreaser with an idling and downtime mode cover, that completely covers the cleaning machine openings when in place and is free of cracks, holes or defects. [40 CFR 63, Subpart T, 63.463(a)(1)(i)]

VD1-2. The permittee shall ensure that the: [40 CFR 63, Subpart T, 63.463(a)(2)-(7)]

a. Degreaser shall have a freeboard ratio of 0.75 or greater;
b. Degreaser shall be equipped with an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minute (11 feet per minute) or less from the initial loading of parts to the removal of parts;
c. Degreaser shall be equipped with a device that shuts off the sump heat if the sump liquid level drops to the sump heater coils;
d. Degreaser shall be equipped with a vapor level control device;
e. Degreaser shall be equipped with a primary condenser; and
f. Each cleaning machine that uses a lip exhaust shall be designed and operated to route all collected solvent vapors through a properly operated and maintained carbon adsorber that meets the requirements of paragraph (e)(2)(vii) of 40 CFR 63.463.

VD1-3. The permittee shall not allow the idling emission to exceed 0.22 kilograms per hour per square meter (0.045 pounds per hour per square foot) of solvent/air interface area. [40 CFR 63, Subpart T, 63.463(b)(2)(ii)]

VD1-4. The permittee shall ensure that: [40 CFR 63, Subpart T, 63.463(d)(1)-(12)]

a. The degreaser cover is in place during the idling and downtime mode unless solvent is removed from the machine or monitoring is being conducted that requires the cover to be open;
b. The parts basket shall occupy no more than 50% of the solvent/air interface area unless the parts are introduced at a speed of 0.9 meters per minute (3 feet per minute) or less;
c. Parts baskets or parts shall not be removed from the machine until dripping stops;
d. During start-up, the primary condenser should be turned on before the sump heater;
e. During shutdown, the sump heater should be turned off and the vapor layer allowed to collapse before the primary condenser is turned off;
f. Solvent shall be transferred using threaded or leak-proof couplings, and the end of the pipe should be below the liquid solvent surface;
g. Solvent cleaning machines shall be maintained and operated according to the manufacturers recommendation or equally effective procedures;
h. Operators will complete and pass the applicable sections of the test of solvent cleaning operating procedures in Appendix A if requested during an inspection;
i. Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers, which may be equipped with a pressure relief device but will not allow liquid solvent to drain from the container; and

j. Sponges, fabric, wood, and paper products shall not be cleaned.

VD1-5. The permittee shall ensure that: [40 CFR 63, Subpart T, 63.463(e)(2)(iv)]

a. Idling mode cover is in place whenever parts are not in the solvent cleaning machine and completely covers the cleaning machine openings when in place;
b. The idling-mode cover is maintained free of cracks, holes, and other defects; and
c. Monthly visual inspections as specified 40 CFR 63 Subpart T 63.466(b)(1) shall be used to determine if the cover is opening and closing properly, completely covers the cleaning machine openings when closed, and is free of cracks, holes, and other defects.

VD1-6. The permittee shall ensure that the unit has a cover or door that can easily be opened or closed without disturbing the vapor zone. Unit shall be equipped with safety switches for the condenser and spray pumps. [OAC 252:100-39-42(b)(1)(A),(B)]

VD1-7. The permittee shall ensure that the unit be equipped with one or more of the following control devices/techniques: [OAC 252:100-39-42(b)(1)(C)]

a. Freeboard ratio of not less than 0.75;
b. Refrigerated chiller;
c. Enclosed design;
d. Carbon adsorber.

VD1-8. The permittee shall ensure that the unit be equipped with a permanent label summarizing the operating requirements in OAC 252:100-39-42(b)(1)(C). [OAC 252: 100-39-42(b)(2)]

VD1-9. The permittee shall: [OAC 252: 100-39-42(b)(2)(A)]

a. Keep cover closed at all times except when degreasing parts;
b. Rack parts to allow full drainage;
c. Move parts in and out at no more than 11 ft per minute;
d. Degrease in the vapor mode at least 30 seconds or until condensation ceases;
e. Tip out pools of VOC on parts before removal;
f. Allow parts to dry within the degreaser for at least 15 seconds or until visually dry;
g. Assure that VOC leaks are immediately repaired or the degreaser is shut down; and
h. Store VOC waste only in closed container.

VD1-10. The permittee shall not: [OAC 252:100-39-42(b)(2)(B)]

a. Degrease porous or absorbent materials such as cloth, leather, wood or rope;
b. Allow workloads to occupy more than half of the degreaser’s open top area;

c. Spray above the vapor level;
d. Allow greater than 20% of VOC to evaporate when disposing of the waste or transferring it to another party;
e. Allow exhaust ventilation to exceed 65 cfm/ft^2 of degreaser open area;
f. Use ventilation fans near the opening; and
g. Allow water to be visually detectable in VOC exiting the water separator.

Monitoring, Reporting and Recordkeeping
Scenario 1 (Primary)

VD1-11. When the unit is operating, the permittee shall perform weekly monitoring using colorimetric tube to ensure that the concentration of organic solvent in the exhaust from this device does not exceed 100 parts per million of any halogenated HAP. If the halogenated HAP solvent concentration in the carbon adsorber exhaust exceeds 100 parts per million, corrective action will be taken so that the exhaust concentration of halogenated HAP solvent is brought below 100 parts per million. The permittee shall ensure that the carbon adsorber bed is not bypassed during desorption. The permittee shall ensure that the lip exhaust is located above the solvent cleaning machine cover so that the cover closes below the lip exhaust level.
[40 CFR 63, Subpart T, 63.463(e)(2)(vii)(A)-(C)]

VD1-12. The monitoring described in specific condition VD1-11 is not required if the unit is empty of halogenated solvent.

VD1-13. The permittee shall comply with the idling emission limit standard. The permittee shall conduct an initial performance test to determine compliance and conduct periodic monitoring (at least annually) to demonstrate ongoing compliance. The permittee shall operate the solvent cleaning machine within parameters identified in the initial performance test. [40 CFR 63, Subpart T, 63.463(f)(1)-(3)]

VD1-14. The permittee shall document potential to emit from all solvent cleaning operations.
[40 CFR 63, Subpart T, 63.465(e)]

VD1-15. The permittee shall: [40 CFR 63, Subpart T, 63.466(c)]

a. Perform measurement of hoist speed by measuring the time it takes the hoist to travel a measured distance;
b. Perform visual inspections on a monthly basis; and
c. If after a year of monitoring there are no exceedances, monitoring may be performed quarterly as long as there are no exceedances.

VD1-16. The permittee shall maintain required records for the lifetime of the machine. The permittee shall maintain the owner's manuals or operating instructions, documentation on the date of installation, and records of the initial performance test demonstrating compliance with the idling emission limit and the monitored parameters during this test and records of the halogenated HAP content of the solvent.

[40 CFR 63, Subpart T, 63.467(a)]

VD1-17. The permittee shall maintain required records of monitoring and corrective actions in electronic or written form for a period of 5 years. The permittee shall also maintain records of annual solvent consumption for the machine for a period of 5 years.
[40 CFR 63, Subpart T, 63.467(b)]

VD1-18. The permittee shall submit initial statement of compliance to the administrator including the test report for the test of idling emissions, a list of the control equipment that will be used to achieve compliance, the parameters that will be monitored, their frequency and the values of these parameters for the first month after the compliance date. [40 CFR 63, Subpart T, 63.468(d)]

VD1-19. The permittee shall submit an annual report (by February 1 each year) including a signed statement that all operators have been trained on the proper operation of the machine and their control devices and have passed a test as specified in 63.463(d)(10). [40 CFR 63, Subpart T, 63.468(f)(1)]

VD1-20. The permittee shall include in the annual report an estimate of solvent consumption for each solvent cleaning machine during the reporting period.
[40 CFR 63, Subpart T, 63.468(f)(2)]

VD1-21. The permittee shall submit an exceedance report on a semiannual basis unless an exceedance occurs. Once an exceedance has occurred, a quarterly reporting format shall be followed until a request to reduce reporting frequency under paragraph (i) of 40 CFR 63.468 is approved. [40 CFR 63, Subpart T, 63.468(h)-(i)]

VD2, FORMERLY "VaporDeg-2, Vapor Degreasers, Vacuum" – NO LONGER IN USE

This EUG once included three vacuum vapor degreasers that previously used perchloroethylene. All vacuum vapor degreasers have been removed or permanently decommissioned. Tinker AFB has no intention of installing any new vacuum vapor degreasers in the foreseeable future. The specific conditions associated with this EUG have been deleted. The EUG, however, will continue to be mentioned in documentation such as the Title V permit to prevent potential confusion when comparing historical operations with conditions existing under this and subsequent permits.

APPENDIX A

SIGNIFICANT COMBUSTION SOURCES LISTED BY EUG **(Data current as of 17 September 2009)**

G_ID	EU ID	DESCRIPTION	BUILDING	LOCATION	ORGANIZATION	EFFEC DA
Comb-1	0081	BOILER #1, NATURAL GAS/ #2 FUEL OIL, 85.3 MMBtu/hr	2212	NORTH CENTRAL BOILER PLANT	72 ABW/CEC	19
Comb-1	0082	BOILER #2, NATURAL GAS/ #2 FUEL OIL, 85.3 MMBtu/hr	2212	NORTH CENTRAL BOILER PLANT	72 ABW/CEC	19
Comb-1	0083	BOILER #3, NATURAL GAS/ #2 FUEL OIL, 83.9 MMBtu/hr	2212	NORTH CENTRAL BOILER PLANT	72 ABW/CEC	19
Comb-2	0061	BOILER #1, NATURAL GAS/ #2 FUEL OIL, 121 MMBtu/hr	3001	SOUTH EAST PART OF THE BUILDING	72 ABW/CEC	19
Comb-2	0062	BOILER #2, NATURAL GAS/ #2 FUEL OIL, 121 MMBtu/hr	3001	SOUTH EAST PART OF THE BUILDING	72 ABW/CEC	19
Comb-4	0051	BOILER, NATURAL GAS/ #2 FUEL OIL, 20 MMBtu/hr IDLE	821	NAVY, EAST SIDE OF PLANT	72 ABW/CEC	19
Comb-4	0052	BOILER, NATURAL GAS/ #2 FUEL OIL, 20 MMBtu/hr IDLE	821	NAVY	72 ABW/CEC	19
Comb-4	0065	BOILER #5, NATURAL GAS/ #2 FUEL OIL, 75 MMBtu/hr	3001	SOUTH EAST PART OF THE BUILDING	72 ABW/CEC	MA
Comb-5	0053	BOILER, NATURAL GAS/ #2 FUEL OIL, 5.6 MMBtu/hr	821	NAVY	72 ABW/CEC	19
Comb-5	0054	BOILER, NATURAL GAS/ #2 FUEL OIL, 5.6 MMBtu/hr	821	NAVY	72 ABW/CEC	19
Comb-6	0041	BOILER, NATURAL GAS, 8.92 MMBtu/hr	964	Boiler Plant	72 ABW/CEC	19
Comb-6	0042	BOILER, NATURAL GAS, 9.68 MMBtu/hr	964	Boiler Plant	72 ABW/CEC	20
Comb-6	0100	FURNACE # 1, PROCESS AIR HEATER, 14 MMBtu/hr	200	SE SIDE	76 MSG/MXCVA	~ 1
Comb-6	0101	FURNACE # 2, PROCESS AIR HEATER, 14 MMBtu/hr	200	SE SIDE	76 MSG/MXCVA	~ 1
Comb-7	0063	BOILER #3, NATURAL GAS/ #2 FUEL OIL, 121 MMBtu/hr	3001	SOUTH EAST PART OF THE BUILDING	72 ABW/CEC	NO
Comb-8	0015	BOILER, NATURAL GAS/ #2 FUEL OIL, 14.3 MMBtu/hr	208	BOILER PLANT	72 ABW/CEC	20
Comb-8	0016	BOILER, NATURAL GAS/ #2 FUEL OIL, 14.3 MMBtu/hr	208	BOILER PLANT	72 ABW/CEC	20
Comb-9	0011	BOILER, NATURAL GAS/ #2 FUEL OIL, 116 MMBtu/hr	208	BOILER PLANT	72 ABW/CEC	19
Comb-9	0012	BOILER, NATURAL GAS/ #2 FUEL OIL, 116 MMBtu/hr	208	BOILER PLANT	72 ABW/CEC	19
Comb-9	0013	BOILER, NATURAL GAS/ #2 FUEL OIL, 116 MMBtu/hr	208	BOILER PLANT	72 ABW/CEC	19
Comb-9	0014	BOILER, NATURAL GAS/ #2 FUEL OIL, 116 MMBtu/hr	208	BOILER PLANT	72 ABW/CEC	19
Comb-9	0031	BOILER, NATURAL GAS/ #2 FUEL OIL, 29 MMBtu/hr	5802	NORTH SIDE, WEST	72 ABW/CEC	19
Comb-9	0032	BOILER, NATURAL GAS/ #2 FUEL OIL, 29 MMBtu/hr	5802	NORTH SIDE, EAST	72 ABW/CEC	19
Comb-10	0091	BOILER #1, NATURAL GAS, 187.5 MMBtu/hr	9301	Tinker Aerospace Complex Boiler Plant	72 ABW/CEC	
Comb-10	0092	BOILER #1, NATURAL GAS, 187.5 MMBtu/hr	9301	Tinker Aerospace Complex Boiler Plant	72 ABW/CEC	

APPENDIX A

SIGNIFICANT COMBUSTION SOURCES LISTED BY EUG **(Data current as of 17 September 2009)**

G_ID	EU ID	DESCRIPTION	BUILDING	LOCATION	ORGANIZATION	EFFEC DA
Comb-10	0093	BOILER #3, NATURAL GAS/ LANDFILL GAS, 191 MMBtu/hr	9301	Tinker Aerospace Complex Boiler Plant	72 ABW/CEC	
Comb-1	5289	DIESEL GENERATORS (<500 BHP), TEMPORARY	2101	various	MXCYBA/B/C	SEAS
Comb-2	7210	FIRE PUMP ENGINE: DIESEL	7017	west of building	72 ABW/CEC	20
Comb-2	7221	EMERGENCY GENERATOR, 2000 kW: DIESEL	1083	SOUTH EAST CORNER	72 ABW/CEC	SEP
Comb-2	7222	EMERGENCY GENERATOR, 2000 kW: DIESEL	1083	SOUTH EAST CORNER	72 ABW/CEC	SEP
Comb-2	7223	EMERGENCY GENERATOR, 2000 kW: DIESEL	1083	SOUTH EAST CORNER	72 ABW/CEC	SEP
Comb-2	7226	EMERGENCY GENERATOR, 670 kW: DIESEL	3001	3001-G	72 ABW/CEC	26 JU
Comb-2	7227	EMERGENCY GENERATOR, 350 kW: DIESEL	996	SOUTH FUEL YARD NEAR BLDG 996	72 ABW/CE	est M
Comb-2	7229	EMERGENCY GENERATOR, 100 kW: GENERAC DIESEL	5811	TELEPHONE SWITCH	72 ABW/CE	FE
Comb-2	7230	EMERGENCY GENERATOR, 30 kW: DIESEL	42	NAVAID	72 ABW/CE	JA
Comb-3	5642	DIESEL GENERATORS, LARGE (> 500 BHP), TEMPORARY	2102,2211,3705,3703	various	76 MXSS/MXDEA	SEAS

APPENDIX B

SIGNIFICANT NON-COMBUSTION SOURCES LISTED BY EUG (Data current as of 17 September 200

UG_ID	EU ID	DESCRIPTION	BUILDING	LOCATION	ORGANIZATION	EFFE D
est-1	5015	FUEL COMPONENT TESTING OPERATIONS	3108	NORTH END OF BLDG	MXCCCB	1943
est-1	5415	FUEL COMPONENT TESTING OPERATIONS	3902	throughout building	552 CMMXS/MXDPAB	1995
est-1	5417	FUEL COMPONENT TESTING OERATIONS	3907	MULTIPLE VENTS WITHIN BUILDING	MXCCCB	Est Ja
nDpnt-1	2031	DEPAINTING OPERATIONS, E-3 AIRCRAFT, NON-HAP	2280	PAINT HANGAR, NORTH AND SOUTH DOCK	MXACCB	JUL 1
nDpnt-1	2154	DEPAINTING OPERATIONS, AIRCRAFT, NON-HAP	3228	ONE DOCK	MXACCB	JUN 0
nDpnt-1	2405	AIRCRAFT DEPAINTING, NON-HAP STRIPPING	2122	SOUTH BAY, EAST DOCK	MXACCA	PRE 1
nDpnt-1	2412	AIRCRAFT DEPAINTING, ZERO-HAP STRIPPER	2122	SOUTH BAY, CENTER AND WEST DOCK	MXACCA	JUL 1
nDpnt-1	2435	AIRCRAFT DEPAINTING, NON-HAP STRIPPING	3228	DOCK,ASF	MBCCA	JUN 0
nDpnt-1	2540	DEPAINTING OUTJOBS, NON-HAP	BASEWIDE		MAB	
nDpnt-2	2032	AIRCRAFT DEPAINTING, HAP-CONTAINING STRIPPER	2280	PAINT HANGAR, NORTH AND SOUTH DOCK	MBCCB	PRE 1
nDpnt-2	2052	AIRCRAFT DEPAINTING, HAP-CONTAINING STRIPPER	2122	SOUTH BAY, EAST DOCK	MXACCA	PRE 1
nDpnt-2	2053	AIRCRAFT DEPAINTING, HAP-CONTAINING STRIPPER	2122	SOUTH BAY, CENTER AND WEST DOCK	MXACCA	PRE 1
nDpnt-2	2437	AIRCRAFT DEPAINTING, HAP-CONTAINING STRIPPER	3228	DOCK,ASF	MBCCA	JUN 0
nDpnt-2	2541	DEPAINTING OUTJOBS, HAP-CONTAINING STRIPPER	BASEWIDE		MAB	
nDpnt-2	3062	DEPAINTING OUTJOBS, HAP-CONTAINING STRIPPER	230	ALL DOCKS	EMS/MXMFS	
nDpnt-2	3317	AIRCRAFT DEPAINTING	820	HANGAR	CSCW-1 NAVY	AUG
nDpnt-2	3846	AIRCRAFT PARTS DEPAINTING	1030	HANGAR	507 MOF/MXOOL	AUG
nDpnt-3	2051	AIRCRAFT DEPAINTING, HAP-CONTAINING STRIPPER	2280	PAINT HANGAR, NORTH AND SOUTH DOCK	MXACCB	PRE 1
nDpnt-3	2153	DEPAINTING OPERATIONS, PARTS	3228	ONE DOCK	MXACCB	JUN 0
nDpnt-3	2406	AIRCRAFT DEPAINTING, HAP-CONTAINING STRIPPER	2122	SOUTH BAY, EAST DOCK	MXACCA	PRE 1
nDpnt-3	2413	AIRCRAFT DEPAINTING, HAP-CONTAINING STRIPPER	2122	SOUTH BAY, CENTER AND WEST DOCK	MXACCA	PRE 1
nDpnt-3	2436	PARTS DEPAINTING WITH HAP-CONTAINING STRIPPER	3228	DOCK,ASF	MBCCA	JUN 0
nDpnt-3	2542	DEPAINTING OUTJOBS, PARTS	BASEWIDE		MAB	
nDpnt-3	2621		2122	Center dock, post A40	76 AMXG	14 Ma
nDpnt-3	3036	PARTS DEPAINTING (HAP) - IDLE	289	PAINT BOOTH AND HANGAR	EMS/MXMFS	PRIO 1998
nDpnt-3	3053	SPOT DEPAINTING, AGE AND AIRCRAFT PARTS ONLY	289	PAINT BOOTH/ HANGAR	EMS/MXMFS	~1979
nDpnt-3	3316	PARTS DEPAINTING WITH HAP-CONTAINING STRIPPER	820	HANGARS VQ-3, VQ-4	CSCW1N415	PRIO 1998
nDpnt-3	3407	PARTS DEPAINTING WITH HAP-CONTAINING STRIPPER	1068	ROOM 122, PAINT BOOTH	507 MXS/LGMFC	PRIO 1998
nDpnt-3	4446	CHEMICAL PAINT REMOVAL TANK	3221		547 PMXS/MXDRBH	2009
nDpnt-3	4690	CHEMICAL PAINT REMOVAL TANK	3001	B-103	548 PMXS/MXDVA	2009
nDpnt-3	4691	CHEMICAL PAINT REMOVAL TANK	3001	B-103	548 PMXS/MXDVA	2009
nDpnt-3	4692	CHEMICAL PAINT REMOVAL TANK	3001	B-103	548 PMXS/MXDVA	2009
nDpnt-3	4693	CHEMICAL PAINT REMOVAL TANK	3001	B-103	548 PMXS/MXDVA	2009
nDpnt-3	5017	STRIPPING BOOTH, RADOMES	2211	E-7	MXCYDC	1969
nDpnt-3	5052	STRIPPING BOOTH, AIRCRAFT PARTS	9001	P42	551 CMMXS/MTBDG (?)	Augu

APPENDIX B

SIGNIFICANT NON-COMBUSTION SOURCES LISTED BY EUG (Data current as of 17 September 200

UG_ID	EU ID	DESCRIPTION	BUILDING	LOCATION	ORGANIZATION	EFFE D
nDpnt-3	5053	STRIPPING BOOTH, AIRCRAFT PARTS	9001	P42	551 CMMXS/MTBDG (?)	Augu
nDpnt-3	5560	HEATED PARTS DEPAINTING TANK	3001	Ha-50	552 CMMXS/MXDRAD	~1993
nDpnt-3	5600	HEATED PARTS DEPAINTING TANK	3705	G-32 (Bay E)	551 CMMXS/MXDPAC	FEB 2
mium-1	4416	CHROMIUM ELECTROPLATING OPERATIONS	3001	M-61, AREA 2	MXPCCA	OCT
lush-1	2004	COLD CLEANING TANK	2121	SOUTH DOCK, POST A10 SOUTH WALL	MXABF	PRE 1
lush-1	2116	FLUSH CLEANING	2122	B-1 PDM Dock	MXABB	2009
lush-1	2500	COLD CLEANING TANK, 15 GAL, B-1 LANDING GEAR	2122	F-40 NORTH DOCK	MXABB	Prior
lush-1	2501	COLD CLEANING TANK, FLUSH CLEANING	3001	X-53	564 AMXS/MXDPAC	Prior
lush-1	2504	CLEANING TANK, FLUSH CLEANING	3001	Y-6	564 AMXS/MXDPAE	2009
lush-1	2552	COLD CLEANING UNIT	3705	A-30 SW CORNER	76AMXG\MXAATB	MAY
lush-1	2555	COLD CLEANING PARTS WASHER	3001	X-49	MABATA	16 SE
lush-1	2600	PARTS WASHING TANK, AIRCRAFT PARTS	3001	Y-21	564 AMXS/MXDPAE	NOV
lush-1	2601	PARTS WASHING TANK, AIRCRAFT PARTS	3001	Y-38	564 AMXS/MXDPAE	NOV
lush-1	2602	FLUSH CLEANING OF AIRCRAFT PARTS	2136	B-15	566 AMXS/MXDPAA	MAR
lush-1	3049	AQUEOUS PARTS WASHER	230	HYDRAULIC SHOP, ROOM SE-145	552 CMS/MXMCP	~1979
lush-1	3304	COLD CLEANING TANKS, TWO	825	NAVY/BOEING	CSCW1/N415	1993
lush-1	3400	COLD CLEANING TANK, 165 GAL	1041	WEST WALL	507 MS/LGMAP	1995
lush-1	3405	COLD CLEANING TANK, 50 GAL, GSE FILTERS	1070	ROOM 106	507 MXS/LGMG	Prior
lush-1	3451	COLD CLEANING TANK, 25 GAL	1041	ROOM 6 BEARING ROOM	507 MS/LGMSA	Prior
lush-1	3452	COLD CLEANING TANK, 10 GAL	1041	ROOM 6 BEARING ROOM	507 MS/LGMSA	1995
lush-1	3734	COLD CLEANING TANK , 15 GAL	260	C-6 (east end of bldg)	OLTK/L30	1996
lush-1	3841	PARTS WASHING TANK, AIRCRAFT PARTS	1041	NE CORNER	507MXS/HYDR	OCT
lush-1	4046	COLD CLEANING TANK, AGITATED	3221	M-14	547 PMXS/MXDRAA	1989
lush-1	4055	COLD CLEANING TANK	3001	C-84 (inside Seal Room)	548 PMXS/MXDRCDB	JAN 1
lush-1	4155	COLD CLEANING TANK	3001	W-83 (inside Lapping Room)	544 PMXS/MXDPABB	JAN 1
lush-1	4188	PRESSURE SPRAY WASHER	3001	L-105	548 PMXS/MXDVAAA	DEC
lush-1	4190	PRESSURE SPRAY WASHER	3001	C-101	548 PMXS/MXDVAAA	DEC
lush-1	4191	PRESSURE SPRAY WASHER	3001	C-101	548 PMXS/MXDVAAA	Prior
lush-1	4207	PRESSURE SPRAY WASHER	3221	M-13	547 PMXS/MXDRAA	Prior
lush-1	4226	PRESSURE SPRAY WASHER	3001	E-91	548 PMXS/MXDRACC	Prior
lush-1	4428	CLEANING TANK	3001	B-103	548 PMXS/MXDVA	DEC
lush-1	4447	CLEANING TANK - AQUEOUS CLEANING SOLVENT	3221		547 PMXS/MXDRBH	2009
lush-1	4448	CLEANING TANK - AQUEOUS CLEANING SOLVENT	3221		547 PMXS/MXDRBH	2009
lush-1	4449	CLEANING TANK - AQUEOUS CLEANING SOLVENT	3221		547 PMXS/MXDRBH	2009
lush-1	4468	ULTRASONIC CLEANING TANK	3001	W-83 (inside Lapping Room)	544 PMXS/MXDPABB	Prior
lush-1	4470	GAS PATH AND EXTERIOR JET ENGINE CLEANING	3703	SOUTH WEST SIDE OF BUILDING	MXPATAA	Prior
lush-1	4471	GAS PATH AND EXTERIOR JET ENGINE CLEANING	3234		MAE-MXPAT	Prior
lush-1	4578	FLUSH CLEANING BOOTH	3001	X-53	545 PMXS/MXDPAB	AUG
lush-1	4582	SPRAY BOOTH, STEAM CLEANING AND HAND WIPE	3001	X-53	545 PMXS/MXDPAB	JAN 2
lush-1	4598	COLD CLEANING PARTS WASHER	3001	Y-77	544 PMXS/MXDPAA	AUG
lush-1	4608	PARTS WASHER, FLUSH CLEANING	3001	X-83	544 PMXS/MXDPAA	OCT
lush-1	4613	PARTS WASHER, FLUSH CLEANING	3001	X-77	544 PMXS/MXDPAA	2006
lush-1	4614	PARTS WASHER, FLUSH CLEANING	3705	STOCK ROOM C, E-18	545 PMXS/MXPDAB	MAR
lush-1	4615	PARTS WASHER	3001	X-85	544 PMXS/MXDPAA	MAR
lush-1	4618	POWER WASHER	3001	X-91	544 PMXS/MXDPAC	AUG
lush-1	4639	FLUSH CLEANING BOOTH	3705	E-18	545 PMXS/MXDPAB	OCT

APPENDIX B

SIGNIFICANT NON-COMBUSTION SOURCES LISTED BY EUG **(Data current as of 17 September 200**

UG_ID	EU ID	DESCRIPTION	BUILDING	LOCATION	ORGANIZATION	EFFE D
lush-1	4663	PARTS WASHER USED TO CLEAN AIRCRAFT PARTS	3001	W-100	544 PMXS/MXDPAA	JAN (
lush-1	4664	PARTS WASHER USED TO CLEAN AIRCRAFT PARTS	3001	U-83	544 PMXS/MXDPABB	JAN (
lush-1	4665	PARTS WASHER USED TO CLEAN AIRCRAFT PARTS	3001	V-109	544 PMXS/MXDPAB	JAN (
lush-1	4666	PARTS WASHER USED TO CLEAN AIRCRAFT PARTS	3001	V-107	544 PMXS/MXDPAB	JAN (
lush-1	4667	PARTS WASHER USED TO CLEAN AIRCRAFT PARTS	3001	P-80	544 PMXS/MXDPAB	JAN (
lush-1	4674	PARTS WASHER, AEROSPACE FLUSH CLEANING	3001	Y-94	544 PMXS/MXDPAA	JUL (
lush-1	4676	COLD CLEANING TANK	3001	W83 (inside Lapping Room)	544 PMXS/MXDPABB	2008
lush-1	4677	Power Washer (Flush Cleaning)	3001	J-85	548 PMXS/MXDRCAC	2008
lush-1	4678	Power Washer (Flush Cleaning)	3001	Q-97	544 PMXS/MXDPABF	
lush-1	4679	Power Washer (Flush Cleaning)	3001	W-87	544 PMXS/MXDPA	2008
lush-1	4680	Power Washer (Flush Cleaning)	3001	Q-86	544 PMXS/MXDPAB	2008
lush-1	4684	CLEANING TANK - AQUEOUS CLEANING SOLVENT	3001	B-103	548 PMXS/MXDVA	2009
lush-1	4685	CLEANING TANK - AQUEOUS CLEANING SOLVENT	3001	B-103	548 PMXS/MXDVA	2009
lush-1	4686	CLEANING TANK - AQUEOUS CLEANING SOLVENT	3001	B-103	548 PMXS/MXDVA	2009
lush-1	4687	CLEANING TANK - AQUEOUS CLEANING SOLVENT	3001	B-103	548 PMXS/MXDVA	2009
lush-1	4688	CLEANING TANK - AQUEOUS CLEANING SOLVENT	3001	B-103	548 PMXS/MXDVA	2009
lush-1	4689	CLEANING TANK - AQUEOUS CLEANING SOLVENT	3001	B-103	548 PMXS/MXDVA	2009
lush-1	5011	THREE-SINK AIRCRAFT PARTS CLEANING UNIT	200	NORTH SECTION, CLEAN ROOM	550 CMXS/MXDPAA	1983
lush-1	5032	COLD CLEANING TANK	2210	LC#3, Post B-3	552 CMMXS/MXDPAC	2009
lush-1	5033	COLD CLEANING TANK	2210	LEAN CELL #3	MNMCC	Prior
lush-1	5035	PRESSURE SPRAY WASHER	2210	Lean Cell #1	552 CMMXS/MXDPAC	2009
lush-1	5036	PRESSURE SPRAY WASHER	2210	Lean Cell #3	552 CMMXS/MXDPAC	2009
lush-1	5043	COLD CLEANING TANK, IDLE	3001	N-56	MXCCCA	Prior
lush-1	5046	FLUSH BOOTHS, THREE	3001	Ha-51, FLUSH ROOM (PBA ROOM, TF33 ROOM)	552 CMMXS/MXDRAD	Prior
lush-1	5064	COLD CLEANING TANK	3001	U-39	MXCCFB	Prior
lush-1	5069	COLD CLEANING TANKS, TWO	3001	V-45	MXCCF	Prior
lush-1	5074	COLD CLEANING TANK	3001	Q-49	552 CMMXS/MXDPAA	Prior
lush-1	5078	COLD CLEANING SOLVENT SPRAY BOOTH	3001	R-49	552 CMMXS/MXDPAA	Prior
lush-1	5082	CLEANING PROCESS TANK	214		MXCVAFH	2009
lush-1	5157	COLD CLEANING TANK	230	Z-10	MXCCME	Prior
lush-1	5187	COLD CLEANING SOAK TANK AND CLEANING CABINET	3001	S-39	552 CMMXG/MXDPBB	1994
lush-1	5189	COLD CLEANING SOAK TANK AND CLEANING CABINET	3001	T-43	MXCCFB	Prior
lush-1	5235	PRESSURE SPRAY WASHER	2210	WEST OF D-2	MNMCC	Prior
lush-1	5243	PRESSURE SPRAY WASHER	2210	E-12	MNMCC	Prior
lush-1	5258	COLD CLEANING LINE	3001	BEARING SHOP	MXCCCA	Prior
lush-1	5261	PROCESS TANK, CLEAN ROOM TANK 11	3001	N-53	MXCCCA	1988
lush-1	5291	CLEAN FLUSH OPERATIONS	2101	INSIDE SANDING WASH BOOTH	MXCYBA/B/C	MAY
lush-1	5321	INSULATION REMOVAL, FLUSH CLEANING	3001	T-43	MXCCFB	
lush-1	5341	COLD CLEANING OPERATIONS	3001	BEARING SHOP	MXCCCA	

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SIGNIFICANT NON-COMBUSTION SOURCES LISTED BY EUG **(Data current as of 17 September 200**

UG_ID	EU ID	DESCRIPTION	BUILDING	LOCATION	ORGANIZATION	EFFE D
lush-1	5503	COLD CLEANING PROCESS TANK	214		MXCVAFH	Prior
lush-1	5504	COLD CLEANING TANK	200	NORTH SECTION OF BLDG: CLEANING	550 CMXS/MXDPAA	Prior
lush-1	5507	PRESSURE SPRAY WASHER GLOVE BOX	200		550 CMXS/MXDPAA	Prior
lush-1	5508	PROCESS TANK, FLUSH CLEANING	200		550 CMXS/MXDPAA	Prior
lush-1	5520	CLEANING TANK, ULTRASONIC: DETERGENT	3001	U-37	552 CMMXS/MXDPBB	Prior
lush-1	5563	COLD CLEANING TANK	200	NORTH SECTION OF BLDG: CLEANING	550 CMMXS/MXDPAA	MAY
lush-1	5573	COLD CLEANING TANK	200	North Section, Clean Room	550 CMMXS/MXDPAA	2003
lush-1	5574	COLD CLEANING TANK	200	North Section, Clean Room	550 CMMXS/MXDPAA	2003
lush-1	5575	COLD CLEANING TANK	200	North Section, Clean Room	550 CMMXS/MXDPAA	2003
lush-1	5576	COLD CLEANING TANK	200	North Section, Clean Room	550 CMMXS/MXDPAA	2003
lush-1	5577	COLD CLEANING TANK	200	North Section, Clean Room	550 CMMXS/MXDPAA	
lush-1	5578	ULTRASONIC CLEANER	200	North Section, Clean Room	550 CMMXS/MXDPAA	
lush-1	5581	COLD CLEANING TANK	214	CLEAN ROOM	76 CMXG/MXCVAFH	
lush-1	5584	FLUSH CLEANING UNIT	214	CLEAN ROOM	76 CMXG/MXCVAFH	
lush-1	5585	STEAM CLEANER, HURRISAFE	3705	G-33 (Bay E)	551 CMMXS/MXDPAC	
lush-1	5603	AIRCRAFT PARTS FLUSH CLEANING	200	NORTH SECTION, CLEAN ROOM	550 CMMXS/MXDPAA	FEB (
lush-1	5604	AIRCRAFT PARTS FLUSH CLEANING	200	NORTH SECTION, CLEAN ROOM	550 CMMXS/MXDPAA	FEB (
lush-1	5609	GLOVE BOX CLEAN FLUSH UNIT	200	NORTH CLEANING ROOM	550 CMXS/MXDPAA	MAR
lush-1	5610	GLOVE BOX CLEAN FLUSH UNIT	200	NORTH CLEANING ROOM	550 CMXS/MXDPAA	MAR
lush-1	5615	SOLVENT TANK	2210	D-7	MNMCC	Prior
lush-1	5616	SOLVENT TANK	2210	D-7	MNMCC	2001
lush-1	5617	COLD CLEANING TANK	2210	D,E-7	MNMCC	Prior
lush-1	5618	PARTS WASHER	2210	LANDING GEAR/TIRE SHOP	MNMCC	Prior
lush-1	5619	SOLVENT TANK	2210	LEAN CELL #3	MNMCC	2000
lush-1	5620	SOLVENT TANK	2210	LEAN CELL #3	MNMCC	2000
lush-1	5621	HYDRAULIC FLUSH STAND	2210	LEAN CELL #3	MNMCC	Prior
lush-1	5622	GLOVE BOX FLUSH CLEANING UNIT	2210	LEAN CELL #3	MNMCC	Prior
lush-1	5623	COLD CLEANING TANK	2210	LEAN CELL #3, B-5	MNMCC	Prior
lush-1	5624	COLD CLEANING TANK	2210	LEAN CELL #2	MNMCC	Prior
lush-1	5625	PARTS WASHER	2210	LEAN CELL #2	MNMCC	2000
lush-1	5626	SOLVENT TANK	2210	LEAN CELL #2	MNMCC	2000
lush-1	5627	COLD CLEANING TANK	2210	LEAN CELL #2	MNMCC	Prior
lush-1	5628	SOLVENT TANK	2210	LEAN CELL #2	MNMCC	2000
lush-1	5629	GLOVE BOX FLUSH CLEANING UNIT	2210	LEAN CELL #1	MNMCC	Prior
lush-1	5630	SOLVENT TANK	2210	LEAN CELL #1	MNMCC	2000
lush-1	5631	PARTS WASHER	2210	LEAN CELL #1	MNMCC	2000
lush-1	5632	COLD CLEANING TANK	2210	LEAN CELL #1	MNMCC	Prior
lush-1	5633	HYDRAULIC FLUSH STAND	2210	LEAN CELL #1	MNMCC	Prior
lush-1	5634	COLD CLEANING TANK	2210	LEAN CELL #1	MNMCC	Prior
lush-1	5635	COLD CLEANING TANK	2210	TEST CELL AREA	MNMCC	Prior
lush-1	5637	COLD CLEANING TANK	3001	N-55 RM 111	MXDPAA	PRIO 1998
lush-1	5639	COLD CLEANING GLOVE BOX	3001	N-55 RM 111	MXDPAA	PRIO 1998
lush-1	5641	COLD CLEANING TANK	3001	N-55 RM 111	MXDPAA	PRIO 1998
lush-1	5670	OPEN BOOTH FOR CLEANING BOOM PARTS	3705	G-31 (Bay E)	551 CMMXS/MXDPAC	OCT
lush-1	5675	COLD CLEANING TANK	3001	Q-49	552 CMMXS/MXDRAD	Dec 2
lWipe-1	2001	HAND WIPE CLEANING OPERATIONS	2121	EAST SIDE OF BLDG, CENTER	MXABF	PRE 1

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SIGNIFICANT NON-COMBUSTION SOURCES LISTED BY EUG (Data current as of 17 September 200

UG_ID	EU ID	DESCRIPTION	BUILDING	LOCATION	ORGANIZATION	EFFE D
Wipe-1	2033	HAND WIPE CLEANING OPERATIONS	2280	PAINT HANGAR, NORTH AND SOUTH DOCK	MXACCB	PRE 1
Wipe-1	2100	HAND WIPE CLEANING OPERATIONS	2121	NORTH AND SOUTH DOCKS	MXABF	PRE 1
Wipe-1	2112	HAND WIPE CLEANING OPERATIONS	2122	B-1 MAINTENANCE/EGRESS	MXABB	PRE 1
Wipe-1	2123	HAND WIPE CLEANING OPERATIONS	2136	E-3 MAINTENANCE HANGAR AREA AND BACK SHOP	MXACE	PRE 1
Wipe-1	2127	HAND WIPE CLEANING OPERATIONS	240	BOTH DOCKS	MABATB	PRE 1
Wipe-1	2140	HAND WIPE CLEANING OPERATIONS	3102	KC-135 POST DOCK, NORTH	MABAT	PRE 1
Wipe-1	2150	HAND WIPE CLEANING OPERATIONS	3225	NEW PAINT FACILITY	MXACCB	PRE 1
Wipe-1	2231	HAND WIPE CLEANING OPERATIONS, IDLE	3105	ONE DOCK	MABAT	PRE 1
Wipe-1	2238	HAND WIPE CLEANING OPERATIONS	230	TEXAS TOWER DOCK	MABCCA	PRE 1
Wipe-1	2402	HAND WIPE CLEANING OPERATIONS	2122	SOUTH BAY, EAST DOCK	MXACCA	PRE 1
Wipe-1	2415	HAND WIPE CLEANING OPERATIONS	2122	SOUTH BAY, CENTER AND WEST DOCK	MXACCA	PRE 1
Wipe-1	2421	HAND WIPE CLEANING OPERATIONS	3001	Y-16, SOUTH MOVING LINE	72AMXG	PRE 1
Wipe-1	2430	HAND WIPE CLEANING OPERATIONS	2121	NE PART OF BLDG	MXACCB	Prior
Wipe-1	2432	HAND WIPE CLEANING OPERATIONS	289	HANGAR	EMS/MXMFS	MAY
Wipe-1	2439	HAND WIPE CLEANING OPERATIONS	3228	DOCK,ASF	MBCCA	JUN (
Wipe-1	2533	HAND WIPE CLEANING OPERATIONS	FLIGHTLINE		MAB	
Wipe-1	2544	HAND WIPE CLEANING OPERATIONS	2122	SOUTH BAY, EAST DOCK	MXACCA	OCT
Wipe-1	2551	HAND WIPE CLEANING OPERATIONS	3705	SW CORNER	76AMXG\MXAATB	MAY
Wipe-1	3000	HAND WIPE CLEANING OPERATIONS, PHASE INSPECTION	230	INSPECTION OF E3-A, DOCK 244	CMS/MXMTC	~1979
Wipe-1	3003	HAND WIPE CLEANING OPERATIONS	976	INSIDE BOOTH	EMS/MXMFS	1996
Wipe-1	3016	HAND WIPE CLEANING OPERATIONS	260	NE AREA OF BLDG	OLTK/L30 [ACC CONTRACT]	Prior
Wipe-1	3037	HAND WIPE CLEANING OPERATIONS	289	PAINT BOOTH	EMS/MXMFS	Prior
Wipe-1	3038	HAND WIPE CLEANING OPERATIONS	289	HANGAR	EMS/MXMFS	Prior
Wipe-1	3039	HAND WIPE CLEANING OPERATIONS	976	AWACS ALERT BOOTH AND HANGAR	CMS/MXMCF	Prior
Wipe-1	3043	HAND WIPE CLEANING OPERATIONS	230	SURVEILLANCE RADAR FLIGHT, ROOM SE-160	CMS/MXMJE	~1979
Wipe-1	3044	HAND WIPE CLEANING OPERATIONS	230	COMM/NAV, ROOM SE-124	MOS/MXCOV	~1979
Wipe-1	3045	HAND WIPE CLEANING OPERATIONS	230	HANGAR/RAMP, ROOM SW-168	AMXS/MXAX	~1979
Wipe-1	3048	HAND WIPE CLEANING OPERATIONS	230	GUIDANCE AND CONTROL, ROOM SE-124	CMS/MXMVA	~1979
Wipe-1	3058	HAND WIPE CLEANING OPERATIONS	267	AAR CONTRACT OPERATIONS	AAR CONTRACT OPERATIONS	
Wipe-1	3060	HAND WIPE CLEANING OPERATIONS	230	ALL DOCKS	EMS/MXMFS	
Wipe-1	3063	HAND WIPE CLEANING OPERATIONS	255		552 96X AACS/DORL	Prior
Wipe-1	3302	HAND WIPE CLEANING OPERATIONS	820	HANGARS VQ-3, VQ-4	CSCW1/N451	1993
Wipe-1	3410	HAND WIPE CLEANING OPERATIONS, SURFACE PREP	1068	ROOM 122, PAINT BOOTH	507 MXS/LGMFC	~1975
Wipe-1	3821	HAND WIPE CLEANING OPERATIONS	1067	AIRCRAFT MAINTENANCE, INSIDE BLDG AND RAMP	507 AMXS	Prior
Wipe-1	3839	HAND WIPE CLEANING OPERATIONS	1030	HANGAR	507 MXS/LGMG	Prior
Wipe-1	4005	HAND WIPE CLEANING OPERATIONS	260		545 PMXS/MXDPA	2009
Wipe-1	4130	HAND WIPE CLEANING OPERATIONS	3001	E-L -- 106-111	546 PMXS/MXDPA	Prior
Wipe-1	4132	HAND WIPE CLEANING OPERATIONS	3001	F-79	MXPCCB	Prior

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UG_ID	EU ID	DESCRIPTION	BUILDING	LOCATION	ORGANIZATION	EFFE D
Wipe-1	4145	HAND WIPE CLEANING OPERATIONS	3221	H-15	548 PMXS/MXDRAA	Prior
Wipe-1	4149	HAND WIPE CLEANING OPERATIONS	3001	K-84	548 PMXS/MXDRCAC	Prior
Wipe-1	4152	HAND WIPE CLEANING OPERATIONS	3001	L-93	548 PMXS/MXDRABB	Prior
Wipe-1	4159	HAND WIPE CLEANING OPERATIONS	3705	SOUTH EAST CORNER	76 AMXG	Prior
Wipe-1	4233	HAND WIPE CLEANING OPERATIONS	9001	Y39 - DD44 approximate	545 PMXS/MXDPAB	Prior
Wipe-1	4237	HAND WIPE CLEANING OPERATIONS	3221	J-15	547 PMXS/MXDRBB	Prior
Wipe-1	4239	HAND WIPE CLEANING OPERATIONS	3221	mezannine	547 PMXS/MXDRBD	June 2
Wipe-1	4240	HAND WIPE CLEANING OPERATIONS	3221	A-9	547 PMXS/MXDRBBE	Prior
Wipe-1	4243	HAND WIPE CLEANING OPERATIONS	3221	G-17	547 PMXS/MXDRBD	Prior
Wipe-1	4245	HAND WIPE CLEANING OPERATIONS	3001	I-91	548 PMXS/MXDVAA	Prior
Wipe-1	4246	HAND WIPE CLEANING OPERATIONS	3001	M-61	MXPCCAH	Prior
Wipe-1	4247	HAND WIPE CLEANING OPERATIONS	3001	F-79	MXPCCB	Prior
Wipe-1	4248	HAND WIPE CLEANING OPERATIONS	3001	I-77	MXPCCB	Prior
Wipe-1	4249	HAND WIPE CLEANING OPERATIONS	3001	U-65	548 PMXS/MXDRAD	Prior
Wipe-1	4251	HAND WIPE CLEANING OPERATIONS	3001	P-99	MXPCIBNA	Prior
Wipe-1	4252	HAND WIPE CLEANING OPERATIONS	3001	S-95	MXPCIBNB	Prior
Wipe-1	4256	HAND WIPE CLEANING OPERATIONS	3001	K-97	MXPAAT/V	Prior
Wipe-1	4257	HAND WIPE CLEANING OPERATIONS	3001	X-55	546 PMXS/MXDPAC	Prior
Wipe-1	4258	HAND WIPE CLEANING OPERATIONS	3001	X-87	546 PMXS/MXDPAA	Prior
Wipe-1	4259	HAND WIPE CLEANING OPERATIONS	3001	T-107	544 PMXS/MXDPAB	Prior
Wipe-1	4260	HAND WIPE CLEANING OPERATIONS	3705		545 PMXS/MXDPAB	Prior
Wipe-1	4261	HAND WIPE CLEANING OPERATIONS	3001	O-106	546 PMXS/MXDPAD	Prior
Wipe-1	4268	HAND WIPE CLEANING OPERATIONS	3001	I-84 to M-86, second (mezzanine) level	548 PMXS/MXDRCA	Prior
Wipe-1	4269	HAND WIPE CLEANING OPERATIONS	3001	D-95	MXPCIBNC	Prior
Wipe-1	4271	HAND WIPE CLEANING OPERATIONS	3001	B-91	548 PMXS/MXDRACB & MXDRACC	Prior
Wipe-1	4272	HAND WIPE CLEANING OPERATIONS	3001	B-88	MXPBMCD	Prior
Wipe-1	4273	HAND WIPE CLEANING OPERATIONS	3703		MXPATBA/B	Prior
Wipe-1	4274	HAND WIPE CLEANING OPERATIONS	3234		MAE-MXPAT	Prior
Wipe-1	4275	HAND WIPE CLEANING OPERATIONS	3703	NORTH END	MXPATBA/B	Prior
Wipe-1	4276	HAND WIPE CLEANING OPERATIONS	3001	K-88 to O-90 (approximately)	548 PMXS/MXDRABC	Prior
Wipe-1	4277	HAND WIPE CLEANING OPERATIONS	3001	~F89 - H91	548 PMXS/MXDRACA	Prior
Wipe-1	4280	HAND WIPE CLEANING OPERATIONS	3001	B-83	548 PMXS/MXDRCDB	Prior
Wipe-1	4282	HAND WIPE CLEANING OPERATIONS	3001	M-84	548 PMXS/MXDRCA	Prior
Wipe-1	4283	HAND WIPE CLEANING OPERATIONS	3001	H-101	548 PMXS/MXDVA	Prior
Wipe-1	4284	HAND WIPE CLEANING OPERATIONS	3001	W103	544 PMXS/MXDPAA	Prior
Wipe-1	4563	HAND WIPE CLEANING OPERATIONS	9001	Y-39 - DD-44 approximate	545 PMXS/MXDPAA	~ 199
Wipe-1	4566	HAND WIPE CLEANING OPERATIONS	3001	XY 70-75	76 PMXG/544 PMXS/MDPA	MAY
Wipe-1	4567	HAND WIPE CLEANING OPERATIONS	3001	X-89	544 PMXS/MXDPAA	Prior
Wipe-1	4575	HAND WIPE CLEANING OPERATIONS	3001	NW ANNEX, DOOR - 6E	PRATT & WHITNEY	AUG
Wipe-1	4586	HAND WIPE CLEANING OPERATIONS	3001	X97-X101	MAEAN	JAN 2
Wipe-1	4599	HAND WIPE CLEANING OPERATIONS	3001	X-Y 77-86	544 PMXS/MXDPAA	JUL 0
Wipe-1	5007	HAND WIPE CLEANING OPERATIONS	3108		552 CMMXS/MXDPAB	2009
Wipe-1	5010	HAND WIPE CLEANING OPERATIONS	2101		MXCYBA/B/C	Prior
Wipe-1	5019	HAND WIPE CLEANING OPERATIONS	2211		MXCYDC	1977
Wipe-1	5109	HAND WIPE CLEANING OPERATIONS	200	BUILDING-WIDE	550 CMXS/MXDPAA	1975
Wipe-1	5135	HAND WIPE CLEANING OPERATIONS, SURFACE PREP	2211	BUILDING-WIDE USE	MXCYDC	Prior
Wipe-1	5155	HAND WIPE CLEANING OPERATIONS	230	THROUGHOUT THE SHOP	MXCCME	Prior
Wipe-1	5165	HAND WIPE CLEANING OPERATIONS, SURFACE PREP	3707	ELECTRONIC REPAIR, RM 158	MXCVF	Prior
Wipe-1	5218	HAND WIPE CLEANING OPERATIONS	3001	KC-51.1	552 CMMXS/MXDRAD	Prior
Wipe-1	5220	SOLVENT USE, MACHINING OPERATIONS	3001	M-65	MXCCM	Prior

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SIGNIFICANT NON-COMBUSTION SOURCES LISTED BY EUG **(Data current as of 17 September 200**

UG_ID	EU ID	DESCRIPTION	BUILDING	LOCATION	ORGANIZATION	EFFE D
Wipe-1	5255	HAND WIPE CLEANING OPERATIONS	3708		MXCVF	Prior
Wipe-1	5280	SOLVENT USE, MACHINING OPERATIONS	3001	K-73	MXCCMW	Prior
Wipe-1	5281	HAND WIPE CLEANING OPERATIONS	3001	N-47	552 CMMXS/MXDPAA	Prior
Wipe-1	5282	HAND WIPE CLEANING OPERATIONS	3705	B-16/20	552 CMXS/MXDRAD	Prior
Wipe-1	5283	HAND WIPE CLEANING OPERATIONS	3705	BAY E, CENTER AND EAST SIDE	551 CMMXS/MXDPBB	Prior
Wipe-1	5284	HAND WIPE CLEANING OPERATIONS	3001	P-45	MXCCFA	Prior
Wipe-1	5285	HAND WIPE CLEANING OPERATIONS	3001	U-39	MXCCFB	Prior
Wipe-1	5287	HAND WIPE CLEANING OPERATIONS	3001	N-57	MXCCCA	Prior
Wipe-1	5288	HAND WIPE CLEANING OPERATIONS	3001G	R-43	550 CMXS/MXDPBB	16 M
Wipe-1	5310	HAND WIPE CLEANING OPERATIONS	2121	FIRST AND SECOND FLOORS	MXCYD/A	Prior
Wipe-1	5322	SOLVENT USE, MACHINING OPERATIONS	2210	ASSEMBLY ROOM	MNMCC	Prior
Wipe-1	5323	HAND WIPE CLEANING OPERATIONS	3001	R-53	552CMXS/MXDRAD	Prior
Wipe-1	5326	HAND WIPE CLEANING OPERATIONS	214	F107 ASSEMBLY AREA, TEST CELLS	MXCVAFH	Prior
Wipe-1	5571	SOLVENT USE, MACHINING OPERATIONS	3001	X103	MANMMM	JUL 2
Wipe-1	5651	HAND WIPE CLEANING OPERATIONS	3705	E-18	551 CMXS/MXDPAB	OCT
Wipe-1	5654	HAND WIPE CLEANING OPERATIONS	3705	THROUGHOUT SHOP	551 CMXS/MXDPBA	OCT
Wipe-1	5656	HAND WIPE CLEANING OPERATIONS	3705	THROUGHOUT SHOP	551 CMXS/MXDPBB	OCT
Wipe-2	3009	HAND WIPE CLEANING OPERATIONS, FUEL CELLS	976	AWACS ALERT, FUEL CELL	CMS/MXMCF	1990
Wipe-2	3018	HAND WIPE CLEANING OPERATIONS, ADHESIVE BONDING	260	NE AREA OF BLDG	OLTK/L30 [ACC CONTRACT]	Prior
Wipe-2	3055	HAND WIPE CLEANING OPERATIONS	230	ELECTRO-ENVIRONMENTAL, ROOM SE-137	MOS/MXMCE	Prior
Wipe-2	3315	HAND WIPE CLEANING OPERATIONS, FUEL CELLS	820	HANGARS VQ-3, VQ-4	CSCW1/N415	Prior
Wipe-2	3474	HAND WIPE CLEANING OPERATIONS	1082	BLADDER ROOM, RM 108	507 MXS/LGMAF	Prior
Wipe-2	3817	HAND WIPE CLEANING OPERATIONS, LAB INSTRUMENTS	1030	507TH	507 MS/LG	Prior
Wipe-2	5020	HAND WIPE CLEANING OPERATIONS, SURFACE PREP	1055	OXYGEN SHOP	MXCVAD	Prior
Wipe-2	5024	HAND WIPE CLEANING OPERATIONS, ELECTRONICS	230	USED THROUGHOUT THE SHOP	MXCCME	Prior
Wipe-2	5083	HAND WIPE CLEANING OPERATIONS, ELECTRICAL PARTS	214	112 ELECTRONIC FUEL CONTROL UNIT	MXCVAFH	1988
Wipe-2	5174	HAND WIPE CLEANING OPERATIONS, ELECTRICAL PARTS	3761	B-1 RADAR	MXCVF	Prior
Wipe-2	5194	HAND WIPE CLEANING OPERATIONS	3001	P/W 39-41	552 CMXG/MXDPBB	Prior
Wipe-2	5252	HAND WIPE CLEANING OPERATIONS, FUEL CELLS	229	FUEL CELL REPAIR	MXCCMG	Prior
Wipe-2	5324	HAND WIPE CLEANING OPERATIONS, ELECTRICAL PARTS	3708		MXCVF	Prior
Wipe-2	5325	HAND WIPE CLEANING OPERATIONS, ELECTRICAL PARTS	3707	ELECTRONIC REPAIR	MXCVF	1997
Wipe-2	5327	HAND WIPE CLEANING OPERATIONS, ELECTRICAL PARTS	200		550 CMXS/MXDPAA	Prior
pray-1	2041	PAINT GUN CLEANING	2280	SOUTH DOCK	MXACCB	PRE
pray-1	2236	PAINT GUN AND EQUIP NON-ATOMIZED CLEANING	3225	ONE DOCK	MXACCB	MAR
pray-1	2610	ENCLOSED PAINT GUN CLEANER	2122		566 AMXS/MXDVAB	JUL 0
pray-1	2611	ENCLOSED PAINT GUN CLEANER	2280	EAST WALL	566 AMXS/MXDVAB	JUL 0
pray-1	2612	ENCLOSED PAINT GUN CLEANER	3225	SOUTH WALL DOCK	566 AMXS/MXDVAB	JUL 0
pray-1	2613	ENCLOSED PAINT GUN CLEANER	2121	EAST SIDE OF BLDG,	566 AMXS/MXDVAB	JUL 0

APPENDIX B

SIGNIFICANT NON-COMBUSTION SOURCES LISTED BY EUG (Data current as of 17 September 200

UG_ID	EU ID	DESCRIPTION	BUILDING	LOCATION	ORGANIZATION	EFFE D
				CENTER (PAINT BOOTH)		
pray-1	3050	DISASSEMBLED AND ENCLOSED PAINT GUN CLEANING	289	PAINT BOOTH AND HANGAR, RM 1	EMS/MXMFS	~1979
pray-1	3051	DISASSEMBLED PAINT GUN CLEANING	976	AWACS ALERT PAINT BOOTH	EMS/MXMFS	~1979
pray-1	3052	DISASSEMBLED PAINT GUN CLEANING	976	AWACS ALERT HANGAR	CMS/MXMCF	~1979
pray-1	3311	DISASSEMBLED PAINT GUN CLEANING	820	HANGAR	CSCW1/N415	~1988
pray-1	3844	ENCLOSED PAINT GUN CLEANER	1130		72 ABW/LGTV	Prior
pray-1	3850	SPRAY GUN CLEANING, DISASSEMBLED, NON-ATOMIZED	2101		76 AMXG/QPQ	SEP 0
pray-1	4559	ENCLOSED SPRAY GUN CLEANER	3001	X-55	545 PMXS/MXDPAB	~1993
pray-1	4560	ENCLOSED SPRAY GUN CLEANING	3221		547 PMXS/MXDRBBE	Befor
pray-1	4588	ENCLOSED PAINT GUN CLEANER	3001	X-80	544 PMXS/MXDPAA	JAN 2
pray-1	4602	ENCLOSED PAINT GUN CLEANER - FUTURE	3705	BAY A	PMXG	FUTU
pray-1	4604	PAINT GUN CLEANER	3001	X-88	544 PMXS/MXDPAA	OCT
pray-1	4612	ENCLOSED PAINT GUN CLEANER	3221	D-2	547 PMXS/MXDRBBE	APR
pray-1	4625	PAINT GUN CLEANING CABINET	3001	X-55	545 PMXS/MXDPAB	PRIO 2007
pray-1	4658	ENCLOSED PAINT GUN CLEANER	3001	S-85	544PMXS/MXDPAB	JAN
pray-1	4660	ENCLOSED PAINT GUN CLEANER	3001	U-84	544 PMXS/MXDPAB	JAN
pray-1	4662	ENCLOSED PAINT GUN CLEANER	3001	U-106	544 PMXS/MXDPAB	JAN
pray-1	4696	PAINT GUN WASHER	3001	K-77	548 PMXS/MXDRAC	June 2
pray-1	4697	PAINT GUN WASHER	3001	K-77	548 PMXS/MXDRAC	June 2
pray-1	5057	PAINT GUN CLEANING	9001	P42	551 CMMXS/MTBDG (?)	Augu
pray-1	5058	PAINT GUN CLEANING	9001	P42	551 CMMXS/MTBDG (?)	Augu
pray-1	5059	PAINT GUN CLEANING	9001	P42	551 CMMXS/MTBDG (?)	Augu
pray-1	5060	PAINT GUN CLEANING	9001	P42	551 CMMXS/MTBDG (?)	Augu
pray-1	5061	PAINT GUN CLEANING	9001	P42	551 CMMXS/MTBDG (?)	Augu
pray-1	5062	PAINT GUN CLEANING	9001	P42	551 CMMXS/MTBDG (?)	Augu
pray-1	5141	ENCLOSED PAINT GUN CLEANER	2211	E-6	551 CMMXS/MXDPBB	June 2
pray-1	5142	ENCLOSED PAINT GUN CLEANER	2211	E-6	551 CMMXS/MXDPBB	June 2
pray-1	5143	ENCLOSED PAINT GUN CLEANER WITH SOLVENT RECYCLER	2211	E-6	551 CMMXS/MXDPBB	June 2
pray-1	5272	PAINT GUN CLEANING	2211	BETWEEN SPRAY BOOTHS 1 & 2	551 CMMXS/MXDPBB	~1993
pray-1	5277	PAINT GUN CLEANING	3708	141	550 CMMXS/MXDPBC	1997
pray-1	5292	ENCLOSED PAINT GUN CLEANER	2101	INSIDE EAST PAINT BOOTH	551 CMMXS/MXDPBB	MAY
pray-1	5293	ENCLOSED PAINT GUN CLEANER	2101	E-15	551 CMMXS/MXDPBB	June 2
pray-1	5294	ENCLOSED PAINT GUN CLEANER	2101	E-15	551 CMMXS/MXDPBB	June 2
pray-1	5554	PAINT GUN CLEANING	200	Room 141	550 CMXS/MXDPAA	2009
pray-1	5599	ENCLOSED PAINT GUN CLEANER - IDLE	3705	BAY E, COLUMN 33 1/2	551 CMMXS/MXDPAC	ECD 2007
pray-1	5601	ENCLOSED PAINT GUN CLEANER	2101	INSIDE WEST PAINT BOOTH	551 CMMXS/MXDPBB	FEB
pray-1	5605	ENCLOSED PAINT GUN CLEANER	2210	CSD SHOP	552 CMMXS/MXDPAC	FEB
pray-1	5606	ENCLOSED PAINT GUN CLEANER	2210	CSD SHOP	552 CMMXS/MXDPAC	FEB
pray-1	5607	ENCLOSED PAINT GUN CLEANER	2210	CSD SHOP	552 CMMXS/MXDPAC	FEB
pray-1	5608	ENCLOSED PAINT GUN CLEANER	2101	E-15	551 CMMXS/MXDPBB	MAR
pray-1	5611	ENCLOSED PAINT GUN CLEANER	3001	R-53, WEST SIDE OF PAINT BOOTH	552 CMMXS/MXDRAD	~1993
pray-1	5614	ENCLOSED PAINT GUN CLEANER	3705	Bay B	552 CMMXS/MXDRAD	AUG
pray-1	5645	ENCLOSED PAINT GUN CLEANER	3001	R-53	552 CMMXS/MXDRAD	AUG
pray-1	5646	PAINT GUN CLEANING CABINET	3707	RM102	550 CMMXS/MXDPBA	AUG
pray-1	5671	PAINT GUN CLEANING	2211	North Side of Paint Booths	551 CMMXS/MXDPBB	
pray-1	5672	PAINT GUN CLEANING	2211	West Booth, #2	551 CMMXS/MXDPBB	

APPENDIX B

SIGNIFICANT NON-COMBUSTION SOURCES LISTED BY EUG (Data current as of 17 September 200

UG_ID	EU ID	DESCRIPTION	BUILDING	LOCATION	ORGANIZATION	EFFE D
pray-1	5673	ENCLOSED PAINT GUN CLEANING CABINET	3001	Ka-51.1	552 CMMXS/MXDRAD	AUG
Test-1	4403	JET ENGINE TEST CELLS, EIGHT	3703		MXPATAA	APR
Test-1	4404	JET ENGINE TEST CELLS, FOUR	3234	TEST CELLS # 9-12	MAE-MXPAT	NOV
-1	8805	OFFLOADING HEADER(S) AND FILLSTAND(S), MOGAS	290		72MSG/LRDF	NOV
-1	1060	CLASSIFIED WASTE INCINERATOR	1096		72 CS [OK LEAGUE FOR THE BLIND	1986
pnt-1	2414	AQUAMISER DEPAINTING OF PARTS AND STABILIZERS	2122	SOUTH BAY, CENTER AND WEST DOCK	MXACCA	FALL
pnt-1	2440	AIRCRAFT DEPAINTING, MEDIA BLASTING	3228	DOCK,ASF	MBCCA	JUN (
pnt-1	5050	AIRCRAFT PARTS DEPAINTING, MEDIA BLASTING	9001	P40	551 CMMXS/MTBDG (?)	Augu
pnt-1	5051	AIRCRAFT PARTS DEPAINTING, MEDIA BLASTING	9001	P40	551 CMMXS/MTBDG (?)	Augu
ent-1	2616	COLD CLEANING (NON-AEROSPACE)	3105	TRAILER SHOP, NORTH DOCK	76 AMXG/QPQ	SEP (
ent-1	3064	COLD CLEANING TANK, FOR AGE PARTS	220		552 MXS/MXMGS	APR
ent-1	3065	COLD CLEANING TANK, FOR AGE PARTS	985		552 MXS/MXMGS	APR
ent-1	3702	COLD CLEANING TANK, CIRCUIT BOARD DEVELOPMENT	1017	ENGINEERING	327TH CLSG/GFLN	APR
ent-1	3707	COLD CLEANING TANKS, TWO, FIREARMS	1023	FIRING RANGE	72SFS/SFTC	1982
ent-1	3738	COLD CLEANING TANK, MOTOR VEHICLE PARTS	2110	in western portion of building	72 ABW/LGTV	Prior
ent-1	3780	COLD CLEANING TANK, 15 GAL	5935	GOLF COURSE MAINTENANCE	72 MSG/SVBG	Prior
ent-1	3787	COLD CLEANING TANK	1	CENTER OF WEST LEG	72MSSDPT	Prior
ent-1	3805	COLD CLEANING TANK, 30 GAL, FACILITY MAINT	1115	LIQUID FUELS MAINTENANCE	72 ABW/COU	JAN 1
ent-1	3811	COLD CLEANING TANK, 20 GAL	773	ROADS & GROUNDS	72 ABW/CEC	1990
ent-1	3833	COLD CLEANING TANK, 20 GAL, GSE	2101	B-4, D-3	MAB-BARDES	Prior
ent-1	3838	COLD CLEANING TANK, NON-AEROSPACE	210	COMPRESSOR ROOM	76 MXSS/MXDVABA	PRIO 1998
ent-1	3843	COLD CLEANING TANK, 20 GAL, GSE	2101	B-4, D-3	MAB-BARDES	Prior
ent-1	3845	SOLVENT CLEANING TANK	3220	ROOM 109, HYDRAULIC ROOM, ENGINEERING TEST LAB	76 MXSS/MXDEB	1998
ent-1	3851	COLD CLEANING TANK , AUTO PARTS	1130	General Purpose (south) maint. Area, middle of west wall	72 ABW/LGTV	2008
ent-1	3852	COLD CLEANING TANK, AUTO PARTS	1130	Special Purpose (north) maint. area, on northwest wall	72 ABW/LGTV	2008
ent-1	5265	CLEAN ROOM TANK 13: CURRENTLY EMPTY, IDLE	3001	BEARING SHOP	MANMCA	Prior
ent-2	2036	GENERAL SOLVENT USE, PAINT GUN TESTING	2280	NEW PAINT FACILITY	MXACCB	2002
ent-2	2155	GENERAL SOLVENT USE, PAINT GUN TESTING	3225	GUN AND POT MAINT ROOM	MXACCB	PRE 1
oat-1	2000	PAINT BOOTH, DRY FILTER	2121	EAST SIDE OF BLDG, CENTER	MXACCB	PRE 1
oat-1	2030	SURFACE COATING, PRIMER AND TOPCOAT	2280	PAINT HANGAR, NORTH AND SOUTH DOCK	MXACCB	PRE 1
oat-1	2119	SURFACE COAT (Topcoat/Primer, Dry Filter system)	2136	E-3 MAINTENANCE HANGAR AREA AND BACK SHOP	MXACE	PRE 2
oat-1	2151	SURFACE COATING, PRIMER AND TOPCOAT	3225	NEW PAINT FACILITY, RM 121	MXACCB	MAR
oat-1	2400	SURFACE COATING, PRIMER AND TOPCOAT	2122	SOUTH BAY, EAST DOCK	MXACCA	JUL 9

APPENDIX B

SIGNIFICANT NON-COMBUSTION SOURCES LISTED BY EUG (Data current as of 17 September 200

UG_ID	EU ID	DESCRIPTION	BUILDING	LOCATION	ORGANIZATION	EFFE D
oat-1	2543	PAINT BOOTH, DRY FILTER	2122	SOUTH BAY, EAST DOCK, SW CORNER	MXACCA	OCT
oat-1	2546	PAINT BOOTHS, DRY FILTER	3705	SW CORNER	76AMXG\MXAATB	JUN 2
oat-1	3040	PAINT BOOTH, DRY FILTER, TOUCH UP	289	PAINT BOOTH	EMS/MXMFS	March
oat-1	3042	PAINT BOOTH, DRY FILTER, TOUCH UP	976	AWACS ALERT BOOTH	CMS/MXMCF	1992
oat-1	3473	PAINT BOOTH, THREE STAGE FILTER	1068	SW CORNER OF BLDG, ROOM 1O2 AND 104	507 MXS/LGMFC	1998
oat-1	4126	PAINT BOOTH, DRY FILTER	3001	K-78	MXPCCB	MAR
oat-1	4576	PAINT BOOTH, DRY FILTER	3001	X-55	545 PMXS/MXDPAB	JULY
oat-1	4587	PAINT BOOTH, DRY FILTER, SPECIALTY COATINGS	3001	Y-78	544 PMXS/MXDPAA	JAN 2
oat-1	4589	PAINT BOOTH, DRY FILTER	3001	X-80	544 PMXS/MXDPAA	
oat-1	4601	PAINT BOOTH, DRY FILTER	801		547 PMXS/MXDTABC	OCT
oat-1	4603	PAINT BOOTH, DRY FILTER, SPECIALTY COATINGS	3001	X-88	544 PMXS/MXDPAA	OCT
oat-1	4657	PAINT BOOTH	3001	S-85	544 PMXS/MXDPAB	JAN (
oat-1	4659	PAINT BOOTH	3001	U-83	544 PMXS/MXDPAB	JAN (
oat-1	4661	PAINT BOOTH	3001	U-106	544 PMXS/MXDPAB	JAN (
oat-1	5003	PAINT BOOTH, DRY FILTER	200	T-4	550 CMXS/MXDPAA	FUTU (2003
oat-1	5016	PAINT BOOTH, DRY FILTER	2211	E-7	MXCYDC	JULY
oat-1	5040	PAINT BOOTH, DRY FILTER	3001	KC-51.1	552 CMMXS/MXDRAD	1987
oat-1	5054	PAINT BOOTH, DRY FILTER	9001	P42	551 CMMXS/MTBDG (?)	Aug 2
oat-1	5055	PAINT BOOTH, DRY FILTER	9001	P42	551 CMMXS/MTBDG (?)	Aug 2
oat-1	5056	PAINT BOOTH, DRY FILTER	9001	P42	551 CMMXS/MTBDG (?)	Aug 2
oat-1	5079	PAINT BOOTH, DRY FILTER	3001	S-53	552CMXS/MXDRAD	DEC
oat-1	5080	PAINT BOOTH, SHEET METAL	3001	S-53	552 CMXS/MXDRA	SEP 0
oat-1	5137	PAINT BOOTH, DRY FILTER	2211	D-7	MXCYDC	JULY
oat-1	5290	PAINT BOOTH, DRY FILTER	2101		MXCYBA/B/C	2001
oat-1	5331	PAINT BOOTH, DRY FILTER	2210		MNMCC	SEP 0
oat-1	5332	PAINT BOOTH, DRY FILTER	2210		MNMCC	SEP 0
oat-1	5333	PAINT BOOTH, DRY FILTER	2210		MNMCC	SEP 0
oat-1	5598	PAINT BOOTH, DRY FILTER - IDLE	3705	BAY E, COLUMN 33 1/2	551 CMMXS/MXDPAC	ECD 2007
oat-1	5613	PAINT BOOTH, DRY FILTER	3705	Post A-18	552 CMMXS/MXDRAD	AUG
oat-2	2101	SPOT PRIMER APPLICATION, BRUSH	2121	NORTH AND SOUTH DOCKS	MXABF	PRE 1
oat-2	2113	SPOT PRIMER APPLICATION, TOUCH UP, BRUSH	2122	B-1 MAINTENANCE/EGRESS	MXABB	PRE 1
oat-2	2122	SPOT PRIMER APPLICATION, TOUCH UP, BRUSH	2136	E-3 MAINTENANCE HANGAR AREA AND BACK SHOP	MXACE	PRE 1
oat-2	2129	SPOT PRIMER APPLICATION, TOUCH UP, BRUSH	240	BOTH DOCKS	MABATB	PRE 1
oat-2	2141	SPOT PRIMER APPLICATION, TOUCH UP, BRUSH	3102	KC-135 POST DOCK, NORTH	MABAT	PRE 1
oat-2	2228	SPOT PRIMER APPLICATION, TOUCH UP, BRUSH	2122	SOUTH BAY, EAST DOCK	MXACCA	FUTU
oat-2	2234	SPOT PRIMER AND TOPCOAT APPLIC, TOUCH UP	3105	ONE DOCK	MABAT	PRE 1
oat-2	2249	SPOT PRIMER APPLICATION, TOUCH UP, BRUSH	2122	SOUTH BAY, CENTER & WEST DOCK	MXACCA	FUTU
oat-2	2423	SPOT PRIMER APPLICATION, TOUCH UP, BRUSH	3001	Y-18, SOUTH MOVING LINE	72AMXG	PRE 1
oat-2	2433	SURFACE COATING, BRUSH	289	HANGAR	EMS/MXMFS	MAY
oat-2	2434	SURFACE COATING, PRIMER AND TOPCOAT	230	BOTH DOCKS	CMS/MXMVA	JUN (

APPENDIX B

SIGNIFICANT NON-COMBUSTION SOURCES LISTED BY EUG (Data current as of 17 September 200

UG_ID	EU ID	DESCRIPTION	BUILDING	LOCATION	ORGANIZATION	EFFE D
oat-2	2530	SPOT PRIMER APPLICATION, TOUCH UP, BRUSH	FLIGHTLINE		MAB	
oat-2	2625	AEROSPACE COATING, BRUSH OR TOUCH UP	3228	HANGAR	566 AMXS/MXDVAA	AUG
oat-2	2626	Surface Coating Operations, Brush Application	3705	SW CORNER (Bay E)	76AMXG/MXAATB	2008
oat-2	3010	SPOT PRIMER AND TOPCOAT APPLICATION, TOUCH UP	976	AWACS ALERT HANGAR	CMS/MXMCF	1992
oat-2	3014	SURFACE COATING, BRUSH PAINTING	267	AAR CONTRACT OPERATIONS	AAR CONTRACT OPERATIONS	
oat-2	3015	SPOT PRIMER APPLICATION, TOUCH UP, BRUSH	260		OLTK [ACC CONTRACT]	Prior
oat-2	3041	SURFACE COATING/DEPAINTING, TOUCH UP AND REPAIR	289	HANGAR	EMS/MXMFS	1981
oat-2	3061	SPOT PRIMER APPLICATION, TOUCH UP, BRUSH	230	ALL DOCKS	EMS/MXMFS	
oat-2	3300	SURFACE COATING OPERATIONS, HANGAR	820	HANGAR	CSCW1/N415	1993
oat-2	3848	SURFACE COATING, TOUCH UP	1030	HANGAR	507 MOF/MXOOL	AUG
oat-2	4585	SURFACE COATING OPERATIONS, BRUSH APPLICATION	3001	X97-X101	MAEAN	JAN 2
oat-2	5009	SURFACE COATING OPERATIONS, BRUSH APPLICATION	2101		MXCYBA/B/C	Prior
oat-2	5025	SURFACE COATING - TOUCH-UP (PEN OR BRUSH)	200	Rm 126	550 CMXS/MXDPAA	Jan 20
oat-2	5026	SURFACE COATING - TOUCH-UP (PEN OR BRUSH)	3001	W-45	552 CMXS/MXDPBA	Mar 2
oat-2	5041	SPOT PRIMER APPLICATION, BRUSH	3001	KC-50	552 CMMXS/MXDRAD	FEB 2
oat-2	5190	SPOT PRIMER APPLICATION, BRUSH	3001	R-43	552 CMXS/MXDPBB	FEB 2
oat-2	5222	SURFACE COATING, SPOT PRIMING, BRUSH	3705	E-32	551 CMMXS/MXDPBB	Prior
oat-2	5266	SURFACE COATING, BRUSH PAINTING	214		MXCVAFH	Prior
oat-2	5267	SURFACE COATING, TOUCH UP, BRUSH	3001	V-65	552CMXS/MXDRAD	Prior
oat-2	5286	SURFACE COATING, BRUSH PAINTING	3705		MXCYDB	Prior
oat-2	5313	SURFACE COATING OPERATIONS, TOUCH-UP, BRUSH	2121	SECOND FLOOR, NORTH DOCK, WEST END, MIDDLE THIRD	MXCYD/A	Prior
oat-2	5315	SPOT PRIMER APPLICATION, BRUSH	2211	THROUGHOUT BLDG	MXCYDC	JUN (
oat-2	5594	SPOT PRIMER APPLICATION, TOUCH UP, BRUSH	3001	0-67	MNMMD	AUG
oat-2	5596	SURFACE COATING, BRUSH OR SPRAY TOUCH UP	3001	M-65	MNMMD	Prior
oat-3	4017	PAINT BOOTH, DRY FILTER, CERAL 3450	3001	K-77	548 PMXS/MXDRAC	2009
oat-3	4018	PAINT BOOTH, DRY FILTER, SERMETEL	3001	K-77	MXPCCB	1984
oat-3	4070	PAINT BOOTH, DRY FILTER, SOLID FILM LUBRICANTS	3221	C-4	547 PMXS/MXDRBBE	DEC
oat-3	4074	PAINT BOOTH, DRY FILTER: SERMETEL	3221	B-4, SW CORNER	547 PMXS/MXDRBBE	DEC
oat-3	4595	PAINT BOOTH, DRY FILTER, CERAL 3450	3221	C-4	547 PMXS/MXDRBBE	2009
oat-3	5168	PAINT BOOTH, DRY FILTER	3707	RM 102	MXCVF	Prior
oat-3	5172	PAINT BOOTH, DRY FILTER	3708	141	MANAF	JUN 1
oat-4	2162	PAINT BOOTH, DRY FILTER, FOR GSE	2101	A-5/6	MAB-BARDES	PRE 1
oat-4	3303	PAINT BOOTH, FOR GSE AND FACILITY EQUIPMENT	825	NAVY/L-3 CONTRACTOR	CSCW1/N415	MAR
oat-4	3501	PAINT BOOTH, DRY FILTER	2101	WEST SIDE	76 MSXG	1953
oat-4	3736	PAINT BOOTH, MAINTENANCE OF FLEET VEHICLES/GSE	1130	EAST SIDE	72 ABW/LGTV	Prior
-1	8333	AST #333, 42000 GAL, UNLEADED MOGAS	333	290 FUEL YARD-POL FUEL YARD	72MSG/LRDF	1989
-2	8105	AST, ROADS AND GROUNDS, 3000 GAL:	885	WEST OF BLDG 773	72MSG/LRDF	1995

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SIGNIFICANT NON-COMBUSTION SOURCES LISTED BY EUG (Data current as of 17 September 200

UG_ID	EU ID	DESCRIPTION	BUILDING	LOCATION	ORGANIZATION	EFFE D
		MOGAS				
-2	8114	AST #1008, 5000 GAL: MOGAS	1010	E OF BLDG 1010	3 CCSS/CYSD	1995
-2	8115	AST #1060, 5000 GAL: MOGAS	1058		507 MS/LGMG	1995
-2	8415	AST, 1000 GAL: MOGAS	820	NORTH EAST CORNER	CSCW1/N415	2000
-2	8418	AST dual compartment	1137	Bldg 1137	Trace Contractor	2005
-2	8702	AST, 3000 GAL: MOGAS	2101	NORTH CENTRAL SIDE OF BUILDING--OUTSIDE	72 AMXG	1995
orDeg-1	4050	VAPOR DEGREASER: PERCHLOROETHYLENE	3001	M-61, AREA 1	MXPCCAH	1986
orDeg-2	4202	VACUUM VAPOR DEGREASER: PERCHLOROETHYLENE - IDLE	3001	M-61, AREA 1	MXPCCAH	MAY

APPENDIX C

AGGREGATED INSIGNIFICANT SOURCES BY CATEGORY
(Data current as of 17 September 2009)

EU_ID	DESCRIPTION	TITLE_V_DESC	COMMENT
0500	NATURAL GAS-BURNING BOILERS, SPACE HEATERS, FURNACES, EXPANSOR TORCHES, FOUNDRY/PROCESS OVENS, RANGES/DEEP FAT FRYERS, < OR = 5 MMBtu HEAT INPUT, 244 TOTAL BASEWIDE	BOILERS, HEATERS, ET AL; < = 5 MMBtu HEAT INPUT	INCLUDES EXPANSOR TORCHES USED ONLY TO HEAT METAL PARTS (~ 0.001 MMBtu), AND RANGES AND DEEP FAT FRYERS, < OR = 5 MMBtu HEAT INPUT, USED FOR COMMERCIAL FOOD PREPARATION AT BASE RESTAURANTS AND SNACK BARS (APPROX 65); ~ 270 TOTAL
0502	STORAGE TANKS, < 400 GAL CAPACITY	STORAGE TANKS, < 400 GAL CAPACITY	ODEQ EMAIL STATES "THOSE [TANKS] WITH A STORAGE CAPACITY LESS THAN 400 GALLONS CAN BE CONSIDERED INSIGNIFICANT DUE TO THE INFREQUENT USE AND TEMPORARY STORAGE…" "...MERELY MENTIONING THESE AND NOT CALCULATING EMISSIONS WOULD SUFFICE."; ~ 25 TOTAL
0503	GENERAL ADHESIVE/SEALANT USE	GENERAL ADHESIVE/SEALANT USE	INSIGNIFICANT EMISSION UNITS AGGREGATED; ~ 110 TOTAL
0504	GRINDING AND SANDING OPERATIONS FOR AIRCRAFT REWORK, BASEWIDE	GRINDING AND SANDING OPERATIONS	~ 80 TOTAL
0505	WELDING OPERATIONS FOR AIRCRAFT REWORK, BASEWIDE	WELDING OPERATIONS	~ 20 TOTAL
0506	SOLDERING OPERATIONS FOR AIRCRAFT REWORK, BASEWIDE	SOLDERING OPERATIONS	~ 35 TOTAL
0507	HAZARDOUS MATERIAL/ HAZARDOUS WASTE TEMPORARY STORAGE SITES, HAZ WASTE ACCUMULATION POINTS	HAZARDOUS MATERIAL/ WASTE TEMPORARY STORAGE SITES	~ 750 TOTAL, 400 HAZ MAT STORAGE POINTS/ 334 HAZ WASTE ACCUMULATION POINTS
0508	STORAGE TANKS, 500-15,000 GALLON CAPACITY, INSIGNIFICANT, USED TO TEMPORARILY STORE HAZARDOUS WASTE/SPENT HAZARDOUS MATERIAL/FUEL PRIOR TO OFFSITE DISPOSAL	STORAGE TANKS, 500-15,000 GALLON CAPACITY	~ 15 TOTAL; ODEQ EMAIL STATES "RECOMMEND YOU LIST THESE TANKS (NOT INDIVIDUALLY…BUT AS A NUMBER WITH A CERTAIN SIZE RANGE…)…THE ONLY RECORDKEEPING…WOULD BE ANNUAL THROUGHPUT BASED ON …ACCOUNTING RECORDS OF USPCI REMOVAL."
0509	CURING OF RESINS	CURING OF RESINS	~ 20 TOTAL
0510	FUGITIVE FUEL EMISSIONS: DEFUEL OPERATION	FUGITIVE FUEL EMISSIONS: DEFUEL OPERATION	RAMP OPERATIONS; MATERIAL USE: JP-5 is used to purge JP-8 from aircraft on ramp.; TYP USAGE RATE:102 aircraft/year, typical capacity based on current aircraft PDM packages. 1997: 100 aircraft. Aircraft to arrive on station with no more than 10,000 lb f

APPENDIX C

AGGREGATED INSIGNIFICANT SOURCES BY CATEGORY
(Data current as of 17 September 2009)

EU_ID	DESCRIPTION	TITLE_V_DESC	COMMENT
0511	FUEL DISPENSING OPERATIONS	FUEL DISPENSING OPERATIONS	~ 20 TOTAL
0512	STORAGE TANKS ASSOCIATED WITH EMERGENCY GENERATORS, INSIGNIFICANT	STORAGE TANKS	~ 90 TOTAL
0513	STORAGE TANKS, INSIGNIFICANT [NOTE THAT MOST STORAGE TANKS HAVE BEEN PREVIOUSLY JUSTIFIED AS INSIGNIFICANT IN 1997 AEI TURNAROUND DOCUMENTS SUBMITTED MAR 98]	STORAGE TANKS	~ 40 TOTAL
0515	EMERGENCY GENERATORS, INSIGNIFICANT	EMERGENCY GENERATORS	~ 90 TOTAL
0516	WOODWORKING	WOODWORKING	BLDG 1156
0517	SOLVENT USE FROM CONTAINERS <1 LITER	SOLVENT USE FROM CONTAINERS <1 LITER	~ 5 TOTAL
0518	GENERAL SOLVENT USE, NOT SUBJECT TO NESHAPS (NON-AEROSPACE)	GENERAL SOLVENT USE	~ 10 TOTAL
0519	ELECTROPLATING OPERATIONS, NOT SUBJECT TO NESHAPS	ELECTROPLATING OPERATIONS	~ 5 TOTAL
0520	SPECIALTY COATING USAGE, EXEMPT FROM AEROSPACE NESHAP	SPECIALTY COATING USAGE	~ 25 TOTAL
0521	STRIPPER USAGE, NON-HAP CONTAINING, NOT SUBJECT TO AEROSPACE NESHAP	STRIPPER USAGE, NON-HAP CONTAINING	BLDG 2280 -- JAN06 UPDATE
0523	CPC (CORROSION PREVENTIVE COMPOUND) APPLICATION [SPECIALTY COATINGS]	CPC (CORROSION PREVENTIVE COMPOUND) APPLICATION	"group" EU to capture aggregate CPC usage

APPENDIX D

NON-AGGREGATED INDIVIDUAL INSIGNIFICANT SOURCES (Data current as of 17 September 2009)

ID	DESCRIPTION	BLDG	LOCATION	SHOP	ORGANIZATI
	BARREL CLEANING, HIGH PRESSURE WATER WASHING AND AEROSOL CAN PIERCING/CRUSHING OPERATION-TI-22, COLLECTS COOLANTS	3125		BARREL YARD	MAD/MAE
	WASHING OF AGE IN CAR WASH BAY	2101	A-1	GSE MAINTENANCE	MABPQ-BARDE
	PARTS WASHING TANK, 200 GAL, FOR CLEANING AIRCRAFT WHEELS [FLUSH CLEANING] - IDLE	1041	NW CORNER	HYDRAULIC SHOP	507MXS/HYDR
	ORGANOSOL DIP TANKS, TWO (2), LOCATED AT NORTHEAST END OF ELECTROLESS NICKEL LINE, T340 AND T342	3001	M-61, AREA 3,	ELECTROPLATING	MXPCCAH
	THERMAL SPRAY OPERATIONS--PLASMA ROBOTS	3221	K-1	BLADE REPAIR - Plasma Spray	547 PMXS/MXDI
	THERMAL SPRAY OPERATIONS	3001	I-73	PLASMA SPRAY/HEAT TREAT	MXPCCBJ
	THERMAL SPRAY OPERATIONS, PLASMA SPRAY UNITS WITH TORIT DUST COLLECTORS	3001	NW ANNEX	THERMAL COATING	PRATT & WHITI
	HEATED ALKALINE CLEANING TANK	3001	T-W 80-83	F100 BEARING SHOP	544 PMXS/MEKI
	GENERAL ADHESIVE USE THROUGHOUT THE SHOP	3001	X-Y 70-75	F100 CORE SUB-ASSEMBLY	76 PMXG/544 PMXS/MDPAC
	SAND BLASTING UNIT	9001	DD-39	TF33 QEC Repair	545 PMXS/MXDI
	blast cabinet	9001	DD-40	TF-33 QEC Repair	545 PMXS/MXDI
	ALODINE APPLICATION	3001G	R-43	Electronic Flight Controls	550 CMXS/MXDI
	SURFACE COATING OPERATIONS, AEROSOL AND BRUSH TOUCH UP IN WOODWORKING SHOP--USED THROUGHOUT THE SHOP.	2101	E-G-5	GSE MAINTENANCE	MABPQ-BARDE
	COOLANT/CUTTING FLUID USE FOR MACHINING OPERATIONS	2121	FIRST AND SECOND FLOORS	TOOL AND DIE, FABRICATION	MXCYD/A
	STRIPPING BOOTH, CURRENTLY IDLE--RELOCATED TO BUILDING 200 FROM 3707	200	ELECTRONIC REPAIR	B-1 AVIONICS	MXCVF
	PAINT STRIPPING SINK, LOCAL EXHAUST---- CURRENTLY IDLE SINCE 1997.	3708	143	B-2 AVIONICS AND TEST	MXCVF
	SURFACE COATING OPERATIONS THROUGHOUT THE SHOP, TOUCH UP, AEROSOL [SPECIALTY COATINGS]	3507	RADOME TEST	RADAR TEST	MXCVFE
	FOUNDRY, NATURAL GAS BURNING KILNS	3001	S-33	SHEETMETAL	552CMXS/MXDE
	TEST STANDS, FOUR	200	PNEUMATIC TEST AREA	AIR ACCESSORIES	550 CMMXS/MXDPA
	COLD CLEANING TANK [FLUSH CLEANING]	200	NORTH SECTION OF BLDG: NDI ROOM	AIR ACCESSORIES	550 CMMXS/MXDPA
	BLASTING OPERATIONS	3705	G-32 (Bay E)	Boom Shop	551 CMMXS/MXDPA
	BLASTING OPERATIONS	3705	G-31 (Bay E)	Boom Shop	551 CMMXS/MXDPA
	CREST ULTRASONIC CLEANING TANK	3705	A-17	TUBE AND CABLE	552 CMXS/MXDRAD
	FURNACE	3705	A-17	TUBE AND CABLE	552CMXS/MXDE
	CLEANING TANK, OPEN TOP, FOR CLEANING TUBES: ALKALINE CLEANER	3705	A-19 ("Bay C")	TUBE AND CABLE	552 CMMXS/MXDRA
	enclosed tank (300-gal capacity) - PD680 for leak/pressure checking of booms	3705	D30 (Bay "E")	Boom Shop	551 CMMXS/MXDPA
	enclosed tank - PD680 for leak/pressure checking of booms	3705	G-32 (Bay "E")	Boom Shop	551 CMMXS/MXDPA
	INSIGNIFICANT COMBUSTION SOURCES	BASEWIDE	BASEWIDE	VARIOUS	72 ABW/CE

	INSIGNIFICANT LARGE GENERATORS	BASEWIDE	BASEWIDE	VARIOUS	72 ABW/CE
	INSIGNIFICANT SMALL GENERATORS	BASEWIDE	BASEWIDE	VARIOUS	72 ABW/CE
	ENGINES FOR FIRE PUMPS, FOUR (4): DIESEL	2123	BOILER #2	CEC WATER & WASTE	72 ABW/CEC
	FIRE PUMP ENGINE: DIESEL	810			72 ABW/CEC
	FIRE PUMP ENGINE: DIESEL	1083			72 ABW/CEC
	FIRE PUMP ENGINE: DIESEL	9303			72 ABW/CEC
	ENGINES FOR FIRE PUMP, TWO (2) : DIESEL	241	FIRE SUPPRESSION	CEC WATER & WASTE	72 ABW/CEC
	FIRE PUMP ENGINE: DIESEL	469	PUMPHOUSE BLDG	CEC WATER & WASTE	72 ABW/CEC
	FIRE PUMP ENGINES, THREE (3): DIESEL	1032	PUMPHOUSE BLDG	CEC WATER & WASTE	72 ABW/CEC
	FIRE PUMP ENGINES, TWO (2): DIESEL	2119	PUMPHOUSE BLDG	CEC WATER & WASTE	72 ABW/CEC
	FIRE PUMP ENGINE: DIESEL	3202	PUMPHOUSE BLDG	CEC WATER & WASTE	72 ABW/CEC
	FIRE PUMP ENGINE: DIESEL	1020	PUMPHOUSE BLDG	CEC WATER & WASTE	72 ABW/CEC
	DIESEL ENGINE FOR FIRE PUMP	1032		CEC WATER & WASTE	72 ABW/CEC
	GENERATOR FOR FIRE PUMP: DIESEL	11	SW OF BLDG 11	CEC WATER & WASTE	72 ABW/CEC
	AST (vaulted UST) #4006, 1000 GAL, FOR FIRE SUPPRESSION PUMP ENGINE: MOGAS	4006	EAST OF WATER WELL	CEC WATER & WASTE	72 ABW/CEC
	UST #264R, 15000 GAL, FOR AGE EQUIPMENT SUPPORT: JP-8	289	WEST OF OF BLDG 289	BASE FUELS	72 ABW/LGSF
	AST #332, 42000 GAL, CONE ROOF WITH FLOATING PAN: DIESEL (DL-2)	332	290 FUEL YARD - POL FUEL YARD	BASE FUELS	72MSG/LRDF
	UST #1009, 5000 GAL: DIESEL	1010	E OF BLDG 1010	3RD HERD	33 CCSS/CYSD
	UST, 20000 GAL, SUPPORT FOR BLDG 3001 BOILERS: DIESEL FUEL	3001	NE OF BLDG 3001G	CEC	72 ABW/CEC
	AST #998, 106472 GAL, MANIFOLDED WITH AST #965 AND #999, HYDRANT SYSTEM: JP-8	998	HYDRANT SYSTEM-AWACS ALERT FACILITY	BASE FUELS	72 ABW/LGSF
	AST #999, 106489 GAL, MANIFOLDED WITH AST #965 AND #998, HYDRANT SYSTEM: JP-8	999	HYDRANT SYSTEM-AWACS ALERT FACILITY	BASE FUELS	72MSG/LRDF
	AST #965, 107520 GAL, MANIFOLDED WITH AST #998 AND #999, HYDRANT SYSTEM: JP-8	965	NEAR AWACS ALERT FACILITY	BASE FUELS	72MSG/LRDF
	ASTs #3100, #3102, #3104, #3106; FOUR (4), 10000 GAL: CALIBRATION FLUID--VAULTED	3108		FUEL COMPONENT TEST	MXCCCB
	ASTs, FIVE (5): CALIBRATION FLUID---- INCLUDES #CFT-1A, 10000 GAL; #CFT-1B, 10000 GAL; #RFT-1, 10000 GAL-RECOVERABLE; #NRFT-1A, 12000 GAL: NONRECOVERABLE; #NRFT-1B, 12000 GAL: NONRECOVERABLE	3902	E OF DOUGLAS BLVD	FUEL COMPONENT TEST	MANMCB
	UST, 10,000-GALLON JP-10 TANK	214	WEST OF BLDG 214	MISSILE TEST FACILITY	550 CMXS/MXD
	UST, 10,000-GALLON JP-10 TANK	214	WEST OF BLDG 214	MISSILE TEST FACILITY	550 CMXS/MXD
	UST, 10,000-GALLON, DUAL-COMPARTMENT PF-1 TANK	214	WEST OF BUILDING 214	MISSILE TEST FACILITY	550 CMXS/MXD
	UST#821, 20000 GAL, SUPPLY FOR BOILERS: #2 FUEL OIL	821	SOUTH SIDE OF BLDG 821	NAVY	72 ABW/CEC
	AST #330, 210000 GAL, MANIFOLDED WITH AST #331: JP-8	330	290 FUEL YARD-POL FUEL YARD	BASE FUELS	72MSG/LRDF

	AST #331, 210000 GAL, MANIFOLDED WITH AST #330: JP-8	331	290 FUEL YARD-POL FUEL YARD	BASE FUELS	72MSG/LRDF
	AST #334, 42000 GAL, MANIFOLDED WITH AST #335: JP-5	334	290 FUEL YARD-POL FUEL YARD	BASE FUELS	72MSG/LRDF
	AST #335, 42000 GAL, MANIFOLDED WITH AST #334: JP-5	335	290 FUEL YARD-POL FUEL YARD	BASE FUELS	72MSG/LRDF
	AST #337, 47000 GAL: P-D-680	337	290 FUEL YARD-POL FUEL YARD	BASE FUELS	72MSG/LRDF
	AST #341, 42000 GAL: BIODIESEL	341	290 FUEL YARD-POL FUEL YARD	BASE FUELS	72MSG/LRDF
	AST #21090, 109000 GAL, JP-8--(MANIFOLDED) HYDRANT SYSTEM	1091		BASE FUELS	72MSG/LRDF
	AST #21091, 109000 GAL, JP-8--(MANIFOLDED) HYDRANT SYSTEM	1091		BASE FUELS	72MSG/LRDF

MAJOR SOURCE AIR QUALITY PERMIT STANDARD CONDITIONS (July 21, 2009)

SECTION I. DUTY TO COMPLY

A. This is a permit to operate / construct this specific facility in accordance with the federal Clean Air Act (42 U.S.C. 7401, et al.) and under the authority of the Oklahoma Clean Air Act and the rules promulgated there under. [Oklahoma Clean Air Act, 27A O.S. § 2-5-112]

B. The issuing Authority for the permit is the Air Quality Division (AQD) of the Oklahoma Department of Environmental Quality (DEQ). The permit does not relieve the holder of the obligation to comply with other applicable federal, state, or local statutes, regulations, rules, or ordinances. [Oklahoma Clean Air Act, 27A O.S. § 2-5-112]

C. The permittee shall comply with all conditions of this permit. Any permit noncompliance shall constitute a violation of the Oklahoma Clean Air Act and shall be grounds for enforcement action, permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application. All terms and conditions are enforceable by the DEQ, by the Environmental Protection Agency (EPA), and by citizens under section 304 of the Federal Clean Air Act (excluding state-only requirements). This permit is valid for operations only at the specific location listed.
[40 C.F.R. §70.6(b), OAC 252:100-8-1.3 and OAC 252:100-8-6(a)(7)(A) and (b)(1)]

D. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in assessing penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations. [OAC 252:100-8-6(a)(7)(B)]

SECTION II. REPORTING OF DEVIATIONS FROM PERMIT TERMS

A. Any exceedance resulting from an emergency and/or posing an imminent and substantial danger to public health, safety, or the environment shall be reported in accordance with Section XIV (Emergencies). [OAC 252:100-8-6(a)(3)(C)(iii)(I) & (II)]

B. Deviations that result in emissions exceeding those allowed in this permit shall be reported consistent with the requirements of OAC 252:100-9, Excess Emission Reporting Requirements.
[OAC 252:100-8-6(a)(3)(C)(iv)]

C. Every written report submitted under this section shall be certified as required by Section III (Monitoring, Testing, Recordkeeping & Reporting), Paragraph F.
[OAC 252:100-8-6(a)(3)(C)(iv)]

SECTION III. MONITORING, TESTING, RECORDKEEPING & REPORTING

A. The permittee shall keep records as specified in this permit. These records, including monitoring data and necessary support information, shall be retained on-site or at a nearby field office for a period of at least five years from the date of the monitoring sample, measurement, report, or application, and shall be made available for inspection by regulatory personnel upon request. Support information includes all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Where appropriate, the permit may specify that records may be maintained in computerized form.

[OAC 252:100-8-6 (a)(3)(B)(ii), OAC 252:100-8-6(c)(1), and OAC 252:100-8-6(c)(2)(B)]

B. Records of required monitoring shall include:
(1) the date, place and time of sampling or measurement;
(2) the date or dates analyses were performed;
(3) the company or entity which performed the analyses;
(4) the analytical techniques or methods used;
(5) the results of such analyses; and
(6) the operating conditions existing at the time of sampling or measurement.

[OAC 252:100-8-6(a)(3)(B)(i)]

C. No later than 30 days after each six (6) month period, after the date of the issuance of the original Part 70 operating permit or alternative date as specifically identified in a subsequent Part 70 operating permit, the permittee shall submit to AQD a report of the results of any required monitoring. All instances of deviations from permit requirements since the previous report shall be clearly identified in the report. Submission of these periodic reports will satisfy any reporting requirement of Paragraph E below that is duplicative of the periodic reports, if so noted on the submitted report. [OAC 252:100-8-6(a)(3)(C)(i) and (ii)]

D. If any testing shows emissions in excess of limitations specified in this permit, the owner or operator shall comply with the provisions of Section II (Reporting Of Deviations From Permit Terms) of these standard conditions. [OAC 252:100-8-6(a)(3)(C)(iii)]

E. In addition to any monitoring, recordkeeping or reporting requirement specified in this permit, monitoring and reporting may be required under the provisions of OAC 252:100-43, Testing, Monitoring, and Recordkeeping, or as required by any provision of the Federal Clean Air Act or Oklahoma Clean Air Act. [OAC 252:100-43]

F. Any Annual Certification of Compliance, Semi Annual Monitoring and Deviation Report, Excess Emission Report, and Annual Emission Inventory submitted in accordance with this permit shall be certified by a responsible official. This certification shall be signed by a responsible official, and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete."

[OAC 252:100-8-5(f), OAC 252:100-8-6(a)(3)(C)(iv), OAC 252:100-8-6(c)(1), OAC 252:100-9-7(e), and OAC 252:100-5-2.1(f)]

G. Any owner or operator subject to the provisions of New Source Performance Standards ("NSPS") under 40 CFR Part 60 or National Emission Standards for Hazardous Air Pollutants ("NESHAPs") under 40 CFR Parts 61 and 63 shall maintain a file of all measurements and other information required by the applicable general provisions and subpart(s). These records shall be maintained in a permanent file suitable for inspection, shall be retained for a period of at least five years as required by Paragraph A of this Section, and shall include records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of an affected facility, any malfunction of the air pollution control equipment; and any periods during which a continuous monitoring system or monitoring device is inoperative.

[40 C.F.R. §§60.7 and 63.10, 40 CFR Parts 61, Subpart A, and OAC 252:100, Appendix Q]

H. The permittee of a facility that is operating subject to a schedule of compliance shall submit to the DEQ a progress report at least semi-annually. The progress reports shall contain dates for achieving the activities, milestones or compliance required in the schedule of compliance and the dates when such activities, milestones or compliance was achieved. The progress reports shall also contain an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted. [OAC 252:100-8-6(c)(4)]

I. All testing must be conducted under the direction of qualified personnel by methods approved by the Division Director. All tests shall be made and the results calculated in accordance with standard test procedures. The use of alternative test procedures must be approved by EPA. When a portable analyzer is used to measure emissions it shall be setup, calibrated, and operated in accordance with the manufacturer's instructions and in accordance with a protocol meeting the requirements of the "AQD Portable Analyzer Guidance" document or an equivalent method approved by Air Quality.

[OAC 252:100-8-6(a)(3)(A)(iv), and OAC 252:100-43]

J. The reporting of total particulate matter emissions as required in Part 7 of OAC 252:100-8 (Permits for Part 70 Sources), OAC 252:100-19 (Control of Emission of Particulate Matter), and OAC 252:100-5 (Emission Inventory), shall be conducted in accordance with applicable testing or calculation procedures, modified to include back-half condensables, for the concentration of particulate matter less than 10 microns in diameter (PM_{10}). NSPS may allow reporting of only particulate matter emissions caught in the filter (obtained using Reference Method 5).

K. The permittee shall submit to the AQD a copy of all reports submitted to the EPA as required by 40 C.F.R. Part 60, 61, and 63, for all equipment constructed or operated under this permit subject to such standards. [OAC 252:100-8-6(c)(1) and OAC 252:100, Appendix Q]

SECTION IV. COMPLIANCE CERTIFICATIONS

A. No later than 30 days after each anniversary date of the issuance of the original Part 70 operating permit or alternative date as specifically identified in a subsequent Part 70 operating permit, the permittee shall submit to the AQD, with a copy to the US EPA, Region 6, a certification of compliance with the terms and conditions of this permit and of any other applicable requirements which have become effective since the issuance of this permit.

[OAC 252:100-8-6(c)(5)(A), and (D)]

B. The compliance certification shall describe the operating permit term or condition that is the basis of the certification; the current compliance status; whether compliance was continuous or intermittent; the methods used for determining compliance, currently and over the reporting period. The compliance certification shall also include such other facts as the permitting authority may require to determine the compliance status of the source.

[OAC 252:100-8-6(c)(5)(C)(i)-(v)]

C. The compliance certification shall contain a certification by a responsible official as to the results of the required monitoring. This certification shall be signed by a responsible official, and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete." [OAC 252:100-8-5(f) and OAC 252:100-8-6(c)(1)]

D. Any facility reporting noncompliance shall submit a schedule of compliance for emissions units or stationary sources that are not in compliance with all applicable requirements. This schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirements for which the emissions unit or stationary source is in noncompliance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the emissions unit or stationary source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based, except that a compliance plan shall not be required for any noncompliance condition which is corrected within 24 hours of discovery.

[OAC 252:100-8-5(e)(8)(B) and OAC 252:100-8-6(c)(3)]

SECTION V. REQUIREMENTS THAT BECOME APPLICABLE DURING THE PERMIT TERM

The permittee shall comply with any additional requirements that become effective during the permit term and that are applicable to the facility. Compliance with all new requirements shall be certified in the next annual certification. [OAC 252:100-8-6(c)(6)]

SECTION VI. PERMIT SHIELD

A. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC 252:100-8) shall be deemed compliance with the applicable requirements identified and included in this permit. [OAC 252:100-8-6(d)(1)]

B. Those requirements that are applicable are listed in the Standard Conditions and the Specific Conditions of this permit. Those requirements that the applicant requested be determined as not applicable are summarized in the Specific Conditions of this permit. [OAC 252:100-8-6(d)(2)]

SECTION VII. ANNUAL EMISSIONS INVENTORY & FEE PAYMENT

The permittee shall file with the AQD an annual emission inventory and shall pay annual fees based on emissions inventories. The methods used to calculate emissions for inventory purposes shall be based on the best available information accepted by AQD.
[OAC 252:100-5-2.1, OAC 252:100-5-2.2, and OAC 252:100-8-6(a)(8)]

SECTION VIII. TERM OF PERMIT

A. Unless specified otherwise, the term of an operating permit shall be five years from the date of issuance. [OAC 252:100-8-6(a)(2)(A)]

B. A source's right to operate shall terminate upon the expiration of its permit unless a timely and complete renewal application has been submitted at least 180 days before the date of expiration. [OAC 252:100-8-7.1(d)(1)]

C. A duly issued construction permit or authorization to construct or modify will terminate and become null and void (unless extended as provided in OAC 252:100-8-1.4(b)) if the construction is not commenced within 18 months after the date the permit or authorization was issued, or if work is suspended for more than 18 months after it is commenced. [OAC 252:100-8-1.4(a)]

D. The recipient of a construction permit shall apply for a permit to operate (or modified operating permit) within 180 days following the first day of operation. [OAC 252:100-8-4(b)(5)]

SECTION IX. SEVERABILITY

The provisions of this permit are severable and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
[OAC 252:100-8-6 (a)(6)]

SECTION X. PROPERTY RIGHTS

A. This permit does not convey any property rights of any sort, or any exclusive privilege.
[OAC 252:100-8-6(a)(7)(D)]

B. This permit shall not be considered in any manner affecting the title of the premises upon which the equipment is located and does not release the permittee from any liability for damage to persons or property caused by or resulting from the maintenance or operation of the equipment for which the permit is issued. [OAC 252:100-8-6(c)(6)]

SECTION XI. DUTY TO PROVIDE INFORMATION

A. The permittee shall furnish to the DEQ, upon receipt of a written request and within sixty (60) days of the request unless the DEQ specifies another time period, any information that the DEQ may request to determine whether cause exists for modifying, reopening, revoking, reissuing,

terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permit.

[OAC 252:100-8-6(a)(7)(E)]

B. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 27A O.S. § 2-5-105(18). Confidential information shall be clearly labeled as such and shall be separable from the main body of the document such as in an attachment.

[OAC 252:100-8-6(a)(7)(E)]

C. Notification to the AQD of the sale or transfer of ownership of this facility is required and shall be made in writing within thirty (30) days after such sale or transfer.

[Oklahoma Clean Air Act, 27A O.S. § 2-5-112(G)]

SECTION XII. REOPENING, MODIFICATION & REVOCATION

A. The permit may be modified, revoked, reopened and reissued, or terminated for cause. Except as provided for minor permit modifications, the filing of a request by the permittee for a permit modification, revocation and reissuance, termination, notification of planned changes, or anticipated noncompliance does not stay any permit condition.

[OAC 252:100-8-6(a)(7)(C) and OAC 252:100-8-7.2(b)]

B. The DEQ will reopen and revise or revoke this permit prior to the expiration date in the following circumstances: [OAC 252:100-8-7.3 and OAC 252:100-8-7.4(a)(2)]

(1) Additional requirements under the Clean Air Act become applicable to a major source category three or more years prior to the expiration date of this permit. No such reopening is required if the effective date of the requirement is later than the expiration date of this permit.
(2) The DEQ or the EPA determines that this permit contains a material mistake or that the permit must be revised or revoked to assure compliance with the applicable requirements.
(3) The DEQ or the EPA determines that inaccurate information was used in establishing the emission standards, limitations, or other conditions of this permit. The DEQ may revoke and not reissue this permit if it determines that the permittee has submitted false or misleading information to the DEQ.
(4) DEQ determines that the permit should be amended under the discretionary reopening provisions of OAC 252:100-8-7.3(b).

C. The permit may be reopened for cause by EPA, pursuant to the provisions of OAC 100-8-7.3(d). [OAC 100-8-7.3(d)]

D. The permittee shall notify AQD before making changes other than those described in Section XVIII (Operational Flexibility), those qualifying for administrative permit amendments, or those defined as an Insignificant Activity (Section XVI) or Trivial Activity (Section XVII). The notification should include any changes which may alter the status of a "grandfathered source," as defined under AQD rules. Such changes may require a permit modification.

[OAC 252:100-8-7.2(b) and OAC 252:100-5-1.1]

E. Activities that will result in air emissions that exceed the trivial/insignificant levels and that are not specifically approved by this permit are prohibited. [OAC 252:100-8-6(c)(6)]

SECTION XIII. INSPECTION & ENTRY

A. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized regulatory officials to perform the following (subject to the permittee's right to seek confidential treatment pursuant to 27A O.S. Supp. 1998, § 2-5-105(18) for confidential information submitted to or obtained by the DEQ under this section):

(1) enter upon the permittee's premises during reasonable/normal working hours where a source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
(2) have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
(3) inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
(4) as authorized by the Oklahoma Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit.

[OAC 252:100-8-6(c)(2)]

SECTION XIV. EMERGENCIES

A. Any exceedance resulting from an emergency shall be reported to AQD promptly but no later than 4:30 p.m. on the next working day after the permittee first becomes aware of the exceedance. This notice shall contain a description of the emergency, the probable cause of the exceedance, any steps taken to mitigate emissions, and corrective actions taken.

[OAC 252:100-8-6 (a)(3)(C)(iii)(I) and (IV)]

B. Any exceedance that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to AQD as soon as is practicable; but under no circumstance shall notification be more than 24 hours after the exceedance. [OAC 252:100-8-6(a)(3)(C)(iii)(II)]

C. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. [OAC 252:100-8-2]

D. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that: [OAC 252:100-8-6 (e)(2)]

(1) an emergency occurred and the permittee can identify the cause or causes of the emergency;

(2) the permitted facility was at the time being properly operated;
(3) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit.

E. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [OAC 252:100-8-6(e)(3)]

F. Every written report or document submitted under this section shall be certified as required by Section III (Monitoring, Testing, Recordkeeping & Reporting), Paragraph F.
[OAC 252:100-8-6(a)(3)(C)(iv)]

SECTION XV. RISK MANAGEMENT PLAN

The permittee, if subject to the provision of Section 112(r) of the Clean Air Act, shall develop and register with the appropriate agency a risk management plan by June 20, 1999, or the applicable effective date. [OAC 252:100-8-6(a)(4)]

SECTION XVI. INSIGNIFICANT ACTIVITIES

Except as otherwise prohibited or limited by this permit, the permittee is hereby authorized to operate individual emissions units that are either on the list in Appendix I to OAC Title 252, Chapter 100, or whose actual calendar year emissions do not exceed any of the limits below. Any activity to which a State or Federal applicable requirement applies is not insignificant even if it meets the criteria below or is included on the insignificant activities list.

(1) 5 tons per year of any one criteria pollutant.
(2) 2 tons per year for any one hazardous air pollutant (HAP) or 5 tons per year for an aggregate of two or more HAP's, or 20 percent of any threshold less than 10 tons per year for single HAP that the EPA may establish by rule.
[OAC 252:100-8-2 and OAC 252:100, Appendix I]

SECTION XVII. TRIVIAL ACTIVITIES

Except as otherwise prohibited or limited by this permit, the permittee is hereby authorized to operate any individual or combination of air emissions units that are considered inconsequential and are on the list in Appendix J. Any activity to which a State or Federal applicable requirement applies is not trivial even if included on the trivial activities list.
[OAC 252:100-8-2 and OAC 252:100, Appendix J]

SECTION XVIII. OPERATIONAL FLEXIBILITY

A. A facility may implement any operating scenario allowed for in its Part 70 permit without the need for any permit revision or any notification to the DEQ (unless specified otherwise in the permit). When an operating scenario is changed, the permittee shall record in a log at the facility the scenario under which it is operating. [OAC 252:100-8-6(a)(10) and (f)(1)]

B. The permittee may make changes within the facility that:

(1) result in no net emissions increases,
(2) are not modifications under any provision of Title I of the federal Clean Air Act, and
(3) do not cause any hourly or annual permitted emission rate of any existing emissions unit to be exceeded;

provided that the facility provides the EPA and the DEQ with written notification as required below in advance of the proposed changes, which shall be a minimum of seven (7) days, or twenty four (24) hours for emergencies as defined in OAC 252:100-8-6 (e). The permittee, the DEQ, and the EPA shall attach each such notice to their copy of the permit. For each such change, the written notification required above shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change. The permit shield provided by this permit does not apply to any change made pursuant to this paragraph. [OAC 252:100-8-6(f)(2)]

SECTION XIX. OTHER APPLICABLE & STATE-ONLY REQUIREMENTS

A. The following applicable requirements and state-only requirements apply to the facility unless elsewhere covered by a more restrictive requirement:

(1) Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in the Open Burning Subchapter. [OAC 252:100-13]
(2) No particulate emissions from any fuel-burning equipment with a rated heat input of 10 MMBTUH or less shall exceed 0.6 lb/MMBTU. [OAC 252:100-19]

(3) For all emissions units not subject to an opacity limit promulgated under 40 C.F.R., Part 60, NSPS, no discharge of greater than 20% opacity is allowed except for: [OAC 252:100-25]

(a) Short-term occurrences which consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity;
(b) Smoke resulting from fires covered by the exceptions outlined in OAC 252:100-13-7;
(c) An emission, where the presence of uncombined water is the only reason for failure to meet the requirements of OAC 252:100-25-3(a); or
(d) Smoke generated due to a malfunction in a facility, when the source of the fuel producing the smoke is not under the direct and immediate control of the facility and the immediate constriction of the fuel flow at the facility would produce a hazard to life and/or property.

(4) No visible fugitive dust emissions shall be discharged beyond the property line on which the emissions originate in such a manner as to damage or to interfere with the use of adjacent properties, or cause air quality standards to be exceeded, or interfere with the maintenance

of air quality standards. [OAC 252:100-29]

(5) No sulfur oxide emissions from new gas-fired fuel-burning equipment shall exceed 0.2 lb/MMBTU. No existing source shall exceed the listed ambient air standards for sulfur dioxide. [OAC 252:100-31]

(6) Volatile Organic Compound (VOC) storage tanks built after December 28, 1974, and with a capacity of 400 gallons or more storing a liquid with a vapor pressure of 1.5 psia or greater under actual conditions shall be equipped with a permanent submerged fill pipe or with a vapor-recovery system. [OAC 252:100-37-15(b)]

(7) All fuel-burning equipment shall at all times be properly operated and maintained in a manner that will minimize emissions of VOCs. [OAC 252:100-37-36]

SECTION XX. STRATOSPHERIC OZONE PROTECTION

A. The permittee shall comply with the following standards for production and consumption of ozone-depleting substances: [40 CFR 82, Subpart A]

(1) Persons producing, importing, or placing an order for production or importation of certain class I and class II substances, HCFC-22, or HCFC-141b shall be subject to the requirements of §82.4;
(2) Producers, importers, exporters, purchasers, and persons who transform or destroy certain class I and class II substances, HCFC-22, or HCFC-141b are subject to the recordkeeping requirements at §82.13; and
(3) Class I substances (listed at Appendix A to Subpart A) include certain CFCs, Halons, HBFCs, carbon tetrachloride, trichloroethane (methyl chloroform), and bromomethane (Methyl Bromide). Class II substances (listed at Appendix B to Subpart A) include HCFCs.

B. If the permittee performs a service on motor (fleet) vehicles when this service involves an ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all applicable requirements. Note: The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC-22 refrigerant. [40 CFR 82, Subpart B]

C. The permittee shall comply with the following standards for recycling and emissions reduction except as provided for MVACs in Subpart B: [40 CFR 82, Subpart F]

(1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156;
(2) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158;
(3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161;

(4) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record-keeping requirements pursuant to § 82.166;
(5) Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to § 82.158; and
(6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

SECTION XXI. TITLE V APPROVAL LANGUAGE

A. DEQ wishes to reduce the time and work associated with permit review and, wherever it is not inconsistent with Federal requirements, to provide for incorporation of requirements established through construction permitting into the Source's Title V permit without causing redundant review. Requirements from construction permits may be incorporated into the Title V permit through the administrative amendment process set forth in OAC 252:100-8-7.2(a) only if the following procedures are followed:

(1) The construction permit goes out for a 30-day public notice and comment using the procedures set forth in 40 C.F.R. § 70.7(h)(1). This public notice shall include notice to the public that this permit is subject to EPA review, EPA objection, and petition to EPA, as provided by 40 C.F.R. § 70.8; that the requirements of the construction permit will be incorporated into the Title V permit through the administrative amendment process; that the public will not receive another opportunity to provide comments when the requirements are incorporated into the Title V permit; and that EPA review, EPA objection, and petitions to EPA will not be available to the public when requirements from the construction permit are incorporated into the Title V permit.
(2) A copy of the construction permit application is sent to EPA, as provided by 40 CFR § 70.8(a)(1).
(3) A copy of the draft construction permit is sent to any affected State, as provided by 40 C.F.R. § 70.8(b).
(4) A copy of the proposed construction permit is sent to EPA for a 45-day review period as provided by 40 C.F.R.§ 70.8(a) and (c).
(5) The DEQ complies with 40 C.F.R. § 70.8(c) upon the written receipt within the 45-day comment period of any EPA objection to the construction permit. The DEQ shall not issue the permit until EPA's objections are resolved to the satisfaction of EPA.
(6) The DEQ complies with 40 C.F.R. § 70.8(d).
(7) A copy of the final construction permit is sent to EPA as provided by 40 CFR § 70.8(a).
(8) The DEQ shall not issue the proposed construction permit until any affected State and EPA have had an opportunity to review the proposed permit, as provided by these permit conditions.
(9) Any requirements of the construction permit may be reopened for cause after incorporation into the Title V permit by the administrative amendment process, by DEQ as provided in OAC 252:100-8-7.3(a), (b), and (c), and by EPA as provided in 40 C.F.R. § 70.7(f) and (g).
(10) The DEQ shall not issue the administrative permit amendment if performance tests fail to demonstrate that the source is operating in substantial compliance with all permit requirements.

B. To the extent that these conditions are not followed, the Title V permit must go through the Title V review process.

SECTION XXII. CREDIBLE EVIDENCE

For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any provision of the Oklahoma implementation plan, 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.

[OAC 252:100-43-6]

DRAFT/PROPOSED

PART 70 PERMIT

AIR QUALITY DIVISION
STATE OF OKLAHOMA
DEPARTMENT OF ENVIRONMENTAL QUALITY
707 N. ROBINSON, SUITE 4100
P.O. BOX 1677
OKLAHOMA CITY, OKLAHOMA 73101-1677

Permit No. 2015-0383-TVR2

Tinker Air Force Base

having complied with the requirements of the law, is hereby granted permission to operate all the air emission sources within their boundaries in Midwest City, Oklahoma County, Oklahoma,

subject to standard conditions dated July 21, 2009 and specific conditions, both attached.

This permit shall expire five years from the date below, except as authorized under Section VIII of the Standard Conditions.

Director, Air Quality Division **Date**

Tinker Air Force Base
Attn: Mr. Martin Wheeler
72 ABW/CEANP
7535 5th Street Bldg 400
Tinker AFB, OK 73145-9010

SUBJECT: Permit No. **2015-0383-TVR2**
Tinker Air Force Base Fac ID: 1518
Facility-Wide Permit

Dear Mr. Wheeler:

Air Quality Division has completed the initial review of your permit application referenced above. This application has been determined to be a **Tier II**. In accordance with 27A O.S. § 2-14-302 and OAC 252:4-7-13(c) the enclosed draft permit is now ready for public review. The requirements for public review include the following steps which you must accomplish:

1. Publish at least one legal notice (one day) in at least one newspaper of general circulation within the county where the facility is located. (Instructions enclosed)

2. Provide for public review (for a period of 30 days following the date of the newspaper announcement) a copy of this draft permit and a copy of the application at a convenient public location within the county of the facility such as the public library in the county seat.

3. Send to AQD a copy of the proof of publication notice from Item #1 above together with any additional comments or requested changes which you may have on the draft permit.

Thank you for your cooperation. If you have any questions, please refer to the permit number above and contact me at (405) 702-4194 or email me at ellis.fischer@deq.ok.gov.

Sincerely,

Phillip Fielder, P.E.
New Source Permits Section
AIR QUALITY DIVISION

Encl.

APPLICANT RESPONSIBILITIES

Permit applicants are required to give public notice that a Tier II or Tier III draft permit has been prepared by DEQ. The notice must be published in one newspaper local to the site or facility. Upon publication, a signed affidavit of publication must be obtained from the newspaper and sent to AQD. Note that if either the applicant or the public requests a public meeting, this must be arranged through the Customer Services Division of the DEQ.

REQUIRED CONTENT (27A O.S. § 2-14-302 and OAC 252:4-7-13(c))

1. A statement that a Tier II or Tier III draft permit has been prepared by DEQ;
2. Name and address of the applicant;
3. Name, address, driving directions, legal description and county of the site or facility;
4. The type of permit or permit action being sought;
5. A description of activities to be regulated, including an estimate of emissions from the facility;
6. Location(s) where the application and draft permit may be reviewed (a location in the county where the site/facility is located must be included);
7. Name, address, and telephone number of the applicant and DEQ contacts;
8. Any additional information required by DEQ rules or deemed relevant by applicant;
9. A 30-day opportunity to request a formal public meeting on the draft permit.

SAMPLE NOTICE on page 2.

SAMPLE NOTICE *(Italicized print is to be filled in by the applicant.)***:**

DEQ NOTICE OF TIER *...II or III...* **DRAFT PERMIT**

A Tier *...II or III...* **application for an air quality** *...type of permit or permit action being sought (e.g., Construction Permit for a Major Facility)...* **has been filed with the Oklahoma Department of Environmental Quality (DEQ) by applicant,** *...name and address.*

The applicant requests approval to *...brief description of purpose of application...* **at the** *...site/facility name ... ...***[proposed to be] located at** *...physical address (if any), driving directions, and legal description including county.....*

In response to the application, DEQ has prepared a draft permit [modification] (Permit Number: *....xx-xxx-x...***), which may be reviewed at** *...locations (one must be in the county where the site/facility is located)...* **or at the Air Quality Division's main office (see address below). The draft permit is also available for review in the Air Quality Section of DEQ's Web Page: http://www.deq.state.ok.us/**

This draft permit would authorize the facility to emit the following regulated pollutants: *(list each pollutant and amounts in tons per year (TPY))*

The public comment period ends 30 days after the date of publication of this notice. Any person may submit written comments concerning the draft permit to the Air Quality Division contact listed below. [Modifications only, add: **Only those issues relevant to the proposed modification(s) are open for comment.**] **A public meeting on the draft permit [modification] may also be requested in writing at the same address. Note that all public meetings are to be arranged and conducted by DEQ/CSD staff.**

In addition to the public comment opportunity offered under this notice, this draft permit is subject to U.S. Environmental Protection Agency (EPA) review, EPA objection, and petition to EPA, as provided by 40 CFR § 70.8. [For Construction Permits, add: **The requirements of the construction permit will be incorporated into the Title V permit through the administrative amendment process. Therefore, no additional opportunity to provide comments or EPA review, EPA objection, and petitions to EPA will be available to the public when requirements from the construction permit are incorporated into the Title V permit.**]

If the Administrator (EPA) does not object to the proposed permit, the public has 60 days following the Administrator's 45 day review period to petition the Administrator to make such an objection as provided in 40 CFR 70.8(d) and in OAC 252:100-8-8(j). Information on all permit actions and applicable review time lines is available in the Air Quality section of the DEQ Web page: http://www.deq.state.ok.us/.

For additional information, contact *...names, addresses and telephone numbers of contact persons for the applicant,* **or contact DEQ at: Chief Engineer, Permits & Engineering Group, Air Quality Division, 707 N. Robinson, Suite 4100, P.O. Box 1677, Oklahoma City, OK, 73101-1677. Phone No. (405) 702-4100.**