DRAFT

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

MEMORANDUM **September 26, 2019**

TO: Phillip Fielder, P.E., Chief Engineer

THROUGH: Rick Groshong, Environmental Manager, Compliance and Enforcement

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

THROUGH: David Schutz, P.E., New Source Permit Section

FROM: Morgan McGrath, P.E., Eng. Section, Regional Office at Tulsa

SUBJECT: Evaluation of Permit Application No. **2015-1514-C (M-2)**
Myall, LLC
PRY Data Storage Facility (SIC 7374/NAICS 518210)
Facility ID: 6417
Latitude 36.24250º, Longitude 95.33020º
Section 6, Township 20N, Range 19E; Pryor, Mayes County
Directions: From intersection of US 412 and US 69, north approximately five miles on US 69, right (east) on Main Street (E0535 Road), ¼ mile to Webb St. (N4210 Road), facility is on southeast corner, 4581 Webb Street, Mid America Industrial Park, Pryor, OK.

INTRODUCTION

Myall, LLC (Myall) has submitted an application for a significant modification to their existing Part 70 construction permit for their data storage facility in Pryor. The facility currently operates under Permit No. 2015-1514-TV (M-1) issued on December 26, 2018.

The facility currently has facility-wide emission caps for emissions of NOx, CO, VOC, SO_2, PM_{10}, and HAPs. In this application Myall has requested the following:

1. Removal of all existing emission caps, with the exception of NOx, which is requested to retain its existing permit limit of 249 TPY;
2. Authorization to construct additional emergency generators, a new fire pump engine, fuel storage tanks, and natural gas-fired heating units;
3. Proposed changes to the performance testing requirements in the specific conditions for existing engine groups that have already undergone satisfactory performance testing.

This application has been classified as Tier II based on the request for a significant modification to the construction permit for a Part 70 source. Per OAC 252:100-8-7.2(b)(2)(A)(ii), significant permit modification procedures shall be used for those permit modifications that relax any reporting or recordkeeping requirements.

The facility has stated that all information pertaining to the emergency generators are proprietary in nature and DEQ has agreed to withhold that information from the permit memorandum for confidentiality purposes.

PROCESS DESCRIPTION

Myall operates a data center that includes emergency generators as permitted emission sources. The emergency generators provide power to the data center in the event of a power supply interruption. The facility also has fuel storage tanks, natural gas-fired heating units and non-contact cooling towers, fire pump engines for use in the event of a fire at the facility, and a booster pump emergency generator for the waste water treatment plant. Site specific information of the permitted equipment is considered confidential and is not presented in the permit.

EQUIPMENT

Emission units (EUs) have been arranged into Emission Unit Groups (EUGs) in the following outline.

EUG 1 – Emergency Generators

CONFIDENTIAL INFORMATION REMOVED

EUG 2 – Fire Pump Engines

CONFIDENTIAL INFORMATION REMOVED

EUG 3 – Wastewater Treatment Booster Pump (WWTP) Engine

CONFIDENTIAL INFORMATION REMOVED

EUG 4 – Natural Gas-Fired HVAC Units (Heaters)

CONFIDENTIAL INFORMATION REMOVED

EUG 5 – Day Tanks and Storage Tanks

CONFIDENTIAL INFORMATION REMOVED

EMISSIONS

Project Evaluation

The potential emissions from the new units were evaluated. The evaluation assumed the worst-case emission factors for each pollutant (based on operating load), 500 hours per year of operation, the maximum horsepower (adjusted to the load for which the emission factor is representative), and the existing permit limit of 249 TPY NOx. The emission increases were determined to be less than 100 TPY for each criteria pollutant (excluding NOx which will retain the enforceable permit limit).

Facility-Wide Potential Emissions

In order to assess if the NOx emission cap is sufficient to limit all other pollutants, a facility-wide potential to emit analysis was performed (submitted to DEQ on March 29, 2019). In the analysis, potential emissions of CO, VOC, SO_2, $PM_{10,}$ and HAPs are assumed to be restricted by the existing enforceable permit limit of 249 TPY NOx. For each pollutant, a worst-case emission factor based on the operating load for each engine type was chosen. The potential to emit analysis for CO resulted in emissions below the Prevention of Significant Deterioration (PSD) major source level (250 TPY) but above the Part 70 major source level (100 TPY). The potential to emit analysis for all other pollutants remained below the Part 70 major source level (< 100 TPY).

The emergency generators are all diesel-fired with NOx levels high enough to make NOx the controlling pollutant of concern. NOx is the primary limit to keep the facility emissions below the PSD major source levels.

Compliance with the CAP for the emergency generators can be demonstrated by the following methods:

i. Use of emission factors for each engine group. The calculations shall either use the g/hp-hr emission factor times hour of operation, assuming rated HP, or shall use the lb/1,000 gallon factor times the fuel consumption for each engine type; or
ii. Use of third order polynomial equations derived from the manufacturer measured emission factors at various loads. Each engine's load and run duration shall be continuously monitored by Myall's generator computer system, and the highest percent load detected in any given operating hour or more frequent intervals shall be recorded as the operating load for that hour (or any part of the hour the engine operated).
iii. Use of the manufacturer emission factors (g/hp-hr) at various load intervals. Each engine's load shall be continuously monitored by Myall's generator computer system. The calculations shall use the g/hp-hr emission factor associated with the next highest percent load detected in any given operating hour (or any part of the hour the engine operated) times the hours of operation at that load interval.

Fire pump emissions and wastewater treatment plant booster pump emissions are calculated based on manufacturer's factors and assuming 500 hours of operation per year. Emissions from the natural gas-fired heating units were calculated using emission factors from Table 1.4-1 and Table

1.4-2 of AP-42 (07/98). Emissions from the diesel-fuel storage tanks are calculated utilizing EPA TANKS 4.0.9d.

Facility-Wide Potential Emission Summary (TPY)

EUG	Description	NO_X	CO	VOC	PM_{10}	SO_2
1	Emergency generator engines	**CONFIDENTIAL INFORMATION REMOVED**				
2	Fire pump engines					
3	WWTP booster pump engine					
4	Natural Gas-Fired HVAC Units					
5	Day tanks & storage tanks					
Total		**249**	**229**	**6.76**	**7.43**	**0.37**

Hazardous Air Pollutants (HAPs)

HAP emissions from diesel fuel combustion were calculated using factors from Table 3.4-3 of AP-42 (10/96). These factors are stated in lb/MMBTU and diesel is assumed to have 138,000 BTU/gallon. Total facility emissions of HAP are 1.64 TPY. The facility is considered an "area" source of HAP.

INSIGNIFICANT ACTIVITIES

The facility has the following insignificant activities:

- Diesel fuel storage tanks;
- Natural gas fired heating units;
- Cooling towers

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 listed in OAC 252:100, Appendix Q. These requirements are addressed in the "Federal Regulations" section.

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

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

OAC 252:100-8 (Permits for Part 70 Source) [Applicable]
This facility meets the definition of a major source since it has the potential to emit regulated pollutants in excess of 100 TPY. As such, a Title V (Part 70) operating permit is required. Any planned changes in the operation of the facility which result in emissions not authorized in the permit and which exceed the "Insignificant Activities" or "Trivial Activities" thresholds require prior notification to Air Quality Division (AQD) and may require a permit modification. Insignificant activities mean individual emission units that either are on the list 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 HAP that the EPA may establish by rule

OAC 252:100-9 (Excess Emissions 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 mitigation, 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 252:100-13 (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.

OAC 252:100-19 (Particulate Matter) [Applicable]
Section 19-4 regulates emissions of Particulate Matter (PM) from new and existing fuel-burning equipment, with emission limits based on maximum design heat input rating. Fuel-burning equipment is defined in OAC 252:100-19 as any internal combustion engine or gas turbine, or other combustion device used to convert the combustion of fuel into usable energy. Appendix C presents the specific PM limits: 0.6 lb/MMBTU for fuel-burning equipment with a rated heat input of 10 MMBTUH or less and a limit of 0.10 lb/MMBTU for fuel-burning equipment with a rated heat input of 10,000 MMBTUH or more. For equipment with a rated heat input that is between those values, there are two equations used to compute the allowable PM emissions. For units with a maximum heat input that is greater than 10 MMBTUH, but less than 1,000 MMBTUH, the following equation is used.

$$E = 1.0428080 \bullet X^{-0.238561}$$

Where E = the allowable total particulate matter emissions in pounds per MMBTU
X = the maximum heat input in MMBTU per hour

The emergency generators, fire pump engines, and WWTP booster engine are subject to these requirements. Emission estimates from the fuel-burning equipment are shown to be below 16% of the calculated limits set by subchapter 19. Therefore, the equipment are in compliance with this subchapter.

OAC 252:100-25 (Visible Emissions and Particulates) [Applicable]
This subchapter states that no person shall allow the discharge of any fumes, aerosol, mist, gas, smoke, vapor, particulate matter, or any combination thereof exhibiting greater than 20% opacity except for short term occurrences, which consist of not more than one six-minute (6) period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24-hour period. In no case shall the average of any six-minute (6) 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, this facility will not cause a problem in this area, therefore it is not necessary to require specific precautions to be taken.

OAC 252:100-31 (Sulfur Compounds) [Applicable]
Part 2 limits the ambient air concentration of hydrogen sulfide (H_2S) emissions from any facility to 0.2 ppmv (24-hour average) at standard conditions which is equivalent to 283 $\mu g/m^3$. Fuel-burning equipment fired with commercial natural gas will not have the potential to exceed the H_2S ambient air concentration limit.
Part 5 limits sulfur dioxide emissions from new fuel-burning equipment (constructed after July 1, 1972). Myall utilizes both natural gas and diesel in their fuel-burning equipment.

For gaseous fuels the limit is 0.2 lb/MMBTU heat input averaged over 3 hours. For fuel gas having a gross calorific value of approximately 1,020 Btu/scf, this limit corresponds to fuel sulfur content of approximately 1,227 ppmv. The permit requires the use of commercial grade natural gas to ensure compliance with Subchapter 31.

The limit for liquid fuels is 0.80 lb/MMBTU heat input averaged over 3-hours. All engines are diesel fired and subject to the ultra-low sulfur fuel requirement for CI stationary engines of 15 ppm. Table 3.4-1 of AP-42 (10/96) lists an SO_2 emission factor of $1.01S_1$ (lb/MMBTU). Where S_1 equals the % sulfur in diesel fuel. Using 15 ppm (0.0015%), the value is calculated to be 0.00151 lb/MMBTU (heat input) which is in compliance with the liquid fuel limit.

OAC 252:100-33 (Nitrogen Oxides) [Not Applicable]
This subchapter limits NO_X emissions from new fuel-burning equipment with a rated heat input greater than or equal to 50 MMBTUH. There is no fuel-burning equipment at the facility that individually exceeds the 50 MMBTUH heat input rate.

OAC 252:100-35 (Carbon Monoxide) [Not Applicable]
None of the following affected processes are located at this facility: gray iron cupola, blast furnace, basic oxygen furnace, petroleum catalytic cracking unit, or petroleum catalytic reforming unit. There are no affected sources at this facility.

OAC 252:100-37 (Volatile Organic Compounds) [Applicable]
Part 3 requires storage tanks constructed after December 28, 1974, with a capacity of 400 gallons and above, 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. The diesel storage tanks have a capacity between 130 and 60,000 gallons each, and a vapor pressure less than 1.5 psia. Therefore, the diesel storage tanks are exempt from Part 3.
Part 5 limits the VOC content of coatings. Any painting operation will involve maintenance coatings of buildings and equipment and is exempt.
Part 7 requires fuel-burning equipment to be operated and maintained so as to minimize VOC emissions. Temperature and available air must be sufficient to provide essentially complete combustion. The emergency engines are designed to satisfy these requirements.

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. Since no AOC has been designated, there are no specific requirements for this 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.

The following Oklahoma Air Pollution Control Rules are not applicable to this facility:

OAC 252:100-11	Alternative Emissions Reduction	not requested
OAC 252:100-15	Mobile Sources	not in source category
OAC 252:100-17	Incinerators	not type of emission unit
OAC 252:100-23	Cotton Gins	not type of emission unit
OAC 252:100-24	Grain Elevators	not in source category
OAC 252:100-39	Former Nonattainment Areas	not in area category
OAC 252:100-47	Municipal Solid Waste Landfills	not in area category

FEDERAL REGULATIONS

PSD, 40 CFR Part 52 [Not Applicable]

Myall is considered a data storage center which does not belong to any of the listed 28 source categories which have an emission threshold of 100 TPY. Therefore, the emission threshold of 250 TPY applies to the facility. The facility has an enforceable permit limit of 249 TPY NOx. NOx is the primary limit to keep the facility emissions below the PSD major source levels. At this time, PSD does not apply.

NSPS, 40 CFR Part 60 [Subpart IIII Applicable]

Subpart Kb, VOL Storage Vessels. This subpart applies to volatile organic liquids storage vessels (including petroleum liquids storage vessels) for which construction, reconstruction, or modification commenced after July 23, 1984, and which have a capacity of 19,813 gallons (75 cubic meters) or more. 40 CFR Part §60.110b specifies that vessels with a design capacity greater than or equal to 39,980 gallons storing a VOL that, as stored, has a maximum true vapor pressure less than 0.5 psia is not subject to this subpart. The diesel storage tanks at this facility are not subject to this subpart because the vapor pressure of the diesel fuel is approximately 0.06kPa (0.009 psi).

Subpart IIII, Stationary Compression Ignition Internal Combustion Engines. The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) that are constructed (ordered) after July 11, 2005 and manufactured after April 1, 2006 (July 1, 2006 for fire pump engines). The emergency generator engines and fire pump engines at this facility have displacement less than 10 liters per cylinder (l/cyl). All emergency generator engines are 2007 model year or later and are certified to nonroad emission standards by the engine manufacture. EPA Certificates of Conformity for each engine family are maintained on site. Engines manufactured by stationary CI internal combustion engine manufacturers must meet the emission standards as required in §60.4201 and §60.4202 during the certified emissions life of the engines. Per §60.4207, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use fuel that meets the requirements of 40 CFR §80.510(b) for nonroad diesel fuel (15 ppm maximum sulfur content). Per §60.4209, owners and operators of emergency stationary CI internal combustion engines that does not meet the standards applicable to non-emergency engines, must install a non-resettable hour meter prior to startup of the engine. All emergency stationary CI internal combustion engines are certified to non-road standards by the manufacturer and are required to be equipped with a non-resettable hour meter. Finally, §60.4211(e) states that 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, but that such testing is limited to 100 hours per year. In accordance with 40 CFR 60.4211 emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response. The facility must maintain records of operation of engine in emergency and non-emergency service (e.g. maintenance) as recorded with the non-resettable hour meter.
Subpart JJJJ, Stationary Spark Ignition Internal Combustion Engines (SI-ICE). There are no SI-ICE located at this facility.

NESHAP, 40 CFR Part 61 [Not Applicable]
There are no emissions of any of the regulated pollutants: arsenic, asbestos, benzene, beryllium, coke oven emissions, mercury, radionuclides or vinyl chloride except for trace amounts of benzene. Subpart J, Equipment Leaks of Benzene, only affects process streams which contain more than 10% benzene by weight. All process streams at this facility are below this threshold.

NESHAP, 40 CFR Part 63 [Subpart ZZZZ Applicable]
Subpart ZZZZ, Reciprocating Internal Combustion Engines (RICE). This subpart affects any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions. Owners and operators of the following new or reconstructed RICE must meet the requirements of Subpart ZZZZ by complying with either 40 CFR Part 60 Subpart IIII (for CI engines) or 40 CFR Part 60 Subpart JJJJ (for SI engines). Based on emission calculations, this facility is an area source of HAP. A stationary RICE located at an area source of HAP emissions is new if construction commenced on or after June 12, 2006. All of the engines associated with emergency generators and the fire pumps are new engines and satisfy requirements of Subpart ZZZZ through compliance with NSPS Subpart IIII. Other applicable requirements include:

1) Operate and maintain the stationary RICE engine and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a 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.
2) Install a non-resettable hour meter if one is not already installed.

Compliance Assurance Monitoring, 40 CFR Part 64 [Not Applicable]
Compliance Assurance Monitoring, as published in the Federal Register on October 22, 1997, applies to any pollutant specific emission unit at a major source, which 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.

There are no control devices on the emergency engines or tanks. CAM is not applicable.

Chemical Accident Prevention Provisions, 40 CFR Part 68 [Not Applicable]
This facility will not process or store more than the threshold quantity of any regulated substance (Section 112r of the Clean Air Act 1990 Amendments). More information on this federal program is available on the web page: www.epa.gov/rmp.

Stratospheric Ozone Protection, 40 CFR Part 82 [Subparts A and F are Applicable]
These standards require phase out of Class I & II substances, reductions of emissions of Class I & II substances to the lowest achievable level in all use sectors, and banning use of nonessential products containing ozone-depleting substances (Subparts A & C); control servicing of motor vehicle air conditioners (Subpart B); require Federal agencies to adopt procurement regulations which meet phase out requirements and which maximize the substitution of safe alternatives to Class I and Class II substances (Subpart D); require warning labels on products made with or containing Class I or II substances (Subpart E); maximize the use of recycling and recovery upon disposal (Subpart F); require producers to identify substitutes for ozone-depleting compounds under the Significant New Alternatives Program (Subpart G); and reduce the emissions of halons (Subpart H).
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.
Subpart F requires that any persons servicing, maintaining, or repairing appliances except for motor vehicle air conditioners; persons disposing of appliances, including motor vehicle air conditioners; refrigerant reclaimers, appliance owners, and manufacturers of appliances and recycling and recovery equipment comply with the standards for recycling and emissions reduction.

The standard conditions of the permit address the requirements specified at § 82.156 for persons opening appliances for maintenance, service, repair, or disposal; § 82.158 for equipment used during the maintenance, service, repair, or disposal of appliances; § 82.161 for certification by an approved technician certification program of persons performing maintenance, service, repair, or disposal of appliances; § 82.166 for recordkeeping; § 82.158 for leak repair requirements; and § 82.166 for refrigerant purchase records for appliances normally containing 50 or more pounds of refrigerant.

COMPLIANCE

Landowner Affidavit

The applicant submitted an 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 certifies that the applicant has a

current lease or easement which is given to accomplish the permitted purpose. Information on all permit actions is available for review by the public in the Air Quality Section of the DEQ web page: *www.deq.state.ok.us*.

Tier Classification

This application has been classified as **Tier II** based on the request for a significant modification to the construction permit for a Part 70 source.

Removing emission CAPs previously established in Tier II construction permits is considered a relaxation to the current recordkeeping requirements. Per OAC 252:100-8-7.2(b)(2)(A)(ii), significant permit modification procedures shall be used for those permit modifications that relax any reporting or recordkeeping requirements.

EPA Review

The proposed permit will go through a 45-day EPA review.

Public Review

The applicant published the "Notice of Filing a Tier II Application" in the *The Paper*, a daily newspaper in Mayes County, on December 3, 2018. The notice stated that the application was available for public review at the Mayes County Courthouse or at the AQD main office in Oklahoma City, Oklahoma.

The applicant will publish a "Notice of Draft Tier II Permit" in a local newspaper for a 30 day public review. A copy of the draft permit will be available on the Air Quality section of the DEQ web page at *www.deq.state.ok.us*.

State Review

This facility is not located within 50 miles of the border of Oklahoma. No state review is required.

Fee Paid

The fee of $5,000 for a significant modification to the construction permit for a Part 70 source was received on November 29, 2018.

SUMMARY

The applicant has demonstrated the ability to achieve compliance with all applicable air quality rules and regulations. Ambient air quality standards are not threatened at this site. There are no active Air Quality compliance or enforcement issues concerning this facility. Issuance of this construction permit is recommended, contingent on public and EPA review.

PERMIT TO CONSTRUCT
AIR POLLUTION CONTROL FACILITY
SPECIFIC CONDITIONS

Myall, LLC **Permit No. 2015-1514-C (M-2)**
PRY Data Storage Facility

The permittee is authorized to construct in conformity with the specifications submitted to Air Quality on November 29, 2018 and subsequent information received. The Evaluation Memorandum dated September 26, 2019, explains the derivation of applicable permit requirements and estimates of emissions; however, it does not contain operating limitations or permit requirements. Continuing operations under this permit constitutes acceptance of, and consent to, the conditions contained herein:

1. Point of emission and emission limitations: [OAC 252:100-8-6(a)(1)]

Facility-Wide Emissions (TPY) [1]

NO_X	249

[1] monthly and 12-month rolling total

2. Emissions from the emergency generators will be limited by, and contribute to, the facility-wide cap on NO_X identified in Specific Condition No. 1. [OAC 252:100-8-6(a)(1)]

    a. Each calendar month, the permittee shall calculate emissions of NO_X from the emergency generators using a method outlined below:
        i. Use of manufacturer's emission factors for each engine group (proposed factors that were provided in the confidential application). The calculations shall either use the g/bhp-hr emission factor (at 100% load) times hour of operation, and assuming maximum rate bhp. Use the lb/1,000 gallon factor times the fuel consumption for each engine type; or
        ii. Use of third order polynomial equations derived from the manufacturer measured emission factors at various loads (ekW). Each engine's load (ekW) and run duration shall be continuously monitored by Myall's generator computer system, and the highest percent load detected in any given operating hour or more frequent intervals shall be recorded as the operating load for that hour (or any part of the hour the engine operated);
        iii. Use of the manufacturer emission factors (g/bhp-hr) at various load intervals. Each engine's load shall be continuously monitored by Myall's generator computer system. The calculations shall use the g/bhp-hr emission factor associated with the next highest percent load detected in any given operating hour (or any part of the hour the engine operated), times the hours of operation at that particular load interval.
    b. Each calendar month the permittee shall incorporate emissions from the emergency generators into the 12-month rolling total emissions for NO_X. These emissions shall be summed with other emissions for determining compliance with the facility-wide cap.

3. Liquid diesel fuel for the emergency generators shall have a sulfur content less than or equal to 0.0015% (15 ppm) by weight. Compliance can be shown by supplier's latest delivery ticket(s), and shall be demonstrated at least once each calendar year.
[40 CFR Subpart IIII §60.4207 & OAC 252:100-31]

4. Emissions from the natural gas fired heating units will be limited by, and contribute to, the facility-wide cap on NO_X identified in Specific Condition No. 1. [OAC 252:100-8-6(a)(1)]

    a. Each calendar month, the permittee shall record the monthly quantity of natural gas combusted in the heating units and shall compute the emission of NO_X using the emission factors in AP-42 Section 1.4. These emissions shall be summed with other emissions for determining compliance with the facility-wide cap.

5. The natural gas fuel-burning equipment shall be fueled only with commercial grade natural gas. Compliance can be shown by a current gas company bill. Compliance shall be demonstrated at least once every calendar year. [OAC 252:100-31]

6. The permittee is authorized to replace any internal combustion engine or turbine with emissions limitations specified in this permit with an engine or turbine that meets the following requirements: [OAC 252:100-8-6(f)(2)]

    a. The replacement engine or turbine shall comply with the same emissions limits as the engine or turbine that it replaced. This applies to TPY limits specified in this permit.
    b. The authorization of replacement of an engine or turbine includes temporary periods of 6 months or less for maintenance purposes.
    c. The permittee shall notify AQD in writing not later than 7 days prior to start-up of the replacement engine or turbine. Said notice shall identify the old engine/turbine and shall include the new engine/turbine make and model, serial number, horsepower rating, and pollutant emission rates (g/hp-hr and TPY) at maximum horsepower for the altitude/location.
    d. Replacement equipment and emissions are limited to equipment and emissions which are not a modification under NSPS or NESHAP.
    e. Replacement equipment and emissions are limited to equipment and emissions which are not a modification or a significant modification under PSD. For existing PSD facilities, the permittee shall calculate the PTE or the net emissions increase resulting from the replacement to document that it does not exceed significance levels and submit the results with the notice required by paragraph (c) of this Specific Condition. The permittee shall attach each such notice to their copy of the relevant 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 described in OAC 252:100-8-6(d) does not apply to any change made pursuant to this paragraph.

f. Engines whose installation and operation are authorized under this Specific Condition which are subject to 40 CFR Part 63, Subpart ZZZZ and/or 40 CFR Part 60, Subpart IIII shall comply with all applicable requirements.
g. Turbines whose installation and operation are authorized under this Specific Condition which are subject to 40 CFR Part 60, Subpart KKKK shall comply with all applicable requirements.

7. The permittee shall comply with all applicable requirements of 40 CFR 60 (NSPS) Subpart IIII, Stationary Compression Ignition Internal Combustion Engines (CI ICE) concerning the generator engines and the fire pump engines, including but not limited to the following.

[40 CFR Part 60, Subpart IIII]

a. §§60.4200 Am I subject to this subpart?
b. §60.4204 What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI internal combustion engine?
c. §60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?
d. §60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?
e. §60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?
f. §60.4208 What is the deadline for importing and installing stationary CI ICE produced in the previous model year?
g. §60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?
h. §60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?
i. §60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?
j. §60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?
k. §60.4218 What parts of the General Provisions apply to me?
l. §60.4219 What definitions apply to this subpart?

8. The permittee shall comply with all applicable requirements of 40 CFR 63 (NESHAP) Subpart ZZZZ, Reciprocating Internal Combustion Engines (RICE), concerning the generator engines and the fire pump engines, including but not limited to the following.

[40 CFR 63, Subpart ZZZZ]

a. §63.6580 What is the purpose of subpart ZZZZ?
b. §63.6585 Am I subject to this subpart?
c. §63.6590 What parts of my plant does this subpart cover?
d. §63.6595 When do I have to comply with this subpart?
e. §63.6603 What emission limitations and operating limitations must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?
f. §63.6605 What are my general requirements for complying with this subpart?

g. §63.6625 What are my monitoring, installation, operation, and maintenance requirements?
h. §63.6630 How do I demonstrate initial compliance with the emission limitations and operating limitations?
i. §63.6640 How do I demonstrate continuous compliance with the emission limitations and operating limitations?
j. §63.6650 What reports must I submit and when?
k. §63.6655 What records must I keep?
l. §63.6660 In what form and how long must I keep my records?
m. §63.6665 What parts of the General Provisions apply to me?
n. §63.6670 Who implements and enforces this subpart?
o. §63.6675 What definitions apply to this subpart?

9. Each engine at the facility shall have a readily accessible, permanent identification plate attached, which shows the make, model number, and serial number. [OAC 252:100-43]

10. At least once per calendar year, the permittee shall conduct test of NO_X emissions in exhaust gases from at least one engine from each engine group recommended to be testing (outlined in the table below). The testing requirement will remain until 20% of total fleet from each engine group has completed performance testing, and the test result from each engine demonstrates compliance with the manufacturers highest rated emission factor provided to AQD in previously submitted confidential applications. Testing shall be conducted using a portable engine analyzer in accordance with a protocol meeting the requirements of the "AQD Portable Analyzer Guidance" document or an equivalent method approved by Air Quality.
[OAC 252:100-43 & OAC 252:100-9]

Engine Group	Performance Testing Requirements
Group 1	No further testing
Group 2	No further testing
Group 3	Additional Testing of EU 19
Group 4	Additional Testing of EU 21 and EU 80
Group 5	No further testing
Group 6	No further testing
Group 7	No further testing
Group 8	Additional Testing to Reach 20% (4 additional tests)
Group 9	Additional Testing to Reach 20% (4 additional tests)
Group 10	Additional Testing to Reach 20% (26 tests total)
Group 11	No further testing
Group 12	Recommend 20% of engines tested (2 tests total)
Group 13	Recommend 20% of engines tested (3 tests total)

a. Following completion of performance testing for each engine group indicated in Specific Condition 10, if the emission factor established from performance testing is found to exceed the manufacturer's highest rated emission factor provided to AQD in

previously submitted confidential applications, the permittee shall submit revised manufacturer's highest rated emission factors to be used for emission calculations for those engine group(s) based on the performance tests. As an alternative, the facility can perform additional tuning on the engine(s) which exceeded the manufacturer's highest rated emission factor and perform an additional performance test to demonstrate compliance with the manufacturer's highest rated emission factor provided to AQD.

11. The permittee shall be authorized to operate this facility continuously (24 hours per day, every day of the year). [OAC 252:100-8-6(a)]

12. The permittee shall maintain records of operations as listed below. These records shall be retained on-site for at least five years from the date of recording, inspection, testing, or repair, and shall be made available to regulatory representatives upon request.
[OAC 252:100-8-5 & OAC 252:100-8-6 (a)(3)(B)]

    a. Emission calculations from all operations showing compliance with the NOx emission limit (monthly and 12-month rolling total);
    b. Hours of operation of each engine (monthly and 12-month rolling total);
    c. Records of the manufactures emission factors at various loads for all emergency generator engine groups in g/bhp-hr along with the maximum rated standby bhp for each engine group;
    d. Records of each engine's electrical output (ekW) and run duration if the third order polynomial equations are used to calculate emissions of NOx (in any given operating hour or more frequent time interval used);
    e. Records of fuel sulfur content;
    f. Records demonstrating compliance with NSPS Subpart IIII and NESHAP (MACT) Subpart ZZZZ;
    g. Records of engine performance testing required by Specific Condition No. 10.

13. No later than 30 days after each anniversary date of the issuance of the initial Title V permit, 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)]

14. The permittee shall apply for a modification of an operating permit within 180 days of commencement of operations as authorized by this construction permit.

DRAFT

PART 70 PERMIT

AIR QUALITY DIVISION
STATE OF OKLAHOMA
DEPARTMENT OF ENVIRONMENTAL QUALITY
707 N. ROBINSON STREET, SUITE 4100
P.O. BOX 1677
OKLAHOMA CITY, OKLAHOMA 73101-1677

Permit No. 2015-1514-C (M-2)

Myall, LLC

having complied with the requirements of the law, is hereby granted permission to construct at the PRY Data Storage Facility at NW/4 SW/4, Section 6, Township 20N, Range 19E, Mayes County, OK, subject to standard conditions dated June 21, 2016, and specific conditions, both attached.

In the absence of commencement of construction, this permit shall expire 18 months from the issuance date, except as authorized under Section VIII of the Standard Conditions.

Phillip Fielder, P.E.
Chief Engineer

Date

MAJOR SOURCE AIR QUALITY PERMIT
STANDARD CONDITIONS
(June 21, 2016)

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(17) 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]

Matt Jennerich, Facility Manager
Myall, LLC
1600 Amphitheatre Parkway
Mountain View, CA 94043

Permit Number: **2015-1514-C (M-2)**
Permit Writer: *Morgan M. McGrath*

SUBJECT: Evaluation of Permit No. 2015-1514-C (M-2)
PRY Data Storage Facility
Facility ID: 6417
Section 6, Township 20N, Range 19E; Pryor, Mayes County, OK

Dear Mr. Jennerich:

Air Quality Division has completed the initial review of your permit application for the above referenced facility. The 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 draft permit is now ready for public review. The requirements for public review of the draft permit include the following steps which you must accomplish:

1. Publish at least one legal notice (one day) in newspaper of general circulation ***within the county*** where the facility is located (see attached instructions).
2. Provide for public review (for a period of 30-days following the date of the newspaper announcement) a copy of this draft permit at a convenient location ***within the county*** of the facility (preferably at a public library).
3. Send AQD a written affidavit of public for the notice (Item #1 above), along with any additional comments or requested changes which you may have for the permit application ***within 20-days*** of publication.
4. At the end of the public review period, send the Air Quality Division a written notice of any public comments that you may have received.

Per your request, the draft permit will be submitted to EPA for concurrent review with the public review period. Note that the time period for EPA review is 45-days. Contingent on public and EPA review, the permit will be issued. The permit review time is hereby tolled pending the receipt of the affidavit of publication. Thank you for your cooperation. If you have any questions, please refer to the permit number above and contact the permit writer at (918) 293-1622.

Sincerely,

Phillip Fielder, P.E.
Chief Engineer
AIR QUALITY DIVISION