Technical Support Document
Arlington Valley Energy Facility
Permit Renewal V99-014 – 2.0.0.0
Issue Date: xxxxxx

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1. APPLICANT:

The Arlington Valley Energy Facility is owned by the Arlington Valley, LLC:

Arlington Valley Energy Facility
39027 West Elliot Road
Arlington, AZ 85322

2. PROJECT LOCATION:

Physical Address of the Arlington Valley Energy Facility
39027 West Elliot Road
Arlington, AZ 85322

Mailing Address:
Arlington Valley Energy Facility
P.O. Box 26
Arlington, AZ 85322

3. PROJECT DESCRIPTION:

This is a support document intended to provide additional information associated with the renewal of a permit. However, this Technical Support Document (TSD) is not part of the permit and is not a legally enforceable document.

Arlington Valley, LLC operates a natural gas-fired combined-cycle power plant designated to operate commercially as a merchant power plant in Arlington, Arizona. The facility operates under the Title V Air Quality Operating Permit #V99-014, issued by the Maricopa County Air Quality Department (MCAQD). A merchant power plant is a power generation facility that produces electricity for the deregulated electricity market without pre-arranged long-term utility power purchase agreements. Arlington Valley Energy Facility (AVEF) is a nominal 580 MW facility and is designed to convert clean natural gas to useful power at high efficiency and low cost. The AVEF employs control technologies and/or good combustion practices to minimize air emissions.

The AVEF is a categorical source for Prevention of Significant Deterioration (PSD) purposes pursuant to County Rule 240 and is, therefore, subject to a 100 ton per year (tpy) potential to emit (PTE) threshold for PSD major source determination. Maricopa County's Title V program, set forth in County Rule 210, defines a Title V major source (in part) as a source with a PTE of at least 100 tpy of any regulated air pollutant. The facility-wide PTE of the AVEF is presented in Table 3. The PTE is above the 100 tpy Title V permitting and PSD thresholds for particulate matter equal to or less than 10 microns in aerodynamic diameter (PM_{10}), particulate matter equal to or less than 2.5 microns in aerodynamic diameter ($PM_{2.5}$), carbon monoxide (CO), nitrogen oxides (NO_X), and volatile organic compounds (VOC). Additionally, the PTE is above the 100,000 tpy PSD threshold for greenhouse gases (CO_{2e}). The PTE is below the 100 tpy Title V permitting and PSD thresholds for sulfur dioxide (SO_2), the 25 tpy Title V permitting threshold for all hazardous air pollutants (HAPs) combined, and the 10 tpy Title V permitting threshold for any single HAP. Consequently, the AVEF is a Title V major source, which necessitates a Title V air quality permit.

AVEF has two nominal gross 168 MW General Electric 7FA natural gas-fired combustion turbines operating in combined-cycle mode with two supplementary fired, three-pressure Heat Recovery Steam Generators (HRSGs) and a common, reheat condensing steam turbine. Steam generation in the HRSGs is augmented with supplementary natural gas-firing using duct burners. Each HRSG

produces high pressure steam at approximately 1,800 pounds per square inch gauge (psig) for introduction into the steam turbine. The steam turbine drives an additional generator to increase the total plant output to about 510 MW without duct firing or 580 MW with duct firing and inlet air chilling.

A package boiler, rated at a maximum of 33 MMBtu/hour, is used to supply heating steam for steam turbine seals and for sparging of the HRSG steam drums during down periods. The boiler is a fire-tube type and combusts natural gas only. Make-up water is received from the demineralizer system that feeds the auxiliary boiler deaerator. The primary use of the auxiliary boiler is to maintain steam flow and operating temperatures within the HRSGs and steam turbine while the combustion turbines are off line. By maintaining steam temperatures within the turbine seals, piping, and HRSGs, the amount of time required to start-up the combustion turbines from a shutdown mode is minimized. Steam from the auxiliary boiler is not used to augment the power generation of the combustion turbines or the steam turbine. Although the auxiliary boiler is not intended for full time operation, full time operation has been assessed in this application to provide maximum operational flexibility.

4. PERMIT HISTORY:

Duke Energy Corp. was issued the initial Title V permit for the Arlington Valley facility on November 22, 2000 by the Maricopa County Environmental Services Department (MCESD). Table 1 shows the history of revisions to the permit since then.

Table 1: Arlington Valley Energy Facility Title V Permit V99014 History

Issue Date	Revision Number	Type	Reason for Revision
11/22/2000	0.0.0.0	Permit	Initial issuance.
9/6/2001	0.0.1.0	Minor Revision	
9/10/2003	0.1.0.0	Significant Revision	To add another block AVEF II 2 CTs 1 ST. (this was never constructed)
10/29/2003	0.1.1.0	Minor Revision	Increase potential capacity of AVEF II. (never implemented because AVEF II was never constructed)
5/6/2011	1.0.0.0	Permit Renewal	Permit renewal.
8/7/2012	1.0.1.0	Minor Revision	Diesel fire pump engine added to permit.
TBD	2.0.0.0	Permit Renewal	Permit Renewal.
TBD	2.0.1.0	Minor Revision	Minor revision to add turbo-mister evaporation system for evaporation pond. Incorporated into renewal.

5. COMBINED CYCLE POWER GENERATION OPERATION THEORY:

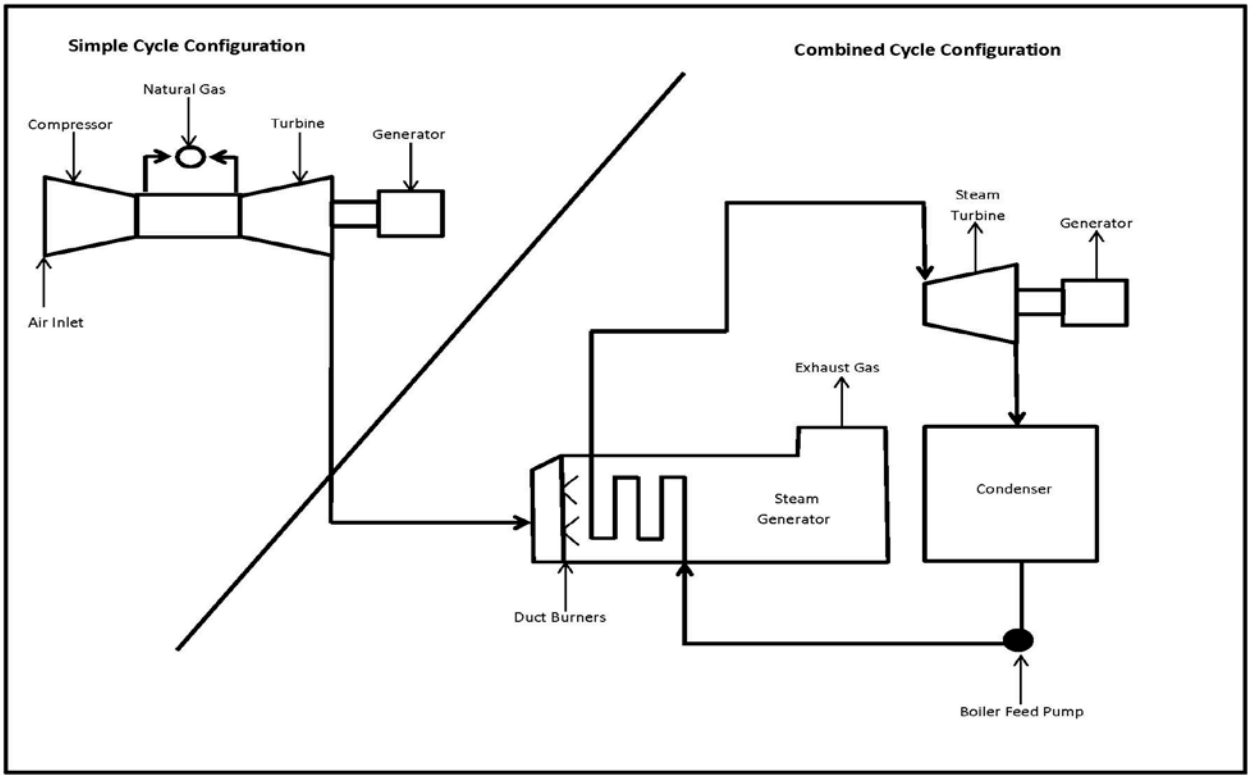
The production of electricity using a combustion turbine engine coupled with a shaft driven generator is referred to as the Brayton Cycle. This power generation cycle has a thermal efficiency which generally approaches 40 percent. This is also referred to as "simple-cycle" and has been traditionally utilized for electricity peaking generation since the unit and its output can be brought on line very quickly. The largest energy loss from this cycle is from the turbine exhaust in which heat is discarded to the atmosphere at about 1,100°F.

The Rankine Cycle represents the traditional method of generating power from utility steam electric power plants. In this cycle, boilers are used to produce high pressure steam which is expanded in a steam turbine to drive an electric generator. Rankine cycle plants have a typical thermal efficiency of less than 35 percent. The largest energy losses from this cycle are from the boiler stack that exhaust

at about 350°F and from heat rejected in the steam turbine condenser. Due to their low thermal efficiency, these plants were traditionally designed to burn inexpensive, low-grade fuels such as coal or residual fuel oil. Relatively high stack temperatures are necessary with these fuels in order to prevent stack corrosion. The need to reject large quantities of heat from the steam turbine is the reason many utility power plants were sited next to a large source of cooling water.

AVEF combines the Brayton and Rankine cycles to maximize thermal efficiency. Natural gas is combusted in two Brayton Cycle turbines that generate most of the electrical output. Instead of being discarded to the environment, the exhaust heat is recovered in a Rankine Cycle HRSG/steam turbine, and the heat is extracted until the exhaust temperature is about 200°F before being discharged through the stacks. This results in an overall thermal efficiency of over 55 percent. This design consumes only about two thirds of the fuel that would be consumed in a conventional utility power plant to produce the same amount of electricity. This state-of-the-art, high-efficiency technology combined with the exclusive use of the cleanest fossil fuel (natural gas) and the application of Best Available Control Technology (BACT), yields a small fraction of the air emissions of a similarly sized conventional power plant.

Figure 1: Plant Turbine Configuration



6. DESCRIPTION OF REGULATED MAJOR FACILITY COMPONENTS:

The description of the major components that are regulated by the MCAQD are shown in Table 2.

Table 2: Regulated Major Facility Components

Equipment/Process	Regulated Activity	Regulated Pollutants
Two GE 7FA Gas Turbines	Fuel Combustion	SO_2, NO_X, VOC, CO, PM_{10} (all PM indicators), HAPs
Cooling Tower	Drift Loss	PM_{10} (all PM indicators)
Turbine Inlet Chilling System	VOCs	VOC
Diesel Emergency Fire-Water Pump Engine	Fuel Combustion	SO_2, NO_X, VOC, CO, PM_{10} (all PM indicators), HAPs
Diesel Emergency Engine	Fuel Combustion	SO_2, NO_X, VOC, CO, PM_{10} (all PM indicators), HAPs
Turbo Mister	Drift Loss	PM_{10} (all PM indicators)

7. CHANGES TO PERMIT WITH RENEWAL:

The AVEF has requested the addition of an evaporative spray system for the evaporation pond. Because there are no published emission factors for evaporative spray systems, the PM_{10} emissions from the operation of the evaporative spray system (Turbo-Mister) using the information for induced draft cooling towers from AP-42, Section 13.4 (01/95), Table 13.4.1, and an assumed maximum TDS fraction of the water in the evaporation pond of 120,000 ppm.

The formula used is as follows:

$$EF = TLD \times TDS$$

Where:

EF = emission factor (lb/1,000 gallons)

TLD = total liquid drift, 1.7 lb/10^3 gallons from AP-42 Table 13.4-1

TDS = Total dissolved solids concentration in the drift. Maximum concentration in the evaporation pond estimated to be 120,000 ppm.

$EF = 1.7 \text{ lb}/10^3 \text{ gal} \times 120{,}000/10^6 = 0.204 \text{ lb } PM_{10}/1{,}000 \text{ gal}$

At an estimated annual flow rate of 42,100,000 gal the PM_{10} emissions are 4.29 tpy.

8. DESCRIPTION OF INSIGNIFICANT AND TRIVIAL ACTIVITIES:

Operations at the AVEF include the following insignificant activities:

- Cooling tower water treatment system, including two sulfuric acid tanks;
- Plant sumps, sump pumps, and oil/water separator;
- Feed water treatment systems including:
  - One 19,500 gallon Demineralizer Regeneration Tank, storing sulfuric acid
  - One 68,000 gallon Neutralization Tank, storing a water/sodium sulfate solution
  - One 19,500 gallon Demineralizer Regeneration Tank, storing sodium hydroxide solution
- Plant and instrument air compressors and auxiliary equipment;
- Sanitary lift station;
- Sanitary sewer vents;
- Knock out drum and filter/separator;
- Steam and water sampling systems;
- Deaerator vent;
- Support facilities for the SCR;
  - Aqueous ammonia (ammonium hydroxide, < 20% solution) off-loading facility
  - 21,000 gallon aqueous ammonia tank (16 feet tall x 15 feet diameter).

- A closed loop auxiliary cooling system consisting of pumps, expansion tank, and heat exchangers;
- Inlet chilling system;
- 350 gallon diesel fuel storage tank (horizontal tank, 6.5 feet long x 3 feet 2 inches diameter) for the Engine Associated with the Fire Water Pump (emergency);
- 1,640 gallon diesel fuel storage tank (horizontal tank, 12 feet long x 5 feet diameter) for the Engine Associated with the Backup Generator (emergency);
- Abrasive blasting machine;
- Cold degreaser;
- Wipe cleaning;
- Building HVAC exhaust vents;
- Turbine compartment ventilation exhaust vents;
- Turbine lube oil vapor extractors and lube oil mist eliminator vents;
- Steam drum safety relief valve vents;
- Building air conditioner units;
- Various steam release vents;
- Welding equipment;
- Lab hood vents;
- Hydrazine storage tank vent;
- Fuel purge vents;
- Condenser vacuum pump vents;
- Acetylene, butane, and propane torches;
- Landscaping, building maintenance, or janitorial activities; and
- Additional Activities listed in Appendix D and Appendix E of the Maricopa County Adopted Rules

The sulfuric acid tanks associated with the cooling tower water treatment systems do not emit regulated air pollutants. To be thorough, emissions from these tanks were calculated using the EPA TANKS (version 4.0.9d) program. The output from the TANKS program is provided in Appendix F of the permit renewal application.

9. ALTERNATIVE OPERATING SCENARIOS:

The sole purpose of the AVEF is to produce electricity for the deregulated electricity market without pre-arranged long-term utility power purchase agreements; there are no alternative operating scenarios.

10. FACILITY POTENTIAL TO EMIT:

The total potential regulated air pollutants from the AVEF are shown in Table 3.

Table 3: AVEF Potential to Emit

Regulated Air Pollutant	PTE (tpy)
PM	278
PM_{10}	228
$PM_{2.5}$	227
CO	894
NO_X	250
SO_2	39.8
VOC	125
CO_{2e}	2,160
Total HAPs	11.1
Greatest Single HAP (formaldehyde)	5.81

11. EMISSIONS:

Detailed information about the emission units associated with the AVEF is presented in Tables 4, 5, 6, and 7. This information includes: (a) the identification of the regulated air pollutants emitted; (b) the classification of emissions as fugitive or non-fugitive; (c) maximum processes rates on an hourly and annual basis; and (d) potential emissions on an hourly and annual basis. The tables do not include processes at the AVEF that do not have the potential to emit regulated air pollutants, are insignificant activities, or are trivial activities.

Table 8 sums the potential emissions from each emission unit to present total facility-wide emissions for the AVEF. Because the AVEF is a categorical source, both non-fugitive and fugitive emissions are included in the determination of the PTE of regulated pollutants for permit applicability purposes.

As discussed in Section 3 and shown in Table 8, the PTE of facility-wide operations at the AVEF is above the 100 tpy Title V permitting and PSD thresholds for PM_{10}, $PM_{2.5}$, CO, NO_X, and VOC. Additionally, the PTE is above the 100,000 tpy PSD threshold for CO_{2e}. The PTE is below the 100 tpy Title V permitting and PSD thresholds for SO_2, the 25 tpy Title V permitting threshold for total HAPs, and the 10 tpy Title V permitting threshold for any single HAP. Consequently, the AVEF is a Title V major source.

The methodology used to calculate the potential emissions of each emission unit at the AVEF facility is presented in Appendix C of the permit renewal application. Detailed calculations of potential emissions are presented in the permit renewal application Appendix D.

Table 4: Potential Emissions from CT 1 and CT 2 (Emissions are for one CT)

Emission Unit Description	Non-Fugitive or Fugitive Classification	Maximum Process Rates		Regulated Air Pollutant	Potential Emissions[a]	
		Hourly	Annual		lb/hr	ton/yr
CT with Duct Burner 1 (combined cycle)[b, c, d, e]	Non-Fugitive	1 hour @ 1,740.805 MMBtu/hr (CT) and 356.6 MMBtu/hr (Duct Burner)	CT with Duct Burner (combined cycle)[b, c, d, e]	PM	24.00	99.90
				PM_{10}	24.00	99.90
				$PM_{2.5}$	24.00	99.90
				CO	1,260.00	438.10
				NO_X	215.95	121.10
				SO_2	5.25	19.80
				VOC	38.38	61.60
				CO_{2e}	245,602	1,075,737
				Total HAPs	1.25E+00	5.49E+00

[a] CO_{2e} emissions are calculated by summing the individual greenhouse gas emissions multiplied by their global warming potential (GWP). GWP of CO_2 = 1, GWP of CH_4 = 25, GWP of N_2O = 298.
[b] Calculation of worst case potential emissions assumes operation of the AVEF in combined-cycle mode.
[c] Annual emissions based on the tpy limits in Condition 18.A.2, Table 1 of Permit #V99-014.
[d] Hourly emissions based on the lb/hour, lb/event, and lb/MMBtu limits in Condition 18.A.2, Table 2-5 of Permit #V99-014.
[e] Hourly emissions assume the Combined Cycle Systems are operating in startup mode (worst case emission estimate).

Table 5: Potential Emissions from the Emergency Fire Pump Engine

Emission Unit Description	Non-Fugitive or Fugitive Classification	Maximum Process Rates		Regulated Air Pollutant	Potential Emissions[a]	
		Hourly	Annual		lb/hr	ton/yr
Engine Associated with the Fire Water Pump (emergency)	Non-Fugitive	1 hour @ 161 hp	500 hours @ 161 hp	PM	0.35	0.09
				PM_{10}	0.35	0.09
				$PM_{2.5}$	0.35	0.09
				CO	1.08	0.27
				NO_X	4.99	1.25
				SO_2	0.002	0.0004
				VOC	0.40	0.10
				CO_{2e}	184.39	46.10
				Total HAPs	4.37E-03	1.09E-03

[a] CO_{2e} emissions are calculated by summing the individual greenhouse gas emissions multiplied by their global warming potential (GWP). GWP of CO_2 = 1, GWP of CH_4 = 25, GWP of N_2O = 298.

Table 6: Potential Emissions from the Backup Emergency Generator Engine

Emission Unit Description	Non-Fugitive or Fugitive Classification	Maximum Process Rates		Regulated Air Pollutant	Potential Emissions[a]	
		Hourly	Annual		lb/hr	ton/yr
Backup Emergency Generator Engine	Non-Fugitive	1 hour @ 748 hp	500 hours @ 748 hp	PM	0.68	0.17
				PM_{10}	0.68	0.17
				$PM_{2.5}$	0.68	0.17
				CO	14.02	3.50
				NO_X	14.55	3.64
				SO_2	0.008	0.002
				VOC	1.65	0.41
				CO_{2e}	856.68	214.17
				Total HAPs	8.24E-03	2.06E-03

[a] CO_{2e} emissions are calculated by summing the individual greenhouse gas emissions multiplied by their global warming potential (GWP). GWP of CO_2 = 1, GWP of CH_4 = 25, GWP of N_2O = 298.

Table 7: Potential Emissions from Other Equipment

Emission Unit Description	Non-Fugitive or Fugitive Classification	Maximum Process Rates		Regulated Air Pollutant	Potential Emissions[a]	
		Hourly	Annual		lb/hr	ton/yr
Wet Cooling Tower	Fugitive	1 hour @ 138,300 gal/min	8,760 hours @ 138,000 gal/min	PM	13.2	57.8
				PM_{10}	4.15	18.2
				$PM_{2.5}$[b]	2.49	10.9
Turbo-Mister	Fugitive	4,806 gal/hr	42,100,000 gal	PM	980	4.29
				PM_{10}	980	4.29
				$PM_{2.5}$[b]	588	2.57
Chiller Module 1, 2, and 3 (per module)	Fugitive	1 hour @ 12,000 gal/min	8,760 hours @ 12,000 gal/min	PM	1.14	5.01
				PM_{10}	0.36	5.01
				$PM_{2.5}$	0.36	5.01
Hydrochloric Acid Tank	Non-Fugitive	1 hour @ 17.1 gal/hour throughput (35% HCl Solution)	8,760 hours @ 17.1 gal/hour (35% HCl Solution)	HCl	2.70E-02	1.18E-01

[a] CO_{2e} emissions are calculated by summing the individual greenhouse gas emissions multiplied by their global warming potential (GWP). GWP of CO_2 = 1, GWP of CH_4 = 25, GWP of N_2O = 298.
[b] $PM_{2.5}$ fraction of PM_{10} from South Coast Air Quality Management District – Methodology to Calculate Particulate Matter (PM) 2.5 Table A for cooling towers

Table 8: Annual Potential Emissions from the Emission Units at the AVEF

Emission Unit Description	Non-Fugitive, Fugitive, or Total	Potential Emissions (tpy)								
		PM	PM_{10}	$PM_{2.5}$	CO	NO_X	SO_2	VOC	CO_{2e}	Total HAPs[a]
Combustion Turbine 1 with Duct Burner 1 (combined cycle)	Non-Fugitive	99.90	99.90	99.90	438.10	121.10	19.80	61.60	1,075,737	5.49E+00
Combustion Turbine 2 with Duct Burner 2 (combined cycle)	Non-Fugitive	99.90	99.90	99.90	438.10	121.10	19.80	61.60	1,075,737	5.49E+00
Auxiliary Boiler	Non-Fugitive	0.90	0.90	0.90	14.10	3.30	0.20	1.50	11,593	1.58E-02
Engine Associated with the Fire Water Pump (emergency)	Non-Fugitive	0.09	0.09	0.09	0.27	1.25	0.0004	0.10	46.10	1.09E-03
Engine Associated with the Backup Generator (emergency)	Non-Fugitive	0.17	0.17	0.17	3.50	3.64	0.002	0.41	214.17	2.06E-03
Wet Cooling Tower	Fugitive	57.77	18.2	10.9	--	--	--	--	--	--
Turbo Mister	Fugitive	4.29	4.29	2.57	--	--	--	--	--	--
Chiller Module 1	Fugitive	5.01	1.58	1.58	--	--	--	--	--	--
Chiller Module 2	Fugitive	5.01	1.58	1.58	--	--	--	--	--	--
Chiller Module 3	Fugitive	5.01	1.58	1.58	--	--	--	--	--	--
Hydrochloric Acid Tank (35% Solution)	Non-Fugitive	--	--	--	--	--	--	--	--	1.18E-01
Total	Non-Fugitive	200.96	200.96	200.96	894.07	250.39	39.80	125.21	2,163,328	11.12
	Fugitive	72.81	22.93	15.63	--	--	--	--	--	--
	Total	278.05	228.18	219.16	894.07	250.39	39.80	125.21	2,163,328	11.12

[a] The greatest single HAP emitted from the AVEF is formaldehyde with total emissions of 5.81 tpy.

12. EMISSION CONTROL:

The AVEF is designed with advanced emissions control technology. For the reduction of NO_X emissions, the combustion turbines have dry, low-NO_X burners and SCR systems. The facility is designed to meet a 2.5 ppm NO_X concentration limit. Clean burning natural gas as fuel produces less PM_{10} and SO_2 emissions than alternative fuels. An SCR system is BACT for the control of NO_X emissions from the combustion turbines and duct burners. The SCR system consists of a modular foil catalyst bed and a support structure located within the HRSG at the point where the flue gas temperature is optimized for SCR conversion of NO_X and an ammonia (NH_3) injection grid located within the HRSG upstream of the catalyst. Support facilities for the SCR system include an aqueous ammonia (ammonium hydroxide, < 20% solution) off-loading facility and a 21,000 gallon storage tank (16 feet tall x 15 feet diameter).

Each combustion turbine is equipped with a continuous emissions monitoring system (CEMS). The CEMS is designed to sample NO_X, CO and O_2 in accordance with New Source Performance Standards (40 Code of Federal Regulations (CFR) 60 Appendix B) and Title IV Acid Rain Program (40 CFR 75) requirements.

13. FUEL USAGE:

A summary of all fuel burning equipment at the AVEF that requires a permit is presented in Table 9. For each piece of fuel burning equipment, the type and quantity of fuels that will be used on an annual and hourly basis, the percent that will be used for process heat, the higher heating values of the fuels, and the potential sulfur and ash contents of the fuel are also included in Table 9. The combustion turbines are fueled entirely by pipeline natural gas, which is currently mainly supplied by El Paso Natural Gas Company.

Table 9: Fuel Usage Information:

Equipment Name	Fuel Type	Maximum Annual Fuel Use	Maximum Hourly Fuel Use	Percent Used for Process Heat	Higher Heating Value	Sulfur and Ash Content[a]
Combustion Turbine 1	Natural Gas	15,189 MMscf	1,733,870 scf	100%	1,004 Btu/scf	≤ 0.5 gr sulfur /100 dscf[b]
Duct Burner 1	Natural Gas	3,111 MMscf	355,179 scf	100%	1,004 Btu/scf	≤ 0.5 gr sulfur /100 dscf[b]
Combustion Turbine 2	Natural Gas	15,189 MMscf	1,733,870 scf	100%	1,004 Btu/scf	≤ 0.5 gr sulfur /100 dscf[b]
Duct Burner 2	Natural Gas	3,111 MMscf	355,179 scf	100%	1,004 Btu/scf	≤ 0.5 gr sulfur /100 dscf[b]
Auxiliary Boiler[c]	Natural Gas	197 MMscf	32,869 scf	100%	1,004 Btu/scf	≤ 0.5 gr sulfur /100 dscf[b]
Engine Associated with the Fire Water Pump[d]	Diesel	4,113 gallons	8.23 gallons	0%	137,000 Btu/gallon	≤ 0.0015% sulfur[e]
Engine Associated with the Backup Generator[d]	Diesel	19,109 gallons	38.22 gallons	0%	137,000 Btu/gallon	≤ 0.0015% sulfur[e]

[a] Ash content is negligible for both natural gas and diesel.
[b] The natural gas sulfur content is based on the definition of pipeline natural gas in Condition 10 of Permit #V99-014.
[c] Auxiliary Boiler annual gas usage based on 6,000 hours per year (Condition 19.B of Permit #V99-014).
[d] Diesel engines fuel usage based on 500 hours per year (Condition 19.D.2 of Permit #V99-014) and an average brake-specific fuel consumption value of 7,000 Btu/hp-hr.
[e] The diesel sulfur content is based on Condition 19.A.2 of Permit #V99-014.
The average hourly fuel use rate is not necessary for determining emissions or demonstrating compliance with Maricopa County Rules.

14. COMPLIANCE ASSURANCE MONITORING (CAM):

All AVEF units utilize NO_X and CO control devices. The NO_X and CO CEMS installed make the facility exempt from CAM per 40 CFR 64.2(b)(1)(vi).

15. CONCLUSION AND PROPOSED ACTION:

Based on the information supplied by the AVEF, and on the analyses conducted by the MCAQD, the MCAQD has concluded that the requested permit renewal is consistent with Federal, State, and County regulations and rules and will not cause or contribute to a violation of any federal ambient air quality standard and will not cause additional adverse air quality impacts.

The, MCAQD proposes to issue the Permit Renewal, V99-014 – 2.0.0.0, subject to the proposed permit conditions.