MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

January 19, 2016

PERMIT TO INSTALL 419-92C

ISSUED TO Oakland University

LOCATED AT 2200 North Squirrel Road Rochester, Michigan

IN THE COUNTY OF Oakland

STATE REGISTRATION NUMBER N3422

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203:

September 22, 2015	
DATE PERMIT TO INSTALL APPROVED: January 19, 2016	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

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	Common	Abbreviations	/ Acronyms
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Common Acronyms			Pollutant / Measurement Abbreviations			
AQD	Air Quality Division	acfm	Actual cubic feet per minute			
BACT	Best Available Control Technology	BTU	British Thermal Unit			
CAA	Clean Air Act	°C	Degrees Celsius			
CAM	Compliance Assurance Monitoring	со	Carbon Monoxide			
CEM	Continuous Emission Monitoring	CO ₂ e	Carbon Dioxide Equivalent			
CFR	Code of Federal Regulations	dscf	Dry standard cubic foot			
СОМ	Continuous Opacity Monitoring	dscm	Dry standard cubic meter			
Department/	Michigan Department of Environmental	°F	Degrees Fahrenheit			
department	Quality	gr	Grains			
EU	Emission Unit	HAP	Hazardous Air Pollutant			
FG	Flexible Group	Hg	Mercury			
GACS	Gallons of Applied Coating Solids	hr	Hour			
GC	General Condition	HP	Horsepower			
GHGs	Greenhouse Gases	H_2S	Hydrogen Sulfide			
HVLP	High Volume Low Pressure*	kW	Kilowatt			
ID	Identification	lb	Pound			
IRSL	Initial Risk Screening Level	m	Meter			
ITSL	Initial Threshold Screening Level	mg	Milligram			
LAER	Lowest Achievable Emission Rate	mm	Millimeter			
MACT	Maximum Achievable Control Technology	MM	Million			
MAERS	Michigan Air Emissions Reporting System	MW	Megawatts			
MAP	Malfunction Abatement Plan	NMOC	Non-methane Organic Compounds			
MDEQ	Michigan Department of Environmental Quality	NOx	Oxides of Nitrogen			
MSDS	Material Safety Data Sheet	ng PM	Nanogram Particulate Matter			
NA	Not Applicable		Particulate Matter equal to or less than 10			
NAAQS	National Ambient Air Quality Standards	PM10	microns in diameter			
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter			
NSPS	New Source Performance Standards	pph	Pounds per hour			
NSR	New Source Review	ppm	Parts per million			
PS	Performance Specification	ppmv	Parts per million by volume			
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight			
PTE	Permanent Total Enclosure	psia	Pounds per square inch absolute			
PTI	Permit to Install	psig	Pounds per square inch gauge			
RACT	Reasonable Available Control Technology	scf	Standard cubic feet			
ROP	Renewable Operating Permit	sec	Seconds			
SC	Special Condition	SO ₂	Sulfur Dioxide			
SCR	Selective Catalytic Reduction	TAC	Toxic Air Contaminant			
SNCR	Selective Non-Catalytic Reduction	Temp	Temperature			
SRN	State Registration Number	THC	Total Hydrocarbons			
TEQ	Toxicity Equivalence Quotient	tpy	Tons per year			
USEPA/EPA	United States Environmental Protection	μg	Microgram			
	Agency	μm	Micrometer or Micron			
VE	Visible Emissions	VOC	Volatile Organic Compounds			
		yr	Year			

*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

GENERAL CONDITIONS

- The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. (R 336.1201(1))
- 2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. (R 336.1201(4))
- 3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. (R 336.1201(6)(b))
- 4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. (R 336.1201(8), Section 5510 of Act 451, PA 1994)
- 5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to R 336.1219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of R 336.1219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. (R 336.1219)
- 6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. (R 336.1901)
- 7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). (R 336.1912)
- 8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
- 9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
- 10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

- 11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303. (R 336.1301)
 - a. A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
 - b. A visible emission limit specified by an applicable federal new source performance standard.
 - c. A visible emission limit specified as a condition of this Permit to Install.
- Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). (R 336.1370)
- 13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. (R 336.2001)

SPECIAL CONDITIONS

EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
High temperature water (HTW) generator #1. International Boiler Works Model TJW-C- 10,000 HTW Generator (Natural Gas) Serial #M-3526. Boiler has a rated heat input capacity of 100 MMBtu/hr	9/3/1971*	FG-BOILERS
High temperature water (HTW) generator #2. International Boiler Works Model TJW-C- 10,000 HTW Generator (Natural Gas) Serial #M-3337. Boiler has a rated heat input capacity of 100 MMBtu/hr	9/3/1971*	FG-BOILERS
Centaur 50-6201S gas turbine generator set package with SoLoNox, natural gas fired. The turbine has a heat release capacity of approximately 51.25 MMBtu/hr.	TBD	FGTURB/WHRU#1
Custom waste heat recovery unit with duct burner for a total of 60 MMBtu/hr. No steam or generation on the back side, but the WHRU can run as a standalone boiler for a total of 15 MMBtu/hr	TBD	FGTURB/WHRU#1
Emergency back-up diesel and natural gas fired generator. The generator produces 1500 kilowatts of electricity per hour and is equipped with a Mitsubishi S16R-PTA engine. The engine is equipped with a dual fuel control system to allow the blending of natural gas and diesel fuels		FG-FACILITY FG-GENERATORS
Emergency back-up diesel and natural gas fired generator. The generator produces 1500 kilowatts of electricity per hour and is equipped with a Mitsubishi S16R-PTA engine. The engine is equipped with a dual fuel control system to allow the blending of natural gas and diesel fuels		FG-FACILITY FG-GENERATORS
	 (Process Equipment & Control Devices) High temperature water (HTW) generator #1. International Boiler Works Model TJW-C- 10,000 HTW Generator (Natural Gas) Serial #M-3526. Boiler has a rated heat input capacity of 100 MMBtu/hr High temperature water (HTW) generator #2. International Boiler Works Model TJW-C- 10,000 HTW Generator (Natural Gas) Serial #M-3337. Boiler has a rated heat input capacity of 100 MMBtu/hr Centaur 50-6201S gas turbine generator set package with SoLoNox, natural gas fired. The turbine has a heat release capacity of approximately 51.25 MMBtu/hr. Custom waste heat recovery unit with duct burner for a total of 60 MMBtu/hr. No steam or generation on the back side, but the WHRU can run as a standalone boiler for a total of 15 MMBtu/hr Emergency back-up diesel and natural gas fired generator. The generator produces 1500 kilowatts of electricity per hour and is equipped with a Mitsubishi S16R-PTA engine. The engine is equipped with a dual fuel control system to allow the blending of natural gas fired generator. The generator produces 1500 kilowatts of electricity per hour and is equipped with a Mitsubishi S16R-PTA engine. The engine is equipped with a dual fuel control system to allow the blending of natural gas fired generator. The generator produces 1500 kilowatts of electricity per hour and is equipped with a Mitsubishi S16R-PTA engine. The engine is equipped with a dual fuel control system to allow the blending of natural gas fired generator. The generator produces 1500 kilowatts of electricity per hour and is equipped with a Mitsubishi S16R-PTA engine. The engine is equipped with a dual fuel control system to allow the blending of natural gas and diesel fuels 	(Process Equipment & Control Devices)Modification DateHigh temperature water (HTW) generator #1. International Boiler Works Model TJW-C- 10,000 HTW Generator (Natural Gas) Serial #M-3526. Boiler has a rated heat input capacity of 100 MMBtu/hr9/3/1971*High temperature water (HTW) generator #2. International Boiler Works Model TJW-C- 10,000 HTW Generator (Natural Gas) Serial #M-3337. Boiler has a rated heat input capacity of 100 MMBtu/hr9/3/1971*Centaur 50-6201S gas turbine generator set package with SoLoNox, natural gas fired. The turbine has a heat release capacity of approximately 51.25 MMBtu/hr.TBDCustom waste heat recovery unit with duct burner for a total of 60 MMBtu/hr. No steam or generation on the back side, but the WHRU can run as a standalone boiler for a total of 15 MMBtu/hrTBDEmergency back-up diesel and natural gas fired generator. The generator produces 1500 kilowatts of electricity per hour and is equipped with a Mitsubishi S16R-PTA engine. The engine is equipped with a dual fuel control system to allow the blending of natural gas fired generator. The generator produces 1500 kilowatts of electricity per hour and is equipped with a Mitsubishi S16R-PTA engine. The engine is equipped with a dual fuel control system to allow the blending of natural gas fired generator. The generator produces 1500 kilowatts of electricity per hour and is equipped with a Mitsubishi S16R-PTA engine. The engine is equipped with a dual fuel control system to allow the blending of natural gas and diesel fuels

FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-BOILERS	Two natural gas natural gas fired boilers	EU_HTWGEN#1 EU_HTWGEN#2
FG-GENERATORS	Emergency back-up diesel and natural gas fired generator. The generator produces 1500 kilowatts of electricity per hour and is equipped with a Mitsubishi S16R-PTA engine. The engine is equipped with a dual fuel control system to allow the blending of natural gas and diesel fuels	EU00006 EU00007
FGTURB/WHRU#1	Centaur 50-6201S gas turbine generator set package with SoLoNox, natural gas fired. The turbine has a heat release capacity of approximately 51.25 MMBtu/hr. Custom waste heat recovery unit with duct burner for a total of 60 MMBtu/hr. No steam or generation on the back side, but the WHRU can run as a standalone boiler for a total of 15 MMBtu/hr	EUTURBINE#1 EU-WHRU#1
FG-FACILITY	All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.	

The following conditions apply to: FG-BOILERS

DESCRIPTION: Two natural gas natural gas fired boilers

Emission Units: EU_HTWGEN#1, EU_HTWGEN#2

POLLUTION CONTROL EQUIPMENT:

I. EMISSION LIMITS

NA

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall only combust pipeline quality sweet natural gas in FG-BOILERS. (R336.1205(3)

IV. DESIGN/EQUIPMENT PARAMETERS

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall maintain the following records:
 - a. Natural gas usage, in standard cubic feet on a monthly basis
 - b. Calculated NOx emissions, tons per year, based upon a calendar year basis.

(R 336.1205)

VII. <u>REPORTING</u>

NA

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1.SV-BOILERS	66 (each boiler stack)	58.3 (each boiler stack)	R 336.1225

IX. OTHER REQUIREMENTS

NA

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

The following conditions apply to: FG-GENERATORS

POLLUTION CONTROL EQUIPMENT:

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating	Equipment	J.	Underlying Applicable
		Scenario		Method	Requirements

Pollutant	Limit	Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NOx	7.8 grams/kilowatt- hour	Test protocol will determine averaging time	FG-GENERATORS	GC 13	R336.1205(3)
2. CO	1.35 grams/kilowatt- hour	Test protocol will determine averaging time	FG-GENERATORS	GC 13	R336.1205(3)
3. VOC	0.38 grams/kilowatt- hour	Test protocol will determine averaging time	FG-GENERATORS	GC 13	R336.1205(3)
4. PM	0.39 grams/kilowatt- hour		FG-GENERATORS	GC 13	R336.1205(3)

II. MATERIAL LIMITS

1. The permittee shall not combust more than 7,962 gallons of distillate oil per rolling 12-month time period, as determined at the end of each calendar month. **[R336.1205(3)]**

III. PROCESS/OPERATIONAL RESTRICTIONS

- 1. The permittee shall not operate FGGENERATORS for more than 1,000 generator-hours per rolling 12-month time period, as determined at the end of each calendar month. A generator hour is defined as the aggregation of the operating hours of each generator, and includes periods of startup shutdown, and testing. [R336.1205(3)]
- 2. The sulfur content of the diesel fuel oil used in FGGENERATORS shall not exceed 0.05% by weight. [R336.1205(3)]

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall maintain the following records:
 - a. The amount of diesel fuel oil (gallons) combusted in FGGENERATORS on a rolling 12 month time period, as determined at the end of each calendar month.
 - b. The amount of natural gas (cubic feet) combusted in FGGENERATORS on a rolling 12 month time period, as determined at the end of each calendar month
 - c. Fuel supplier certification that the sulfur content of the diesel fuel oil complies with special condition III.2. If fuel supplier certification is not available, the applicant shall test, record, and maintain the sulfur content of each shipment of diesel oil.

d. Hours of operation for each generator, as well as total generator-hours. This data shall be based on a rolling 12-month time period, as determined at the end of each calendar month.

All records shall be kept in a format acceptable to the district supervisor, and shall be maintained for a period of at least five calendar years. **[R336.1203]**

VII. <u>REPORTING</u>

N/A

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-EU00006	14	14	R 336.1224
2. SV-EU00007	14	14	R 336.1224

IX. OTHER REQUIREMENTS

NA

The following conditions apply to: FGTURB/WHRU#1

DESCRIPTION: A nominally rated 51.25 MMBtu/hr natural gas-fired turbine, a waste heat recovery unit with a nominally rated 60 MMBtu/hr natural gas-fired duct burner and an electrical generator operating in combined-cycle mode.

Emission Units: EUTURBINE#1, EU_WHRU#1

POLLUTION CONTROL EQUIPMENT: N/A

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NO _x	25 ppmv dry at	30-day rolling	FGTURB/WHRU#1	SC VI.2,	R 336.1205(1)(a) and (1)(b),
	15% oxygen	average as		SC VI.5	40 CFR 60.4320(a)
		determined each day			
		the turbine operates			
2. NO _x	8.44 pph	24-hour rolling	FGTURB/WHRU#1	SC VI.2,	R 336.1205(1)(a) and (1)(b),
	(turbine and	average as		SC VI.5	R 336.2803,
	waste heat	determined each hour			R 336.2804,
	recovery unit)	the boiler operates			40 CFR 52.21(c) and (d)
*Test protoc	ol shall specify	averaging time.			

II. MATERIAL LIMITS

1. The permittee shall only combust pipeline quality natural gas in FGTURB/WHRU#1. (R 336.1205(1)(a), R 336.1401, R 336.1702(a), 40 CFR 60.4330)

III. PROCESS/OPERATIONAL RESTRICTIONS

- 1. The permittee shall not operate FGTURB/WHRU#1 unless a malfunction abatement plan (MAP) as described in Rule 911(2), has been submitted within 180 days of initial start-up, and is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.
 - d. Identification of the source, and operating variables and ranges for varying loads, shall be monitored and recorded. The normal operating range of these variables and a description of the method of monitoring shall be maintained.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1911)**

 The permittee shall not operate FGTURB/WHRU#1unless the AQD District Supervisor has approved a plan that describes how emissions will be minimized during start-up and shutdown. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. Unless notified by the AQD District Supervisor within 30 business days after plan submittal, the plan shall be deemed approved. (R 336.1911, R 336.1912) The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and KKKK, as they apply to FGTURB/WHRU#1. (40 CFR Part 60, Subparts A and KKKK)

IV. DESIGN/EQUIPMENT PARAMETERS

1. The maximum design heat input capacity of FGTURB/WHRU#1 shall not exceed 51.25 MMBtu per hour for EUTURBINE1, and 60 MMBtu per hour for EU_WHRUF#1. (R 336.1205(1)(a) and (1)(b))

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. Within 180 days but no later than 12 months after commencement of initial start-up, verification of NOx emission rates and mass emissions from FGTURB/WHRU#1 at 50%, 75% and 100% loads or other loads as approved by AQD, by testing at owner's expense, in accordance with Department requirements, will be required. Testing shall consist of a minimum of two tests at the prescribed loads, one in the winter season and one in the summer season. The permittee must complete the testing once every five years, thereafter. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD Permit Section Supervisor and the TPU Supervisor. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. (40 CFR 60.4400)

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205, R 336.2802(4), R 336.2803, R 336.2804, 40 CFR 52.21(a)(2), (c), and (d))
- The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device or system to monitor the appropriate parameters to demonstrate that the turbine is operating in low-NOx mode. (40 CFR 60.4340(b)(2)(ii))
- The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the fuel flow rate from FGTURB/WHRU#1 on a continuous basis. The monitor shall be operated in accordance with 40 CFR 60.4345(c). (R 336.1205(1)(a), R 336.2802(4), R 336.2803, R 336.2804, 40 CFR 52.21(a)(2), (c), and (d), 40 CFR 60.4345)
- 4. The permittee shall keep, in a satisfactory manner, 24-hour rolling average, 30-day rolling average, and 12-month rolling time period NOx emission rate and mass emission records for FGTURB/WHRU#1, as required by SC 1.1 and I.2. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(1)(a), R 336.2802(4), R 336.2803, R 336.2804, 40 CFR 52.21(a)(2), (c), and (d), 40 CFR 60.4345)
- 5. The permittee shall maintain records of all information necessary for all notifications and reports as specified in these special conditions as well as that information necessary to demonstrate compliance with the emission limits of this permit. This information shall include, but shall not be limited to the following:
 - a. Compliance tests and any testing required under the special conditions of this permit;
 - b. Monitoring data;
 - c. Total sulfur content of the natural gas as required by 40 CFR 60.4365(a);
 - d. Verification of heat input capacity required to show compliance with SC IV.1;
 - e. Identification, type and the amounts of fuel combusted in FGTURB/WHRU#1on a calendar month basis;

- f. All records required by 40 CFR 60.7;
- g. Records of the duration of all times FGTURB/WHRU#1is operated under start-up or shutdown conditions as defined in SC III.2;
- h. All calculations necessary to show compliance with the limits contained in this permit.

All of the above information shall be stored in a format acceptable to the Air Quality Division and shall be consistent with the requirements of 40 CFR 60.7(f). (R 336.1205(1)(a), R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1401, R 336.1702(a), R 336.1901, R 336.1912, 40 CFR 60.7(f))

VII. <u>REPORTING</u>

 Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of initial start-up of FGTURB/WHRU#1. (R 336.1201(7)(a))

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVTURB/WHRU#1	47.5	58	R 336.1225

IX. OTHER REQUIREMENTS

1. The permittee shall comply with all applicable portions of 40 CFR 60 Subpart KKKK, Standards of Performance for Stationary Combustion Turbines.

The following conditions apply Source-Wide to: FG-FACILITY

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NOx	89 tpy	12-month rolling time period as determined	FG-FACILITY	SC VI.1	R 336.1205(3)
2. CO	89 tpy	12-month rolling time period as determined	FG-FACILITY	SC VI.2	R 336.1205(3)

II. MATERIAL LIMITS

- 1. The natural gas fuel usage for FG-FACILITY shall not exceed 850 million cubic feet per year as based on a 12-month rolling time period. (R 336.1205(1)(a) & (3))
- The distillate oil usage for FG-FACILITY shall not exceed 8,000 gallons per year. (R 336.1205(1)(a) & (3))III.

PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the natural gas used from all fuel burning equipment at FG-FACILITY. (R 336.1205(3))

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205(3)
- 2. The permittee shall monitor and record, in a satisfactory manner, each fuel used for FG-FACILITY on a monthly basis. The permittee shall calculate monthly and 12-month rolling time period NOx and CO emissions from FG-FACILITY and make them available to the Department upon request. For the purpose of demonstrating compliance with the CO and NOx emission limits in SCs I.1 and I.2, the permittee shall use appropriate CO and NOx emission factors. (R 336.1205(1)(a) and (3))