

**MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
AIR QUALITY DIVISION**

December 18, 2019

PERMIT TO INSTALL
352-05A

ISSUED TO
Martin Technologies

LOCATED AT
55390 Lyon Industrial Drive
New Hudson, Michigan

IN THE COUNTY OF
Oakland

STATE REGISTRATION NUMBER
N7564

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environment, Great Lakes, and Energy. 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: December 13, 2019	
DATE PERMIT TO INSTALL APPROVED: December 18, 2019	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

Table of Contents

COMMON ACRONYMS 2
POLLUTANT / MEASUREMENT ABBREVIATIONS..... 3
GENERAL CONDITIONS 4
EMISSION UNIT SPECIAL CONDITIONS..... 6
 EMISSION UNIT SUMMARY TABLE 6
FLEXIBLE GROUP SPECIAL CONDITIONS..... 8
 FLEXIBLE GROUP SUMMARY TABLE 8
 FGENGTESTING..... 9
FGFACILITY CONDITIONS..... 12
APPENDIX A..... 14

COMMON ACRONYMS

AQD	Air Quality Division
BACT	Best Available Control Technology
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
COMS	Continuous Opacity Monitoring System
Department/department/EGLE	Michigan Department of Environment, Great Lakes, and Energy
EU	Emission Unit
FG	Flexible Group
GACS	Gallons of Applied Coating Solids
GC	General Condition
GHGs	Greenhouse Gases
HVLP	High Volume Low Pressure*
ID	Identification
IRSL	Initial Risk Screening Level
ITSL	Initial Threshold Screening Level
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
MAERS	Michigan Air Emissions Reporting System
MAP	Malfunction Abatement Plan
MSDS	Material Safety Data Sheet
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standard for Hazardous Air Pollutants
NSPS	New Source Performance Standards
NSR	New Source Review
PS	Performance Specification
PSD	Prevention of Significant Deterioration
PTE	Permanent Total Enclosure
PTI	Permit to Install
RACT	Reasonable Available Control Technology
ROP	Renewable Operating Permit
SC	Special Condition
SCR	Selective Catalytic Reduction
SNCR	Selective Non-Catalytic Reduction
SRN	State Registration Number
TBD	To Be Determined
TEQ	Toxicity Equivalence Quotient
USEPA/EPA	United States Environmental Protection Agency
VE	Visible Emissions

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

POLLUTANT / MEASUREMENT ABBREVIATIONS

acfm	Actual cubic feet per minute
BTU	British Thermal Unit
°C	Degrees Celsius
CO	Carbon Monoxide
CO ₂ e	Carbon Dioxide Equivalent
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
°F	Degrees Fahrenheit
gr	Grains
HAP	Hazardous Air Pollutant
Hg	Mercury
hr	Hour
HP	Horsepower
H ₂ S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NO _x	Oxides of Nitrogen
ng	Nanogram
PM	Particulate Matter
PM10	Particulate Matter equal to or less than 10 microns in diameter
PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
pph	Pounds per hour
ppm	Parts per million
ppmv	Parts per million by volume
ppmw	Parts per million by weight
psia	Pounds per square inch absolute
psig	Pounds per square inch gauge
scf	Standard cubic feet
sec	Seconds
SO ₂	Sulfur Dioxide
TAC	Toxic Air Contaminant
Temp	Temperature
THC	Total Hydrocarbons
tpy	Tons per year
µg	Microgram
µm	Micrometer or Micron
VOC	Volatile Organic Compounds
yr	Year

GENERAL CONDITIONS

1. 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 Environment, Great Lakes, and Energy, 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 Rule 210 (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 Rule 219 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 Rule 219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy. **(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 conditions or malfunction has been corrected, or within 30 days of discovery of 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 Rule 301, 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 Rule 303 (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.
12. 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 Rule 370(2). **(R 336.1370)**
13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. **(R 336.2001)**

EMISSION UNIT SPECIAL CONDITIONS

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUTESTCELL1	Engine dynamometer test cell used for development and testing of internal combustion engines with a maximum hourly fuel usage of 25 gallons/hour. The engines tested will be fueled by unleaded gasoline, leaded gasoline, and diesel fuel. The test cell is exhausted through SV2.	2001/2019	FGENGTESTING
EUTESTCELL2	Engine dynamometer test cell used for development and testing of internal combustion engines with a maximum hourly fuel usage of 25 gallons/hour. The engines tested will be fueled by unleaded gasoline, leaded gasoline, and diesel fuel. The test cell is exhausted through SV2.	2001/2019	FGENGTESTING
EUTESTCELL3	Engine dynamometer test cell used for development and testing of internal combustion engines with a maximum hourly fuel usage of 25 gallons/hour. The engines tested will be fueled by unleaded gasoline, leaded gasoline, and diesel fuel. The test cell is exhausted through SV3.	2001/2019	FGENGTESTING
EUTESTCELL4	Engine dynamometer test cell used for development and testing of internal combustion engines with a maximum hourly fuel usage of 25 gallons/hour. The engines tested will be fueled by unleaded gasoline, leaded gasoline, and diesel fuel. The test cell is exhausted through SV1.	2001/2019	FGENGTESTING
EUTESTBAY1	Engine test bay used for non-loaded testing of internal combustion engines with a maximum hourly fuel usage of 3 gallons/hour. The engines tested will be fueled by unleaded gasoline, leaded gasoline, and diesel fuel. The test bay is exhausted through SV4.	2019	FGENGTESTING
EUTESTBAY2	Engine test bay used for non-loaded testing of internal combustion engines with a maximum hourly fuel usage of 3 gallons/hour. The engines tested will be fueled by unleaded gasoline, leaded gasoline, and diesel fuel. The test bay is exhausted through SV4.	2019	FGENGTESTING

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUTESTBAY3	Engine test bay used for non-loaded testing of internal combustion engines with a maximum hourly fuel usage of 3 gallons/hour. The engines tested will be fueled by unleaded gasoline, leaded gasoline, and diesel fuel. The test bay is exhausted through SV4.	2019	FGENGTESTING
EUTESTBAY4	Engine test bay used for non-loaded testing of internal combustion engines with a maximum hourly fuel usage of 3 gallons/hour. The engines tested will be fueled by unleaded gasoline, leaded gasoline, and diesel fuel. The test bay is exhausted through SV4.	2019	FGENGTESTING
EUTESTBAY5	Engine test bay used for non-loaded testing of internal combustion engines with a maximum hourly fuel usage of 3 gallons/hour. The engines tested will be fueled by unleaded gasoline, leaded gasoline, and diesel fuel. The test bay is exhausted through SV4.	2019	FGENGTESTING
EUTESTBAY6	Engine test bay used for non-loaded testing of internal combustion engines with a maximum hourly fuel usage of 3 gallons/hour. The engines tested will be fueled by unleaded gasoline, leaded gasoline, and diesel fuel. The test bay is exhausted through SV4.	2019	FGENGTESTING
EUTESTBAY7	Engine test bay used for non-loaded testing of internal combustion engines with a maximum hourly fuel usage of 3 gallons/hour. The engines tested will be fueled by unleaded gasoline, leaded gasoline, and diesel fuel. The test bay is exhausted through SV4.	2019	FGENGTESTING
EUTESTBAY8	Engine test bay used for non-loaded testing of internal combustion engines with a maximum hourly fuel usage of 3 gallons/hour. The engines tested will be fueled by unleaded gasoline, leaded gasoline, and diesel fuel. The test bay is exhausted through SV4.	2019	FGENGTESTING
EUTESTCELLP	Engine dynamometer test cell used for testing of internal combustion performance engines with a maximum hourly fuel usage of 2 gallons/hour. The engines tested will be fueled by unleaded gasoline, leaded gasoline, and diesel fuel. The test cell is exhausted through SV4.	2018	FGENGTESTING

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1291.

FLEXIBLE GROUP SPECIAL CONDITIONS

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
FGENGTESTING	Internal combustion engine testing equipment consisting of four engine dynamometer test cells for development and testing, one engine dynamometer test cell for performance engine testing, and eight test bays for non-loaded engine testing. Engines tested in the dynamometer test cells burn unleaded gasoline, leaded gasoline, and diesel fuels, and are exhausted out SV1, SV2, SV3, and SV4. Engines tested in the test bays burn unleaded gasoline, leaded gasoline, and diesel fuel, and are exhausted out SV4.	EUTESTCELL1, EUTESTCELL2, EUTESTCELL3, EUTESTCELL4, EUTESTBAY1, EUTESTBAY2, EUTESTBAY3, EUTESTBAY4, EUTESTBAY5, EUTESTBAY6, EUTESTBAY7, EUTESTBAY8, EUTESTCELLP

**FGENGTESTING
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Internal combustion engine testing equipment consisting of four engine dynamometer test cells for development and testing, one engine dynamometer test cell for performance engine testing, and eight test bays for non-loaded engine testing. Engines tested in the dynamometer test cells burn unleaded gasoline, leaded gasoline, and diesel fuels, and are exhausted out SV1, SV2, SV3, and SV4. Engines tested in the test bays burn unleaded gasoline, leaded gasoline, and diesel fuel, and are exhausted out SV4.

Emission Unit: EUTESTCELL1, EUTESTCELL2, EUTESTCELL3, EUTESTCELL4, EUTESTBAY1, EUTESTBAY2, EUTESTBAY3, EUTESTBAY4, EUTESTBAY5, EUTESTBAY6, EUTESTBAY7, EUTESTBAY8, EUTESTCELLP

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. CO	6.0 lb/gallon gasoline ^A	Hourly	FGENGTESTING	SC V.1, SC VI.2	R 336.1205(1)(a) & (3), 40 CFR 52.21(d)
2. CO	86.9 tpy	12-month rolling time period as determined at the end of each calendar month.	FGENGTESTING	SC I.1 SC VI.4, Appendix A	R 336.1205(1)(a) & (3), 40 CFR 52.21(d)
3. NO _x	35.7 tpy	12-month rolling time period as determined at the end of each calendar month.	FGENGTESTING	SC VI.4, Appendix A	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)

^A This emission factor includes wide open throttle (WOT) operation and if tested, it should include WOT operation if possible.

II. MATERIAL LIMIT(S)

1. The permittee shall only burn unleaded gasoline (with ethanol contents less than 20 percent), leaded gasoline, and diesel in engines being tested in FGENGTESTING. **(R 336.1205(1)(a) & (3), R 336.1224, R 336.1225, R 336.1702, 40 CFR 52.21(c) & (d))**
2. The total fuel usage for FGENGTESTING shall not exceed 62 gallons per hour. Of the 62 gallons per hour, the leaded gasoline usage shall not exceed 10 gallons per hour. **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))**
3. The total fuel usage for FGENGTESTING shall not exceed 117,000 gallons per 12-month rolling time period as determined at the end of each calendar month. Of the 117,000 gallons, the gasoline usage shall not exceed 27,000 gallons per 12-month rolling time period as determined at the end of each calendar month. Of the 27,000 gallons, the leaded gasoline usage shall not exceed 200 gallons per 12-month rolling time period as determined at the end of each calendar month. **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a), R 336.1901, 40 CFR 52.21(c) & (d))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

1. Upon request by the AQD District Supervisor, the permittee shall verify CO and/or NO_x emission rates from FGENGTESTING by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205(1)(a) & (3), R 336.1902, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

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 and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a), R 336.1901, 40 CFR 52.21(c) & (d))**
2. The permittee shall keep, in a satisfactory manner, test reports for FGENGTESTING, as required by SC V.1, on file at the facility and make them available to the Department upon request. **(R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d))**
3. The permittee shall keep, in a satisfactory manner, records of the gallons of leaded gasoline and of total fuel used per hour in FGENGTESTING on an hourly basis. The permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))**
4. The permittee shall keep the following information on a monthly basis for FGENGTESTING:
 - a) A record of the days of operation.
 - b) Gallons of each fuel used per month.
 - c) Leaded gasoline usage calculations determining the annual usage rate in gallons per 12-month rolling time period as determined at the end of each calendar month.
 - d) Total gasoline (unleaded and leaded) usage calculations determining the annual usage rate in gallons per 12-month rolling time period as determined at the end of each calendar month.
 - e) Total fuel (unleaded and leaded gasoline plus diesel) usage calculations determining the annual usage rate in gallons per 12-month rolling time period as determined at the end of each calendar month.
 - f) CO and NO_x emission calculations determining the monthly emission rate in tons per calendar month.
 - g) CO and NO_x emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records in the format specified in Appendix A, or an alternate format that has been approved by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a), R 336.1901, 40 CFR 52.21(c) & (d))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

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. SV1	48	26.75	R 336.1225
2. SV2	48	26.75	R 336.1225
3. SV3	48	26.75	R 336.1225
4. SV4	48	26.75	R 336.1225

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

FGFACILITY CONDITIONS

DESCRIPTION: The following conditions apply source-wide to all process equipment including equipment covered by other permits, grand-fathered equipment and exempt equipment.

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. CO	89.8 tpy	12-month rolling time period as determined at the end of each calendar month.	FGFACILITY	SC VI.2	R 336.1205(1)(a) & (3)

II. MATERIAL LIMIT(S)

1. The permittee shall only burn unleaded gasoline (with ethanol contents less than 20 percent), leaded gasoline, and diesel in engines being tested in FGFACILITY. **(R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d))**
2. The total fuel usage for engines being tested in FGFACILITY shall not exceed 117,000 gallons per 12-month rolling time period as determined at the end of each calendar month. Of the 117,000 gallons, the gasoline usage shall not exceed 27,000 gallons per 12-month rolling time period as determined at the end of each calendar month. **(R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d))**
3. The natural gas usage for FGFACILITY shall not exceed 70 MM cubic feet (MMcf) per 12-month rolling time period as determined at the end of each calendar month. **(R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the natural gas usage in FGFACILITY on a continuous basis. **(R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d))**

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 complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. **(R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d))**

2. The permittee shall keep the following information on a monthly basis for FGFACILITY:
- a) Gallons of gasoline (unleaded and leaded) and diesel used per month.
 - b) Total gasoline (unleaded and leaded) usage calculations determining the annual usage rate in gallons per 12-month rolling time period as determined at the end of each calendar month.
 - c) Engine testing total fuel (total gasoline and diesel) usage calculations determining the annual usage rate in gallons per 12-month rolling time period as determined at the end of each calendar month.
 - d) MMcf of natural gas used per month.
 - e) Natural gas usage calculations determining the annual usage rate in MMcf per 12-month rolling time period as determined at the end of each calendar month.
 - f) Any other information needed to quantify CO emissions.
 - f) CO emission calculations determining the monthly emission rate in tons per calendar month.
 - g) CO emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records in the format specified in Appendix A, or an alternate format that has been approved by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

APPENDIX A
CO and NOx Calculation Method

FGENGTESTING

12-month rolling tpy calculations for FGENGTESTING shall be performed in the following manner:

Emissions in tons/month are determined first for each of the fuel types:

$$\text{Emissions (tons/month)} = (\text{Emission Factor in lb/gallon} \times \text{Fuel Usage in gallon/month}) / (2,000 \text{ lb/ton})$$

The tons/month shall be summed for each of the fuel types to calculate the total tons/month.

Every month, the 12-month rolling tpy emissions will be calculated by adding the latest month's emissions to the sum of the previous 11 months of emissions for a total of 12 months of emissions.

Emission Factors will be the emission factor used in the evaluation of this permit, until there is an approved tested emission factor. The tested emission factor shall be used thereafter unless otherwise required by the AQD District Supervisor. The emission factors used in the evaluation of this permit are listed below:

Pollutant	Gasoline (unleaded & leaded) lb/gallon	Diesel lb/gallon
CO	6.0	0.13
NOx	0.15	0.61

FGFACILITY

FGFACILITY also includes a CO 12-month rolling tpy calculation. It must include all contributions of CO emitted at the facility. At a minimum, this should include the CO from FGENGTESTING and the CO from natural gas combustion. At the time of permitting, there were no other reported sources of CO emissions; however, any additional CO sources would need to be included in the demonstration of compliance if installed in the future.

Natural gas emissions shall be calculated as follows:

$$\text{Emissions (tons/month)} = (\text{Emission Factor in lb/MMcf} \times \text{Fuel Usage in MMcf/month}) / (2,000 \text{ lb/ton})$$

The facility-wide CO tons/month emissions shall be summed for each source type to calculate the total tons/month.

Every month, the 12-month rolling tpy emissions will be calculated by adding the latest month's emissions to the sum of the previous 11 months of emissions for a total of 12 months of emissions.

Emission Factors will either be the emission factor used in the evaluation of this permit or an approved tested emission factor. The emission factor used in the evaluation of this permit is listed below:

Pollutant	Natural Gas (lb/MMcf)
CO	84