# MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

October 29, 2014

PERMIT TO INSTALL 153-10A

ISSUED TO
AT & T Communications of Michigan, Inc.

LOCATED AT 445 State Street Detroit, Michigan

IN THE COUNTY OF Wayne

PENINSUL

# STATE REGISTRATION NUMBER M4785

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:				
October 9, 2014	October 9, 2014			
,				
DATE PERMIT TO INSTALL APPROVED:	SIGNATURE:			
October 29, 2014				
DATE PERMIT VOIDED:	SIGNATURE:			
DATE PERMIT REVOKED:	SIGNATURE:			

## **PERMIT TO INSTALL**

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## **Common Abbreviations / Acronyms**

AQD         Air Quality Division         BTU         British Thermal Unit           BACT         Best Available Control Technology         °C         Degrees Celsius           CAA         Clean Air Act         CO         Carbon Monoxide           CEM         Continuous Emission Monitoring         dscf         Dry standard cubic foot           GFR         Code of Federal Regulations         dscf         Dry standard cubic foot           CO₂e         Carbon Dioxide Equivalent         °F         Degrees Fahrenheit           COM         Continuous Opacity Monitoring         g         Gram           EPA         Environmental Protection Agency         g         Gram           EU         Emission Unit         Hg         Mercury           FG         Flexible Group         hr         Hour           GACS         Gallon of Applied Coating Solids         H₂S         Hydrogen Sulfide           GC         General Condition         hp         Horsepower           GHGS         Greenhouse Gases         lb         Pound           HAV         High Volume Low Pressure *         m         Meter           ID         Identification         m         Millimeter           MACTS         Michigan Air Emissions Reporting Syst		Common Appreviations / Acronyms  Pollutant / Magazirement Abbreviations			
BACT Best Available Control Technology CAA Clean Air Act CEM Continuous Emission Monitoring CFR Code of Federal Regulations CO₂e Carbon Dioxide Equivalent CO₂e Carbon Dioxide Equivalent CO₂e Carbon Dioxide Equivalent COM Continuous Opacity Monitoring CPA Environmental Protection Agency EU Emission Unit FG Flexible Group GACS Gallon of Applied Coating Solids GC General Condition GHGs Greenhouse Gases HAP Hazardous Air Pollutant HVLP High Volume Low Pressure * ID Identification LAER Lowest Achievable Emission Rate MACT Maximum Achievable Control Technology MAERS Michigan Air Emissions Reporting System MAP Malfunction Abatement Plan MDEQ Michigan Department of Environmental Quality (Department) NSPS New Source Performance Standards NSPS New Source Review PS Performance Specification PSD Prevention of Significant Deterioration PTE Permanent Total Enclosure PTI Permit to Install RACT Reasonably Available Control Technology ROP Renewable Operating Permit SC Special Condition SCR Selective Catalytic Reduction SRN State Registration Number TAC Toxic Air Contaminant TEQ Toxicity Equivalence Quotient  COO Carbon Monoxide CCO Carbon Monoxide dscf Dry standard cubic feot dscf Dry standard cubic neter CCO Carbon Monoxide dscf Dry standard cubic feot dscm Dry standard cubic feot dscm Dry standard cubic feot pry Gram FF Degrees Fahrenheit dscm Dry standard cubic feot form FF Degrees Fahrenheit dscm Dry standard cubic feot form FF Degrees Fahrenheit gcm Gram FF Degrees Fahrenheit gcm pry Gram Gram FF Degrees Fahrenheit gcm Gram FF Degrees Fahrenheit gcm gram Gram FF Degrees Fahrenheit gcm gram Gram FF Degrees Fahrenheit gcm gram FF Degrees Fahrenheit gcm gram Gram FF Degrees Fahrenheit gcm gram Gram FF Degrees Fahrenheit gcm gram FF Degrees Fahrenheit gcm gram FF Degrees Fahrenheit gcm gram FF Degrees Fahrenheit	105	Common Acronyms			
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CFR         Code of Federal Regulations         dscm         Dry standard cubic meter           CO₂e         Carbon Dioxide Equivalent         °F         Degrees Fahrenheit           COM         Continuous Opacity Monitoring         g         Gram           EPA         Environmental Protection Agency         gr         Grain           EU         Emission Unit         Hg         Mercury           FG         Flexible Group         hr         Hour           GACS         Gallon of Applied Coating Solids         H₂S         Hydrogen Sulfide           GC         General Condition         hp         Horsepower           GHGS         Greenhouse Gases         lb         Pound           HAP         Hazardous Air Pollutant         kW         Kilowatt           HVLP         High Volume Low Pressure *         m         Meter           ID         Identification         mg         Milligram           LAER         Lowest Achievable Emission Rate         mm         Milligram           MACT         Maximum Achievable Control Technology         MM         Million           MAP         Malfunction Abatement Plan         MW         Megawatts           MAP         Material Safety Data Sheet         MN					
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VE Visible Emissions Volatile Organic Compound	VE	Visible Emissions	VOC	Volatile Organic Compound	
yr Year			yr	Year	

<sup>\*</sup> For High Volume Low Pressure (HVLP) applicators, the pressure measured at the HVLP gun air cap shall not exceed ten (10) pounds per square inch gauge (psig).

#### **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 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 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.
- 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.
- 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 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 ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EUMI4290A	A 1,500 kw diesel-fueled emergency backup engine generator manufactured in 2010. Emissions from EUMI4290A exhaust through SVMI4290A.	December 2010	FGGENERATORS
EUGMMI4290B	A 1,500 kw diesel-fueled emergency backup engine generator manufactured in 2010. Emissions from EUMI4290B exhaust through SVMI4290B.	December 2010	FGGENERATORS

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 336.1290.

#### **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
FGGENERATORS	Two 1500 kw diesel-fueled emergency backup generators.	EUMI4290A, EUMI4290B

#### The following conditions apply to: FGGENERATORS

**<u>DESCRIPTION</u>**: Two (2) 1,500 kilowatts (kW) diesel-fueled emergency engine generators manufactured in 2010

Flexible Group ID: FGGENERATORS

**POLLUTION CONTROL EQUIPMENT: NA** 

#### I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NMHC + NOx	6.4 g/kW-hr	Test Protocol*	Each engine of FGGENERATORS	SC VI.2	40 CFR 60.4205(b), 60.4202(a)(2), Table 1 of 40 CFR 89.112
2. CO	3.5 g/kW-hr	Test Protocol*	Each engine of FGGENERATORS	SC VI.2	40 CFR 60.4205(b), 60.4202(a)(2), Table 1 of 40 CFR 89.112
3. PM	0.20 g/kW-hr	Test Protocol*	Each engine of FGGENERATORS	SC VI.2	40 CFR 60.4205(b), 60.4202(a)(2), Table 1 of 40 CFR 89.112
*Test Protocol shall determine averaging time.					

**II. MATERIAL LIMITS** 

1. The permittee shall burn only diesel fuel, in each engine of FGGENERATORS with the maximum sulfur content of 15 ppm (0.0015 percent) by weight and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent. (R 336.1402(1), 40 CFR 60.4207, 40 CFR 80.510(b))

#### **III. PROCESS/OPERATIONAL RESTRICTIONS**

- 1. The permittee shall not operate each engine of FGGENERATORS for more than 500 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month. The 500 hours includes the hours for the purpose of necessary maintenance checks and readiness testing as described in SC III.2. (R 336.1225, R 336.1702(a), 40 CFR 52.21 (c) & (d))
- 2. The permittee may operate each engine of FGGENERATORS for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. Permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. Each engine of FGGENERATORS may operate up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply non-emergency power as part of a financial arrangement with another entity. (40 CFR 60.4211(f))

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- 3. If the permittee purchased a certified engine, according to procedures specified in 40 CFR Part 60 Subpart IIII, for the same model year and maximum engine power, the permittee shall meet the following requirements for each engine of FGGENERATORS:
  - a) Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions;
  - b) Change only those emission-related settings that are permitted by the manufacturer; and
  - c) Meet the requirements as specified in 40 CFR 89, 94, and/or 1068, as they apply to you.
  - If you do not operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, the engine may be considered a non-certified engine. (40 CFR 60.4211(a) & (c), 60.4205(b))
- 4. If the permittee purchased a non-certified engine or a certified engine operating in a non-certified manner, the permittee shall keep a maintenance plan for each engine of FGGENERATORS and shall, to the extent practicable, maintain and operate each engine in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR 60.4211(g)(3))

#### IV. DESIGN/EQUIPMENT PARAMETERS

- 1. The permittee shall equip and maintain each engine of FGGENERATORS with non-resettable hours meters to track the operating hours. (R 336.1225, 40 CFR 60.4209)
- 2. The nameplate capacity of each engine of FGGENERATORS shall not exceed 1,500 kW, as certified by the equipment manufacturer. (40 CFR 60.4202, 40 CFR 89.112(a))

#### V. TESTING/SAMPLING

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

1. The permittee shall conduct an initial performance test for each engine of FGGENERATORS within one year after startup of the engine to demonstrate compliance with the emission limits in 40 CFR 60.4205 unless the engines have been certified by the manufacturer and the permittee maintains the engine as required by 40 CFR Part 60 Subpart IIII. If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4212. No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. 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. Subsequent performance testing shall be conducted every 8,760 hours of engine operation or 3 years, whichever comes first. (40 CFR 60.4211, 40 CFR 60.4212, 40 CFR Part 60 Subpart IIII)

### 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 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1225, R 336.1702(a), 40 CFR 52.21 (c) & (d))
- 2. The permittee shall keep, in a satisfactory manner, records of testing required in SC V.1 or manufacturer certification documentation indicating that each engine of FGGENERATORS meets the applicable requirements contained in the federal Standards of Performance for New Stationary Sources 40 CFR Part 60 Subpart IIII. If any engine of FGGENERATORS becomes uncertified then the permittee must also keep records of a maintenance plan and maintenance activities. The permittee shall keep all records on file and make them available to the Department upon request. (40 CFR 60.4211)

- 3. The permittee shall monitor and record the total hours of operation and the hours of operation during non-emergencies for each engine of FGGENERATORS, on a monthly and 12-month rolling time period basis, in a manner acceptable to the District Supervisor, Air Quality Division. The permittee shall document how many hours are spent for emergency operation of each engine, including what classified the operation as emergency and how many hours are spent for non-emergency operation. (40 CFR 60.4211, 40 CFR 60.4214)
- 4. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in FGGENERATORS, demonstrating that the fuel meets the requirement of 40 CFR 80.510(b). The certification or test data shall include the name of the oil supplier or laboratory, the sulfur content, and cetane index or aromatic content of the fuel oil. (R 336.1402(1), 40 CFR 80.510(b))

#### VII. REPORTING

- 1. 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 trial operation of each engine of FGGENERATORS. (R 336.1201(7)(a))
- 2. The permittee shall submit a notification specifying whether each engine of FGGENERATORS will be operated in a certified or a non-certified manner to the AQD District Supervisor, in writing, within 30 days following the initial startup of the engine and within 30 days of switching the manner of operation. (40 CFR Part 60 Subpart IIII)

#### 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. SVMI4290A	20	42.67	R 336.1225, 40 CFR 52.21 (c) & (d)
2. SVMI4290B	20	42.67	R 336.1225, 40 CFR 52.21 (c) & (d)

#### IX. OTHER REQUIREMENTS

- 1. The permittee shall comply with the provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subpart A and Subpart IIII, as they apply to each engine of FGGENERATORS. (40 CFR Part 60 Subparts A & IIII)
- 2. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subpart A and Subpart ZZZZ, as they apply to each engine of FGGENERATORS. (40 CFR Part 63 Subparts A and ZZZZ, 40 CFR 63.6595)