# MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

April 20, 2017

PERMIT TO INSTALL 217-16

ISSUED TO
PepperCo-USA, Inc.

LOCATED AT 220 North Fillmore Road Coldwater, Michigan

IN THE COUNTY OF Branch

## STATE REGISTRATION NUMBER P0517

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:  December 14, 2016			
April 20, 2017	SIGNATURE:		
DATE PERMIT VOIDED:	SIGNATURE:		
DATE PERMIT REVOKED:	SIGNATURE:		

## **PERMIT TO INSTALL**

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# Common Abbreviations / Acronyms

	Common Appreviations / Acronyms					
AQD	Common Acronyms Air Quality Division		Pollutant / Measurement Abbreviations			
BACT	•	acfm	Actual cubic feet per minute			
CAA	Best Available Control Technology Clean Air Act	BTU	British Thermal Unit			
		°C	Degrees Celsius			
CAM	Compliance Assurance Monitoring	CO	Carbon Monoxide			
CEM	Continuous Emission Monitoring	CO <sub>2</sub> e	Carbon Dioxide Equivalent			
CFR	Code of Federal Regulations	dscf	Dry standard cubic foot			
COM	Continuous Opacity Monitoring	dscm	Dry standard cubic meter			
Department/ department	Michigan Department of Environmental Quality	°F	Degrees Fahrenheit Grains			
EU	Emission Unit	gr 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 <sub>2</sub> S	Hydrogen Sulfide			
HVLP	High Volume Low Pressure*	kW	Kilowatt			
ID	Identification	lb	Pound			
IRSL	Initial Risk Screening Level	1.0	Meter			
ITSL	Initial Threshold Screening Level	m				
LAER	Lowest Achievable Emission Rate	mg	Milligram			
MACT		mm	Millimeter			
	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	NO <sub>x</sub>	Oxides of Nitrogen			
MSDS	Material Safety Data Sheet	ng PM	Nanogram Particulate Matter			
NA 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 <sub>2</sub>	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 Year			
	cators the pressure measured at the gun air ca	yr 				

<sup>\*</sup>For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

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#### **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.
- 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.
- 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	
EUPEPPERCOBOILER1	One 48 MMBtu/hr natural gas fired boiler with No. 2 fuel oil backup. Boiler is equipped with low NOx burners	12/31/2014	FGPEPPERCOBOILERS	
EUPEPPERCOBOILER2	One 48 MMBtu/hr natural gas fired boiler with No. 2 fuel oil backup. Boiler is equipped with low NOx burners	12/31/2014	FGPEPPERCOBOILERS	
EUPEPPERCOBOILER3	One 48 MMBtu/hr natural gas fired boiler with No. 2 fuel oil backup. Boiler is equipped with low NOx burners	12/31/2014	FGPEPPERCOBOILERS	
Changes to the aguinment described in this table are subject to the requirements of D 226 1201, except as allowed by				

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
FGPEPPERCOBOILERS	Three 48 MMBtu/hr natural gas fired boilers with No. 2 fuel oil backup. Boilers are equipped with low NOx burners during natural gas combustion	EUPEPPERCOBOILER1 EUPEPPERCOBOILER2 EUPEPPERCOBOILER3
FGFACILITY	All process equipment source-wide including equipment covered by other permits, grand-fathered equipment, and exempt equipment	NA

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## The following conditions apply to: FGPEPPERCOOILERS

## **DESCRIPTION**

Three 48 MMBtu/hr natural gas fired boilers with No. 2 fuel oil backup. Boilers are equipped with low NOx burners during natural gas combustion.

Flexible Group ID: NA

## **POLLUTION CONTROL EQUIPMENT**

All boilers are equipped with low NOx burners.

## I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. CO	37.1 tpy	12 month rolling time period, as determined at the end of each calendar month.	FGPEPPERCOBOILERS	SC VI.3	R 336.1205(3))
2. NOx	34.4 tpy	12 month rolling time period, as determined at the end of each calendar month.	FGPEPPERCOBOILERS	SC VI.3	R 336.1205(3))

#### II. MATERIAL LIMITS

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements	
1. Sulfur in No. 2	15 ppmw	Instantaneous	Each boiler located	SC V.1, I.1	40 CFR	
oil			at this facility		60.42c(d)	
2. No. 2 oil	334,021 gallons per year*	time period, as determined at the end of each calendar	All boilers located at this facility	SC VI.3	R 336.1205(3).	
		month				
No. 2 oil usage for periodic testing purposes	48 hours per year	Calendar Year	Each boiler located at this facility	SC V.1, I.1	R 336.1205(3)	
4. Natural gas		Rolling 12 month time period, as determined at the end of each calendar month.			R 336.1205(3)	
* This limit is applicable only under periods of natural gas curtailment.						

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#### III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not burn liquid fuel in each boiler identified in FGPEPPERCOBOILERS except for the following circumstances:
  - a) Periodic testing of liquid fuel, maintenance, or operator training
  - b) Periods of gas curtailment or supply interruptions as defined below:
    - Periods of gas curtailment or supply interruption mean periods of time during which the supply of gaseous fuel to an affected boiler is restricted or halted for reasons beyond the control of the permittee.
    - ii. The act of entering into a contractual agreement with a supplier of natural gas established for curtailment purposes does not constitute a reason that is under the control of the permittee for the purposes of this definition.
    - iii. An increase in the cost or unit price of natural gas due to normal market fluctuations not during periods of supplier delivery restriction does not constitute a period of natural gas curtailment or supply interruption.
    - iv. On-site gaseous fuel system emergencies or equipment failures qualify as periods of supply interruption when the emergency or failure is beyond the control of the permittee.

(40 CFR 63.11237)

- The burning of liquid fuel in each boiler of FGPEPPERCOBOILERS for performance testing, maintenance, or operator training shall not exceed a combined total of 48 hours per boiler during any calendar year. (40 CFR 63.11237)
- 3. The permittee shall not operate any boiler using natural gas in FGPEPPERCOBOILERS unless the low NOx burners are installed and are operating properly. (R 336.1205(3))

## IV. <u>DESIGN/EQUIPMENT PARAMETER(S)</u>

NA

#### V. TESTING/SAMPLING

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

NA

#### VI. MONITORING/RECORDKEEPING

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

- The permittee shall keep records for each delivery of the fuel oil, an analysis (as provided by the supplier),
  of the sulfur content by percent weight or ppm and the heat content in BTU per gallon or BTU per pound.
  (R 336.1401)
- 2. The permittee shall monitor and record, in a satisfactory manner, the following parameters on a monthly basis:
  - a) Monthly and 12-month rolling natural gas usage (million cubic feet).
  - b) The No. 2 oil fuel usage (gallons) for all boilers listed in FGPEPPERCOBOILERS. (R 336.1205, R 336.1225,)
  - c) Monthly and 12-month rolling CO emissions for the facility.
  - d) Monthly and 12-month rolling NOx emissions for the facility
  - e) Hours for which distillate oil is used in each boiler for purposes of for periodic testing.

The methodology for calculating annual CO and NOx emissions shall be done in a manner acceptable to, and approved by, AQD district staff. (R 336.1205(3))

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#### VII. REPORTING

NA

#### VIII. STACK/VENT RESTRICTIONS

Stack & Vent ID		Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements	
1.	SVPEPPERCOBOILER1	33.6	31.4	R 336.1225	
2.	SVPEPPERCOBOILER12	33.6	31.4	R 336.1225	
3.	SVPEPPERCOBOILER13	33.6	31.4	R 336.1225	

#### IX. OTHER REQUIREMENTS

1. The permittee shall comply with all applicable portions of 40 CFR Part 60 Subpart Dc "Standards of Performance for Small Industrial-Commercial-Industrial Steam Generating Units".

#### Footnotes:

<sup>&</sup>lt;sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>&</sup>lt;sup>2</sup> This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

#### The following conditions apply to: FGFACILITY

#### **DESCRIPTION**

All process equipment source-wide including equipment covered by other permits, grand-fathered equipment, and exempt equipment

Flexible Group ID: NA

#### **POLLUTION CONTROL EQUIPMENT**

NA

#### I. <u>EMISSION LIMITS</u>

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. CO	89.9* tpy	12 month rolling time period, as determined at the end of each calendar month.	FGFACILITY	Appendix A	R 336.1205(3))
2. NOx	89.9* tpy	12 month rolling time period, as determined at the end of each calendar month.	FGFACILITY	Appendix A	R 336.1205(3))

<sup>\*</sup> This value represents the total annual emissions summed with the annual emissions from the Maroa Facility under permit 192-16

### II. MATERIAL LIMITS

NA

#### 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)

NA

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#### VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall monitor and record, in a satisfactory manner, the following parameters on a monthly basis:
  - a) Monthly and 12-month rolling CO emissions for the facility.
  - b) Monthly and 12-month rolling NOx emissions for the facility.

## VII. REPORTING

NA

#### VIII. STACK/VENT RESTRICTIONS

NA

## IX. OTHER REQUIREMENTS

NA

#### Appendix A:

Appendix A. Methodology for Calculating CO and NOx Annual Emissions

Annual emissions of NOx and CO shall be calculated via the use of fuel usage and the use of appropriate emission factors. Emissions are calculated by multiplying the fuel usage quantity (gallons or cubic feet per unit of time) by an emission factor (pound per volume of fuel processed) Following are specific requirements for these calculations:

- Fuel usages shall be compiled on a monthly basis, by the end of the calendar month
- The emission factors shall be based upon stack testing, continuous emission monitoring system (CEMS) data, EPA or other published data (i.e. AP-42, MAERS, NSPS), manufacturers recommended values, or other factors approved by the Air Quality Division District staff.
- Emissions shall be aggregated on a monthly basis and an annual basis. Annual emissions shall be expressed as a rolling 12-month time period basis.
- All emission factors used shall be approved by the Air Quality Division staff.
- The calculations shall clearly define how the calculated values were derived.