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Alphabetical Listing of Common Abbreviations/Acronyms used in this Permit to Install.

Common Acronyms		Pollutant/Measurement Abbreviations	
AQD	Air Quality Division	°C	Degrees Celsius
BACT	Best Available Control Technology	CO	Carbon Monoxide
CAA	Clean Air Act	°F	Degrees Fahrenheit
CEM	Continuous Emission Monitoring	BTU	British Thermal Unit
CFR	Code of Federal Regulations	dscf	Dry standard cubic foot
COM	Continuous Opacity Monitoring	dscm	Dry standard cubic meter
EPA	Environmental Protection Agency	gr	Grains
EU	Emission Unit	Hg	Mercury
GACS	Gallon of Applied Coating Solids	hr	Hour
GC	General Condition	H ₂ S	Hydrogen Sulfide
HAP	Hazardous Air Pollutant	HP	Horsepower
HVLP	High Volume Low Pressure *	Lb	Pound
ID	Identification	M	Meter
LAER	Lowest Achievable Emission Rate	mm	Millimeter
MACT	Maximum Achievable Control Technology	MM	Million
MAP	Malfunction Abatement Plan	MW	Megawatts
MDEQ	Michigan Department of Environmental Quality	NO _x	Oxides of Nitrogen
MSDS	Material Safety Data Sheet	PM	Particulate Matter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM10	Particulate Matter less than 10 microns diameter
NSPS	New Source Performance Standards	pph	Pound per hour
NSR	New Source Review	ppm	Parts per million
PSD	Prevention of Significant Deterioration	ppmv	Parts per million by volume
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
SC	Special Condition	sec	Seconds
SCR	Selective Catalytic Reduction	SO ₂	Sulfur Dioxide
SRN	State Registration Number	THC	Total Hydrocarbons
TAC	Toxic Air Contaminant	tpy	Tons per year
VE	Visible Emissions	µg	Microgram
		VOC	Volatile Organic Compounds
		yr	Year

* 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).

Supplement To Permit No. 245-01

GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, altered, 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, reconstruction, relocation, or alteration 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 person to whom this permit was issued, or the designated authorized agent, shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, PO Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or alteration 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. The written request 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 owner or operator of a source, process, or process equipment shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant in excess of standards for more than one hour, or of any air contaminant in excess of standards for more than two hours, as required in this rule, to the District Supervisor, Air Quality Division. The notice shall be provided no 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 District Supervisor within ten days, with the information required in this rule. **[R 336.1912]**
8. Approval of this permit does not exempt the person to whom this permit was issued from complying with any future applicable requirements which may be promulgated under Part 55 of Act 451, PA 1994 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 Act 451, PA 1994, 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, a person 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. Except as allowed by Rule 285 (a), (b), and (c), applicant shall not substitute any fuels, coatings, nor raw materials for those described in the application and allowed by this permit, nor make changes to the process or process equipment described in the application, without prior notification to and approval by the Air Quality Division. **[R 336.1201(1)]**
14. The Department may require the applicant to conduct acceptable performance tests, at the applicant'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 Identification

Emission Unit ID	Emission Unit Description	Stack Identification
EUDEHY	Glycol dehydration system processing gas from the niagaran formation; no control.	SV1
EUENGINE	215 HP Caterpillar G3406 NA compressor engine; no control.	SV6
Changes to the equipment described in this table are subject to the requirements of R336.1201, except as allowed by R336.1278 to R336.1290.		

The following conditions apply to: EUDEHY

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Compliance Method	Applicable Requirement
1.1a	VOC	EUDEHY	10.7 tons per year	12-month rolling time period.	S.C. Nos. 1.2, 1.3, 1.5, and 1.6	R336.1702(a)
1.1b	Benzene	EUDEHY	1.1 tons per year	12-month rolling time period.	S.C. Nos. 1.2, 1.3, 1.5, and 1.6	R336.1225
12-month rolling time period shall be determined at the end of each calendar month.						

Process/Operational Limits

1.2 The glycol re-circulation rate of EUDEHY shall not exceed a maximum of 0.28 gallons per minute. [R336.1225, R336.1702(a)]

Testing

1.3 At least once each calendar year the permittee shall obtain, by sampling, an analysis of the wet gas stream. The sample shall be analyzed for nitrogen, carbon dioxide, hydrogen sulfide, C1 through C6 series hydrocarbons, benzene, toluene, xylene, ethylbenzene, and heptanes plus. Any request for a change in the sampling frequency must be submitted to the AQD District Supervisor for review and approval. [R336.1225, R336.1702(a)]

Monitoring

1.4 The permittee shall monitor in a satisfactory manner the glycol recirculation rate of EUDEHY on a monthly basis. [R336.1225, R336.1702(a)]

Recordkeeping/Reporting/Notification

1.5 The permittee shall calculate the VOC and benzene emission rates from EUDEHY for each calendar month and 12-month rolling time period, using a method acceptable to the AQD District Supervisor. If GRI-GLYCalc (Version 3.0 or higher) is used to calculate the emission rates, the inputs to the model shall be representative of actual operating conditions of EUDEHY and shall include the most recent gas analysis data. Any request for a change in the calculation frequency must be submitted to the AQD District Supervisor for review and approval. Records of VOC and benzene emission rates are for the purpose of compliance demonstration and shall be kept on file for a period of at least five years and made available to the Department upon request. [R336.1225, R336.1702(a)]

1.6. The permittee shall keep the following records for EUDEHY in a satisfactory manner. All records are for the purpose of compliance demonstration and shall be kept on file for a period of at least five years and made available to the Department upon request.

	Record	Applicable Requirements
a.	Wet gas composition as determined through analysis of wet gas samples as required in Special Condition 1.3.	R336.1225 and R336.1702(a)
b.	Monthly records of the glycol re-circulation rate.	R336.1225 and R336.1702(a)

Stack/Vent Restrictions

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirement
1.7	SV1	2	28	R336.1225
The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.				

The following conditions apply to: EUENGINE

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Compliance Method	Applicable Requirement
2.1	NOx	EUENGINE	44.4 tons per year	12-month rolling time period.	S.C. Nos. 2.2 and 2.3	40 CFR 52.21 (c) & (d)
12-month rolling time period shall be determined at the end of each calendar month.						

Monitoring

2.2 The permittee shall monitor in a satisfactory manner the natural gas consumption rate of EUENGINE on a continuous basis. [40 CFR 52.21 (c) & (d)]

Recordkeeping/Reporting/Notification

2.3 The permittee shall keep the following records for EUENGINE in a satisfactory manner. All records are for the purpose of compliance demonstration and shall be kept on file for a period of at least five years and made available to the Department upon request.

	Record	Applicable Requirements
a.	Monthly and 12-month rolling time period records of the amount of natural gas burned.	40 CFR 52.21(c)&(d)
b.	Calculations of the monthly and 12-month rolling time period NOx emission rates.	40 CFR 52.21(c)&(d)

Stack/Vent Restrictions

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirement
2.4	SV6	4	18	40 CFR 52.21 (c) & (d)
The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.				