MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

January 13, 2004

NEW SOURCE REVIEW PERMIT TO INSTALL

No. 355-01

ISSUED TO
EQ-Environmental Quality Company

LOCATED AT
49350 N. I-94 Service Drive
Belleville, Michigan 48111

IN THE COUNTY OF
Wayne

STATE REGISTRATION NUMBER
M4782

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 Part 5505(1) of Article II, Chapter I, Part 55 (Air Pollution Control) of P.A. 451 of 1994. 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: **10/13/2003**	
DATE PERMIT TO INSTALL APPROVED: **1/13/2004**	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

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Common Abbreviations / Acronyms Used in this Permit to Install

Common Acronyms		Pollutant/Measurement Abbreviations	
AQD	Air Quality Division	BTU	British Thermal Unit
ANSI	American National Standards Institute	°C	Degrees Celsius
BACT	Best Available Control Technology	CO	Carbon Monoxide
CAA	Clean Air Act	dscf	Dry standard cubic foot
CEM	Continuous Emission Monitoring	dscm	Dry standard cubic meter
CFR	Code of Federal Regulations	°F	Degrees Fahrenheit
COM	Continuous Opacity Monitoring	gr	Grains
EPA	Environmental Protection Agency	Hg	Mercury
EU	Emission Unit	hr	Hour
FG	Flexible Group	H_2S	Hydrogen Sulfide
GACS	Gallon of Applied Coating Solids	HP	Horsepower
GC	General Condition	lb	Pound
HAP	Hazardous Air Pollutant	m	Meter
HVLP	High Volume Low Pressure *	mg	Milligram
ID	Identification	mm	Millimeter
LAER	Lowest Achievable Emission Rate	MM	Million
MACT	Maximum Achievable Control Technology	MW	Megawatts
MAERS	Michigan Air Emissions Reporting System	NOx	Oxides of Nitrogen
MAP	Malfunction Abatement Plan	PM	Particulate Matter
MDEQ	Michigan Department of Environmental Quality	PM-10	Particulate Matter less than 10 microns diameter
MIOSHA	Michigan Occupational Safety & Health Administration	pph	Pound per hour
MSDS	Material Safety Data Sheet	ppm	Parts per million
NESHAP	National Emission Standard for Hazardous Air Pollutants	ppmv	Parts per million by volume
NSPS	New Source Performance Standards	ppmw	Parts per million by weight
NSR	New Source Review	psia	Pounds per square inch absolute
PS	Performance Specification	psig	Pounds per square inch gauge
PSD	Prevention of Significant Deterioration	scf	Standard cubic feet
PTE	Permanent Total Enclosure	sec	Seconds
PTI	Permit to Install	SO_2	Sulfur Dioxide
RACT	Reasonable Available Control Technology	THC	Total Hydrocarbons
SC	Special Condition	tpy	Tons per year
SCR	Selective Catalytic Reduction	µg	Microgram
SRN	State Registration Number	VOC	Volatile Organic Compounds
TAC	Toxic Air Contaminant	yr	Year
VE	Visible Emissions		

* 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, 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. **[R336.1201(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. **[R336.1201(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 R336.1210, 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. **[R336.1201(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. **[R336.1201(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 R336.1219 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 R336.1219. The written request shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. **[R336.1219]**

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. **[R336.1901]**

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. **[R336.1912]**

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 R336.1301, 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 R336.1303. **[R336.1301]**

    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 R336.1370(2). **[R336.1370]**

13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R336.2001 and R336.2003, under any of the conditions listed in R336.2001. **[R336.2001]**

SPECIAL CONDITIONS

Emission Unit Identification

Emission Unit ID	Emission Unit Description	Stack Identification
EUCONSOLIDATION	Consolidation room (a.k.a. Containment Area No. 7) with a baghouse for particulate control.	SV1
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: EUCONSOLIDATION

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirement
1.1a	VOC	EUCONSOLIDATION	17.5 tpy	12-month rolling time period*	SC 1.13, 1.14, 1.15, 1.17, 1.18, 1.19	R336.1702(a)
1.1b	Benzene	EUCONSOLIDATION	4.5 tpy	12-month rolling time period*	GC 1.13, SC 1.13, 1.14, 1.15, 1.17, 1.18, 1.19	R336.1225
1.1c	Trichloroethene	EUCONSOLIDATION	2.7 tpy	12-month rolling time period*	GC 1.13, SC 1.13, 1.14, 1.15, 1.17, 1.18, 1.19	R336.1225
1.1d	PM	EUCONSOLIDATION	0.02 grain per scf	Testing protocol	GC 13, SC 1.12, 1.16	R336.1331
1.1e	PM	EUCONSOLIDATION	11.3 pph	Testing protocol	GC 13, SC 1.12, 1.16	R336.1331
	* as determined at the end of each calendar month.					

Material Usage Limits

1.2 The permittee shall not process any hazardous waste having a VOC concentration greater than 500 ppm in EUCONSOLIDATION. **[R336.1702(a)]**

1.3 The permittee shall not process any non-hazardous waste having a VOC concentration greater than 20.0 percent in EUCONSOLIDATION. **[R336.1702(a)]**

1.4 The permittee shall not process more than 152,000 gallons per day of hazardous waste in EUCONSOLIDATION. **[R336.1702(a)]**

1.5 The permittee shall not process more than 55,000 gallons per day of non-hazardous waste in EUCONSOLIDATION. **[R336.1702(a)]**

Process/Operational Limits

1.6 The pressure drop across CDBAGHOUSE shall not exceed a maximum of 8 inches of water gage. **[R336.1331, R336.1910]**

1.7 The permittee shall not store light material, as defined in 40 CFR 63.681, or perform waste stabilization, as defined in 40 CFR 63.681, in any container in EUCONSOLIDATION. **[R 336.1225, R 336.1702(a), 40 CFR 63 Subparts A and DD]**

Equipment

1.8 The permittee shall not operate EUCONSOLIDATION unless the CDBAGHOUSE is installed, maintained, and operated in a satisfactory manner. **[R336.1301, R336.1331, R336.1910]**

1.9 The permittee shall equip and maintain CDBAGHOUSE with pressure drop indicator. **[R336.1331, R336.1910]**

1.10 The permittee shall equip each container having a design capacity greater them 0.1 m^3 with Level 1 control, as defined in 40 CFR 63 Subpart PP. **[R 336.1225, R 336.1702(a), 40 CFR 63 Subparts A and DD]**

1.11 The permittee shall meet the standards in 40 CFR 61.345 for each container in which waste is placed in accordance with 40 CFR 61.342(c)(ii). **[R 336.1225, R 336.1702(a), 40 CFR 61 Subparts A and FF]**

Monitoring

1.12 The permittee shall monitor, in a satisfactory manner, the pressure drop across CDBAGHOUSE on a daily basis. **[R336.1331, R336.1910]**

1.13 The permittee shall perform inspections and monitoring of the container Level 1 controls as required in 40 CFR 63 Subpart PP. **[R 336.1225, R 336.1702(a), 40 CFR 63 Subparts A and DD]**

1.14 The permittee shall perform the inspections and monitoring specified in 40 CFR 61.345 for each container in which waste is placed in accordance with 40 CFR 61.342(c)(ii). **[R 336.1225, R 336.1702(a), 40 CFR 61 Subparts A and FF]**

Recordkeeping/Reporting/Notification

1.15 The permittee shall keep, in a satisfactory manner, records of the amounts of hazardous and non-hazardous waste materials processed in EUCONSOLIDATION on a daily basis. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **[R336.1702(a)]**

1.16 The permittee shall keep, in a satisfactory manner, daily records of the pressure drop across CDBAGHOUSE. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **[R336.1331, R336.1910]**

1.17 The permittee shall keep production records and any other records as required to demonstrate compliance with the emission limits specified in Special Condition Nos. 1a through 1c. Emission totals shall be calculated using the method described in Appendix 1. A monthly summary of these emissions shall be kept on file for at least five years and made available to the Air Quality Division upon request. **[R336.1225, R336.1331, R336.1702(a)]**

1.18 The permittee shall keep, in a satisfactory manner, records of the inspections and monitoring of the container Level 1 controls. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **[R 336.1225, R 336.1702(a), 40 CFR 63 Subparts A and DD]**

1.19 The permittee shall keep, in a satisfactory manner, records of the inspections and monitoring specified in 40 CFR 61.345 for each container in which waste is placed in accordance with 40 CFR 61.342(c)(ii). All records shall be kept on file for a period of at least five years and made available to the Department upon request. **[R 336.1225, R 336.1702(a), 40 CFR 61 Subparts A and FF]**

Stack/Vent Restrictions

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirement
1.20	SV1	46	42.1	R 336.1225
	The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.			

Appendix 1

Compliance Demonstration Equations

To demonstrate continuous compliance with the VOC emission limits in special condition No. 1.1, applicant shall monitor and record the amount of VOC present in each waste stream, before consolidation, on a daily basis. A monthly report shall summarize the amount of waste consolidated and the VOC concentration and the total VOC input. This report shall be submitted to the AQD District Supervisor on a quarterly basis to monitor the cumulative VOC emissions for the preceding 12 months.

VOCs — Non-hazardous waste containers:

The following formula shall be used to calculate and monitor the VOC emissions from the non-hazardous waste bulking/consolidation process:

$$\frac{\text{Lbs. of VOC emitted from non-hazardous waste bulking,}}{\text{time period}} == \Sigma[V_i \times W_i \times D_i] \times E_r$$

where:

i = Each iteration of waste stream treated during the time period.

V_i = Volume of waste stream i processed [gallons per time period].

W_i = Weight fraction of VOC present in waste stream i processed [not to exceed 20 percent].

D_i = Density of waste stream i processed in appropriate unit [lbs per gallon]. 8.34 lb/gal will be the default value, but waste specific data can be used.

E_r = Emission factor for VOC released from waste during the bulking/consolidation process. A factor of 0.1 percent evaporation by weight will be the default value, but site specific data can be used.

VOCs — Hazardous waste containers:

The following formula shall be used to calculate and monitor the VOC emissions from the hazardous waste bulking/consolidation process:

$$\frac{\text{Lbs. of VOC emitted from hazardous waste bulking,}}{\text{time period}} == \Sigma[V_i \times W_i \times D_i] \times E_r$$

where:

i = Each iteration of waste stream treated during the time period.

V_i = Volume of waste stream i processed [gallons per time period].

W_i = Weight fraction of VOC present in waste stream i processed [not to exceed 500 ppmw].

D_i = Density of waste stream i processed in appropriate unit [lbs per gallon]. 8.34 lb/gal will be the default value, but waste specific data can be used.

E_r = Emission factor for VOC released from waste during the bulking/consolidation process. A factor of 0.1 percent evaporation by weight will be the default value, but site specific data can be used.