MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

July 15, 2004

NEW SOURCE REVIEW PERMIT TO INSTALL

276-87M

ISSUED TO
H & D Inc.

LOCATED AT
SE ¼ of NW ¼ T25N R9E, Section 2
Greenbush Township, Michigan

IN THE COUNTY OF
Alcona

STATE REGISTRATION NUMBER
N1357

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: **June 15, 2004**	
DATE PERMIT TO INSTALL APPROVED: **July 15, 2004**	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

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

Common Acronyms		Pollutant/Measurement Abbreviations	
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
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
COM	Continuous Opacity Monitoring	°F	Degrees Fahrenheit
EPA	Environmental Protection Agency	gr	Grains
EU	Emission Unit	Hg	Mercury
GACS	Gallon of Applied Coating Solids	hr	Hour
GC	General Condition	H_2S	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	PM-10	Particulate matter less than 10 microns aerodynamic 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	Reasonably 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).

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. **[R336.1201(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, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification 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 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). **[R336.1912]**

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 R336.1301, 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 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
EU-001	One hot mix asphalt facility, consisting of the 400 tons per hour aggregate conveyors and 400 tons per hour parallel flow drum mixer with 72,000 actual cubic feet per minute Dillman 72M-10 x 816 baghouse	SV-001
EU-ACTANK	liquid asphalt cement storage tanks, 2@30,000 gallons capacity each	
EU-SILO	asphalt paving materials product storage bins, 2@200 tons capacity each	
EU-YARD	Fugitive dust sources associated with the hot mix asphalt facility, consisting of all plant roadways, the plant yard, all material storage piles, and all material handling operations except cold feed aggregate bins	fugitive emissions
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 Identification

Flexible Group ID	Emission Units Included in Flexible Group
FG-FACILITY	All equipment at the facility including equipment covered by other permits, grand-fathered equipment and exempt equipment.

The following conditions apply to: EU-001

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Compliance Method	Applicable Requirement
1.1a	PM	EU-001	0.04 gr/dscf	U.S. EPA Test Method 5	SC 1.19	40 CFR§60.92(a)(1) R 336.1205(3)
1.1b	PM	EU-001	14.6 tpy[1]	12 month rolling time period	SC 1.19	R 336.1205(3)
1.1c	SO_2	EU-001	0.20 lb/ton HMA[2]	U.S. EPA Test Method	SC 1.19	R 336.1205(3))
1.1d	SO_2	EU-001	22.5 tpy[1,3]	12 month rolling time period	SC 1.19	R 336.1205(3))
1.1e	NO_x	EU-001	0.12 lb/ton HMA[2]	U.S. EPA Test Method	SC 1.19	R 336.1205(3))
1.1f	NO_x	EU-001	18.4 tpy[1]	12 month rolling time period	SC 1.19	R 336.1205(3))

	Pollutant	Equipment	Limit	Time Period	Compliance Method	Applicable Requirement
1.1g	CO/	EU-001	0.201 lb/ton HMA[2]	U.S. EPA Test Method	SC 1.19	R 336.1205(3))
1.1h	CO	EU-001	30.2 tpy[1]	12 month rolling time period	SC 1.19	R 336.1205(3))
1.1i	VOC	EU-001	0.058 lb/ton HMA[2]	U.S. EPA Test Method	SC 1.19	R 336.1205(3))
1.1j	VOC	EU-001	10.4 tpy[1]	12 month rolling time period	SC 1.19	R 336.1205(3))
1.1k	Lead	EU-001	2.02 E-6 lb/ton HMA[2]	U.S. EPA Test Method	SC 1.19	R 336.1205(3))
1.1l	Lead	EU-001	3.0 E-4 tpy[1]	12 month rolling time period	SC 1.19	R 336.1205(3))
1.1m	Hydrogen chloride	EU-001	0.006 lb/ton HMA[2,4]	U.S. EPA Test Method	GC 13	R 336.1201(3) and R 336.1224
1.1n	Sulfuric acid	EU-001	0.0032 lb/ton HMA[2,4]	U.S. EPA Test Method	GC 13	R 336.1201(3) and R 336.1224
1.1o	Benzene	EU-001	0.001 lb/ton HMA[2,4]	U.S. EPA Test Method	GC 13	R 336.1201(3) and R 336.1224
1.1p	Toluene	EU-001	0.006 lb/ton HMA[2,4]	U.S. EPA Test Method	GC 13	R 336.1201(3) and R 336.1224
1.1q	Ethylbenzene	EU-001	0.001 lb/ton HMA[2,4]	U.S. EPA Test Method	GC 13	R 336.1201(3) and R 336.1224
1.1r	Xylene	EU-001	0.001 lb/ton HMA[2,4]	U.S. EPA Test Method	GC 13	R 336.1201(3) and R 336.1224
1.1s	Naphthalene	EU-001	0.001 lb/ton HMA[2,4]	U.S. EPA Test Method	GC 13	R 336.1201(3) and R 336.1224
1.1t	Formaldehyde	EU-001	0.01 lb/ton HMA[2,4]	U.S. EPA Test Method	GC 13	R 336.1201(3) and R 336.1224
1.1u	Acrolein	EU-001	0.001 lb/ton HMA[2,4]	U.S. EPA Test Method	GC 13	R 336.1201(3) and R 336.1224
1.1v	Arsenic	EU-001	1 E-6 lb/ton HMA[2,4]	U.S. EPA Test Method	GC 13	R 336.1201(3) and R 336.1224
1.1w	Nickel	EU-001	1 E-4 lb/ton HMA[2,4]	U.S. EPA Test Method	GC 13	R 336.1201(3) and R 336.1224
1.1x	Manganese	EU-001	5 E-5 lb/ton HMA[2,4]	U.S. EPA Test Method	GC 13	R 336.1201(3) and R 336.1224

1 based on a 12-month rolling time period and 300,000 tons asphalt paving materials production
2 pounds per ton of asphalt paving materials produced
3 emission factor obtained from AQD's General Permit Addendum for HMA Plants. SO_2 emission rate equation: 0.0828 x 2.05 gal/ton HMA x 1.0 percent sulfur
4 developed by AQD using test data and AP-42 factors

Material Usage Limits

1.2 Permittee shall limit the asphalt mixture in EU-001 to a maximum of 40 percent reclaimed asphalt pavement (RAP) material based on a monthly average. **[R 336.1901]**

1.3 Permittee shall not use as a raw material in EU-001 any asbestos tailing or asbestos containing waste materials. **[National Emission Standards for Hazardous Air Pollutants, 40 CFR, Part 61, Subpart M]**

1.4 Permittee shall not burn any fuel other than natural gas, propane gas, butane gas, or No. 2, No. 4, No. 5, or No. 6 fuel oil or specification Recycled Used Oil in EU-001. **[R 336.1201(3)]**

Process/Operational Limits

1.5. Permittee shall not process a combined total of more than 300,000 tons of asphalt paving materials in EU-001 per 12 month rolling time period as determined at the end of each calendar month. **[R 336.1205]**

1.6 Permittee shall not burn in EU-001 any hazardous waste (as defined in state or federal law), any blended fuel oil or specification recycled used oil (RUO) containing any contaminant that exceeds the following concentrations or for which the flash point or ash content varies from the standards specified in the following table. **[R 336.1201(3) and R 336.1225]**

Contaminant	Maximum Concentration Parts per million by weight
Arsenic	5.0
Cadmium	2.0
Chromium	10.0
Lead	100.0
PCBs	1.0
Total Halogens	4000.0
Sulfur	1.0 % by weight
Minimum Flash Point	100 degrees F
Maximum Ash Content	1.0 % by weight

1.7 The sulfur content of the fuel oil or RUO combusted in EU-001 shall not exceed 1.0% by weight based on a fuel oil with a minimum higher heating value of 17,000 Btu per pound. **[R 336.1402]**

1.8 Permittee shall not operate EU-001 unless a Compliance Monitoring Plan for RUO (CMP) attached as Appendix B has been implemented by the permittee. All records required by the CMP shall be kept on file for a period of at least two years and made available to Air Quality Division upon request. **[R 336.1201(3) and R 336.1225]**

Equipment

1.9 Permittee shall equip and maintain EU-001 with a fabric filter collector (baghouse). Maintenance records consistent with the Preventative Maintenance Program for the Baghouse attached as Appendix A shall be kept on file for a period of at least five years and made available to the Air Quality Division upon request. **[R 336.1910 and R 336.1911]**

1.10 Permittee shall equip and maintain the EU-001 baghouse with instrumentation to indicate the pressure drop across the fabric filters. **[R 336.1910]**

1.11 Permittee shall not operate EU-001 unless the fabric filter collector (baghouse) is installed and operating properly. **[R 336.1910]**

Monitoring

1.12 Permittee shall maintain the efficiency of the EU-001 drum mix burners, by using the following methods for proper burner operation and performance, to control CO emissions. The two methods are as follows:

a) At the startup of the drum mix fuel burners, upon each paving season, and after every 500 hours of operation thereafter or malfunction of EU-001 as shown by the CO emission monitoring parameters, which ever occurs first, the permittee shall fine tune the burners.

b) 1) monitor and record the CO emissions from EU-001 on an intermittent basis in a manner and with instrumentation identified in a plan acceptable to the District Supervisor, AQD, and according to the schedule below

Parameter	Monitoring phase	Frequency*	Duration
CO emissions	Routine	One data set each month of operation	Until the District Supervisor approves an alternate schedule, proposed by the permittee in writing

* Each data set shall consist of at least eight separate CO readings taken over a total time period of thirty minutes or longer.

2) Monitor and record production data associated with the time the emissions data were collected to calculate the pounds of CO emitted per ton of asphalt paving materials produced.

Data collected by this method shall not supersede the results of a performance test meeting MDEQ requirements. **[R 336.1205 and R 336.1901]**

Recordkeeping/Reporting/Notification

1.13 The following data shall be kept on file for a period of at least five years from the time the data were collected and made available to the AQD upon request:

a) All CO and related production data required by SC 1.12, including the dates and times emissions were monitored

b) All calculations required by SC 1.12 **[R 336.1205 and R 336.1901]**

1.14 Permittee shall keep a written record of the amount of asphalt paving materials processed in EU-001 as determined at the end of each calendar month. The record shall be kept on file for a period of at least five years and made available to the AQD upon request. **[R 336.1205]**

1.15 Permittee shall obtain a copy of the (waste oil, reprocessed oil, reused or used oil, RUO etc.) analysis from the fuel supplier for each shipment of blended fuel oil or RUO used as fuel in EU-001. The analysis shall include analyses of blended fuel oil's or RUO's content of arsenic, cadmium, chromium, lead, PCBs, and total halogens (all in units of parts per million by weight), sulfur (percent by weight), specific gravity, and higher heating value (Btu/pound). The analyses shall report the detection limit for each component analyzed. This information shall be kept on file for a period of at least five years and made available to the AQD upon request. **[R 336.1201(3) and R 336.1225]**

1.16 Complete copies of all EU-001 fuel oil or RUO certification(s) as supplied by the fuel oil supplier and all fuel or RUO oil sampling analytical results obtained by the permittee, including QA/QC data, shall be kept on file for a period of at least five years and made available to AQD upon request. **[R 336.1201(3) and R 336.1225]**

1.17 Permittee shall monitor the following production information for EU-001 on the basis indicated for each item:

a) The virgin aggregate feed rate (continuous basis)

b) The RAP feed rate (continuous basis)

c) Information sufficient to identify all components of the liquid asphalt cement and additives. (continuous basis)

d) The asphalt paving material product temperature (intermittent basis)

Upon start-up, the initial mix design and time shall be recorded. When a new mix design is activated after start-up, the time and new mix design shall be recorded. Product quality control data may be used for item d). Records sufficient to identify routine process changes shall be kept on file until the end of the paving season in which they were recorded and made available to the AQD upon request. **[R 336.1901]**

1.18 Permittee shall keep records of the following items for each calendar day that EU-001 is operated. These records shall be kept on file for a period of at least five years and made available to the AQD upon request. **[R 336.1201(3)]**

a) The identification, type, and amounts (in gallons or cubic feet) of all fuels combusted.
b) Tons of virgin hot mix asphalt produced.
c) Tons of hot mix asphalt containing RAP produced, including the average percent of RAP per ton of hot mix asphalt produced containing RAP.
d) Total hours of operation.
e) The quantity of RAP used in hot mix asphalt paving materials each calendar month.
f) The sulfur content of each load of fuel oil delivered to the hot mix asphalt facility.

1.19 Permittee shall calculate the actual emission levels for CO, SO_2, NO_x, VOC, particulate matter, and lead from EU-001 based on the most recent calendar year. If stack test results for the permitted hot mix asphalt facility exist for any of the aforementioned pollutants, those stack test results may be used to estimate pollutant emissions subject to the approval of the AQD. In the event that stack test results do not exist for a specific pollutant, the applicable emission factor listed in SC 1.1a through SC 1.1l shall be used to estimate the emissions of a pollutant. These data shall be kept on file for a period of at least five years and made available to the AQD upon request. **[R 336.1205]**

Stack/Vent Restrictions

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirement
1.20	SV-001	48	25	R 336.1901
	The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.			

The following conditions apply to: **EU-YARD**

Process/Operational Limits

2.1 Permittee shall not operate EU-001 unless the Management Plan for the Control of Fugitive Dust for all plant roadways, the plant yard, all material storage piles, and all material handling operations specified in Appendix C has been implemented and is maintained. **[R 336.1371, R 336.1372, and R 336.1901]**

Recordkeeping/Reporting/Notification

2.2 Permittee shall calculate the fugitive dust emissions based on the most recent calendar year. The fugitive dust emissions of particulate matter shall be calculated using the current U. S. Environmental Protection Agency's Compilation of Air Pollutant Emission Factors (AP-42) or other emission factors approved by the department such as those used in the Michigan Air Emissions Reporting system (MAERS). **[R 336.1371, R 336.1372, and R 336.1901]**

2.3 The actual emission levels for the pollutants specified in SC 2.1 and SC 2.2 shall be reported to the AQD through the annual emission reporting required under Section 5503(k) of the Natural Resources and Environmental Protection Act. **[Section 5503(k) of the Natural Resources and Environmental Protection Act]**

The following conditions apply to: **EU-ACTANKS**

Process/Operational Limits

3.1 Permittee shall not operate EU-001 unless the vapor condensation and recovery system for each liquid asphalt cement storage tank is installed and operating properly. **[R 336.1224]**

The following conditions apply to: FG-FACILITY

Emission Limits

5.1 The total emission rate from the stationary source, including fugitive emissions, of each criteria pollutant as defined in the federal CAA shall not exceed 89.9 tons per rolling twelve-month period. **[R 336.1205(3)]**

5.2 The total emission rate from the stationary source, including fugitive emissions, of HAPs shall not exceed 8.9 tons per rolling twelve-month period for each individual HAP nor 22.49 tons per rolling twelve-month period for all HAPs combined. **[CAA, Section 112]**

5.3 The permittee shall not operate FG-FACILITY at this site for more than 24 consecutive months. **[R 336.1205, R 336.1901]**

The permittee shall not relocate FG-FACILITY to any new geographical site in Michigan unless all of the following criteria are met:

a) FG-FACILITY shall not have any outstanding unresolved violations of any of the MDEQ Air Pollution Control rules, order, or permits; or federal air quality regulations.

b) The installation of FG-FACILITY at the geographical site shall be of a temporary nature lasting not more than 24 consecutive months.

c) A notice of intent to relocate along with a proposed site plan shall be provided to the AQD district office not less than 21 days prior to the scheduled relocation identifying the proposed new geographical site and the probable duration at the new site. All residential or commercial establishments and places of public assembly within 1,000 feet of the proposed site of FG-FACILITY shall be clearly identified on the proposed site plan.

d) FG-FACILITY shall not be located within 800 feet of a residential or commercial establishment or a place of public assembly unless prior written site approval is obtained from the AQD district office.

e) A copy of this approved permit and permit conditions shall be clearly posted in the operator's office or work station and the permit number shall be posted on the equipment where it is clearly visible from the operator's office or work station.

f) The Department's Delegation of Authority does not authorize us to approve any site where there is a known unresolved objection. Therefore, a request for site approval where there are known unresolved objections will continue to be handled by the Office of the Director of the MDEQ. **[Act 451 324.5505, R 336.1201, R 336.1205, R 336.1901]**

APPENDIX A

Preventative Maintenance
Program for the
BAGHOUSE
at
H & D, Inc.

The Preventative Maintenance Program for the Baghouse is for the purpose of keeping the baghouse in good operating condition, and thereby, maintaining the rated capture efficiency of the baghouse for the control of particulate matter. ALL REFERENCES TO VISIBLE EMISSIONS IN THIS DOCUMENT, PARTICULARLY IN SEC. 5, REFER SPECIFICALLY TO VISIBLE EMISSIONS CAUSED BY A DUST (PARTICULATE) EMISSION.

1. BAGHOUSE OPERATING PRESSURE DROP.

a. The pressure drop across the baghouse shall be continuously measured and the minimum pressure drop shall not be less than 2 inches, water gauge, except when a large number of filter bags have been replaced.

b. The pressure drop across the baghouse shall be recorded at least once per day and made available to the Air Quality Division upon request.

2. BAGHOUSE/PLANT ALARM SYSTEM.

The baghouse shall be equipped with a high temperature sensor and alarm system. The alarm system shall be designed to set off an alarm when the high temperature set-point has been violated, and, to begin a sequential shut-down of the plant if the situation is not resolved within a very short period of time after the alarm sounds.

3. HANDLING AND STORAGE OF BAGHOUSE DUST.

Accumulated baghouse dust (particulate) shall be stored and/or be disposed of in a manner which minimizes the introduction of the air contaminants to the outer air.

4. PIPING AND SEALS MAINTENANCE.

Piping and seals shall be replaced as needed.

5. VISIBLE EMISSIONS AND ACTIONS TO BE TAKEN IN THE EVENT OF.

In the event visible emissions, which appear to exceed the standard allowed in General Condition No. 11 of this Permit to Install, are observed at the discharge point of the stack, the following actions shall be taken:

If no certified visible emissions reader can be on-site within 60 minutes of observing the visible emission to verify the emission density, operations shall be ceased immediately and the cause of the visible emissions determined and corrected prior to operating the plant again.

REMINDER: If the visible emissions continue for more than 2 hours, in excess of an emission standard, an excess emissions report must be made to MDEQ.

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6. BLACK LIGHT INSPECTIONS.

A black light test shall be conducted at least once per year--before operations begin for a paving season. Black light inspection equipment and materials shall be available for use at the facility and used as needed during the paving season.

7. INVENTORY OF FILTER BAGS.

A minimum of 15 filter bags shall be kept on-site at all times. An inventory of other replacement parts for the baghouse shall be maintained at all times.

8. BAGHOUSE INSPECTION RECORD.

A written record of the following shall be maintained by the owner or operator of the facility and made available to the Air Quality Division upon request:

- Visual inspections of the interior components of the baghouse, including date, time, and findings;
- Black light inspections, including date, time, and findings;
- Number of filter bags installed as a result of each inspection to replace filter bags already in use in the baghouse, including date, time, location, and whether the replacement filter bag was brand new or a cleaned, previously used filter bag;
- An explanation (i.e., a description of the damage found) for each filter bag removed from the baghouse and confirmation that another filter bag was installed to replace it;
- Each observation of visible emissions at the stack discharge point and description of response to the observed visible emission, including date and time of visible emission occurrence and results of EPA Method 9 observation, if any. A visible emission record sheet will be made available in the Daily Operations Log Book.
- All significant maintenance activities performed on the baghouse.

APPENDIX B

Compliance Monitoring Plan
for the Characterization of

RECYCLED USED OIL
at
Hot Mix Asphalt Facilities

Purpose: This Compliance Monitoring Plan (CMP) describes the requirements for combusting recycled used oil (RUO) in the hot mix asphalt facility. Each Purchase Order that is executed by a facility for the purchase of recycled used oil shall be accompanied by specific requirements that the supplier must meet. The requirements include RUO characterization information, Quality Assurance/Quality Control (QA/QC) data, and a demonstration that the RUO supplied does not exceed the allowable levels for RUO properties and constituents listed in this CMP, the Permit to Install special conditions, and 40 CFR 279.11.

In Michigan, used oil management is regulated by the Michigan Department of Environmental Quality (MDEQ) by several divisions under various Parts of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), Act 207 of 1941, and the applicable Administrative Rules. In addition to the MDEQ regulations, used oil management may be subject to requirements of other agencies including, but not limited to the U.S. Environmental Protection Agency, the U.S. Department of Transportation, the Michigan Department of Consumer and Industry Services, and the local fire authorities. Information concerning applicable regulations may be obtained from the MDEQ Environmental Assistance Center, at (517) 373-9400.

REQUIREMENTS FOR SUPPLIERS OF RECYCLED USED OIL

A certificate of analysis shall be provided by the supplier upon delivery of each truckload of recycled used oil accepted for use as fuel at the facility. Each batch of RUO shall have a unique certificate of analysis. A batch is a quantity of used oil, contained in one storage unit (i.e., a tank, tanker truck, barge, etc.) where no additional oil is put into the storage unit after testing. If additional oil is added to a storage unit, a new certificate of analysis is necessary. Information to be presented on the certificate of analysis shall include:

- A unique batch identification number
- Date of delivery
- Dates of performance of analyses
- Analytical methods used
- Specific Gravity or API Gravity
- Higher Heating Value (in Btu per pound)
- Flash Point (in degrees Fahrenheit)
- Results of analyses for arsenic, cadmium, chromium, lead, sulfur, polychlorinated biphenyls (PCBs), and total halogens.
- The AQD recommends that the appropriate allowable levels for RUO properties and constituents be listed on the certificate of analysis to simplify verification.

ALLOWABLE LEVELS

Allowable levels for RUO properties and constituents are listed in the Permit to Install special conditions and below:

PROPERTY/CONSTITUENT	ALLOWABLE LEVEL
Higher Heating Value	17,000 Btu per pound, minimum
Flash Point	100 degrees Fahrenheit, minimum
Arsenic	5.0 ppm, maximum
Cadmium	2.0 ppm, maximum
Chromium	10.0 ppm, maximum
Lead	100.0 ppm, maximum
Sulfur	1.0 percent, maximum
Polychlorinated Biphenyls (PCBs)	1.0 ppm, maximum
Total Halogens	4,000 ppm, maximum

ON-SITE RUO CHARACTERIZATION PROGRAM

Upon receipt of each shipment of RUO by the facility, a check shall be made to ensure no exceedances of the allowable levels for RUO properties and constituents are identified by the supplier's analytical results. A representative sample shall be screened for Total Halogens using U.S. EPA SW-846 Method 9077 and the screening results recorded. If the certificate of analysis shows an exceedance of an allowable level or the screening shows an exceedance of the allowable level for Total Halogens, the shipment shall not be accepted by the facility.

Verification of the supplier certificate of analysis information, by testing, at owner's expense, in accordance with Department requirements will be required. Random monthly sampling and analysis shall be conducted for each supplier of RUO for the first 12-months from the date of the first delivery of RUO by the supplier. Thereafter, sampling and analysis shall be conducted not less than once per calendar quarter in which RUO is received for each supplier of RUO.

Sampling: Samples shall be taken at the time of delivery from the delivery truck, prior to mixing with oil in the on-site storage tank, and labeled with the batch identification number. Sufficient RUO shall be collected to provide two samples, each of sufficient volume for the required analyses. If one of the two samples is sent to an independent laboratory for analysis, the second sample shall be kept available for duplicate analysis. Sample collection, handling, and storage shall be in accordance with the Quality Assurance Plan to be provided by the independent laboratory. Samples shall be kept available for not less than five months from the date of collection.

Analysis: The purpose of the analysis of the RUO sample is the verification of the information provided in the supplier certificate of analysis. The required analyses are listed in the section of this CMP titled "Requirements for Suppliers of Recycled Used Oil." Results of the analyses shall be reported to the facility within the appropriate sample holding time for each analytical method to provide the opportunity for analysis of the duplicate sample.

Laboratory: A Quality Assurance Plan (QAP) shall be developed by any independent laboratory used by the facility for RUO analysis. A copy of the QAP shall be submitted by the facility to the AQD, District Office 60 days prior to the use of that laboratory. Detailed in the QAP will be the QA/QC procedures, sample handling, storage, and chain of custody procedures, analytical methods for all analyses, a description of the laboratory instrumentation, and the instrumental detection limits. The analytical methods used by the independent laboratory must be consistent with the methods used by the RUO supplier's laboratory. A list of acceptable QA/QC requirements may be obtained from AQD, Compliance Support Unit in Lansing. The facility shall maintain a copy of the approved QAP on site.

EXCEEDANCES OF ALLOWABLE LEVELS

All exceedances of allowable levels will be reviewed by the AQD for enforcement actions. In addition to possible enforcement actions the facility shall take all appropriate actions described in Step 1 and Step 2 below to address the exceedance.

ACTIONS TO BE TAKEN:

STEP 1

If the laboratory analytical results reported under the on-site RUO characterization program show that an allowable level has been exceeded, the facility shall notify the AQD, District Office verbally within two business days after receiving these analytical results. The verbal notification shall be followed by a written report of the results within five business days after making the verbal report.

At the option of the facility, the duplicate sample may be analyzed within the appropriate sample holding time for each analytical method after the facility receives the results showing an exceedance of any allowable level. Analysis may be performed solely for that property or constituent for which an exceedance is identified.

Upon receipt of the laboratory results for the duplicate sample, the facility shall notify the AQD, District Office verbally within two business days of receiving them. The verbal notification shall be followed by a written report of the results within five business days after making the verbal report.

STEP 2

When an exceedance of an allowable level is identified the facility shall:

- Notify the RUO supplier that an exceedance has occurred.
- Provide copies of the laboratory analytical results to the RUO supplier.
- Inform the RUO supplier of the required increase in sampling frequency described below.
- Explain the requirement for discontinuing RUO deliveries if a second exceedance occurs within six months.

Increase in Sampling Frequency: When an exceedance occurs, samples from three of the next six loads of RUO received from the supplier shall be collected and analyzed in accordance with the on-site RUO characterization program contained in this CMP. Thereafter, monthly random sampling shall continue for the next 12 months from the date of receipt of the load from which the exceedance occurred.

Discontinuing RUO Deliveries: If a second load of recycled used oil from the same supplier has an exceedance within six months after the first exceedance, the facility shall immediately discontinue accepting RUO deliveries from that supplier. If a supplier is terminated as a result of a second exceedance within six months, the facility shall notify the AQD, District Office in writing within ten business days that RUO deliveries from the supplier have been discontinued.

REPORTING REQUIREMENTS

Upon request from the AQD, District Supervisor and solely for those quarters in which RUO was delivered to the facility, summaries, based on calendar quarters, supplier certificates of analysis and the analytical results obtained from the on-site RUO characterization program shall be provided to the AQD, District Supervisor no later than thirty (30) days following the last day in the calendar quarter. Each quarterly summary shall include the following information:

- RUO supplier's name for each delivery;
- Date of each delivery and sample;
- Batch identification number;
- Whether an allowable level for RUO properties and constituents was exceeded (for each sample) and identification of which allowable level(s), if any, were exceeded.

RECORDKEEPING REQUIREMENTS

Copies of the supplier certificates of analysis, the analytical results obtained from the on-site RUO characterization program, and quarterly summaries as described above shall be kept on file for a period of at least two years from the date of receipt and made available to the AQD upon request.

INSPECTIONS

If an AQD inspector visits the facility to collect samples of the RUO, sufficient RUO shall be provided to the inspector for the required analyses listed in this Compliance Monitoring Plan.

RECYCLED USED OILS WITH HALOGEN CONCENTRATIONS OVER 1,000 PPM

An Addendum to this Compliance Monitoring Plan contains additional requirements for Recycled Used Oil with halogen concentrations over 1000 parts per million (ppm). The use as a fuel of RUO containing greater than 1,000 ppm halogens must be specifically allowed in the Special Conditions of the Air Use Permit for the facility.

Compliance Monitoring Plan Addendum

ADDITIONAL REQUIREMENTS FOR RECYCLED USED OIL
WITH GREATER THAN 1,000 PPM HALOGENS

Maximum Allowable Halogen Concentration
The maximum concentration of total halogens in each batch of recycled used oil (RUO) accepted for use as fuel at the facility shall not exceed 4,000 ppm. The use as a fuel of RUO containing greater than 1,000 ppm halogens must be specifically allowed in the Special Conditions of the Air Use Permit to Install for the facility. For Permits to Install in which RUO containing up to 4,000 ppm halogens is approved for use as a fuel, the allowable level for total halogens listed as 1,000 ppm in the Compliance Monitoring Plan (CMP) is changed to 4,000 ppm.

Rebuttable Presumption for Used Oil
Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in 40 CFR Part 261, Subpart D.

As stated in the federal Standards for the Management of Used Oil (40 CFR 279.10(b)(1)(ii) and 40 CFR 279.63) and Michigan's Hazardous Waste Management Rules (Part 111 of the Administrative Rules, Rule 809(2)(b) [R299.8909(2)(b)]), a person may rebut the presumption by demonstrating that the used oil does not contain hazardous waste.

For each batch of recycled used oil accepted for use as fuel, the facility shall comply with Michigan Department of Environmental Quality, Waste Management Division requirements providing for used oil, once sufficiently reclaimed, to be managed as a product, thereby eliminating the need for further management as a regulated liquid industrial waste. In accordance with the provisions of 40 CFR 279.63(d), records of analyses conducted or information used to comply with the requirements shall be kept on file for a period of at least three years and made available to the AQD upon request.

Additional Analytical Requirements
The following analytical requirements are in addition to those contained in the CMP. Results of analyses for the halogenated solvents listed below shall be included on the certificate of analysis to be provided by the RUO supplier and as part of the on-site RUO characterization program.

The maximum allowable level of 100 ppm is established for each of the following hazardous halogenated compounds listed by the U.S. EPA as a hazardous spent solvent (i.e., EPA Hazardous Waste Numbers F001 and F002).

List of Halogenated Solvents: carbon tetrachloride; chlorobenzene; 1,2-dichlorobenzene; dichlorodifluoromethane; methylene chloride; tetrachloroethylene; 1,1,1 trichloroethane; 1,1,2-trichloroethane; 1,1,2-trichloro-1,2,2- trifluoroethane; trichloroethylene; and trichlorofluoromethane.

APPENDIX C

FUGITIVE DUST CONTROL PLAN

PURPOSE: This plan provides dust control strategies for the areas adjacent to and associated with the equipment operations involved in the manufacture of Hot Mix Asphalt (HMA) paving materials.

1. SITE MAINTENANCE.

a. Dust on all areas where vehicular traffic will travel shall be controlled by the application of water, sweeping, vacuuming, or other acceptable dust control method. This will occur a minimum of once per month or more frequently as dictated by weather conditions and vehicular activity. The dust control method shall be acceptable as determined by the District Supervisor.

b. The speed of vehicles on the site will be limited to 10 miles per hour (MPH) or less. Signs will be posted to advise drivers of the speed limitation.

c. Stock piling will be performed in a manner that minimizes freefall drop distance.

d. Piles will be maintained to prevent fugitive dust. This includes the use of watering, covering and encrusting agents.

2. MANAGEMENT OF ON -SITE ROADWAYS.

a. During the operating season the plant roads on which the hot mix asphalt haul vehicles travel shall be treated with water, chlorided, vacuumed, or swept in a manner that minimizes the introduction of the dust to the ambient air to control fugitive dust emissions and track-out dust. This will occur a minimum of two times per month or more frequently as dictated by weather conditions and vehicular activity. The dust control method shall be acceptable as determined by the District Supervisor.

b. During the operating season, the unpaved travel surfaces shall be treated with water, or other acceptable dust control agents on a frequency sufficient to meet the visible emission opacity standard of 5% opacity specified in Michigan Act 451, Section 5524.

c. Any aggregate spillage on roads shall be removed immediately.

3. ON-SITE MANAGEMENT OF HAUL VEHICLES.

a. INCOMING TRUCKS: All trucks entering the site to deliver aggregates will be required to have the loads covered.

b. OUT-GOING TRUCKS: All trucks leaving the site with HMA paving materials will be required to cover their loads prior to leaving the site. A sign shall be posted to advise drivers of this requirement.

4. MANAGEMENT OF FRONT-END LOADER OPERATIONS.

The front-end loader operator shall be directed to avoid overfilling the bucket of the loader and the feed hoppers to prevent spillage, and to minimize the drop height of the material when loading the feed hoppers or transferring material to stockpiles.

5. RECORDKEEPING.

Records of dust control activities on travel surfaces and other surfaces where fugitive dust emissions occur shall be kept on file and made available to MDEQ staff upon request until the end of the paving season. The records will indicate the date, time, what was observed or the reason for the dust control activity (routine or other), and what action was taken.

6. FUGITIVE EMISSIONS FROM PROCESS EQUIPMENT AND BAGHOUSE.

Any fugitive emissions from leak(s) and malfunction(s) from any transfer system, storage bin, mixer, hopper, or baghouse shall be immediately corrected to prevent further fugitive emissions.