

SUPPLEMENT TO PERMIT NO. 304-97
Michigan Marine Terminal
River Rouge, Michigan
June 3, 1999

GENERAL CONDITIONS

1. Rule 201(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.
2. Rule 201(4) - 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, P.O. 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.
3. Rule 201(6)(a) - If this Permit to Install is issued for a process or process equipment located at a stationary source that is subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, trial operation is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install and until the appropriate terms and conditions of this Permit to Install have been incorporated into the Renewable Operating Permit. Upon incorporation of the appropriate terms and conditions into the Renewable Operating Permit, this Permit to Install shall become void.
4. Rules 201(6)(b) - 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.
5. Rule 201(8) and Section 5510 of Act 451, P.A. 1994 - 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 Departments' rules or the Clean Air Act.
6. Rule 219 - 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.
7. Rule 901 - 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.
 8. Rule 912 - 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 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 District Supervisor within 10 days, with the information required in this rule.
 9. 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, P.A. 1994 or the Clean Air Act.
 10. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
 11. Operation of this equipment may be subject to other requirements of Part 55 of Act 451, P.A. 1994, and the rules promulgated thereunder.
 12. Rule 301 - 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.
 - a) A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% 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.
 13. Rule 370 - 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).
14. Rule 285 - 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.
 15. 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.

SPECIAL CONDITIONS
June 3, 1999

1. For the purposes of this permit to install, all requirements for notifications or submittals of records to or approvals by the District Supervisor, Air Quality Division should be submitted to the Director of Compliance and Enforcement, Air Quality Management Division, Wayne County Department of Environment unless you are otherwise notified in writing by the Air Quality Division. At no time shall notifications or submittals to or approvals by both agencies be required pursuant to this permit.
2. The applicant may not burn more than 604,440 gallons of specification recycled used oil, (hereinafter "RUO"), in the two natural gas, no. 2 fuel oil and RUO fired tank heaters, (hereinafter "heaters"), per year based on a 12 month rolling time period as determined at the end of each calendar month, nor 1,656 gallons per 24-hour period as determined on a daily basis. This condition is necessary to assure compliance with the requirements of Rules 224 and 225.
3. The particulate emission rate from the heaters shall not exceed 3.8 pounds per hour nor 16.5 tons per year. The hourly limit shall be based on a daily average. The annual limit shall be based on 12 month rolling time period as determined at the end of each calendar month. This condition is necessary to assure compliance with the requirements of Rule 205.
4. The sulfur dioxide emission rate from the heaters shall not exceed 10.2 pounds per hour nor 44.6 tons per year. The hourly limit shall be based on a daily average. The annual limit shall be based on 12 month rolling time period as determined at the end of each calendar month. This condition is necessary to assure compliance with the requirements of Rule 205.
5. The emission rates of toxic air contaminants (TACs) from the heaters shall not exceed those listed in Table 1, Appendix A. This condition is necessary to assure compliance with the requirements of Rule 225.
6. Applicant shall not burn any hazardous waste (as defined 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 Rules, (Part 111 of the administrative Rules, Rule 809(2)(b) [R299.8909(2)(b)]) in the heaters. In addition, the applicant shall not burn any RUO in the heaters that does not comply with the RUO characteristics and contaminant concentrations specified in Table 2, Appendix A. This condition is necessary to assure compliance with the requirements of Rules 205, 224, 225 and 402.

7. Applicant shall not burn RUO in the heaters unless the Compliance Monitoring Plan for Recycled Used Oil (CMP) attached as Appendix B is being implemented by the applicant. All records required by the CMP shall be kept on file for a period of at least five years and made available to the Department upon request. The records required by the CMP include the RUO supplier's certificate of analysis and the on-site total halogen screening results for each shipment of RUO received, as well as, all sampling, analytical and other records required by the Quality Assurance Plan. This condition is necessary to assure compliance with the requirements of Rules 205, 225, 402 and 901.
8. Applicant shall keep records of the amount of RUO combusted in the heaters, in gallons per 24 hour calendar day, for each 24 hour calendar day of operations. These records shall be kept on file for a period of at least five years and made available to the Air Quality Division upon request. This condition is necessary to assure compliance with the requirements of Rules 205, and 225.
9. The applicant shall calculate and record the total RUO usage rate for the calendar month, at the end of each calendar month. The RUO usage rate shall be based on the information provided by the 24 hour calendar day record keeping requirement of the previous condition (# 5). The monthly usage rate shall be added to the actual calculated usage rate for the previous 11 consecutive calendar months and recorded to demonstrate compliance with the 12 months rolling time period requirement. This information shall be kept on file for five years and made available to the Air Quality Division upon request. This condition is necessary to assure compliance with the requirements of Rules 205 and 225.
10. Within 180 days after commencement of operation with RUO fuel, verification of total dioxins and furans, formaldehyde and hexavalent chromium emission rates from the heaters by testing, at owner's expense, in accordance with Department requirements, will be required. Verification of emission rates includes the submittal of a complete report of the test results. No less than 60 days prior to testing, a complete stack testing plan must be submitted to the Air Quality Division. The final plan must be approved by the Air Quality Division prior to testing. This condition establishes performance testing requirements pursuant to Rules 1001, 1003 and 1004.
11. The exhaust gases from the heaters shall be discharged unobstructed vertically upwards to the ambient air from a stack with a maximum diameter of 18 inches at an exit point not less than 55 feet above ground level. This condition is necessary to assure compliance with the requirements of Rule 225.

12. Written notification of commencement of operations with RUO as the burner fuel shall be provided to the AQD District Supervisor no later than 15 days after the commencement. This condition is necessary to assure compliance with the requirements of Rule 201(7) (a).
13. Within 30 days of the RUO fuel usage in the heaters and each quarter, on an annual basis, thereafter the applicant shall fine tune the burners for efficient burning of all permitted fuels for the heaters. During the month of the start of each paving season, and after any burner malfunction of the heaters, the applicant shall inspect and fine tune, as necessary, the burners to ensure efficient burning of all burner fuels in the heaters. All records of inspection and fine tuning shall be kept on file for a period of at least five years and made available to the Air Quality Division upon request. This condition is necessary to assure compliance with the requirements of Rules 201(3) and 901.
14. The sulfur content of the No. 2 fuel oil shall not exceed 0.3% by weight. This condition is necessary to ensure compliance with the Wayne County Ordinance as incorporated in the State Implementation Plan.

TABLE 1

Toxic Air Contaminant	per hour	per year
Hexavalent chromium	0.00076 pounds	6.7 pounds
Total dioxins and furans ¹	106 micrograms	0.932 grams
Formaldehyde	0.735	3.2 tons

¹ Total dioxins and furans shall be defined as: Total polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans, tetrachloro through octachloro-isomers, measured as toxic equivalents of 2,3,7,8-tetrachloro dibenzo-p-dioxin.

TABLE 2

Property/Constituent	Allowable Level Parts per million by weight
Arsenic	3.0 ppm, maximum
Cadmium	2.0 ppm, maximum
Chromium	4.3 ppm, maximum
Lead	100.0 ppm, maximum
Sulfur	0.7 % by weight, maximum*
Manganese	10 ppm, maximum
PCBs	1.0 ppm, maximum
Total Halogens	4000.0 ppm, maximum
Carbon tetrachloride	100 ppm, maximum
Chlorobenzene	100 ppm, maximum
1,2-Dichlorobenzene	100 ppm, maximum
Dichlorodifluoromethane	100 ppm, maximum
Methylene chloride	100 ppm, maximum
Tetrachloroethylene	100 ppm, maximum
1,1,1-Trichloroethane	100 ppm, maximum
1,1,2-Trichloroethane	100 ppm, maximum
1,1,2-Trichloro-1,2,2-trifluoroethane	100 ppm, maximum
Trichloroethylene	100 ppm, maximum
Trichlorofluoromethane	100 ppm, maximum
Higher Heating Value	17,000 Btu per pound, minimum
Flash Point	100 degrees F, minimum
Acidity	minimum pH =4; maximum pH = 10
Ash Content	1.0 % by weight, maximum

*Wayne County Ordinance requirement.

**Compliance Monitoring Plan
for the Characterization of
RECYCLED USED OIL
at
Michigan Marine Terminal, River Rouge**

Purpose: This Compliance Monitoring Plan (CMP) describes the requirements for combusting recycled used oil (RUO) in the asphalt hot oil heating 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.

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	3.0 ppm, maximum
Cadmium	2.0 ppm, maximum
Chromium	4.3 ppm, maximum
Lead	100.0 ppm, maximum
Sulfur	0.7 percent, maximum ²
Polychlorinated Biphenyls (PCBs)	1.0 ppm, maximum
Total Halogens	1,000 ppm, maximum ¹

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 (Chlor-D-Tect 1000) 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

² Wayne County Ordinance requirement.

¹ Unless a different concentration is allowed, as mentioned in the addendum (attached) for RUO with more than 1000 ppm halogens.

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.