

SUPPLEMENT TO PERMIT NO. 387-98  
Mathy Construction Company  
Plant #15  
Revised May 9, 2000

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 Department's 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).

Mathy Construction Company

Permit No. 387-98, Plant #15

Page No. 3

May 15, 1999

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  
Revised, May 9, 2000  
(33 Special Conditions )

**POLLUTANT EMISSION RESTRICTIONS**

1. The particulate emission rate from the hot mix asphalt facility shall not exceed 0.04 grain per dry standard cubic foot of exhaust gases. This limit is based on the federal Standards of Performance for New Stationary Sources, 40 CFR, Part 60, Subparts A and I.
2. The particulate emission rate from the hot mix asphalt facility shall not exceed 16.2 pounds per hour nor 27.51 tons per year, based on a 12 month rolling period as determined at the end of each calendar month. This condition is necessary to assure compliance with the emission limits established pursuant to Rule 331.
3. The nitrogen oxides (NOx) emission rate from the hot mix asphalt facility shall not exceed 0.1225 pounds per ton of asphalt paving materials produced nor 49 pounds per hour nor 83.3 tons per year. This condition is necessary to assure compliance with the emission limits established pursuant to Rule 205.
4. The total combined carbon monoxide (CO) emission rate from the hot mix asphalt facility shall not exceed 0.198 pounds per ton of asphalt paving materials produced nor 79.2 pounds per hour nor 74.73 tons per year. This condition is necessary to assure compliance with the emission limits established pursuant to Rule 205.
5. The volatile organic compounds (VOC) emission rate from the hot mix asphalt facility shall not exceed 0.0575 pounds per ton of asphalt paving materials produced nor 23 pounds per hour nor 39.1 tons per year. This condition is necessary to assure compliance with the emission limits established pursuant to Rules 205 and 225.
6. The total combined sulfur dioxide (SO<sub>2</sub>) emission rate from the hot mix asphalt facility shall not exceed 0.056 pounds per ton of asphalt paving materials produced nor 22.4 pounds per hour nor 38.08 tons per year, based upon a 12-month rolling period as determined at the end of each calendar month. This condition is necessary to assure compliance with the emission limits established pursuant to Rule 205.
7. The lead emission rate from the hot mix asphalt facility shall not exceed 0.00000202 pounds per ton of hot mix asphalt paving materials produced nor 0.0008 pounds per hour nor 2.7 pounds per year, based upon a 12-month rolling period as determined at the end of each calendar month. This condition is necessary to assure compliance with the emission limits which have been established pursuant to Rules 205 and 225.

## PRODUCTION/PROCESS RESTRICTIONS

8. Applicant shall limit the asphalt mixture to a maximum of 30 percent reclaimed asphalt pavement (RAP) material based on an annual average. This condition is necessary to assure compliance with Rule 901.
9. Applicant shall not process more than 754,800 tons of asphalt paving materials in the hot mix asphalt facility per 12 month rolling time period as determined at the end of each calendar month. A written record of the amount of material processed shall be kept on file for a period of at least five years and made available to the Department upon request. This condition is necessary to assure compliance with Rule 205.
10. Applicant shall not burn any fuel other than natural gas, liquid petroleum gas (LPG), recycled oil, or Nos 2 and 4 fuel oils in the hot mix asphalt facility. This condition is necessary to assure compliance with Rule 205.
11. The sulfur content of any oil burned as fuel in the hot mix asphalt facility shall not exceed 1.0 percent by weight. This condition is necessary to assure compliance with the emission limits established pursuant to Rule 402.
12. Applicant shall conduct all necessary maintenance and make all necessary attempts to keep all components of the manufacturing process equipment in proper operating condition at all times. The owner or operator of the hot mix asphalt facility shall maintain a log of all significant maintenance activities conducted and all significant repairs made to the manufacturing process equipment. 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 Rule 205.
13. Within the first month after startup of the hot mix asphalt facility at the beginning of the paving season, the applicant shall fine-tune the burners for efficient combustion of all fuels burned at the facility. During the month of August, and after any malfunction of the hot mix asphalt facility, the applicant shall inspect and tune the burners as necessary to ensure efficient combustion of all fuels burned at the facility. Records of inspection and maintenance activities performed pursuant to this permit condition shall be kept on file for five years and made available to the District Supervisor, Air Quality Division upon request. This condition is necessary to assure compliance with Rules 205 and 901.

#### **PARTICULATE CONTROL REQUIREMENTS**

14. Applicant shall equip and maintain the hot mix asphalt facility 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 at the plant site 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 Rules 910 and 911.
15. Applicant shall equip and maintain the baghouse with instrumentation to indicate the pressure drop across the fabric filters. This condition is necessary to assure compliance with Rule 910.
16. Applicant shall not operate the hot mix asphalt facility unless the fabric filter collector (baghouse) is installed and operating properly. This condition is necessary to assure compliance with Rule 910.

## RECYCLED USED OIL RESTRICTIONS & SPECIFICATIONS

17. The sulfur content of the fuel oil combusted in the HMA facility shall not exceed 1.0% by weight based on a fuel oil with a minimum higher heating value of 17,000 Btu per pound.
18. Applicant shall not burn any hazardous waste (as defined in state or federal law), nor any blended fuel oil containing any contaminant that exceeds the following concentrations or for which the flash point, ash content, or acidity vary from the standards specified in the following table.

<u>Contaminant</u>	<u>Maximum Concentration Parts per million by weight</u>
Arsenic	5.0
Cadmium	2.0
Chromium	10.0
Lead	100.0
PCBs	1.0
Total Halogens	1000.0
Sulfur	1.0 % by weight
Minimum Flash Point	100 degrees F

19. Applicant shall obtain a copy of the blended fuel oil (waste oil, reprocessed oil, reused or used oil etc.) analysis from the fuel supplier for each shipment of blended fuel oil. The analysis shall include analyses of the oil'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 Air Quality Division upon request. This condition is necessary to assure compliance with the requirements of Rule 225.
20. Complete copies of all fuel oil certification(s) as supplied by the fuel oil supplier and all facility fuel oil sampling analytical results obtained by the applicant, including QA/QC data, 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 Rule 22.
21. Applicant shall not burn recycled used oil in the HMA facility unless the Compliance Monitoring Plan for Recycled Used Oil (CMP) specified in the attached Appendix B has been 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 Air Quality Division upon request. This condition is necessary to assure compliance with the requirements of Rule 225.

## FUGITIVE DUST PLAN

22. Applicant shall not operate the hot mix asphalt facility 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 B has been implemented and is maintained. This condition is necessary to assure compliance with Rules 371, 372, and 901.

## MISCELLANEOUS REQUIREMENTS

23. The exhaust gases from the hot mix asphalt facility shall be discharged unobstructed vertically upwards to the ambient air from a stack with maximum rectangular dimensions of 3.6 feet by 3.2 feet at an exit point not less than 29 feet above ground level. This condition is necessary to assure compliance with Rule 225.
24. Applicant shall not use as a raw material any asbestos tailing or asbestos containing waste materials in the hot mix asphalt facility pursuant to the National Emission Standards for Hazardous Air Pollutants, 40 CFR, Part 61, Subpart M.
25. Applicant shall not relocate this portable asphalt production plant to any new geographic site in Michigan unless all the following criteria are met:
  - The plant shall not have any outstanding unresolved violations of any of the Michigan Air Pollution Control Commission's rules, order, or permits: or Federal air quality regulations.
  - the installation of the plant at the geographic site shall be of a temporary lasting not more than 12 consecutive months.
  - A notice of intent to relocate along with a proposed site plan shall be provided to the 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 plant's site shall be clearly identified on the proposed site plan.
  - The asphalt production plant shall not be located within 800 feet to a residential or commercial establishment or a place of public assembly unless prior written site approval is obtained from the Air Quality Division district office
  - The concrete production equipment, the non-metallic mineral processing equipment, the asphalt crusher or the concrete shall be located within 500 feet to a residential or commercial establishment or a place of public assembly unless prior written site approval is obtained from the Air Quality Division district office. The Commission's Delegation of Authority does not authorize us to approve any site where there is a known unresolved objection. Therefore requests for site approval where there are known unresolved objections will continue to be handled by the Michigan Air Pollution Control Commission.
  - 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.

## RECORDKEEPING AND REPORTING

26. If requested by the District Supervisor, applicant shall monitor and record the virgin aggregate feed rate and the RAP feed rate to the hot mix asphalt facility on a continuous basis in a manner and with instrumentation acceptable to the District Supervisor, Air Quality Division. Upon startup, the initial mix design and time shall be recorded. When a new mix design is activated after startup, the time and new aggregate and RAP feed rates shall be recorded. All records shall be kept on file until the end of the paving season in which they were recorded and made available to the Air

Quality Division upon request. This condition is necessary to assure compliance with Rule 901.

27. Applicant shall monitor and record the drum mix temperature and the drum exhaust gas temperature from the hot mix asphalt facility on a continuous basis in a manner and with instrumentation acceptable to the District Supervisor, Air Quality Division. All records shall be kept on file at the plant site 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 Rule 901.
28. Applicant shall keep records of the following items for each calendar day that the hot mix asphalt facility is operated. These records shall be kept on file at the hot mix asphalt facility for a period of at least five years and made available to the Air Quality Division upon request.
  - 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.

This condition is necessary to assure compliance with Rule 205.

29. Applicant shall maintain records of the following process data:
  - (i) the quantity of RAP used in hot mix asphalt paving materials each calendar month;
  - (ii) the sulfur content of each load of fuel oil delivered to the hot mix asphalt facility; and
  - (iii) the fuel usage for fuel oil each day that fuel is burned;

This information shall be kept on file at the plant site for at least five years and made available to the Air Quality Division upon request. This condition is necessary to assure compliance with Rule 205.

30. Applicant shall calculate the actual emission levels for CO, SO<sub>2</sub>, NO<sub>x</sub>, VOCs, particulate matter, and lead from the hot mix asphalt facility 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 Air Quality Division. In the event that stack test results do not exist for a specific pollutant, the applicable emission factor listed in Table 1 (Attachment B) shall be used to estimate the emissions of a pollutant from the hot mix asphalt facility. This condition is necessary to assure compliance with Rule 205.

31. Applicant 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). This condition is necessary to assure compliance with Rules 371, 372, and 901.
32. The actual emission levels for the pollutants specified in Special Conditions Nos. 24 and 25 shall be reported to the Air Quality Division through the annual emission reporting required under Section 5503(k) of the Natural Resources and Environmental Protection Act.

#### **TESTING AND NOTIFICATION**

33. Written notification of construction and operation is required to comply with the federal Standards of Performance for New Stationary Sources, 40 CFR, Part 60.7. This notification shall be submitted to the District Supervisor, Air Quality Division within the time frames specified in 40 CFR, Part 60.7.

## APPENDIX A

### **Preventative Maintenance Program for the BAGHOUSE at Mathy Construction Company Plant #15**

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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 kept in a bound notebook. These data shall be recorded in the Daily Operations Log Book.

#### **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 are observed at the discharge point of the stack, the following actions shall be taken:

If the opacity is greater than 20% or if no certified visible emissions reader can be on-site within 60 minutes of observing the visible emission, operations shall be ceased immediately and the cause of the visible emissions determined and corrected prior to operating the plant again.

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**REMINDER:** If the visible emissions continue for more than 2 hours, regardless of the opacity, 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.**

An inventory of baghouse filter bags shall be maintained by the facility owner or operator so that filter bags will be available to this site within four hours of requesting the filter bags. In addition, 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 in a bound notebook of the following shall be maintained by the owner or operator of the facility:

- 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

### FUGITIVE DUST CONTROL PLAN

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**PURPOSE:** This plan provides dust control strategies for the areas adjacent to an 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, as necessary, by the application of water, sweeping, vacuuming, or other acceptable dust control agent.
- 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 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.
- b. 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. RECORD KEEPING.**

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. The record shall be maintained in the Operations Log Book.

**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.

## APPENDIX C

### COMPLIANCE MONITORING PLAN FOR RECYCLED USED OIL WITH MAXIMUM CONTENT OF 1000 PPM HALOGEN FOR MATHY CONSTRUCTION COMPANY

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#### INTRODUCTION.

This Compliance Monitoring Plan was developed to ensure that each supplier of recycled used oil (RUO) continually monitors their specification oil assurance program, and so that the Mathy Construction Company. Hot Mix Asphalt (HMA) facility receives and consumes only high quality recycled used oil that will comply with the Michigan Department of Environmental Quality (MDEQ), Air Quality Division (AQD), Permit to Install Special Conditions for the Mathy Construction Company facility. Each purchase order that is executed by Mathy Construction Company for the purchase of recycled used oil shall be accompanied by specific requirements that the supplier must meet.

#### COMPLIANCE REQUIREMENTS FOR SAMPLE ANALYTICAL DATA.

##### 1. ALLOWABLE CHARACTERISTIC AND CONTAMINANT LEVELS.

The allowable characteristic and contaminant levels are identified in Special Condition No. 18 of Permit to Install No. 387-98.

##### 2. ALLOWABLE DEVIATIONS BETWEEN SUPPLIER'S ANALYTICAL RESULTS AND MATHY CONSTRUCTION COMPANY'S ANALYTICAL RESULTS.

For the purpose of ensuring that the supplier's lab analytical data is consistently representative of the recycled used oil delivered, allowable "deviations" between the analytical data provided by the supplier and the analytical data obtained by Mathy Construction Company have been established. This provision is to ensure that the recycled used oil sampled by the supplier is the same recycled used oil delivered and sampled by Mathy Construction Company.

Should the lab analytical results exceed the "deviations" listed below, it would identify that the lab analytical data provided by the supplier was not representative of the batch of recycled used oil delivered by the supplier to Mathy Construction Company:

Sulfur content	+/- 0.2 % by weight
BTU/lb	+/- 3,000.0 BTU/lb
Flashpoint	+/- 50.0 degrees Fahrenheit
PCBs	+/- 20% of the supplier's observed value

AQD staff will not issue any Letter of Violations for any DEVIATIONS so long as Mathy Construction Company staff follow the requirements listed in the "ACTIONS TO BE TAKEN FOR AN EXCEEDANCE, DIVERGENCE, OR DEVIATION" section of this plan for each instance in which a deviation occurs.

#### **REQUIREMENTS FOR EACH RECYCLED USED OIL DELIVERY.**

All loads of recycled used oil delivered to Mathy Construction Company must be accompanied by a "detailed certificate of analysis" for the batch of recycled used oil delivered. Each detailed certificate of analysis shall identify the characteristics and contaminants listed in Special Condition No. 18 of Permit to Install No. 387-98, and provide the unique batch identification number assigned by the supplier to the batch of recycled used oil delivered. Note that a "batch" is a quantity of recycled used oil contained in one storage unit where no additional oil is put into the storage unit after sampling and analyzing the oil. This detailed certificate of analysis shall be obtained by Mathy Construction Company at the time of delivery for each load of recycled used oil delivered. Mathy Construction Company personnel must review the supplier's detailed certificate of analysis for each batch of recycled used oil to be delivered to confirm that the recycled used oil is compliant with the allowable contaminants and characteristics identified in Special Condition No. 18 of Permit to Install No. 387-98.

Each analysis provided by the supplier to Mathy Construction Company with each recycled used oil delivery shall be performed by an independent laboratory. Additionally, the report of the analytical results shall contain a description of the analytical methods used. All data shall be labeled with the unique batch identification number for the delivered load of recycled used oil.

#### **ON-SITE SAMPLING PROGRAM.**

If requested by the District Engineer, a sample of recycled used oil shall be collected at random by Mathy Construction Company personnel and analyzed for the contaminants and characteristics listed in Special Condition No. 18 of Permit to Install No. 387-98 according to the periodic schedule defined herein. If there is more than one supplier, and if requested by the District Engineer, each supplier's recycled used oil deliveries must be sampled randomly according to the periodic schedule identified herein. All samples must be taken at the time of delivery from the delivery truck, prior to mixing with oil in the MATHY CONSTRUCTION COMPANY storage tank.

Sufficient sample shall be collected so that it can be split into two samples of sufficient volume for the analyses. One of the two samples will be retained by Mathy Construction Company, and one shall be sent to the MATHY CONSTRUCTION COMPANY independent laboratory for analysis. If the results from the independent analyses of the samples collected by Mathy Construction Company exceed a maximum contaminant level or diverge from an allowable characteristic listed in Special Condition No. 18 of Permit to Install No. 387-98, OR reveal a deviation from the analytical results provided by the supplier, the duplicate sample shall be analyzed for the non-compliant contaminant(s) or the deviation contaminant(s). Please refer to the "ACTIONS TO BE TAKEN FOR AN EXCEEDANCE, DIVERGENCE, OR DEVIATION" section of this plan which identifies the explicit sampling schedule which must be followed in this case.

If requested by the District Supervisor, for the first year (12 months) on and after the date that this Permit to Install is issued MATHY CONSTRUCTION COMPANY, a monthly sample shall be collected at random and analyzed for the all of the characteristics and contaminants listed in Special Condition No. 18 of Permit to Install No. 387-98. When the first year is completed, at least one sample shall be collected each calendar quarter and analyzed for the characteristics and contaminants listed in Special Condition No. 18 of Permit to Install No. 387-98. This schedule shall continue unless any of the following occur:

- exceedance of a maximum contaminant level in Special Condition No. 18 of Permit to Install 387-98;
- divergence from an allowable characteristic listed in Special Condition No. 18 of Permit to Install 387-98;
- deviation from the analytical results provided by the supplier.

In this case, please refer to the "ACTIONS TO BE TAKEN FOR AN EXCEEDANCE, DIVERGENCE, OR DEVIATION" section of this plan which identifies the explicit sampling schedule which must be followed.

If the lab analytical data identifies compliance with all of the allowable levels and deviation requirements, the duplicate sample may be returned to the fuel tank.

If Mathy Construction Company changes oil suppliers or adds an additional supplier, please refer to the "ACTIONS TO BE TAKEN WHEN CHANGING RUO SUPPLIERS" section of this plan.

## **QA/QC REQUIREMENTS FOR SUPPLIER AND MATHY CONSTRUCTION COMPANY INDEPENDENT LABORATORY.**

Quality assurance/ quality control (QA/QC) documentation is required for all analytical work performed by the supplier's independent laboratory and the MATHY CONSTRUCTION COMPANY independent laboratory. All QA/QC documentation shall be maintained on file and made available to the AQD upon request for no less than two years from the date of each recycled used oil delivery. The QA/QC requirements for all laboratory data shall contain reporting of accuracy control, precision control, laboratory blanks, and laboratory calibrations. The accuracy control shall include comparisons with NIST traceable standards which bracket the allowable limit and near the method detection limit. The precision control shall show the repeatability of duplicates. The laboratory calibrations shall include a five point calibration curve with the low standard being close to the method detection limit, several intermediate levels, and the upper calibration points to be at the allowable limit for the compound of interest.

The independent laboratory chosen by Mathy Construction Company shall submit to Mathy Construction Company and the AQD, Marquette District Office a Quality Assurance Plan (QAP) for approval within thirty (30) days of Permit to Install No. 387-98 issuance date. Detailed in the QAP will be the QA/QC procedures, sample handling 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 MATHY CONSTRUCTION COMPANY independent laboratory must be consistent with the methods used by the supplier's independent laboratory.

## **RECORDKEEPING REQUIREMENTS.**

The information in the detailed certificate of analysis received by Mathy Construction Company from the recycled used oil supplier shall be recorded, where specified, in the Oil Delivery Log Book (see Attachment 1). When the Mathy Construction Company sample from the corresponding delivery date is analyzed, the results of the Mathy Construction Company analysis shall be recorded in the Oil Delivery Log Book alongside the supplier's analytical data and a check made to ensure that the delivered oil met the aforementioned compliance requirements. Should the first Mathy Construction Company sample identify a non-compliant sample, yet the duplicate sample indicate compliance, the first sample will not be discarded as evidence of non-compliance until AQD has had an opportunity to review all of the Mathy Construction Company QA/QC data and the supplier's QA/QC data.

All analytical results and QA/QC data for the analyses performed by Mathy Construction Company shall be maintained on file at Mathy Construction Company.. All analytical results for the analyses obtained from and performed by the recycled used oil supplier shall also be kept on file at Mathy Construction Company. All QA/QC data for the analyses performed by the recycled used oil supplier may be maintained on file either at Mathy Construction Company or at the recycled used oil supplier's site. In either case, the supplier's QA/QC data must be maintained on file. All analytical results and QA/QC data from both the supplier and Mathy Construction Company shall be kept on file for a period of at least five years from the date of delivery of the recycled used oil and made available to MDEQ staff upon request.

## **REPORTING REQUIREMENTS.**

If testing has been requested by the District Supervisor, quarterly summaries of the analytical results from both the supplier and Mathy Construction Company shall be provided to the AQD, Marquette District Office no later than thirty days following the last day in the preceding calendar quarter. Each quarterly summary shall identify the date of each delivery/sample, the batch identification number, and whether each sample complied with the allowable levels specified in Special Condition No. 18 of Permit to Install No. 387-98 and the deviation provisions specified within this plan. The requirement to submit quarterly summary reports may be waived upon written request by Mathy Construction Company and written approval by the AQD, Marquette District Supervisor. At any time, by written request from the AQD, Marquette District Supervisor, AQD may reinstate the reporting requirements as described herein.

## **ACTIONS TO BE TAKEN FOR AN EXCEEDANCE, DIVERGENCE, OR DEVIATION.**

Mathy Construction Company shall verbally notify the AQD, Marquette District Office within two (2) business days upon receiving any analytical data identifying an exceedance of a maximum contaminant level or a divergence from an allowable characteristic listed in Special Condition No. 18 of Permit to Install No. 387-98, OR a deviation from the analytical results provided by the supplier. The duplicate sample shall be submitted for analysis within four (4) business days. The initial verbal notification shall be followed by written notification within five (5) business days after making the verbal report. The same reporting schedule shall be followed upon receipt of the results from the analysis of the duplicate sample. The duplicate analysis written notification shall include copies of the supplier's analytical results and the analytical results for the two MATHY CONSTRUCTION COMPANY samples and all QA/QC data.

If an exceedance of a maximum contaminant level or a divergence from an allowable characteristic listed in Special Condition No. 18 of Permit to Install No. 387-98 is corroborated with the duplicate sample analysis, samples from the next 10 loads of recycled used oil received from the supplier shall be collected and analyzed in accordance with the on-site sampling and analytical guidelines specified herein.

If a deviation from the analytical results provided by the supplier is corroborated with the duplicate sample analysis, samples from the next 4 loads of recycled used oil received from the supplier shall be collected and analyzed in accordance with the on-site sampling and analytical guidelines specified herein.

When the sampling of the next 10 loads (for an exceedance/divergence) or 4 loads (for a deviation) is completed, monthly random sampling shall continue or be re-instituted for the next 12 months from the date of receipt of the load that had corroborated the non-compliant recycled used oil delivery. This sampling shall commence from the date of receipt of the analytical results for the load that had the corroborated exceedance(s) or deviation(s) from the supplier's analytical results.

In the event a second load of recycled used oil from the same supplier has a corroborated non-compliant delivery within six months after the first non-compliant sample has been corroborated, Mathy Construction Company shall immediately discontinue receiving recycled used oil deliveries

from that supplier. In any event which a supplier is terminated as a result of a second corroborated non-compliant delivery within six months, Mathy Construction Company shall verbally notify the AQD-Marquette District Office within two (2) business days of such termination. This verbal notification shall be followed by a written notification submitted within five (5) business days of terminating the supplier.

#### **ACTIONS TO BE TAKEN WHEN CHANGING RUO SUPPLIERS.**

If requested by the District Supervisor, in the event Mathy Construction Company switches to a different recycled used oil supplier or adds an additional recycled used oil supplier, whether for business purposes or as a result of two corroborated non-compliant deliveries, Mathy Construction Company shall collect random oil samples from the new supplier on a monthly basis for the first year (12 months) from the date of the first delivery by the new supplier. Each sample shall be analyzed for the characteristics and contaminants listed in Special Condition No. 18 of Permit to Install No. 387-98. When the first year is completed, at least one sample shall be collected each calendar quarter and analyzed for the characteristics and contaminants listed in Special Condition No. 18 of Permit to Install No. 387-98.

#### **AQD INSPECTIONS.**

In the event that an AQD inspector comes to Mathy Construction Company to collect a sample of recycled used oil, sufficient sample shall be collected to provide half of the sample to Mathy Construction Company. The Mathy Construction Company sample will be submitted to the MATHY CONSTRUCTION COMPANY-independent laboratory. Mathy Construction Company will analyze the sample and the results will be compared with the results from the AQD analysis.

BATCH IDENTIFICATION NUMBER: \_\_\_\_\_

**CONTAMINANT CHECK**

CONTAMINANT	SUPPLIERS CONTENT	MAXIMUM ALLOWED BY WEIGHT	LAB RESULTS
SULFUR		1.0%	
HALOGENS		1000 PPM	
ARSENIC		5 PPM	
CADMIUM		2 PPM	
CHROMIUM		10 PPM	
LEAD		100 PPM	
PCB'S		1 PPM	

**DEVIATION CHECK**

CONTAMINANT	SUPPLIER'S RESULTS	ALLOWABLE LEVEL	MATHY CONSTRUCT COMPANY.'S RESULT
SULFUR		1.0% MAX.	
HIGH HEATING VALUE		17,000 BTU/LB MIN.	
FLASHPOINT		100° F MIN.	
PCB'S		1 PPM	

**ATTACHMENT B**

**TABLE 1**

<b>Pollutant</b>	<b>lb./ton of HMA produced using Natural Gas</b>
PM, Baghouse	0.0400
PM, Scrubber	0.0520
Oxides of Sulfur, virgin mixes	0.0042
Oxides of Sulfur, RAP mixes	0.0042
Oxides of Nitrogen	0.0275
Carbon Monoxide	0.1980
NMTHC as Carbon (VOC)	0.0340
Lead	2.02 E-6
<b>Pollutant</b>	<b>lb./ton of HMA produced using Liquid</b>
<b>Petroleum Gas</b>	
PM, Baghouse	0.0400
PM, Scrubber	0.0520
Oxides of Sulfur, virgin mixes	0.0000
Oxides of Sulfur, RAP mixes	0.0000
Oxides of Nitrogen	0.0400
Carbon Monoxide	0.1980
NMTHC as Carbon (VOC)	0.0340
Lead	2.02 E-6
<b>Pollutant</b>	<b>lb./ton of HMA produced using No. 2 Fuel Oil</b>
PM, Baghouse	0.0400
PM, Scrubber	0.0520
Oxides of Sulfur, virgin mixes	0.0560
Oxides of Sulfur, RAP mixes	0.0560
Oxides of Nitrogen	0.1225
Carbon Monoxide	0.0525
NMTHC as Carbon (VOC)	0.0575
Lead	2.02 E-6
<b>Pollutant</b>	<b>lb./ton of HMA produced using No. 4, 5, 6 Fuel Oil and Recycled Used Oil</b>
PM, Baghouse	0.0400
PM, Scrubber	0.0520
Oxides of Sulfur, virgin mixes	$0.0397 \times F \times S^1$
Oxides of Sulfur, RAP mixes <sup>2</sup>	$0.0828 \times F \times S^1$

<sup>1</sup> F = fuel consumption, gallons/ton HMA produced

S = sulfur content in fuel, %

<sup>2</sup> This emission factor is valid only for annual average RAP contents up to 30%, calculated as follows:

Annual Average RAP % = Tons of RAP consumed per year / Tons of HMA containing RAP produced/year x 100%

Mathy Construction Company  
Permit No. 387-98, Plant #15  
Page No. 24  
May 15, 1999

Oxides of Nitrogen	0.1225
Carbon Monoxide	0.2010
NMTHC as Carbon (VOC)	0.0575
Lead	2.02 E-6