Permit Conditions
W.R. Meadows Of Arizona Inc
V98-004
April 19, 2004

In accordance with Maricopa County Air Pollution Control Rules and Regulations (Rules), Rule 210 § 302.2, all Conditions of this Permit are federally enforceable unless they are identified as being locally enforceable only. However, any Permit Condition identified as locally enforceable only will become federally enforceable if, during the term of this Permit, the underlying requirement becomes a requirement of the Clean Air Act (CAA) or any of the CAA's applicable requirements.

All federally enforceable terms and conditions of this Permit are enforceable by the Administrator of the United States Environmental Protection Agency (Administrator or Administrator of the USEPA hereafter) and citizens under Section 304 of the CAA.

Any cited regulatory paragraphs or section numbers refer to the version of the regulation that was in effect on the first date of public notice of the applicable Permit Condition unless specified otherwise.

23. RACT REQUIREMENTS FOR THE FIBERBOARD SATURATION PROCESS:

A. DEFINITIONS:

Emissions Control System (ECS): A system for reducing emissions of organic compounds, consisting of both emissions collection and processing devices which are approved in writing by the Control Officer and are designed and operated in accordance with good engineering practice.

Saturator Unit: 3,000 gallon tank 48 foot in length. The tank is filled with asphalt and mineral spirits blend and is used for saturating fiberboards.

Fiberboard Saturation Process – Includes the saturator unit, asphalt storage tank, mineral spirits storage tanks, and asphalt/mineral spirits blend tanks.

B. OPERATIONAL LIMITATIONS/STANDARDS:

1) The Permittee shall install, operate, and maintain an Emissions Control System (ECS) on the Saturator Unit. [County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

2) The Permittee shall vent the exhaust gases from the Saturator Unit to the ECS without bypass. [County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

3) The ECS shall achieve at least 85% by weight overall reduction of VOC emissions from the saturator unit. The capture efficiency shall be at least 90% by weight. The control efficiency of the ECS shall be at least 95% by weight. [County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

4) The Permittee shall provide, implement, and maintain an O&M Plan for the ECS and for any monitoring devices that are used pursuant to County Rule 210§302.1(h)(g), SIP Rule 220§302.2, and this permit. [County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

5) The Permittee shall submit to the Control Officer for approval the O&M Plans of the ECS and each monitoring device that is used pursuant to County Rule 210§302.1(h)(g), SIP Rule 220§302.2, and this permit. [County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

6) The Permittee shall comply with all O&M Plans that the Permittee has submitted for approval but which have not yet been approved, unless notified otherwise by the Control Officer in writing. The O&M Plan shall contain, at a minimum, key operating limits and maintenance procedures acceptable to the Control Officer. [County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

7) The following conditions apply if a thermal oxidizer is the ECS:

   a) The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established during the performance testing conducted pursuant to permit condition 24.F. Prior to the performance test, the average combustion temperature in any 3-hour period must not fall below the temperature limit in the most recently submitted O&M plan.

   a) During the performance test required by these permit conditions, the Permittee shall monitor and record the combustion temperature at least once every 15 minutes during each of the three test runs. The Permittee shall monitor the

temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs.

b) The Permittee shall use the data collected during the performance test to calculate and record the average combustion temperature maintained during the performance test. If the performance test demonstrated at least 95% destruction efficiency for the thermal oxidizer, this average combustion temperature shall be the minimum combustion temperature limit for the thermal oxidizer as required in permit condition 24.B.7.a. [County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

8) If the ECS is found to be operating outside of the operating limits specified in this Permit or the most recently submitted O&M Plan, the Permittee shall investigate and take corrective action if necessary to bring the ECS back into proper operation. [County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

9) The Permittee shall not use the asphalt/mineral spirits blend tanks unless they are fitted with a cover or other device provided for the tanks which prevents VOC evaporation. The cover or device shall be closed or in place on the tank at all times except during loading or unloading of the tank.
[County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

10) All storage of VOC-containing materials subject to evaporation, including the storage of waste solvent and waste solvent residues, shall at all times be in closed containers except when contents are added or removed. [County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

11) Containers shall be legibly labeled with their contents.
[County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

C. MONITORING/RECORDKEEPING:

1) If a thermal oxidizer will be utilized as the ECS, the Permittee shall install, maintain, and operate, in accordance with the manufacturer's recommendations, a monitoring device that continuously indicates and records the combustion temperature of the thermal oxidizer. The monitoring device must meet the following requirements:

a) The combustion temperature monitoring device must complete a minimum of one cycle of operation for each successive 15-minute period. A minimum of four equally spaced successive cycles of combustion temperature monitoring device operation in 1 hour are required.

b) Determine the average of all recorded readings for each successive 3-hour period of the thermal oxidizer operation.

c) The Permittee shall record the results of each inspection, calibration, and validation check of the combustion temperature monitoring device.

d) The Permittee shall maintain the combustion temperature monitoring device at all times and have available necessary parts for routine repairs of the combustion temperature monitoring equipment.

e) The Permittee shall operate the combustion temperature monitoring device and collect thermal oxidizer temperature data at all times that a fiberboard saturation process is operating, except during monitoring malfunctions, associated repairs, and required quality assurance or control activities(including, if applicable, calibration checks and required zero and span adjustments).

f) The Permittee shall not use temperature monitoring data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities when calculating data averages. The Permittee shall use all the data collected during all other periods in calculating the data averages for determining compliance with the thermal oxidizer temperature limits. [County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

2) The Permittee shall install, calibrate, maintain, and operate, according to the manufacturer's specifications, a monitoring device that continuously indicates and records the differential pressure across the natural draft openings or across the inlet and outlet openings to the dip tank.
[County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

3) The Permittee provide, properly install and maintain in calibration, in good working order and in operation, devices described in the facility's O&M Plan that indicate temperatures, pressures, rates of flow, or other operating conditions necessary to determine if the ECS is functioning properly and is properly maintained.
[County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

4) The Permittee shall maintain monthly records of the quantity of mineral spirits, asphalt, and all other VOC containing materials that were purchased, used, and disposed of in the fiberboard saturation process. The Permittee shall maintain a twelve (12) month rolling total of the quantities of mineral spirits, asphalt, and all other VOC containing materials that were purchased, used, and disposed of in the fiberboard saturation process. [County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

5) The Permittee shall keep and maintain on file, a copy of the MSDS for the mineral spirits, asphalt and all other VOC containing materials used in the fiberboard saturation process.

[County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

6) Records shall be kept complete and up-to-date, in a consistent and legible format.

[County Rule 210§302.1(h)(6)][SIP Rule 220§302.2]

D. PERIODIC MONITORING/RECORDKEEPING FOR SATURATOR UNIT ECS:

If the ECS is found to be operating outside of the operating limits specified in either these permit conditions or the O&M Plan, the Permittee shall record the following:

a) The date and time when the ECS was found to be operating outside of its operating limits and the date and time that it returned to operating within its limits.

b) The results of the investigation into the cause of the excursion outside of the operating limits.

c) A description of any corrective actions taken to return the ECS to normal operation. If the ECS returned to normal operation without any actions by the Permittee, that fact shall also be recorded.

[County Rule 210 §302.1c]

E. REPORTING REQUIREMENTS:

1) The Permittee shall include the following information in the semiannual monitoring report:

a) Any dates when the required monitoring was not performed. If all monitoring was performed during the reporting, a statement to that effect will satisfy this requirement.

b) Any dates when the ECS was bypassed. If the ECS was not bypassed during the reporting period, a statement to that effect will satisfy this requirement.

c) If any of the operating parameters are found to be operating outside of its operating limits, the report shall include the following information:

(1) The equipment identification along with the date and time that the excursion was discovered.

(2) The values of the daily readings during the excursion.

(3) The date and time that the readings were returned to normal.

(4) The cause of the excursion and what corrective actions were taken to bring the readings back to normal. If the reading returned to normal without corrective actions, a statement to that effect should be included.

(5) If the parameters were always found to be operating within their limits, a statement to that effect will satisfy this requirement. [County Rule 210 §302.1e]

2) The Permittee shall submit the following in the semiannual monitoring report:
The Permittee shall submit the results of the monthly and 12 month rolling calculations of mineral spirits, asphalt, and all other VOC containing materials purchased, used, and disposed in the fiberboard saturation process for each month in the six-months reporting period. [County Rule 210 §302.1e]

3) If the Permittee uses an ECS other than a thermal oxidizer, the Permittee shall submit an application for a permit revision prior to its installation in order to include operating, monitoring, performance testing, and recordkeeping requirements appropriate to the ECS used. If the Permittee uses a thermal oxidizer, the Permittee shall submit a written notification by hand delivery or by certified mail to the Administrator of the EPA and to the Control Officer a minimum of 7 working days prior to commencing construction of the ECS. [County Rule 210 §302.1e]

F. TESTING:

1) The Permittee shall conduct performance testing on the ECS that will be installed on the Saturator Unit.

[County Rule 200 §309]

2) The Permittee shall use EPA test methods 25A, 40 CFR 60 Appendix A to demonstrate the VOC destruction or control efficiency and VOC emission rate of the ECS. The capture efficiency of the ECS shall be verified using both EPA Method 204 and EPA Guidance Document "Guidelines for Determining Capture Efficiency", January 9, 1995 or an alternative method approved by the Administrator and the Control Officer.[County Rule 270 §§301 & 402] [SIP Rule 25 A & D] [SIP Rule 27 B]

3) If a thermal oxidizer is the ECS, the Permittee shall use EPA test methods 7E and 10 to demonstrate the NO_x and CO emission rates of the Thermal Oxidizer. [County Rule 270 §§301 & 402] [SIP Rule 25 A & D] [SIP Rule 27 B]

4) The testing shall be conducted by March 24, 2005. [County Rule 270 §401] [SIP Rule 27A]

5) Performance tests shall be conducted under such conditions as the Control Officer shall specify based upon representative performance of the source or facility. The Permittee shall make available to the Control Officer such records as may be necessary to determine the conditions of the performance tests. Operations during periods of start-up, shutdown, and malfunction shall not constitute representative conditions of performance tests unless otherwise specified in the applicable standard. [County Rule 270 §403]

6) The Permittee shall submit an approvable test protocol to the Department, for review and approval at least 30 days prior to the performance test.[County Rule 270 §301.1] [County Rule 280 §301.5]

7) The Permittee shall notify the Department in writing at least two weeks in advance of the actual time and date of the performance test so that the Department may have a representative attend. [County Rule 270 §404]

8) The Permittee shall submit a report to the Department within 30 days after completion of the performance test. The report shall summarize the results of the testing in sufficient detail to allow a compliance determination to be made. [County Rule 270 §§301.1 & 401]

G. COMPLIANCE SCHEDULE:

1) Schedule Of Compliance:

a) In order to achieve compliance with County Rule 210§302.1(h)(6), SIP Rule 220§302.2, and the requirements of these permit conditions (RACT requirements for the 3,000 gallon saturator unit), the Permittee shall install an ECS in accordance with the following schedule:

(1) By July 16, 2004, the Permittee shall complete system design/engineering.
(2) By September 5, 2004, the Permittee shall identify bidders, prepare request for proposal, and solicit bidders.
(3) By October 3, 2004, the Permitee shall review bids, select firm, and award contract.
(4) By March 6, 2005, the Permittee shall complete equipment fabrication/delivery.
(5) By April 15, 2005, the Permittee shall identify installation contractors and prepare request for proposal.
(6) By May 13, 2005, the Permittee shall select installation contractor and finalize contract.
(7) By June 22, 2005, the Permittee shall complete installation of control equipment that will achieve compliance with RACT requirements.
(8) By June 22, 2005, the Permittee shall submit an operations/maintenance (O&M) plan.
(9) By July 24, 2005, complete startup and debugging period.
(10) By August 24, 2005, the Permittee shall complete a stack test to demonstrate compliance with RACT requirements.
(11) By September 2, 2005, the Permittee shall update the O&M plan if necessary.

b) On a quarterly basis the Permittee shall submit a certified progress report to the Control Officer, Attn: Large Source Compliance Supervisor. The report shall contain, at a minimum the following information:

(1) Dates when the milestones specified in permit condition 23.G.1 Schedule of Compliance were achieved; and

(2) An explanation of why any dates specified in permit condition 23.G.1 Schedule of Compliance were not or will not be met, and any preventive or corrective measures adopted. [County Rule 210§305.1g. (3),(4)]