

Missouri Department of Natural Resources
Air Pollution Control Program

PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth here in.

Operating Permit Number: OP2005-023
Expiration Date: AUG 14 2010
Installation ID: 217-0004
Project Number: 4860-0004-035

Installation Name and Address

3M - Commercial Graphics Division
Highway 71 South
Nevada, MO 64772
Vernon County

Parent Company's Name and Address

3M
P.O. Box 33331 Building 41-01-05
St. Paul, MN 55133-3331

Installation Description:

The 3M – Nevada installation, located in Vernon County, produces an array of graphics products for the global graphics industry.

AUG 15 2005

Effective Date

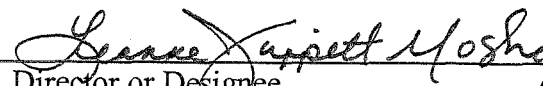

Director or Designee
Department of Natural Resources

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| THIS RULE HAS ESSENTIALLY REPLACED 10 CSR 10-3.100, <i>RESTRICTION OF EMISSION OF SULFUR COMPOUNDS</i> , AND 10 CSR 10-3.150, <i>RESTRICTION OF EMISSION OF SULFUR COMPOUNDS FROM INDIRECT HEATING SOURCES</i> . IT HAS BEEN DETERMINED TO BE APPLICABLE TO THE INSTALLATION AND THEREFORE HAS BEEN INCLUDED IN THE OPERATING PERMIT. | 2 |

I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

The 3M – Nevada installation, located in Vernon County, produces an array of graphics products for the global graphics industry. These products include decorative and specialty films for architectural, sign, fleet, commercial and automotive applications. The installation has surface coating lines controlled by regenerative thermal oxidizers, film extruders, various coating mixing equipment, solvent storage tanks and boilers. This installation is a major source of Volatile Organic Compounds (VOC).

| Reported Air Pollutant Emissions, tons per year | | | | | | | |
|---|--|-------------------------------------|---------------------------------------|-------------------------------------|-------------------------|--------------|------------------------------------|
| Year | Particulate Matter ≤ Ten Microns (PM ₁₀) | Sulfur Oxides (SO _x) | Nitrogen Oxides (NO _x) | Volatile Organic Compounds (VOC) | Carbon Monoxide (CO) | Lead (Pb) | Hazardous Air Pollutants (HAPs) |
| 1998 | 2.27 | 0.20 | 29.96 | 558.27 | 25.11 | -- | -- |
| 1999 | 2.53 | 0.24 | 33.38 | 593.08 | 27.80 | -- | -- |
| 2000 | 2.60 | 0.46 | 33.38 | 619.89 | 27.59 | -- | -- |
| 2001 | 2.51 | 0.62 | 31.44 | 608.00 | 25.67 | -- | -- |
| 2002 | 2.39 | 0.18 | 31.52 | 574.54 | 26.47 | -- | -- |

EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation which emit air pollutants and which are identified as having unit-specific emission limitations.

| Emission Unit # | Description of Emission Unit |
|-----------------|------------------------------|
| EU0010 | Boiler #1 |
| EU0020 | Boiler #2 |
| EU0030 | North Chrome Tank |
| EU0040 | Heptane Tank |
| EU0050 | Methyl Ethyl Ketone Tank |
| EU0060 | Xylene Tanks |
| EU0070 | Diisobutyl Ketone Tank |
| EU0080 | Cleaning Solvent Tank #T100 |
| EU1000 | Maker 40 Flexible Line |
| EU1010 | Maker 41 Flexible Line |
| EU1020 | Maker 43 Line |
| EU1030 | Maker 44 Line |
| EU1040 | Maker 45 Line |
| EU1050 | N1 Press Line |
| EU1060 | N2 Press Line |
| EU1070 | Maker 42 Line |
| EU1080 | Maker 46 Line |
| EU1090 | Maker 47 Line |
| EU1100 | Maker 48 Line |
| EU1110 | Maker 49 Line |
| EU1120 | Maker 50 Line |
| EU1130 | N3 Press Line |
| EU1140 | Mix-Mill |

| | |
|--------|--|
| EU2000 | Pre-Approved Installation of Web Coating Line (1a) |
| EU2010 | Pre-Approved Modification of Web Coating Line (2a) |
| EU2020 | Pre-Approved Installation of Pressure Sensitive Tape Coating Line (1b) |
| EU2030 | Pre-Approved Modification of Pressure Sensitive Tape Coating Line (2b) |
| EU2040 | Pre-Approved Installation of Flexographic Printing Line (1c) |
| EU2050 | Pre-Approved Modification of Flexographic Printing Line (2c) |
| EU2060 | Pre-Approved Installation of Raw Material Processing and Handling (1d) |
| EU2070 | Pre-Approved Modification of Raw Material Processing and Handling (2d) |
| EU2080 | Pre-Approved Installation of Thermal Oxidizer (1g) |
| EU2090 | Pre-Approved Modification of Thermal Oxidizer (2g) |
| EU2100 | Pre-Approved Installation of Dry Cleaning Equipment (1e) |
| EU2110 | Pre-Approved Modification of Dry Cleaning Equipment (2e) |
| EU2120 | Pre-Approved Installation of Chromium Anodizing Tank (1f) |
| EU2130 | Pre-Approved Modification of Chromium Anodizing Tank (2f) |
| EU2140 | Pre-Approved Installation of Volatile Organic Liquid Tank (1h) |
| EU2150 | Pre-Approved Modification of Volatile Organic Liquid Tank (2h) |

EMISSION UNITS WITHOUT LIMITATIONS

The following list provides a description of the equipment that does not have unit specific limitations at the time of permit issuance.

Description of Emission Source

Maker 47 – Cleaning Room
Maker 49 – Cleaning Room
Maker – Cleaning Room
Press Cleaning Room
Thermal Oxidizer A
Thermal Oxidizer B
Thermal Oxidizer C
Thermal Oxidizer D
Cleaning Solvent Tank #1
Cleaning Solvent Tank #2
Cleaning Solvent Tank #3
Fuel Oil Storage Tank
Laminator
Resource Recovery #1
Resource Recovery #2
Extruder Line
Case Printer
Test Printer #1
Test Printer #2
Space Heaters (3)
Cleaning Tank #1
Cleaning Tank #2
Stripping Tank
Grinder
Copper Tank #1

Copper Tank #2
Copper Tank #3
Rinse Tank #1
Lathe
Engraver
Ring Coater
Etch Tank
Rinse Tank #2
Proof Press

DOCUMENTS INCORPORATED BY REFERENCE

These documents have been incorporated by reference into this permit.

- 1) Construction Permit 042004-002

II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements.

Permit Condition PW001

10 CSR 10-6.060

Construction Permits Required

Air Pollution Control Program Permit to Construct Number 042004-002

1. Superseding Condition

- A. The conditions of this construction permit supersede all special conditions found in the following previously issued construction permits and amendments from the Air Pollution Control Program:

| Permit Number |
|---------------|
| 0782-002 |
| 0590-011 |
| 0590-012 |
| 0291-003 |
| 0395-012 |
| 0895-025 |
| 1195-009 |
| 1095-014 |
| 1195-018 |
| 0396-019 |
| 1098-017 |
| 1098-017A |
| 1098-017B |

2. Annual Emission Limitation

- A. 3M Nevada shall emit less than 655 tons of Volatile Organic Compounds (VOCs) from the entire installation in any consecutive 12-month period. The consecutive 12-month period shall not include time periods prior to issuance of this construction permit. Emissions from the entire installation include emissions during periods of start-up, shutdown, and malfunction of the control device.
- B. 3M Nevada shall track VOC emissions and calculate the monthly and consecutive 12-month VOC emissions from the entire installation. Attachment A, or equivalent forms approved by the permitting authority shall be used to demonstrate compliance with Special Conditions 2.A.
- C. 3M Nevada shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten (10) days after the end of the month during which the records from Special Condition Number 2.B. indicate that the source exceeds the limitation of Special Conditions Number 2.A.
- D. 3M Nevada shall keep documentation of any emission factors used to demonstrate compliance with Special Condition 2.A. Emission factors must be obtained from the most recent edition of AP-42, *Compilation of Air Pollutant Emission Factors*, the most recent stack performance test results, a mass balance approach using the Material Safety Data Sheets (MSDS) of all materials, and/or by a method approved by the permitting authority. Documentation sufficient to support the emission factors must accompany Attachment A required by Special Condition 2.B.
- E. 3M Nevada shall keep documentation of any overall control efficiencies used to demonstrate compliance with Special Condition 2.A. Overall control efficiency is the product of the capture efficiency and control efficiency of the pollution control device. Documentation sufficient to support the capture and control efficiencies must accompany Attachment A required by Special Condition 2.B.
- F. 3M Nevada shall keep documentation of all data relied upon, including but not limited to, any quality assurance/quality control data, in calculating the monthly and annual VOC emissions.

3. Operational Requirement

- A. 3M Nevada shall keep the ink, solvents and cleaning solutions in sealed containers whenever the materials are not in use. 3M Nevada shall provide and maintain suitable easily read permanent markings on all inks, solvent and cleaning solution containers used with this equipment.
- 4. Pre-Approved Operational and Equipment Modifications
 - A. 3M Nevada is authorized to perform the physical or operational changes, or changes deemed consistent with those physical or operational changes, listed in Attachment B, *Pre-Approved Changes*, without applying for or obtaining a construction permit or amendment from the permitting authority. Any increase or decrease in emissions of VOC resulting from the construction and operation of any of the above pre-approved changes are subject to the requirements listed in Special Condition 2. Any increase or decrease in emissions of non-VOC criteria air pollutants resulting from the construction and operation of any of the above pre-approved changes are subject to the requirements listed in Special Condition 23. *These pre-approved modifications are designed, in part, to accommodate the facility's implementation of pollution prevention activities. As a result, 3M is fully pre-approved to implement all physical and operational changes consistent with making the change to MACT JJJJ compliant coatings*
 - B. 3M Nevada shall maintain a log of equipment installed and/or modified under the Pre-Approved Changes and the date on which construction and/or modification and operation began. In addition, 3M Nevada shall maintain a log of equipment removed from the installation and the date on which it was removed. The log must account for all equipment present at the installation at any given time. Attachment C, or equivalent forms approved by the permitting authority, may be used for this purpose.
 - C. 3M Nevada shall notify the permitting authority of all activities associated with any Pre-Approved Change according to Special Condition 5 and 6.
 - D. If 3M Nevada wishes to make physical or operational changes that are not deemed consistent with the physical or operational changes listed in Attachment B of this construction permit and are not exempt from the construction permit rule, then 3M Nevada must first apply for and obtain a construction permit or amendment according to 10 CSR 10-6.060, *Construction Permits Required*.
- 5. Notification of Actual Construction of Pre-Approved Change
 - A. 3M Nevada shall submit written notification to the permitting authority at least 10 days prior to the actual construction of any pre-approved change listed in Attachment B. The notification shall contain the following:
 - 1. Detailed description of the physical or operational change including the affect on existing equipment;
 - 2. A plant layout diagram with representation of existing equipment and physical or operational changes;
 - 3. A schedule of construction activities related to the pre-approved change;
 - 4. A statement of applicability for any New Source Performance Standard (NSPS), National Emissions Standard of Hazardous Air Pollutants (NESHAP), and/or state regulations not identified as core requirements in the operating permit;
 - 5. An emissions calculation sheet for the pre-approved change including any modeling required by Special Condition 7;
 - 6. A calculation sheet for the potential emissions of all criteria air pollutants except VOC for the pre-approved change;
 - 7. A summation of the potential emissions from completed and proposed pre-approved changes; and
 - 8. A statement of verification that the physical or operational change will not result in installation emissions that exceed the limitations stated in Special Condition 2.
 - B. This notification shall become an enforceable part of this construction permit upon receipt by the permitting authority and 3M Nevada shall comply with the terms and conditions of the notification.
 - C. The permitting authority may disapprove any activity that has not been demonstrated to the satisfaction of the Program to be related to the pre-approved changes. At that time, 3M Nevada shall cease construction of the change until an appropriate authorization of the activities is obtained (such as a construction permit, if necessary).
- 6. Notification of Actual Start-up of Pre-Approved Change
 - A. 3M Nevada shall submit written notification to the permitting authority at least 10 days prior to the actual start-up or operation of any pre-approved change listed in Attachment B. The notification shall contain the following:
 - 1. Reference to the notification of actual construction including date of notification and brief description of change;
 - 2. Verification that the physical or operational change was completed as described in the original notification; and
 - 3. Scheduled date operations will be commenced.

- B. It is a violation of this construction permit for 3M Nevada to construct, modify or operate the installation not in accordance with the notification of 6.A. above.
- 7. Ambient Air Quality Analysis Requirement for Individual HAPs
 - Prior to submitting notification of a pre-approved change, 3M Nevada must evaluate HAP emissions for the pre-approved change according to the following methodology:
 - A. For all HAPs listed in *Draft Acceptable Ambient Levels for Missouri* with a potential to emit greater than their respective threshold levels, 3M Nevada shall perform screen modeling using the methods outlined in Special Condition 8 to determine the one-hour, 8-hour, 24-hour, and/or annual concentration of any individual HAP. The results of the screen modeling must be submitted with the notification required in Special Condition 5 for all pre-approved changes containing HAP.
 - B. The 8-hour, 24-hour and/or annual concentrations shall be compared to the current, available Risk Assessment Levels for each HAP listed in *Draft Acceptable Ambient Levels for Missouri*.
 - C. If the screen modeling indicates that the emissions from the pre-approved change at the installation exceeds acceptable concentration levels as stated in the most current version of *Draft Acceptable Ambient Levels for Missouri*, then 3M must submit and obtain approval for either of the following options prior to submitting notification of construction (Special Condition 5):
 - 1. Refined modeling, or
 - 2. An amendment to the flexible construction permit to include a federally enforceable limit on HAP emissions.
- 8. Screen Modeling Method for Individual HAPs
 - A. 3M Nevada shall use the preferred screening method stated in 40 CFR Part 51 Appendix W, "*Guideline on Air Quality Models*".
 - B. The emission rate to be used in the model shall be the potential to emit of the individual HAP. Stack parameters used in the model shall be representative of actual stack parameters including height, diameter, flow rate/velocity, temperature, etc. If 3M Nevada wishes to use values other than the default values for any parameter with a default value, 3M Nevada shall submit justification and obtain approval for the proposed value prior to use in the model.
- 9. Capture and Control Equipment - Thermal Oxidizer
 - A. The thermal oxidizer must be in use at all times when a control efficiency is claimed for compliance with the VOC emissions limitation. The thermal oxidizer shall be operated and maintained in accordance with the manufacturer's specifications and within the temperature range determined in Special Condition 11.
 - B. The operating temperature of the thermal oxidizer shall be maintained on a rolling 3-hour average and shall be continuously monitored and recorded when a control efficiency is claimed for compliance with the VOC emissions limitation. The most recent sixty (60) months of records shall be maintained on-site and shall be made immediately available to Missouri Department of Natural Resources' personnel upon request.
 - C. An assessment of RTO valve operation and leakage shall be conducted as part of the maintenance and inspection activities, at least annually.
 - D. 3M Nevada shall develop a monitoring plan that, for each capture system (maker, bay, or room enclosure):
 - 1. Identifies the operating parameter(s) to be monitored to assure capture efficiency,
 - 2. Explains why this parameter is appropriate for demonstrating ongoing compliance,
 - 3. Identifies the specific monitoring procedures, and
 - 4. Specifies the operating parameter value or range of values (or the procedures for establishing the values) that shall be maintained to demonstrate capture efficiency is being maintained.
 - E. The capture efficiency operating parameter(s) identified in Special Condition 9(D) shall be continuously monitored when a capture and control efficiency is claimed for compliance with the VOC emissions limitation. The most recent sixty (60) months of records shall be maintained on-site and shall be made immediately available to Missouri Department of Natural Resources' personnel upon request.
 - F. 3M Nevada shall install and maintain, for any intermittently controllable work station, a system to monitor when bypass of the control device system occurs while the work station is in operation.
 - G. 3M Nevada shall maintain an operating and maintenance log for the capture and control systems (enclosures and thermal oxidizers) for a period of (60) sixty months which shall include the following:
 - 1. Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
 - 2. Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

3. A written record of regular inspection schedule, the date and results of all inspections including any actions or maintenance activities that result from that inspection.

10. Performance Testing

- A. 3M Nevada shall conduct performance tests on the Regenerative Thermal Oxidizers A, B, C, and D (TOA, TOB, TOC, and TOD) to determine the VOC and HAP destruction efficiencies and operating parameters when all the processes controlled by these devices are in normal operation. These control efficiencies will be used in Attachment A for compliance.
- B. For each capture system, 3M Nevada shall:
 1. Confirm that the capture system continues to meet the requirements of EPA Method 204 from an approved performance test with no changes to operating parameters, or
 2. Conduct a performance test to determine the capture efficiency and establish the value or range of values for the selected operating parameter(s) when all the processes controlled by these devices are in normal operation.

These capture efficiencies shall be used in Attachment A for compliance.

- C. Section 6 of EPA method 204 of 40 CFR part 51, Appendix M shall be used to confirm that an enclosure meets the requirements for permanent total enclosures. If the enclosure meets the permanent total enclosure criteria and directs all VOC to a control device, a capture efficiency of 100 percent may be assumed.
- D. By June 3, 2006 and, henceforth, within 5 years of the most recent performance tests, 3M Nevada shall:
 1. Conduct performance tests to verify the operating parameters and/or the control efficiencies of the thermal oxidizers; and
 2. Confirm the capture efficiencies of the total or partial enclosures by Special Condition 10.B.1) or 10.B.2).
- E. These tests shall be performed according to the requirements found at 40 CFR Chapter I Part 63 Subpart JJJJ and Subpart KK, as applicable. Equipment in the pre-approved list will be treated as an existing affected source under Subpart JJJJ. Subpart JJJJ and Subpart KK performance testing will be supplemented with the appropriate VOC test methods to establish total control efficiencies. These performance tests will need to comply with Special Condition 11.
- F. 3M Nevada shall maintain a record of the results of all performance tests required by Special Conditions 10.A. and 10.B.

11. Proposed Test Plan

- A. A completed Proposed Test Plan Form (enclosed) must be submitted to the Air Pollution Control Program, Enforcement Section, 30 days prior to the proposed test date so that the Air Pollution Control Program, Enforcement Section, may arrange a pretest meeting, if necessary, and assure that the test date is acceptable for an observer to be present. The Proposed Test Plan may serve the purpose of notification and must be approved by the Staff Director prior to conducting the required emission testing.
- B. Two (2) copies of a written report of the performance test results shall be submitted to the Staff Director within 30 days of completion of any required testing. The report must include legible copies of the raw data sheets, analytical instrument laboratory data and complete sample calculations from the required U.S. EPA Method for at least one (1) sample run.
- C. The test report is to fully account for all operational and emission parameters addressed both in the construction permit conditions as well as in any other applicable state or federal rules or regulations.

12. Startup, Shutdown, and Malfunction Requirement

- A. 3M Nevada shall develop and implement an operation and maintenance plan to minimize the instances of excess emissions during start-up, shutdown and malfunction. The operation and maintenance plan shall detail procedures for maintaining, repairing and operating the various sources and their controls during all periods of operation, including start-up, shutdown and malfunction.

13. Reopening of the Construction Permit

- A. The permitting authority may reopen this construction permit to accomplish the following actions:
 1. Revise the Special Condition 2 to reflect an increase in the plantwide limitation as outlined in Special Condition 18.
 2. Reduce the plantwide limitation to reflect newly applicable Federal and/or State requirements with compliance dates after the issuance of this construction permit.
 3. Reduce the plantwide limitation if the permitting authority determines that a reduction is necessary to avoid causing or contributing to a National Ambient Air Quality Standard (NAAQS) or Prevention of Significant Deterioration (PSD) increment violation, or to an adverse impact on air quality in a Class I area.

- B. All reopenings that increase the plantwide limitation level are required to be placed on public notice for at least a 30-day period for submittal of public comment.
- 14. Plantwide Limitation Effective Period
 - A. The plantwide limitation in Special Condition 2 will be effective for ten (10) years. The plantwide limitation term commences on the date of issuance of this construction permit.
- 15. Permit Application Submission Requirements
 - A. Between six and eighteen months prior to the expiration of the plantwide limitation in Special Condition 2, 3M Nevada shall submit a complete application for the renewal or expiration of the plantwide limitation in Special Condition 2. For plantwide limitation renewal, 3M Nevada will be required to comply with Special Condition 16. For plantwide limitation expiration, 3M Nevada will be required to comply with Special Condition 17.
 - B. Once a complete application according to Special Condition 15.A. is received by the permitting authority, the plantwide limitation in Special Condition 2 will remain in effect until a revised plantwide limitation or a revised permit incorporating allowable limits is issued by the permitting authority.
 - C. Failure to submit a complete application according to Special Condition 15.A. to the permitting authority at least six (6) months prior to the expiration of the plantwide limitation is a violation of this construction permit and will result in the termination of the plantwide limitation on the date of expiration. At the time of termination, 3M Nevada will be required to comply with Special Condition 17.
- 16. Plantwide Limitation Renewal Requirements
 - A. A complete application shall consist of written documentation and/or calculations for the following items:
 - 1. A proposed plantwide limitation level;
 - 2. A list of all emissions units with applicable Federal or State requirements;
 - 3. The potential emissions of all current equipment at the installation;
 - 4. Identification of the baseline period;
 - 5. Baseline actual emissions; and
 - 6. A compliance plan for the proposed plantwide limitation.
 - B. The permitting authority will have the final authority to set the new plantwide emissions limitation based on the following guidelines:
 - 1. If the baseline actual emissions at the time of renewal are equal to or greater than 80 percent of the plantwide limitation, the plantwide limitation may be renewed at the same level.
 - 2. The plantwide limitation may not be set at a level that is greater than the potential to emit of the entire installation.
 - 3. The plantwide limitation shall be adjusted to account for any applicable State or Federal requirement with a compliance date that occurs during the effective period of this plantwide limitation.
 - 4. A plantwide limitation level higher than the current plantwide limitation level cannot be approved unless otherwise approved through Special Condition 18.
 - C. Any request to renew the plantwide limitation level is required to be placed on public notice for at least a 30-day period for submittal of public comment.
- 17. Expiration of the Plantwide Limitation
 - A. If 3M Nevada does not wish to renew the plantwide limitation of this construction permit, 3M Nevada shall apply for and obtain a construction permit for each emissions unit (or each group of emissions units) that existed under the plantwide limitation.
 - B. A complete application shall consist of a proposed allowable emission limitation for each emissions unit (or each group of emissions units) by distributing the plantwide limitation allowable emissions for the installation among each of the emissions units that existed under the plantwide limitation. If the plantwide limitation had not yet been adjusted for an applicable requirement that became effective during the plantwide limitation effective period, such distribution shall be made as if the plantwide limitation had been adjusted.
 - C. The plantwide limitation in Special Condition 2 will remain in effect until a revised construction permit is issued by the permitting authority.
 - D. Any physical change or change in the method of operation at the installation that meets the definition of major modification will be subject to major construction permitting requirements.
 - E. 3M Nevada shall continue to comply with any State or Federal applicable requirements that may have applied either during the plantwide limitation effective period or prior to the plantwide limitation effective period except for the emissions limitations that are superseded in Special Condition 1.
- 18. Increase of the Plantwide Limitation during the Effective Period

- A. If 3M Nevada wishes to alter Special Condition 2 of this construction permit to allow the installation to emit more than 655 tons per year of VOC, 3M Nevada shall submit a complete application to request an increase in the plantwide limitation meeting all the requirements for a major modification.
 - B. A complete application shall consist of written documentation and/or calculations to accomplish the following items:
 - 1. Identify the emissions units contributing to the increase in emissions so as to cause 3M Nevada's emissions to equal or exceed the plantwide limitation in Special Condition 2.
 - 2. Demonstrate that the sum of the baseline actual emissions of the small emissions units, plus the sum of the baseline actual emissions of the significant and major emissions units assuming application of Best Available Control Technology (BACT) equivalent controls, plus the sum of the allowable emissions of the new or modified emissions units exceeds the plantwide limitation.
 - 3. Comply with the provisions of a current BACT analysis for all emissions unit(s) identified in Special Condition 18.B(1) in accordance with the requirements of 10 CSR 10-6.060 section (8) regardless of the magnitude of the emissions increase resulting from them.
 - C. The revised plantwide limitation shall be effective on the day any emissions unit that is part of the plantwide limitation major modification becomes operational and begins to emit VOC.
 - D. The revised plantwide limitation level shall be placed on public notice for at least a 30-day period for submittal of public comment.
19. Requirements for the Early Termination of the Plantwide Limitation
- A. If 3M Nevada wishes to terminate the plantwide limitation in Special Condition 2 of this construction permit, 3M Nevada will be required to comply with the provisions of State Rule 10 CSR 10-6.060.
 - B. Activities that are subject to Special Condition 19.A. are any physical and/or operational changes performed after issuance of this construction permit and in accordance with this construction permit.
 - C. Upon termination of the plantwide emission limitation, this construction permit will be void and all previously issued construction permits cited in Special Condition 1 will be reinstated.
 - D. The new construction permit will include a BACT analysis utilizing current technologies, a netting analysis performed by the installation and any other requirements that the permitting authority deems necessary pursuant to 10 CSR 10-6.060 section (8). The results of the BACT and netting analyses shall be submitted to the permitting authority for review and approval.
 - E. If 3M Nevada requests termination of the plantwide limitation during the effective period, the plantwide limitation in Special Condition 2. will remain in effect until a valid construction permit is issued by the permitting authority pursuant to 10 CSR 10-6.060.
20. Records Retention Requirement
- A. 3M Nevada shall maintain all records required by this construction permit for not less than ten (10) years unless otherwise specified in a special condition.
 - B. 3M Nevada shall make these records available immediately to any Missouri Department of Natural Resources' personnel upon request.
21. Reporting Requirement
- A. 3M Nevada shall submit a semi-annual emissions report to the permitting authority within 30 days after the end of each reporting period. The reporting periods are January 1 – June 30 and July 1- December 31. The report shall contain the following information:
 - 1. Identification of owner and operator and the permit number;
 - 2. Total annual emissions in tons per year based on a 12-month rolling total for each month in the reporting period;
 - 3. A summary of all data relied upon, including but not limited to, any Quality Assurance or Quality Control data, in calculating the monthly and annual VOC emissions;
 - 4. A list of any emissions units modified or added to the installation during the preceding 6-month period;
 - 5. The number, duration, and cause of any deviations or monitoring malfunctions, and any corrective action taken;
 - 6. A notification of shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of VOC;

7. A signed statement by the responsible official certifying the truth, accuracy, and completeness of the information provided in the report.
- B. 3M Nevada shall submit reports to the permitting authority within ten (10) days of any deviations or exceedance of permitting requirements. The report shall contain the following information:
 1. The identification of owner and operator and the permit number:
 2. The permit requirement that experienced the deviation or that was exceeded:
 3. Emissions resulting from the deviation or the exceedance: and
 4. A signed statement by the responsible official certifying the truth, accuracy, and completeness of the information provided in the report.
22. Quality Assurance/Quality Control Plan
 - A. 3M Nevada shall maintain an operation and maintenance plan on site at all times. A table of contents of the plan shall be submitted to the permitting authority within 60 days of the issuance of this construction permit. The plan shall be a detailed, specific to the Nevada facility and include the following information:
 - B. A preventative maintenance program for avoidance of excess emissions which shall include all maintenance activities, with inspection schedule, repair actions, and replacements inventory.
 - C. A range of operating conditions and outlet variables for normal operation.
 - D. A summary of operating conditions and outlet variables for all control equipment that will be monitored for malfunction or breakdown and a description of the method of detecting and informing responsible personnel of any malfunction or breakdowns, including alarm systems, lights and other indicators.
 - E. A description of the generic corrective procedures that will be taken in the event of a malfunction or breakdown in order to restore compliance with the applicable emission limitations and permit conditions (e.g. reducing of production rate).
23. Emission Limitation for Non-VOC pollutants
 - A. 3M Nevada shall maintain documentation of the summation of the potential emissions of all criteria air pollutants except VOC from completed and proposed pre-approved changes. Attachment D, or equivalent forms approved by the permitting authority shall be used for this purpose.
 - B. If the records from Special Condition 23.A. indicate that the summation of potential emissions of any of the following criteria air pollutant exceeds its respective de minimis level as indicated in Special Condition 23.B.(1), 3M Nevada shall comply with the provisions of Special Condition 23.B.(1)-(3) for that particular pollutant.
 1. 3M Nevada shall emit less than the following amounts for each listed criteria air pollutant in any consecutive 12 month period from all equipment, which has been installed under the authority of pre-approved changes set forth in Special Condition 4.A. and listed in Attachment B, *Pre-Approved Changes*:

| Pollutant | Limitation |
|---|------------|
| Particulate Matter less than 10 microns in diameter (PM ₁₀) | 15.0 |
| Sulfur Oxides (SO _x) | 40.0 |
| Nitrogen Oxides (NO _x) | 40.0 |
| Carbon Monoxide (CO) | 100.0 |
 2. 3M Nevada shall track and calculate the monthly emissions of the listed criteria air pollutants in Special Condition 23.B (1) from all equipment listed in Attachment B, *Pre-Approved Changes*. Attachment E, or equivalent forms approved by the permitting authority shall be used to demonstrate compliance with Special Conditions 23.B.(1).
 3. 3M Nevada shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten (10) days after the end of the month during which the records from Special Condition Number 23.B(2) indicate that the source exceeds the limitation of Special Conditions Number 23.B(1).
24. Emissions Limitation on Process Line N3 Maker and 48 Maker
 - A. 3M Nevada shall emit less than 99.5 tons of Volatile Organic Compounds (VOCs) from the N3 Maker in any consecutive 12-month period.
 - B. 3M Nevada shall emit less than 99.5 tons of Volatile Organic Compounds (VOCs) from the 48 Maker in any consecutive 12-month period.
 - C. Attachment F and Attachment G or equivalent forms approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 24(A) and 24(B). These records shall include Material Safety Data Sheets (MSDS) for all materials used for N3 Maker and 48 Maker.

- D. 3M Nevada shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten (10) days after the end of the month during which the records from Special Condition Number 24(C) indicate that the source exceeds the limitation of Special Conditions Number 24(A) and 24(B).
- E. 3M Nevada may request the removal of Special Condition 24 if and when EPA approves the State of Missouri's submittal for adoption into the State Implementation Plan (SIP), the NSR improvements for Plantwide Applicability Limits finalized on December 31, 2002.

Permit Condition PW002

10 CSR 10-6.170

Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin

Emission Limitation:

1. The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line or origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director; or
2. The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.
3. Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary.

Monitoring:

1. The permittee shall conduct inspections of its facilities sufficient to determine compliance with this regulation. If a violation of this regulation is discovered, the source shall undertake corrective action to eliminate the violation.
2. The following monitoring schedule must be maintained:
 - a) Weekly observations shall be conducted for a minimum of eight consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then-
 - b) Observations must be made once every two weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then-
 - c) Observations must be made once per month. If a violation is noted, monitoring reverts to weekly.
3. If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency.

Record Keeping:

1. A log must be maintained noting the following:
 - a) Whether air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin.
 - b) Whether the visible emissions were normal for the installation.
 - c) Equipment malfunctions that cause an exceedance of 10 CSR 10-6.170.
 - d) Any violations of 10 CSR 10-6.170 and any corrective actions undertaken to correct the violation.
2. Attachment H contains a log including these record keeping requirements. This log, or an equivalent created by the permittee, must be used to certify compliance with this requirement.

Reporting:

The permittee shall report to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as part of each semi-annual report required under Part V of this permit, any deviation of any of the terms imposed by this regulation, or any malfunction which causes an exceedance of this regulation.

III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements.

| EU0010 through EU0020 Boiler #1 Boiler #2 | | |
|---|---|----------------------|
| Emission Unit | Description | 2002 EIQ Reference # |
| EU0010 | Boiler #1. 10.40 MMBtu/hr Dual Fuel (Natural Gas and #2 Fuel Oil) Boiler. Installed 1969. | EP-B1 |
| EU0020 | Boiler #2. 10.40 MMBtu/hr Dual Fuel (Natural Gas and #2 Fuel Oil) Boiler. Installed 1969. | EP-B2 |

Permit Condition (EU0010 through EU0020)-001

10 CSR 10-3.060

Maximum Allowable Emission of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating

Emission Limitation:

The permittee shall not emit particulate matter in excess of the emission limit, in pounds per million BTU of heat input from each of the emission units EU0010 and EU0020, as defined below.

$$E = 0.90(Q)^{-0.174}$$

where

E = the maximum allowable particulate emission rate in pound per million Btu of heat input; and

Q = the installation heat input in million of Btu per hour.

Equipment and Operation Parameters:

These emission units shall be limited to burning pipeline grade natural gas and fuel oil No. 2.

Monitoring/Record Keeping:

1. The permittee shall maintain the installation total heat input and emission limitation calculations.
2. The permittee shall maintain potential to emit calculations in terms of pounds of particulate matter per million BTU of heat input for each fuel type burned in each of the emission units EU0010 and EU0020.
3. These records shall be made available immediately for inspection to the Department of Natural Resources personnel upon request.
4. Attachments I and J contains a log including these record keeping requirements. This log, or an equivalent created by the permittee, must be used to certify compliance with this requirement.

Reporting:

The permittee shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as part of each semi-annual report required under Part V of this permit, any deviation of any of the terms imposed by this condition, or any malfunction which causes an exceedance of this condition.

Permit Condition (EU0010 through EU0020)-002

10 CSR 10-6.220

Restriction of Emission of Visible Air Contaminants

Emission Limitation:

1. No owner or other person shall cause or permit to be discharged into the atmosphere from any source any visible emissions with an opacity greater than 40%.
2. Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six minutes in any 60 minutes air contaminants with an opacity up to 60%.

Monitoring:

1. The permittee shall conduct opacity readings on this emission unit using the procedures contained in USEPA Test Method 22. Readings are only required when the emission unit is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
2. The following monitoring schedule must be maintained:
 - a) Observations must be made once per month. If a violation is noted:
 1. Weekly observations shall be conducted for a minimum of eight consecutive weeks. Should no violation of this regulation be observed during this period, then;
 2. Observations must be made once every two weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period, then;
 3. Observations must be made once per month. If a violation is noted, monitoring reverts to weekly.

Record Keeping:

1. The permittee shall maintain records of all observation results (see Attachments B and C), noting:
 - a) Whether any air emissions (except for water vapor) were visible from the emission units,
 - b) All emission units from which visible emissions occurred, and
 - c) Whether the visible emissions were normal for the process.
2. The permittee shall maintain records of any equipment malfunctions (see Attachment E).
3. The permittee shall maintain records of any USEPA Method 9 opacity test (see Attachment D) performed in accordance with this permit condition.
4. These records shall be made available immediately for inspection to the Department of Natural Resources personnel upon request.
5. All records shall be maintained for five years.

Reporting:

The permittee shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as part of each semi-annual report required under Part V of this permit, any deviation of any of the terms imposed by this regulation, or any malfunction which causes an exceedance of this regulation.

Permit Condition (EU0010 through EU0020)-003

10 CSR 10-6.260

Restriction of Emission of Sulfur Compounds¹

Emission Limitation:

1. No person shall cause or allow emissions of sulfur dioxide into the atmosphere from any indirect heating source in excess of eight pounds of sulfur dioxide per million BTUs actual heat input averaged on any consecutive three hour time period.

¹ 10 CSR 10-6.260(4) is a state-only requirement.

2. No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards. [10 CSR 10-6.260(4) & 10 CSR 10-6.010 Ambient Air Quality Standards]

| Pollutant | Concentration by Volume | Remarks |
|---|--|--|
| Sulfur Dioxide (SO ₂) | 0.03 parts per million (ppm) (80 micrograms per cubic meter (µg/m ³)) | Annual arithmetic mean |
| | 0.14 ppm (365 µg/m ³) | 24-hour average not to be exceeded more than once per year |
| | 0.5 ppm (1300 µg/m ³) | 3-hour average not to be exceeded more than once per year |
| Hydrogen Sulfide (H ₂ S) | 0.05 ppm (70 µg/m ³) | ½-hour average not to be exceeded over 2 times per year |
| | 0.03 ppm (42 µg/m ³) | ½-hour average not to be exceeded over 2 times in any 5 consecutive days |
| Sulfuric Acid (H ₂ SO ₄) | 10 µg/m ³ | 24-hour average not to be exceeded more than once in any 90 consecutive days |
| | 30 µg/m ³ | 1-hour average not to be exceeded more than once in any 2 consecutive days |

Operation Parameters:

The emission unit shall be limited to burning pipeline grade natural gas or fuel oil No. 2.

Monitoring/Record Keeping:

- The permittee shall maintain an accurate record of the annual fuel usage.
- These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
- All records shall be maintained for five years.

Reporting:

The permittee shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as part of each semi-annual report required under Part V of this permit, any deviation of any of the terms imposed by this regulation, or any malfunction which causes an exceedance of this regulation. The facility would be exempt from this regulation if only natural gas was used.

| EU0030 North Chrome Tanks | | |
|------------------------------|---------------------------------|----------------------|
| Emission Unit | Description | 2002 EIQ Reference # |
| EU0035 | Plating Line: North Chrome Tank | GA-13 |

Permit Condition EU0030-001

10 CSR 10-6.075

Maximum Achievable Control Technology Regulations

40 CFR Part 63, Subpart N

National Emission Standards for Hazardous Air Pollutants for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks

Emission Limitation:

An emission limitation of 0.015 mg/dscm (6.6×10^{-6} gr/dscf), as total chromium applies at the exhaust of the emission control device of each affected source. This limitation applies during tank operation as well as during periods of startup and shutdown. The emission limitation does not apply during periods of malfunction; however, work practice standards that address operation and maintenance and that are required by §63.342(f) must be followed during malfunctions.

Emission Controls:

1. The permittee shall control emissions from the chromium plating bath of the North Chrome Tank: by applying a scrubber in series with a HEPA filter

Operation of Emission Controls:

1. The permittee shall add fresh makeup water to the top of the packed bed according to the frequency specified by the manufacture, or equal [40 CFR 63.342 Table 1, 40 CFR 63.346(b)(1)]

Operation and Maintenance Plan:

The permittee shall prepare and maintain an O&M Plan with content according to 40 CFR 63.342(f)(3)(i). This requirement may be met in part or in full using (SOP) manuals, OSHA plans, and/or other existing plans.

Monitoring/Inspection/Recordkeeping

1. Pressure drop shall be measured and recorded across the following air pollution control devices when the corresponding affected source is operating.
 - a) Across the HEPA filter: once per week, and according to documentation previously submitted by the permittee according to 40 CFR 63.343(d)
 - b). Across the scrubber: once per day, and according to documentation previously submitted by the permittee according to 40 CFR 63.343(d) [40 CFR 63.343(c)(2)(ii)](b)
2. Visually inspect each control device and record the results, once per quarter, according to the criteria of 40 CFR 63.342 Table 1 and 40 CFR 63.346(b)(1)]
3. Record each instance of maintenance of each affected source, air pollution control device, monitoring equipment [40 CFR 63.346(b)(2)]
4. Record total process operating time for the reporting period [40 CFR 63.346(b)(11)]
5. The permittee shall respond to and record each instance of a malfunction of the affected source [which could reasonably result in failure to meet an emission standard] and associated air pollution control devices and monitoring equipment according to 40 CFR 63.346(b)(3)-(5), (9)-(10)

Reporting:

1. The permittee shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as part of each semi-annual report required under Part V of this permit, any deviation of any of the terms imposed by this regulation, any malfunction which causes an exceedance of this regulation, and any information as may be required by 40 CFR 63.347(g)(3)
2. In the event that an emission limit is exceeded, the permittee shall submit a Summary Report quarterly, until a request to reduce reporting frequency is approved according to 40 CFR 63.347(g)(2). The Summary Report shall be submitted submit as part of the semi-annual report required under Part V of this permit, and by April 30 [for the reporting period January 1 through March 30] and by October 30 [for the reporting period July 1 through September 30].

EU0040 through EU0080
Heptane Tank
Methyl Ethyl Ketone Tank
Xylene Tank
Diisobutyl Ketone Tank
Cleaning Solvent Tank #T100

| Emission Unit | Description | 2002 EIQ Reference # |
|---------------|--|----------------------|
| EU0040 | Heptane Tank. 20,000 gallons (75.1m ³), installed 1990. | THEP |
| EU0050 | Methyl Ethyl Ketone Tank. 15,000 gallons (56.8m ³), installed 1990. | TMEK |
| EU0060 | Xylene Tank. 20,000 gallons (75.1m ³), installed 1990. | TXYL |
| EU0070 | Diisobutyl Ketone Tank. 15,000 gallons (56.8m ³), installed 1990. | TDBK |
| EU0080 | Cleaning Solvent Tank #T100. 15,000 gallons (56.8m ³), installed 1990. | T100 |

Permit Condition (EU0040 and EU0060) -001

10 CSR 10-6.070

New Source Performance Regulations

40 CFR 60 Subpart Kb

Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction or Modification Commenced After July 23, 1984

Emission Limitation:

Except as provided in §60.110b(b), the affected facility to which this subpart applies is each storage vessel with a capacity greater than or equal to 75 cubic meters (m³) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984.

Monitoring/Record Keeping:

1. The owner or operator of each storage vessel as specified in §60.116b(a) shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Each storage vessel with a design capacity less than 75 m³ is subject to no provisions of this subpart other than those required by §60.116b(b).
2. The owner or operator shall keep copies of all records required by §60.116b(b) for the life of the source.

Reporting:

The permittee shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as part of each semi-annual report required under Part V of this permit, any deviation from any of the terms imposed by this condition, or any malfunction which causes an exceedance of this condition.

Permit Condition (EU0050-001 and EU0060-002 and EU0080-001)²

10 CSR 10-6.075

Maximum Achievable Control Technology Regulations

40 CFR Part 63, Subpart HHHHH

National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing [MCM]

40 CFR Part 63, Subpart EEEE

National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution [OLD]

40 CFR Part 63, Subpart A

General Provisions

Emission Limitation:

The permittee shall meet all applicable requirements of 40 CFR Part 63, Subpart HHHHH, "National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing" (MCM MACT) as of the compliance date of this rule [presently stated as December 11, 2006], and meet all applicable, on-going requirements beyond the compliance date, including those as may pertain to testing, notifications, and reporting.

The permittee shall meet all applicable requirements of 40 CFR Part 63, Subpart EEEE, "National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution" (OLD MACT). as of the compliance date of this rule [presently stated as February 5, 2007], and meet all applicable, ongoing requirements beyond the compliance date, including those as may pertain to testing, notifications, and reporting.

EU1000 through EU1130³

Maker 40 Line
Maker 41 Line
Maker 43 Line
Maker 44 Line
Maker 45 Line
N1 Press Line
N2 Press Line
Maker 42 Line
Maker 46 Line
Maker 47 Line
Maker 48 Line
Maker 49 Line
Maker 50 Line
N3 Press Line

² According to preliminary analysis of the operations of the 3M Nevada plant, EU0050, EU0060, EU080, and associated tank truck unloading and piping, may constitute in part or in full an existing affected source under 40 CFR Part 63, Subpart HHHHH, "National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing" [MCM MACT] and/or an existing affected source under 40 CFR Part 63, Subpart EEEE, "National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution" [OLD MACT].

| Emission Unit | Description | 2002 EQ Reference # |
|---------------|--|---------------------|
| EU1000 | Maker 40 Line. Web coating line with a natural gas drying oven . Installed 1996. | M40 |
| EU1010 | Maker 41 Line. Web coating line with a natural gas drying oven . Installed 1971. | M41 |
| EU1020 | Maker 43 Line. Web coating line with a natural gas drying oven (19.88 MMBtu/hr). Installed 1977. | M43 |
| EU1030 | Maker 44 Line. Web coating line with a natural gas drying oven . Installed 1977. | M44 |
| EU1040 | Maker 45 Line. Web coating line with a natural gas drying oven . Installed 1986. | M45 |
| EU1050 | N1 Press Line. Web coating line with a natural gas drying oven . Installed 1971. | N1 |
| EU1060 | N2 Press Line. Web coating line with a natural gas drying oven . Installed 1978. | N2 |
| EU1070 | Maker 42 Line. Web coating line with a natural gas drying oven . Installed 1976. | M42 |
| EU1080 | Maker 46 Press. Web coating line with a natural gas drying oven . Installed 1986. | M46 |
| EU1090 | Maker 47 Line. Web coating line with a natural gas drying oven . Installed 1992. | M47 |
| EU1100 | Maker 48 Line. Web coating line with a natural gas drying oven . Installed 1996. | M48 |
| EU1110 | Maker 49 Line. Web coating line with a natural gas drying oven . Installed 1997. | M49 |
| EU1120 | Maker 50 Press. Web coating line with a natural gas drying oven . Installed 2000. | M50 |
| EU1130 | N3 Press Line. Web coating line with a natural gas drying oven . Installed 1997. | N3 |

Permit Condition (EU1000 through 1030, EU1050, EU1060, and EU1130 -001

10 CSR 10-6.075

Maximum Achievable Control Technology Regulations

40 CFR Part 63, Subpart JJJJ

National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating

40 CFR Part 63, Subpart A

General Provisions

Permit Condition (EU1040 and EU1170 through EU1120)-001⁴

10 CSR 10-6.075

Maximum Achievable Control Technology Regulations

40 CFR Part 63, Subpart JJJJ

10 CSR 10-6.070

³ The 3M Nevada plant is an existing *affected source* under 40 CFR 63 sub JJJJ [Paper and Other Web Coating [POWC] MACT]. The *affected source* consists of the collection of the following web coating lines: Makers 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, and 50, and Presses N1, N2, and N3.

⁴ In addition to being part of the collection of web coating lines that make up the POWC MACT affected source, each of Makers 42, 45, 46, 47, 48, 49, and 50 is also a separate *affected facility* under the Pressure Sensitive Tape and Label [PSTL] Surface Coating NSPS at 40 CFR 60 sub RR.

New Source Performance Regulations

40 CFR Part 60, Subpart RR

Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations

40 CFR Part 63, Subpart A

General Provisions

Emission Limitation:⁵⁶

Organic HAP emissions shall be limited to the level specified in §63.3320(b)(1), (2), (3) or (4), as follows.

- a) No more than 5 percent of the organic HAP applied for each month (95 percent reduction) at existing affected sources; or (§63.3320(b)(1))
- b) No more than 4 percent of the mass of coating materials applied for each month at existing affected sources; or. (§63.3320(b)(2))
- c) No more than 20 percent of the mass of coating solids applied for each month at existing affected sources. (§63.3320(b)(3))
- d) If you use an oxidizer to control organic HAP emissions, operate the oxidizer such that an outlet organic HAP concentration of no greater than 20 parts per million by volume (ppmv) by compound on a dry basis is achieved and the efficiency of the capture system is 100 percent. (§63.3320(b)(4))

Monthly Compliance Demonstration:

1. The permittee may assign a single emissions limitation option across the entire MACT JJJJ affected source, or may assign different options to any combination of the workstations, so long as every workstation of the MACT JJJJ affected source has been assigned an option. The permittee may change each month the emissions limitation option assigned to each workstation.
2. By the 30th day of each month, the permittee shall demonstrate that the entire MACT JJJJ affected source is in compliance for the preceding month with the emission limits according to how the permittee had assigned the emissions limitation options to the workstations of the affected source for that month. This demonstration shall be made using the applicable procedures at 40 CFR 63.3370 for whatever combination of always-controlled, intermittently-controlled, and never-controlled workstations exist for the affected source. For each emissions limitation option assigned for that month to one or more web coating lines which is (are) also an affected facility(ies) under NSPS RR, the demonstration for that month must be performed on the basis of volatile organic content [according to § 63.3360(d)] , If an emissions limitation option has been assigned for that month to one or more web coating line, none of which are also an affected facility under NSPS RR, the demonstration may be performed for that limitation on the basis of either volatile organic content or organic-HAPs.

Monitoring/Recordkeeping:

1. The permittee shall monitor the temperature of each oxidizer according to §63.3350(e)(9)
2. The permittee shall select and monitor a capture system operating parameter according to §63.3350(f)(3).
3. Data collected by the monitors shall be data collection standards and be recorded according to §63.3350(e)

Prevention of Unintentional Bypass:

⁵ A regulatory streamlining analysis performed according to EPA's Title V White Paper #2 [March 5, 1996] has demonstrated that, for the 3M Nevada facility, the emissions standards of 40 CFR 63 Subpart JJJJ [POWC MACT], when assessed on the basis of volatile organic substances rather than organic-HAPs [as is an option provided for at §63.3360(d), etc.], are more restrictive than those of 40 CFR 60 Subpart RR [NSPS RR]. As such and for purposes of this permit only, the POWC MACT may be said to subsume NSPS RR. Therefore, only the emissions standards and attendant monitoring, recordkeeping, and reporting requirements of the POWC MACT are contained in this permit, and compliance with these requirements also constitutes compliance with all requirements of NSPS RR.

⁶ 3M has volunteered to comply the Paper and Other Web MACT as of the date of issuance of the Title V operating permit, which is well in advance of the otherwise applicable compliance date of December 5, 2005.

For each work station of the POWC MACT affected source which is intermittently controlled by an air pollution control device, the permittee shall prevent unintentional bypass by electing one of the following options, according to §63.3350(c). A different option may be elected for each bypass.

1. auto-stop the web coating line of the work station when flow is diverted away from an operating APCD
2. car-seal or lock-and-key valve closure, secured in closed position
3. air flow position indicator
4. continuous monitoring of valve position when source is operating and APCD is in use

Inspection/Recordkeeping:

1. For each intermittently-controlled work station for which bypass control is provided by auto-stop of the web coating line, the permittee shall inspect the auto-stop system monthly to verify that it will detect flow diversions and shut down operations
2. For each intermittently-controlled work station for which bypass control is provided by car-seal or lock-and-key valve closure, the permittee shall perform a monthly, visual inspection of the seal or closure mechanism to verify that the valve or damper is closed
3. For each intermittently-controlled work station for which bypass control is provided by an air flow position indicator, the permittee shall record the time and flow control position once per hour and for each occurrence of a change of flow direction, according to §63.3350(c)(1).
4. For each intermittently-controlled work station for which bypass control is provided by continuous monitoring of valve position, the permittee shall once per month inspect the system to verify that the monitor will indicate valve position

Recordkeeping:

1. The permittee shall record the amount and properties of each coating used, according to §63.3370, and as necessary to demonstrate compliance each month using the applicable procedures at §63.3370.
2. For each workstation intermittently controlled by an air pollution control device, the permittee shall calculate and record the mass of each coating material applied during a bypass of that control device.
3. For each CPMS used by an air pollution control device, capture system, and/or bypass control, the permittee shall record each instance of inspection, calibration, and validation check, according to §63.3350(e)(5).
4. For each CPMS, CMS, each air pollution control device, additional recordkeeping shall be performed according to applicable sections of the MACT General Provisions, including §63.10(b)(2) and §63.10(c), as applicable.

Written Plans:

1. The permittee shall develop and implement a Startup, Shutdown, and Malfunction [SSM] Plan pertaining only to the air pollution control devices. Ongoing recordkeeping associated with the SSM Plan shall be performed according to §63.6(e)(3), as applicable
2. The permittee shall develop a Capture System Site-Specific Monitoring Plan, according to §63.3350(f)

Reporting:

The permittee shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as part of each semi-annual report required under Part V of this permit, any deviation from any of the terms imposed by this condition, or any malfunction which causes an exceedance of this condition, as well as all applicable information at §63.3400(c)(2), and all applicable information of §63.10(d)(5)(i) which would otherwise constitute a Start-up, Shutdown, Malfunction (SSM) Report.

Performance Test/Demonstrations:

1. The permittee shall conduct an initial performance test by June 3, 2006, for each air pollution control device used to meet the emission standards of the POWC MACT, according to §63.3360(e), as applicable.
2. The permittee may elect to request, according to §63.7(h), that the MoDNR recognize previously-performed emissions testing as satisfying the initial performance test, in part or in full.
3. The permittee shall conduct an initial performance test by June 3, 2006, of each air pollution control device used to meet the emission standards of the POWC.
4. The permittee shall determine the capture efficiency of each enclosure used to meet the emission standards of the POWC MACT, according to §63.3360(f), as applicable.

| EU1140 Mix Mill Operations | | |
|-------------------------------|----------------------|----------------------|
| Emission Unit | Description | 2002 EIQ Reference # |
| EU1140 | Mix-Mill Operations. | NA |

Permit Condition (EU1140)-001⁷

10 CSR 10-6.075

Maximum Achievable Control Technology Regulations

40 CFR Part 63, Subpart HHHHH

National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing [MCM]

40 CFR Part 63, Subpart A

General Provisions

Emission Limitation:

The permittee shall meet all applicable requirements of 40 CFR Part 63, Subpart HHHHH, "National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing" as of the compliance date of this rule [presently stated to be December 11, 2006], and shall meet all applicable, ongoing requirements beyond the compliance date, including those as may pertain to testing, notifications, and reporting.

EU2000 through EU2090⁸

Pre-Approved Installation of Web Coating Line (1a)

Pre-Approved Modification of Web Coating Line (2a)

Pre-Approved Installation of Pressure Sensitive Tape Coating Line (1b)

⁷ According to preliminary analysis of the operations of the 3M Nevada plant, one or more mixing vessels and associated piping, plus one or more bulk storage tanks of EU1140, may constitute in part or in full an existing affected source under 40 CFR 63 subpart HHHHH.

⁸ Subject to all other terms and conditions of this Title V operating permit, the 3M Nevada plant is authorized under Construction Permit No. 042004-002, to perform any number of modifications of the type specified in Attachment B of this permit, and to perform any number of installations of equipment of the type also specified in Attachment B. All such modifications/installations performed after issuance of this permit are assigned an EU as a group [e.g. If two new web coating lines are installed, both lines are assigned EU2000]

Pre-Approved Modification of Pressure Sensitive Tape Coating Line (2b)
Pre-Approved Installation of Wide-web Flexographic Press or Product and Packaging
Rotogravure Line (1c)
Pre-Approved Modification of Wide-web Flexographic Press or Product and Packaging
Rotogravure Line (2c)
Pre-Approved Installation of equipment for processing and/or handling raw materials
associated with coating operations (1d)
Pre-Approved Modification of equipment for processing and/or handling raw materials
associated with coating operations (2d)
Pre-Approved Installation of Thermal Oxidizer (1g)
Pre-Approved Modification of Thermal Oxidizer (2g)

| Emission Unit | Description | 2002 EIQ Reference # |
|---------------|--|----------------------|
| EU2000 | Pre-Approved Installation of Web Coating Line (1a) | NA |
| EU2010 | Pre-Approved Modification of Web Coating Line (2a) | NA |
| EU2020 | Pre-Approved Installation of Pressure Sensitive Tape Coating Line (1b) | NA |
| EU2030 | Pre-Approved Modification of Pressure Sensitive Tape Coating Line (2b) | NA |
| EU2040 | Pre-Approved Installation of Wide-web Flexographic Press or Product and Packaging Rotogravure Line (1c) | NA |
| EU2050 | Pre-Approved Modification of Wide-web Flexographic Press or Product and Packaging Rotogravure Line (2c) | NA |
| EU2060 | Pre-Approved Installation of equipment for processing and/or handling raw materials associated with coating operations (1d) | NA |
| EU2070 | Pre-Approved Modification of equipment for processing and/or handling raw materials associated with coating operations (2d) | NA |
| EU2080 | Pre-Approved Installation of Thermal Oxidizer (1g) | NA |
| EU2090 | Pre-Approved Modification of Thermal Oxidizer (2g) | NA |

Permit Condition (EU2000 through EU2010 and EU2060 through 2070)-001

10 CSR 10-6.075

Maximum Achievable Control Technology Regulations

40 CFR Part 63, Subpart JJJJ

National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating

40 CFR Part 63, Subpart A

General Provisions

10 CSR 10-6.060

Construction Permit Required (Construction Permit Number 042004-002)

Permit Condition (EU2020 and EU2030) -001

10 CSR 10-6.075

Maximum Achievable Control Technology Regulations

40 CFR Part 63, Subpart JJJJ

National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating

10 CSR 10-6.070

New Source Performance Regulations

40 CFR Part 60, Subpart RR

Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations

40 CFR Part 63, Subpart A

General Provisions

10 CSR 10-6.060

Construction Permit Required (Construction Permit Number 042004-002)

Permit Condition (EU2040 and EU2050)-001

10 CSR 10-6.075

Maximum Achievable Control Technology Regulations

40 CFR Part 63, Subpart KK

National Emission Standards for the Printing and Publishing Industry

40 CFR Part 63, Subpart A

General Provisions

10 CSR 10-6.060

Construction Permit Required (Construction Permit Number 042004-002)

Permit Condition (EU2060 and EU2070) -001

10 CSR 10-6.075

Maximum Achievable Control Technology Regulations

40 CFR Part 63, Subpart JJJJ

National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating

10 CSR 10-6.075

Maximum Achievable Control Technology Regulations

40 CFR Part 63, Subpart KK

National Emission Standards for the Printing and Publishing Industry

10 CSR 10-6.075

Maximum Achievable Control Technology Regulations

40 CFR Part 63, Subpart HHHHH⁹

National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing [MCM]

40 CFR Part 63, Subpart EEEE

National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution [OLD]

40 CFR Part 63, Subpart A

General Provisions

10 CSR 10-6.060

Construction Permit Required (Construction Permit Number 042004-002)

Permit Condition (EU2080 and EU2090)-001

10 CSR 10-6.075

Maximum Achievable Control Technology Regulations

40 CFR Part 63, Subpart JJJJ

National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating

⁹ Certain installation/modification of equipment which are performed subsequent to December 11, 2006, under authorization of EU2060 or EU2070, may constitute modification of an existing affected source under the Miscellaneous Coating Manufacturing [MCM] MACT at 40 CFR 63 sub HHHHH. All such equipment of EU2060 or EU2070 which is, subsequent to December 11, 2006, in dedicated service to any combination of EU1000, EU1010, EU1020, EU1030, EU1040, EU1050, EU1060, EU1070, EU1080, EU1090, EU1100, EU1110, EU1120, EU1130, EU2000, EU2010, EU2020, EU2030, EU2040, and EU2050 constitute *affiliated operations* [as defined at 40 CFR 63.7985(d)(2)] of a MACT JJJJ or MACT KK affected source. Such equipment of EU2060 and/or EU2070 are exempt from all requirements of MACT HHHHH, according to 40 CFR 63.7985(d)(2).

10 CSR 10-6.075

Maximum Achievable Control Technology Regulations

40 CFR Part 63, Subpart KK

National Emission Standards for the Printing and Publishing Industry

10 CSR 10-6.070

New Source Performance Regulations

40 CFR Part 60, Subpart RR

Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations

40 CFR Part 63, Subpart A

General Provisions

10 CSR 10-6.060

Construction Permit Required (Construction Permit Number 042004-002)

Emission Limitation:

According to Construction Permit Number 042004-002 the installation is required to comply with all applicable provisions of the most current version of: 10 CSR 10-6.075, "Maximum Achievable Control Technology Regulations", 40 CFR Part 63, Subpart JJJJ, "National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating." In accordance with Permit Condition (EU1040 and EU1170 through EU1120)-001, the permittee shall perform each monthly compliance demonstration on the basis of VOCs rather than HAPs for each emissions limitation option which has been assigned, for the month, to one or more web coating lines that is an affected facility under NSPS RR.¹⁰

Permit Condition (EU2080 and EU2090)-002

10 CSR 10-6.400

Control of Emission of Particulate Matter From Industrial Processes

Emission Limitation:

The installation is required to follow all applicable provisions of the most recent version of CSR 10-6.400 "Control of Emission of Particulate Matter from Industrial Processes" for emission points EU2080 and EU2090.

EU2100 and EU2110¹¹

Pre-Approved Installation of Dry Cleaning Equipment(1e)

Pre-Approved Modification of Dry Cleaning Equipment(2e)

| Emission Unit | Description | 2002 EIQ Reference # |
|---------------|---|----------------------|
| EU2100 | Pre-Approved Installation of Dry Cleaning Equipment(1e) | NA |

¹⁰ This is based on a regulatory streamlining analysis performed according to EPA's Title V White Paper #2 [March 5, 1996], which demonstrated that for the 3M Nevada facility, the emissions standards of 40 CFR 63 Subpart JJJJ [POWC MACT] are more restrictive than those of 40 CFR 63 Subpart KK, and that the emissions standards of the POWC MACT, when assessed on the basis of volatile organic substances rather than organic-HAPs [as is an option provided for at §63.3360(d), etc.], are more restrictive than those of 40 CFR 60 Subpart RR [NSPS RR]. As such and for purposes of this permit only, the POWC MACT may be said to subsume "MACT KK," and may be said to subsume NSPS RR. Therefore, only the emissions standards and attendant monitoring, recordkeeping, and reporting requirements of the POWC MACT are contained in this permit, and compliance with these requirements also constitutes compliance with all requirements of MACT KK and/or NSPS RR.

¹¹ Subject to all other terms and conditions of this Title V operating permit, the 3M Nevada plant is authorized under Construction Permit Number 042004-002, to perform any number of modifications or installations of dry cleaning equipment listed in Attachment B of this permit. All such modifications/installations performed after issuance of this permit are assigned an EU as a group [e.g. If two new dry cleaning lines are installed, both lines are assigned EU2100].

| | | |
|--------|---|----|
| EU2110 | Pre-Approved Modification of Dry Cleaning Equipment(2e) | NA |
|--------|---|----|

Permit Condition (EU2100 and EU2110)-001

10 CSR 10-6.075

Maximum Achievable Control Technology Regulations

40 CFR Part 63, Subpart M

National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities

40 CFR Part 63, Subpart A

General Provisions

10 CSR 10-6.060

Construction Permit Required (Construction Permit Number 042004-002)

Emission Limitation:

According to Construction Permit Number 042004-002 the installation is required to comply with all applicable provisions of the most current version of 40 CFR 63, Subpart M, "National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities" for emission units EU2100 and EU2110. (see Attachment B)

EU2120 and EU2130¹²

Pre-Approved Installation of a Chromium Anodizing Tank (1f)

Pre-Approved Modification of a Chromium Anodizing Tank (2f)

| Emission Unit | Description | 2002 EIQ Reference # |
|---------------|---|----------------------|
| EU2120 | Pre-Approved Installation of a Chromium Anodizing Tank (1f) | NA |
| EU2130 | Pre-Approved Modification of a Chromium Anodizing Tank (2f) | NA |

Permit Condition (EU2120 and EU2130)-001

10 CSR 10-6.075

Maximum Achievable Control Technology Regulations

40 CFR Part 63, Subpart N

National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks

40 CFR Part 63, Subpart A

General Provisions

10 CSR 10-6.060

Construction Permit Required (Construction Permit Number 042004-002)

Emission Limitation:

According to Construction Permit Number 042004-002 the installation is required to comply with all applicable provisions of the most current version of 40 CFR 63, Subpart N, "National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks" for emission units EU2120 and EU2130. (see Attachment B)

EU2140 and EU2150

Pre-Approved Installation of a VOL Tank (1h)

¹² Subject to all other terms and conditions of this Title V operating permit, the 3M Nevada plant is authorized under Construction Permit Number 042004-002, to perform any number of modifications or installations of chromium anodizing tanks listed in Attachment B of this permit. All such modifications/installations performed after issuance of this permit are assigned an EU as a group [e.g. If three new chrome anodizing lines are installed, both lines are assigned EU2120].

| Pre-Approved Modification of a VOL Tank (2h) | | |
|--|--|----------------------|
| Emission Unit | Description | 2002 EIQ Reference # |
| EU2140 | Pre-Approved Installation of a VOL Tank (1h) | NA |
| EU2150 | Pre-Approved Modification of a VOL Tank (2h) | NA |

Permit Condition (EU2140 and EU2150)-001¹³

10 CSR 10-6.070

New Source Performance Regulations

40 CFR 60 Subpart Kb

Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels)
for Which Construction, Reconstruction or Modification Commenced After July 23, 1984

10 CSR 10-6.075

Maximum Achievable Control Technology Regulations

40 CFR Part 63, Subpart HHHHH

National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing [MCM]

40 CFR Part 63, Subpart EEEE

National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution [OLD]

40 CFR Part 63, Subpart A

General Provisions

10 CSR 10-6.060

Construction Permit Required (Construction Permit Number 042004-002)

Emission Limitation:

According to Construction Permit Number 042004-002 the installation is required to comply with all applicable provisions of the most current version of 40 CFR 60, Subpart Kb, "Standards of Performance for Volatile Organic Liquid Storage Vessels for which Construction, Reconstruction, or Modification Commenced After July 23, 1984" for emission units EU2140 and EU2150. (see Attachment B)

¹³ Certain installation/modification of VOL tanks which are performed subsequent to December 11, 2006, under authorization of EU2140 and/or EU2150, may constitute modification of an existing affected source under 40 CFR 63 Subpart HHHHH (National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing) and/or modification of an existing affected source under 40 CFR 63 Subpart EEEE (National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution). The permittee shall meet all applicable requirements of 40 CFR Part 63, Subpart HHHHH as of the compliance date of this rule [presently stated to be December 11, 2006], and shall meet all applicable requirements of 40 CFR Part 63, Subpart EEEE as of the compliance date of this rule [presently stated to be February 5, 2007].

IV. Core Permit Requirements

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements.

10 CSR 10-6.050, Start-up, Shutdown and Malfunction Conditions

1. In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days in writing the following information:
 - a) Name and location of installation;
 - b) Name and telephone number of person responsible for the installation;
 - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
 - d) Identity of the equipment causing the excess emissions;
 - e) Time and duration of the period of excess emissions;
 - f) Cause of the excess emissions;
 - g) Air pollutants involved;
 - h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
 - i) Measures taken to mitigate the extent and duration of the excess emissions; and
 - j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
2. The permittee shall submit the paragraph (1.) information list to the director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
3. Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph (1.) list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under section 643.080 or 643.151, RSMo.
4. Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
5. Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

10 CSR 10-6.060, Construction Permits Required

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

10 CSR 10-6.065, Operating Permits

The permittee shall file for renewal of this operating permit no sooner than eighteen months, nor later than six months, prior to the expiration date of this operating permit. The permittee shall retain the most current operating permit issued to this installation on-site and shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request.

10 CSR 10-6.110, Submission of Emission Data, Emission Fees and Process Information

1. The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) in accordance with the requirements outlined in this rule.
2. The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079 to satisfy the requirements of the Federal Clean Air Act, Title V.
3. The fees shall be due April 1 each year for emissions produced during the previous calendar year. The fees shall be payable to the Department of Natural Resources and shall be accompanied by the Emissions Inventory Questionnaire (EIQ) form or equivalent approved by the director.

10 CSR 10-6.130, Controlling Emissions During Episodes of High Air Pollution Potential

This rule specifies the conditions that establish an air pollution alert (yellow/red), watch or emergency and the associated procedures and emissions reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

10 CSR 10-6.150, Circumvention

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

10 CSR 10-6.180, Measurement of Emissions of Air Contaminants

1. The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be performed by qualified personnel.
2. The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
3. The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

10 CSR 10-3.030, Open Burning Restrictions

1. The permittee shall not conduct, cause, permit or allow a salvage operation, the disposal of trade wastes or burning of refuse by open burning.

2. Exception – Open burning of trade waste or vegetation may be permitted only when it can be shown that open burning is the only feasible method of disposal or an emergency exists which requires open burning.
 - a) Any person intending to engage in open burning shall file a request to do so with the director. The request shall include the following:
 1. The name, address and telephone number of the person submitting the application; The type of business or activity involved; A description of the proposed equipment and operating practices, the type, quantity and composition of trade wastes and expected composition and amount of air contaminants to be released to the atmosphere where known;
 2. The schedule of burning operations;
 3. The exact location where open burning will be used to dispose of the trade wastes;
 4. Reasons why no method other than open burning is feasible; and
 5. Evidence that the proposed open burning has been approved by the fire control authority which has jurisdiction.
3. Upon approval of the open burning permit application by the director, the person may proceed with the operation under the terms of the open burning permit. Be aware that such approval shall not exempt 3M-Nevada from the provisions of any other law, ordinance or regulation.
4. The permittee shall maintain files with letters from the director approving the open burning operation and previous DNR inspection reports.

10 CSR 10-3.090, Restriction of Emission of Odors

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour.

This requirement is not federally enforceable.

10 CSR 10-6.100, Alternate Emission Limits

Proposals for alternate emission limitations shall be submitted on Alternate Emission Limits Permit forms provided by the department. An installation owner or operator must obtain an Alternate Emission Limits Permit in accordance with 10 CSR 10-6.100 before alternate emission limits may become effective.

10 CSR 10-6.080, Emission Standards for Hazardous Air Pollutants

40 CFR Part 61 Subpart M, National Emission Standard for Asbestos

1. The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.
2. The permittee shall conduct monitoring to demonstrate compliance with registration, certification, notification, and Abatement Procedures and Practices standards as specified in 40 CFR Part 61, Subpart M.

10 CSR 10-6.250, Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the department to monitor training provided to employees. Each individual who works in asbestos abatement projects must first obtain certification for the appropriate occupation from the department. Each person who offers training for asbestos abatement

occupations must first obtain accreditation from the department. Certain business entities that meet the requirements for state-approved exemption status must allow the department to monitor training classes provided to employees who perform asbestos abatement.

Title VI – 40 CFR Part 82, Protection of Stratospheric Ozone

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
 - b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
 - c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
 - d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
 - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
 - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. (“MVAC-like” appliance as defined at §82.152).
 - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
 - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term “motor vehicle” as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term “MVAC” as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only – 40 CFR part 82*

10 CSR 10-6.280, Compliance Monitoring Usage

1. The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
 - a) Monitoring methods outlined in 40 CFR Part 64;

- b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - c) Any other monitoring methods approved by the director.
2. Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
- a) Monitoring methods outlined in 40 CFR Part 64;
 - b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - c) Compliance test methods specified in the rule cited as the authority for the emission limitations.
3. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
- a) Applicable monitoring or testing methods, cited in:
 - 1. 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
 - 2. 10 CSR 10-6.040, "Reference Methods";
 - 3. 10 CSR 10-6.070, "New Source Performance Standards";
 - 4. 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
 - b) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

V. General Permit Requirements

Permit Duration

10 CSR 10-6.065(6)(C)1.B.

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

General Record Keeping and Reporting Requirements

10 CSR 10-6.065(6)(C)1.C

1. Record Keeping
 - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
 - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
2. Reporting
 - a) The permittee shall submit a report of all required monitoring by:
 1. October 1st for monitoring which covers the January through June time period, and
 2. April 1st for monitoring which covers the July through December time period.
 3. Exception: Monitoring requirements which require reporting more frequently than semi annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
 - b) Each report must identify any deviations from emission limitations, monitoring, record keeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
 - c) All reports shall be submitted to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102.
 - d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
 1. Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7 of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if you wish to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and that you can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.
 2. Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semiannual report shall be reported on the schedule specified in the permit.

These supplemental reports shall be submitted to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.

- e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.
- f) The permittee may request confidential treatment of information submitted in any report of deviation.

Risk Management Plans Under Section 112(r)

10 CSR 10-6.065(6)(C)1.D.

1. The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:
 - a) June 21, 1999;
 - b) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or
 - c) The date on which a regulated substance is first present above a threshold quantity in a process.

Severability Clause

10 CSR 10-6.065(6)(C)1.F.

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

General Requirements

10 CSR 10-6.065(6)(C)1.G

1. The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
2. The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
3. The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and re-issuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, will not stay any permit condition.
4. This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
5. The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.

Incentive Programs Not Requiring Permit Revisions

10 CSR 10-6.065(6)(C)1.H.

No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

Compliance Requirements

10 CSR 10-6.065(6)(C)3.

1. Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
2. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
 - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
3. All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
 - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
 - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
4. The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually on April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 901 North 5th Street, Kansas City, Kansas 66101, as well as the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:
 - a) The identification of each term or condition of the permit that is the basis of the certification,
 - b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation,
 - c) Whether compliance was continuous or intermittent,
 - d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period, and
 - e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

Permit Shield

10 CSR 10-6.065(6)(C)6.

1. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
 - a) The applicable requirements are included and specifically identified in this permit; or
 - b) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.
2. Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
 - a) The provisions of section 303 of the Act or section 643.090, RSMo concerning emergency orders,
 - b) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
 - c) The applicable requirements of the acid rain program,
 - d) The administrator's authority to obtain information, or
 - e) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

Emergency Provisions

10 CSR 10-6.065(6)(C)7.

1. An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7. shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, you must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following: That an emergency or upset occurred and that you can identify the source of the emergency or upset,
 - a) That the installation was being operated properly,
 - b) That you took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
 - c) That you submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
2. Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

Operational Flexibility

10 CSR 10-6.065(6)(C)8.

1. An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program and the Administrator at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that established an emissions limit (including a work practice standard) or a

federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

- a) Section 502(b)(10) changes. Changes that, under section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), record keeping, reporting or compliance requirements of the permit.
 1. Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program and to the Administrator, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and this agency shall place a copy with the permit in the public file. Written notice shall be provided to the administrator and this agency at least seven days before the change is to be made. If less than seven days notice is provided because of a need to respond more quickly to these unanticipated conditions, The permittee shall provide notice to the administrator and the permitting authority as soon as possible after learning of the need to make the change.
 2. The permit shield shall not apply to these changes.

Off-Permit Changes

10 CSR 10-6.065(6)(C)9.

1. Except as noted below, The permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:
 - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; The permittee may not change a permitted installation without a permit revision, if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
 - b) The permittee must provide written notice of the change to the permitting authority and to the administrator no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under paragraph (6)(B)3. of this rule. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.
 - c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and
 - d) The permit shield shall not apply to these changes.

Responsible Official

10 CSR 10-6.020(2)(R)12.

The application utilized in the preparation of this was signed by Kenneth D. Bothof, Plant Manager. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of

limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

Reopening Permit For Cause

10 CSR 10-6.065(6)(E)6.

1. In accordance with 10 CSR 10-6.065(6)(E)6.A., this permit may be reopened with cause if:
 - a) The Missouri Department of Natural Resources (MDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
 - b) MDNR or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
 - c) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
 - d) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit; or
 - e) MDNR or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

Statement of Basis

10 CSR 10-6.065(6)(E)1.C.

This permit is accompanied by a statement setting forth the legal and factual basis for the draft permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

Attachment A

VOC Compliance Calculations and Worksheet

3M Commercial Graphics Division
Vernon County, S10, T35N, R3W
Project Number: 2003-06-024
Installation ID Number: 217-0004
Permit Number: **OP2005-023**

The calculation methods for demonstrating compliance with special condition 2 (A) are described below. Table A provides an example worksheet that will be used to identify the sources of VOC emissions, the emissions calculations method used, and the monthly emissions (tons).

Record keeping – Material Balance

On each day of operation, the Permittee shall record and maintain records of the total quantity of all materials used containing VOC at the facility. By the 15th of the month, the Permittee shall calculate and record the following:

1. The total usage of VOC containing materials for the previous calendar month using the daily VOC usage records. The record shall also include the VOC content of each material as determined by (1) Material Safety Data Sheet (MSDS) from the 3M Chemical Data Management System (CDMS), (2) 3M laboratory formulation sheet or (3) 3M product specification information, which ever is most representative for each material used; the record shall indicate the source of VOC content for each material used. Other alternative methods approved by the Director may be used. The Director reserves the right to require the Permittee to determine the VOC contents of any material according to EPA reference methods. The amount of VOC used for each month shall be determined by multiplying the amount of VOC containing materials used by the VOC content of each material.
2. The VOC emissions for each emissions unit and the total facility for the previous month. VOC emissions shall be determined from the total VOC used for each emissions unit multiplied by one minus the capture efficiency for each emissions unit multiplied by the control efficiency of any thermal oxidizer used, as represented in the following equation:

$$VOC\ emissions = VOC\ used\ (1 - capture\ efficiency \times control\ efficiency)$$

Where:

- VOC emissions are expressed as pounds (or tons)
- VOC used is expressed as pounds (or tons)
- Capture efficiency is expressed as a fraction (i.e., percent capture divided by 100)
- Control efficiency is expressed as a fraction (i.e., percent capture divided by 100)

Total facility VOC emissions shall be calculated by summing the VOC emissions from each emissions unit.

3. The 12 month rolling sum VOC emission for the previous 12 month period by summing the monthly VOC emissions data for the previous 12 months. This number shall be used to demonstrate compliance with Special Condition 2(A).
4. VOC emissions shall be recorded and maintained in a written or electronic form at the facility for a period of five years.

Attachment A (continued)

VOC Compliance Calculations and Worksheet

3M Commercial Graphics Division
Vernon County, S10, T35N, R3W
Project Number: 2003-06-024
Installation ID Number: 217-0004
Permit Number: **OP2005-023**

Record keeping – Emission Factor or Emission Model Calculations

On each day of operation, the Permittee shall record and maintain records of the total quantity of materials used or hours of operation for each VOC emissions unit. By the 15th of the month, the Permittee shall calculate and record the following:

1. The total usage of VOC containing materials or hours of operation for the previous calendar month using the daily production records. The record shall indicate the emission factor used to demonstrate compliance with Special Condition 2(A). Emission factors must be obtained from the most recent edition of AP-42, *Compilation of Air Pollutant Emission Factors*, the most recent stack test report, a mass balance approach (described above), and/or by a method approved by the Air Pollution Control Program. Documentation sufficient to support the emission factors must accompany Attachment A required by Special Condition 2(B).
2. The VOC emissions for each emissions unit and the total facility for the previous month. VOC emissions shall be determined by multiplying the quantity of materials used or hours of operation by an emissions factor, as represented in the following equation:

$$VOC\ emissions = Materials\ Used\ or\ Hours\ of\ Operation \times Emission\ Factor$$

Total facility VOC emissions shall be calculated by summing the VOC emissions from each emissions unit.

3. The 12 month rolling sum VOC emission for the previous 12 month period by summing the monthly VOC emissions data for the previous 12 months. This number shall be used to demonstrate compliance with Special Condition 2(A).
4. VOC emissions shall be recorded and maintained in a written or electronic form at the facility for a period of five years.

Attachment B - Pre-Approved Changes

| Pre-Approved Change | | | Regulated Substances | Applicable Standards | |
|---------------------|----------------------|--|--|--|--|
| | | | | Federal | State of Missouri |
| 1 | Install ¹ | (a) a web coating line ² | VOC, HAP | MACT 40 CFR 63 Subpart JJJJ | NONE |
| | | | IF: natural gas OR propane, THEN: PM, SOx, NOx | NONE | 10 CSR 10-6.260 10 CSR 10-3.060 |
| | | (b) a coating line used in the manufacture of pressure sensitive tape and label materials ³ | VOC, HAP | NSPS 40 CFR 60 Subpart RR | NONE |
| | | | IF: natural gas OR propane, THEN: PM, SOx, NOx | NONE | 10 CSR 10-6.260 10 CSR 10-3.060 |
| | | (c) a product and packaging rotogravure or wide-web flexographic printing press ⁴ | VOC, HAP | MACT 40 CFR 63 Subpart KK | NONE |
| | | | IF: natural gas OR propane, THEN: PM, SOx, NOx | NONE | 10 CSR 10-6.260 10 CSR 10-3.060 |
| | | (d) equipment for processing and/or handling raw materials associated with coating operations | VOC, HAP | MACT 40 CFR 63 Subpart JJJJ And/Or 40 CFR 63 Subpart KK | NONE |
| | | | PM | | 10 CSR 10-6.400 |
| | | (e) dry cleaning equipment ⁵ | Perchloroethylene | MACT 40 CFR 63 Subpart M | NONE |
| | | (f) a chromium anodizing tank ⁶ | Chromium | MACT 40 CFR 63 Subpart N | NONE |
| | | (g) a thermal oxidizer | VOC, HAP | | as required by applicable requirements under Pre-Approved Projects 1(a), 1(b), OR 1(c) |
| | | | PM, SOx, NOx | NONE | 10 CSR 10-6.260 10 CSR 10-3.060 |
| | | (h) a VOL tank (fixed roof) ⁷ | VOC, HAP | IF: V ≥ 19,800 gal, THEN: NSPS: 40 CFR 60 sub Kb | NONE |
| | | (i) a solvent cold cleaner | VOC, HAP (non-halogen) | | NONE |
| 2 | Modify ¹ | (a) a web coating line | Same as Pre-Approved Project 1(a) above | | |
| | | (b) a coating line used in the manufacture of pressure sensitive tape and label materials | Same as Pre-Approved Project 1(b) above | | |
| | | (c) a product and packaging rotogravure or wide-web flexographic printing press | Same as Pre-Approved Project 1(c) above | | |
| | | (d) equipment for processing and/or handling raw materials associated with coating operations | Same as Pre-Approved Project 1(d) above | | |
| | | (e) dry cleaning equipment | Same as Pre-Approved Project 1(e) above | | |
| | | (f) a chromium anodizing tank | Same as Pre-Approved Project 1(f) above | | |
| | | (g) a thermal oxidizer | Same as Pre-Approved Project 1(g) above | | |
| | | (h) a VOL tank (fixed roof) | Same as Pre-Approved Project 1(h) above | | |
| 3 | Changes Materials | (a) use of a new raw material or ingredient in a coating solution | VOC, HAP | | |
| | | (b) use of a new coating solution | VOC, HAP | | |

Attachment B (continued)

Pre-Approved Changes

Footnotes

¹The terms *install*, *construct*, and *modify*, for purposes of this table, have operational rather than regulatory meaning. For example, in some cases one or more of the listed *installation* projects might meet the regulatory definition of a *modification* rather than *construction*, according to its applicable regulation.

²A **web coating line** means any number of work stations, of which one or more applies a continuous layer of coating material across the entire width or any portion of the width of a web substrate, and any associated curing/drying equipment between an unwind or feed station and a rewind or cutting station, AND:

- Web means a continuous substrate (e.g., paper, film, foil) which is flexible enough to be wound or unwound as rolls.
- Includes ancillary equipment which meets the definition of "affiliated equipment" addressed in the preamble of the POWC MACT

³Means any number or combination of adhesive, release, or precoat coating applicators, flashoff areas, and ovens which coat a continuous web, located between a web unwind station and a web rewind station, to produce pressure sensitive tape and label materials, AND:

- Coating applicator means an apparatus used to apply a surface coating to a continuous web.
- Flashoff area means the portion of a coating line after the coating applicator and usually before the oven entrance.
- Hood or enclosure means any device used to capture fugitive volatile organic compounds.
- Oven means a chamber which uses heat or irradiation to bake, cure, polymerize, or dry a surface coating.
- Precoat means a coating operation in which a coating other than an adhesive or release is applied to a surface during the production of a pressure sensitive tape or label product.

⁴**Product and packaging rotogravure printing** means the production, on a rotogravure press, of any printed substrate. This includes, but is not limited to, folding cartons, flexible packaging, labels and wrappers, gift wraps, wall and floor coverings, upholstery, decorative laminates, and tissue products.

Wide-web flexographic press means a flexographic press capable of printing substrates greater than 18 inches in width, AND: Flexographic press means an unwind or feed section, a series of individual work stations, one or more of which is a flexographic print station, any dryers (including interstage dryers and overhead tunnel dryers) associated with the work stations, and a rewind, stack, or collection station. The work stations may be oriented vertically, horizontally, or around the circumference of a single large impression cylinder. Inboard and outboard work stations, including those employing any other technology, such as rotogravure, are included if they are capable of printing or coating on the same substrate.

⁵Means each dry-to-dry machine and its ancillary equipment or a transfer machine system and its ancillary equipment, AND:

- Ancillary equipment means the equipment used with a dry cleaning machine in a dry cleaning system including, but not limited to, emission control devices, pumps, filters, muck cookers, stills, solvent tanks, solvent containers, water separators, exhaust dampers, diverter valves, interconnecting piping, hoses, and ducts.
- Dry-to-dry machine means a one-machine dry cleaning operation in which washing and drying are performed in the same machine.

⁶**Chromium electroplating or chromium anodizing tank** means the receptacle or container in which hard or decorative chromium electroplating or chromium anodizing occurs.

- Decorative chromium electroplating means the process by which a thin layer of chromium (typically 0.003 to 2.5 microns) is electrodeposited on a base metal, plastic, or undercoating to provide a bright surface with wear and tarnish resistance. In this process, the part(s) serves as the cathode in the electrolytic cell and the solution serves as the electrolyte. Typical current density applied during this process ranges from 540 to 2,400 Amperes per square meter (A/m²) for total plating times ranging between 0.5 to 5 minutes.
- Hard chromium electroplating or industrial chromium electroplating means a process by which a thick layer of chromium (typically 1.3 to 760 microns) is electrodeposited on a base material to provide a surface with functional properties such as wear resistance, a low coefficient of friction, hardness, and corrosion resistance. In this process, the part serves as the cathode in the electrolytic cell and the solution serves as the electrolyte. Hard chromium electroplating process is performed at current densities typically ranging from 1,600 to 6,500 A/m² for total plating times ranging from 20 minutes to 36 hours depending upon the desired plate thickness.
- Chromium anodizing means the electrolytic process by which an oxide layer is produced on the surface of a base metal for functional purposes (e.g., corrosion resistance or electrical insulation) using a chromic acid solution. In chromium anodizing, the part to be anodized acts as the anode in the electrical circuit, and the chromic acid solution, with a concentration typically ranging from 50 to 100 grams per liter (g/L), serves as the electrolyte.

⁷Means each tank, reservoir, or container used for the storage of volatile organic liquids, not including frames, housing, auxiliary supports, or other components that are not directly involved in the containment of liquids or vapors.

Processes Added/Removed/Modified from VOC Compliance Worksheet

[illegible]

³If equipment is being added, list date of commencement of operation (including startup). If equipment is being removed, list date of removal from installation.

Calculation of Potential to Emit of Non-VOC Pollutants for Pre-Approved Changes Worksheet

[illegible]

³The summation of non-VOC potential emissions for all equipment. For potential emissions greater than de minimis levels, 3M must comply with de minimis limitations as set forth in Special Condition 23.

Attachment E

Non-VOC Compliance Calculations and Worksheet

3M Commercial Graphics Division
Vernon County, S10, T35N, R3W
Project Number: 2003-06-024
Installation ID Number: 217-0004
Permit Number: **OP2005-023**

[illegible]

Description of equipment including emission point identification. This log shall include any equipment with potential emissions of pollutants greater than de minimis as specified in Special Condition 23. The pollutant being tracked should be indicated above.

²Amount of material processed for combustion sources is the amount of natural gas/propane combusted. Units should be specified in the chart.

³The units for the emission factor used should correspond with the units used for amount of material processed. For combustion sources, the emission factor should be obtained from the EPA document AP-42.

⁴ Amount of Material Processed x Emission Factor x 0.0005.

⁵Sum of last 12-months of Monthly Emissions. A 12-Month Total pollutant emissions not in excess of de minimis levels indicates compliance.

Attachment F

VOC Compliance Calculations and Worksheet for N3 Maker

3M Commercial Graphics Division
Vernon County, S10, T35N, R3W
Project Number: 2003-06-024
Installation ID Number: 217-0004
Permit Number: **OP2005-023**

| This sheet covers month, year from | | to | | | |
|------------------------------------|------------------------------------|---|------------------------------|---|---------------------------------|
| Month | Equipment Description ¹ | Amount of Material Processed ² | Emission Factor ³ | Monthly Emissions of Pollutant ⁴ | 12-Month Emissions ⁵ |
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¹Description of equipment including emission point identification. This log shall include any emissions associated with N3 Maker as specified in Special Condition 24.

²Amount of material used at N3 Maker. Amount of material processed for combustion sources is the amount of natural gas/propane combusted. Units should be specified in the chart.

³The units for the emission factor used should correspond with the units used for amount of material processed. For combustion sources, the emission factor should be obtained from the EPA document AP-42. For VOC content, use Material Safety Data Sheets (MSDS).

⁴Amount of Material Processed x Emission Factor x 0.0005.

⁵Sum of last 12-months of Monthly Emissions. A 12-Month Total VOC emissions less than 99.5 tons indicates compliance.

Attachment G

VOC Compliance Calculations and Worksheet for 48 Maker

3M Commercial Graphics Division
Vernon County, S10, T35N, R3W
Project Number: 2003-06-024
Installation ID Number: 217-0004
Permit Number: **OP2005-023**

| This sheet covers month, year from | | to | | | |
|------------------------------------|------------------------------------|---|------------------------------|---|---------------------------------|
| Month | Equipment Description ¹ | Amount of Material Processed ² | Emission Factor ³ | Monthly Emissions of Pollutant ⁴ | 12-Month Emissions ⁵ |
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¹Description of equipment including emission point identification. This log shall include any emissions associated with 48 Maker as specified in Special Condition 24.

²Amount of material used at 48 Maker. Amount of material processed for combustion sources is the amount of natural gas/propane combusted. Units should be specified in the chart.

³The units for the emission factor used should correspond with the units used for amount of material processed. For combustion sources, the emission factor should be obtained from the EPA document AP-42. For VOC content, use Material Safety Data Sheets (MSDS).

⁴Amount of Material Processed x Emission Factor x 0.0005.

⁵Sum of last 12-months of Monthly Emissions. A 12-Month Total VOC emissions less than 99.5 tons indicates compliance.

Attachment H

This attachment may be used to help meet the record keeping requirements of Permit Condition PW002.

[illegible]

Attachment I

This attachment may be used to help meet the record keeping requirements of Permit Conditions: (EU0010 through EU0020)-003.

| Method 22 (Outdoor) Observation Log | | |
|---|--|---|
| Emission Unit | | |
| Observer | Date | |
| Sky Conditions | | |
| Precipitation | | |
| Wind Direction | Wind Speed | |
| Sketch process unit: Indicate the position relative to the source and sun; mark the potential emission points and/or the observing emission points. | | |
| Observation Clock Time | Observation Period Duration (minute:second) | Accumulative Emission Time (minute:second) |
| Begin Observation | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| End Observation | | |

Attachment J

This attachment may be used to help meet the record keeping requirements of Permit Conditions:

[illegible]

Attachment K

This attachment may be used to help meet the record keeping requirements of Permit Conditions:

| Method 9 Opacity Emissions Observations | |
|---|-----------------------------|
| Company | Observer |
| Location | Observer Certification Date |
| Date | Emission Unit |
| Time | Control Device |

Attachment L

This attachment may be used to help meet the record keeping requirements of Permit Conditions:.

[illegible]

Attachment M

This attachment may be used to help meet the record keeping requirements of Permit Conditions: (EU0010 through EU0020)-001.

| Unit Description | Heat Input (Q) |
|--|-----------------------|
| Boiler No. 1 | 10.40 MMBtu/hr |
| Boiler No. 2 | 10.40 MMBtu/hr |
| Total Installation Heat Input (Q) | 20.80 MMBtu/hr |
| PM Allowable Emission Limitation for "New" Units ¹ $E = 1.31(Q)^{-0.338}$ | 0.47 lb PM/MMBtu |
| PM Allowable Emission Limitation for "Existing" Units ¹ $E = 0.90(Q)^{-0.174}$ | 0.53 lb PM/MMBtu |

¹Compliance calculations for the units subject to 10 CSR 10-5.030 can be found in Attachment N.

Attachment N

This attachment may be used to help meet the record keeping requirements of Permit Conditions: (EU0010 through EU0020)-001.

| Unit | Fuel | Maximum Hourly Design Rate ¹ | Emission Factor ² | Heat Capacity (MMBtu/hr) | Potential Emission Rate ³ (lbs/MMBtu) | Emission Limitation (lbs/MMBtu) |
|--------|--------------------|---|---------------------------------|-----------------------------|--|---------------------------------------|
| EU0010 | Natural Gas | 0.0099 | 7.60 | 10.40 | 0.01 | 0.53 |
| | Fuel Oil No. 1 & 2 | 0.0743 | 2.00 | | 0.01 | 0.53 |
| EU0020 | Natural Gas | 0.0099 | 7.60 | 10.40 | 0.01 | 0.53 |
| | Fuel Oil No. 1 & 2 | 0.0743 | 2.00 | | 0.01 | 0.53 |

¹Natural Gas: 1050 MMBtu/MMCF
Units: MMCF/hr
Fuel Oil: 140 MMBtu/10³ gallons
Units: 10³ gallons/hr

²Natural Gas: Emission Factor Source = AP42 Sec 1.4 (7/98)
Units: lb PM/MMCF
Fuel Oil: Emission Factor Source = AP42 Sec. 1.3 (9/78)
Units: lb PM/10³ gallons

³Potential PM Emission Rate = Max. Hourly Design Rate (units/hr) * Emission Factor (lb/units) * (1/Boiler Heat Capacity [MMBtu/hr])

STATEMENT OF BASIS

Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

1. Part 70 Operating Permit Application, received July 11, 1996; revised June 5, 2003
2. 2003 Emissions Inventory Questionnaire, received April 1, 2004;
3. U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.
4. Air Pollution Control Program Permit to Construct Number 0278-005
5. Air Pollution Control Program Permit to Construct Number 0478-004
6. Air Pollution Control Program Permit to Construct Number 1278-002
7. Air Pollution Control Program Permit to Construct Number 0782-002
8. Air Pollution Control Program Permit to Construct Number 0184-013
9. Air Pollution Control Program Permit to Construct Number 0184-014
10. Air Pollution Control Program Permit to Construct Number 0184-015
11. Air Pollution Control Program Permit to Construct Number 0184-016
12. Air Pollution Control Program Permit to Construct Number 0184-017
13. Air Pollution Control Program Permit to Construct Number 0884-005
14. Air Pollution Control Program Permit to Construct Number 0585-001
15. Air Pollution Control Program Permit to Construct Number 0988-003
16. Air Pollution Control Program Permit to Construct Number 0289-005
17. Air Pollution Control Program Permit to Construct Number 0590-011
18. Air Pollution Control Program Permit to Construct Number 0590-012
19. Air Pollution Control Program Permit to Construct Number 0291-003
20. Air Pollution Control Program Permit to Construct Number 0395-012
21. Air Pollution Control Program Permit to Construct Number 0895-025
22. Air Pollution Control Program Permit to Construct Number 1095-014
23. Air Pollution Control Program Permit to Construct Number 1195-009
24. Air Pollution Control Program Permit to Construct Number 1195-018
25. Air Pollution Control Program Permit to Construct Number 0396-019
26. Air Pollution Control Program Permit to Construct Number 0396-020
27. Air Pollution Control Program Permit to Construct Number 0596-010 (Temporary)
28. Air Pollution Control Program Permit to Construct Number 0596-011 (Temporary)
29. Air Pollution Control Program Permit to Construct Number 0796-003
30. Air Pollution Control Program Permit to Construct Number 1096-003
31. Air Pollution Control Program Permit to Construct Number 0297-017
32. Air Pollution Control Program Permit to Construct Number 1098-017
33. Air Pollution Control Program Permit to Construct Number 1098-017A
34. Air Pollution Control Program Permit to Construct Number 1098-017B
35. Air Pollution Control Program Permit to Construct Number 0199-025
36. Air Pollution Control Program Permit to Construct Number 0899-012 (Temporary)
37. Air Pollution Control Program Permit to Construct Number 012000-020 (Temporary)
38. Air Pollution Control Program Permit to Construct Number 002004-000 (Flexible)

Applicable Requirements Included in the Operating Permit but Not in the Application

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

1. 10 CSR 10-6.100, *Alternate Emission Limits*

This rule has been deemed to be applicable to all installations and is, as such, included in the operating permit as a core permit requirement.

2. 10 CSR 10-6.180, *Measurement of Emissions of Air Contaminants*,

This rule has been included in the operating permit in order to provide citing for the allowance of requests for emissions data results. On past forms issued by the Air Pollution Control Program, including the application for this permit, it was automatically marked as an administrative rule not required to be listed as an applicable requirement. It is no longer judged to be solely administrative and is, therefore, included in the operating permit as a core permit requirement.

3. 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*,

10 CSR 10-3.080, *Restriction of Emission of Visible Air Contaminants*, has been rescinded and removed from the SIP. It has been replaced by 10 CSR 10-6.220 *Restriction of Emission of Visible Air Contaminants*, which is an applicable requirement in the operating permit.

4. 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds*,

This rule has essentially replaced 10 CSR 10-3.100, *Restriction of Emission of Sulfur Compounds*, and 10 CSR 10-3.150, *Restriction of Emission of Sulfur Compounds From Indirect Heating Sources*. It has been determined to be applicable to the installation and therefore has been included in the operating permit.

Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program (APCP) has determined the following requirements to not be applicable to this installation at this time for the reasons stated.

Missouri Air Conservation Law, *Asbestos Abatement*, 643.225 through 643.250; 10 CSR 10-6.080, *Emission Standards for Hazardous Air Pollutants, Subpart M, National Standards for Asbestos*; and 10 CSR 10-6.250, *Asbestos Abatement Projects - Certification, Accreditation, and Business Exemption Requirements*

The installation is subject to these regulations if they undertake any projects that deal with or involve any asbestos containing materials. In the installation's operating projects were underway at the time of this review that deal with or involve asbestos containing material at this installation. Therefore, the above regulations were not cited in the operating permit.

If the installation should undertake any construction or demolition projects in the future that deal with or involve any asbestos containing materials, the installation must follow all of the applicable requirements of the above rules related to that specific project.

Construction Permit Revisions

The following revisions were made to construction permits for this installation:

1) *Construction Permit # 0278-005*

In the APCP database this permit is marked as a Construction Permit # 0278-005A which would indicate an amendment to a Construction Permit # 0278-005. It is not the case. In the early days of the of the

Construction Permit Program, any change, (including editorial changes, spelling errors, etc.), to a construction permit were marked with a letter A. Thus, the most recent version of the permit was always marked with "A". However, it was never intended to be a "stand-alone" amended permit as the case would be today. The permit has no special conditions permit thus the permit was no included within the body of the operating permit.

2) *Construction Permit # 0478-004*

In the APCP database this permit is marked as a Construction Permit # 0478-004A which would indicate an amendment to a Construction Permit # 0478-004. It is not the case. In the early days of the of the Construction Permit Program, any change, (including editorial changes, spelling errors, etc.), to a construction permit were marked with a letter A. Thus, the most recent version of the permit was always marked with "A". However, it was never intended to be a "stand-alone" amended permit as the case would be today. The permit has no special conditions thus the permit was no included within the body of the operating permit.

3) *Construction Permit # 1278-002*

This permit was for an authority to construct a sparging vat to remove solvents from rags, gloves, and filters contaminated with organic solvents. There were no Special Conditions in the permit thus the permit was no included within the body of the operating permit.

4) *Construction Permit # 0782-002*

The special conditions of this permit were superceded by the conditions of Construction Permit # 042004-002. Per 3M letter received on August 1, 1984 the DMC line was shutdown on April 30, 1984. In the APCP database this permit is marked as a Construction Permit # 0782-002A which would indicate an amendment to a Construction Permit # 0782-002. It is not the case. In the early days of the of the Construction Permit Program, any change, (including editorial changes, spelling errors, etc.), to a construction permit were marked with a letter A. Thus, the most recent version of the permit was always marked with "A". However, it was never intended to be a "stand-alone" amended permit as the case would be today.

5) *Construction Permits # 0184-013 through 017*

In the APCP database these permits are marked as a Construction Permits # 0184-013A through 017A which would indicate an amendments to a Construction Permits # 0184-013 through 017. It is not the case. In the early days of the of the Construction Permit Program, any change, (including editorial changes, spelling errors, etc.), to a construction permit were marked with a letter A. Thus, the most recent version of the permit was always marked with "A". However, it was never intended to be a "stand-alone" amended permit as the case would be today. These permits have no special conditions and the permits were not included within the body of the operating permit.

6) *Construction Permit # 0884-005*

This permit was given to construct a 3-Roll Mixer. In the APCP database this permit is marked as a Construction Permit # 0884-005A which would indicate an amendment to a Construction Permit # 0884-005. It is not the case. In the early days of the of the Construction Permit Program, any change, (including editorial changes, spelling errors, etc.), to a construction permit were marked with a letter A. Thus, the most recent version of the permit was always marked with "A". However, it was never intended to be a "stand-alone" amended permit as the case would be today. The permit has no special conditions thus the permit was no included within the body of the operating permit.

7) *Construction Permit # 0585-001*

This permit was given to construct a corona treater. In the APCP database this permit is marked as a Construction Permit # 0585-001A which would indicate an amendment to a Construction Permit # 0585-001. It is not the case. In the early days of the of the Construction Permit Program, any change, (including editorial changes, spelling errors, etc.), to a construction permit were marked with a letter A. Thus, the most recent version of the permit was always marked with "A". However, it was never intended to be a "stand-alone" amended permit as the case would be today. The permit has no special conditions thus the permit was no included within the body of the operating permit.

8) *Construction Permit # 0289-005*

This permit was given to construct a tote and drum cleaning system. In the APCP database this permit is marked as a Construction Permit # 0289-005A which would indicate an amendment to a Construction Permit # 0289-005. It is not the case. In the early days of the of the Construction Permit Program, any change, (including editorial changes, spelling errors, etc.), to a construction permit were marked with a letter A. Thus, the most recent version of the permit was always marked with "A". However, it was never intended to be a "stand-alone" amended permit as the case would be today. The permit has no special conditions thus the permit was no included within the body of the operating permit.

9) *Construction Permit # 0988-003*

This permit was given to construct a replacement boiler rated for a maximum design heat input rate of 30.6 MMBTU, fired by natural gas, with No. 2 fuel oil as a backup fuel. In the APCP database this permit is marked as a Construction Permit # 0988-003A which would indicate an amendment to a Construction Permit # 0988-003. It is not the case. In the early days of the of the Construction Permit Program, any change, (including editorial changes, spelling errors, etc.), to a construction permit were marked with a letter A. Thus, the most recent version of the permit was always marked with "A". However, it was never intended to be a "stand-alone" amended permit as the case would be today. The permit has no special conditions thus the permit was no included within the body of the operating permit.

10) *Construction Permit # 0590-011*

The special conditions of this permit were superceded by the conditions of Construction Permit # 042004-002.

11) *Construction Permit # 0590-012*

The special conditions of this permit were superceded by the conditions of Construction Permit # 042004-002.

12) *Construction Permit # 0291-003*

The special conditions of this permit were superceded by the conditions of Construction Permit # 042004-002.

13) *Construction Permit # 0395-012*

The special conditions of this permit were superceded by the conditions of Construction Permit # 042004-002.

14) *Construction Permit # 0895-025*

The special conditions of this permit were superceded by the conditions of Construction Permit # 042004-002.

15) *Construction Permit # 0596-010*

On May 10, 1996, the installation was issued a temporary permit for a one-time experiment on the 40 Maker. The temporary permit expired two weeks after the initial startup date of the experiment and the experiment was to be initiated no more than 180 days from the date of receipt of the permit (05/10/1996). Therefore, the temporary permit was not included in the operating permit.

16) *Construction Permit # 0596-011*

On May 10, 1996, the installation was issued a temporary permit for the N2 Process. The temporary permit limited the experiment to two years. The permit has expired and was not included in the operating permit.

17) *Construction Permit # 1095-014*

The special conditions of this permit were superceded by the conditions of Construction Permit # 042004-002.

18) *Construction Permit # 1195-009*

The special conditions of this permit were superceded by the conditions of Construction Permit # 042004-002.

19) *Construction Permit # 1195-018*

The special conditions of this permit were superceded by the conditions of Construction Permit # 042004-002. There is also a Construction Permit # 1195-018A listed in the database. However, it is more of a clarification letter than an amended permit and is treated here as an integral part of the Construction Permit # 1195-018.

20) *Construction Permit # 0396-019*

The special conditions of this permit were superceded by the conditions of Construction Permit # 042004-002.

On March 13, 2003 the Air Pollution Control Program (APCP) has received a letter requesting to amend Permit Number 0396-019 for the 3M plant located in Nevada, Missouri.

On February 27, 1996, 3M was issued a permit for the operation of Maker 49 (Permit Number 0396-019). In the permit, 3M proposed to operate a thermal oxidizer to reduce Volatile Organic Compound (VOC) emissions and comply with the New Source Performance Standards (NSPS) Subpart RR for Pressure Sensitive Tape and Label Surface Coating Operations. Subpart RR requires an affected facility to either limit emissions to not more than 0.20 kg VOC/kg of coating solids or demonstrate a VOC emissions reduction of 90 percent overall.

Since the permit issuance, 3M has been approved by the APCP Enforcement Section to demonstrate compliance using compliant material (i.e. 0.20 kg VOC/kg of coating solids). Therefore, the thermal oxidizer was no longer required as a control device for Maker 49. As indicated in the letter, 3M will continue to use the thermal oxidizer to control odors that may result from a portion of the Maker 49 process.

Although the subject of the letter is, "New Source Review Permit Amendment – Project Number: 2003-03-073", it was never intended as a permit amendment but more as a permit clarification/addition and as such was a part of the original Construction Permit # 0396-019. This letter, as a part of the original March 13, 2003 was also superceded by the Construction Permit # 042004-002.

21) *Construction Permit # 0796-003*

This permit was issued to construct a New Lathe. The permit has no special conditions thus the permit was no included within the body of the operating permit

22) *Construction Permit # 1096-003*

This permit was for an authority to construct a solvent recovery system. There were no Special Conditions in the permit thus the permit was no included within the body of the Operating Permit .

23) *Construction Permit # 1098-017*

The special conditions of this permit were superceded by the conditions of Construction Permit # 042004-002.

24) *Construction Permit # 1098-017A*

The special conditions of this permit were superceded by the conditions of Construction Permit # 042004-002.

25) *Construction Permit # 1098-017B*

The special conditions of this permit were superceded by the conditions of Construction Permit # 042004-002.

26) *Construction Permit # 0199-025*

This permit was issued to construct parts cleaning vat. The permit has no special conditions thus the permit was no included within the body of the operating permit

27) *Construction Permit # 0899-012*

On May 10, 1996, the installation was issued a temporary permit for the N2 Process. The temporary permit limited the experiment to two years. The permit has expired and was not included in the operating permit.

28) *Construction Permit # 012000-020*

On January 8, 2000 the installation was issued a temporary permit to install two 175 kW/hr generators. The permit expired on March 31, 2000 and was not included in the operating permit.

29) *Construction Permit # 042004-002.*

All special conditions of this permit are incorporated into the operating permit.

NSPS Applicability

10 CSR 10-6.070, *New Source Performance Regulations*

40 CFR 60, Subpart Kb, *Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984*

The requirements of this part apply to any liquid hazardous waste storage tank operated on premises of 3M Nevada facility. 3M-Commercial Graphics Division in Nevada, Missouri is required to follow the regulations of this part.

Heptane Tank and Xylene Tank are subject to Subpart Kb. Since the applicability date and minimum volume are July 24, 1984 and 40 cubic meters (m³) respectively, the rule does/does not apply to Methyl Ethyl Ketone Tank, Diisobutyl Tank and the Cleaning Solvent Tank # T100.

| | | K _b Applicability |
|--------|--|------------------------------|
| EU0040 | Heptane Tank. 20,000 gallons (75.1m ³), installed 1990. | Yes |
| EU0050 | Methyl Ethyl Ketone Tank. 15,000 gallons (56.8m ³), installed 1990. | No |
| EU0060 | Xylene Tank. 20,000 gallons (75.1m ³), installed 1990. | Yes |
| EU0070 | Diisobutyl Ketone Tank. 15,000 gallons (56.8m ³), installed 1990. | No |
| EU0080 | Cleaning Solvent Tank #T100. 15,000 gallons (56.8m ³), installed 1990. | No |

MACT Applicability

3M Nevada is a major source of VOC and NO_x but is not a major source of HAPs. 3M elected to attain compliance with VOC emissions through compliance with specific MACT regulations. There are however, several new MACT (112j) regulations that the facility may be subject to in the future. On request of 3M, MACT applicability explanations/determinations were placed in footnotes within the text of the Operating Permit.

NESHAP Applicability

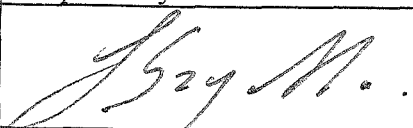
There are no applicable NESHAP regulations.

Other Regulatory Determinations

10 CSR 10-6.400, "Restriction of Emission of Particulate Matter from Industrial Processes"

The only sources of particulate emissions for the facility are two boilers, EU0010 and EU0020. The particulate emissions from the boilers are already regulated under 10 CSR 10-3.060, "Maximum Allowable Emission of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating". Analysis of the potential to emit indicates that the facility is below the 0.5 lbs/hr applicability threshold for 10 CSR 10-6.400.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the APCP's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the APCP a schedule for achieving compliance for that regulation(s).

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| Prepared by: |
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| Slawomir Szydlo, P.E. |
| Environmental Engineer |