

AIR EMISSION PERMIT NO. 13900113-001

IS ISSUED TO

Medallion Cabinetry, Inc. - Shakopee
4571 Valley Industrial Boulevard South
Shakopee, Scott County, MN 55379

The emission units, control equipment and emission stacks at the stationary source authorized in this permit are as described in the following permit application(s):

Permit Type
Total Facility Operating Permit

Application Date
January 6, 2005

This permit authorizes the permittee to operate and construct the stationary source at the address listed above unless otherwise noted in Table A. The permittee must comply with all the conditions of the permit. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. 7007.1150 to 7007.1500. Terms used in the permit are as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

Permit Type: Part 70/Limits to Avoid NSR

Authorization to Construct and Operate (40 CFR 52.21) Issuance Date: June 21, 2005

Authorization to Construct and Operate (40 CFR 52.21) Effective Date: June 21, 2005

Final Permit Issuance Date: July 18, 2005

Expiration: July 18, 2010

All Title I Conditions do not expire.

Richard J. Sandberg, Manager
Air Quality Permits Section
Industrial Division

for Sheryl A. Corrigan
Commissioner
Minnesota Pollution Control Agency

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NOTICE TO THE PERMITTEE:

Your stationary source may be subject to the requirements of the Minnesota Pollution Control Agency's (MPCA) solid waste, hazardous waste, and water quality programs. If you wish to obtain information on these programs, including information on obtaining any required permits, please contact the MPCA general information number at:

Metro Area	(651) 296-6300
Outside Metro Area	1-800-657-3864
TTY	(651) 282-5332

The rules governing these programs are contained in Minn. R. chs. 7000-7105. Written questions may be sent to: Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

Questions about this air emission permit or about air quality requirements can also be directed to the telephone numbers and address listed above.

PERMIT SHIELD:

Subject to the limitations in Minn. R. 7007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition. Subject to the limitations of Minn. R. 7007.1800 and 7017.0100, subp. 2, notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

FACILITY DESCRIPTION:

This permit authorizes Medallion Cabinetry, Inc. to construct and operate a new cabinet finishing facility. The main processes that will generate emissions are surface coating and combustion of natural gas. The coating operations emit volatile organic compounds (VOCs), several hazardous air pollutants (HAPs), and particulate matter and particulate matter less than 10 microns (PM/PM₁₀). The facility will install three new spray booths that will have high-efficiency pleated panel filters to control PM/PM₁₀. HAPs are from solvents in the coatings used for surface coating operations, and include cumene, ethyl benzene, formaldehyde, glycol ethers, methanol, toluene, and xylene.

TABLE A: LIMITS AND OTHER REQUIREMENTS

07/18/05

Facility Name: Medallion Cabinetry Inc - Shakopee

Permit Number: 13900113 - 001

Table A contains limits and other requirements with which your facility must comply. The limits are located in the first column of the table (What To do). The limits can be emission limits or operational limits. This column also contains the actions that you must take and the records you must keep to show that you are complying with the limits. The second column of Table A (Why to do it) lists the regulatory basis for these limits. Appendices included as conditions of your permit are listed in Table A under total facility requirements.

Subject Item:**Total Facility**

What to do	Why to do it
This permit establishes limits on the facility to keep it a minor source under New Source Review. The Permittee cannot make any change at the source that would make the source a major source under New Source Review until a permit amendment has been issued. This includes changes that might otherwise qualify as insignificant modifications and minor or moderate amendments.	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21
Insignificant Activities: The Permittee shall evaluate the emissions from changes made under Minn. R. 7007.1300 PRIOR TO MAKING THE CHANGE. The Permittee shall not make any change that causes emissions to exceed permit thresholds in Minn. R. ch. 7007 without first obtaining a major permit amendment. Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350 subp. 2), including records of the emissions resulting from those changes.	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21
OPERATIONAL REQUIREMENTS	hdr
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.	Minn. R. 7011.0020
Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated, unless otherwise noted in Table A.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O & M plan shall identify all air pollution control equipment and control practices and shall include a preventative maintenance program for the equipment and practices, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment and practices to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment and practices, and the records kept to demonstrate plan implementation.	Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J)
Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.	Minn. R. 7019.1000, subp. 4
Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7030.0010 - 7030.0080
Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).	Minn. R. 7007.0800, subp. 9(A)
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
MONITORING REQUIREMENTS	hdr
Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment (any requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)
Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.	Minn. R. 7007.0800, subp. 4(D)
RECORDKEEPING	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS

07/18/05

Facility Name: Medallion Cabinetry Inc - Shakopee

Permit Number: 13900113 - 001

Record keeping: Retain all records at the stationary source for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).	Minn. R. 7007.0800, subp. 5(C)
Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350 subp. 2), including records of the emissions resulting from those changes.	Minn. R. 7007.0800, subp. 5(B)
REPORTING/SUBMITTALS	hdr
The Permittee shall comply, and upon written request demonstrate compliance, with National Primary and Secondary Ambient Air Quality Standards, 40 CFR pt. 50, and the Minnesota Ambient Air Quality Standards, Minn. R. 7009.0010 to 7009.0080.	40 CFR pt. 50; Minn. Stat. Sec. 116.07, subds. 4a and 9; Minn. R. 7007.0100, subps. 7A, 7L and 7M; Minn. R. 7007.0800, subps. 1, 2, and 4; Minn. R. 7009.0010-7009.0080
Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3. At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.	Minn. R. 7019.1000, subp. 3
Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2. At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.	Minn. R. 7019.1000, subp. 2
Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7019.1000, subp. 1
Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description: 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.	Minn. R. 7019.1000, subp. 1
Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 through Minn. R. 7007.1500
Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).	Minn. R. 7007.1400, subp. 1(H)
Emission Inventory Report: due on or before April 1 of each calendar year following permit issuance. To be submitted on a form approved by the Commissioner.	Minn. R. 7019.3000 through Minn. R. 7019.3100
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095

TABLE A: LIMITS AND OTHER REQUIREMENTS

07/18/05

Facility Name: Medallion Cabinetry Inc - Shakopee

Permit Number: 13900113 - 001

Subject Item: GP 001 NESHAP Sources

Associated Items: CE 001 Mat or Panel Filter
CE 002 Mat or Panel Filter
CE 003 Mat or Panel Filter
EU 001 Stain Spray Booth
EU 002 Sealer Spray Booth
EU 003 Topcoat Spray Booth
SV 001 Stain Spray Booth
SV 002 Sealer Spray Booth
SV 003 Topcoat Spray Booth

What to do	Why to do it
EMISSION LIMITS AND OPERATING REQUIREMENTS	hdr
Volatile Hazardous Air Pollutant (VHAP) means any volatile hazardous air pollutant listed in Table 2 of 40 CFR pt. 63, subp. JJ	40 CFR Section 63.801 and Table 2 of 40 CFR pt. 63, subp. JJ Minn. R. 7011.7340
HAPs - Volatile: less than or equal to 0.8 kilograms/kilograms (kg VHAP/kg solids) average content (E) of all finishing materials, including but not limited to, stains, basecoats, washcoats, enamels, sealers and topcoats, as applied. "E" shall be calculated using the equation below.	40 CFR Section 63.802(b)(1) & Table 3 of 40 CFR pt. 63, subp. JJ Minn. R. 7011.7340
HAPs - Volatile: less than or equal to 0.2 kilograms/kilograms (kg VHAP/kg solids) for each contact adhesive as applied	40 CFR Section 63.802(b)(2) & 40 CFR Section 63.804(e) Minn. R. 7011.7340
HAPs - Volatile: less than or equal to 0.8 kilograms/kilograms (kg VOC/kg solids) for each strippable spray booth coating, as applied.	40 CFR Section 63.802(b)(3) Minn. R. 7011.7340
Work Practice Implementation Plan: The Permittee shall maintain and adhere to the Work Practice Implementation Plan (WPIP) which defines environmentally desirable work practices for each wood furniture manufacturing operation and addresses each of the work practice standards in paragraphs (b) through (l) of Section 63.803. These standards are included in Appendix I of this permit. The plan shall be available upon request by the Administrator and shall be revised upon request by the Administrator.	40 CFR Section 63.803(a) Minn. R. 7011.7340
MONITORING AND RECORDKEEPING	hdr
The VHAP content for each finishing material, thinner, contact adhesive, and strippable spray booth coating shall be determined as specified in 40 CFR Section 63.805(a). This information shall be found on the certified product data sheet (CPDS).	40 CFR Section 63.805(a) Minn. R. 7011.7340
Compliance Procedure for Finishing Materials: The Permittee shall calculate the average VHAP content (E) using the following equation: $E = (Mc1Cc1 + Mc2Cc2 + \dots + McnCcn + S1W1 + S2W2 + SnWn) / (Mc1 + Mc2 + \dots + Mcn)$ <p>Where n = 1, 2, 3, ... (first finishing material, second finishing material, ... etc.) Mc = the mass of solids in finishing material(c), in kg Cc = the VHAP content of finishing material(c), in kg of VHAP per kg of coating solids (lb VHAP/lb solids), as applied S = the VHAP content of solvent, in weight fraction, added to finishing materials, and W = amount of solvent, in kg (lb), added to finishing materials during the monthly averaging period.</p>	40 CFR Section 63.804(d)(1) Minn. R. 7011.7340
Recordkeeping: The Permittee shall maintain the following records onsite: 1. A certified product data sheet for each finishing material, thinner, contact adhesive, and strippable spray booth coating; 2. A copy of the averaging calculation for each month following the initial startup, as well as the data on the quantity of coatings and thinners used that is necessary to support the calculation of E; 3. The VHAP content, in kg VHAP/kg solids, as applied of each finishing material and contact adhesive; 4. The VOC content, in kg VOC/kg solids, as applied, of each strippable booth coating; and 5. The WPIP and all records associated with fulfilling the requirements of the WPIP.	40 CFR Section 63.806(b), (c), and (e) Minn. R. 7011.7340

TABLE A: LIMITS AND OTHER REQUIREMENTS

07/18/05

Facility Name: Medallion Cabinetry Inc - Shakopee

Permit Number: 13900113 - 001

The minimum WPIP onsite record content shall include: 1. Records demonstrating that the operator training program is in place; 2. Records collected in accordance with the inspection and maintenance program; 3. Records associated with the cleaning solvent accounting system; 4. Records associated with the limitation on the use of conventional air spray guns showing total finishing material use and the percentage of finishing materials applied with this type of spray gun for each semiannual period; and 5. Copies of documentation such as logs developed to demonstrate that the other provisions of the WPIP are followed.	40 CFR Section 63.806(e) Minn. R. 7011.7340
The Permittee shall maintain records of all reports submitted to the Agency including the supporting materials.	40 CFR Section 63.806(h) and (i) Minn. R. 7011.7340
The Permittee shall maintain all records for a period of 5 years and, at a minimum, the most recent 2 years of data shall be retained on site. The records including all required reports shall be in a form suitable and readily available for expeditious inspection and review.	40 CFR Section 63.806(j) and and 40 CFR Section 63.10(b)(1) Minn. R. 7011.7340
The Compliance Date is the date of startup of this facility.	40 CFR Section 63.800(f) Minn. R. 7011.7340
Initial Compliance Status Report: The Permittee shall submit the compliance status report required by 40 CFR Section 63.9(h) of Subpart A (General Provisions) no later than 60 days after the compliance date.	40 CFR Section 63.807(b) Minn. R. 7011.7340
Content of Initial Compliance Status Report: The Permittee shall submit the results of the averaging calculation for the first month with the initial compliance status report required by 40 CFR Section 63.807(b). The first month's calculation shall include data for the entire month in which the compliance date falls.	40 CFR Section 63.804(f)(1) Minn. R. 7011.7340
Content of Initial Compliance Status Report: If the Permittee complies with 63.802(b)(2) through the procedures in 40 CFR Section 63.804(b), (c)(1), or (e)(1), the Permittee shall include with the initial compliance status report, as required by 40 CFR Section 63.807(b), a statement that compliant contact adhesives are used.	40 CFR Section 63.804(f)(5) Minn. R. 7011.7340
Content of Initial Compliance Status Report: The Permittee shall include with the initial compliance status report, as required by 40 CFR Section 63.807(b), a statement that compliant strippable spray booth coatings are used.	40 CFR Section 63.804(f)(7) Minn. R. 7011.7340
Content of Initial Compliance Status Report: The Permittee shall include with the initial compliance status report, as required by 40 CFR Section 63.807(b), a statement that the Work Practice Implementation Plan has been developed and procedures have been established for implementing the procedures of the plan.	40 CFR Section 63.804(f)(8) Minn. R. 7011.7340
Semiannual Report: The Permittee shall submit a semiannual report covering six consecutive months of manufacturing operations. The first report is due 30 calendar days after the end of the first six month period following the compliance date. Subsequent reports are due 30 days after the end of each six month reporting period.	40 CFR Section 63.807(c) Minn. R. 7011.7340
Content of Semiannual Report: The Permittee shall submit the results of the averaging calculation for each month within each semiannual period and include a compliance certification with the semiannual report required by 40 CFR Section 63.807(c).	40 CFR Section 63.804(g)(1) Minn. R. 7011.7340
Content of Semiannual Report: If the Permittee complies with 40 CFR Section 63.802(b)(1) through the procedures in 40 CFR Section 63.804(d)(2), the Permittee shall maintain records that demonstrate the coatings and thinners are compliant, and submit a compliance certification with the semiannual report required by 40 CFR Section 63.807 (c).	40 CFR Section 63.804(g)(2) Minn. R. 7011.7340
Content of Semiannual Report: The Permittee shall submit a compliance certification with the semiannual report required by 40 CFR Section 63.807(c) stating that compliant contact adhesives have been used each day, or should otherwise identify each day noncompliant contact adhesives were used.	40 CFR Section 63.804(g)(5) Minn. R. 7011.7340
Content of Semiannual Report: The Permittee shall submit a compliance certification with the semiannual report required by 40 CFR Section 63.807(c) stating that compliant strippable spray booth coatings have been used each day, or should otherwise identify each day noncompliant contact adhesives were used.	40 CFR Section 63.804(g)(7) Minn. R. 7011.7340
Content of Semiannual Report: The Permittee shall submit a compliance certification with the semiannual report required by 40 CFR Section 63.807(c) stating that the WPIP is being followed, or should otherwise identify the provisions of the plan that have not been implemented and each day the provisions were not implemented.	40 CFR Section 63.804(g)(8) Minn. R. 7011.7340

TABLE A: LIMITS AND OTHER REQUIREMENTS

07/18/05

Facility Name: Medallion Cabinetry Inc - Shakopee

Permit Number: 13900113 - 001

Subject Item: GP 002 Coating Operations

Associated Items: CE 001 Mat or Panel Filter
 CE 002 Mat or Panel Filter
 CE 003 Mat or Panel Filter
 EU 001 Stain Spray Booth
 EU 002 Sealer Spray Booth
 EU 003 Topcoat Spray Booth
 SV 001 Stain Spray Booth
 SV 002 Sealer Spray Booth
 SV 003 Topcoat Spray Booth

What to do	Why to do it
EMISSION LIMITS	hdr
Volatile Organic Compounds: less than or equal to 95 tons/year using 12-month Rolling Sum . All sources emitting VOC's, other than fuel combustion, shall be included in the 12-month rolling sum calculation.	Title I Condition: Synthetic Minor Limit to avoid classification as a major source under 40 CFR Section 52.21 & Minn. R. 7007.3000
Total Particulate Matter: less than or equal to 95 tons/year using 12-month Rolling Sum	Title I Condition: Synthetic Minor Limit to avoid classification as a major source under 40 CFR Section 52.21 & Minn. R. 7007.3000
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735. This limit applies to each emission unit individually.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent opacity This limit applies to each emission unit individually.	Minn. R. 7011.0715, subp. 1(B)
OPERATING REQUIREMENTS	hdr
The Permittee shall operate only one spray gun at any time in each spray booth.	Minn. R. 7011.0715
Pre-authorized Changes: The Permittee may replace existing spray guns or add the authorized second spray guns, per booth, as long as all guns meet the following conditions: 1). The gun capacity of any and all guns used in a given booth is less than the capacity listed in Appendix III of this permit for that booth; 2). They are used in a spray booth that is controlled by equipment meeting the requirements of GP003; and 3). New or modified guns must have a transfer efficiency equal to or better than airless technology (75% minimum manufacturer specified transfer efficiency). In addition, the Permittee may change to different coating materials and formulations as long as all coatings meet the requirements of GP001 and the content assumptions used in the Technical Support Document for this permit. If a proposed change triggers an applicable requirement that is not contained in this permit, the change must go through the appropriate procedure in Minn. R. ch. 7007.	Title I Condition: Changes authorized under the limit to avoid classification as a major source under 40 CFR Section 52.21 & Minn. R. 7007.3000
Preauthorized Changes, continued: All VOC-emitting equipment at the Facility is subject to the 95-ton-per-year limit. If the Permittee replaces any existing VOC-emitting equipment, adds new VOC-emitting equipment, or modifies the existing equipment, such equipment is subject to this permit limit as well as all of the requirements of GP 001 and GP002. Prior to making such a change, the Permittee shall determine if an amendment is required under Minn. R. 7007.1450 or 7007.1500 and shall apply for and obtain the appropriate amendment. The Permittee is not required to repeat VOC calculations described in Minn. R. 7007.1200, subp. 2. A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping in this permit.	Title I Condition: Changes authorized under the limit to avoid classification as a major source under 40 CFR Section 52.21 & Minn. R. 7007.3000
MONITORING AND RECORDS	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS

07/18/05

Facility Name: Medallion Cabinetry Inc - Shakopee

Permit Number: 13900113 - 001

Material Content: VOC, HAPs, and Solids (PM and PM<10 microns) contents in coating materials shall be determined by the Material Safety Data Sheet (MSDS), Certified Product Data Sheet (CPDS), or equivalent document provided by the supplier for each material used. If a material content range is given on the MSDS, the highest number in the range shall be used in all compliance calculations. Other alternative methods approved by the MPCA may be used to determine the VOC, HAPs, and solids contents. The Commissioner reserves the right to require the Permittee to determine the VOC, HAP, and solids contents of any material, according to EPA or ASTM reference methods. If an EPA or ASTM reference method is used for material content determination, the data obtained shall supersede the MSDS, CPDS or equivalent document.	Minn. R. 7007.0800, subp. 4 and 5
Waste Credit: If the Permittee elects to obtain credit for HAPs, solids, and/or VOC shipped in waste materials, the Permittee shall either use item 1 or 2 to determine the VOC, solids, and/or total and individual HAP content for each credited shipment. 1) The Permittee shall analyze a composite sample of each waste shipment to determine the weight content of VOC, solids, total HAP, and each individual HAP, excluding water. 2) The Permittee may use supplier data for raw materials to determine the VOC, solids, and total and individual HAP contents of each waste shipment, using the same content data used to determine the content of raw materials. If the waste contains several materials, the content of mixed waste shall be assumed to be the lowest VOC, solids, and total and individual HAP content of any of the materials.	Minn. R. 7007.0800, subp. 4 and 5
VOC Recordkeeping: If the Permittee elects to obtain credit for VOC contained in shipped waste, calculate and record mass of shipped VOC's using quantities disbursed from inventory and quantities in recovered materials.	Title I Condition: Monitoring & Recordkeeping for limit taken to avoid classification as a major source or modification under 40 CFR Section 52.21 & Minn. R. 7007.3000
Definition of Accounting Period: The VOC and PM limits are based on 12 accounting periods in a calendar year. These periods can vary from 3 to 5 weeks each. The Permittee determines the number of weeks in each accounting period prior to the beginning of the calendar year. The determination of how many weeks are in each accounting period, including starting and ending dates, shall be included in the Annual Report that is due January 30th of each year.	Title I Condition: Recordkeeping to avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000
Daily Recordkeeping - VOC. On each day of operation, the Permittee shall calculate, record, and maintain the total quantity of all coatings and other VOC and solids containing materials used at the facility. This shall be based on written usage logs or flowmeters.	Title I Condition: Monitoring for Limit to avoid classification as major source and modification under 40 CFR 52.21 and Minn. R. 7007.3000
Accounting Period Recordkeeping -- VOC Emissions: By the 15th day of the accounting period, the Permittee shall calculate and record the following: 1) The total VOC shipped in waste for the previous accounting period, using billing records and analyses or MSDS as appropriate. 2) The total VOC dispensed for the previous accounting period by summing all the daily records for the previous accounting period. 3) The VOC emissions for the previous accounting period by subtracting VOC shipped in waste (item 1) from VOC dispensed (item 2). 4) The 12 accounting period rolling sum VOC emissions for the previous 12 accounting periods by adding the monthly VOC emissions data for the previous 12 accounting periods.	Title I Condition: Recordkeeping to avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000
Monthly Calculation -- VOC Emissions. The Permittee shall calculate VOC emissions using the following equations: VOC (tons/month) = V - W V = (A1 x B1) + (A2 x B2) + (A3 x B3) + W = (C1 x D1) + (C2 x D2) + C3 x D3) +	Title I Condition: Recordkeeping to avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000
Monthly VOC Emissions Calculation Continued: where: V = total VOC used in tons/month; A# = amount of each VOC containing material used, in tons/month; B# = weight percent VOC in A#, as a fraction; W = the amount of VOC shipped in waste, in tons/month; C# = amount, in tons/month, of each VOC containing waste material shipped. If the Permittee chooses to not take credit for waste shipments, this parameter would be zero; and D# = weight percent of VOC in C#, as a fraction.	Title I Condition: Recordkeeping to avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000
Daily Recordkeeping - PM. On each day of operation, the Permittee shall calculate, record, and maintain the total quantity of all coating operations PM-emitting, solids containing materials used at the facility. This shall be based on written usage logs or flowmeters and MSDS/CPDS records.	Title I Condition: Recordkeeping to avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000

TABLE A: LIMITS AND OTHER REQUIREMENTS

07/18/05

Facility Name: Medallion Cabinetry Inc - Shakopee

Permit Number: 13900113 - 001

<p>Accounting Period Recordkeeping -- PM Emissions: By the 15th day of the accounting period, the Permittee shall calculate and record the following:</p> <p>1) The total PM dispensed for the previous accounting period by adding all the daily records for the previous accounting period.</p> <p>2) The 12-accounting-period rolling sum PM emissions for the previous 12 accounting periods by adding the monthly PM emissions data for the previous 12 accounting periods.</p>	<p>Title I Condition: Recordkeeping to avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000</p>
<p>Monthly Calculation -- Solids, PM, and PM10 Emissions.</p> <p>The Permittee shall calculate emissions from the spray booths using the following equations:</p> <p>PM10 (tons/month) = $S(1-CE)(1-TE) - W$ $S = (A1 \times B1) + (A2 \times B2) + (A3 \times B3) + \dots$ $W = (C1 \times D1) + (C2 \times D2) + (C3 \times D3) + \dots$</p>	<p>Title I Condition: Recordkeeping to avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000</p>
<p>Monthly PM10 Emissions Calculation Continued:</p> <p>Where: S = total solids used in tons/month; CE = overall control efficiency, as a fraction. This shall be 0.74 for all spray booths; TE = transfer efficiency, as a fraction. This shall be 0.75, unless otherwise approved by the MPCA in writing. A# = amount of each solids containing material sprayed, in tons/month; B# = weight percent solids in A#, as a fraction; W = the amount of solids shipped in waste, in tons/month; C# = amount, in tons/month, of each solids containing waste material shipped. If the Permittee chooses to not take credit for waste shipments, this parameter would be zero; and D# = weight percent of solids in C#, as a fraction.</p>	<p>Title I Condition: Recordkeeping to avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000</p>
<p>Recordkeeping of Equipment and Coating Changes:</p> <p>The Permittee shall keep records of spray guns that are added or replaced. This record shall be updated with each addition or replacement. The record shall include the date the spray gun was added or replaced, the manufacturer and model number, the spray technology, the manufacturer's specified transfer efficiency (which must be a minimum of 75 %), the spray capacity in gallons per hour, and the emission unit number (EU) of the spray booth where the gun will be used.</p> <p>The Permittee shall keep a log of all coating materials and their VOC and Solids (PM) contents, as determined by the Materials Content requirement of this permit.</p>	<p>Title I Condition: Recordkeeping to avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

07/18/05

Facility Name: Medallion Cabinetry Inc - Shakopee

Permit Number: 13900113 - 001

Subject Item: GP 003 Panel Filter Requirements**Associated Items:** CE 001 Mat or Panel Filter

CE 002 Mat or Panel Filter

CE 003 Mat or Panel Filter

What to do	Why to do it
Total Particulate Matter: greater than or equal to 73.6 percent control efficiency (80% capture x removal efficiency of the panel filter). Operate & maintain control equipment such that it achieves the specified overall control efficiency. This requirement applies to each emission unit individually.	Title I Condition: Limit to avoid classification as a major source under 40 CFR Section 52.21 & Minn. R. 7007.3000 & Minn. R. 7011.0715
Particulate Matter < 10 micron: greater than or equal to 73.6 percent control efficiency (80% capture x removal efficiency of the panel filter). Operate & maintain control equipment such that it achieves the specified overall control efficiency. This requirement applies to each emission unit individually.	Title I Condition: Limit to avoid classification as a major source under 40 CFR Section 52.21 & Minn. R. 7007.3000 & Minn. R. 7011.0715
Operate and maintain panel filters according to the manufacturer's specifications.	Title I Condition: Limit to avoid classification as a major source under 40 CFR Section 52.21 & Minn. R. 7007.3000 & Minn. R. 7011.0715
The Permittee shall operate and maintain the filter at all times that any emission unit controlled by the filter is in operation. The Permittee shall document periods of non-operation of the control equipment.	Title I Condition: Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21 Minn. R. 7007.0800, subp. 2 and 14
Periodic Inspections: Once each operating day, the Permittee must visually inspect the condition of each panel filter with respect to alignment, saturation, tears, holes, and any other matter that may affect the filter's performance. Records of these inspections must be maintained. At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subp. 4, 5 and 14
Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - visible emissions are observed; or - the filter or any of its components are found during the inspections to need repair. Corrective actions shall eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. R. 7007.0800, subp. 4, 5, and 14
The Permittee shall operate and maintain the filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14

TABLE A: LIMITS AND OTHER REQUIREMENTS

07/18/05

Facility Name: Medallion Cabinetry Inc - Shakopee

Permit Number: 13900113 - 001

Subject Item: EU 004 Makeup air heating unit**Associated Items:** SV 004 Air Make-Up Unit

What to do	Why to do it
Fuel: Natural gas only	Minn. R. 7007.0800, subp. 2
Total Particulate Matter: less than or equal to 0.4 lbs/million Btu heat input (This is met through the limit on type of fuel use to natural gas only.)	Minn. R. 7011.0515, subp. 1
Opacity: less than or equal to 20 percent opacity using 6-minute Average except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0515, subp. 2

TABLE B: SUBMITTALS

07/18/05

Facility Name: Medallion Cabinetry Inc - Shakopee
Permit Number: 13900113 - 001

Table B lists most of the submittals required by this permit. Please note that some submittal requirements may appear in Table A or, if applicable, within a compliance schedule located in Table C. Table B is divided into two sections in order to separately list one-time only and recurrent submittal requirements.

Each submittal must be postmarked or received by the date specified in the applicable Table. Those submittals required by parts 7007.0100 to 7007.1850 must be certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Other submittals shall be certified as appropriate if certification is required by an applicable rule or permit condition.

Send any application for a permit or permit amendment to:

Permit Technical Advisor
Permit Section
Air Quality Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Also, where required by an applicable rule or permit condition, send to the Permit Technical Advisor notices of:

- accumulated insignificant activities,
- installation of control equipment,
- replacement of an emissions unit, and
- changes that contravene a permit term.

Unless another person is identified in the applicable Table, send all other submittals to:

Supervisor
Compliance Determination Unit
Air Quality Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Send submittals that are required to be submitted to the U.S. EPA regional office to:

Mr. George Czerniak
Air and Radiation Branch
EPA Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Send submittals that are required by the Acid Rain Program to:

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue NW (6204N)
Washington, D.C. 20460

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS

07/18/05

Facility Name: Medallion Cabinetry Inc - Shakopee
Permit Number: 13900113 - 001

What to send	When to send	Portion of Facility Affected
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility
Initial Compliance Status Report	due 60 days after Initial Startup	GP001

TABLE B: RECURRENT SUBMITTALS

07/18/05

Facility Name: Medallion Cabinetry Inc - Shakopee

Permit Number: 13900113 - 001

What to send	When to send	Portion of Facility Affected
Compliance Status Report	due 30 days after end of each calendar half-year following Initial Startup The Permittee shall submit a semiannual Continuous Compliance Report. At a minimum, the report shall include: 1) results of averaging calculation for VHAP from finishing operations for each month within the semiannual period using the equation for "E"; 2) a compliance certification stating the "E" value was always less than 0.8, that compliant contact adhesives have been used on each operating day, that compliant strippable spray booth coatings have been used each day, and the WPIP is followed. The certification must be signed by a responsible official of the facility. If the Permittee is out of compliance with any of the requirements in the NESHAP, the Permittee shall state the measures taken to bring the facility back into compliance.	GP001
Semiannual Deviations Report	due 30 days after end of each calendar half-year following Permit Issuance. The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. If no deviations have occurred, the Permittee shall submit the report stating no deviations.	Total Facility
Annual Report	due 30 days after end of each calendar year following Permit Issuance. The Permittee shall submit an annual report by January 30th that describes the changes made at the facility during the previous calendar year using the latest MPCA application forms. The report shall include the emission unit, stack/vent, group, and control equipment data for any new or replaced units or control devices. The report shall document the VOC and PM 12-month rolling sum calculations for the previous calendar year. The report shall be submitted with the annual Compliance Certification listed in Table B. As part of the Annual Report, the Permittee shall verify and certify that the facility has maintained minor source status for New Source Review.	Total Facility
Compliance Certification	due 30 days after end of each calendar year following Permit Issuance (for the previous calendar year). To be submitted on a form approved by the Commissioner, both to the Commissioner and to the US EPA regional office in Chicago. This report covers all deviations experienced during the calendar year.	Total Facility

APPENDIX I
Facility Name: Medallion Cabinetry, Inc.
Permit Number: 13900113-001

APPENDIX MATERIAL

Facility Name: Medallion Cabinetry Inc - Shakopee

Permit Number: 13900113-001

Work Practice Implementation Plan

At a minimum, a work practice implementation plan (WPIP) shall contain the following:

A. Operator training course - the Permittee shall train all personnel involved in finishing, gluing, cleaning, and washoff operations, use of manufacturing equipment, or implementation of the requirements of the MACT standard. Those personnel hired before the compliance date shall be trained within six months of the compliance date and new personnel shall be trained prior to performing their job duties. At a minimum all personnel shall receive annual refresher training. The Permittee shall maintain a copy of the program with the WPIP, each with minimum of following information:

- 1) a list of all current personnel by name and job description;
- 2) outline of all training materials;
- 3) lesson plans which shall include, but not limited to appropriate application techniques, cleaning and washoff procedures, equipment setup and adjustment to minimize finishing material usage and overspray, and appropriate management of cleanup wastes; and
- 4) documentation of successful completion of training.

B. Inspection and maintenance plan - A written leak inspection and maintenance plan shall be followed.

At a minimum this plan shall specify the following:

- 1) a visual inspection frequency of at least once per month for all equipment used to transfer or apply coating, adhesives, or organic solvents;
- 2) an inspection schedule;
- 3) methods for documenting the date and results of each inspection and any repairs that were made; and
- 4) the timeframe between identifying the leak and making the repair. A first attempt at repair and final repairs shall be made within 5 and 15 calendar days after the leak is detected respectively. If new equipment must be purchased, the leak must be repaired within three months of discovery.

C. Cleaning and washoff solvent accounting system - An accounting system shall be maintained to record the following:

- 1) the quantities and types of organic solvent used/month for cleaning and washoff operations;
- 2) the number of pieces washed off and the reason for the washoff; and
- 3) the quantity of spent solvent from each washoff and cleaning operation and whether it is recycled onsite or disposed offsite.

D. Chemical composition of cleaning and washoff solvents - The facility is prohibited from using cleaning or washoff solvents containing the chemicals listed in Table 4 of 40 CFR pt. 63, subp. JJ, in concentrations subject to MSDS reporting as required by OSHA.

E. Spray booth cleaning - VOC content of cleaning spray booth components shall not exceed 8 percent by weight. This limit does not apply to cleaning conveyors, continuous coaters and total enclosures, or metal filters. If the Permittee is replacing the spray booth coating or other protective material used to cover the booth, no more than 1 gallon of organic solvent per booth to prepare the surface of the booth prior to applying the booth coating.

F. Storage requirements - use normally closed containers for storing finishing, gluing, cleaning, and washoff materials.

APPENDIX I

Facility Name: Medallion Cabinetry, Inc.

Permit Number: 13900113-001

G. Application equipment requirements - A WPIP shall specify when conventional air spray guns are allowed to be used in application of finishing materials as outlined in 40 CFR Section 63.803(h).

H. Line Cleaning - pump or drain all organic solvent used for line cleaning into a normally closed containers.

I. Gun cleaning - collect all organic solvent used to clean spray guns into a normally closed container.

J. Washoff operations - use normally closed tanks for washoff and minimizing dripping by tilting or rotating the part to drain as much solvent as possible.

K. Formulation assessment plan (FAP) for finishing operations - prepare and maintain with the WPIP a formulation assessment plan only if the following chemicals are being used in finishing operations: dimethyl formamide, formaldehyde, methylene chloride, 2-nitropropane, isophorone, styrene monomer, phenol, diethanolamine, 2-methoxyethanol, 2-ethoxyethyl acetate. A FAP shall be done in accordance with 40 CFR Section 63.803(l).

APPENDIX II

Facility Name: Medallion Cabinetry, Inc.

Permit Number: 13900113-001

Insignificant Activities and General Applicable Requirements

The table below lists the insignificant activities that are currently at the facility and their associated general applicable requirements.

Minn. R. 7007.1300, subp.	Rule Description of the Activity	General Applicable Requirement
3(A)	Fuel use: space heaters fueled by, kerosene, natural gas, or propane. <i>Medallion's current total capacity is 5.8 + MMBtu/hr.</i>	Minn. R. 7011.0515
3(B)(2)	Furnaces, boilers, and incinerators:	
	Fuel burning equipment with a capacity less than 500,000 Btu/hour but only if the total combined capacity of all fuel burning equipment at the stationary source with a capacity less than 500,000 Btu per hour is less than or equal to 2,000,000 Btu/hour. <i>Medallion's current capacity is less than 2 MMBtu/hr.</i>	Minn. R. 7011.0515

Under Minn. R. 7007.1250, subp. 1(A), the Permittee may add insignificant activities to the stationary source throughout the term of the permit without getting permit amendments. Certain exclusions apply and are listed in Minn. R. 7007.1250, subp. 2. In addition, this permit specifically prohibits the Permittee from making any modifications that would make the source major under NSR. The following table is a listing of the insignificant activities that the Permittee is somewhat likely to add and their associated applicable requirements.

Minn. R. 7007.1300, subp.	Rule Description of the Activity	General Applicable Requirement(s)
3(B)(1)	Furnaces, boilers, and incinerators:	
	1. infrared electric ovens; and	Minn. R. 7011.0110 (opacity)
3(H)	Miscellaneous:	
	4. brazing, soldering or welding equipment;	Minn. R. 7011.0715 (PM and opacity)
	5. blueprint copiers and photographic processes;	Minn. R. 7011.0110 (opacity)
	8. cleaning operations: alkaline/phosphate cleaners and associated cleaners and associated burners.	Minn. R. 7011.0610 + Minn. R. 7011.0715 (PM and opacity)
3(J)	Fugitive Emissions from unpaved roads and parking lots.	Minn. R. 7011.0150 (PM)

APPENDIX II
Facility Name: Medallion Cabinetry Inc.
Permit Number: 13900113-001

Spray Gun Capacities

Any and all individual spray guns used in a spray booth are limited to the capacity given in the table below for the specified booth.

Emission Unit (EU)	Individual Gun Capacity Limit (gallons/hour)
001	5.6
002	5.6
003	5.6

TECHNICAL SUPPORT DOCUMENT
For
PROPOSED AIR EMISSION PERMIT NO. 13900113-001

This technical support document (TSD) is intended for all parties interested in the proposed permit for Medallion Cabinetry Inc. and to meet the requirements that have been set forth by the federal and state regulations (40 CFR § 70.7(a)(5) and Minn. R. 7007.0850, subp.1). The purpose of this document is to provide the legal and factual justification for each applicable requirement or policy decision considered in the determination to issue the proposed permit.

1. General Information

1.1. Applicant and Stationary Source Location:

Applicant/Address	Stationary Source/Address (SIC Code: 2434)
Medallion Kitchens of Minnesota, Inc. 180 Industrial Blvd. Waconia, MN 55387	Medallion Cabinetry Inc. 4571 Valley Industrial Blvd South Shakopee Scott County
Contact: Craig Fast Phone: (952) 442-5171 x6920	

1.2. Description of the Permit Action

Medallion Cabinetry, Inc. is planning to construct a new cabinet finishing facility. The main processes that will generate emissions are surface coating and combustion of natural gas. The coating operations emit volatile organic compounds (VOCs), several hazardous air pollutants (HAPs), and particulate matter and particulate matter less than 10 microns (PM/PM₁₀). The facility will install three new paint spray booths that will have high-efficiency pleated panel filters to control PM/PM₁₀. HAPs are from solvents in the coatings used for surface coating operations, and include cumene, ethyl benzene, formaldehyde, glycol ethers, methanol, toluene, and xylene.

The permit contains operational and control requirements that limit emissions of VOCs and HAPs.

1.3. Facility Emissions:

Table 1. Total Facility Potential to Emit Summary

	PM tpy	PM ₁₀ Tpy	SO ₂ tpy	NO _x tpy	CO tpy	VOC tpy	Single HAP tpy
Total Facility Limited Potential Emissions	11.66	11.66	0.01	2.45	2.06	95.0	44.42

Table 2. Facility Classification

Classification	Major/Affected Source	Synthetic Minor	Minor
PSD		X (VOC)	X (PM/PM ₁₀ , SO ₂ , NO _x , and CO)
Part 70 Permit Program	X		
Part 63 NESHAP	X		

2. Regulatory and/or Statutory Basis

New Source Review

The facility has taken limits to avoid major source classification for New Source Review.

Part 70 Permit Program

The facility is a major source under the Part 70 permit program due to its major source status under Part 63.

New Source Performance Standards (NSPS)

There are no New Source Performance Standards applicable to the operations at this facility.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The facility is a major source for HAPs and subject to the NESHAPs for “*Wood Furniture Manufacturing Operations*” promulgated in Title 40 CFR 63, Subpart JJ.

Minnesota State Rules

Portions of the facility are subject to the following Minnesota Standards of Performance:

- Minn. R. 7011.0700 Standards for Industrial Process Equipment

Table 3. Regulatory Overview of Facility

EU, GP, or SV	Applicable Regulations	Comments:
GP 001 Spray Booths	40 CFR pt. 63, subp. JJ	National Emission Standards for Hazardous Air Pollutants from Wood Furniture Manufacturing Operations. Limits VHAP from finishing materials, adhesives, and strippable spray booth coatings. A Work Practice Implementation Plan meeting the requirements in Appendix I of the permit is required.
GP 002 Spray Booths	40 CFR 52.21 Minn. R. 7011.0715	Prevention of Significant Deterioration (PSD). Limits taken to avoid major source classification under PSD for all noncombustion emissions of VOCs and PM. All spray booths shall be controlled by GP 002. VOC less than 95 tons per year for all non-combustion sources. The VOC limit is a 12-month rolling limit. The permittee shall operate only one spray gun at any time in all spray booths. Capacities of the spray guns are limited to 5.6 gal/hr. Standards of Performance for Post 1969 Industrial Process Equipment. Per MPCA guidance, this rule applies in addition to the NESHAP.
GP 003 Panel Filters	40 CFR 52.21 and Minn. R. 7011.0715	Control efficiency and other operating parameter requirements to limit PM/PM ₁₀ PTE to avoid major source classification under PSD and to meet the Minnesota Performance Standard.
EU 004	Minn. R. 7011.0515	Standards of Performance for Indirect Heating Equipment. Fuel limited to natural gas only.

3. Technical Information

3.1 Calculations of Potential to Emit

Attachment 1 to this TSD contains Form GI-07, which summarizes the PTE of the Facility and contains detailed spreadsheets and supporting information. The spreadsheets include calculations of PTE from the spray booths. However, since the permit contains total VOC and HAP caps, the various coating contents are used for calculating PM/PM₁₀ potentials and for

estimating the maximum hourly emissions of VOC and HAPs. The facility can change materials as long as the new materials continue to meet the various permit limits and content assumptions.

The permitted allowable emissions take into account limits on gun capacity, maximum VOC and solids contents of coatings, total VOC and HAP caps, and particulate control requirements. The replacement of guns or changing coatings to ones that are consistent with these assumptions will not cause an emissions increase under Minn. R. 7007.1200, subp. 3 (calculating emissions increases for non-Title I changes). Therefore, they are not modifications and can be made without the need for an amendment.

Changing to a coating that has a higher solids content would be considered a modification (e.g., hourly and annual increase in PTE of PM/PM₁₀ from coating) and would need to be evaluated to determine the type of modification and possible permit action.

3.2 Periodic Monitoring

In accordance with the Clean Air Act, it is the responsibility of the owner or operator of a facility to have sufficient knowledge of the facility to certify that the facility is in compliance with all applicable requirements.

In evaluating the monitoring included in the permit, the MPCA considers the following:

- The likelihood of violating the applicable requirements;
- Whether add-on controls are necessary to meet the emission limits;
- The variability of emissions over time;
- The type of monitoring, process, maintenance, or control equipment data already available for the emission unit;
- The technical and economic feasibility of possible periodic monitoring methods; and
- The kind of monitoring found on similar units elsewhere.

Table 4 summarizes the periodic monitoring requirements for those emission units for which the monitoring required by the applicable requirement is nonexistent or inadequate.

Table 4. Periodic Monitoring

Emission Unit or Group	Requirement (basis)	Additional Monitoring	Discussion
Spray Booths GP 001	NESHAP 40 CFR Part 63, subp. JJ	None since this NESHAP was promulgated after the CAAA of 1990 and contains adequate periodic monitoring	Onsite records are kept of VHAP and VOC content of finishing materials, adhesives, and strippable spray booth coatings. Data demonstrating compliance is submitted semiannually.
Spray Booths GP 002	PSD, 40 CFR 52.21, limits to avoid major source status	Daily usage records of VOC and PM emitting materials; monthly – or equivalent accounting period – calculation of emissions, including 12-month rolling totals	Onsite records are kept of VOC content of finishing materials, adhesives, and strippable spray booth coatings. Data demonstrating compliance is maintained onsite as a 12-month rolling sum.
Panel Filters GP 003	PM/PM ₁₀ : Control Efficiency of 73.6	Recordkeeping, O&M, inspections	Monitoring based on the Minnesota Performance Standard for Control Equipment is adequate to have a reasonable assurance of compliance (daily and periodic visual inspections of filter condition, corrective actions, O&M, and hood design records).
Air Make Up Unit: EU 004	PM: ≤ 0.4 lb/MMBtu Opacity: ≤ 20 % with exceptions (Minn. R. 7011.0515)	Recordkeeping: Monthly fuel records	Unit uses natural gas; therefore, the likelihood of violating either of the emission limits is very small. The Permittee can demonstrate that this unit will continue to operate such that emissions are well below the emission limits by only burning natural gas. Since this is a permit condition, the semi-annual deviations report will document any deviations from this condition. Design-based PTE for each unit, using AP-42, is 0.0072 compared to the rule limit of 0.4 lb/MMBtu.

3.3 Insignificant Activities

Medallion Cabinetry, Inc. has several operations which are classified as insignificant activities. These are listed in Appendix A to the permit.

3.4 Permit Organization

In general, the permit meets the MPCA Delta Guidance for ordering and grouping of requirements. One area where this permit deviates slightly from Delta guidance is in the use of appendices. While appendices are fully enforceable parts of the permit, in general, any requirement that the MPCA thinks should be tracked (e.g., limits, submittals, etc.), should be in Table A or B. The main reason is that the appendices are word processing sections and are not part of the tracking system. Violation of the appendices can be enforced, but the computer system will not automatically generate the necessary enforcement notices or documents. Staff must generate these. For this permit, certain permit requirements and limits are listed in the appendices of the permit instead of Table A.

The first set of requirements are the Work Practice Implementation Plan (WPIP) requirements from the Wood Furniture NESHAP. These requirements are fairly detailed and lengthy and could be referenced in the permit as needing to be met, but to aid the Permittee, they were included in Appendix I. Table A does say the company must have a WPIP meeting the requirements in Appendix I.

The second appendix meets Delta guidance – it is the listing of Insignificant Activities and their applicable requirements. This is a fairly standard way to include these in the permit, since it is highly unlikely the MPCA would need to have these as trackable items in the Delta database.

3.5 Comments Received (to be completed following public comment)

Public Notice Period: May 22, 2005 – June 20, 2005

EPA 45-day Review Period: May 22, 2005 – July 5, 2005

Comments were not received from the public or US EPA during the public notice period.

4. Conclusion

Based on the information provided by Medallion Cabinetry, Inc., the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. **13900113-001** and this technical support document, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: David Beil (permit writer/engineer) MPCA
 Scott Parr (enforcement) MPCA
 Chandler Taylor, Earth Tech

Attachments: 1. PTE Summary and Calculation Spreadsheets
 2. Facility Description and CD-01 Forms

ATTACHMENT 1

PTE SUMMARY AND CALCULATION SPREADSHEETS

ATTACHMENT 2

FACILITY DESCRIPTION AND CD-01 FORMS