

AIR EMISSION PERMIT NO. 01900022- 003

IS ISSUED TO

MEDALLION KITCHENS OF MINNESOTA

180 Industrial Boulevard

Waconia, Carver County, Minnesota 55387

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	Application Date
Total Facility Operating Permit	04/17/1995
Supplemental Submittal #1	11/03/1997
Supplemental Submittal #2	04/14/1999
Major Amendment	09/11/00

This permit authorizes the permittee to operate and modify 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 as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

Permit Type: Federal ; Part 70/Limits to Avoid NSR; Major Amendment

Issue Date: March 15, 2001

Expiration:

All Title I Conditions do not expire.

Rodney E. Massey, P.E.
District Director

For Karen A. Studders
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.

FACILITY DESCRIPTION:

Medallion Kitchens is a manufacturer of finished kitchen cabinets. The facility assembles and finishes kitchen cabinet pieces purchased from outside sources or manufactured at the site based on customer design specifications. The cabinet pieces manufactured on site are refined from stock lumber by sawing, milling, and sanding to fit in the cabinets being assembled. The cabinet components are then loaded on a conveyer system which carries them through different stages of surface coating operations. The coatings applied are stains, lacquers and sealers. The product is then allowed to fan or oven dry followed by assembly, packaging, storage, and shipping.

The facility has taken limits to avoid major source classification for New Source Review (40 CFR § 52.21). However, the facility is a major source under the federal operation permits program (40 CFR pt. 70) and the National Emissions Standards for Hazardous Air Pollutants (NESHAPs, 40 CFR pt. 63). The facility is subject to a promulgated NESHAP for Wood Furniture Manufacturing Operations (40 CFR pt. 63, subp. JJ). The facility must comply with the NESHAP limits for new affected sources, due to reconstruction of the source that took place in 1998.

The permit contains requirements that limit emissions of volatile organic compounds, hazardous air pollutants, and Particulate Matter and Particulate Matter less than 10 microns (PM/PM₁₀). The permit also contains requirements to control PM/PM₁₀ emissions from wood working and surface coating operations.

The permit pre-authorizes certain changes at the facility that can be made over the life of the permit. Specifics related to the pre-authorized changes and limitations that apply can be found in Table A, at GP002 (Coating Operations) and GP005 (Wood Working Equipment).

Amendment 003 is a major amendment. The amendment authorizes the installation of nine additional (or second) spray guns in the existing nine booths which currently were only permitted to have one gun. This amendment also authorizes the installation of five new spray booths each with the ability to have two spray guns.

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/15/01

Facility Name: Medallion Kitchens of Minnesota Inc

Permit Number: 01900022 - 003

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 major 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 a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000
The Permittee shall maintain Air Curtains to all entry ways leading to the wood working area.	Minn. R. 7007.0800, subp. 14
The Air Curtains shall be maintained and operated according to the manufacturers' specifications.	Minn. R. 7007.0800, subp. 14
The Air Curtains shall be operated at all times that the wood working area is in use.	Minn. R. 7007.0800, subp. 14
STANDARD REQUIREMENTS	hdr
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment.	Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J)
Monitoring Equipment: Install or make needed repairs to monitoring equipment within 60 days of issuance of the permit if monitoring equipment is not installed and operational on the date the permit is issued.	Minn. R. 7007.0800, subp. 4(D)
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)
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)
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
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)
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)
Inspections: Upon presentation of credentials and other documents as may be required by law, allow the Agency, or its representative, to enter the Permittee's premises to have access to and copy any records required by this permit, to inspect at reasonable times (which include any time the source is operating) any facilities, equipment, practices or operations, and to sample or monitor any substances or parameters at any location.	Minn. R. 7007.0800, subp. 9(A)
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

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/15/01

Facility Name: Medallion Kitchens of Minnesota Inc

Permit Number: 01900022 - 003

<p>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).</p>	<p>Minn. R. 7007.1400, subp. 1(H)</p>
<p>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.</p>	<p>Minn. R. 7030.0010 - 7030.0080</p>
<p>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.</p> <p>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.</p>	<p>Minn. R. 7019.1000, subp. 3</p>
<p>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.</p> <p>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.</p>	<p>Minn. R. 7019.1000, subp. 2</p>
<p>Notification of Deviations Endangering Human Health or the Environment: Immediately after discovery of the deviation or immediately after when the deviation reasonable should have been discovered, 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.</p>	<p>Minn. R. 7019.1000, subp. 1</p>
<p>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:</p> <ol style="list-style-type: none"> 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. 	<p>Minn. R. 7019.1000, subp. 1</p>
<p>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.</p>	<p>Minn. R. 7019.1000, subp. 4</p>
<p>Emission Fees: due 60 days after receipt of an MPCA bill.</p>	<p>Minn. R. 7002.0005 through Minn. R. 7002.0095</p>
<p>The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.</p>	<p>Minn. R. 7007.0800, subp. 16</p>
<p>Environmental Review: the Permittee shall not begin construction of any single project or projects that are connected or phased, which will cause a total increase in actual emissions of greater than 99 tons per year for any criteria pollutant, without first getting a permit amendment to authorize the project. Connected and phased have meanings as defined in Minn. R. 4410.0200, subps. 9(b) and 60. The Permittee shall not begin construction of any project which is listed in Minn. R. 4410.4300 or Minn. R. 4410.4400 without first obtaining a permit amendment to authorize the project. Such project(s) may require the completion of an Environmental Assessment Worksheet or an Environmental Impact Statement prior to issuance of the amendment.</p>	<p>Minn. R. 4410.4300; Minn. R. 4410.4400</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/15/01

Facility Name: Medallion Kitchens of Minnesota Inc

Permit Number: 01900022 - 003

Subject Item: GP 001 NESHAP Sources

- Associated Items:** EU 001 Spray Booth, Automotive
 EU 002 Spray Booth, Specialty
 EU 003 Spray Booth, Stain 3
 EU 004 Spray Booth, Top Coat 1
 EU 005 Spray Booth, Stain 1
 EU 006 Spray Booth, Seal 1
 EU 007 Spray Booth, Stain 2
 EU 008 Spray Booth, Top Coat 2
 EU 009 Spray Booth, Seal 2
 EU 010 Spray Booth, Top Coat 3
 EU 011 Spray Booth, Seal 3

What to do	Why to do it
EMISSION AND OPERATIONAL LIMITS	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
Emission Limit for Finishing Materials (compliance based on averaging): the average volatile hazardous air pollutant (VHAP) content (E) of all finishing materials, which include but are not limited to, stains, basecoats, washcoats, enamels, sealers, and topcoats used, shall not exceed 0.8 kg VHAP/kg solids (0.8 lb VHAP/lb solids), as applied. "E" shall be calculated using the equation given in this permit.	40 CFR Section 63.802(b)(1) and Table 3 of 40 CFR pt. 63, subp. JJ
Emission Limit (contact adhesives): the VHAP content, as applied, shall not exceed than 0.2 kg VHAP/kg solids (0.2 lb VHAP/lb solids). The limit does not apply to aerosol adhesives and contact adhesives applied to nonporous substrates.	40 CFR Section 63.802(b)(2) & 40 CFR Section 63.804(e)
Emission Limit (strippable spray booth coatings): the VOC content, as applied, shall not exceed than 0.8 kg VOC/kg solids (0.8 lb VHAP/lb solids).	40 CFR Section 63.802(b)(3)
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 presented in paragraphs (b) through (l) or 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)
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)
<p>Compliance Procedure For Finishing Materials: The Permittee shall calculate the average VHAP content (E) using the following equation: $E = \frac{Mc_1Cc_1 + Mc_2Cc_2 + \dots + Mc_nCc_n + S_1W_1 + S_2W_2 + \dots + S_nW_n}{Mc_1 + Mc_2 + \dots + Mc_n}$</p> <p>Where: n=1,2,3,...(the first finishing material(c), the second finishing material(c), etc); Mc=the mass of solids in a finishing material(c), in kg (lb); Cc=the VHAP content of a finishing material(c), in kg of VHAP per kg of coating solids (lb VHAP/lb solids), as supplied; S=the VHAP content of a 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)

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/15/01

Facility Name: Medallion Kitchens of Minnesota Inc

Permit Number: 01900022 - 003

<p>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) Copies 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 above E calculation; 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.</p>	<p>40 CFR Section 63.806(b), (c), and (e)</p>
<p>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 plan; 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 usage and the percentage of finishing materials applied with this type of spray guns for each semiannual period; and 5) Copies of documentation such as logs developed to demonstrate that the other provisions of the WPIP are followed.</p>	<p>40 CFR Section 63.806(e)</p>
<p>The Permittee shall maintain records of all reports submitted to the agency including the supporting materials.</p>	<p>40 CFR Section 63.806(h) and (i)</p>
<p>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.</p>	<p>40 CFR Section 63.806(j) and 40 CFR Section 63.10(b)(1)</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/15/01

Facility Name: Medallion Kitchens of Minnesota Inc

Permit Number: 01900022 - 003

Subject Item: GP 002 Coating Operations

- Associated Items:**
- EU 001 Spray Booth, Automotive
 - EU 002 Spray Booth, Specialty
 - EU 003 Spray Booth, Stain 3
 - EU 004 Spray Booth, Top Coat 1
 - EU 005 Spray Booth, Stain 1
 - EU 006 Spray Booth, Seal 1
 - EU 007 Spray Booth, Stain 2
 - EU 008 Spray Booth, Top Coat 2
 - EU 009 Spray Booth, Seal 2
 - EU 010 Spray Booth, Top Coat 3
 - EU 011 Spray Booth, Seal 3

What to do	Why to do it
EMISSION AND OPERATIONAL LIMITS	hdr
Volatile Organic Compounds: less than or equal to 245.0 tons/year based on a 12 accounting period rolling sum. VOC content shall be determined as described under the Material Content requirement of this permit. All sources using VOC, other than fuel combustion, shall be included in the 12 accounting period rolling sum calculation (e.g., coating, cleaning, etc.).	Title I Condition: Limit to avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000
Total Particulate Matter: less than or equal to 150 tons/year based on a 12 month accounting period rolling sum. PM10 content shall be described under the Material Content requirement of this permit. All coating operation sources using PM10 shall be included in the 12 accounting period rolling sum calculation (e.g., coating, cleaning, etc., but not wood operations or fuel combustion). PM is assumed to equal PM10.	Title I Condition: Limit to avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000
<p>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:</p> <ol style="list-style-type: none"> 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). <p>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.</p> <p>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.</p>	Title I Condition: Limit to avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000
The Permittee shall vent emissions from all spray booths to control equipment meeting the requirements of GP003.	Title I Condition: Limit to avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7011.0715
A maximum of two spray guns shall be operated, at a time, per spray booth for each of Group 002's spray booths. These two booths may operate two spray guns at any given time, provided the spray guns meet all other permit requirements.	Minn. R. 7011.0715
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 separately to each emissions unit listed in GP002.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent opacity . This limit applies separately to each emissions unit listed in GP002.	Minn. R. 7011.0715, subp. 1(B)
MONITORING AND RECORDKEEPING	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/15/01

Facility Name: Medallion Kitchens of Minnesota Inc

Permit Number: 01900022 - 003

<p>Material Content: VOC and Solids (PM) content of raw materials shall be determined by the Material Safety Data Sheet (MSDS) provided by the supplier for each material used. The Permittee shall obtain a certification from the supplier as to the accuracy of the MSDS. If the MSDS provides a material content range, the highest number in the range shall be used for all calculations. Other alternative methods approved by the MPCA may be used to determine the VOC or Solids (PM) content. The Commissioner reserves the right to require the Permittee to take the samples of VOC containing materials, and to conduct analysis of VOC or Solids (PM) as per EPA and ASTM reference methods. If the EPA or ASTM reference method is used, it shall supersede the MSDS.</p>	<p>Title I Condition: Monitoring to avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000</p>
<p>Material Content of Shipped Wastes: If the Permittee elects to obtain credit for VOC shipped in waste materials, the Permittee shall either use method 1 or 2 to determine the VOC content in the shipped wastes.</p> <p>1). The Permittee or company receiving the waste shall analyze a sample of each container of waste using a gas chromatograph or other method approved by the Commissioner, to determine the weight content of VOC.</p> <p>2). The Permittee may use MSDS data for raw materials to determine the VOC content of the waste, using the lowest VOC content if a range is given. If the waste contains several materials, the content of mixed waste shall be assumed to be the lowest VOC content of any of the materials.</p>	<p>Title I Condition: Monitoring to avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000</p>
<p>Daily Recordkeeping -- VOC Emissions.</p> <p>1). On each day of operation, the Permittee shall calculate, record, and maintain daily totals of all VOC dispensed at the facility, in tons, based on purchase records, flow meters, and MSDS data.</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>Accounting Period Recordkeeping -- VOC Emissions. By the 15th day of the accounting period, the Permittee shall calculate and record the following:</p> <p>1) The total VOC shipped in waste for the previous accounting period, using billing records and analyses or MSDS as appropriate.</p> <p>2) The total VOC dispensed for the previous accounting period by summing all the daily numbers for the previous accounting period.</p> <p>3) The VOC emissions for the previous accounting period by subtracting VOC shipped in waste (item 1) from VOC dispensed (item 2).</p> <p>4) The 12 accounting period rolling sum VOC emissions for the previous 12 accounting periods by summing the monthly VOC emissions data for the previous 12 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>Daily Recordkeeping -- PM Emissions.</p> <p>1). On each day of operation, the Permittee shall calculate, record, and maintain daily totals of all the coating operation's PM dispensed at the facility, in tons, based on purchase records, flow meters, and MSDS data.</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>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 summing all the daily numbers for the previous accounting period.</p> <p>2) The 12 accounting period rolling sum PM emissions for the previous 12 accounting periods by summing the monthly PM emissions data for the previous 12 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>Recordkeeping of Equipment and Coating Changes:</p> <p>The Permittee shall keep records of any spray guns that are added or replaced. This record shall be updated any time a gun is added or replaced. The record shall include the date the gun was added or replaced, the gun manufacturer and model number, the spray technology and manufacturer specified transfer efficiency (minimum of 75%), the spray capacity in gallons per hour, and the EU (emission unit) number 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 Material 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>
<p>Definition of Accounting Period: The VOC and PM limits are based on 12 accounting periods in a calendar year. These periods can vary from three to five weeks each. The Company 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.</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

03/15/01

Facility Name: Medallion Kitchens of Minnesota Inc

Permit Number: 01900022 - 003

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
 - CE 004 Mat or Panel Filter
 - CE 005 Mat or Panel Filter
 - CE 006 Mat or Panel Filter
 - CE 007 Mat or Panel Filter
 - CE 008 Mat or Panel Filter
 - CE 009 Mat or Panel Filter
 - CE 010 Mat or Panel Filter
 - CE 011 Mat or Panel Filter

What to do	Why to do it
LIMITS	hdr
Operate and maintain control equipment such that it achieves a control efficiency (=80% capture efficiency x removal efficiency of the panel filter) for Total Particulate Matter: greater than or equal to 73.6 percent control efficiency	Title I Condition: Limit to avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7011.0715
Operate and maintain control equipment such that it achieves a control efficiency (=80% capture efficiency x removal efficiency of the panel filter) for Particulate Matter < 10 micron: greater than or equal to 73.6 percent control efficiency	Title I Condition: Limit to avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7011.0715
The Permittee shall operate and maintain the control equipment any time the process equipment that it controls is in operation.	Title I Condition: Limit to avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7011.0715
Operation and Maintenance of Filters: The Permittee shall operate and maintain each panel filter according to the control equipment manufacture's specifications.	Title I Condition: Limit to avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7011.0715
MONITORING AND RECORDKEEPING	hdr
Daily Inspections: Once each operating day, the Permittee shall visually inspect the condition of the panel filters, including, but not limited to, alignment, saturation, tears, and holes. The Permittee shall maintain a daily written record of filter inspections.	Title I Condition: Monitoring to avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000
Periodic Inspections: The Permittee shall inspect the control equipment components as required by the manufacturing specifications. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subp. 14
Corrective Actions: If the filters or any of their components are found to need repair during the inspections, the Permittee shall follow the Operation and Maintenance Plan for the panel filter and take corrective action as soon as possible. The Permittee shall keep a record of the type and date of any corrective action taken for each filter, as soon as possible after completion of any corrective action.	Title I Condition: Monitoring to avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000
Hood Certification: Each control device hood must conform to the requirements listed in Minn. R. 7011.0070, subp. 1, and the Permittee shall certify this for each hood as specified in Minn. R. 7011.0070, subp. 3. The Permittee shall maintain a copy of each certification on site, as well as an annual record of the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow indication method.	Minn. R. 7007.0800, subp. 14 & 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/15/01

Facility Name: Medallion Kitchens of Minnesota Inc

Permit Number: 01900022 - 003

Subject Item: GP 004 Indirect Heating Equipment

- Associated Items:** EU 012 Air Make Up Unit 50K Old N
 EU 013 Air Make Up Unit 50K Old S
 EU 014 Boiler
 EU 015 Air Make Up 40K (Any other process units)
 EU 016 Air Make Up Unit 50K SW
 EU 017 Air Make Up Unit 50K W
 EU 018 Air Make Up Unit 50K N
 EU 019 Air Make Up Unit 50K SE

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.4 lbs/million Btu heat input . Due to equipment design, PTE of each unit is 0.0072 lb/MMBtu.	Minn. R. 7011.0515, subp. 1
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0515, subp. 2
Fuel Type: natural gas only, by design.	Minn. R. 7005.0100, subp. 35a
The Permittee shall keep records of fuel type and usage on a monthly basis.	Minn. R. 7007.0800, subp. 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/15/01

Facility Name: Medallion Kitchens of Minnesota Inc

Permit Number: 01900022 - 003

Subject Item: GP 005 Wood Working Equipment

- Associated Items:** CE 012 Fabric Filter - Low Temperature, i.e., T<180 Degrees F
 CE 013 Fabric Filter - Low Temperature, i.e., T<180 Degrees F
 EU 020 Wood Grinder/trailer
 EU 022 22 shapers
 EU 023 2 shapers
 EU 024 2 shapers
 EU 025 2 shapers
 EU 026 Sanding table
 EU 027 Chop saw
 EU 028 4 chop saws
 EU 029 4 table saws
 EU 030 table saw
 EU 031 3 table saws
 EU 032 2 table saws
 EU 033 table saw
 EU 034 Belt sander
 EU 035 2 panel saws
 EU 036 3 boring machines
 EU 037 boring machine
 EU 038 6 table saws
 EU 039 table saw
 EU 040 table saw
 EU 041 table saw
 EU 042 table saw
 EU 043 4 shapers
 EU 044 shaper
 EU 045 toe notcher
 EU 046 vertical panel saw
 EU 047 radial arm saw
 EU 048 overhead router
 EU 049 veneer sander
 EU 050 sanding table
 EU 051 3 wide belt sanders
 EU 052 dovetail machine
 EU 053 edgebander
 EU 054 band saw/overhead router
 EU 055 2 vertical panel saws
 EU 056 edge sander

What to do	Why to do it
Pre-authorized Changes: The Permittee may replace or move existing wood working equipment or add additional wood working equipment as long as all equipment is controlled by either CE012 or CE013 at all times that they are in operation.	Title I Condition: Limit to avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/15/01

Facility Name: Medallion Kitchens of Minnesota Inc

Permit Number: 01900022 - 003

<p>Recordkeeping of Equipment Changes: The Permittee shall keep and maintain a list of equipment vented to each baghouse and the required airflows for each piece of equipment. The record shall show that the total airflow requirements for each baghouse system are less than the limits given in Table A of this permit, listed at CE012 and CE013.</p> <p>This list shall be updated each time a piece of equipment is added, moved, or replaced. The record shall include the date the change was made, a brief description of the equipment, the required airflow for each piece of equipment, the CE (control equipment) number of the baghouse where the unit will be vented, and the total airflow for all equipment vented to each baghouse.</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>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 separately to each piece of wood working equipment listed in GP005.</p>	<p>Minn. R. 7011.0715, subp. 1(A)</p>
<p>Opacity: less than or equal to 20 percent opacity . This limit applies separately to each piece of wood working equipment listed in GP005.</p>	<p>Minn. R. 7011.0715, subp. 1(B)</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/15/01

Facility Name: Medallion Kitchens of Minnesota Inc

Permit Number: 01900022 - 003

Subject Item: CE 012 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

- Associated Items:** EU 022 22 shapers
 EU 023 2 shapers
 EU 024 2 shapers
 EU 025 2 shapers
 EU 026 Sanding table
 EU 027 Chop saw
 EU 028 4 chop saws
 EU 029 4 table saws
 EU 030 table saw
 EU 031 3 table saws
 EU 032 2 table saws
 EU 033 table saw
 EU 034 Belt sander
 EU 035 2 panel saws
 EU 036 3 boring machines
 EU 037 boring machine
 GP 005 Wood Working Equipment

What to do	Why to do it
EMISSION LIMITS	hdr
Particulate Matter < 10 micron: less than or equal to 0.02 grains/dry standard cubic foot	Title I Condition: Limit to avoid classification as a major source under 40 CFR Section 52.21 and Minn R. 7007.3000
Total Particulate Matter: less than or equal to 0.02 grains/dry standard cubic foot	Title I Condition: Limit to avoid classification as a major source under 40 CFR Section 52.21 and Minn R. 7007.3000
OPERATIONAL LIMITS	hdr
Operate and maintain control equipment such that it achieves a control efficiency (= 80% capture efficiency x removal efficiency of the fabric filter) for Total Particulate Matter: greater than or equal to 79.0 percent control efficiency	Title I Condition: Limit to avoid classification as a major source under 40 CFR Section 52.21 and Minn R. 7007.3000; Minn. R. 7011.0065, subp. 1(A)
Operate and maintain control equipment such that it achieves a control efficiency (= 80% capture efficiency x removal efficiency of the fabric filter) for Particulate Matter < 10 micron: greater than or equal to 79.0 percent control efficiency	Title I Condition: Limit to avoid classification as a major source under 40 CFR Section 52.21 and Minn R. 7007.3000; Minn. R. 7011.0065, subp. 1(A)
Pressure Drop: greater than or equal to 2.0 inches of water column and less than or equal to 4.0 inches of water column , recorded once every 24 hours when in operation.	Title I Condition: Limit to avoid classification as a major source under 40 CFR Section 52.21 and Minn R. 7007.3000; Minn. R. 7011.0080
Air Flow Rate: less than or equal to 48,000 actual cubic feet/minute . The Permittee shall keep the baghouse system design specifications showing the calculated maximum airflow on site.	Minn. R. 7005.0100, subp. 35a
Maintenance of Control Equipment. The Permittee shall maintain the control equipment as specified in Minn. R. 7011.0075, subp. 2(A)-(G) and maintain records of maintenance activities and corrective actions as specified in Minn. R. 7011.0075, subp. 2(H) and (I).	Minn. R. 7011.0075, subp. 2
MONITORING AND RECORDKEEPING	hdr
The Permittee shall operate the control equipment monitoring equipment at all times the control equipment is required to operate in compliance with Minn. R. 7011.0075.	Minn. R. 7011.0075, subp. 3
If the pressure drop is outside the specified pressure drop range, this shall be considered a deviation that must be reported in the Semiannual Deviations Report.	Minn. R. 7011.0075, subp. 5(b)
Hood Certification: The control device hood must conform to the requirements listed in Minn. R. 7011.0070, subp. 1, and the Permittee shall certify this for each hood as specified in Minn. R. 7011.0070, subp. 3. The Permittee shall maintain a copy of each certification on site, as well as an annual record of the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow indication method.	Minn. R. 7011.0070, subp. 1 & 3

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/15/01

Facility Name: Medallion Kitchens of Minnesota Inc

Permit Number: 01900022 - 003

Subject Item: CE 013 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

- Associated Items:** EU 020 Wood Grinder/trailer
 EU 038 6 table saws
 EU 039 table saw
 EU 040 table saw
 EU 041 table saw
 EU 042 table saw
 EU 043 4 shapers
 EU 044 shaper
 EU 045 toe notcher
 EU 046 vertical panel saw
 EU 047 radial arm saw
 EU 048 overhead router
 EU 049 veneer sander
 EU 050 sanding table
 EU 051 3 wide belt sanders
 EU 052 dovetail machine
 EU 053 edgebander
 EU 054 band saw/overhead router
 EU 055 2 vertical panel saws
 EU 056 edge sander
 GP 005 Wood Working Equipment

What to do	Why to do it
EMISSION LIMITS	hdr
Particulate Matter < 10 micron: less than or equal to 0.02 grains/dry standard cubic foot	Title I Condition: Limit to avoid classification as a major source under 40 CFR Section 52.21 and Minn R. 7007.3000
Total Particulate Matter: less than or equal to 0.02 grains/dry standard cubic foot	Title I Condition: Limit to avoid classification as a major source under 40 CFR Section 52.21 and Minn R. 7007.3000
OPERATIONAL LIMITS	hdr
Operate and maintain control equipment such that it achieves a control efficiency (= 80% capture efficiency x removal efficiency of the fabric filter) for Total Particulate Matter: greater than or equal to 79.0 percent control efficiency	Title I Condition: Limit to avoid classification as a major source under 40 CFR Section 52.21 and Minn R. 7007.3000; Minn. R. 7011.0065, subp. 1(A)
Operate and maintain control equipment such that it achieves a control efficiency (= 80% capture efficiency x removal efficiency of the fabric filter) for Particulate Matter < 10 micron: greater than or equal to 79.0 percent control efficiency	Title I Condition: Limit to avoid classification as a major source under 40 CFR Section 52.21 and Minn R. 7007.3000; Minn. R. 7011.0065, subp. 1(A)
Pressure Drop: greater than or equal to 2.0 inches of water column and less than or equal to 4.0 inches of water column , recorded once every 24 hours when in operation.	Title I Condition: Limit to avoid classification as a major source under 40 CFR Section 52.21 and Minn R. 7007.3000; Minn. R. 7011.0080
Air Flow Rate: less than or equal to 57,000 actual cubic feet/minute . The Permittee shall keep the baghouse system design specifications showing the calculated maximum airflow on site.	Minn. R. 7005.0100, subp. 35a
Maintenance of Control Equipment. The Permittee shall maintain the control equipment as specified in Minn. R. 7011.0075, subp. 2(A)-(G) and maintain records of maintenance activities and corrective actions as specified in Minn. R. 7011.0075, subp. 2(H) and (I).	Minn. R. 7011.0075, subp. 2
MONITORING AND RECORDKEEPING	hdr
The Permittee shall operate the control equipment monitoring equipment at all times the control equipment is required to operate in compliance with Minn. R. 7011.0075.	Minn. R. 7011.0075, subp. 3
If the pressure drop is outside the specified pressure drop range, this shall be considered a deviation that must be reported in the Semiannual Deviations Report.	Minn. R. 7011.0075, subp. 5(b)

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/15/01

Facility Name: Medallion Kitchens of Minnesota Inc

Permit Number: 01900022 - 003

<p>Hood Certification: The control device hood must conform to the requirements listed in Minn. R. 7011.0070, subp. 1, and the Permittee shall certify this for each hood as specified in Minn. R. 7011.0070, subp. 3. The Permittee shall maintain a copy of each certification on site, as well as an annual record of the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow indication method.</p>	<p>Minn. R. 7011.0070, subp. 1 & 3</p>
<p>Initial Performance Test: due 180 days after Permit Issuance to measure PM10 emissions.</p>	<p>Title I Condition: Monitoring for limit taken to avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1</p>
<p>Performance Test Notifications and Submittals:</p> <p>Performance Tests are due as outlined in Tables A and B of the permit. See Table B for additional testing requirements.</p> <p>Performance Test Notification (written): due 30 days before each Performance Test Performance Test Plan: due 30 days before each Performance Test Performance Test Pre-test Meeting: due 7 days before each Performance Test Performance Test Report: due 45 days after each Performance Test Performance Test Report - Microfiche Copy: due 105 days after each Performance Test</p>	<p>Minn. R. 7017.2030, subp. 1-4 and Minn. R. 7017.2035, subp. 1-2</p>

TABLE B: SUBMITTALS

03/15/01

Facility Name: Medallion Kitchens of Minnesota Inc
Permit Number: 01900022 - 003

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

03/15/01

Facility Name: Medallion Kitchens of Minnesota Inc

Permit Number: 01900022 - 003

What to send	When to send	Portion of Facility Affected
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility
Computer Dispersion Modeling Protocol	due 1,096 days after Permit Issuance. This protocol will describe the proposed modeling methodology and input data, in accordance with all requirements of 40 CFR pt. 51, App. W. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Total Facility
Computer Dispersion Modeling Results	due 1,462 days after Permit Issuance To be submitted after the MPCA has reviewed and approved the modeling protocol. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Total Facility
Testing Frequency Plan	due 60 days after Initial Performance Test for PM10. The plan shall specify a testing frequency for both CE012 and CE013 using the test data and MPCA guidance. Future performance tests based on year (12 month), 36 month, and 60 month intervals, or as applicable, shall be required on written approval of MPCA per Minn. R. 7017.2020, subp. 1.	CE013

TABLE B: RECURRENT SUBMITTALS

03/15/01

Facility Name: Medallion Kitchens of Minnesota Inc

Permit Number: 01900022 - 003

What to send	When to send	Portion of Facility Affected
Compliance Status Report	due 30 days after end of each calendar half-year following Permit Issuance. The Permittee shall submit a semiannual Continuous Compliance Report. At a minimum, the report shall include; 1) results of averaging calculation of VHAP from finishing operation for each month within that semiannual period using above equation "E"; 2) a compliance certification stating the "E" value was always less than 0.8, compliant contact adhesives have been used on each operating day, compliant strippable spray booth coatings have been used each day, and the WPIP being 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 them 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.	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 30 each year that describes the changes made at the facility during the previous calendar year using the latest MPCA application forms (GI-04 and GI-05 series). The report shall document the VOC 12 accounting period rolling sum calculations for the previous calendar year and any equipment that was added, changed or removed. It shall also include the defined accounting periods for the next 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 31 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 U.S. EPA regional office in Chicago. This report covers all deviations experienced during the calendar year. The EPA copy shall be sent to: Mr. George Czerniak, Chief, Air Enforcement and Compliance Assurance Branch, Air and Radiation Division, EPA Region V, 77 West Jackson Boulevard, Chicago, Illinois 60604.	Total Facility
Emissions Inventory Report	due 91 days after end of each calendar year following Permit Issuance (April 1). To be submitted on a form approved by the Commissioner.	Total Facility

TABLE C: COMPLIANCE SCHEDULE

12/25/9999

Facility Name:

Permit Number:

APPENDIX I
Facility Name: Medallion Kitchens of Minnesota
Permit Number: 01900022-001

APPENDIX MATERIAL

Facility Name: Medallion Kitchens of Minnesota Inc
Permit Number: 01900022-003

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.

APPENDIX I

Facility Name: Medallion Kitchens of Minnesota

Permit Number: 01900022-001

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

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 Kitchens of Minnesota
Permit Number: 01900022-001

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 1.41 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 Kitchens of Minnesota
Permit Number: 01900022-001

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	5.55
002	3.1
003	3.96
004	9.1
005	3.96
006	6.34
007	6.34
008	9.14
009	5.55
010	5.55
011	5.55
057	9.14
058	3.96
059	5.55
060	3.17
061	5.55

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 01900022-003

This Technical Support Document (TSD) is for all the interested parties of the permit for Medallion Kitchens. The purpose of this document is to set forth the legal and factual basis for the permit conditions, including references to the applicable statutory or regulatory provisions.

1. General Information

1.1 Applicant and Stationary Source Location:

Facility Address and Contact Information (SIC Code: 2434)
Medallion Kitchens of Minnesota, Inc. 180 Industrial Blvd. Waconia Carver County Craig Fast, 612-442-6920

1.2 Description of the Facility

Medallion Kitchens is a manufacturer of finished kitchen cabinets. The main processes that generate emissions are wood working, surface coating, and combustion of natural gas. The facility also has some insignificant activities that were addressed in the Part 70 permit. The coating operations emit volatile organic compounds (VOC), several hazardous air pollutants (HAP), and particulate matter and particulate matter less than 10 microns (PM/PM₁₀). They have wall filters that control PM/PM₁₀. The wood working operations emit PM/PM₁₀ and are controlled with 2 baghouse systems.

The permit contains operational and control requirements that limit emissions of VOC, HAP, and PM/PM₁₀.

1.3 Description of Previous Air Emission Permits

The facility received a total facility operating permit in 1986 that authorized the operation of all the equipment that existed at that time (908-86-OT-1). The permit contained Minnesota Rule limits and requirements to maintain the spray booth filters. These conditions are carried forward or updated with more current requirements.

The facility received an installation and operation permit in January 1997 for an additional spray booth (908-97-I/O-1 or 01900022-005). The permit contained limits on the spray booth to avoid major modification classification for both VOC and PM/PM₁₀ for New Source Review. These limits were replaced in a permit issued in January 1998 (908-86-OT-1, Amendment No.1 or 01900022-006).

Permit Action Number:
Date: 2/3/2004

The 1998 permit authorized the installation and operation of eight new paint booths and the relocation, modification, and operation of three existing paint booths. It did not cover the wood working operations. It contained Title I limits on the total facility VOC emissions to keep the whole source minor under New Source Review, National Emission Standards for Hazardous Air Pollutants (NESHAP) requirements (see Section 3.3 of this TSD for more detail), Minnesota Rule limits for the spray booths and air make-up units, and control equipment requirements for the spray booth filters. These limits were carried forward into the Part 70 permit.

In Sept., 1999, the Part 70 Operating permit was issued. This permit pre-authorized certain changes at the facility that can be made over the life of the permit. The following are changes that the facility can make as long as all permit conditions are met, and as long as no new applicable requirements are triggered:

- move, add, or replace wood working equipment;
- add or replace spray guns with guns that have better or equivalent transfer efficiency; and
- change coatings to different formulations that meet coating content assumptions used in this TSD (based on application materials).

1.4 Description of any changes allowed with this permit issuance

This major amendment includes the following changes:

- adds 5 new spray booths. This includes one auto booth (EU057) as well as a new line (EU058 - EU061). The new line contains a glaze, stain, topcoat, and sealer booth.
- adds a second spray gun to nine existing booths. It is noted that previously only EU001 and EU004 were authorized to use two spray guns in a booth. The new booths will all have 2 spray guns.
- changes all of the coating calculations due to changes in the materials being applied; and,
- changes all gun flow rates contained in the previous permit.

The combustion and wood working operations were not altered as a result of this amendment.

1.5 Changes to the Draft Permit Due to Comments

(place holder if needed)

1.6 Facility Emissions

Table 1. Total Facility Permitted Potential to Emit Summary

Permit Action Number:

Date: 2/3/2004

Note: See Section 3.3 of this TSD for more discussion of potential emissions.

Pollutant	Combustion Units (tpy)	Insignificant Activities (tpy)	Wood Working Operations (tpy)	Coating ** Operations (tpy)	Total Facility (tpy)
PM	1.3046	0.1081	78.84	150.0	230.25
PM ₁₀	1.3046	0.1081	78.84	150.0	230.25
NO _x	17.1654	1.4225	--	--	18.588
SO _x	0.1030	0.0085	--	--	0.1115
VOC	0.9441	0.0782	--	245.0	246.02
CO	14.4190	1.1949	--	--	15.614
HAPs					
Cumene	neg	neg	--	36.09	36.09
Ethyl Benzene	neg	neg	--	245.0	245.0
Formaldehyde	neg	neg	--	11.23	11.23
Glycol Ethers	neg	neg	--	245.0	245.0
Methanol	neg	neg	--	245.0	245.0
Methyl Isobutyl Ketone	neg	neg	--	60.71	60.71
Naphthalene	neg	neg	--	92.23	92.23
Phenol	neg	neg	--	190.72	190.72
Toluene	neg	neg	--	245.0	245.0
Xylene	neg	neg	--	245.0	245.0
Total HAP	neg	neg	--	245.0	245.0

* The individual HAPs are based on the individual worst case compound found in any coating MSDS.

All of the volatile HAP are also VOC, so the total tons per year of each of these HAP could not exceed the 245 tpy VOC cap.

** Coating Operations = spray booths + custom coatings + cleanup materials

Table 2. Facility and Permit Classification

Program	Major/Affected Source	*Synthetic Minor	*Minor
Prevention of Significant Deterioration		X (VOC and PM/PM ₁₀)	
Nonattainment Area Review	NA	NA	NA
Part 70 Permit Program	X		

* Refers to potential emissions that are less than those specified as major by 40 CFR § 52.21, 40 CFR pt. 51 Appendix S, and 40 CFR pt. 70.

2. Regulatory Overview of the Facility

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The facility has taken limits to avoid major source classification for New Source Review (40 CFR § 52.21). The facility is a major source under the federal operation permits program (40 CFR pt. 70) and the National Emissions Standards for Hazardous Air Pollutants (NESHAPs, 40 CFR pt. 63). The facility is subject to a promulgated NESHAP for Wood Furniture Manufacturing Operations (40 CFR pt. 63, subp. JJ). The facility must comply with the NESHAP limits for new affected sources, due to reconstruction of the source that took place in 1998.

See Attachment 2 of this TSD for the specific permit limits and their basis (Form CD-01).

Table 3. Regulatory Overview

(This table only contains the Groups that were amended as a result of this amendment. Previous Group regulations are also included.)

Level*	Applicable Regulations	Comments:
GP001	40 CFR 63 subp. JJ	National Emission Standards for Hazardous Air Pollutants for Wood Furniture Manufacturing Operations. See Section 3.1 of this TSD for more details. The new units are subject to this NESHAP.
GP002	40 CFR § 52.21	<p>Prevention of Significant Deterioration (PSD). Limits taken to avoid major source classification under PSD for all noncombustion emissions of VOC.</p> <p>Most of these were conditions carried forward from Air Emission Permit No. 01900022-006 with some additional limits and detail added to the Part 70 monitoring requirements.</p> <p>Conditions from the Part 70 permit: The permit requires all spray booths to be controlled by GP003. The permit carries forward a limit on emissions of VOC from all noncombustion processes. The VOC limit is a rolling limit due to substantial and unpredictable variations in operation.</p> <p>The Part 70 permit allows the facility to get credit for VOCs shipped offsite as waste. The Part 70 permit also pre-authorized certain changes that can be made during the permit term -- replacing or adding spray guns and changing coatings -- so long as the permit limits are met. The Part 70 permit changed the recordkeeping periods from calendar months to accounting periods.</p> <p>New: Adds a 150 tpy emission cap on the PM (solids) emissions from all the coatings. In the previous permit, the PM limit was implicit with the quantity of coatings</p>

Level*	Applicable Regulations	Comments:
	Minn. R. 7011.0715	<p>restricted by the 245 tpy VOC cap. With a lower VOC content, this implicit limit could no longer limit the PTE to under the 250 tpy threshold. Only the coating operations were capped. The combustion PM PTE emissions are 1.3 tpy and the wood working operations are 78.84 tpy. The wood working operations all emit into one of the two baghouses. The baghouses have a 0.2 gr/dscf emission limit already in place. Hence, the 78.84 tpy cannot be exceeded. Accordingly, only the coating operations were capped. It is assumed that PM = PM10.</p> <p>Standards of Performance for Post 1969 Industrial Process Equipment. The Part 70 permit contained several new conditions necessary for the units to meet this rule.</p> <p>In the Part 70 permit, the booths were previously only able to operate one gun at a time. To limit the hourly PM/PM₁₀ emissions, all but 2 of the booths were limited to operate one gun at a time. EU001 and 004 were authorized to operate 2 guns at a time. In addition, all new spray guns were to have a spray capacity less than or equal to the current spray gun capacity used in the given booth (listed in Appendix III of the permit). The PM/PM₁₀ PTE calculations can be found in Attachment 3 of this TSD.</p> <p>New: In addition, a second gun was allowed to be operated all of the booths. This was possible by utilizing a 75% transfer efficiency for all of the new guns. (The existing guns maintained the 50% transfer efficiency.) In addition, the solids content in the worst case material decreased from 8.35 to 7.18 lb/gal.</p>
GP003	40 CFR § 52.21; Minn. R. 7011.0715	PSD and Standards of Performance for Post 1969 Industrial Equipment. Conditions carried forward into the Part 70 permit from Air Emission Permit No. 01900022-006 with further detail added to monitoring. 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.

*Level --- EU = emission unit, GP = group, TF = total facility, SV = stack/vent, CE = control equipment

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3. Technical Information

3.1 NESHAP Applicability

As stated previously, the 1998 permit, Air Emission Permit No. 01900022-006 (Amendment No. 1 to 908-86-OT-1), authorized the installation and operation of eight new paint booths and the relocation, modification, and operation of three existing paint booths. The MPCA determined that this was considered reconstruction for the Wood Furniture Manufacturing NESHAP; therefore, the facility was subject to the new affected source requirements per 40 CFR § 63.800(g). The permit was issued in January of 1998 with the new affected source limits.

The company agreed to meet the limits for a new affected source, yet in January of 1998, they also sent a determination request to EPA asking for a formal determination on the reconstruction issue. EPA has yet to respond as of the date of this document. The company has stated that they will continue to meet the limits for new affected sources under the NESHAP regardless of EPA's determination. The NESHAP limits have been carried forward into and are maintained in the Part 70 permit. The "new affected source" NESHAP limits were again carried forward into and maintained in this major permit amendment.

3.2 Pre-authorized Changes

From the Part 70 Permit, this permit maintains the pre-authorizations. These pre-authorization of certain changes might otherwise be considered modifications under state and federal rules.

Spray Booths:

This permit maintains the pre-authorizes for the following changes at the spray booths as long as all permit conditions are met and as long as no new applicable requirements are triggered:

- add or replace spray guns with guns that have spray capacities less than or equal to the capacities listed in Appendix III of the permit and as long as the guns have better or equivalent transfer efficiency to airless spray technology (75%); and
- change coatings to different formulations that meet coating content assumptions.

The permitted allowable emissions take into account limits on gun capacity, maximum VOC and solids contents of coatings, total VOC cap, and particulate control requirements. All applicable requirements and necessary monitoring are in the permit. The addition or 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); so 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 (e.g., insignificant modification, minor amendment, major amendment, etc.).

3.3 Potential to Emit Calculations

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Attachment 3 contains detailed spreadsheets and supporting information prepared by the MPCA. There are several MPCA spreadsheets that are used to calculate PTE from the spray booths. Two spreadsheets detail the various coating and cleanup materials that the facility is expecting to use. However, since the permit contains a total VOC cap, the various coating contents are not relevant for calculating annual PTE of VOC. They are only used for calculating PM/PM₁₀ and HAP potentials and for estimating the maximum hourly emissions of VOC.

It is noted that the spreadsheets remain dated 9/24/99. This date is in error for this amendment work. These spreadsheets were updated in Dec. 2000.

Table 1 of this document summarizes the potential to emit for various HAPs. These HAPs and their PTEs are based on the current and projected coatings and formulations for this facility. The facility can change materials at any time, so long as the new materials continue to meet the various permit limits and content assumptions. While the numbers and chemicals in Table 1 are intended to project the maximum possible emissions of all the HAPs the facility will likely emit, the facility is not restricted to these coatings and formulations; therefore, the HAPs and PTEs of those HAPs may change after permit issuance.

The maximum numbers in Table 1 for single volatile HAPs are limited by the total VOC limit of 245 tons per year. For example, the facility can only emit up to 245 tons per year of methanol since it is a VOC as well as HAP. However, this is essentially impossible, since this would mean that the facility would then not be able to use any other volatile material. The total HAP number is calculated by assuming 245 tons per year of volatile HAPs. It is noted that the 2 particulate HAP materials (manganese and chromium compounds) are no longer used. This explains the decrease of 7 tpy of HAPs PTE from the Part 70 permit. See Attachment 1 for more details about specific calculations.

3.4 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. To achieve this objective, US EPA issued guidance (September 15, 1998, memorandum Periodic Monitoring Guidance for Title V Operating Permits Programs) on periodic monitoring requirements for permitted sources. In this guidance, EPA indicates that monitoring required by recently promulgated NESHAPs meet the requirements for periodic monitoring for those standards. Since a NESHAP applies to the HAP emissions from the coating operations, no additional monitoring is necessary for this particular applicable requirement as the NESHAP requires adequate monitoring.

In evaluating the monitoring included in the permit for the remaining applicable requirements, the MPCA considered the following as per the Sept. 15, 1998, guidance:

- the likelihood of violating the applicable requirement;
- whether add-on controls are necessary to meet the emission limit;
- the variability of emissions over time;
- the type of monitoring, process, maintenance, or control equipment data already available for the emission unit;

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- the technical and economic feasibility of possible periodic monitoring methods; and
- the kind of monitoring found on similar units.

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. Emission Units Subject to Periodic Monitoring

EU/ GP/ CE	Emission limit (Basis)	Additional Monitoring	Discussion
Spray Booths: GP002	VOC = 245 tons per any 12 accounting periods (limit to avoid NSR)	Recordkeeping: Daily records of coating usage; On-going MSDS records of coating contents; Accounting period calculations of emissions.	<p>Records can be generated on a daily basis since all the coating materials are dispensed from the central paint stores (used at EUs 001-011, 057-061). This area will be using a combination of daily manual logs and purchase records (for smaller quantity items).</p> <p>Credit can be taken for waste materials collected and shipped off-site (dispensed - waste = emissions). Since this is done at most monthly, calculating emissions more frequently than monthly would result in large spikes (while waste is accumulating) and dips (when waste is shipped) – resulting in possible paperwork violations and days with negative emissions. For these reasons, 12 month rolling limits are reasonable for this facility.</p> <p>The company currently uses an accounting period tracking system which is based on weeks rather than calendar months. There are always 12 accounting periods per year, but the number of weeks in each period is not always the same each year. This is determined prior to the start of the year and is used throughout the year for all business functions. Since this varies from year to year, the permit requires the Permittee to include the defined accounting periods for the following year in</p>

EU/ GP/ CE	Emission limit (Basis)	Additional Monitoring	Discussion
	<p>New guns limited to current capacities.</p> <p>Technology – airless or better transfer efficiency</p>	<p>On-going record of gun capacities.</p> <p>On-going record for each gun – technology and mfr. specified transfer</p>	<p>The PM/PM₁₀ limits are conservative since all allowable and PTE calculations are based on 50% transfer, even though all new guns are required to have a 75% transfer efficiency (a 33% margin).</p>
<p>Spray Booths: EU001 and EU002</p>	<p>PM: ≤ 0.0779 gr/dscf, each booth</p> <p>Opacity: ≤ 20 % (Minn. R. 7011.0715)</p>	<p>None</p>	<p>Other PM limits at GP003 and GP002 (and associated monitoring) ensure that this applicable requirement is being met. These other operational limits give these booths PTEs of 7.94 lb/hr and 4.43 lb/hr of PM, respectively. Applicable rule limit at maximum airflow is 10.11 lb/hr, for each booth.</p>
<p>Spray Booth: EU003</p>	<p>PM: ≤ 0.0650 gr/dscf Opacity: ≤ 20 % (Minn. R. 7011.0715)</p>	<p>None</p>	<p>Other PM limits at GP003 and GP002 (and associated monitoring) ensure that this applicable requirement is being met. These other operational limits give this process a PTE = 5.66 lb/hr of PM. Applicable rule limit at maximum airflow is 14.72 lb/hr.</p>
<p>Spray Booth: EU004</p>	<p>PM: ≤ 0.0561 gr/dscf Opacity: ≤ 20 % (Minn. R. 7011.0715)</p>	<p>None</p>	<p>Other PM limits at GP003 and GP002 (and associated monitoring) ensure that this applicable requirement is being met. These other operational limits give this process a PTE = 13.01 lb/hr of PM. Applicable rule limit at maximum airflow is 19.99 lb/hr.</p>
<p>Spray Booths: EU005, 006, and 007</p>	<p>PM: ≤ 0.0622 gr/dscf, each booth</p> <p>Opacity: ≤ 20 % (Minn. R. 7011.0715)</p>	<p>None</p>	<p>Other PM limits at GP003 and GP002 (and associated monitoring) ensure that this applicable requirement is being met. These other operational limits give these booths PTEs of = 5.66 lb/hr, 9.07</p>

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			lb/hr, and 9.07 lb/hr of PM, respectively. Applicable rule limit at maximum airflow is 16.15 lb/hr, for each booth.
Spray Booths: EU008 and EU009	PM: ≤ 0.0622 gr/dscf, each booth Opacity: $\leq 20\%$ (Minn. R. 7011.0715)	None	Other PM limits at GP003 and GP002 (and associated monitoring) ensure that this applicable requirement is being met. These other operational limits give these booths PTEs of 13.07 lb/hr and 7.94 lb/hr of PM, respectively. Applicable rule limit at maximum airflow is 16.15 lb/hr, for each booth.
Spray Booths: EU010 and EU011	PM: ≤ 0.0699 gr/dscf, each booth Opacity: $\leq 20\%$ (Minn. R. 7011.0715)	None	Other PM limits at GP003 and GP002 (and associated monitoring) ensure that this applicable requirement is being met. These other operational limits give these booths PTEs of 7.94 lb/hr and 7.94 lb/hr of PM, respectively. Applicable rule limit at maximum airflow is 12.68 lb/hr, for each booth.
Spray Booths EU057	PM: ≤ 0.0740 gr/dscf, each booth Opacity: $\leq 20\%$ (Minn. R. 7011.0715)	None	Other PM limits at GP003 and GP002 (and associated monitoring) ensure that this applicable requirement is being met. These other operational limits give this booth PTE of 8.71 lb/hr. Applicable rule limit at maximum airflow is 11.23 lb/hr, for each booth.
Spray Booths: EU058 and EU059	PM: ≤ 0.0779 gr/dscf, each booth Opacity: $\leq 20\%$ (Minn. R. 7011.0715)	None	Other PM limits at GP003 and GP002 (and associated monitoring) ensure that this applicable requirement is being met. These other operational limits give these booths PTEs of 3.77 lb/hr and 5.29 lb/hr of PM, respectively. Applicable rule limit at maximum airflow is 10.11 lb/hr, for each booth.

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EU/ GP/ CE	Emission limit (Basis)	Additional Monitoring	Discussion
Spray Booths: EU060 and EU061	PM: ≤ 0.0779 gr/dscf, each booth Opacity: $\leq 20\%$ (Minn. R. 7011.0715)	None	Other PM limits at GP003 and GP002 (and associated monitoring) ensure that this applicable requirement is being met. These other operational limits give these booths PTEs of 3.02 lb/hr and 5.29 lb/hr of PM, respectively. Applicable rule limit at maximum airflow is 10.11 lb/hr, for each booth.
Panel Filters: GP003	PM/PM ₁₀ : Control Efficiency of 73.6% (limit to avoid NSR + Minn. R. 7011.0715)	Recordkeeping, O&M, inspections	<p>Monitoring based on the Minnesota Performance Standard for Control Equipment is adequate to have a reasonable assurance of compliance (daily and periodic inspections, corrective actions, O&M, and hood design records). This is an area on which EPA had comments, so the following additional discussion is provided.</p> <p>The Minnesota Control Equipment Rule lists the standard periodic monitoring that the MPCA expects for control equipment. For spray booths, no parametric monitoring is required. The types of parametric monitoring required for some other types of particulate control are pressure drop and visible emissions. Visible emissions are not meaningful for these particular spray booths due to the low concentration of the emission stream – there would never be visible emissions, even without control. Pressure drop is not usually useful due to the low pressure differentials over the panel filters. For wall filters, where the filters are easily accessible (versus a baghouse), visual inspections of the filter condition is the most effective way to verify filter performance. Daily visual inspections (and records) are required by this permit.</p> <p>In terms of performance testing to verify the control efficiency, the spray booths are not total enclosures; therefore, a stack test to determine control efficiency is not technically feasible. There are no EPA reference test methods for testing PM/PM₁₀ from units that are not totally enclosed. Other types of tests or analysis can yield information about the spray operation (e.g., mass balance), but do not directly give a control efficiency number. In order to correlate this data to control efficiency, so many assumptions must be made (e.g., transfer and capture efficiency) that the calculated control efficiency would be virtually meaningless for compliance purposes. There are also inherent inaccuracies when trying to do a mass balance for PM/PM₁₀</p>

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EU/ GP/ CE	Emission limit (Basis)	Additional Monitoring	Discussion
	<p>when the PM/PM₁₀ can be found in both the liquid and gaseous phase (e.g., condensables).</p> <p>For this operation, vendor information indicates an overall control efficiency of 77.68%, versus the permit limit of 73.6%. In addition, the permit limits are based on using the highest solids content coating – 7.19 lb/gal – all the time. Of the 43 coatings that the facility currently uses, 34 of them are less than 50% of this value.</p> <p>For these reasons, the periodic monitoring as in the permit is adequate to have a reasonable assurance of compliance.</p>		

3.5 Deviations from Delta Guidance (maintained from the Part 70 permit)

In general, the permit meets the MPCA Delta Guidance for ordering and grouping of requirements.

Groups

One item that deviates from guidance is the listing of certain applicable requirements at the group level even though they apply at the individual unit or control device. Specifically: the indirect heating rule is listed at GP004, the IPER is listed at GP002 and GP005, and the control equipment requirements for the spray booths are listed at GP003. In general, limits that apply to individual pieces of equipment should be tracked at the unit level and should not be listed as a GP. The main reason is if there is noncompliance with a limit by one unit within the group, the computer system would say the whole group was out of compliance. This is a computer tracking issue.

For the IPER and the indirect heating rule, either the permit has other limits, some at GPs and some at CEs, on the various units that ensure that the applicable requirement will be met, or the units by design are not likely to violate the limits. Therefore, it is highly unlikely that we would need to track noncompliance with these limits at the individual level.

For the control equipment at GP003, these are fairly standard conditions based on Minnesota rules and it is unlikely that we would need to track noncompliance with these limits at the individual control equipment level. Listing these individually would lengthen the permit by over 8 pages.

Appendices

Another 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 being 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. These must be

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generated by staff. 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 (and the rule citation).

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.

The third appendix is the listing of the current spray gun capacities. Any future guns are limited to these capacities, so Appendix III does contain limits. Including these in the body of the permit would add at least 11 pages. These are also nameplate capacities, easily confirmed and documented. It is not very likely that the MPCA would need to track a violation of one of these capacities. The permit does contain a requirement in Table A that the Permittee must comply with these capacity limits, so any violation could be tracked in the system using the Table A requirement with a note as to which gun limit was exceeded. For these reasons, it was decided that using an appendix would meet the MPCA needs and streamline the permit for the Permittee.

4. Conclusion

Based on the information provided by Medallion Kitchens of Minnesota, the MPCA has reasonable assurance that the operation of the emission facility, as described in the Air Emission Permit No. 01900022-003 and this technical support document, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

MPCA Staff Member on Permit Team: Bruce Braaten

Attachments:

- 1 MPCA Emission Calculations

ATTACHMENT 1 MPCA Emission Calculations

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This attachment contains the following spreadsheets:

Title	Description
Coatings	Tables showing the highest content coatings (lb/gal) for the various regulated pollutants + calculations for one coating that is mixed on site.
Custom Coating and CleanUp Materials	Tables showing the contents of various materials that are used in small quantities to custom mix coatings. Typically used to color match an older coating. Also contains a table for the cleanup materials used for flushing the coating lines.
Spray Booths – PM/PM ₁₀ PTE	Tables showing the maximum uncontrolled and controlled lb/hr and tpy of PM/PM ₁₀ from the spray booths. Calculations are based on using the highest solids content coating (from the first spreadsheet).
Spray Booths – VOC/HAP PTE	Tables showing the maximum lb/hr and tpy of VOC and the various HAPs from the spray booths. Calculations are based on using the highest content coating for each regulated pollutant (from the first spreadsheet).
Wood Working Operations	PTE calculations for the wood working operations using several calculation methods – Minnesota Rule allowable, permitted emissions limit, and AP-42 and the permitted control efficiency.
Combustion	PTE calculations for the significant combustion devices at the site using AP-42 emissions factors.
Allowable PM/PM ₁₀	Tables showing the calculated Minnesota Rule allowable emission rates for the spray booths and baghouses. These numbers were compared to the calculated PTEs in the periodic monitoring table (Table 4 of TSD).