May 24, 2022

Jennifer Blake  
Barbosa Cabinets, Inc.  
2020 E Grant Line Rd  
Tracy, CA 95304

Re: Notice of Preliminary Decision - Authority to Construct  
Facility Number: N-4065  
Project Number: N-1203975

Dear Ms. Blake:

Enclosed for your review and comment is the District’s analysis of Barbosa Cabinets, Inc.’s application for an Authority to Construct for modification to existing permits to lower facility-wide VOC emission limit, and to install a new wood stain application line, a new clear coat application line and a new lacquer coating line, at 2020 E Grant Line Rd, Tracy, California.

The notice of preliminary decision for this project has been posted on the District’s website (www.valleyair.org). After addressing all comments made during the 30-day public notice period, the District intends to issue the Authority to Construct. Please submit your written comments on this project within the 30-day public comment period, as specified in the enclosed public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Jag Kahlon of Permit Services at (209) 557-6452.

Sincerely,

Brian Clements  
Director of Permit Services

BC:JK

Enclosures

cc: Courtney Graham, CARB (w/ enclosure) via email
I. Proposal

Barbosa Cabinets is proposing the following changes to their woodworking and coating facility:

N-4065-6-7
The applicant currently has permit N-4065-6 for a woodworking operation served by an LMC baghouse. Barbosa Cabinets, Inc. is proposing to install new emission units (N-4065-18, ‘-19, and ‘-20) that will generate wood dust. Wood dust from those new emission units will be routed to the existing LMC baghouse listed in this permit.

N-4065-7-3, ‘-8-3, ‘-9-3, ‘-10-3, ‘-11-3, ‘-12-3, ‘-13-3, and ‘-16-3
Barbosa Cabinets, Inc. has proposed to lower the existing facility-wide VOC emissions from 40,000 pounds per year to 19,999 pounds per year. Therefore, all current permits that emit VOCs are being modified to reflect the newly proposed facility-wide limit.

The facility-wide VOC emissions limit of 40,000 pounds per year was established in 2004. Since that time, several coatings Barbosa Cabinets uses have been re-formulated with lower VOC contents, and several process improvements have been made that optimized their coating usage rates, all of which has resulted in lower actual VOC emissions over the past 18 years.

Under this project, the applicant has proposed to install three state-of-the-art automatic spray coating lines (N-4065-18, ‘-19 and ‘-20). The proposed equipment would apply stains, clear coats, and lacquers to cabinet panels more efficiently than their existing traditional equipment, which uses manual and semi-automatic coating techniques. The new spray systems will also use newly formulated low-VOC coatings compatible with the new spray systems. The applicant projects that the use of new spray systems will reduce the existing coating usage rate by about 30%. Further, over time, the use of this modern state-of-the-art spray equipment is expected to partially or completely eliminate the need to use the traditional less efficient coating equipment.
at this site. A combination of the use of newly formulated low-VOC coatings, reduced material usage due to more efficient spray systems, and replacement of traditional spray equipment over time is expected to allow the facility to operate below 19,999 pounds per year of VOC emissions upon implementing this project.

N-4065-18-0
Barbosa Cabinets, Inc. has proposed to install a new wood stain application line that will have a sanding machine, a manual sanding station, a brush cleaning machine, a Superfici Magnum stain spray machine, counter-flow linear steam or hot water heated dryer, cross-transfer steam or hot water heated blade dryer, and associated conveying systems. Wood dust from the sanding machine, the manual sanding station, and the brush cleaning machine will be routed to the LMC baghouse system under permit N-4065-6.

N-4065-19-0
Barbosa Cabinets, Inc. has proposed to install a new clear coat application line that will have a brush cleaning machine, a Superfici Magnum clear coat spray application machine, a steam or hot water heated vertical dryer, and associated conveying systems. Wood dust from the brush cleaning machine will be routed to the baghouse under permit N-4065-6.

N-4065-20-0
Barbosa Cabinets, Inc. has proposed to install a new lacquer (or paint) application line that will have a sanding machine, a manual sanding station, a brush cleaning machine, a Superfici Magnum lacquer spray machine, a steam or hot water heated vertical dryer, and associated conveying systems. Wood dust from the sanding machine, the manual sanding station, and the brush cleaning machine will be routed to the baghouse under permit N-4065-6.

Barbosa Cabinets, Inc. possesses a Title V Permit. Upon implementation of the permits under this project, this facility will no longer be subject to Title V permits, and all Rule 2520 and associated requirements will be administratively removed from the facility-wide permit, as well as, any permit that is not a part of this project.

The draft Authority to Construct (ATC) permits are included in Appendix A of this document.

II. Applicable Rules

Rule 2201   New and Modified Stationary Source Review Rule (8/15/19)
Rule 2410   Prevention of Significant Deterioration (6/16/11)
Rule 2520   Federally Mandated Operating Permits (8/15/19)
Rule 4001   New Source Performance Standards (4/14/99)
Rule 4002   National Emissions Standards for Hazardous Air Pollutants (5/20/04)
Rule 4101   Visible Emissions (2/17/05)
Rule 4102   Nuisance (12/17/92)
Rule 4201   Particulate Matter Concentration (12/17/92)
Rule 4202   Particulate Matter – Emission Rate (12/17/92)
Rule 4606   Wood Products and Flat Wood Paneling Products Coating Operations (10/16/08)
Rule 4701   Internal Combustion Engines – Phase 1 (8/21/03)
Rule 4702 Internal Combustion Engines (8/19/21)
Rule 4801 Sulfur Compounds (12/17/92)
CH&SC 41700 Health Risk Assessment
CH&SC 42301.6 School Notice
Title 17 California Code of Regulations (CCR), Section 93115 - Airborne Toxic Control Measure (ATCM) for Stationary Compression-Ignition (CI) Engines
Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

III. Project Location

The facility is located at 2020 E Grant Line Rd in Tracy, California. The proposed equipment will not be located within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

IV. Process Description

N-4065-6, '-7, '-8, '-9, '-10, '-11, '-12, '-13, '-16
Unless otherwise noted in section I, the applicant is not proposing any changes to the woodworking and wood coating processes under these permits. The processes for these units were described in evaluations for previous projects. Therefore, no further discussion will be provided in this evaluation.

N-4065-18-0
Wood panels will be loaded onto a conveyor. These panels will travel into a sanding machine and then onto the standing workstations to prepare them for coating. Loose sanded dust will be thoroughly removed with an automated brush cleaning machine. The cleaned panels will then be conveyed into a stain application machine (Superfici Magnum 2.2.1), where nozzle heads spray the desired stain onto the panels. These sprayed panels then travel through steam-heated or hot water heated dryers for drying the coated stains. A cross transfer device will be used to automatically turnover the panel to finish the other side of the panel.

N-4065-19-0
The stained panels (N-4065-18) will be conveyed into a clear coat booth (Superfici Magnum 3.2.2). After applying the clear coat, the panels then travel into another steam-heated or hot water heater dryer. A cross transfer device will be used to automatically turnover the panel to finish the other side of the panel. The finished panels are stacked and shipped to the customers.

N-4065-20-0
Wood panels will be loaded onto the conveyor. These panels will travel into a sanding machine and then onto the standing workstations to prepare them for coating. Loose sanded dust will be thoroughly removed with an automated brush cleaning machine. The cleaned panels will be coated in lacquer application (Superfici Magnum 3.2.2), where nozzle head sprays the desired paint onto the panels. These sprayed panels then travel through a steam-heated or hot water
heated dryer. A cross transfer device will be used to automatically turnover the panel to finish the other side of the panel. The finished panels are stacked and shipped to the customers.

V. Equipment Listing

Pre-Project Equipment Description:

N-4065-6-5: WOODWORKING OPERATION CONSISTING OF 34 SAWS, 14 BORING MACHINES, 2 EDGE BANDERS, 13 SANDERS AND 4 SHAPERS AND FILTER CLEANING BOOTH ALL SERVED BY AN LMC MODEL 594-LP-12 BAGHOUSE

N-4065-7-2: WOOD COATING OPERATION SERVED BY A SPRAY SYSTEMS MODEL I-18107 OPEN FACE BOOTH

N-4065-8-2: WOOD COATING OPERATION SERVED BY A SPRAY SYSTEMS MODEL I-18107 (OR EQUIVALENT) OPEN FACE BOOTH

N-4065-9-2: WOOD COATING OPERATION SERVED BY A SPRAY SYSTEMS MODEL I-18107 (OR EQUIVALENT) OPEN FACE BOOTH

N-4065-10-2: WOOD COATING OPERATION SERVED BY A SPRAY SYSTEMS MODEL I-18107 OPEN FACE BOOTH

N-4065-11-2: WOOD COATING OPERATION SERVED BY A SPRAY SYSTEMS MODEL I-1287 OPEN FACE BOOTH

N-4065-12-2: RHODES MANUFACTURING MODEL I-22810C CONVEYORIZED WOOD COATING AND SANDING SYSTEM. THE SYSTEM INCLUDES THREE COATING BOOTHS, ONE SANDING BOOTH SERVED BY A TORIT ECB DUST COLLECTOR AND FOUR PERMIT EXEMPT OVEN/CURING TUNNELS

N-4065-13-2: CEFLA FALCIONI PROFIPLUS 39 MOLDING COATING UNIT

N-4065-16-2: 325 BHP PERKINS MODEL 1306-E87TA DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

Proposed Modification:

N-4065-6-7: MODIFICATION OF WOODWORKING OPERATION CONSISTING OF 34 SAWS, 14 BORING MACHINES, 2 EDGE BANDERS, 13 SANDERS AND 4 SHAPERS AND FILTER CLEANING BOOTH ALL SERVED BY AN LMC MODEL 594-LP-12 BAGHOUSE: TO CONNECT EXHAUST FROM WOOD WORKING EQUIPMENT (2 SANDING MACHINES, 3 BRUSH CLEANING MACHINES, AND 2 MANUAL SANDING STATIONS) UNDER PERMITS N-4065-18, '-19 AND '-20 TO THE BAGHOUSE UNDER THIS PERMIT
N-4065-7-3: MODIFICATION OF WOOD COATING OPERATION SERVED BY A SPRAY SYSTEMS MODEL I-18107 OPEN FACE BOOTH: LOWER THE FACILITY-WIDE VOC EMISSION LIMIT TO 19,999 POUNDS PER YEAR

N-4065-8-3: MODIFICATION OF WOOD COATING OPERATION SERVED BY A SPRAY SYSTEMS MODEL I-18107 (OR EQUIVALENT) OPEN FACE BOOTH: LOWER THE FACILITY-WIDE VOC EMISSION LIMIT TO 19,999 POUNDS PER YEAR

N-4065-9-3: MODIFICATION OF WOOD COATING OPERATION SERVED BY A SPRAY SYSTEMS MODEL I-18107 (OR EQUIVALENT) OPEN FACE BOOTH: LOWER THE FACILITY-WIDE VOC EMISSION LIMIT TO 19,999 POUNDS PER YEAR

N-4065-10-3: MODIFICATION OF WOOD COATING OPERATION SERVED BY A SPRAY SYSTEMS MODEL I-18107 OPEN FACE BOOTH: LOWER THE FACILITY-WIDE VOC EMISSION LIMIT TO 19,999 POUNDS PER YEAR

N-4065-11-3: MODIFICATION OF WOOD COATING OPERATION SERVED BY A SPRAY SYSTEMS MODEL I-1287 OPEN FACE BOOTH: LOWER THE FACILITY-WIDE VOC EMISSION LIMIT TO 19,999 POUNDS PER YEAR

N-4065-12-3: MODIFICATION OF RHODES MANUFACTURING MODEL I-22810C CONVEYORIZED WOOD COATING AND SANDING SYSTEM. THE SYSTEM INCLUDES THREE COATING BOOTHS, ONE SANDING BOOTH SERVED BY A TORIT ECB DUST COLLECTOR AND FOUR PERMIT EXEMPT OVEN/CURING TUNNELS: LOWER THE FACILITY-WIDE VOC EMISSION LIMIT TO 19,999 POUNDS PER YEAR

N-4065-13-3: MODIFICATION OF CEFLA FALCIONI PROFIPLUS 39 MOLDING COATING UNIT: LOWER THE FACILITY-WIDE VOC EMISSION LIMIT TO 19,999 POUNDS PER YEAR

N-4065-16-3: MODIFICATION OF 325 BHP PERKINS MODEL 1306-E87TA DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR: LOWER THE FACILITY-WIDE VOC EMISSION LIMIT TO 19,999 POUNDS PER YEAR


N-4065-19-0: CLEAR COAT APPLICATION AND DRYING OPERATION CONSITING OF A BRUSH CLEANING MACHINE, SUPERFICI MAGNUM FULLY ENCLOSED COATING SPRAY MACHINE, STEAM/HOT WATER-HEATED VERTICAL DRYER,
AND ASSOCIATED CONVEYING SYSTEM. WOOD DUST FROM THE BRUSH CLEANING MACHINE WILL BE ROUTED TO THE BAGHOUSE UNDER PERMIT N-4065-6.


Post-Project Equipment Description:

N-4065-6-7: WOODWORKING OPERATION CONSISTING OF 34 SAWS; 14 BORING MACHINES; 2 EDGE BANDERS; 13 SANDERS; 4 SHAPERS; 2 SANDING MACHINES, 3 BRUSH CLANING MACHINES AND 2 MANUAL SANDING STATIONS UNDER PERMITS N-4065-18, ’-19 AND ’-20; AND FILTER CLEANING BOOTH; ALL EQUIPMENT IS SERVED BY AN LMC MODEL 594-LP-12 BAGHOUSE SYSTEM.

N-4065-7-3: WOOD COATING OPERATION SERVED BY A SPRAY SYSTEMS MODEL I-18107 OPEN FACE BOOTH

N-4065-8-3: WOOD COATING OPERATION SERVED BY A SPRAY SYSTEMS MODEL I-18107 (OR EQUIVALENT) OPEN FACE BOOTH

N-4065-9-3: WOOD COATING OPERATION SERVED BY A SPRAY SYSTEMS MODEL I-18107 (OR EQUIVALENT) OPEN FACE BOOTH

N-4065-10-3: WOOD COATING OPERATION SERVED BY A SPRAY SYSTEMS MODEL I-18107 OPEN FACE BOOTH

N-4065-11-3: WOOD COATING OPERATION SERVED BY A SPRAY SYSTEMS MODEL I-1287 OPEN FACE BOOTH

N-4065-12-3: RHODES MANUFACTURING MODEL I-22810C CONVEYORIZED WOOD COATING AND SANDING SYSTEM. THE SYSTEM INCLUDES THREE COATING BOOTHs, ONE SANDING BOOTH SERVED BY A TORIT ECB DUST COLLECTOR AND FOUR PERMIT EXEMPT OVEN/CURING TUNNELS

N-4065-13-3: CEFLA FALCIONI PROFIPLUS 39 MOLDING COATING UNIT

N-4065-16-3: 325 BHP PERKINS MODEL 1306-E87TA DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR


VI. Emission Control Technology Evaluation

Barbosa Cabinets, Inc. has proposed to use materials that are compliant with District Rule 4606. Additionally, wood dust from various pieces of new woodworking equipment will be routed to the existing LMC baghouse currently permitted under PTO N-4065-6.

VII. General Calculations

A. Assumptions

- Assumptions will be stated as they are made during the analysis.

B. Emission Factors

1. Pre-Project Emission Factors (EF1)

   N-4065-6-5
   Per the current PTO,

   \[ EF = 0.003 \text{ gr-PM}_{10}/\text{dscf of exhaust flow} \]
The operations under these permits use multiple coatings with different VOC contents. These permits limit daily mass emission rates for VOC and PM10 emissions. Since the mass emission rates are available, EFs are not being listed here.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>EF1 (g/bhp-hr)</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
<td>4.1</td>
<td>PTO N-4065-16-2</td>
</tr>
<tr>
<td>SOx</td>
<td>0.0051</td>
<td>Calculated based on 15 ppm by wt. sulfur content</td>
</tr>
<tr>
<td>PM10</td>
<td>0.067</td>
<td>PTO N-4065-16-2</td>
</tr>
<tr>
<td>CO</td>
<td>0.45</td>
<td></td>
</tr>
<tr>
<td>VOC</td>
<td>0.15</td>
<td></td>
</tr>
</tbody>
</table>

The proposed operations are new to the facility. Therefore, EF1 is not required.

2. Post-Project Emission Factors (EF2)

The applicant is not proposing any changes to the existing emission factor. Therefore, EF2 will be same as EF1.

The applicant is not proposing any changes to the daily mass emission rates for VOC and PM10 emissions.

The applicant has proposed to use several coatings under each permit. The mass emissions of each coating were determined using the specifications for each coating provided by the manufacturers.

C. Calculations

1. Pre-Project Potential to Emit (PE1)

PE1 = (0.003 gr-PM10/dscf of exhaust flow)(90,000 dscf/min)(1,440 min/day)(lb/7,000 gr)
    = 55.5 lb-PM10/day (20,258 lb-PM10/yr @ 365 days/yr operation)

Each permit contains the following emission limits:

PE1 = 99.0 lb-VOC/day and 6.6 lb-PM10/day
Using worst-case operating scenario of 365 days/yr, the annual emissions for each permit unit are:

$$PE_1 = 99.0 \text{ lb-VOC/day} \times 365 \text{ days/yr}$$
$$= 36,135 \text{ lb-VOC/yr}$$

$$PE_1 = 6.6 \text{ lb-PM}_{10}/\text{day} \times 365 \text{ days/yr}$$
$$= 2,409 \text{ lb-PM}_{10}/\text{yr}$$

Note that facility-wide VOC and PM$_{10}$ emissions are limited to 40,000 lb/yr and 29,200 lb/yr, respectively.

N-4065-12-2
Per PTO,

$$PE_1 = 297.0 \text{ lb-VOC/day}, 19.8 \text{ lb-PM}_{10}/\text{day}$$

The facility-wide VOC emissions are limited to 40,000 lb/yr. Therefore, this permit unit could emit up to 40,000 lb-VOC/yr.

$$PE_1 = 19.8 \text{ lb-PM}_{10}/\text{day} \times 365 \text{ days/yr}$$
$$= 7,227 \text{ lb-PM}_{10}/\text{yr}$$

The sanding operation is limited to release 0.0093 lb-PM$_{10}$/lb-dust collected with up to a maximum of 100 lb-dust collection per day. Thus,

$$PE_1 = (0.0093 \text{ lb-PM}_{10}/\text{lb-dust collected})(100 \text{ lb-dust collected/day})$$
$$= 0.9 \text{ lb-PM}_{10}/\text{day} (329 \text{ lb-PM}_{10}/\text{yr} @ 365 \text{ days/yr operation})$$

N-4065-16-2
The engine is rated at 325 bhp and is limited to operate 50 hr/yr for non-emergency purpose. Thus,

$$PE_1 = EF_1 (\text{g/bhp-hr}) \times 325 \text{ bhp} \times \frac{\text{lb}}{453.6 \text{ g}} \times 24 \text{ hr/day}$$
$$PE_1 = EF_1 (\text{g/bhp-hr}) \times 325 \text{ bhp} \times \frac{\text{lb}}{453.6 \text{ g}} \times 50 \text{ hr/yr}$$

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>EF1 (g/bhp-hr)</th>
<th>PE1 (lb/day)</th>
<th>PE1 (lb/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
<td>4.1</td>
<td>70.5</td>
<td>147</td>
</tr>
<tr>
<td>SOx</td>
<td>0.0051</td>
<td>0.1</td>
<td>0</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>0.067</td>
<td>1.2</td>
<td>2</td>
</tr>
<tr>
<td>CO</td>
<td>0.45</td>
<td>7.7</td>
<td>16</td>
</tr>
<tr>
<td>VOC</td>
<td>0.15</td>
<td>2.6</td>
<td>5</td>
</tr>
</tbody>
</table>
N-4065-18-0, ‘-19-0 and ‘-20-0
The proposed operations are new to the facility. Therefore, PE1 is zero for each permit unit.

2. **Post-Project Potential to Emit (PE2)**

N-4065-6-5
Per applicant, the existing baghouse will be able to accommodate the exhaust from the 2 sanding machines (2 x 4,114 cfm), 3 brush cleaning machines (3 x 1,360 cfm) and 2 manual sanding stations (2 x 1,060 cfm) proposed under permits N-4065-18, ‘-19 and ‘-20. They are not proposing any changes to the existing exhaust flow rate or emission factor. Thus, PE2 will be same as PE1.

N-4065-7-2, ‘-8-2, ‘-9-2, ‘-10-2, ‘-11-2, ‘-12-2, ‘-13-2
The applicant has proposed to retain the existing daily emission limits in these permits. Therefore, daily PE2 is equal to daily PE1. Note that the applicant has proposed to lower the post-project facility-wide VOC emissions to 19,999 lb/year.

N-4065-16-2
The applicant is not proposing any changes to the existing unit; therefore, PE2 will be same as PE1.

N-4065-18-0
**Sanding Machine, Brush Cleaning Machine, Manual Sanding:**
This permit will have one sanding machine (4,114 cfm), one brush cleaning machine (1,360 cfm) and one manual sanding station (1,060 cfm). Each of these units will be routed to a baghouse under permit N-4065-6. The potential contribution of each of these new units could be up to:

\[
= (0.003 \text{ gr-PM}_{10}/\text{dscf of exhaust flow})(4,114 \text{ dscf/min})(1,440 \text{ min/day})(\text{lb/7,000 lb})
= 2.5 \text{ lb-PM}_{10}/\text{day (913 lb-PM}_{10}/\text{yr @ 365 days/yr operation})
\]

\[
= (0.003 \text{ gr-PM}_{10}/\text{dscf of exhaust flow})(1,360 \text{ dscf/min})(1,440 \text{ min/day})(\text{lb/7,000 lb})
= 0.8 \text{ lb-PM}_{10}/\text{day (292 lb-PM}_{10}/\text{yr @ 365 days/yr operation})
\]

\[
= (0.003 \text{ gr-PM}_{10}/\text{dscf of exhaust flow})(1,060 \text{ dscf/min})(1,440 \text{ min/day})(\text{lb/7,000 lb})
= 0.7 \text{ lb-PM}_{10}/\text{day (256 lb-PM}_{10}/\text{yr @ 365 days/yr operation})
\]

Note that all PM_{10} emissions from these wood working machines are counted under permit N-4065-6.

**Stain application and drying operation:**
The applicant has provided the maximum daily and annual use rates for each proposed stain in a worksheet that was prepared to estimate the potential emissions (Refer to **Appendix C**). The applicant has proposed to add 20% margin of compliance on top of the estimated emissions in the worksheet.
VOC emissions were estimated as follows:

\[ \text{PE2} = \text{Material VOC content (lb-VOC/gal)} \times \text{Usage (gal/day, gal/yr)} \]

The spraying system is assumed to transfer at least 75% of the material onto the panels. Any overspray will be captured by a set of three filter systems with an estimated PM control efficiency of 99.88%. Thus, PM emissions are estimated as follows:

\[ \text{PE2} = \text{Solids content (lb-solids/gal)} \times \text{Usage (gal/day, gal/yr)} \times (1-0.75) \times (1-0.9988) \times 1 \text{ lb-PM}_{10}/\text{lb-solid} \]

In summary, the applicant is proposing the following emission rates:

\[ \text{PE2} = \begin{align*} 125.9 \text{ lb-VOC/day, } & 2,873 \text{ lb-VOC/yr} \\ & = 0.016 \text{ lb-PM}_{10}/\text{day (} \sim 0.0 \text{ lb-PM}_{10}/\text{day)}, 0.3 \text{ lb-PM}_{10}/\text{yr (} \sim 0 \text{ lb-PM}_{10}/\text{yr) } \end{align*} \]

Note the new automatic spray system has the potential to spray more material than the traditional manual or semi-automatic spray equipment on any given day, even though its annual material usage is expected to be much less that the traditional spray equipment.

**N-4065-19-0**

*Brush Cleaning Machine:*
This permit will have one brush cleaning machine (1,360 cfm). This unit will be routed to a baghouse under permit N-4065-6. The potential contribution of this unit could be up to:

\[ = (0.003 \text{ gr-PM}_{10}/\text{dscf of exhaust flow})(1,360 \text{ dscf/min})(1,440 \text{ min/day})(\text{lb}/7,000 \text{ lb}) \]
\[ = 0.8 \text{ lb-PM}_{10}/\text{day (} 292 \text{ lb-PM}_{10}/\text{yr @ 365 days/yr operation) } \]

Note that the PM\textsubscript{10} emissions from this machine are counted under permit N-4065-6.

*Clear coat application and drying operation:*
The applicant has proposed to use various clear coats. A worksheet is prepared to estimate the potential emissions (Refer to Appendix C). The applicant has proposed to add 20% margin of compliance on top of the estimated emissions in the worksheet. VOC emissions are estimated as follows:

\[ \text{PE2} = \text{Material VOC content (lb-VOC/gal)} \times \text{Usage (gal/day, gal/yr)} \]

Spraying system is assumed to transfer at least 75% of the material onto the panels. Any overspray will be captured by a set of three filter systems with an estimated PM control efficiency of 99.88%. Thus, PM emissions are estimated as follows:

\[ \text{PE2} = \text{Solids content (lb-solids/gal)} \times \text{Usage (gal/day, gal/yr)} \times (1-0.75) \times (1-0.9988) \times 1 \text{ lb-PM10/lb-solid} \]
In summary, the applicant is proposing the following emission rates:

\[
\begin{align*}
PE2 & = 13.3 \text{ lb-VOC/day, 2,386 lb-VOC/yr} \\
& = 0.043 \text{ lb-PM}_{10}/\text{day} (~0.0 \text{ lb-PM}_{10}/\text{day}), 8 \text{ lb-PM}_{10}/\text{yr}
\end{align*}
\]

**N-4065-20-0**

*Sanding Machine, Brush Cleaning Machine, Manual Sanding:*

This permit will have one sanding machine (4,114 cfm), one brush cleaning machine (1,360 cfm) and one manual sanding station (1,060 cfm). Each of these units will be routed to a baghouse under permit N-4065-6. The potential contribution of each of these new units could be up to:

\[
\begin{align*}
= (0.003 \text{ gr-PM}_{10}/\text{dscf of exhaust flow})(4,114 \text{ dscf/min})(1,440 \text{ min/day})(\text{lb/7,000 lb}) \\
&= 2.5 \text{ lb-PM}_{10}/\text{day} (913 \text{ lb-PM}_{10}/\text{yr} @ 365 \text{ days/yr operation})
\end{align*}
\]

\[
\begin{align*}
= (0.003 \text{ gr-PM}_{10}/\text{dscf of exhaust flow})(1,360 \text{ dscf/min})(1,440 \text{ min/day})(\text{lb/7,000 lb}) \\
&= 0.8 \text{ lb-PM}_{10}/\text{day} (292 \text{ lb-PM}_{10}/\text{yr} @ 365 \text{ days/yr operation})
\end{align*}
\]

\[
\begin{align*}
= (0.003 \text{ gr-PM}_{10}/\text{dscf of exhaust flow})(1,060 \text{ dscf/min})(1,440 \text{ min/day})(\text{lb/7,000 lb}) \\
&= 0.7 \text{ lb-PM}_{10}/\text{day} (256 \text{ lb-PM}_{10}/\text{yr} @ 365 \text{ days/yr operation})
\end{align*}
\]

Note that these PM\(_{10}\) emissions from these wood working machines are counted under permit N-4065-6.

*Lacquer application and drying operation:*

The applicant has proposed to use various lacquers. A worksheet is prepared to estimate the potential emissions (Refer to Appendix C). The applicant has proposed to add 20% margin of compliance on top of the estimated emissions in the worksheet. VOC emissions are estimated as follows:

\[
\begin{align*}
\text{PE2} &= \text{Material VOC content (lb-VOC/gal)} \times \text{Usage (gal/day, gal/yr)}
\end{align*}
\]

Spraying system is assumed to transfer at least 75% of the material on to the panels. Any overspray will be captured by a set of three filter system with an estimated PM control efficiency of 99.88%. Thus, PM emissions are estimated as follows:

\[
\begin{align*}
\text{PE2} &= \text{Solids content (lb-solids/gal)} \times \text{Usage (gal/day, gal/yr)} \times (1-0.75) \times (1-0.9988) \times \text{1 lb-PM}_{10}/\text{lb-solid}
\end{align*}
\]

In summary, the applicant is proposing the following emission rates:

\[
\begin{align*}
\text{PE2} &= 152.4 \text{ lb-VOC/day, 8,857 lb-VOC/yr} \\
&= 0.3 \text{ lb-PM}_{10}/\text{day}, 18 \text{ lb-PM}_{10}/\text{yr}
\end{align*}
\]

Note the new automatic spray system has the potential to spray more material than the traditional manual or semi-automatic spray equipment on any given day, even
though its annual material usage is expected to be much less than the traditional spray equipment.

3. **Pre-Project Stationary Source Potential to Emit (SSPE1)**

Pursuant to District Rule 2201, the SSPE1 is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of Emission Reduction Credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions (AER) that have occurred at the source, and which have not been used on-site.

<table>
<thead>
<tr>
<th>Permit Unit</th>
<th>NOX</th>
<th>SOX</th>
<th>PM10</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-4065-5-5</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>N-4065-6-5</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>N-4065-7-2</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>N-4065-8-2</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>N-4065-9-2</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>N-4065-10-2</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>N-4065-11-2</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>N-4065-12-2</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>N-4065-13-2</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>N-4065-14-2</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>N-4065-15-2</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>N-4065-16-2</td>
<td>147</td>
<td>0</td>
<td>--</td>
<td>16</td>
<td>40,000*</td>
</tr>
</tbody>
</table>

*Facility-wide Limits

4. **Post-Project Stationary Source Potential to Emit (SSPE2)**

Pursuant to District Rule 2201, the SSPE2 is the PE from all units with valid ATCs or PTOs at the Stationary Source and the quantity of ERCs which have been banked since September 19, 1991 for AER that have occurred at the source, and which have not been used on-site. As stated previously, the applicant has proposed to lower facility-wide VOC emission limit from 40,000 lb/yr to 19,999 lb/yr.

<table>
<thead>
<tr>
<th>Permit Unit</th>
<th>NOX</th>
<th>SOX</th>
<th>PM10</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-4065-5-5</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>N-4065-6-6</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>N-4065-7-3</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>N-4065-8-3</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>N-4065-9-3</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>N-4065-10-3</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>N-4065-11-3</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>N-4065-12-3</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>N-4065-13-3</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
</tbody>
</table>
5. Major Source Determination

**Rule 2201 Major Source Determination:**
Pursuant to District Rule 2201, a Major Source is a stationary source with a SSPE2 equal to or exceeding one or more of the following threshold values. For the purposes of determining major source status the following shall not be included:

- Any ERCs associated with the stationary source
- Emissions from non-road IC engines (i.e. IC engines at a particular site at the facility for less than 12 months), pursuant to the Clean Air Act, Title 3, Section 302, US Codes 7602(j) and (z)
- Fugitive emissions, except for the specific source categories specified in 40 CFR 70.2

<table>
<thead>
<tr>
<th>Permit Unit</th>
<th>NOx</th>
<th>SOx</th>
<th>PM10</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-4065-14-2</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>N-4065-15-2</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>N-4065-16-3</td>
<td>147</td>
<td>0</td>
<td>--</td>
<td>16</td>
<td>--</td>
</tr>
<tr>
<td>N-4065-18-0</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>N-4065-19-0</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>N-4065-20-0</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td><strong>SSPE2</strong></td>
<td>147</td>
<td>0</td>
<td>29,200*</td>
<td>16</td>
<td>19,999*</td>
</tr>
</tbody>
</table>

*Facility-wide Limits

As seen in the table above, SSPE2 is below the Major Source thresholds for each pollutant. Thus, the facility will no longer be a Major Source for VOC emissions.

**Rule 2410 Major Source Determination:**
The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(iii). Therefore, the PSD Major Source threshold is 250 tpy for any regulated NSR pollutant.
### PSD Major Source Determination (tons/year)

<table>
<thead>
<tr>
<th></th>
<th>NO₂</th>
<th>VOC</th>
<th>SO₂</th>
<th>CO</th>
<th>PM</th>
<th>PM₁₀</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Facility PE</td>
<td>0.1</td>
<td>20.0</td>
<td>0.0</td>
<td>0.0</td>
<td>14.6</td>
<td>14.6</td>
</tr>
<tr>
<td>before Project Increase</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSD Major Source</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Thresholds</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
</tr>
</tbody>
</table>

As seen in the table above, the facility is not an existing PSD major source for any regulated NSR pollutant expected to be emitted at this facility.

### 6. Baseline Emissions (BE)

The BE calculation (in lb/year) is performed pollutant-by-pollutant for each unit within the project to calculate the QNEC, and if applicable, to determine the amount of offsets required.

Pursuant to District Rule 2201, BE = PE₁ for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, located at a Major Source.

otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to District Rule 2201.

N-4065-6-7, '-7-3, '-8-3, '-9-3, '-10-3, '-11-3, '-12-3, '-13-3, '-16-3, '-18-0 through '-20-0
NOx, SOx, CO and VOC:
As noted above, BE calculations are required to estimate the amount of offsets. Since SSPE₂ for this facility is below the offset threshold for each pollutant, BE calculations are not required.

PM₁₀:
This facility is not a Major Source for PM₁₀ emissions. Therefore, BE is equal to PE₁ for each permit unit in this project.

### 7. SB 288 Major Modification

40 CFR Part 51.165 defines a SB 288 Major Modification as any physical change in or change in the method of operation of a major stationary source that would result in
a significant net emissions increase of any pollutant subject to regulation under the Act.

Per section VII.C.5 above, the post-modification facility will no longer be a Major Source for any pollutant after implementing the permits under this project. Thus, this project will not constitute an SB 288 Major Modification and no further discussion is required.

8. Federal Major Modification / New Major Source

Federal Major Modification

District Rule 2201 states that a Federal Major Modification is the same as a “Major Modification” as defined in 40 CFR 51.165 and part D of Title I of the CAA.

As defined in 40 CFR 51.165, Section (a)(1)(v) and part D of Title I of the CAA, a Federal Major Modification is any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act. The significant net emission increase threshold for each criteria pollutant is included in Rule 2201.

Per section VII.C.5 above, the post-modification facility will no longer be a Major Source for any pollutant after implementing the permits under this project. Thus, this project will not constitute Federal Major Modification and no further discussion is required.

New Major Source

As demonstrated above, this facility is not becoming a Major Source as a result of this project, therefore, this facility is not a New Major Source pursuant to 40 CFR 51.165 a(1)(iv)(A)(3).

9. Rule 2410 – Prevention of Significant Deterioration (PSD) Applicability Determination

Rule 2410 applies to any pollutant regulated under the Clean Air Act, except those for which the District has been classified nonattainment. The pollutants which must be addressed in the PSD applicability determination for sources located in the SJV and which are emitted in this project are: (See 52.21 (b) (23) definition of significant)

- NO2 (as a primary pollutant)
- SO2 (as a primary pollutant)
- CO
- PM
- PM10
I. Project Emissions Increase - New Major Source Determination

The post-project potentials to emit from all new and modified units are compared to the PSD major source thresholds to determine if the project constitutes a new major source subject to PSD requirements.

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(iii). The PSD Major Source threshold is 250 tpy for any regulated NSR pollutant.

<table>
<thead>
<tr>
<th>PSD Major Source Determination: Potential to Emit (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO₂</td>
</tr>
<tr>
<td>Total PE from New and Modified Units</td>
</tr>
<tr>
<td>PSD Major Source threshold</td>
</tr>
<tr>
<td>New PSD Major Source?</td>
</tr>
</tbody>
</table>

As seen in the table above, the potential to emit for the project, by itself, does not exceed any PSD major source threshold. Therefore Rule 2410 is not applicable and no further analysis is required.

10. Quarterly Net Emissions Change (QNEC)

The QNEC is calculated solely to establish emissions that are used to complete the District’s PAS emissions profile screen. Detailed QNEC calculations are included in Appendix G.

VIII. Compliance Determination

Rule 2201  New and Modified Stationary Source Review Rule

A. Best Available Control Technology (BACT)

1. BACT Applicability

Pursuant to District Rule 2201, Section 4.1, BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis. Unless specifically exempted by Rule 2201, BACT shall be required for the following actions*:

a. Any new emissions unit with a potential to emit exceeding two pounds per day,
b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,
c. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an Adjusted Increase in Permitted Emissions (AIPE) exceeding two pounds per day, and/or
d. Any new or modified emissions unit, in a stationary source project, which results in an SB 288 Major Modification or a Federal Major Modification, as defined by the rule.

*Except for CO emissions from a new or modified emissions unit at a Stationary Source with an SSPE2 of less than 200,000 pounds per year of CO.

a. **New emissions units – PE > 2 lb/day**

N-4065-18-0

_Sanding Machine, Brush Cleaning Machine, Manual Sanding:_
Per section VII.C.2 of this document, PE2 exceeds 2 lb/day for PM10 emissions from the sanding machine. Thus, this machine triggers BACT.

Note that the PE2 does not exceed 2 lb/day for PM10 emissions from brush cleaning or manual sanding station; therefore, BACT is not triggered.

_Stain application operation:_
Per section VII.C.2 of this document, PE2 exceeds 2 lb/day for VOC emissions from stain application operation. Thus, this operation triggers BACT for VOC emissions.

N-4065-19-0

_Brush Cleaning Machine:_
Per section VII.C.2 of this document, PE2 does not exceed 2 lb/day for PM10 emissions from the brush cleaning machine. Thus, BACT is not triggered for this unit.

_Clear coat application operation:_
Per section VII.C.2 of this document, PE2 exceeds 2 lb/day for VOC emissions from clear coat application operation. Thus, this operation triggers BACT for VOC emissions.

N-4065-20-0

_Sanding Machine, Brush Cleaning Machine, Manual Sanding:_
Per section VII.C.2 of this document, PE2 exceeds 2 lb/day for PM10 emissions from the sanding machine. Thus, this machine triggers BACT.

Note that the PE2 does not exceed 2 lb/day for PM10 emissions from brush cleaning or manual sanding station; therefore, BACT is not triggered.

_Lacquer application operation:_
Per section VII.C.2 of this document, PE2 exceeds 2 lb/day for VOC emissions from lacquer application operation. Thus, this operation triggers BACT for VOC emissions.
b. Relocation of emissions units – PE > 2 lb/day

None of the emissions units are being relocated from one stationary source to another; therefore, BACT is not triggered.

c. Modification of emissions units – AIPE > 2 lb/day

\[ \text{AIPE} = \text{PE2} - \text{HAPE} \]

Where,

\[ \begin{align*}
\text{AIPE} &= \text{Adjusted Increase in Permitted Emissions, (lb/day)} \\
\text{PE2} &= \text{Post-Project Potential to Emit, (lb/day)} \\
\text{HAPE} &= \text{Historically Adjusted Potential to Emit, (lb/day)}
\end{align*} \]

\[ \text{HAPE} = \text{PE1} \times (\frac{\text{EF2}}{\text{EF1}}) \]

Where,

\[ \begin{align*}
\text{PE1} &= \text{The emissions unit’s PE prior to modification or relocation, (lb/day)} \\
\text{EF2} &= \text{The emissions unit’s permitted emission factor for the pollutant after modification or relocation. If EF2 is greater than EF1 then EF2/EF1 shall be set to 1} \\
\text{EF1} &= \text{The emissions unit’s permitted emission factor for the pollutant before the modification or relocation}
\end{align*} \]

\[ \text{AIPE} = \text{PE2} - (\text{PE1} \times (\frac{\text{EF2}}{\text{EF1}})) \]

PE2 = PE1 and EF2 = EF1 for the pollutants emitted from each operation; therefore, AIPE is equal to zero for each pollutant.

Since AIPE is zero for each pollutant, BACT is not triggered for these operations.

d. SB 288/Federal Major Modification

As discussed in Sections VII.C.7 and VII.C.8 above, this project does not constitute an SB 288 and/or Federal Major Modification for any pollutant. Therefore BACT is not triggered for any pollutant.

2. BACT Guidelines

Sanding Machine, Brush Cleaning Machine, Manual Sanding:

BACT guideline 8.1.1 will be used to address the BACT requirements for PM_{10} emissions from the sanding machine.

Stain application operation:

BACT guideline 4.4.2 will be used to address the BACT requirements for VOC emissions from stain application operation.
N-4065-19-0

Clear coat application operation:
BACT guideline 4.4.2 will be used to address the BACT requirements for emissions from the clear coat application operation.

N-4065-20-0

Sanding Machine, Brush Cleaning Machine, Manual Sanding:
BACT guideline 8.1.1 will be used to address the BACT requirements for PM$_{10}$ emissions from the sanding machine.

Lacquer application operation:
BACT guideline 4.4.2 will be used to address the BACT requirements for VOC emissions from the lacquer or paint application operation.

Refer to Appendix D for the BACT guidelines.

3. Top-Down BACT Analysis

Per Permit Services Policies and Procedures for BACT, a Top-Down BACT analysis shall be performed as a part of the application review for each application subject to the BACT requirements pursuant to the District’s NSR Rule.

Pursuant to the attached Top-Down BACT Analysis (see Appendix E), BACT has been satisfied with the following:

N-4065-18-0

Sanding Machine, Brush Cleaning Machine, Manual Sanding:
BACT guideline 8.1.1 requires to connect wood working equipment to a baghouse system. The applicant has proposed to comply with this requirement; thus, BACT requirement is satisfied.

Stain application operation:
BACT guideline 4.4.2 lists the following technologically feasible options: thermal/catalytic incineration, and carbon adsorption. There is no achieved-in-practice option listed in this guideline; however, use of HVLP or equivalent method and use of coating compliance with District Rule 4606 is considered as achieved-in-practice BACT for the purpose of this project (as listed in the draft revised BACT guideline).

As discussed in Appendix E of this document, cost of reduction ($/ton) is more than the $22,600/ton threshold for technologically feasible options; thus, it is not cost effective to use thermal or catalytic incineration or carbon adsorber technologies and use of any of these technologies is not required at this time. The applicant will be required to use HVLP spray equipment and use stains compliant with the limits in District Rule 4606.
N-4065-19-0

*Clear coat application operation:*

BACT guideline 4.4.2 lists the following technologically feasible options to reduce VOC: thermal/catalytic incineration, and carbon adsorption. There is no achieved-in-practice option listed in this guideline; however, use of HVLP or equivalent method and use of coating compliance with District Rule 4606 is considered as achieved-in-practice BACT for the purpose of this project (as listed in the draft revised BACT guideline).

As discussed in **Appendix E** of this document, cost of reduction ($/ton) is more than the $22,600/ton threshold for technologically feasible options; thus, it is not cost effective to use thermal or catalytic incineration or carbon adsorber technologies and use of any of these technologies is not required at this time. The applicant will be required to use HVLP spray equipment and use clear coats compliant with the limits in District Rule 4606.

N-4065-20-0

*Sanding Machine, Brush Cleaning Machine, Manual Sanding:*

BACT guideline 8.1.1 will be used to address the BACT requirements for the sanding machine. This guideline requires to connect wood working equipment to a baghouse system. The applicant has proposed to comply with this requirement; thus, BACT requirement is satisfied.

*Lacquer application operation:*

BACT guideline 4.4.2 lists the following technologically feasible options to reduce VOC: thermal/catalytic incineration, and carbon adsorption. There is no achieved-in-practice option listed in this guideline; however, use of HVLP or equivalent method and use of coating compliance with District Rule 4606 is considered as achieved-in-practice BACT for the purpose of this project (as listed in the draft revised BACT guideline).

As discussed in **Appendix E** of this document, cost of reduction ($/ton) is more than the $22,600/ton threshold for technologically feasible options; thus, it is not cost effective to use thermal or catalytic incineration or carbon adsorber technologies and use of any of these technologies is not required at this time. The applicant will be required to use HVLP spray equipment and use clear coats compliant with the limits in District Rule 4606.

**B. Offsets**

1. **Offset Applicability**

Pursuant to District Rule 2201, Section 4.5, offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the SSPE2 equals or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

The SSPE2 is compared to the offset thresholds in the following table.
Offset Determination (lb/year)

<table>
<thead>
<tr>
<th></th>
<th>NOx</th>
<th>SOx</th>
<th>PM_{10}</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSPE2</td>
<td>147</td>
<td>0</td>
<td>29,200</td>
<td>16</td>
<td>19,999</td>
</tr>
<tr>
<td>Offset Thresholds</td>
<td>20,000</td>
<td>54,750</td>
<td>29,200</td>
<td>200,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Offsets Triggered?</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

2. Quantity of District Offsets Required

As seen above, the SSPE2 equals the offset threshold for PM_{10} emissions. Therefore offset calculations will be required. The quantity of offsets in pounds per year is calculated as follow:

Offsets Required (lb/year) = (\sum [PE2 – BE] + ICCE) x DOR, for all new or modified emissions units in the project,

Where,

PE2 = Post Project Potential to Emit, (lb/year)
BE = Baseline Emissions, (lb/year)
ICCE = Increase in Cargo Carrier Emissions, (lb/year)
DOR = Distance Offset Ratio, determined pursuant to Section 4.8

BE = PE1 for:

• Any unit located at a non-Major Source,
• Any Highly-Utilized Emissions Unit, located at a Major Source,
• Any Fully-Offset Emissions Unit, located at a Major Source, or
• Any Clean Emissions Unit, Located at a Major Source.

Otherwise, BE = HAE

PM_{10}

Pursuant to District Policy APR 1420, NSR Calculations for Units with Specific Limiting Conditions (3/12/07), the quantity of ERCs for a project will be determined by comparing the post project PE, which is the SLC, to the pre project BE for the SLC.

Additionally, the policy states that if the SLC is for a pollutant exceeding the Major Source threshold and any single unit under the SLC is not a Highly-Utilized, Fully-Offset, or Clean Emissions Units, then the sum of the actual emissions from all units in SLC will be used to determine the pre project BE.

As discussed in Section VII.C.6 above, this facility is not a Major Source for PM_{10} emissions. Thus, BE is equal to the PE1 for each permit unit under this project.
Furthermore, there is no increase in cargo carrier emissions. Therefore, offsets can be determined as follows:

Offsets Required (lb/year) = \((\text{PE}_{\text{SLC}} - \text{BE}_{\text{SLC}}) \times \text{DOR}\)

\[
\begin{align*}
\text{PE}_{\text{SLC}} &= 29,200 \text{ lb-PM}_{10}/\text{yr} \\
\text{BE}_{\text{SLC}} &= 29,200 \text{ lb-PM}_{10}/\text{yr}
\end{align*}
\]

Offsets Required (lb/year) = \((29,200 - 29,200) \times \text{DOR}\)

= 0 lb-PM\(_{10}\)/year

Thus, no offsets are required for PM\(_{10}\) emissions.

C. Public Notification

1. Applicability

Pursuant to District Rule 2201, Section 5.4, public noticing is required for:

a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications,

b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,

c. Any project which results in the offset thresholds being surpassed,

d. Any project with an SSIP of greater than 20,000 lb/year for any pollutant, and/or

e. Any project which results in a Title V significant permit modification

a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications

As seen in section VII.C.5 above, this facility is not a new Major Source. Furthermore, as seen in section VII.C.7 and VII.C.8 above, this project does not constitute an SB 288 or a Federal Major Modification. Therefore, public noticing for this project for New Major Source, Federal Major Modification, or SB 288 Major Modification purposes is not required.

b. PE > 100 lb/day

Applications which include a new emissions unit with a PE greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements.

As seen in Section VII.C.2 above, Stain Application And Drying Operation (N-4065-18-0) and Lacquer Coating And Drying Operation (N-4065-19-0), each has daily VOC emissions greater than 100 lb/day, therefore public noticing for PE > 100 lb/day purposes is required for this project.
c. Offset Threshold

Public notification is required if the pre-project Stationary Source Potential to Emit (SSPE1) is increased to a level exceeding the offset threshold levels. The following table compares the SSPE1 with the SSPE2 in order to determine if any offset thresholds have been surpassed with this project.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>SSPE1 (lb/year)</th>
<th>SSPE2 (lb/year)</th>
<th>Offset Threshold</th>
<th>Public Notice Required?</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO&lt;sub&gt;x&lt;/sub&gt;</td>
<td>147</td>
<td>147</td>
<td>20,000 lb/year</td>
<td>No</td>
</tr>
<tr>
<td>SO&lt;sub&gt;x&lt;/sub&gt;</td>
<td>0</td>
<td>0</td>
<td>54,750 lb/year</td>
<td>No</td>
</tr>
<tr>
<td>PM&lt;sub&gt;10&lt;/sub&gt;</td>
<td>29,200</td>
<td>29,200</td>
<td>29,200 lb/year</td>
<td>No</td>
</tr>
<tr>
<td>CO</td>
<td>16</td>
<td>16</td>
<td>200,000 lb/year</td>
<td>No</td>
</tr>
<tr>
<td>VOC</td>
<td>40,000</td>
<td>19,999</td>
<td>20,000 lb/year</td>
<td>No</td>
</tr>
</tbody>
</table>

As seen in the table above, there were no thresholds surpassed with this project; therefore, public noticing is not required for offset purposes.

d. SSIPE > 20,000 lb/year

Public notification is required for any permitting action that results in a SSIPE of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE = SSPE2 – SSPE1. The SSIPE is compared to the SSIPE Public Notice thresholds in the following table. Negative SSIPE values are equated to zero.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>SSPE2 (lb/year)</th>
<th>SSPE1 (lb/year)</th>
<th>SSIPE (lb/year)</th>
<th>SSIPE Public Notice Threshold</th>
<th>Public Notice Required?</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO&lt;sub&gt;x&lt;/sub&gt;</td>
<td>147</td>
<td>147</td>
<td>0</td>
<td>20,000 lb/year</td>
<td>No</td>
</tr>
<tr>
<td>SO&lt;sub&gt;x&lt;/sub&gt;</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>20,000 lb/year</td>
<td>No</td>
</tr>
<tr>
<td>PM&lt;sub&gt;10&lt;/sub&gt;</td>
<td>29,200</td>
<td>29,200</td>
<td>0</td>
<td>20,000 lb/year</td>
<td>No</td>
</tr>
<tr>
<td>CO</td>
<td>16</td>
<td>16</td>
<td>0</td>
<td>20,000 lb/year</td>
<td>No</td>
</tr>
<tr>
<td>VOC</td>
<td>19,999</td>
<td>40,000</td>
<td>0</td>
<td>20,000 lb/year</td>
<td>No</td>
</tr>
</tbody>
</table>

As seen in the table above, the SSIPE for each pollutant is less than 20,000 lb/year; therefore, public noticing for SSIPE purposes is not required.

e. Title V Significant Permit Modification

As discussed in Rule 2520 discussion in section VIII of this document, the proposed project is not a significant permit modification.
2. Public Notice Action

As discussed above, public noticing is required for this project. Public notice documents will be submitted to the California Air Resources Board (CARB) and a public notice will be electronically published on the District’s website prior to the issuance of the ATCs under this project.

D. Daily Emission Limits (DELs)

DELs and other enforceable conditions are required by Rule 2201 to restrict a unit’s maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. The DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT.

**Proposed Rule 2201 (DEL) Conditions:**

**N-4065-6-7**
- Exhaust flow rate of the baghouse shall not exceed 90,000 dscfm. [District Rule 2201]

- PM$_{10}$ emissions from the woodworking operation at the baghouse exhaust shall not exceed 0.003 gr/dscf of exhaust flow rate. [District Rules 2201 and 4201]

**N-4065-7-3, '-8-3, '-9-3, '-10-3, '-11-3, '-12-3, '-13-3, and '-16-3**
Current DELs from the existing PTO will be replicated into the above permits.

**N-4065-18-0**

**Sanding Machine, Brush Cleaning Machine, Manual Sanding:**

Emissions from each of these units are routed through the baghouse under permit N-4065-6. These emissions are already counted under permit N-4065-6. Therefore, no separate DELs are established for these units.

**Stain application and drying operation:**

- Total VOC emissions from the stain application and drying operation shall not exceed any of the following emission limits: 125.9 lb/day and 2,873 lb/year. VOC emissions from the use of each stain shall be estimated in the following manner: Material VOC content (lb-VOC/gal, as applied) x Actual stain used (gallons/day). Total VOC emissions shall be the sum of VOC emissions from each stain used during a given day. The daily VOC emissions shall be used to estimate monthly and consecutive rolling 12-month emissions. [District Rule 2201]

- The stain application machine enclosure shall be equipped with filters capable of capturing at least 99.88% of PM10 emissions from overspray. The owner or operator shall keep sufficient records (e.g., PM10 filter efficiency test sheets, or other documents from filter vendors) to demonstrate compliance with this condition. [District Rule 2201]
N-4065-19-0

Brush Cleaning Machine:
Emissions from each of these units are routed through the baghouse under permit N-4065-6. These emissions are already counted under permit N-4065-6. Therefore, no separate DELs are established for these units.

Clear coat application and drying operation:
- Total PM10 emissions from clear coat application and drying operation shall not exceed any of the following emission limits: 0.043 lb/day and 8 lb/year. PM10 emissions from the use of each clearcoat shall be estimated in the following manner: 0.0003 x solids content in the clearcoat (lb-solids/gallon) x Actual clearcoat used (gallons/day). Total PM10 emissions shall be the sum of PM10 emissions from each clearcoat used during a given day. The daily PM10 emissions shall be used to estimate monthly and consecutive rolling 12-month emissions. [District Rule 2201]

- Clear coat application machine enclosure shall be equipped with filters capable of capturing at least 99.88% of PM10 emissions from overspray. The owner or operator shall keep sufficient records (e.g., PM10 filter efficiency test sheets, or other documents from filter vendors) to demonstrate compliance with this condition. [District Rule 2201]

- Total VOC emissions from clear coat application and drying operation shall not exceed any of the following emission limits: 13.3 lb/day and 2,386 lb/year (12-month rolling basis). VOC emissions from the use of each clear coat shall be estimated in the following manner: Material VOC content (lb-VOC/gal, as applied) x Actual clear coat used (gallons/day). Total VOC emissions shall be the sum of VOC emissions from each clear coat used during a given day. The daily VOC emissions shall be used to estimate monthly and consecutive rolling 12-month emissions. [District Rule 2201]

N-4065-20-0

Sanding Machine, Brush Cleaning Machine, Manual Sanding:
Emissions from each of these units are routed through the baghouse under permit N-4065-6. These emissions are already counted under permit N-4065-6. Therefore, no separate DELs are established for these units.

Lacquer application and drying operation:
- Total PM10 emissions from lacquer application and drying operation shall not exceed any of the following emission limits: 0.3 lb/day and 18 lb/year. PM10 emissions from the use of each lacquer shall be estimated in the following manner: 0.0003 x solids content in the lacquer (lb-solids/gallon) x Actual lacquer used (gallons/day). Total PM10 emissions shall be the sum of PM10 emissions from the use of each coating used during a given day. The daily PM10 emissions shall be used to estimate monthly and consecutive rolling 12-month emissions. [District Rule 2201]

- Lacquer application machine enclosure shall be equipped with filters capable of capturing at least 99.88% of PM10 emissions from overspray. The owner or operator shall keep sufficient records (e.g., PM10 filter efficiency test sheets, or other documents from filter vendors) to demonstrate compliance with this condition. [District Rule 2201]
Total VOC emissions from clear coat application and drying operation shall not exceed any of the following emission limits: 152.4 lb/day and 8,857 lb/year. VOC emissions from the use of each clear coat shall be estimated in the following manner: Material VOC content (lb-VOC/gal, as applied) x Actual lacquer used (gallons/day). Total VOC emissions shall be the sum of VOC emissions from the use of coating used during a given day. The daily VOC emissions shall be used to estimate monthly and consecutive rolling 12-month emissions. [District Rule 2201]

The following facility-wide requirements will be included in each permit:

- Facility-wide VOC emissions shall not exceed 19,999 pounds in any rolling 12-month period. [District Rule 2201]
- Facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201]

E. Compliance Assurance

1. Source Testing

Pursuant to District Policy APR-1705, source testing is not required to demonstrate compliance with Rule 2201.

2. Monitoring

No monitoring is required to demonstrate compliance with Rule 2201.

3. Recordkeeping

Recordkeeping is required to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201. The following condition(s) are listed on the permit to operate:

- The owner or operator shall keep daily records of the VOC and PM10 emitted from the operations under this permit. These records shall contain each calculated emission quantity as well as each process variable used in the respective calculations for each operation. [District Rule 2201]

- The operator shall keep a rolling 12-month record of the facility-wide VOC emissions. The record shall be updated on at least a monthly basis. [District Rule 2201]

- The operator shall keep a rolling 12-month record of the facility-wide PM10 emissions. The record shall be updated on at least a monthly basis. [District Rule 2201]
4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

F. Ambient Air Quality Analysis (AAQA)

Section 4.14 of District Rule 2201 requires that an AAQA be conducted for the purpose of determining whether a new or modified Stationary Source will cause or make worse a violation of an air quality standard. The District’s Technical Services Division conducted the required analysis. Refer to Appendix F of this document for the AAQA summary sheet.

The proposed location is in an attainment area for NO\textsubscript{X}, CO, and SO\textsubscript{X}. As shown by the AAQA summary sheet the proposed equipment will not cause a violation of an air quality standard for NO\textsubscript{X}, CO, or SO\textsubscript{X}.

The proposed location is in a non-attainment area for the state’s PM\textsubscript{10} as well as federal and state PM\textsubscript{2.5} thresholds. As shown by the AAQA summary sheet the proposed equipment will not cause a violation of an air quality standard for PM\textsubscript{10} and PM\textsubscript{2.5}.

Compliance is expected with this rule.

Rule 2410 Prevention of Significant Deterioration

As shown in Section VII.C.9 above, this project does not result in a new PSD major source or PSD major modification. No further discussion is required.

Rule 2520 Federally Mandated Operating Permits

Since this facility’s post-project potential emissions do not exceed any major source thresholds of Rule 2201, this facility is not a major source, and Rule 2520 does not apply.

Rule 4001 New Source Performance Standards (NSPS)

This rule incorporates NSPS from Part 60, Chapter 1, Title 40, Code of Federal Regulations (CFR); and applies to all new sources of air pollution and modifications of existing sources of air pollution listed in 40 CFR Part 60. However, no subparts of 40 CFR Part 60 apply to the proposed operations under this permit.

Rule 4002 National Emission Standards for Hazardous Air Pollutants (NESHAPs)

This rule incorporates NESHAPs from Part 61, Chapter I, Subchapter C, Title 40, CFR and the NESHAPs from Part 63, Chapter I, Subchapter C, Title 40, CFR; and applies to all sources of hazardous air pollution listed in 40 CFR Part 61 or 40 CFR Part 63. The following subparts apply to a plant site that is major source as defined in 40 CFR part 63, subpart A, 63.2:
40 CFR 63 Subpart JJ - National Emission Standards for Wood Furniture Manufacturing Operations
40 CFR 63 Subpart QQQQ - National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products
These subparts are applicable to Major Sources of HAP emissions. A Major source of HAP emissions is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, considering controls, any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

The applicant has proposed to limit facility-wide VOC emissions to less than 10 tons per year, which means that a single or combined total HAP are expected to be below the thresholds noted in the above paragraph. Furthermore, this facility uses untreated wood in their cabinet manufacturing operations; therefore, no additional HAPs are expected from wood working operations. Therefore, this facility is not a major source of HAP emissions, and the above listed subparts do not apply.

40 CFR 63 Subpart QQQQQ, National Emission Standards for Hazardous Air Pollutants for Wood Preserving Area Sources
Section 63.11433 defines Wood preserving means the pressure or thermal impregnation of chemicals into wood to provide effective long-term resistance to attack by fungi, bacteria, insects, and marine borers. The chemicals include chromium, arsenic, dioxins, or methylene chloride.

This facility does not operate wood preservative operation. Therefore, this subpart does not apply.

**Rule 4101 Visible Emissions**

Rule 4101 states that no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour which is as dark as or darker than Ringelmann 1 (or 20% opacity). The proposed operations are not expected to cause any visible emissions. The following condition will be included in the permit:

- No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]

Compliance is expected with this rule.

**Rule 4102 Nuisance**

Rule 4102 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these
operations, provided the equipment is well maintained. Therefore, compliance with this rule is expected.

**California Health & Safety Code 41700 (Health Risk Assessment)**

District Policy APR 1905 – *Risk Management Policy for Permitting New and Modified Sources* specifies that for an increase in emissions associated with a proposed new source or modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite.

District policy APR 1905 also specifies that the increase in emissions associated with a proposed new source or modification of an existing source shall not result in an increase in cancer risk greater than the District’s significance level (20 in a million) and shall not result in acute and/or chronic risk indices greater than 1.

According to the Technical Services Memo for this project, the total facility prioritization score including this project was greater than one. Therefore, an HRA was required to determine the short-term acute and long-term chronic exposure from this project.

The resulting prioritization score, acute hazard index, chronic hazard index, and cancer risk for this project is shown below.

<table>
<thead>
<tr>
<th>Health Risk Assessment Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Worst Case Potential</strong></td>
</tr>
<tr>
<td>Prioritization Score</td>
</tr>
<tr>
<td>Cancer Risk</td>
</tr>
<tr>
<td>Acute Hazard Index</td>
</tr>
<tr>
<td>Chronic Hazard Index</td>
</tr>
<tr>
<td>T-BACT Required?</td>
</tr>
</tbody>
</table>

**Discussion of T-BACT**

BACT for toxic emission control (T-BACT) is required if the cancer risk exceeds one in one million. As demonstrated above, T-BACT is not required for this project because the HRA indicates that the risk is not above the District’s thresholds for triggering T-BACT requirements; therefore, compliance with the District’s Risk Management Policy is expected.

In accordance with District policy APR 1905, no further analysis is required, and compliance with District Rule 4102 requirements is expected.

See **Appendix F: Health Risk Assessment Summary**

Compliance is expected with this rule.
Rule 4201 Particulate Matter Concentration

Section 3.1 prohibits discharge of dust, fumes, or total particulate matter into the atmosphere from any single source operation in excess of 0.1 grain per dry standard cubic foot.

N-4065-6-7, ‘-7-3, ‘-8-3, ‘-9-3, ‘-10-3, ‘-11-3, ‘-12-3, ‘-13-3, and ‘-16-3
The applicant is not proposing any changes to existing PM emissions under these permits. Therefore, continued compliance is expected.

N-4065-18-0
Sanding Machine, Brush Cleaning Machine, Manual Sanding:
Wood dust from these machines will be routed to an existing baghouse which is limited to release 0.003 gr-PM/dscf. Thus, continued compliance is expected.

Stain application and drying operation:
PE2 = 0.00065 lb-PM_{10}/hr
Exhaust flow rate (stain machine) = 7,060 cfm
PM_{10}/PM Fraction = 100% (assumed)
Exhaust gas temperature = 78 °F
Moisture in the exhaust gas = 5% (assumed)

\[
PM \left( \frac{gr}{dscf} \right) = \left( \frac{0.00065 \ lb-PM_{10}}{hr} \right) \left( \frac{7,000 \ gr-PM}{lb-PM} \right) \left( \frac{hr}{60 \ min} \right) \left( \frac{7,060 \ ft^3}{min} \right) \left( \frac{460+60}{460+78} \right) \left( 1-0.05 \right) = 0.0 \ \frac{gr-PM}{dscf}
\]

Since grain concentration is less than 0.1 gr/dscf, compliance is expected with this rule.

N-4065-19-0
Brush Cleaning Machine:
Wood dust from these machines will be routed to an existing baghouse which is limited to release 0.003 gr-PM/dscf. Thus, continued compliance is expected.

Clear coat application and drying operation:
PE2 = 0.0018 lb-PM_{10}/hr
Exhaust flow rate (clear coat machine) = 8,850 cfm
PM_{10}/PM Fraction = 100% (assumed)
Exhaust gas temperature = 78 °F
Moisture in the exhaust gas = 5% (assumed)

\[
PM \left( \frac{gr}{dscf} \right) = \left( \frac{0.0018 \ lb-PM_{10}}{hr} \right) \left( \frac{7,000 \ gr-PM}{lb-PM} \right) \left( \frac{hr}{60 \ min} \right) \left( \frac{8,850 \ ft^3}{min} \right) \left( \frac{460+60}{460+78} \right) \left( 1-0.05 \right) = 0.0 \ \frac{gr-PM}{dscf}
\]

Since grain concentration is less than 0.1 gr/dscf, compliance is expected with this rule.
**N-4065-20-0**

**Sanding Machine, Brush Cleaning Machine, Manual Sanding:**
Wood dust from these machines will be routed to an existing baghouse which is limited to release 0.003 gr-PM/dscf. Thus, continued compliance is expected.

**Lacquer application and drying operation:**
PE2 = 0.320 lb-PM$_{10}$/hr
Exhaust flow rate (clear coat machine) = 8,850 cfm
PM$_{10}$/PM Fraction = 100% (assumed)
Exhaust gas temperature = 78°F
Moisture in the exhaust gas = 5% (assumed)

\[
PM_{dscf} = \left( \frac{0.320 \text{ lb-PM}}{\text{hr}} \right) \left( \frac{7,000 \text{ gr-PM}}{\text{lb-PM}} \right) \left( \frac{\text{hr}}{60 \text{ min}} \right) \left( \frac{8,850 \text{ ft}^3}{\text{min}} \right) \left( \frac{460 + 78}{460 + 60} \right) (1-0.05) = 0.0 \text{ gr-PM/dscf}
\]

Since grain concentration is less than 0.1 gr/dscf, compliance is expected with this rule.

**Rule 4202 Particulate Matter – Emission Rate**

Section 4.0 requires that a person shall not discharge into the atmosphere from any source operation, particulate matter in excess of that allowed by one of the following applicable equation:

\[ E = 3.59 P^{0.62}, \text{ P is process weight less than or equal to 30 tons/hr} \]
\[ E = 17.31 P^{0.16}, \text{ P is process weight greater than 30 tons/hr} \]

The applicant is not proposing any changes to existing PM emissions under these permits. Therefore, continued compliance is expected.

**N-4065-16-3**

This permit is for an emergency internal combustion engine. Per ‘Process Weight’ definition, liquid and gaseous fuel are not are considered a part of process weight. Thus, allowable emissions cannot be quantified for this permit unit.

**N-4065-18-0**

**Sanding Machine, Brush Cleaning Machine, Manual Sanding:**
The process rate of each machine is assumed to be 2.81 tons/hr; this process rate is same as noted for permit N-4065-12, ‘-14 or ‘-16 under project N-1043060.

\[ P = 2.81 \text{ tons/hr} \]
\[ E_{\text{max}} = 3.59 (2.81)^{0.62} = 6.8 \text{ lb/hr} \]
The highest PM emission rate is 0.104 lb/hr (2.5 lb-PM/day ÷ 24 hr/day) from the sanding machine. Thus,

\[ \text{E}_{\text{proposed}} = 0.104 \text{ lb/hr} \]

Since the proposed PM emission rate is below the maximum allowable PM emission rate of 6.8 lb/hr, compliance is expected with this rule.

**N-4065-19-0**

*Brush Cleaning Machine:*
The process rate of each machine is assumed to be 2.81 tons/hr; this process rate is same as noted for permit N-4065-12, ‘-14 or ‘-16 under project N-1043060.

\[ P = 2.81 \text{ tons/hr} \]

\[ E_{\text{max}} = 3.59 (2.81)^{0.62} = 6.8 \text{ lb/hr} \]

The PM emission rate is 0.03 lb/hr (0.8 lb-PM/day ÷ 24 hr/day) from the brush cleaning machine. Thus,

\[ \text{E}_{\text{proposed}} = 0.03 \text{ lb/hr} \]

Since the proposed PM emission rate is below the maximum allowable PM emission rate of 6.8 lb/hr, compliance is expected with this rule.

**N-4065-20-0**

*Sanding Machine, Brush Cleaning Machine, Manual Sanding:*
The process rate of each machine is assumed to be 2.81 tons/hr; this process rate is same as noted for permit N-4065-12, ‘-14 or ‘-16 under project N-1043060.

\[ P = 2.81 \text{ tons/hr} \]

\[ E_{\text{max}} = 3.59 (2.81)^{0.62} = 6.8 \text{ lb/hr} \]

The highest PM emission rate is 0.104 lb/hr (2.5 lb-PM/day ÷ 24 hr/day) from the sanding machine. Thus,

\[ \text{E}_{\text{proposed}} = 0.104 \text{ lb/hr} \]

Since the proposed PM emission rate is below the maximum allowable PM emission rate of 6.8 lb/hr, compliance is expected with this rule.

**Rule 4606  Wood Products and Flat Wood Paneling Products Coating Operations**

This rule is applicable to operations that apply coatings to wood products, including furniture, cabinets, flat wood paneling, and custom replica furniture. The rule shall also apply to the
organic solvent cleaning, and the storage and disposal of all solvents and waste solvent materials associated with such coating operations.

This facility uses various stains, basecoats, and sealers in a wood cabinet manufacturing operation. Therefore, the existing wood coating operations under permits N-4065-7 through ‘-13 and the newly proposed operation under N-4065-18 through ‘-20 are subject to the requirements of this rule. Note that only applicable parts of the rule will be discussed in the following section.

Section 5.1 states that an operator shall not apply any coating to a wood product that has VOC content, as applied, that exceeds the applicable limits specified in Tables 1 or 2.

<table>
<thead>
<tr>
<th>Table 1 VOC Content Limits for Wood Product Coating Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coating Category</td>
</tr>
<tr>
<td>Clear Topcoat</td>
</tr>
<tr>
<td>Filler</td>
</tr>
<tr>
<td>High-Solids Stain</td>
</tr>
<tr>
<td>Ink</td>
</tr>
<tr>
<td>Mold-Seal Coating</td>
</tr>
<tr>
<td>Multi-Colored Coating</td>
</tr>
<tr>
<td>Pigmented Coating</td>
</tr>
<tr>
<td>Sanding Sealer</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 2 VOC Content Limits for Wood Product Coating Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coating Category</td>
</tr>
<tr>
<td>Low-Solids Stain</td>
</tr>
<tr>
<td>Stripper</td>
</tr>
</tbody>
</table>

The following conditions in permits N-4065-7 through ‘-13 and ‘-18 through ‘-20 will ensure compliance with this section:

- VOC content of coatings as applied, excluding water and exempt compounds, used for wood product, shall not exceed any of the following limits: clear topcoat 275 g/l (2.3 lb/gallon), filler 275 g/l (2.3 lb/gallon), high-solids stains 240 g/l (2.0 lb/gallon), ink 500 g/l (4.2 lb/gallon), mold-seal coating 750 g/l (6.3 lb/gallon), multi-colored coating 275 g/l (2.3 lb/gallon), pigmented coating 275 g/l (2.3 lb/gallon), and sanding sealer 275 g/l (2.3 lb/gallon). [District Rule 4606]
• VOC content of materials for wood products, as applied, shall not exceed any of the following limits: low-solids stain 120 g/l (1.0 lb/gallon), stripper 350 g/l (2.9 lb/gallon). [District Rule 4606]

Section 5.5 states that an operator shall not apply coatings to wood products unless the coating is applied using one of the following methods:

1. Electrostatic application;
2. High-Volume, Low Pressure (HVLP) spray; provided
   - HVLP spray equipment shall be operated in accordance with the manufacturer's recommendations;
   - For HVLP spray guns manufactured prior to January 1, 1996, the end user shall demonstrate that the gun meets HVLP spray equipment standards. Satisfactory proof will be either in the form of manufacturer's published technical material or by a demonstration using a certified air pressure tip gauge, measuring the air atomizing pressure dynamically at the center of the air cap and at the air horns.
3. Hand roller
4. Flow coat
5. Roll Coater
6. Dip coat
7. Paint Brush
8. Detailing or touch-up guns; or
9. Such other coating application methods that demonstrate 65% transfer efficiency, as approved by the District
10. Use of an approved VOC emission control system

The following conditions in permits N-4065-7 through ‘-13 and ‘-18 through ‘-20 will ensure compliance with this section:

• Only high-volume low-pressure (HVLP) spray, electrostatic, brush, dip, flow, or roll coating application equipment, or other application equipment approved by the District in writing, shall be used. All application equipment shall be operated in accordance with the manufacturer’s recommendations. [District Rule 4606]

• For HVLP spray guns manufactured prior to January 1, 1996, the permittee shall demonstrate that the gun meets HVLP spray equipment standards. Satisfactory proof will be either in the form of manufacturer's published technical material or by a demonstration using a certified air pressure tip gauge, measuring the air atomizing pressure dynamically at the center of the air cap and at the air horns. [District Rule 4606]

Section 5.7 lists requirements for organic solvent cleaning operations and strippable booth coatings. An operator shall not use organic solvents for cleaning operations that exceed the content limits specified in Table 4 in accordance with the corresponding effective date; and shall not use a strippable booth coating with VOC content in excess of 450 g/l (3.8 lb/gal) as applied, excluding water and exempt compounds.
Table 4 – VOC Limits for Organic Solvents Used in Cleaning Operations

<table>
<thead>
<tr>
<th>Type of Solvent Cleaning Operation</th>
<th>Effective November 15, 2003 through September 20, 2008</th>
<th>Effective on and after September 21, 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VOC Content Limit Grams of VOC/liter of material (lb/gal)</td>
<td>VOC Content Limit Grams of VOC/liter of material (lb/gal)</td>
</tr>
<tr>
<td>A. Product Cleaning During Manufacturing Process or Surface Preparation for Coating Application</td>
<td>50 (0.42)</td>
<td>25 (0.21)</td>
</tr>
<tr>
<td>B. Repair and Maintenance Cleaning</td>
<td>50 (0.42)</td>
<td>25 (0.21)</td>
</tr>
<tr>
<td>C. Cleaning of Coating Application Equipment</td>
<td>550 (4.6)</td>
<td>25 (0.21)</td>
</tr>
</tbody>
</table>

The following conditions in permits N-4065-7 through '-13 and '-18 through ' -20 will ensure compliance with this section:

- VOC content of strippable booth coating shall not exceed 450 g/l (3.8 lb/gallon) as applied, excluding water and exempt compounds. [District Rule 4606]

- VOC content of solvents used for product cleaning during manufacturing process or surface preparation for coating application, repair and maintenance cleaning, and cleaning of coating application equipment shall not exceed 25 g/l (0.21 lb/gal), unless such cleaning operations are carried out in District approved emission control system that meets the requirements of Section 5.4 of Rule 4606 (10/16/08). [District Rule 4606]

Section 5.8 list requirements for organic solvent disposal and storage. The following conditions in permits N-4065-7 through ’-13 and ’-18 through ’-20 will ensure compliance with this section:

- The operator shall store or dispose of fresh or spent solvents, waste solvent cleaning materials such as cloth, paper, etc., coatings, adhesives, catalysts, and thinners in closed, non-absorbent and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4606]

Section 6.1 lists requires record retention for a period five year, and make these records available on site during normal business hours to the APCO, ARB, or EPA, and submit them to the APCO, ARB, or EPA upon request. The following conditions in permits N-4065-7 through ‘-13 and ‘-18 through ‘-20 will ensure compliance with this section:

- The operator shall retain all records on site for a period of five years, make the records available on site during normal business hours to the District, ARB or EPA and submit the records to the District, ARB, or EPA upon request. [District Rule 4606]

Section 6.2 lists recordkeeping requirements for coatings. The following conditions in permits N-4065-7 through ‘-13 and ‘-18 through ‘-20 will ensure compliance with this section:
The operator shall maintain a current list of coatings, inks, adhesives, and solvents in use which provides all of the data necessary to evaluate compliance, including the following information, as applicable: a.) identify coatings, catalysts, reducers, inks, adhesives and solvents, b.) manufacturer's recommended mix ratio of components, c.) VOC content of coatings, as applied, d.) VOC content of solvents, e.) VOC content of inks, as applied, and f.) VOC content of adhesives, as applied. [District Rule 4606]

The operator shall maintain records on a daily basis that provide the following information, as applicable: a.) coating and mix ratio of components in the coating used, b.) quantity of each coating applied, c.) identification of coating category, d.) identification and quantity of each ink used, e.) identification and quantity of each adhesive used, and f.) type and amount of solvent used for cleanup and surface preparation. [District Rule 4606]

Section 6.3 lists recordkeeping requirements for cleaning solvents. The following conditions in permits N-4065-7 through ‘-13 and ‘-18 through ‘-20 will ensure compliance with this section:

The operator shall maintain the following records, and have available at all times, a current list of solvents in use which provides all of the data necessary to evaluate compliance, including the following information as applicable: a.) keep a copy of the manufacturer’s product data sheet or material safety data sheet of the solvents used for organic solvent cleaning activities, and b.) maintain a current list of solvents that are being used for organic solvent cleaning activities including the following information: the name of the solvent and its manufacturer’s name, the VOC content of the solvent expressed in grams/liter or lb/gallon, when the solvent is a mixture of different materials that are blended by the operator, the mix ratio of the batch shall be recorded and the VOC content of the batch shall be calculated and recorded in order to determine compliance with the specified limits of VOC content, as applied, and the type of cleaning activity for each solvent that is being used in accordance with the applicable cleaning category specified in Table 4 of Rule 4606 (10/16/08). [District Rule 4606]

Compliance is expected with this rule.

Rule 4701 Internal Combustion Engines – Phase 1
Rule 4702 Internal Combustion Engines
Rule 4801 Sulfur Compounds
Title 17 California Code of Regulations (CCR), Section 93115 - Airborne Toxic Control Measure (ATCM) for Stationary Compression-Ignition (CI) Engines

The applicant is not proposing any physical or operational changes to the existing emergency engine under permit N-4065-16. Further, the permit includes all applicable up-to-date requirements from these rules. Therefore, continued compliance is expected with these rules.

California Health & Safety Code 42301.6 (School Notice)

The District has verified that this site is not located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.
California Environmental Quality Act (CEQA)

CEQA requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The District adopted its *Environmental Review Guidelines* (ERG) in 2001. The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities;
- Identify the ways that environmental damage can be avoided or significantly reduced;
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

Greenhouse Gas (GHG) Significance Determination

It is determined that no other agency has or will prepare an environmental review document for the project. Thus the District is the Lead Agency for this project.

The District’s engineering evaluation (this document) demonstrates that the project would not result in an increase in project specific greenhouse gas emissions. The District therefore concludes that the project would have a less than cumulatively significant impact on global climate change.

District CEQA Findings

The District is the Lead Agency for this project because there is no other agency with broader statutory authority over this project. The District performed an Engineering Evaluation (this document) for the proposed project and determined that the project will not have a significant effect on the environment. The District finds that the project is exempt per the common sense exemption that CEQA applies only to projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061(b)(3)).

Indemnification Agreement/Letter of Credit Determination

According to District Policy APR 2010 (CEQA Implementation Policy), when the District is the Lead or Responsible Agency for CEQA purposes, an indemnification agreement and/or a letter of credit may be required. The decision to require an indemnity agreement and/or a letter of credit is based on a case-by-case analysis of a particular project’s potential for litigation risk, which in turn may be based on a project’s potential to generate public concern, its potential for significant impacts, and the project proponent’s ability to pay for the costs of litigation without a letter of credit, among other factors.
The criteria pollutant emissions and toxic air contaminant emissions associated with the proposed project are not significant, and there is minimal potential for public concern for this particular type of facility/operation. Therefore, an Indemnification Agreement and/or a Letter of Credit will not be required for this project in the absence of expressed public concern.

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Issue ATCs N-4065-6-7, ‘-7-3 through ‘-13-3, ‘-16-3, ‘-18-0, ‘-19-0 and ‘-20-0 subject to the permit conditions on the attached draft ATCs in Appendix A.

X. Billing Information

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Fee Schedule</th>
<th>Fee Description</th>
<th>Annual Fee</th>
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<tr>
<td>N-4065-6-7</td>
<td>3020-01-G</td>
<td>1,365.92 hp, total electric motors</td>
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<tr>
<td>N-4065-7-3</td>
<td>3020-01-A</td>
<td>5 hp, electric motors</td>
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<td>3020-01-C</td>
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<td>N-4065-20-0</td>
<td>3020-01-D</td>
<td>128 hp, total electric motors</td>
<td>$128</td>
</tr>
</tbody>
</table>

Appendixes

A: Draft ATCs
B: Permits to Operate
C: Potential to Emit for N-4065-18-0, ‘-19-0 and ‘-20-0
D: BACT Guidelines
E: BACT Analysis
F: HRA and AAQA Summary
G: Quarterly Net Emissions Change
Appendix A
Draft ATCs
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-4065-6-7

ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: BARBOSA CABINETS, INC.
MAILING ADDRESS: 2020 E GRANT LINE RD
TRACY, CA 95304

LOCATION: 2020 E GRANT LINE RD
TRACY, CA 95304

EQUIPMENT DESCRIPTION:
MODIFICATION OF WOODWORKING OPERATION CONSISTING OF 34 SAWS, 14 BORING MACHINES, 2 EDGE BANDERS, 13 SANDERS AND 4 SHAPERS AND FILTER CLEANING BOOTH ALL SERVED BY AN LMC MODEL 594-LP-12 BAGHOUSE: TO CONNECT EXHAUST FROM WOOD WORKING EQUIPMENT (2 SANDING MACHINES, 3 BRUSH CLEANING MACHINES, AND 2 MANUAL SANDING STATIONS) UNDER PERMITS N-4065-18, ’-19 AND ’-20 TO THE BAGHOUSE UNDER THIS PERMIT

CONDITIONS

1. Facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201]

2. Visible emissions from the baghouses serving the woodworking equipment shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4201]

3. The exhaust flow rate of the baghouse shall not exceed 90,000 dscfm. [District Rule 2201]

4. The PM10 emissions from the baghouse shall not exceed 0.003 gr/dscf of exhaust flow. [District Rules 2201 and 4201]

5. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201]

6. The baghouse shall operate at all times with a minimum differential pressure of 0.5 inches of water column and a maximum differential pressure of 4 inches of water column. [District Rule 2201]

7. The differential operating pressure shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Samir Sheikh, Executive Director / APCO

Brian Clements, Director of Permit Services

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8. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201]

9. The baghouse shall be maintained and operated according to manufacturer's specifications. [District Rule 2201]

10. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201]

11. Material removed from the dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201]

12. Records of the number of hours of operation of each baghouse, on a rolling 12-month basis, shall be kept. The records shall be kept separately for each baghouse and shall be updated at least monthly. [District Rules 1070 and 2201]

13. Records of all maintenance of the baghouse, including all change outs of filter media, shall be maintained. [District Rules 1070 and 2201]

14. The operator shall keep a rolling 12-month record of the facility-wide PM10 emissions. The record shall be updated on at least a monthly basis. [District Rule 2201]

15. Records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 1070]
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-4065-7-3

LEGAL OWNER OR OPERATOR: BARBOSA CABINETS, INC.
MAILING ADDRESS: 2020 E GRANT LINE RD
TRACY, CA 95304

LOCATION: 2020 E GRANT LINE RD
TRACY, CA 95304

EQUIPMENT DESCRIPTION:
MODIFICATION OF WOOD COATING OPERATION SERVED BY A SPRAY SYSTEMS MODEL I-18107 OPEN FACE BOOTH: LOWER THE FACILITY-WIDE VOC EMISSION LIMIT TO 19,999 POUNDS PER YEAR

CONDITIONS

1. Upon implementing Authority to Construct permits N-4065-7-3, '8-3, '9-3, '10-3, '11-3, '12-3, '13-3, '16-3, '18-0, '19-0 and '20-0, the facility will no longer be a Title V source, and all requirements pertaining to Title V shall be administratively removed from the facility-wide permit, as well as, any permit that is not a part of project N-1203975. [District Rule 2201]

2. Facility-wide VOC emissions shall not exceed 19,999 pounds in any rolling 12-month period. [District Rule 2201]

3. Facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201]

4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

5. VOC emissions shall not exceed 99.0 pounds during any one day. [District Rule 2201]

6. PM10 emissions shall not exceed 6.6 pounds during any one day. [District Rule 2201]

7. A record of the daily VOC emissions, in pounds, shall be kept. [District Rule 2201]

8. A record of the daily PM10 emissions, in pounds, shall be kept. [District Rule 2201]

9. VOC content of coatings as applied, excluding water and exempt compounds, used for wood product, shall not exceed any of the following limits: clear topcoat 275 g/l (2.3 lb/gallon), filler 275 g/l (2.3 lb/gallon), high-solids stains 240 g/l (2.0 lb/gallon), ink 500 g/l (4.2 lb/gallon), mold-seal coating 750 g/l (6.3 lb/gallon), multi-colored coating 275 g/l (2.3 lb/gallon), pigmented coating 275 g/l (2.3 lb/gallon), and sanding sealer 275 g/l (2.3 lb/gallon). [District Rule 4606]

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Samir Sheikh, Executive Director / APCO

Brian Clements, Director of Permit Services

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10. VOC content of materials for wood products, as applied, shall not exceed any of the following limits: low-solids stain 120 g/l (1.0 lb/gallon), stripper 350 g/l (2.9 lb/gallon). [District Rule 4606]
11. VOC content of strippable booth coating shall not exceed 450 g/l (3.8 lb/gallon) as applied, excluding water and exempt compounds. [District Rule 4606]
12. Only high-volume low-pressure (HVLP) spray, electrostatic, brush, dip, flow, or roll coating application equipment, or other application equipment approved by the District in writing, shall be used. All application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rule 4606]
13. For HVLP spray guns manufactured prior to January 1, 1996, the permittee shall demonstrate that the gun meets HVLP spray equipment standards. Satisfactory proof will be either in the form of manufacturer's published technical material or by a demonstration using a certified air pressure tip gauge, measuring the air atomizing pressure dynamically at the center of the air cap and at the air horns. [District Rule 4606]
14. VOC content of solvents used for product cleaning during manufacturing process or surface preparation for coating application, repair and maintenance cleaning, and cleaning of coating application equipment shall not exceed 25 g/l (0.21 lb/gal), unless such cleaning operations are carried out in District approved emission control system that meets the requirements of Section 5.4 of Rule 4606 (10/16/08). [District Rule 4606]
15. The operator shall store or dispose of fresh or spent solvents, waste solvent cleaning materials such as cloth, paper, etc., coatings, adhesives, catalysts, and thinners in closed, non-absorbent and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4606]
16. The operator shall maintain a current list of coatings, inks, adhesives, and solvents in use which provides all of the data necessary to evaluate compliance, including the following information, as applicable: a.) identify coatings, catalysts, reducers, inks, adhesives and solvents, b.) manufacturer's recommended mix ratio of components, c.) VOC content of coatings, as applied, d.) VOC content of solvents, e.) VOC content of inks, as applied, and f.) VOC content of adhesives, as applied. [District Rule 4606]
17. The operator shall maintain records on a daily basis that provide the following information, as applicable: a.) coating and mix ratio of components in the coating used, b.) quantity of each coating applied, c.) identification of coating category, d.) identification and quantity of each ink used, e.) identification and quantity of each adhesive used, and f.) type and amount of solvent used for cleanup and surface preparation. [District Rule 4606]
18. The operator shall maintain the following records, and have available at all times, a current list of solvents in use which provides all of the data necessary to evaluate compliance, including the following information as applicable: a.) keep a copy of the manufacturer's product data sheet or material safety data sheet of the solvents used for organic solvent cleaning activities, and b.) maintain a current list of solvents that are being used for organic solvent cleaning activities including the following information: the name of the solvent and its manufacturer's name, the VOC content of the solvent expressed in grams/liter or lb/gallon, when the solvent is a mixture of different materials that are blended by the operator, the mix ratio of the batch shall be recorded and the VOC content of the batch shall be calculated and recorded in order to determine compliance with the specified limits of VOC content, as applied, and the type of cleaning activity for each solvent that is being used in accordance with the applicable cleaning category specified in Table 4 of Rule 4606 (10/16/08). [District Rule 4606]
19. The operator shall keep a rolling 12-month record of the facility-wide VOC emissions. The record shall be updated on at least a monthly basis. [District Rule 2201]
20. The operator shall keep a rolling 12-month record of the facility-wide PM10 emissions. The record shall be updated on at least a monthly basis. [District Rule 2201]
21. The operator shall retain all records on site for a period of five years, make the records available on site during normal business hours to the District, ARB or EPA and submit the records to the District, ARB, or EPA upon request. [District Rule 4606]
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-4065-8-3

LEGAL OWNER OR OPERATOR: BARBOSA CABINETS, INC.
MAILING ADDRESS: 2020 E GRANT LINE RD
TRACY, CA 95304

LOCATION: 2020 E GRANT LINE RD
TRACY, CA 95304

EQUIPMENT DESCRIPTION:
MODIFICATION OF WOOD COATING OPERATION SERVED BY A SPRAY SYSTEMS MODEL I-18107 (OR EQUIVALENT) OPEN FACE BOOTH: LOWER THE FACILITY-WIDE VOC EMISSION LIMIT TO 19,999 POUNDS PER YEAR

CONDITIONS

1. Upon implementing Authority to Construct permits N-4065-7-3, '8-3, '9-3, '10-3, '11-3, '12-3, '13-3, '16-3, '18-0, '19-0 and '20-0, the facility will no longer be a Title V source, and all requirements pertaining to Title V shall be administratively removed from the facility-wide permit, as well as, any permit that is not a part of project N-1203975. [District Rule 2201]

2. Facility-wide VOC emissions shall not exceed 19,999 pounds in any rolling 12-month period. [District Rule 2201]

3. Facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201]

4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

5. VOC emissions shall not exceed 99.0 pounds during any one day. [District Rule 2201]

6. PM10 emissions shall not exceed 6.6 pounds during any one day. [District Rule 2201]

7. A record of the daily VOC emissions, in pounds, shall be kept. [District Rule 2201]

8. A record of the daily PM10 emissions, in pounds, shall be kept. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Samir Sheikh, Executive Director / APCO

Brian Clements, Director of Permit Services

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9. VOC content of coatings as applied, excluding water and exempt compounds, used for wood product, shall not exceed any of the following limits: clear topcoat 275 g/l (2.3 lb/gallon), filler 275 g/l (2.3 lb/gallon), high-solids stains 240 g/l (2.0 lb/gallon), ink 500 g/l (4.2 lb/gallon), mold-seal coating 750 g/l (6.3 lb/gallon), multi-colored coating 275 g/l (2.3 lb/gallon), pigmented coating 275 g/l (2.3 lb/gallon), and sanding sealer 275 g/l (2.3 lb/gallon). [District Rule 4606]

10. VOC content of materials for wood products, as applied, shall not exceed any of the following limits: low-solids stain 120 g/l (1.0 lb/gallon), stripper 350 g/l (2.9 lb/gallon). [District Rule 4606]

11. VOC content of strippable booth coating shall not exceed 450 g/l (3.8 lb/gallon) as applied, excluding water and exempt compounds. [District Rule 4606]

12. Only high-volume low-pressure (HVLP) spray, electrostatic, brush, dip, flow, or roll coating application equipment, or other application equipment approved by the District in writing, shall be used. All application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rule 4606]

13. For HVLP spray guns manufactured prior to January 1, 1996, the permittee shall demonstrate that the gun meets HVLP spray equipment standards. Satisfactory proof will be either in the form of manufacturer's published technical material or by a demonstration using a certified air pressure tip gauge, measuring the air atomizing pressure dynamically at the center of the air cap and at the air horns. [District Rule 4606]

14. VOC content of solvents used for product cleaning during manufacturing process or surface preparation for coating application, repair and maintenance cleaning, and cleaning of coating application equipment shall not exceed 25 g/l (0.21 lb/gal), unless such cleaning operations are carried out in District approved emission control system that meets the requirements of Section 5.4 of Rule 4606 (10/16/08). [District Rule 4606]

15. The operator shall store or dispose of fresh or spent solvents, waste solvent cleaning materials such as cloth, paper, etc., coatings, adhesives, catalysts, and thinners in closed, non-absorbent and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4606]

16. The operator shall maintain a current list of coatings, inks, adhesives, and solvents in use which provides all of the data necessary to evaluate compliance, including the following information, as applicable: a.) identify coatings, catalysts, reducers, inks, adhesives and solvents, b.) manufacturer's recommended mix ratio of components, c.) VOC content of coatings, as applied, d.) VOC content of solvents, e.) VOC content of inks, as applied, and f.) VOC content of adhesives, as applied. [District Rule 4606]

17. The operator shall maintain records on a daily basis that provide the following information, as applicable: a.) coating and mix ratio of components in the coating used, b.) quantity of each coating applied, c.) identification of coating category, d.) identification and quantity of each ink used, e.) identification and quantity of each adhesive used, and f.) type and amount of solvent used for cleanup and surface preparation. [District Rule 4606]

18. The operator shall maintain the following records, and have available at all times, a current list of solvents in use which provides all of the data necessary to evaluate compliance, including the following information as applicable: a.) keep a copy of the manufacturer's product data sheet or material safety data sheet of the solvents used for organic solvent cleaning activities, and b.) maintain a current list of solvents that are being used for organic solvent cleaning activities including the following information: the name of the solvent and its manufacturer's name, the VOC content of the solvent expressed in grams/liter or lb/gallon, when the solvent is a mixture of different materials that are blended by the operator, the mix ratio of the batch shall be recorded and the VOC content of the batch shall be calculated and recorded in order to determine compliance with the specified limits of VOC content, as applied, and the type of cleaning activity for each solvent that is being used in accordance with the applicable cleaning category specified in Table 4 of Rule 4606 (10/16/08). [District Rule 4606]

19. The operator shall keep a rolling 12-month record of the facility-wide VOC emissions. The record shall be updated on at least a monthly basis. [District Rule 2201]

20. The operator shall keep a rolling 12-month record of the facility-wide PM10 emissions. The record shall be updated on at least a monthly basis. [District Rule 2201]

21. The operator shall retain all records on site for a period of five years, make the records available on site during normal business hours to the District, ARB or EPA and submit the records to the District, ARB, or EPA upon request. [District Rule 4606]
AUTHORITY TO CONSTRUCT

PERMIT NO: N-4065-9-3

LEGAL OWNER OR OPERATOR: BARBOSA CABINETS, INC.
MAILING ADDRESS: 2020 E GRANT LINE RD
TRACY, CA 95304

LOCATION: 2020 E GRANT LINE RD
TRACY, CA 95304

EQUIPMENT DESCRIPTION:
MODIFICATION OF WOOD COATING OPERATION SERVED BY A SPRAY SYSTEMS MODEL I-18107 (OR EQUIVALENT) OPEN FACE BOOTH: LOWER THE FACILITY-WIDE VOC EMISSION LIMIT TO 19,999 POUNDS PER YEAR

CONDITIONS

1. Upon implementing Authority to Construct permits N-4065-7-3, '8-3, '9-3, '10-3, '11-3, '12-3, '13-3, '16-3, '18-0, '19-0 and '20-0, the facility will no longer be a Title V source, and all requirements pertaining to Title V shall be administratively removed from the facility-wide permit, as well as, any permit that is not a part of project N-1203975. [District Rule 2201]

2. Facility-wide VOC emissions shall not exceed 19,999 pounds in any rolling 12-month period. [District Rule 2201]

3. Facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201]

4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

5. VOC emissions shall not exceed 99.0 pounds during any one day. [District Rule 2201]

6. PM10 emissions shall not exceed 6.6 pounds during any one day. [District Rule 2201]

7. A record of the daily VOC emissions, in pounds, shall be kept. [District Rule 2201]

8. A record of the daily PM10 emissions, in pounds, shall be kept. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Samir Sheikh, Executive Director / APCO

Brian Clements, Director of Permit Services
9. VOC content of coatings as applied, excluding water and exempt compounds, used for wood product, shall not exceed any of the following limits: clear topcoat 275 g/l (2.3 lb/gallon), filler 275 g/l (2.3 lb/gallon), high-solids stains 240 g/l (2.0 lb/gallon), ink 500 g/l (4.2 lb/gallon), mold-seal coating 750 g/l (6.3 lb/gallon), multi-colored coating 275 g/l (2.3 lb/gallon), pigmented coating 275 g/l (2.3 lb/gallon), and sanding sealer 275 g/l (2.3 lb/gallon). [District Rule 4606]

10. VOC content of materials for wood products, as applied, shall not exceed any of the following limits: low-solids stain 120 g/l (1.0 lb/gallon), stripper 350 g/l (2.9 lb/gallon). [District Rule 4606]

11. VOC content of strippable booth coating shall not exceed 450 g/l (3.8 lb/gallon) as applied, excluding water and exempt compounds. [District Rule 4606]

12. Only high-volume low-pressure (HVLP) spray, electrostatic, brush, dip, flow, or roll coating application equipment, or other application equipment approved by the District in writing, shall be used. All application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rule 4606]

13. For HVLP spray guns manufactured prior to January 1, 1996, the permittee shall demonstrate that the gun meets HVLP spray equipment standards. Satisfactory proof will be either in the form of manufacturer's published technical material or by a demonstration using a certified air pressure tip gauge, measuring the air atomizing pressure dynamically at the center of the air cap and at the air horns. [District Rule 4606]

14. VOC content of solvents used for product cleaning during manufacturing process or surface preparation for coating application, repair and maintenance cleaning, and cleaning of coating application equipment shall not exceed 25 g/l (0.21 lb/gal), unless such cleaning operations are carried out in District approved emission control system that meets the requirements of Section 5.4 of Rule 4606 (10/16/08). [District Rule 4606]

15. The operator shall store or dispose of fresh or spent solvents, waste solvent cleaning materials such as cloth, paper, etc., coatings, adhesives, catalysts, and thinners in closed, non-absorbent and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4606]

16. The operator shall maintain a current list of coatings, inks, adhesives, and solvents in use which provides all of the data necessary to evaluate compliance, including the following information, as applicable: a.) identify coatings, catalysts, reducers, inks, adhesives and solvents, b.) manufacturer's recommended mix ratio of components, c.) VOC content of coatings, as applied, d.) VOC content of solvents, e.) VOC content of inks, as applied, and f.) VOC content of adhesives, as applied. [District Rule 4606]

17. The operator shall maintain records on a daily basis that provide the following information, as applicable: a.) coating and mix ratio of components in the coating used, b.) quantity of each coating applied, c.) identification of coating category, d.) identification and quantity of each ink used, e.) identification and quantity of each adhesive used, and f.) type and amount of solvent used for cleanup and surface preparation. [District Rule 4606]

18. The operator shall maintain the following records, and have available at all times, a current list of solvents in use which provides all of the data necessary to evaluate compliance, including the following information as applicable: a.) keep a copy of the manufacturer's product data sheet or material safety data sheet of the solvents used for organic solvent cleaning activities, and b.) maintain a current list of solvents that are being used for organic solvent cleaning activities including the following information: the name of the solvent and its manufacturer's name, the VOC content of the solvent expressed in grams/liter or lb/gallon, when the solvent is a mixture of different materials that are blended by the operator, the mix ratio of the batch shall be recorded and the VOC content of the batch shall be calculated and recorded in order to determine compliance with the specified limits of VOC content, as applied, and the type of cleaning activity for each solvent that is being used in accordance with the applicable cleaning category specified in Table 4 of Rule 4606 (10/16/08). [District Rule 4606]

19. The operator shall keep a rolling 12-month record of the facility-wide VOC emissions. The record shall be updated on at least a monthly basis. [District Rule 2201]

20. The operator shall keep a rolling 12-month record of the facility-wide PM10 emissions. The record shall be updated on at least a monthly basis. [District Rule 2201]

21. The operator shall retain all records on site for a period of five years, make the records available on site during normal business hours to the District, ARB or EPA and submit the records to the District, ARB, or EPA upon request. [District Rule 4606]
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-4065-10-3
ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: BARBOSA CABINETS, INC.
MAILING ADDRESS: 2020 E GRANT LINE RD
TRACY, CA 95304

LOCATION: 2020 E GRANT LINE RD
TRACY, CA 95304

EQUIPMENT DESCRIPTION:
MODIFICATION OF WOOD COATING OPERATION SERVED BY A SPRAY SYSTEMS MODEL I-18107 OPEN FACE
BOOTH: LOWER THE FACILITY-WIDE VOC EMISSION LIMIT TO 19,999 POUNDS PER YEAR

CONDITIONS

1. Upon implementing Authority to Construct permits N-4065-7-3, ’-8-3, ’-9-3, ’-10-3, ’-11-3, ’-12-3, ’-13-3, ’-16-3, ’-18-0,
’-19-0 and ’-20-0, the facility will no longer be a Title V source, and all requirements pertaining to Title V shall be
administratively removed from the facility-wide permit, as well as, any permit that is not a part of project N-1203975.
   [District Rule 2201]

2. Facility-wide VOC emissions shall not exceed 19,999 pounds in any rolling 12-month period. [District Rule 2201]

3. Facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule
   2201]

4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

5. VOC emissions shall not exceed 99.0 pounds during any one day. [District Rule 2201]

6. PM10 emissions shall not exceed 6.6 pounds during any one day. [District Rule 2201]

7. A record of the daily VOC emissions, in pounds, shall be kept. [District Rule 2201]

8. A record of the daily PM10 emissions, in pounds, shall be kept. [District Rule 2201]

9. VOC content of coatings as applied, excluding water and exempt compounds, used for wood product, shall not exceed
   any of the following limits: clear topcoat 275 g/l (2.3 lb/gallon), filler 275 g/l (2.3 lb/gallon), high-solids stains 240 g/l
   (2.0 lb/gallon), ink 500 g/l (4.2 lb/gallon), mold-seal coating 750 g/l (6.3 lb/gallon), multi-colored coating 275 g/l (2.3
   lb/gallon), pigmented coating 275 g/l (2.3 lb/gallon), and sanding sealer 275 g/l (2.3 lb/gallon). [District Rule 4606]
10. VOC content of materials for wood products, as applied, shall not exceed any of the following limits: low-solids stain 120 g/l (1.0 lb/gallon), stripper 350 g/l (2.9 lb/gallon). [District Rule 4606]

11. VOC content of strippable booth coating shall not exceed 450 g/l (3.8 lb/gallon) as applied, excluding water and exempt compounds. [District Rule 4606]

12. Only high-volume low-pressure (HVLP) spray, electrostatic, brush, dip, flow, or roll coating application equipment, or other application equipment approved by the District in writing, shall be used. All application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rule 4606]

13. For HVLP spray guns manufactured prior to January 1, 1996, the permittee shall demonstrate that the gun meets HVLP spray equipment standards. Satisfactory proof will be either in the form of manufacturer's published technical material or by a demonstration using a certified air pressure tip gauge, measuring the air atomizing pressure dynamically at the center of the air cap and at the air horns. [District Rule 4606]

14. VOC content of solvents used for product cleaning during manufacturing process or surface preparation for coating application, repair and maintenance cleaning, and cleaning of coating application equipment shall not exceed 25 g/l (0.21 lb/gal), unless such cleaning operations are carried out in District approved emission control system that meets the requirements of Section 5.4 of Rule 4606 (10/16/08). [District Rule 4606]

15. The operator shall store or dispose of fresh or spent solvents, waste solvent cleaning materials such as cloth, paper, etc., coatings, adhesives, catalysts, and thinners in closed, non-absorbent and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4606]

16. The operator shall maintain a current list of coatings, inks, adhesives, and solvents in use which provides all of the data necessary to evaluate compliance, including the following information, as applicable: a.) identify coatings, catalysts, reducers, inks, adhesives and solvents, b.) manufacturer's recommended mix ratio of components, c.) VOC content of coatings, as applied, d.) VOC content of solvents, e.) VOC content of inks, as applied, and f.) VOC content of adhesives, as applied. [District Rule 4606]

17. The operator shall maintain records on a daily basis that provide the following information, as applicable: a.) coating and mix ratio of components in the coating used, b.) quantity of each coating applied, c.) identification of coating category, d.) identification and quantity of each ink used, e.) identification and quantity of each adhesive used, and f.) type and amount of solvent used for cleanup and surface preparation. [District Rule 4606]

18. The operator shall maintain the following records, and have available at all times, a current list of solvents in use which provides all of the data necessary to evaluate compliance, including the following information as applicable: a.) keep a copy of the manufacturer's product data sheet or material safety data sheet of the solvents used for organic solvent cleaning activities, and b.) maintain a current list of solvents that are being used for organic solvent cleaning activities including the following information: the name of the solvent and its manufacturer's name, the VOC content of the solvent expressed in grams/liter or lb/gallon, when the solvent is a mixture of different materials that are blended by the operator, the mix ratio of the batch shall be recorded and the VOC content of the batch shall be calculated and recorded in order to determine compliance with the specified limits of VOC content, as applied, and the type of cleaning activity for each solvent that is being used in accordance with the applicable cleaning category specified in Table 4 of Rule 4606 (10/16/08). [District Rule 4606]

19. The operator shall keep a rolling 12-month record of the facility-wide VOC emissions. The record shall be updated on at least a monthly basis. [District Rule 2201]

20. The operator shall keep a rolling 12-month record of the facility-wide PM10 emissions. The record shall be updated on at least a monthly basis. [District Rule 2201]

21. The operator shall retain all records on site for a period of five years, make the records available on site during normal business hours to the District, ARB or EPA and submit the records to the District, ARB, or EPA upon request. [District Rule 4606]
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-4065-11-3
LEGAL OWNER OR OPERATOR: BARBOSA CABINETS, INC.
MAILING ADDRESS: 2020 E GRANT LINE RD
TRACY, CA 95304
LOCATION: 2020 E GRANT LINE RD
TRACY, CA 95304

EQUIPMENT DESCRIPTION:
MODIFICATION OF WOOD COATING OPERATION SERVED BY A SPRAY SYSTEMS MODEL I-1287 OPEN FACE
BOOTH: LOWER THE FACILITY-WIDE VOC EMISSION LIMIT TO 19,999 POUNDS PER YEAR

CONDITIONS

' -19-0 and ' -20-0, the facility will no longer be a Title V source, and all requirements pertaining to Title V shall be
administratively removed from the facility-wide permit, as well as, any permit that is not a part of project N-1203975.
[District Rule 2201]

2. Facility-wide VOC emissions shall not exceed 19,999 pounds in any rolling 12-month period. [District Rule 2201]

3. Facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201]

4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

5. VOC emissions shall not exceed 99.0 pounds during any one day. [District Rule 2201]

6. PM10 emissions shall not exceed 6.6 pounds during any one day. [District Rule 2201]

7. A record of the daily VOC emissions, in pounds, shall be kept. [District Rule 2201]

8. A record of the daily PM10 emissions, in pounds, shall be kept. [District Rule 2201]

9. VOC content of coatings as applied, excluding water and exempt compounds, used for wood product, shall not exceed
any of the following limits: clear topcoat 275 g/l (2.3 lb/gallon), filler 275 g/l (2.3 lb/gallon), high-solids stains 240 g/l
(2.0 lb/gallon), ink 500 g/l (4.2 lb/gallon), mold-seal coating 750 g/l (6.3 lb/gallon), multi-colored coating 275 g/l (2.3
lb/gallon), pigmented coating 275 g/l (2.3 lb/gallon), and sanding sealer 275 g/l (2.3 lb/gallon). [District Rule 4606]

YOU MUST NOTIFY THE DISTR
ICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO
OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Samir Sheikh, Executive Director / APCO

Brian Clements, Director of Permit Services
N-4065-11-3: May 23 2022 5:17PM - KAHLONJ: Joint Inspection NOT Required
Northern Regional Office • 4800 Enterprise Way • Modesto, CA 95356-8718 • (209) 557-6400 • Fax (209) 557-6475
10. VOC content of materials for wood products, as applied, shall not exceed any of the following limits: low-solids stain 120 g/l (1.0 lb/gallon), stripper 350 g/l (2.9 lb/gallon). [District Rule 4606]

11. VOC content of strippable booth coating shall not exceed 450 g/l (3.8 lb/gallon) as applied, excluding water and exempt compounds. [District Rule 4606]

12. Only high-volume low-pressure (HVLP) spray, electrostatic, brush, dip, flow, or roll coating application equipment, or other application equipment approved by the District in writing, shall be used. All application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rule 4606]

13. For HVLP spray guns manufactured prior to January 1, 1996, the permittee shall demonstrate that the gun meets HVLP spray equipment standards. Satisfactory proof will be either in the form of manufacturer's published technical material or by a demonstration using a certified air pressure tip gauge, measuring the air atomizing pressure dynamically at the center of the air cap and at the air horns. [District Rule 4606]

14. VOC content of solvents used for product cleaning during manufacturing process or surface preparation for coating application, repair and maintenance cleaning, and cleaning of coating application equipment shall not exceed 25 g/l (0.21 lb/gal), unless such cleaning operations are carried out in District approved emission control system that meets the requirements of Section 5.4 of Rule 4606 (10/16/08). [District Rule 4606]

15. The operator shall store or dispose of fresh or spent solvents, waste solvent cleaning materials such as cloth, paper, etc., coatings, adhesives, catalysts, and thinners in closed, non-absorbent and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4606]

16. The operator shall maintain a current list of coatings, inks, adhesives, and solvents in use which provides all of the data necessary to evaluate compliance, including the following information, as applicable: a.) identify coatings, catalysts, reducers, inks, adhesives and solvents, b.) manufacturer's recommended mix ratio of components, c.) VOC content of coatings, as applied, d.) VOC content of solvents, e.) VOC content of inks, as applied, and f.) VOC content of adhesives, as applied. [District Rule 4606]

17. The operator shall maintain records on a daily basis that provide the following information, as applicable: a.) coating and mix ratio of components in the coating used, b.) quantity of each coating applied, c.) identification of coating category, d.) identification and quantity of each ink used, e.) identification and quantity of each adhesive used, and f.) type and amount of solvent used for cleanup and surface preparation. [District Rule 4606]

18. The operator shall maintain the following records, and have available at all times, a current list of solvents in use which provides all of the data necessary to evaluate compliance, including the following information as applicable: a.) keep a copy of the manufacturer's product data sheet or material safety data sheet of the solvents used for organic solvent cleaning activities, and b.) maintain a current list of solvents that are being used for organic solvent cleaning activities including the following information: the name of the solvent and its manufacturer's name, the VOC content of the solvent expressed in grams/liter or lb/gallon, when the solvent is a mixture of different materials that are blended by the operator, the mix ratio of the batch shall be recorded and the VOC content of the batch shall be calculated and recorded in order to determine compliance with the specified limits of VOC content, as applied, and the type of cleaning activity for each solvent that is being used in accordance with the applicable cleaning category specified in Table 4 of Rule 4606 (10/16/08). [District Rule 4606]

19. The operator shall keep a rolling 12-month record of the facility-wide VOC emissions. The record shall be updated on at least a monthly basis. [District Rule 2201]

20. The operator shall keep a rolling 12-month record of the facility-wide PM10 emissions. The record shall be updated on at least a monthly basis. [District Rule 2201]

21. The operator shall retain all records on site for a period of five years, make the records available on site during normal business hours to the District, ARB or EPA and submit the records to the District, ARB, or EPA upon request. [District Rule 4606]
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-4065-12-3

LEGAL OWNER OR OPERATOR: BARBOSA CABINETS, INC.
MAILING ADDRESS: 2020 E GRANT LINE RD
TRACY, CA 95304

LOCATION: 2020 E GRANT LINE RD
TRACY, CA 95304

EQUIPMENT DESCRIPTION:
MODIFICATION OF RHODES MANUFACTURING MODEL I-22810C CONVEYORIZED WOOD COATING AND SANDING SYSTEM. THE SYSTEM INCLUDES THREE COATING BOOTHS, ONE SANDING BOOTH SERVED BY A TORIT ECB DUST COLLECTOR AND FOUR PERMIT EXEMPT OVEN/CURING TUNNELS: LOWER THE FACILITY-WIDE VOC EMISSION LIMIT TO 19,999 POUNDS PER YEAR

CONDITIONS

1. Upon implementing Authority to Construct permits N-4065-7-3, -8-3, -9-3, -10-3, -11-3, -12-3, -13-3, -16-3, -18-0, -19-0 and -20-0, the facility will no longer be a Title V source, and all requirements pertaining to Title V shall be administratively removed from the facility-wide permit, as well as, any permit that is not a part of project N-1203975. [District Rule 2201]
2. Facility-wide VOC emissions shall not exceed 19,999 pounds in any rolling 12-month period. [District Rule 2201]
3. Facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201]
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
5. Visible emissions from the baghouse serving the sanding booth shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rule 2201]
6. VOC emissions shall not exceed 297.0 pounds during any one day. [District Rule 2201]
7. PM10 emissions shall not exceed 19.8 pounds during any one day. [District Rule 2201]
8. PM10 emissions from the sanding booth shall not exceed 0.0093 lb/lb of sawdust collected by the dust collector. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Samir Sheikh, Executive Director / APCO

DRAFT
9. The quantity of sawdust collected by the dust collector shall not exceed 100 pounds during any one day. [District Rule 2201]

10. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201]

11. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201]

12. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201]

13. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201]

14. A record of the daily VOC emissions, in pounds, shall be kept. [District Rule 2201]

15. A record of the daily PM10 emissions, in pounds, shall be kept. [District Rule 2201]

16. A record of the daily quantity of sawdust collected by the dust collector, in pounds, shall be kept. [District Rule 2201]

17. VOC content of coatings as applied, excluding water and exempt compounds, used for wood product, shall not exceed any of the following limits: clear topcoat 275 g/l (2.3 lb/gallon), filler 275 g/l (2.3 lb/gallon), high-solids stains 240 g/l (2.0 lb/gallon), ink 500 g/l (4.2 lb/gallon), mold-seal coating 750 g/l (6.3 lb/gallon), multi-colored coating 275 g/l (2.3 lb/gallon), pigmented coating 275 g/l (2.3 lb/gallon), and sanding sealer 275 g/l (2.3 lb/gallon). [District Rule 4606]

18. VOC content of materials for wood products, as applied, shall not exceed any of the following limits: low-solids stain 120 g/l (1.0 lb/gallon), stripper 350 g/l (2.9 lb/gallon). [District Rule 4606]

19. VOC content of strippable booth coating shall not exceed 450 g/l (3.8 lb/gallon) as applied, excluding water and exempt compounds. [District Rule 4606]

20. Only high-volume low-pressure (HVLP) spray, electrostatic, brush, dip, flow, or roll coating application equipment, or other application equipment approved by the District in writing, shall be used. All application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rule 4606]

21. For HVLP spray guns manufactured prior to January 1, 1996, the permittee shall demonstrate that the gun meets HVLP spray equipment standards. Satisfactory proof will be either in the form of manufacturer's published technical material or by a demonstration using a certified air pressure tip gauge, measuring the air atomizing pressure dynamically at the center of the air cap and at the air horns. [District Rule 4606]

22. VOC content of solvents used for product cleaning during manufacturing process or surface preparation for coating application, repair and maintenance cleaning, and cleaning of coating application equipment shall not exceed 25 g/l (0.21 lb/gal), unless such cleaning operations are carried out in District approved emission control system that meets the requirements of Section 5.4 of Rule 4606 (10/16/08). [District Rule 4606]

23. The operator shall store or dispose of fresh or spent solvents, waste solvent cleaning materials such as cloth, paper, etc., coatings, adhesives, catalysts, and thinners in closed, non-absorbent and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4606]

24. The operator shall maintain a current list of coatings, inks, adhesives, and solvents in use which provides all of the data necessary to evaluate compliance, including the following information, as applicable: a.) identify coatings, catalysts, reducers, inks, adhesives and solvents, b.) manufacturer's recommended mix ratio of components, c.) VOC content of coatings, as applied, d.) VOC content of solvents, e.) VOC content of inks, as applied, and f.) VOC content of adhesives, as applied. [District Rule 4606]

25. The operator shall maintain records on a daily basis that provide the following information, as applicable: a.) coating and mix ratio of components in the coating used, b.) quantity of each coating applied, c.) identification of coating category, d.) identification and quantity of each ink used, e.) identification and quantity of each adhesive used, and f.) type and amount of solvent used for cleanup and surface preparation. [District Rule 4606]

CONDITIONS CONTINUE ON NEXT PAGE
26. The operator shall maintain the following records, and have available at all times, a current list of solvents in use which provides all of the data necessary to evaluate compliance, including the following information as applicable: a.) keep a copy of the manufacturer’s product data sheet or material safety data sheet of the solvents used for organic solvent cleaning activities, and b.) maintain a current list of solvents that are being used for organic solvent cleaning activities including the following information: the name of the solvent and its manufacturer’s name, the VOC content of the solvent expressed in grams/liter or lb/gallon, when the solvent is a mixture of different materials that are blended by the operator, the mix ratio of the batch shall be recorded and the VOC content of the batch shall be calculated and recorded in order to determine compliance with the specified limits of VOC content, as applied, and the type of cleaning activity for each solvent that is being used in accordance with the applicable cleaning category specified in Table 4 of Rule 4606 (10/16/08). [District Rule 4606]

27. The operator shall keep a rolling 12-month record of the facility-wide VOC emissions. The record shall be updated on at least a monthly basis. [District Rule 2201]

28. The operator shall keep a rolling 12-month record of the facility-wide PM10 emissions. The record shall be updated on at least a monthly basis. [District Rule 2201]

29. The operator shall retain all records on site for a period of five years, make the records available on site during normal business hours to the District, ARB or EPA and submit the records to the District, ARB, or EPA upon request. [District Rules 2201 and 4606]
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-4065-13-3

LEGAL OWNER OR OPERATOR: BARBOSA CABINETS, INC.
MAILING ADDRESS: 2020 E GRANT LINE RD
TRACY, CA 95304

LOCATION: 2020 E GRANT LINE RD
TRACY, CA 95304

EQUIPMENT DESCRIPTION: MODIFICATION OF CEFLA FALCIONI PROFIPLUS 39 MOLDING COATING UNIT: LOWER THE FACILITY-WIDE VOC EMISSION LIMIT TO 19,999 POUNDS PER YEAR

CONDITIONS

1. Upon implementing Authority to Construct permits N-4065-7-3, ‘-8-3, ‘-9-3, ‘-10-3, ‘-11-3, ‘-12-3, ‘-13-3, ‘-16-3, ‘-18-0, ‘-19-0 and ‘-20-0, the facility will no longer be a Title V source, and all requirements pertaining to Title V shall be administratively removed from the facility-wide permit, as well as, any permit that is not a part of project N-1203975. [District Rule 2201]

2. Facility-wide VOC emissions shall not exceed 19,999 pounds in any rolling 12-month period. [District Rule 2201]

3. Facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201]

4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

5. VOC emissions shall not exceed 99.0 pounds during any one day. [District Rule 2201]

6. PM10 emissions shall not exceed 6.6 pounds during any one day. [District Rule 2201]

7. A record of the daily VOC emissions, in pounds, shall be kept. [District Rule 2201]

8. A record of the daily PM10 emissions, in pounds, shall be kept. [District Rule 2201]

9. VOC content of coatings as applied, excluding water and exempt compounds, used for wood product, shall not exceed any of the following limits: clear topcoat 275 g/l (2.3 lb/gallon), filler 275 g/l (2.3 lb/gallon), high-solids stains 240 g/l (2.0 lb/gallon), ink 500 g/l (4.2 lb/gallon), mold-seal coating 750 g/l (6.3 lb/gallon), multi-colored coating 275 g/l (2.3 lb/gallon), pigmented coating 275 g/l (2.3 lb/gallon), and sanding sealer 275 g/l (2.3 lb/gallon). [District Rule 4606]
10. VOC content of materials for wood products, as applied, shall not exceed any of the following limits: low-solids stain 120 g/l (1.0 lb/gallon), stripper 350 g/l (2.9 lb/gallon). [District Rule 4606]

11. VOC content of strippable booth coating shall not exceed 450 g/l (3.8 lb/gallon) as applied, excluding water and exempt compounds. [District Rule 4606]

12. Only high-volume low-pressure (HVLP) spray, electrostatic, brush, dip, flow, or roll coating application equipment, or other application equipment approved by the District in writing, shall be used. All application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rule 4606]

13. For HVLP spray guns manufactured prior to January 1, 1996, the permittee shall demonstrate that the gun meets HVLP spray equipment standards. Satisfactory proof will be either in the form of manufacturer's published technical material or by a demonstration using a certified air pressure tip gauge, measuring the air atomizing pressure dynamically at the center of the air cap and at the air horns. [District Rule 4606]

14. VOC content of solvents used for product cleaning during manufacturing process or surface preparation for coating application, repair and maintenance cleaning, and cleaning of coating application equipment shall not exceed 25 g/l (0.21 lb/gal), unless such cleaning operations are carried out in District approved emission control system that meets the requirements of Section 5.4 of Rule 4606 (10/16/08). [District Rule 4606]

15. The operator shall store or dispose of fresh or spent solvents, waste solvent cleaning materials such as cloth, paper, etc., coatings, adhesives, catalysts, and thinners in closed, non-absorbent and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4606]

16. The operator shall maintain a current list of coatings, inks, adhesives, and solvents in use which provides all of the data necessary to evaluate compliance, including the following information, as applicable: a.) identify coatings, catalysts, reducers, inks, adhesives and solvents, b.) manufacturer's recommended mix ratio of components, c.) VOC content of coatings, as applied, d.) VOC content of solvents, e.) VOC content of inks, as applied, and f.) VOC content of adhesives, as applied. [District Rule 4606]

17. The operator shall maintain records on a daily basis that provide the following information, as applicable: a.) coating and mix ratio of components in the coating used, b.) quantity of each coating applied, c.) identification of coating category, d.) identification and quantity of each ink used, e.) identification and quantity of each adhesive used, and f.) type and amount of solvent used for cleanup and surface preparation. [District Rule 4606]

18. The operator shall maintain the following records, and have available at all times, a current list of solvents in use which provides all of the data necessary to evaluate compliance, including the following information as applicable: a.) keep a copy of the manufacturer's product data sheet or material safety data sheet of the solvents used for organic solvent cleaning activities, and b.) maintain a current list of solvents that are being used for organic solvent cleaning activities including the following information: the name of the solvent and its manufacturer's name, the VOC content of the solvent expressed in grams/liter or lb/gallon, when the solvent is a mixture of different materials that are blended by the operator, the mix ratio of the batch shall be recorded and the VOC content of the batch shall be calculated and recorded in order to determine compliance with the specified limits of VOC content, as applied, and the type of cleaning activity for each solvent that is being used in accordance with the applicable cleaning category specified in Table 4 of Rule 4606 (10/16/08). [District Rule 4606]

19. The operator shall keep a rolling 12-month record of the facility-wide VOC emissions. The record shall be updated on at least a monthly basis. [District Rule 2201]

20. The operator shall keep a rolling 12-month record of the facility-wide PM10 emissions. The record shall be updated on at least a monthly basis. [District Rule 2201]

21. The operator shall retain all records on site for a period of five years, make the records available on site during normal business hours to the District, ARB or EPA and submit the records to the District, ARB, or EPA upon request. [District Rule 4606]
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-4065-16-3

LEGAL OWNER OR OPERATOR: BARBOSA CABINETS, INC.
MAILING ADDRESS: 2020 E GRANT LINE RD
TRACY, CA 95304

LOCATION: 2020 E GRANT LINE RD
TRACY, CA 95304

EQUIPMENT DESCRIPTION:
MODIFICATION OF 325 BHP PERKINS MODEL 1306-E87TA DIESEL-FIRED EMERGENCY STANDBY IC ENGINE
POWERING AN ELECTRICAL GENERATOR: LOWER THE FACILITY-WIDE VOC EMISSION LIMIT TO 19,999 POUNDS
PER YEAR

CONDITIONS

'19-0 and '20-0, the facility will no longer be a Title V source, and all requirements pertaining to Title V shall be
administratively removed from the facility-wide permit, as well as, any permit that is not a part of project N-1203975.

2. Facility-wide VOC emissions shall not exceed 19,999 pounds in any rolling 12-month period. [District Rule 2201]

3. Facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule
2201]

4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

5. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase
emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control
efficiency. [District Rule 2201]

6. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap
(flapper ok), roof overhang, or any other obstruction. [District Rule 4102]

7. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201
and 4801 and 17 CCR 93115]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO
OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE.
Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the
approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all
Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this
Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with
all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Samir Sheikh, Executive Director / APCO
8. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115]

9. Emissions from this IC engine shall not exceed any of the following limits: 4.1 g-NOx/bhp-hr, 0.45 g-CO/bhp-hr, or 0.15 g-VOC/bhp-hr. [District Rule 2201, 13 CCR 2423 and 17 CCR 93115]

10. Emissions from this IC engine shall not exceed 0.067 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, 13 CCR 2423 and 17 CCR 93115]

11. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702]

12. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702]

13. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702 and 17 CCR 93115]

14. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702]

15. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702]

16. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115]

17. The operator shall keep a rolling 12-month record of the facility-wide VOC emissions. The record shall be updated on at least a monthly basis. [District Rule 2201]

18. The operator shall keep a rolling 12-month record of the facility-wide PM10 emissions. The record shall be updated on at least a monthly basis. [District Rule 2201]

19. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115]
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-4065-18-0

LEGAL OWNER OR OPERATOR: BARBOSA CABINETS, INC.
MAILING ADDRESS: 2020 E GRANT LINE RD
TRACY, CA 95304
LOCATION: 2020 E GRANT LINE RD
TRACY, CA 95304

EQUIPMENT DESCRIPTION:
STAINS COATING AND DRYING OPERATION CONSISTS OF A SANDING MACHINE, A MANUAL SANDING STATION,
A BRUSH CLEANING MACHINE, SUPERFICI MAGNUM FULLY ENCLOSED STAIN SPRAY MACHINE, COUNTER
FLOW LINEAR STEAM/HOT WATER-HEATED DRYER, CROSS TRANSFER STEAM/HOT WATER-HEATED BLADE
DRYER, AND ASSOCIATED CONVEYING SYSTEM. WOOD DUST FROM THE SANDING MACHINE, MANUAL
SANDING STATION, AND BRUSH CLEANING MACHINE WILL BE ROUTED TO THE BAGHOUSE UNDER PERMIT N-
4065-6.

CONDITIONS

1. Upon implementing Authority to Construct permits N-4065-7-3, '-8-3, '-9-3, '-10-3, '-11-3, '-12-3, '-13-3, '-16-3, '-18-0,
'-19-0 and '-20-0, the facility will no longer be a Title V source, and all requirements pertaining to Title V shall be
administratively removed from the facility-wide permit, as well as, any permit that is not a part of project N-1203975.

2. Facility-wide VOC emissions shall not exceed 19,999 pounds in any rolling 12-month period. [District Rule 2201]

3. Facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201]

4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

5. Stain application machine enclosure shall be equipped with filters capable of capturing at least 99.88% of PM10
emissions from overspray. The owner or operator shall keep sufficient records (e.g., PM10 filter efficiency test sheets,
or other documents from filter vendors) to demonstrate compliance with this condition. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO
OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE.
Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the
approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all
Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this
Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all
laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Samir Sheikh, Executive Director / APCO

Brian Clements, Director of Permit Services
N-4065-18-0: May 23 2022 5:17PM - KAHLONJ: Joint Inspection NOT Required
Northern Regional Office • 4800 Enterprise Way • Modesto, CA 95356-8718 • (209) 557-6400 • Fax (209) 557-6475
6. Total VOC emissions from stain application and drying operation shall not exceed any of the following emission limits: 125.9 lb/day and 2,873 lb/year. VOC emissions from the use of each stain shall be estimated in the following manner: Material VOC content (lb-VOC/gal, as applied) x Actual stain used (gallons/day). Total VOC emissions shall be the sum of VOC emissions from each stain used during a given day. The daily VOC emissions shall be used to estimate monthly and consecutive rolling 12-month emissions. [District Rule 2201]

7. The owner or operator shall keep daily records of the VOC emitted from the operations under this permit. These records shall contain each calculated emission quantity as well as each process variable used in the respective calculations for each operation. [District Rule 2201]

8. The operator shall keep rolling 12-month record of the VOC from this permit unit. The record shall be updated on at least a monthly basis. [District Rule 2201]

9. VOC content of coatings as applied, excluding water and exempt compounds, used for wood product, shall not exceed any of the following limits: clear topcoat 275 g/l (2.3 lb/gallon), filler 275 g/l (2.3 lb/gallon), high-solids stains 240 g/l (2.0 lb/gallon), ink 500 g/l (4.2 lb/gallon), mold-seal coating 750 g/l (6.3 lb/gallon), multi-colored coating 275 g/l (2.3 lb/gallon), pigmented coating 275 g/l (2.3 lb/gallon), and sanding sealer 275 g/l (2.3 lb/gallon). [District Rule 4606]

10. VOC content of materials for wood products, as applied, shall not exceed any of the following limits: low-solids stain 120 g/l (1.0 lb/gallon), stripper 350 g/l (2.9 lb/gallon). [District Rule 4606]

11. VOC content of strippable booth coating shall not exceed 450 g/l (3.8 lb/gallon) as applied, excluding water and exempt compounds. [District Rule 4606]

12. Only high-volume low-pressure (HVLP) spray, electrostatic, brush, dip, flow, or roll coating application equipment, or other application equipment approved by the District in writing, shall be used. All application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rule 4606]

13. For HVLP spray guns manufactured prior to January 1, 1996, the permittee shall demonstrate that the gun meets HVLP spray equipment standards. Satisfactory proof will be either in the form of manufacturer's published technical material or by a demonstration using a certified air pressure tip gauge, measuring the air atomizing pressure dynamically at the center of the air cap and at the air horns. [District Rule 4606]

14. VOC content of solvents used for product cleaning during manufacturing process or surface preparation for coating application, repair and maintenance cleaning, and cleaning of coating application equipment shall not exceed 25 g/l (0.21 lb/gal), unless such cleaning operations are carried out in District approved emission control system that meets the requirements of Section 5.4 of Rule 4606 (10/16/08). [District Rule 4606]

15. The operator shall store or dispose of fresh or spent solvents, waste solvent cleaning materials such as cloth, paper, etc., coatings, adhesives, catalysts, and thinners in closed, non-absorbent and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4606]

16. The operator shall maintain a current list of coatings, inks, adhesives, and solvents in use which provides all of the data necessary to evaluate compliance, including the following information, as applicable: a.) identify coatings, catalysts, reducers, inks, adhesives and solvents, b.) manufacturer's recommended mix ratio of components, c.) VOC content of coatings, as applied, d.) VOC content of solvents, e.) VOC content of inks, as applied, and f.) VOC content of adhesives, as applied. [District Rule 4606]

17. The operator shall maintain records on a daily basis that provide the following information, as applicable: a.) coating and mix ratio of components in the coating used, b.) quantity of each coating applied, c.) identification of coating category, d.) identification and quantity of each ink used, e.) identification and quantity of each adhesive used, and f.) type and amount of solvent used for cleanup and surface preparation. [District Rule 4606]
18. The operator shall maintain the following records, and have available at all times, a current list of solvents in use which provides all of the data necessary to evaluate compliance, including the following information as applicable: a.) keep a copy of the manufacturer's product data sheet or material safety data sheet of the solvents used for organic solvent cleaning activities, and b.) maintain a current list of solvents that are being used for organic solvent cleaning activities including the following information: the name of the solvent and its manufacturer's name, the VOC content of the solvent expressed in grams/liter or lb/gallon, when the solvent is a mixture of different materials that are blended by the operator, the mix ratio of the batch shall be recorded and the VOC content of the batch shall be calculated and recorded in order to determine compliance with the specified limits of VOC content, as applied, and the type of cleaning activity for each solvent that is being used in accordance with the applicable cleaning category specified in Table 4 of Rule 4606 (10/16/08). [District Rule 4606]

19. The operator shall keep a rolling 12-month record of the facility-wide VOC emissions. The record shall be updated on at least a monthly basis. [District Rule 2201]

20. The operator shall keep a rolling 12-month record of the facility-wide PM10 emissions. The record shall be updated on at least a monthly basis. [District Rule 2201]

21. The operator shall retain all records on site for a period of five years, make the records available on site during normal business hours to the District, ARB or EPA and submit the records to the District, ARB, or EPA upon request. [District Rule 4606]
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-4065-19-0
ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: BARBOSA CABINETS, INC.
MAILING ADDRESS: 2020 E GRANT LINE RD
TRACY, CA 95304

LOCATION: 2020 E GRANT LINE RD
TRACY, CA 95304

EQUIPMENT DESCRIPTION:
CLEAR COAT APPLICATION AND DRYING OPERATION CONSISTING OF A BRUSH CLEANING MACHINE, SUPERFICIAL MAGNUM FULLY ENCLOSED COATING SPRAY MACHINE, STEAM/HOT WATER-HEATED VERTICAL DRYER, AND ASSOCIATED CONVEYING SYSTEM. WOOD DUST FROM THE BRUSH CLEANING MACHINE WILL BE ROUTED TO THE BAGHOUSE UNDER PERMIT N-4065-6.

CONDITIONS

1. Upon implementing Authority to Construct permits N-4065-7-3, '8-3, '9-3, '10-3, '11-3, '12-3, '13-3, '16-3, '18-0, '19-0 and '20-0, the facility will no longer be a Title V source, and all requirements pertaining to Title V shall be administratively removed from the facility-wide permit, as well as, any permit that is not a part of project N-1203975. [District Rule 2201]

2. Facility-wide VOC emissions shall not exceed 19,999 pounds in any rolling 12-month period. [District Rule 2201]

3. Facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201]

4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

5. Clear coat application machine enclosure shall be equipped with filters capable of capturing at least 99.88% of PM10 emissions from overspray. The owner or operator shall keep sufficient records (e.g., PM10 filter efficiency test sheets, or other documents from filter vendors) to demonstrate compliance with this condition. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Samir Sheikh, Executive Director / APCO

Brian Clements, Director of Permit Services
Northern Regional Office • 4800 Enterprise Way • Modesto, CA 95356-8718 • (209) 557-6400 • Fax (209) 557-6475
6. Total VOC emissions from clear coat application and drying operation shall not exceed any of the following emission limits: 13.3 lb/day and 2.386 lb/year (12-month rolling basis). VOC emissions from the use of each clear coat shall be estimated in the following manner: Material VOC content (lb-VOC/gal, as applied) x Actual clear coat used (gallons/day). Total VOC emissions shall be the sum of VOC emissions from each clear coat used during a given day. The daily VOC emissions shall be used to estimate monthly and consecutive rolling 12-month emissions. [District Rule 2201]

7. Total PM10 emissions from clear coat application and drying operation shall not exceed any of the following emission limits: 0.043 lb/day and 8 lb/year. PM10 emissions from the use of each clear coat shall be estimated in the following manner: 0.0003 x solids content in the clearcoat (lb-solids/gallon) x Actual clearcoat used (gallons/day). Total PM10 emissions shall be the sum of PM10 emissions from each clear coat used during a given day. The daily PM10 emissions shall be used to estimate monthly and consecutive rolling 12-month emissions. [District Rule 2201]

8. The owner or operator shall keep daily records of the VOC and PM10 emitted from the operations under this permit. These records shall contain each calculated emission quantity as well as each process variable used in the respective calculations for each operation. [District Rule 2201]

9. The operator shall keep rolling 12-month record of the VOC and PM10 emissions from this permit unit. The record shall be updated on at least a monthly basis. [District Rule 2201]

10. VOC content of coatings as applied, excluding water and exempt compounds, used for wood product, shall not exceed any of the following limits: clear topcoat 275 g/l (2.3 lb/gallon), filler 275 g/l (2.3 lb/gallon), high-solids stains 240 g/l (2.0 lb/gallon), ink 500 g/l (4.2 lb/gallon), mold-seal coating 750 g/l (6.3 lb/gallon), multi-colored coating 275 g/l (2.3 lb/gallon), pigmented coating 275 g/l (2.3 lb/gallon), and sanding sealer 275 g/l (2.3 lb/gallon). [District Rule 4606]

11. VOC content of materials for wood products, as applied, shall not exceed any of the following limits: low-solids stain 120 g/l (1.0 lb/gallon), stripper 350 g/l (2.9 lb/gallon). [District Rule 4606]

12. VOC content of strippable booth coating shall not exceed 450 g/l (3.8 lb/gallon) as applied, excluding water and exempt compounds. [District Rule 4606]

13. Only high-volume low-pressure (HVLP) spray, electrostatic, brush, dip, flow, or roll coating application equipment, or other application equipment approved by the District in writing, shall be used. All application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rule 4606]

14. For HVLP spray guns manufactured prior to January 1, 1996, the permittee shall demonstrate that the gun meets HVLP spray equipment standards. Satisfactory proof will be either in the form of manufacturer's published technical material or by a demonstration using a certified air pressure tip gauge, measuring the air atomizing pressure dynamically at the center of the air cap and at the air horns. [District Rule 4606]

15. VOC content of solvents used for product cleaning during manufacturing process or surface preparation for coating application, repair and maintenance cleaning, and cleaning of coating application equipment shall not exceed 25 g/l (0.21 lb/gal), unless such cleaning operations are carried out in District approved emission control system that meets the requirements of Section 5.4 of Rule 4606 (10/16/08). [District Rule 4606]

16. The operator shall store or dispose of fresh or spent solvents, waste solvent cleaning materials such as cloth, paper, etc., coatings, adhesives, catalysts, and thinners in closed, non-absorbent and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4606]

17. The operator shall maintain a current list of coatings, inks, adhesives, and solvents in use which provides all of the data necessary to evaluate compliance, including the following information, as applicable: a.) identify coatings, catalysts, reducers, inks, adhesives and solvents, b.) manufacturer's recommended mix ratio of components, c.) VOC content of coatings, as applied, d.) VOC content of solvents, e.) VOC content of inks, as applied, and f.) VOC content of adhesives, as applied. [District Rule 4606]

18. The operator shall maintain records on a daily basis that provide the following information, as applicable: a.) coating and mix ratio of components in the coating used, b.) quantity of each coating applied, c.) identification of coating category, d.) identification and quantity of each ink used, e.) identification and quantity of each adhesive used, and f.) type and amount of solvent used for cleanup and surface preparation. [District Rule 4606]
19. The operator shall maintain the following records, and have available at all times, a current list of solvents in use which provides all of the data necessary to evaluate compliance, including the following information as applicable: a.) keep a copy of the manufacturer's product data sheet or material safety data sheet of the solvents used for organic solvent cleaning activities, and b.) maintain a current list of solvents that are being used for organic solvent cleaning activities including the following information: the name of the solvent and its manufacturer's name, the VOC content of the solvent expressed in grams/liter or lb/gallon, when the solvent is a mixture of different materials that are blended by the operator, the mix ratio of the batch shall be recorded and the VOC content of the batch shall be calculated and recorded in order to determine compliance with the specified limits of VOC content, as applied, and the type of cleaning activity for each solvent that is being used in accordance with the applicable cleaning category specified in Table 4 of Rule 4606 (10/16/08). [District Rule 4606]

20. The operator shall keep a rolling 12-month record of the facility-wide VOC emissions. The record shall be updated on at least a monthly basis. [District Rule 2201]

21. The operator shall keep a rolling 12-month record of the facility-wide PM10 emissions. The record shall be updated on at least a monthly basis. [District Rule 2201]

22. The operator shall retain all records on site for a period of five years, make the records available on site during normal business hours to the District, ARB or EPA and submit the records to the District, ARB, or EPA upon request. [District Rule 4606]
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-4065-20-0

LEGAL OWNER OR OPERATOR: BARBOSA CABINETS, INC.
MAILING ADDRESS: 2020 E GRANT LINE RD
                          TRACY, CA 95304
LOCATION: 2020 E GRANT LINE RD
                          TRACY, CA 95304

EQUIPMENT DESCRIPTION:

CONDITIONS

1. Upon implementing Authority to Construct permits N-4065-7-3, '-8-3, '-9-3, '-10-3, '-11-3, '-12-3, '-13-3, '-16-3, '-18-0, '-19-0 and '-20-0, the facility will no longer be a Title V source, and all requirements pertaining to Title V shall be administratively removed from the facility-wide permit, as well as, any permit that is not a part of project N-1203975. [District Rule 2201]

2. Facility-wide VOC emissions shall not exceed 19,999 pounds in any rolling 12-month period. [District Rule 2201]

3. Facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201]

4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

5. Lacquer application machine enclosure shall be equipped with filters capable of capturing at least 99.88% of PM10 emissions from overspray. The owner or operator shall keep sufficient records (e.g., PM10 filter efficiency test sheets, or other documents from filter vendors) to demonstrate compliance with this condition. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Samir Sheikh, Executive Director / APCO

San Joaquin Valley
Air Pollution Control District
Conditions for N-4065-20-0 (continued)

6. Total VOC emissions from clear coat application and drying operation shall not exceed any of the following emission limits: 152.4 lb/day and 8,857 lb/year. VOC emissions from the use of each clear coat shall be estimated in the following manner: Material VOC content (lb-VOC/gal, as applied) x Actual lacquer coat used (gallons/day). Total VOC emissions shall be the sum of VOC emissions from the use of coating used during a given day. The daily VOC emissions shall be used to estimate monthly and consecutive rolling 12-month emissions. [District Rule 2201]

7. Total PM10 emissions from lacquer application and drying operation shall not exceed any of the following emission limits: 0.3 lb/day and 18 lb/year. PM10 emissions from the use of each lacquer shall be estimated in the following manner: 0.0003 x solids content in the lacquer (lb-solids/gallon) x Actual lacquer used (gallons/day). Total PM10 emissions shall be the sum of PM10 emissions from the use of each coating used during a given day. The daily PM10 emissions shall be used to estimate monthly and consecutive rolling 12-month emissions. [District Rule 2201]

8. The owner or operator shall keep daily records of the VOC and PM10 emitted from the operations under this permit. These records shall contain each calculated emission quantity as well as each process variable used in the respective calculations for each operation. [District Rule 2201]

9. The operator shall keep rolling 12-month record of the VOC and PM10 emissions from this permit unit. The record shall be updated on at least a monthly basis. [District Rule 2201]

10. VOC content of coatings as applied, excluding water and exempt compounds, used for wood product, shall not exceed any of the following limits: clear topcoat 275 g/l (2.3 lb/gallon), filler 275 g/l (2.3 lb/gallon), high-solids stains 240 g/l (2.0 lb/gallon), ink 500 g/l (4.2 lb/gallon), mold-seal coating 750 g/l (6.3 lb/gallon), multi-colored coating 275 g/l (2.3 lb/gallon), pigmented coating 275 g/l (2.3 lb/gallon), and sanding sealer 275 g/l (2.3 lb/gallon). [District Rule 4606]

11. VOC content of materials for wood products, as applied, shall not exceed any of the following limits: low-solids stain 120 g/l (1.0 lb/gallon), stripper 350 g/l (2.9 lb/gallon). [District Rule 4606]

12. VOC content of strippable booth coating shall not exceed 450 g/l (3.8 lb/gallon) as applied, excluding water and exempt compounds. [District Rule 4606]

13. Only high-volume low-pressure (HVLP) spray, electrostatic, brush, dip, flow, or roll coating application equipment, or other application equipment approved by the District in writing, shall be used. All application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rule 4606]

14. For HVLP spray guns manufactured prior to January 1, 1996, the permittee shall demonstrate that the gun meets HVLP spray equipment standards. Satisfactory proof will be either in the form of manufacturer's published technical material or by a demonstration using a certified air pressure tip gauge, measuring the air atomizing pressure dynamically at the center of the air cap and at the air horns. [District Rule 4606]

15. VOC content of solvents used for product cleaning during manufacturing process or surface preparation for coating application, repair and maintenance cleaning, and cleaning of coating application equipment shall not exceed 25 g/l (0.21 lb/gal), unless such cleaning operations are carried out in District approved emission control system that meets the requirements of Section 5.4 of Rule 4606 (10/16/08). [District Rule 4606]

16. The operator shall store or dispose of fresh or spent solvents, waste solvent cleaning materials such as cloth, paper, etc., coatings, adhesives, catalysts, and thinners in closed, non-absorbent and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4606]

17. The operator shall maintain a current list of coatings, inks, adhesives, and solvents in use which provides all of the data necessary to evaluate compliance, including the following information, as applicable: a.) identify coatings, catalysts, reducers, inks, adhesives and solvents, b.) manufacturer's recommended mix ratio of components, c.) VOC content of coatings, as applied, d.) VOC content of solvents, e.) VOC content of inks, as applied, and f.) VOC content of adhesives, as applied. [District Rule 4606]

18. The operator shall maintain records on a daily basis that provide the following information, as applicable: a.) coating and mix ratio of components in the coating used, b.) quantity of each coating applied, c.) identification of coating category, d.) identification and quantity of each ink used, e.) identification and quantity of each adhesive used, and f.) type and amount of solvent used for cleanup and surface preparation. [District Rule 4606]
19. The operator shall maintain the following records, and have available at all times, a current list of solvents in use which provides all of the data necessary to evaluate compliance, including the following information as applicable: a.) keep a copy of the manufacturer’s product data sheet or material safety data sheet of the solvents used for organic solvent cleaning activities, and b.) maintain a current list of solvents that are being used for organic solvent cleaning activities including the following information: the name of the solvent and its manufacturer’s name, the VOC content of the solvent expressed in grams/liter or lb/gallon, when the solvent is a mixture of different materials that are blended by the operator, the mix ratio of the batch shall be recorded and the VOC content of the batch shall be calculated and recorded in order to determine compliance with the specified limits of VOC content, as applied, and the type of cleaning activity for each solvent that is being used in accordance with the applicable cleaning category specified in Table 4 of Rule 4606 (10/16/08). [District Rule 4606]

20. The operator shall keep a rolling 12-month record of the facility-wide VOC emissions. The record shall be updated on at least a monthly basis. [District Rule 2201]

21. The operator shall keep a rolling 12-month record of the facility-wide PM10 emissions. The record shall be updated on at least a monthly basis. [District Rule 2201]

22. The operator shall retain all records on site for a period of five years, make the records available on site during normal business hours to the District, ARB or EPA and submit the records to the District, ARB, or EPA upon request. [District Rule 4606]
Appendix B
Permits to Operate
PERMIT UNIT REQUIREMENTS

1. Visible emissions from the baghouses serving the woodworking equipment shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit

2. The exhaust flow rate of the baghouse shall not exceed 90,000 dscfm. [District Rule 2201] Federally Enforceable Through Title V Permit

3. The PM10 emissions from the baghouse shall not exceed 0.003 gr/dscf of exhaust flow. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit

4. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

5. The baghouse shall operate at all times with a minimum differential pressure of 0.5 inches of water column and a maximum differential pressure of 4 inches of water column. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

6. The differential operating pressure shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

7. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit

8. The baghouse shall be maintained and operated according to manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit

9. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit

10. Material removed from the dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit

11. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation E=3.59xP^0.62 if P is less than or equal to 30 tons per hour, or E=17.31xP^0.16 if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit

12. Visible emissions from the baghouse shall be evaluated using EPA Method 22 for a period of at least 6 minutes at least once during each day that the woodworking equipment is are operated. Records of visible emissions evaluations shall be maintained. [40 CFR Part 64] Federally Enforceable Through Title V Permit
13. If visible emissions from the baghouse are observed, the permittee shall investigate the cause of visible emissions and take corrective action to minimize emissions and prevent recurrence of emissions as expeditiously as practicable. [40 CFR Part 64] Federally Enforceable Through Title V Permit

14. During each day of operation, the permittee shall record the pressure drops of the baghouse and compare the readings to the acceptable range. Upon detecting any excursion from the acceptable pressure drop range, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [40 CFR Part 64] Federally Enforceable Through Title V Permit

15. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64] Federally Enforceable Through Title V Permit

16. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64] Federally Enforceable Through Title V Permit

17. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit

18. Records of the number of hours of operation of each baghouse, on a rolling 12-month basis, shall be kept. The records shall be kept separately for each baghouse and shall be updated at least monthly. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

19. Records of all maintenance of the baghouse, including all change outs of filter media, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

20. Records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070 and 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.
San Joaquin Valley
Air Pollution Control District

PERMIT UNIT REQUIREMENTS

PERMIT UNIT: N-4065-7-2  EXPIRATION DATE: 02/28/2025

EQUIPMENT DESCRIPTION:
WOOD COATING OPERATION SERVED BY A SPRAY SYSTEMS MODEL I-18107 OPEN FACE BOOTH

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

2. The VOC emissions shall not exceed 99.0 pounds during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit

3. The PM10 emissions shall not exceed 6.6 pounds during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit

4. A record of the daily VOC emissions, in pounds, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit

5. A record of the daily number of pounds of PM10 emissions, due to coating usage, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit

6. VOC content of coatings as applied, excluding water and exempt compounds, used for wood product, shall not exceed any of the following limits: clear topcoat 275 g/l (2.3 lb/gallon), filler 275 g/l (2.3 lb/gallon), high-solids stains 240 g/l (2.0 lb/gallon), ink 500 g/l (4.2 lb/gallon), mold-seal coating 750 g/l (6.3 lb/gallon), multi-colored coating 275 g/l (2.3 lb/gallon), pigmented coating 275 g/l (2.3 lb/gallon), sanding sealer 275 g/l (2.3 lb/gallon). [District Rule 4606] Federally Enforceable Through Title V Permit

7. VOC content of materials for wood products, as applied, shall not exceed any of the following limits: low-solids stain 120 g/l (1.0 lb/gallon), stripper 350 g/l (2.9 lb/gallon). [District Rule 4606] Federally Enforceable Through Title V Permit

8. VOC content of strippable booth coating shall not exceed 450 g/l (3.8 lb/gallon) as applied, excluding water and exempt compounds. [District Rule 4606] Federally Enforceable Through Title V Permit

9. Only HVLP, electrostatic, brush, dip, flow, or roll coating application equipment shall be used, and the application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rule 4606] Federally Enforceable Through Title V Permit

10. Permittee shall demonstrate that HVLP guns manufactured prior to 1/1/96 operate between 0.1 and 10 psig air atomizing pressure, by manufacturer's published technical material or by use of a certified air pressure tip gauge. [District Rule 4606] Federally Enforceable Through Title V Permit

11. VOC content of solvents used shall not exceed any of the following limits: product cleaning during manufacturing process or surface preparation for coating application: 25 g/l (0.21 lb/gal), repair and maintenance cleaning: 25 g/l (0.21 lb/gal), and cleaning of coating application equipment: 25 g/l (0.21 lb/gal). [District Rule 4606] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.
12. An operator shall store or dispose of fresh or spent solvents, waste solvent cleaning material such as cloth, paper, etc., coating, adhesives, catalysts, and thinners in closed, non-absorbent and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4606] Federally Enforceable Through Title V Permit

13. Permittee shall keep the following records for solvent cleaning activities: manufacturers product data sheet or MSDS of solvents used, VOC content of solvents in g/l or lb/gal, and the type of cleaning activity for which each solvent is used. [District Rule 4606] Federally Enforceable Through Title V Permit

14. Permittee shall maintain daily records of the following: quantity and type of coatings and solvents used, mix ratios (by volume) of components added to each coating, volume of coatings applied, VOC content of each coating as applied, and VOC content of each solvent or stripper. [District Rule 4606] Federally Enforceable Through Title V Permit

15. Records shall be retained on-site for a minimum of five years and made available for District inspection upon request. [District Rule 4606] Federally Enforceable Through Title V Permit
PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

2. The VOC emissions shall not exceed 99.0 pounds during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit

3. The PM10 emissions shall not exceed 6.6 pounds during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit

4. A record of the daily VOC emissions, in pounds, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit

5. A record of the daily number of pounds of PM10 emissions, due to coating usage, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit

6. VOC content of coatings as applied, excluding water and exempt compounds, used for wood product, shall not exceed any of the following limits: clear topcoat 275 g/l (2.3 lb/gallon), filler 275 g/l (2.3 lb/gallon), high-solids stains 240 g/l (2.0 lb/gallon), ink 500 g/l (4.2 lb/gallon), mold-seal coating 750 g/l (6.3 lb/gallon), multi-colored coating 275 g/l (2.3 lb/gallon), pigmented coating 275 g/l (2.3 lb/gallon), sanding sealer 275 g/l (2.3 lb/gallon). [District Rule 4606] Federally Enforceable Through Title V Permit

7. VOC content of materials for wood products, as applied, shall not exceed any of the following limits: low-solids stain 120 g/l (1.0 lb/gallon), stripper 350 g/l (2.9 lb/gallon). [District Rule 4606] Federally Enforceable Through Title V Permit

8. VOC content of strippable booth coating shall not exceed 450 g/l (3.8 lb/gallon) as applied, excluding water and exempt compounds. [District Rule 4606] Federally Enforceable Through Title V Permit

9. Only HVLP, electrostatic, brush, dip, flow, or roll coating application equipment shall be used, and the application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rule 4606] Federally Enforceable Through Title V Permit

10. Permittee shall demonstrate that HVLP guns manufactured prior to 1/1/96 operate between 0.1 and 10 psig air atomizing pressure, by manufacturer's published technical material or by use of a certified air pressure tip gauge. [District Rule 4606] Federally Enforceable Through Title V Permit

11. VOC content of solvents used shall not exceed any of the following limits: product cleaning during manufacturing process or surface preparation for coating application: 25 g/l (0.21 lb/gal), repair and maintenance cleaning: 25 g/l (0.21 lb/gal), and cleaning of coating application equipment: 25 g/l (0.21 lb/gal). [District Rule 4606] Federally Enforceable Through Title V Permit
12. An operator shall store or dispose of fresh or spent solvents, waste solvent cleaning material such as cloth, paper, etc., coating, adhesives, catalysts, and thinners in closed, non-absorbent and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4606] Federally Enforceable Through Title V Permit

13. Permittee shall keep the following records for solvent cleaning activities: manufacturers product data sheet or MSDS of solvents used, VOC content of solvents in g/l or lb/gal, and the type of cleaning activity for which each solvent is used. [District Rule 4606] Federally Enforceable Through Title V Permit

14. Permittee shall maintain daily records of the following: quantity and type of coatings and solvents used, mix ratios (by volume) of components added to each coating, volume of coatings applied, VOC content of each coating as applied, and VOC content of each solvent or stripper. [District Rule 4606] Federally Enforceable Through Title V Permit

15. Records shall be retained on-site for a minimum of five years and made available for District inspection upon request. [District Rule 4606] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.
PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

2. The VOC emissions shall not exceed 99.0 pounds during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit

3. The PM10 emissions shall not exceed 6.6 pounds during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit

4. A record of the daily VOC emissions, in pounds, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit

5. A record of the daily number of pounds of PM10 emissions, due to coating usage, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit

6. VOC content of coatings as applied, excluding water and exempt compounds, used for wood product, shall not exceed any of the following limits: clear topcoat 275 g/l (2.3 lb/gallon), filler 275 g/l (2.3 lb/gallon), high-solids stains 240 g/l (2.0 lb/gallon), ink 500 g/l (4.2 lb/gallon), mold-seal coating 750 g/l (6.3 lb/gallon), multi-colored coating 275 g/l (2.3 lb/gallon), pigmented coating 275 g/l (2.3 lb/gallon), sanding sealer 275 g/l (2.3 lb/gallon). [District Rule 4606] Federally Enforceable Through Title V Permit

7. VOC content of materials for wood products, as applied, shall not exceed any of the following limits: low-solids stain 120 g/l (1.0 lb/gallon), stripper 350 g/l (2.9 lb/gallon). [District Rule 4606] Federally Enforceable Through Title V Permit

8. VOC content of strippable booth coating shall not exceed 450 g/l (3.8 lb/gallon) as applied, excluding water and exempt compounds. [District Rule 4606] Federally Enforceable Through Title V Permit

9. Only HVLP, electrostatic, brush, dip, flow, or roll coating application equipment shall be used, and the application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rule 4606] Federally Enforceable Through Title V Permit

10. Permittee shall demonstrate that HVLP guns manufactured prior to 1/1/96 operate between 0.1 and 10 psig air atomizing pressure, by manufacturer's published technical material or by use of a certified air pressure tip gauge. [District Rule 4606] Federally Enforceable Through Title V Permit

11. VOC content of solvents used shall not exceed any of the following limits: product cleaning during manufacturing process or surface preparation for coating application: 25 g/l (0.21 lb/gal), repair and maintenance cleaning: 25 g/l (0.21 lb/gal), and cleaning of coating application equipment: 25 g/l (0.21 lb/gal). [District Rule 4606] Federally Enforceable Through Title V Permit
12. An operator shall store or dispose of fresh or spent solvents, waste solvent cleaning material such as cloth, paper, etc., coating, adhesives, catalysts, and thinners in closed, non-absorbent and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4606] Federally Enforceable Through Title V Permit

13. Permittee shall keep the following records for solvent cleaning activities: manufacturers product data sheet or MSDS of solvents used, VOC content of solvents in g/l or lb/gal, and the type of cleaning activity for which each solvent is used. [District Rule 4606] Federally Enforceable Through Title V Permit

14. Permittee shall maintain daily records of the following: quantity and type of coatings and solvents used, mix ratios (by volume) of components added to each coating, volume of coatings applied, VOC content of each coating as applied, and VOC content of each solvent or stripper. [District Rule 4606] Federally Enforceable Through Title V Permit

15. Records shall be retained on-site for a minimum of five years and made available for District inspection upon request. [District Rule 4606] Federally Enforceable Through Title V Permit
Facility Name: BARBOSA CABINETS, INC.
Location: 2020 E GRANT LINE RD, TRACY, CA 95304

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The VOC emissions shall not exceed 99.0 pounds during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The PM10 emissions shall not exceed 6.6 pounds during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. A record of the daily VOC emissions, in pounds, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
5. A record of the daily number of pounds of PM10 emissions, due to coating usage, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
6. VOC content of coatings as applied, excluding water and exempt compounds, used for wood product, shall not exceed any of the following limits: clear topcoat 275 g/l (2.3 lb/gallon), filler 275 g/l (2.3 lb/gallon), high-solids stains 240 g/l (2.0 lb/gallon), ink 500 g/l (4.2 lb/gallon), mold-seal coating 750 g/l (6.3 lb/gallon), multi-colored coating 275 g/l (2.3 lb/gallon), pigmented coating 275 g/l (2.3 lb/gallon), sanding sealer 275 g/l (2.3 lb/gallon). [District Rule 4606] Federally Enforceable Through Title V Permit
7. VOC content of materials for wood products, as applied, shall not exceed any of the following limits: low-solids stain 120 g/l (1.0 lb/gallon), stripper 350 g/l (2.9 lb/gallon). [District Rule 4606] Federally Enforceable Through Title V Permit
8. VOC content of strippable booth coating shall not exceed 450 g/l (3.8 lb/gallon) as applied, excluding water and exempt compounds. [District Rule 4606] Federally Enforceable Through Title V Permit
9. Only HVLP, electrostatic, brush, dip, flow, or roll coating application equipment shall be used, and the application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rule 4606] Federally Enforceable Through Title V Permit
10. Permittee shall demonstrate that HVLP guns manufactured prior to 1/1/96 operate between 0.1 and 10 psig air atomizing pressure, by manufacturer's published technical material or by use of a certified air pressure tip gauge. [District Rule 4606] Federally Enforceable Through Title V Permit
11. VOC content of solvents used shall not exceed any of the following limits: product cleaning during manufacturing process or surface preparation for coating application: 25 g/l (0.21 lb/gal), repair and maintenance cleaning: 25 g/l (0.21 lb/gal), and cleaning of coating application equipment: 25 g/l (0.21 lb/gal). [District Rule 4606] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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13. Permittee shall keep the following records for solvent cleaning activities: manufacturers product data sheet or MSDS of solvents used, VOC content of solvents in g/l or lb/gal, and the type of cleaning activity for which each solvent is used. [District Rule 4606] Federally Enforceable Through Title V Permit

14. Permittee shall maintain daily records of the following: quantity and type of coatings and solvents used, mix ratios (by volume) of components added to each coating, volume of coatings applied, VOC content of each coating as applied, and VOC content of each solvent or stripper. [District Rule 4606] Federally Enforceable Through Title V Permit

15. Records shall be retained on-site for a minimum of five years and made available for District inspection upon request. [District Rule 4606] Federally Enforceable Through Title V Permit
San Joaquin Valley
Air Pollution Control District

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

2. The VOC emissions shall not exceed 99.0 pounds during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit

3. The PM10 emissions shall not exceed 6.6 pounds during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit

4. A record of the daily VOC emissions, in pounds, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit

5. A record of the daily number of pounds of PM10 emissions, due to coating usage, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit

6. VOC content of coatings as applied, excluding water and exempt compounds, used for wood product, shall not exceed any of the following limits: clear topcoat 275 g/l (2.3 lb/gallon), filler 275 g/l (2.3 lb/gallon), high-solids stains 240 g/l (2.0 lb/gallon), ink 500 g/l (4.2 lb/gallon), mold-seal coating 750 g/l (6.3 lb/gallon), multi-colored coating 275 g/l (2.3 lb/gallon), pigmented coating 275 g/l (2.3 lb/gallon), sanding sealer 275 g/l (2.3 lb/gallon). [District Rule 4606] Federally Enforceable Through Title V Permit

7. VOC content of materials for wood products, as applied, shall not exceed any of the following limits: low-solids stain 120 g/l (1.0 lb/gallon), stripper 350 g/l (2.9 lb/gallon). [District Rule 4606] Federally Enforceable Through Title V Permit

8. VOC content of strippable booth coating shall not exceed 450 g/l (3.8 lb/gallon) as applied, excluding water and exempt compounds. [District Rule 4606] Federally Enforceable Through Title V Permit

9. Only HVLP, electrostatic, brush, dip, flow, or roll coating application equipment shall be used, and the application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rule 4606] Federally Enforceable Through Title V Permit

10. Permittee shall demonstrate that HVLP guns manufactured prior to 1/1/96 operate between 0.1 and 10 psig atomizing pressure, by manufacturer's published technical material or by use of a certified air pressure tip gauge. [District Rule 4606] Federally Enforceable Through Title V Permit

11. VOC content of solvents used shall not exceed any of the following limits: product cleaning during manufacturing process or surface preparation for coating application: 25 g/l (0.21 lb/gal), repair and maintenance cleaning: 25 g/l (0.21 lb/gal), and cleaning of coating application equipment: 25 g/l (0.21 lb/gal). [District Rule 4606] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.
12. An operator shall store or dispose of fresh or spent solvents, waste solvent cleaning material such as cloth, paper, etc, coating, adhesives, catalysts, and thinners in closed, non-absorbent and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4606] Federally Enforceable Through Title V Permit

13. Permittee shall keep the following records for solvent cleaning activities: manufacturers product data sheet or MSDS of solvents used, VOC content of solvents in g/l or lb/gal, and the type of cleaning activity for which each solvent is used. [District Rule 4606] Federally Enforceable Through Title V Permit

14. Permittee shall maintain daily records of the following: quantity and type of coatings and solvents used, mix ratios (by volume) of components added to each coating, volume of coatings applied, VOC content of each coating as applied, and VOC content of each solvent or stripper. [District Rule 4606] Federally Enforceable Through Title V Permit

15. Records shall be retained on-site for a minimum of five years and made available for District inspection upon request. [District Rule 4606] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.
PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

2. Visible emissions from the baghouse serving the sanding booth shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rule 2201] Federally Enforceable Through Title V Permit

3. The VOC emissions shall not exceed 297.0 pounds during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit

4. The PM10 emissions, due to coating application, shall not exceed 19.8 pounds during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit

5. The PM10 emissions from the sanding booth shall not exceed 0.0093 lb/lb of sawdust collected by the dust collector. [District Rule 2201] Federally Enforceable Through Title V Permit

6. The quantity of sawdust collected by the dust collector shall not exceed 100 pounds during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit

7. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit

8. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit

9. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit

10. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit

11. VOC content of coatings as applied, excluding water and exempt compounds, used for wood product, shall not exceed any of the following limits: clear topcoat 275 g/l (2.3 lb/gallon), filler 275 g/l (2.3 lb/gallon), high-solids stains 240 g/l (2.0 lb/gallon), ink 500 g/l (4.2 lb/gallon), mold-seal coating 750 g/l (6.3 lb/gallon), multi-colored coating 275 g/l (2.3 lb/gallon), pigmented coating 275 g/l (2.3 lb/gallon), sanding sealer 275 g/l (2.3 lb/gallon). [District Rule 4606] Federally Enforceable Through Title V Permit

12. VOC content of materials for wood products, as applied, shall not exceed any of the following limits: low-solids stain 120 g/l (1.0 lb/gallon), stripper 350 g/l (2.9 lb/gallon). [District Rule 4606] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.
13. VOC content of strippable booth coating shall not exceed 450 g/l (3.8 lb/gallon) as applied, excluding water and exempt compounds. [District Rule 4606] Federally Enforceable Through Title V Permit

14. Only HVLP, electrostatic, brush, dip, flow, or roll coating application equipment shall be used, and the application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rule 4606] Federally Enforceable Through Title V Permit

15. Permittee shall demonstrate that HVLP guns manufactured prior to 1/1/96 operate between 0.1 and 10 psig air atomizing pressure, by manufacturer's published technical material or by use of a certified air pressure tip gauge. [District Rule 4606] Federally Enforceable Through Title V Permit

16. VOC content of solvents used shall not exceed any of the following limits: product cleaning during manufacturing process or surface preparation for coating application: 25 g/l (0.21 lb/gal), repair and maintenance cleaning: 25 g/l (0.21 lb/gal), and cleaning of coating application equipment: 25 g/l (0.21 lb/gal). [District Rule 4606] Federally Enforceable Through Title V Permit

17. An operator shall store or dispose of fresh or spent solvents, waste solvent cleaning material such as cloth, paper, etc, coating, adhesives, catalysts, and thinners in closed, non-absorbent and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4606] Federally Enforceable Through Title V Permit

18. A record of the daily VOC emissions, in pounds, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit

19. A record of the daily number of pounds of PM10 emissions, due to coating usage, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit

20. A record of the daily quantity of sawdust collected by the dust collector, in pounds, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit

21. Permittee shall keep the following records for solvent cleaning activities: manufacturers product data sheet or MSDS of solvents used, VOC content of solvents in g/l or lb/gal, and the type of cleaning activity for which each solvent is used. [District Rule 4606] Federally Enforceable Through Title V Permit

22. Permittee shall maintain daily records of the following: quantity and type of coatings and solvents used, mix ratios (by volume) of components added to each coating, volume of coatings applied, VOC content of each coating as applied, and VOC content of each solvent or stripper. [District Rule 4606] Federally Enforceable Through Title V Permit

23. Records shall be retained on-site for a minimum of five years and made available for District inspection upon request. [District Rule 4606] Federally Enforceable Through Title V Permit

24. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation 
\[
E=3.59xP^{0.62} \text{ if } P \text{ is less than or equal to 30 tons per hour, or } E=17.31xP^{0.16} \text{ if } P \text{ is greater than 30 tons per hour.}
\] [District Rule 4202] Federally Enforceable Through Title V Permit
PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

2. The VOC emissions shall not exceed 99.0 pounds during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit

3. The PM10 emissions shall not exceed 6.6 pounds during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit

4. VOC content of coatings as applied, excluding water and exempt compounds, used for wood product, shall not exceed any of the following limits: clear topcoat 275 g/l (2.3 lb/gallon), filler 275 g/l (2.3 lb/gallon), high-solids stains 240 g/l (2.0 lb/gallon), ink 500 g/l (4.2 lb/gallon), mold-seal coating 750 g/l (6.3 lb/gallon), multi-colored coating 275 g/l (2.3 lb/gallon), pigmented coating 275 g/l (2.3 lb/gallon), sanding sealer 275 g/l (2.3 lb/gallon). [District Rule 4606] Federally Enforceable Through Title V Permit

5. VOC content of materials for wood products, as applied, shall not exceed any of the following limits: low-solids stain 120 g/l (1.0 lb/gallon), stripper 350 g/l (2.9 lb/gallon). [District Rule 4606] Federally Enforceable Through Title V Permit

6. VOC content of strippable booth coating shall not exceed 450 g/l (3.8 lb/gallon) as applied, excluding water and exempt compounds. [District Rule 4606] Federally Enforceable Through Title V Permit

7. Only HVLP, electrostatic, brush, dip, flow, or roll coating application equipment shall be used, and the application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rule 4606] Federally Enforceable Through Title V Permit

8. Permittee shall demonstrate that HVLP guns manufactured prior to 1/1/96 operate between 0.1 and 10 psig air atomizing pressure, by manufacturer's published technical material or by use of a certified air pressure tip gauge. [District Rule 4606] Federally Enforceable Through Title V Permit

9. VOC content of solvents used shall not exceed any of the following limits: product cleaning during manufacturing process or surface preparation for coating application: 25 g/l (0.21 lb/gal), repair and maintenance cleaning: 25 g/l (0.21 lb/gal), and cleaning of coating application equipment: 25 g/l (0.21 lb/gal). [District Rule 4606] Federally Enforceable Through Title V Permit

10. An operator shall store or dispose of fresh or spent solvents, waste solvent cleaning material such as cloth, paper, etc., coating, adhesives, catalysts, and thinners in closed, non-absorbent and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4606] Federally Enforceable Through Title V Permit

11. A record of the daily VOC emissions, in pounds, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
12. A record of the daily number of pounds of PM10 emissions, due to coating usage, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit

13. Permittee shall keep the following records for solvent cleaning activities: manufacturers product data sheet or MSDS of solvents used, VOC content of solvents in g/l or lb/gal, and the type of cleaning activity for which each solvent is used. [District Rule 4606] Federally Enforceable Through Title V Permit

14. Permittee shall maintain daily records of the following: quantity and type of coatings and solvents used, mix ratios (by volume) of components added to each coating, volume of coatings applied, VOC content of each coating as applied, and VOC content of each solvent or stripper. [District Rule 4606] Federally Enforceable Through Title V Permit

15. Records shall be retained on-site for a minimum of five years and made available for District inspection upon request. [District Rule 4606] Federally Enforceable Through Title V Permit
San Joaquin Valley
Air Pollution Control District

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.
11. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit

12. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit

13. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

14. The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

15. The engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

16. The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

17. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

18. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

19. The permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

20. The permittee must maintain records of all required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

21. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 17 CCR 93115 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.
Appendix C
Potential to Emit for N-4065-18-0, ‘-19-0 and ‘-20-0
<table>
<thead>
<tr>
<th>Product name</th>
<th>Product type (e.g., stain, clear coat, etc.)</th>
<th>VOC lb/gal, material</th>
<th>Solids Content lb/gal</th>
<th>Daily Usage gal/day</th>
<th>Annual Usage gal/yr</th>
<th>PE lb-VOC/day</th>
<th>PE lb-VOC/yr</th>
<th>PE lb-PM10/day</th>
<th>PE lb-PM10/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>505-D020-86B-Sienna Dye Spray Stain</td>
<td>Stain</td>
<td>0.927</td>
<td>0.373</td>
<td>18.62</td>
<td>712.215</td>
<td>17.3</td>
<td>660</td>
<td>0.002</td>
<td>0.078</td>
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<td>505-D020-88 - SEDONA HIGH DYE SPRAY STAIN</td>
<td>Stain</td>
<td>0.879</td>
<td>0.293</td>
<td>18.62</td>
<td>256.956</td>
<td>16.4</td>
<td>226</td>
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<td>541-B020-12688 - Espresso Dye Spray Stain</td>
<td>Stain</td>
<td>0.979</td>
<td>0.486</td>
<td>18.62</td>
<td>316.54</td>
<td>18.2</td>
<td>310</td>
<td>0.003</td>
<td>0.045</td>
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<td>541-D020-841 - 203504 TELTTEALE WALNUT SPRAY STAIN</td>
<td>Stain</td>
<td>0.895</td>
<td>0.51</td>
<td>8.62</td>
<td>93.1</td>
<td>7.7</td>
<td>83</td>
<td>0.001</td>
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<td>541-E020-1311 - SMOKE GREY SPRAY STAIN</td>
<td>Stain</td>
<td>0.758</td>
<td>0.405</td>
<td>8.62</td>
<td>204.82</td>
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<td>548-D020-1057 - KAHLLUA SPRAY STAIN</td>
<td>Stain</td>
<td>0.926</td>
<td>0.247</td>
<td>3.62</td>
<td>139.65</td>
<td>3.4</td>
<td>129</td>
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<td>0.01</td>
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<td>548-D020-1085 - SADDLE DYE SPRAY STAIN</td>
<td>Stain</td>
<td>0.929</td>
<td>0.252</td>
<td>8.62</td>
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<td>8.0</td>
<td>216</td>
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<td>548-D020-1086 - FRENCH WALNUT DYE SPRAY STAIN</td>
<td>Stain</td>
<td>0.867</td>
<td>0.147</td>
<td>3.62</td>
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<td>121</td>
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<td>548-D020-1087 - CHOCOLATE DYE SPRAY STAIN</td>
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<td>0.918</td>
<td>0.257</td>
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<td>548-D020-1088 - AVALON DYE SPRAY STAIN</td>
<td>Stain</td>
<td>0.879</td>
<td>0.312</td>
<td>18.62</td>
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<td></td>
<td>125.9</td>
<td>2873</td>
<td>0.016</td>
<td>0.319</td>
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</tr>
</tbody>
</table>

Notes:

1. Taken from product data sheet
2. Solids content was calculated as follows: Solids content (% by wt.) = Solids content/100 lb-Coating x Density (lb-Coating/gal-Coating)
3. Proposed by the applicant
4. VOC lb-VOC/day = VOC lb/gal, material x Daily Usage gal/day
5. VOC lb-VOC/yr = VOC lb/gal, material x Annual Usage gal/yr
6. PE (lb-VOC/day) = Solids content lb/gal x Daily Usage gal/day x 1 lb-PMT10/lb-solid x (1-0.75) x (1-0.89) x (1-0.918) x (1-0.87); 75% transfer efficiency of spray equipment; 89%, 91.8% and 87% PM10 control efficiency of three filters (overall control efficiency = 99.88%)
7. PE (lb-PMT10/yr) = Solids content lb/gal x Annual Usage gal/yr x 1 lb-PMT10/lb-solid x (1-0.75) x (1-0.89) x (1-0.918) x (1-0.87); 75% transfer efficiency of spray equipment; 89%, 91.8% and 87% PM10 control efficiency of three filters (overall control efficiency = 99.88%)
8. Total x 1.2 = The applicant proposed 20% margin of compliance; therefore, 1.2 multiplier is applied to the total
<table>
<thead>
<tr>
<th>Product name</th>
<th>Product type (e.g., stain, clear coat, etc.)</th>
<th>Product Density lb/gal</th>
<th>VOC lb/gal, material</th>
<th>Solids Content lb/gal</th>
<th>Daily Usage gal/day</th>
<th>Annual Usage gal/yr</th>
<th>PE lb-VOC/day</th>
<th>PE lb-VOC/yr</th>
<th>PE lb-PM10/day</th>
<th>PE lb-PM10/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>M831-20L6V-826(0001 - LOW VOC SELF SEAL TOPCOAT</td>
<td>Top Coat and Sealer</td>
<td>8.739</td>
<td>0.262</td>
<td>2.928</td>
<td>42.24</td>
<td>7589.04</td>
<td>11.1</td>
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</table>

9Total x 1.2: 13.3 2386 0.043 7.817

Notes:

1Taken from product data sheet

2Solids content was calculated as follows: Solids content (% by wt.) lb-Solids/100 lb-Coating x Density (lb-Coating/gal-Coating)

3Proposed by the applicant

5PE (lb-VOC/day) = VOC lb/gal, material x Daily Usage gal/day

6PE (lb-VOC/day) = VOC lb/gal, material x Annual Usage gal/yr

7PE (lb-PM10/day) = Solids content lb/gal x Daily Usage gal/day x 1 lb-PM10/lb-solid x (1-0.75) x (1-0.89) x (1-0.918) x (1-0.87); 75% transfer efficiency of spray equipment; 89%, 91.8% and 87% PM10 control

8PE (lb-PM10/yr) = Solids content lb/gal x Annual Usage gal/yr x 1 lb-PM10/lb-solid x (1-0.75) x (1-0.89) x (1-0.918) x (1-0.87); 75% transfer efficiency of spray equipment; 89%, 91.8% and 87% PM10 control

9Total x 1.2 = The applicant proposed 20% margin of compliance; therefore, 1.2 multiplier is applied to the total
<table>
<thead>
<tr>
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<th>PE lb-VOC/yr</th>
<th>PE lb-PM10/day</th>
<th>PE lb-PM10/yr</th>
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<tbody>
<tr>
<td>831-20E020-303 - EBONY CV 20 PLUS</td>
<td>Lacquer</td>
<td>8.763</td>
<td>0.742</td>
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<td>8.62</td>
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<tr>
<td>831-20E020-298 - BATTLESHIP CV 20 PLUS</td>
<td>Lacquer</td>
<td>9.988</td>
<td>0.739</td>
<td>4.675</td>
<td>12.24</td>
<td>752</td>
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<td>555</td>
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<tr>
<td>831-20E020-305 - FLINT CV 20 PLUS</td>
<td>Lacquer</td>
<td>9.967</td>
<td>0.633</td>
<td>4.634</td>
<td>9.62</td>
<td>378</td>
<td>6.1</td>
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<td>0.513</td>
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<td>831-20E020-306 - DOVE GRAY CV 20 PLUS</td>
<td>Lacquer</td>
<td>9.902</td>
<td>0.468</td>
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<td>17.24</td>
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<td>831-20E020-311 - STONE CV 20 PLUS</td>
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<td>831-20E020-395 - PORPOISE CV 20 PLUS</td>
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<td>0.701</td>
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<td>7.24</td>
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<td>831-20W020-308 - FROST WHITE CV 20 PLUS</td>
<td>Lacquer</td>
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<td>5.62</td>
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<td>830-17W020-1534 - WINTER WHITE CV 20 PLUS</td>
<td>Lacquer</td>
<td>11.21</td>
<td>0.264</td>
<td>5.627</td>
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<td>11.2</td>
<td>992</td>
<td>0.070</td>
<td>6.199</td>
</tr>
<tr>
<td>831-20W20-409 HI Hide Super White CV 20 Plus - Replaces Super White</td>
<td>Lacquer</td>
<td>11.21</td>
<td>0.263</td>
<td>5.626</td>
<td>32.24</td>
<td>921</td>
<td>8.5</td>
<td>242</td>
<td>0.053</td>
<td>1.519</td>
</tr>
<tr>
<td>831-20W20-409 HI Hide Super White CV 20 Plus - Replaces Swiss Coffee</td>
<td>Lacquer</td>
<td>9.875</td>
<td>0.426</td>
<td>4.484</td>
<td>32.24</td>
<td>1644</td>
<td>13.7</td>
<td>700</td>
<td>0.042</td>
<td>2.161</td>
</tr>
<tr>
<td>830 - J020 - 1529 - 16:1 Catalyst</td>
<td>Catalyst</td>
<td>7.818</td>
<td>5.109</td>
<td>2.699</td>
<td>9.9275</td>
<td>630</td>
<td>50.7</td>
<td>3217</td>
<td>0.008</td>
<td>0.498</td>
</tr>
</tbody>
</table>

**Total:** 127.0 7381.0 0.267 15.3

**Total x 1.2:** 152.4 8857 0.320 18.4

Notes:

1. Taken from product data sheet
2. Solids content was calculated as follows: Solids content (% by wt.) = lb-Solids/100 lb-Coating x Density (lb-Coating/gal-Coating)
3. Proposed by the applicant
4. PE (lb-VOC/day) = VOC lb/gal, material x Daily Usage gal/day
5. PE (lb-VOC/day) = VOC lb/gal, material x Annual Usage gal/yr
6. PE (lb-PM10/day) = Solids content lb/gal x Daily Usage gal/day x 1 lb-PM10/lb-solid x (1-0.75) x (1-0.89) x (1-0.918) x (1-0.87); 75% transfer efficiency of spray equipment; 89%, 91.8% and 87% PM10 control efficiency of three filters
7. PE (lb-PM10/yr) = Solids content lb/gal x Annual Usage gal/yr x 1 lb-PM10/lb-solid x (1-0.75) x (1-0.89) x (1-0.918) x (1-0.87); 75% transfer efficiency of spray equipment; 89%, 91.8% and 87% PM10 control efficiency of three filters
8. Total x 1.2 = The applicant proposed 20% margin of compliance; therefore, 1.2 multiplier is applied to the total
Appendix D
BACT Guidelines
San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.4.2*

Last Update: 5/12/2000

Wood Products Coating Operation - Continuously-fed Booth, = or < 5000 square feet material coated/day

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Achieved in Practice or contained in the SIP</th>
<th>Technologically Feasible</th>
<th>Alternate Basic Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC</td>
<td></td>
<td>1. 65% capture efficiency (open-faced booth) with thermal/catalytic incineration, and the use of coatings with a VOC content (less water and exempt compounds) of 4.6 lb/gal for clear topcoats, 3.2 lb/gal for high-solid coatings, and 4.6 lb/gal for sanding sealers</td>
<td>2. 65% capture efficiency (open-faced booth) with carbon adsorption, and the use of coatings with a VOC content (less water and exempt compounds) of 4.6 lb/gal for clear topcoats, 3.2 lb/gal for high-solid coatings, and 4.6 lb/gal for sanding sealers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. 65% capture efficiency (open-faced booth) with carbon adsorption, and the use of typical coatings for this source and category of operation</td>
<td>5. Coatings with a VOC content (less water and exempt compounds) of 4.6 lb/gal for clear topcoats, 3.2 lb/gal for high-solid coatings, and 4.6 lb/gal for sanding sealers, using HVLP spray equipment</td>
</tr>
<tr>
<td>PM10</td>
<td>HVLP spray equipment or equivalent</td>
<td>Spray Booth exhausted to a particulate filter with a minimum cross-section face velocity of 100 ft/min and use of HVLP application equipment</td>
<td></td>
</tr>
</tbody>
</table>

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a State Implementation Plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

*This is a Summary Page for this Class of Source

4.4.2
## Best Available Control Technology (BACT) Guideline 8.1.1*

**Last Update:** 7/19/2018

### Woodworking Equipment

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Achieved in Practice or contained in the SIP</th>
<th>Technologically Feasible</th>
<th>Alternate Basic Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM10</td>
<td>Woodworking equipment vented to a baghouse system</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a State Implementation Plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

*This is a Summary Page for this Class of Source*
Appendix E
BACT Analysis
Top-Down BACT Analysis

N-4065-18-0 and ‘-19-0

Sanding Machine

Step 1 - Identify All Possible Control Technologies

BACT guideline 8.1.1 will be used to determine BACT requirements for PM10 emissions from emissions from the sanding machine under each permit. This guideline list the following options:

Achieved-in-practice (AIP):
Woodworking equipment vented to a baghouse system

Technologically Feasible Options:
None

Alternate Basic Equipment:
None

Step 2 - Eliminate Technologically Infeasible Options

There are no technologically infeasible option listed in Step 1.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

1. Woodworking equipment vented to a baghouse system (AIP)

Step 4 - Cost Effectiveness Analysis

There is no technologically feasible or alternate basic equipment options listed in Step 3 that needs cost effectiveness analysis.

Step 5 - Select BACT

BACT for the sanding machine is to vent it to a baghouse system. The applicant has proposed to comply with this BACT requirement. Thus, BACT requirements are satisfied.
Stain application operation
Clear coat application operation
Lacquer application operation
As mentioned previously, each of these operation triggers BACT for VOC emissions.

Step 1 - Identify All Possible Control Technologies

Both the existing BACT guideline 4.4.2 and newly drafted proactive BACT guideline 4.4.2 were reviewed. The newly drafted proactive BACT guideline 4.4.2 will be used to determine BACT requirements for VOC emissions from each operation. This guideline list the following options:

Achieved-in-practice (AIP):
Utilizing HVLP or equivalent application equipment and using coatings compliant with District Rule 4606

Technologically Feasible Options:
1. 65% capture efficiency (open-face booth) with thermal/catalytic incineration, and using coatings with a VOC content (less water and exempt compounds) of 2.3 lb/gal for clear topcoats, 2.0 lb/gal for high-solids coatings, 2.3 lb/gal for sanding sealers, 0.68 lb/gal for water based pigmented primers, and 1.62 lb/gal for water based pigmented topcoats;

2. 65% capture efficiency (open-face booth) with carbon adsorption, and using coatings with a VOC content (less water and exempt compounds) of 2.3 lb/gal for clear topcoats, 2.0 lb/gal for high-solids coatings, 2.3 lb/gal for sanding sealers, 0.68 lb/gal for water based pigmented primers, and 1.62 lb/gal for water based pigmented topcoats;

The proposed project involve machines that are going to apply coatings inside enclosures that are actively vented through the filters prior to being discharged into the atmosphere. Furthermore, steam heated dryers will also be enclosed and discharged through separate stacks. Therefore, 100% of VOC emissions from coating application and drying operations are expected to release through the discharge stacks and can be routed to an emission control system.

Further, VOC limits of 0.68 lb/gal for water based pigmented primers, and 1.62 lb/gal for water based pigmented topcoats were re-evaluated. The draft proactive BACT guideline cites District Rule 4606 as source of these limits. However, the rule does not contain these VOC limits. Therefore, these limits have been removed from consideration in this analysis.

The revised technologically feasible options for the proposed project would be:

1. 98% overall capture and control (100% capture x 98% control) with thermal incineration, and use of coatings compliant with District Rule 4606;

2. 98% overall capture and control (100% capture x 98% control) with catalytic incineration, and use of coatings compliant with District Rule 4606;
3. 95% overall capture and control (100% capture x 95% control) with carbon adsorption, and use of coatings compliant with District Rule 4606;

Alternate Basic Equipment:
None

Step 2 - Eliminate Technologically Infeasible Options

There are no technologically infeasible option listed in Step 1.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

1. 98% overall capture and control (100% capture x 98% control) with thermal incineration, and use of coatings compliant with District Rule 4606;

2. 98% overall capture and control (100% capture x 98% control) with catalytic incineration, and use of coatings compliant with District Rule 4606;

3. 95% overall capture and control (100% capture x 95% control) with carbon adsorption, and use of coatings compliant with District Rule 4606;

4. Utilizing HVLP or equivalent application equipment and using coatings compliant with District Rule 4606

Step 4 - Cost Effectiveness Analysis

Option 1: 98% overall capture and control with thermal incineration, and use of coatings compliant with District Rule 4606

<table>
<thead>
<tr>
<th>Cost Item</th>
<th>Reasons &amp; Remarks</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Direct Costs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchased equipment costs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment Purchase (RTO), EC</td>
<td>Ref: Oxidizers Inc., quote July 26, 2021, RTO handling 44,175 cfm</td>
<td>$830,000</td>
</tr>
<tr>
<td>Instrumentation (included)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales taxes</td>
<td>3.1825% EC</td>
<td>$26,415</td>
</tr>
<tr>
<td>*Freight</td>
<td>0.05 EC</td>
<td>$41,500</td>
</tr>
<tr>
<td><strong>Purchased equipment costs, PEC</strong></td>
<td>sum of above items</td>
<td>$897,915</td>
</tr>
<tr>
<td><strong>Direct installation costs</strong></td>
<td>Ref: Section 3 Table 2.8 of EPA Air Pollution Control Cost Manual (Sixth Edition)</td>
<td></td>
</tr>
<tr>
<td>Foundations &amp; supports</td>
<td>0.08 PEC</td>
<td>$71,833</td>
</tr>
<tr>
<td>Handling &amp; erection</td>
<td>0.14 PEC</td>
<td>$125,708</td>
</tr>
<tr>
<td>Electrical</td>
<td>0.02 PEC</td>
<td>$17,958</td>
</tr>
<tr>
<td>Piping</td>
<td>0.01 PEC</td>
<td>$8,979</td>
</tr>
<tr>
<td></td>
<td>0.01 PEC</td>
<td>$8,979</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------</td>
<td>--------</td>
</tr>
<tr>
<td>Insulation for duct work</td>
<td>0.01 PEC</td>
<td>$8,979</td>
</tr>
<tr>
<td>Painting</td>
<td>0.01 PEC</td>
<td>$8,979</td>
</tr>
<tr>
<td><strong>Direct installation costs</strong></td>
<td><strong>sum of above items</strong></td>
<td><strong>$242,437</strong></td>
</tr>
<tr>
<td>Site preparation</td>
<td>not included</td>
<td></td>
</tr>
<tr>
<td>Buildings</td>
<td>not included</td>
<td></td>
</tr>
<tr>
<td><strong>Total Direct Costs, DC</strong></td>
<td><strong>$1,140,352</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Indirect Costs (installation)**

<table>
<thead>
<tr>
<th></th>
<th>0.10 PEC</th>
<th>$89,791</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>0.10 PEC</td>
<td>$89,791</td>
</tr>
<tr>
<td>Construction &amp; field expenses</td>
<td>0.05 PEC</td>
<td>$44,896</td>
</tr>
<tr>
<td>Contractor fees</td>
<td>0.10 PEC</td>
<td>$89,791</td>
</tr>
<tr>
<td>Start-up</td>
<td>0.02 PEC</td>
<td>$17,958</td>
</tr>
<tr>
<td>Performance test</td>
<td>0.01 PEC</td>
<td>$8,979</td>
</tr>
<tr>
<td>Contingencies</td>
<td>0.03 PEC</td>
<td>$26,937</td>
</tr>
<tr>
<td><strong>Total Indirect Costs, IC</strong></td>
<td><strong>sum of above items</strong></td>
<td><strong>$278,354</strong></td>
</tr>
</tbody>
</table>

**Total Capital Investment (TCI)**

<table>
<thead>
<tr>
<th></th>
<th>DC + IC</th>
<th>$1,418,705</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Direct Annual Costs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating labor</td>
<td>Ref: EPA Table 2.10 of EPA/452/B-02-001</td>
<td></td>
</tr>
<tr>
<td>Operator</td>
<td>0.5 hr/shift, $32.00/hr, 3 shifts/day, 365 days/yr</td>
<td>$17,520</td>
</tr>
<tr>
<td>Supervisor</td>
<td>15% of operator</td>
<td>$2,628</td>
</tr>
<tr>
<td>Maintenance</td>
<td>Ref: EPA Table 2.10 of EPA/452/B-02-001</td>
<td></td>
</tr>
<tr>
<td>Labor</td>
<td>0.5 hr/shift, $32.00/hr, 3 shifts/day, 365 days/yr</td>
<td>$17,520</td>
</tr>
<tr>
<td>Materials</td>
<td>100% of maintenance labor</td>
<td>$17,520</td>
</tr>
<tr>
<td><strong>Utilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplemental fuel (Natural gas)</td>
<td>not estimated</td>
<td></td>
</tr>
<tr>
<td>Electricity (RTO)</td>
<td>not estimated</td>
<td></td>
</tr>
<tr>
<td><strong>Total Direct Annual Costs, DAC</strong></td>
<td><strong>sum of above items</strong></td>
<td><strong>$55,188</strong></td>
</tr>
</tbody>
</table>

**Indirect Annual Costs**

<table>
<thead>
<tr>
<th></th>
<th>Ref: Section 3 Table 2.8 of EPA Air Pollution Control Cost Manual (Sixth Edition)</th>
</tr>
</thead>
</table>
Edition) EPA/452/B-02-001

<table>
<thead>
<tr>
<th>Overhead</th>
<th>60% of sum of operating, supervisor, &amp; maintenance labor &amp; maintenance materials</th>
<th>$33,112.80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Charges</td>
<td>2% TCI</td>
<td>$28,374</td>
</tr>
<tr>
<td>Property Taxes</td>
<td>1% TCI</td>
<td>$14,187</td>
</tr>
<tr>
<td>Insurance</td>
<td>1% TCI</td>
<td>$14,187</td>
</tr>
<tr>
<td><strong>Total Indirect Annual Costs, IAC</strong></td>
<td><strong>sum of above items</strong></td>
<td><strong>$89,861</strong></td>
</tr>
</tbody>
</table>

| Total Annual Costs, TAC | **DAC + IAC** | **$145,049** |

**Cost Effectiveness**

- **Annualized Total Capital Investment, ATCI**: 0.123 TCI, amortization factor determined using 10 year, 4% interest | **$174,914** |
- **Cost of controls ($/yr), C** | ATCI + TAC | **$319,963** |
- **Emission Reductions (tons/yr), E**: 14,116 lb-VOC/yr x 0.98 x ton/2000 lb | **6.9** |
- **Costs of Reduction ($/ton)** | C/E | **$46,259** |

*Ref: Section 3 Table 2.8 of EPA Air Pollution Control Cost Manual (Sixth Edition) EPA/452/B-02-001*

Since the cost of VOC reductions ($/ton) is above the cost effectiveness threshold of $22,600/ton, the use of this technology is not required.

**Option 2: 98% overall capture and control with catalytic incineration, and use of coatings compliant with District Rule 4606**

<table>
<thead>
<tr>
<th>Cost Item</th>
<th>Reasons &amp; Remarks</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Direct Costs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchased equipment costs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment Purchase (RTO), EC</td>
<td>Cost estimated using Oxidizer Inc. quote for RTO, July 26, 2021 (44,175 cfm), and Anguil Environmental Systems, Inc. cost quote (July 26, 2019) for RTO and CTO provided under project N-1192453</td>
<td><strong>$769,468</strong></td>
</tr>
<tr>
<td>Instrumentation (included)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales taxes</td>
<td>3.1825% EC</td>
<td><strong>$24,488</strong></td>
</tr>
<tr>
<td>*Freight</td>
<td>0.05 EC</td>
<td><strong>$38,473</strong></td>
</tr>
<tr>
<td><strong>Purchased equipment costs, PEC</strong></td>
<td><strong>sum of above items</strong></td>
<td><strong>$832,430</strong></td>
</tr>
</tbody>
</table>
### Direct installation costs

<table>
<thead>
<tr>
<th>Item</th>
<th>PEC</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundations &amp; supports</td>
<td>0.08</td>
<td>$66,594</td>
</tr>
<tr>
<td>Handling &amp; erection</td>
<td>0.14</td>
<td>$116,540</td>
</tr>
<tr>
<td>Electrical</td>
<td>0.02</td>
<td>$16,649</td>
</tr>
<tr>
<td>Piping</td>
<td>0.01</td>
<td>$8,324</td>
</tr>
<tr>
<td>Insulation for duct work</td>
<td>0.01</td>
<td>$8,324</td>
</tr>
<tr>
<td>Painting</td>
<td>0.01</td>
<td>$8,324</td>
</tr>
</tbody>
</table>

**Direct installation costs**  
sum of above items

$224,756

### Site preparation

not included

### Buildings

not included

**Total Direct Costs, DC**

$1,057,186

---

### Indirect Costs (installation)

<table>
<thead>
<tr>
<th>Item</th>
<th>PEC</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>0.10</td>
<td>$83,243</td>
</tr>
<tr>
<td>Construction &amp; field expenses</td>
<td>0.05</td>
<td>$41,622</td>
</tr>
<tr>
<td>Contractor fees</td>
<td>0.10</td>
<td>$83,243</td>
</tr>
<tr>
<td>Start-up</td>
<td>0.02</td>
<td>$16,649</td>
</tr>
<tr>
<td>Performance test</td>
<td>0.01</td>
<td>$8,324</td>
</tr>
<tr>
<td>Contingencies</td>
<td>0.03</td>
<td>$24,973</td>
</tr>
</tbody>
</table>

**Total Indirect Costs, IC**  
sum of above items

$258,053

**Total Capital Investment (TCI)**

DC + IC

$1,315,240

---

### Direct Annual Costs

<table>
<thead>
<tr>
<th>Item</th>
<th>Ref: EPA Table 2.10 of EPA/452/B-02-001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating labor</td>
<td>Operator 0.5 hr/shift, $32.00/hr, 3 shifts/day, 365 days/yr</td>
</tr>
<tr>
<td></td>
<td>Supervisor 15% of operator</td>
</tr>
<tr>
<td>Maintenance</td>
<td>Ref: EPA Table 2.10 of EPA/452/B-02-001</td>
</tr>
<tr>
<td>Labor</td>
<td>0.5 hr/shift, $32.00/hr, 3 shifts/day, 365 days/yr</td>
</tr>
<tr>
<td>Materials</td>
<td>100% of maintenance labor</td>
</tr>
<tr>
<td>Utilities</td>
<td></td>
</tr>
<tr>
<td>Cost Item</td>
<td>Reasons &amp; Remarks</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Direct Costs</strong></td>
<td></td>
</tr>
<tr>
<td>Purchased equipment costs</td>
<td></td>
</tr>
<tr>
<td>Equipment Purchase (Carbon adsorber), EC</td>
<td>Ref: Oxidizers Inc., quote July 26, 2021, activated carbon static bed adsorber handling 44,175 cfm</td>
</tr>
<tr>
<td>Instrumentation</td>
<td>0.1 EC</td>
</tr>
<tr>
<td>Sales taxes</td>
<td>3.1825% EC</td>
</tr>
<tr>
<td>Freight</td>
<td>0.05 EC</td>
</tr>
<tr>
<td>Purchased equipment costs, PEC</td>
<td>sum of above items</td>
</tr>
</tbody>
</table>

**Option 3: 95% overall capture and control with carbon adsorption, and use of coatings compliant with District Rule 4606**

<table>
<thead>
<tr>
<th>Cost Item</th>
<th>Reasons &amp; Remarks</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indirect Annual Costs</strong></td>
<td>Ref: Section 3 Table 2.8 of EPA Air Pollution Control Cost Manual (Sixth Edition) EPA/452/B-02-001</td>
<td></td>
</tr>
<tr>
<td>Overhead</td>
<td>60% of sum of operating, supervisor, &amp; maintenance labor &amp; maintenance materials</td>
<td>$33,112.80</td>
</tr>
<tr>
<td>Administrative Charges</td>
<td>2% TCI</td>
<td>$26,305</td>
</tr>
<tr>
<td>Property Taxes</td>
<td>1% TCI</td>
<td>$13,152</td>
</tr>
<tr>
<td>Insurance</td>
<td>1% TCI</td>
<td>$13,152</td>
</tr>
<tr>
<td>Total Indirect Annual Costs, IAC</td>
<td>sum of above items</td>
<td>$85,722</td>
</tr>
</tbody>
</table>

**Total Annual Costs, TAC**

DAC + IAC

$140,910

**Cost Effectiveness**

Annualized Total Capital Investment, ATCI

0.123 TCI, amortization factor determined using 10 year, 4% interest

$162,157

Cost of controls ($/yr), C

ATCI + TAC

$303,067

Emission Reductions (tons/yr), E

14,116 lb-VOC/yr x 0.98 x 1 ton/2000 lb

$6.9

Costs of Reduction ($/ton)

C/E

$43,816

*Ref: Section 3 Table 2.8 of EPA Air Pollution Control Cost Manual (Sixth Edition) EPA/452/B-02-001
<table>
<thead>
<tr>
<th>Direct installation costs</th>
<th>Ref: Section 3 Table 1.3 of EPA Air Pollution Control Cost Manual (Sixth Edition) EPA/452/B-02-001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundations &amp; supports</td>
<td>0.08 PEC $47,557</td>
</tr>
<tr>
<td>Handling &amp; erection</td>
<td>0.14 PEC $83,224</td>
</tr>
<tr>
<td>Electrical</td>
<td>0.04 PEC $23,778</td>
</tr>
<tr>
<td>Piping</td>
<td>0.02 PEC $11,889</td>
</tr>
<tr>
<td>Insulation</td>
<td>0.01 PEC $5,945</td>
</tr>
<tr>
<td>Painting</td>
<td>0.01 PEC $5,945</td>
</tr>
<tr>
<td><strong>Direct installation costs</strong></td>
<td><strong>sum of above items</strong> $178,337</td>
</tr>
<tr>
<td>Site preparation</td>
<td>not included</td>
</tr>
<tr>
<td>Buildings</td>
<td>not included</td>
</tr>
<tr>
<td><strong>Total Direct Costs, DC</strong></td>
<td><strong>$772,795</strong></td>
</tr>
<tr>
<td><strong>Indirect Costs (installation)</strong></td>
<td><strong>Ref: Section 3 Table 1.3 of EPA Air Pollution Control Cost Manual (Sixth Edition) EPA/452/B-02-001</strong></td>
</tr>
<tr>
<td>Engineering</td>
<td>0.10 PEC $59,446</td>
</tr>
<tr>
<td>Construction &amp; field expenses</td>
<td>0.05 PEC $29,723</td>
</tr>
<tr>
<td>Contractor fees</td>
<td>0.10 PEC $59,446</td>
</tr>
<tr>
<td>Start-up</td>
<td>0.02 PEC $11,889</td>
</tr>
<tr>
<td>Performance test</td>
<td>0.01 PEC $5,945</td>
</tr>
<tr>
<td>Contingencies</td>
<td>0.03 PEC $17,834</td>
</tr>
<tr>
<td><strong>Total Indirect Costs, IC</strong></td>
<td><strong>sum of above items</strong> $184,282</td>
</tr>
<tr>
<td><strong>Total Capital Investment (TCI) = DC + IC</strong></td>
<td><strong>$957,077</strong></td>
</tr>
<tr>
<td><strong>Direct Annual Costs</strong></td>
<td><strong>Ref: Section 3 Table 1.6 of EPA Air Pollution Control Cost Manual (Sixth Edition) EPA/452/B-02-001</strong></td>
</tr>
<tr>
<td>Operating labor</td>
<td></td>
</tr>
<tr>
<td>Operator</td>
<td>0.5 hr/shift, $32.00/hr, 3 shifts/day, 365 days/yr $17,520</td>
</tr>
<tr>
<td>Supervisor</td>
<td>15% of operator $2,628</td>
</tr>
<tr>
<td>Maintenance</td>
<td></td>
</tr>
<tr>
<td>Labor</td>
<td>0.5 hr/shift, $32.00/hr, 3 shifts/day, 365 days/yr $17,520</td>
</tr>
<tr>
<td>Materials</td>
<td>100% of maintenance labor $17,520</td>
</tr>
<tr>
<td>Replacement Parts, carbon</td>
<td></td>
</tr>
<tr>
<td>Replacement labor</td>
<td>Not determined</td>
</tr>
<tr>
<td>Carbon cost</td>
<td>Not determined</td>
</tr>
<tr>
<td>-------------</td>
<td>----------------</td>
</tr>
<tr>
<td><strong>Utilities</strong></td>
<td></td>
</tr>
<tr>
<td>Electricity (carbon adsorber system)</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Total Direct Annual Costs, DAC</strong></td>
<td>sum of above items</td>
</tr>
<tr>
<td><strong>Indirect Annual Costs</strong></td>
<td>Ref: Section 3 Table 1.6 of EPA Air Pollution Control Cost Manual (Sixth Edition) EPA/452/B-02-001</td>
</tr>
<tr>
<td>Overhead</td>
<td>60% of sum of operating, supervisor, &amp; maintenance labor &amp; maintenance materials</td>
</tr>
<tr>
<td>Administrative Charges</td>
<td>2%TCI</td>
</tr>
<tr>
<td>Property Taxes</td>
<td>1%TCI</td>
</tr>
<tr>
<td>Insurance</td>
<td>1%TCI</td>
</tr>
<tr>
<td><strong>Total Indirect Annual Costs, IAC</strong></td>
<td>sum of above items</td>
</tr>
<tr>
<td><strong>Total Annual Costs, TAC</strong></td>
<td>DAC + IAC</td>
</tr>
</tbody>
</table>

**Cost Effectiveness**

| ATCI | 0.123 TCI, amortization factor determined using 10 year, 4% interest | $117,999 |
| Cost of controls ($/yr), C | ATCI + TAC | $244,583 |
| Emission Reductions (tons/yr), E | 14,116 lb-VOC/yr x 0.95 x ton/2000 lb | $6.7 |
| Costs of Reduction ($/ton) | C÷E | $36,477 |

*Ref. Ref: Section 3 Table 1.3 of EPA Air Pollution Control Cost Manual (Sixth Edition) EPA/452/B-02-001

Since the cost of VOC reductions ($/ton) is above the cost effectiveness threshold of $22,600/ton, the use of this technology is not required.

**Option 4: Utilizing HVLP or equivalent application equipment and using coatings compliant with District Rule 4606**

The applicant has propose to apply coating using HVLP (or equivalent) equipment, and has proposed to use coatings compliant with District Rule 4606. Since this option is the achieved-in-practice (AIP) control, cost effectiveness analysis is not required.

**Step 5 – Select BACT**

BACT each operation is to apply coating using HVLP (or equivalent) equipment, and has proposed to use coatings compliant with District Rule 4606. Thus, BACT requirements are satisfied.
To: Jag Kahlon – Permit Services  
From: Keanu Morin – Technical Services  
Date: March 14, 2022  
Facility Name: Barbosa Cabinets, Inc.  
Location: 2020 E. Grant Line Rd. Tracy, CA  
Application #(s): N-4065-6-7, -7-3, -8-3, -9-3, -10-3, -11-3, -12-3, -13-3, -16-3, -18-0, -19-0, -20-0  
Project #: N-1203975

### 1. Summary

#### 1.1 RMR

<table>
<thead>
<tr>
<th>Units</th>
<th>Prioritization Score</th>
<th>Acute Hazard Index</th>
<th>Chronic Hazard Index</th>
<th>Maximum Individual Cancer Risk</th>
<th>T-BACT Required</th>
<th>Special Permit Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-7</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>7-3</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>8-3</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>9-3</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>10-3</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>11-3</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>12-3</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>13-3</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>16-3</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>N/A¹</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>18-0</td>
<td>0.23</td>
<td>0.00</td>
<td>0.00</td>
<td>2.89E-08</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>19-0</td>
<td>N/A²</td>
<td>N/A²</td>
<td>N/A²</td>
<td>N/A²</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>20-0</td>
<td>1.00</td>
<td>0.05</td>
<td>0.00</td>
<td>1.29E-07</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Project Totals</strong></td>
<td>1.23</td>
<td>0.05</td>
<td>0.00</td>
<td>1.58E-07</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Facility Totals</strong></td>
<td>&gt;1</td>
<td>0.73</td>
<td>0.04</td>
<td>1.01E-06</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Notes:
1. There is no increase in permitted emission from these Units, therefore, they are not included in this analysis.
2. Maximum Individual Cancer Risk, Acute, and Chronic Hazard Indices were not calculated for Unit 19 since there is no risk factor or the risk factor is so low that it has been determined to be insignificant for this type of unit.
1.2 AAQA

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Air Quality Standard (State/Federal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td>Pass 3 Hours Pass 8 Hours Pass 24 Hours Pass Annual</td>
</tr>
<tr>
<td>NOx</td>
<td>Pass 3 Hours Pass 8 Hours Pass 24 Hours Pass Annual</td>
</tr>
<tr>
<td>SO2</td>
<td>Pass 3 Hours Pass 8 Hours Pass 24 Hours Pass Annual</td>
</tr>
<tr>
<td>PM10</td>
<td>Pass 3 Hours Pass 8 Hours Pass 24 Hours Pass Annual</td>
</tr>
<tr>
<td>PM2.5</td>
<td>Pass 3 Hours Pass 8 Hours Pass 24 Hours Pass Annual</td>
</tr>
</tbody>
</table>

Notes:
1. Results were taken from the attached AAQA Report.
2. The criteria pollutants are below EPA’s level of significance as found in 40 CFR Part 51.165 (b)(2) unless otherwise noted below.
3. Modeled PM10 concentrations were below the District SIL for non-fugitive sources of 5 μg/m³ for the 24-hour average concentration and 1 μg/m³ for the annual concentration.
4. Modeled PM2.5 concentrations were below the District SIL for non-fugitive sources of 1.2 μg/m³ for the 24-hour average concentration and 0.2 μg/m³ for the annual concentration.

To ensure that human health risks will not exceed District allowable levels; the following shall be included as requirements for:

Unit # -6-7, -7-3, -8-3, -9-3, -10-3, -11-3, -12-3, -13-3, -16-3, -18-0, -19-0, and -20-0

1. No special requirements.

2. Project Description

Technical Services received a request on January 5, 2022 to perform a Risk Management Review (RMR) and Ambient Air Quality Analysis (AAQA) for the following:

- Unit -6-7: MODIFICATION OF WOODWORKING OPERATION CONSISTING OF 34 SAWS, 14 BORING MACHINES, 2 EDGE BANDERS, 13 SANDERS AND 4 SHAPERS AND FILTER CLEANING BOOTH ALL SERVED BY AN LMC MODEL 594-LP-12 BAGHOUSE: TO CONNECT EXHAUST FROM WOOD WORKING EQUIPMENT (TWO SANDING MACHINES, 3 BRUSH CLEANING MACHINES, AND 2 MANUAL SANDING STATIONS) UNDER PERMITS N-4065-18, -19 AND '20 TO THE BAGHOUSE UNDER THIS PERMIT

- Unit -7-3: MODIFICATION OF WOOD COATING OPERATION SERVED BY A SPRAY SYSTEMS MODEL I-18107 OPEN FACE BOOTH: LOWER THE FACILITY-WIDE VOC EMISSION LIMIT TO 19,999 POUNDS PER YEAR

- Unit -8-3: MODIFICATION OF WOOD COATING OPERATION SERVED BY A SPRAY SYSTEMS MODEL I-18107 (OR EQUIVALENT) OPEN FACE BOOTH: LOWER THE FACILITY-WIDE VOC EMISSION LIMIT TO 19,999 POUNDS PER YEAR

- Unit -9-3: MODIFICATION OF WOOD COATING OPERATION SERVED BY A SPRAY SYSTEMS MODEL I-18107 (OR EQUIVALENT) OPEN FACE BOOTH: LOWER THE FACILITY-WIDE VOC EMISSION LIMIT TO 19,999 POUNDS PER YEAR

- Unit -10-3: MODIFICATION OF WOOD COATING OPERATION SERVED BY A SPRAY SYSTEMS MODEL I-18107 OPEN FACE BOOTH: LOWER THE FACILITY-WIDE VOC EMISSION LIMIT TO 19,999 POUNDS PER YEAR
• Unit -11-3: MODIFICATION OF WOOD COATING OPERATION SERVED BY A SPRAY SYSTEMS MODEL I-1287 OPEN FACE BOOTH: LOWER THE FACILITY-WIDE VOC EMISSION LIMIT TO 19,999 POUNDS PER YEAR

• Unit -12-3: MODIFICATION OF RHODES MANUFACTURING MODEL I-22810C CONVEYORIZED WOOD COATING AND SANDING SYSTEM. THE SYSTEM INCLUDES THREE COATING BOOTHS, ONE SANDING BOOTH SERVED BY A TORIT ECB DUST COLLECTOR AND FOUR PERMIT EXEMPT OVEN/CURING TUNNELS: LOWER THE FACILITY-WIDE VOC EMISSION LIMIT TO 19,999 POUNDS PER YEAR

• Unit -13-3: MODIFICATION OF CEFLA FALCIONI PROFIPLUS 39 MOLDING COATING UNIT: LOWER THE FACILITY-WIDE VOC EMISSION LIMIT TO 19,999 POUNDS PER YEAR

• Unit -16-3: MODIFICATION OF 325 BHP PERKINS MODEL 1306-E87TA DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR: LOWER THE FACILITY-WIDE VOC EMISSION LIMIT TO 19,999 POUNDS PER YEAR

• Unit -18-0: STAINS COATING AND DRYING OPERATION CONSISTS OF A SANDING MACHINE, A MANUAL SANDING STATION, A BRUSH CLEANING MACHINE, SUPERFICI MAGNUM FULLY ENCLOSED STAIN SPRAY MACHINE, COUNTER FLOW LINEAR STEAM/HOT WATER-HEATED DRYER, CROSS TRANSFER STEAM/HOT WATER-HEATED BLADE DRYER, AND ASSOCIATED CONVEYING SYSTEM. THE DUST FROM THE SANDING MACHINE, MANUAL SANDING STATION, AND BRUSH CLEANING MACHINE WILL BE ROUTED TO THE BAGHOUSE UNDER PERMIT N-4065-6.

• Unit -19-0: CLEAR COAT APPLICATION AND DRYING OPERATION CONSISTING OF A BRUSH CLEANING MACHINE, SUPERFICI MAGNUM FULLY ENCLOSED COATING SPRAY MACHINE, STEAM/HOT WATER-HEATED VERTICAL DRYER, AND ASSOCIATED CONVEYING SYSTEM. THE DUST FROM THE BRUSH CLEANING MACHINE WILL BE ROUTED TO THE BAGHOUSE UNDER PERMIT N-4065-6.

• Unit -20-0: LACQUER COATING AND DRYING OPERATION CONSISTING OF A SANDING MACHINE, A MANUAL SANDING STATION, A BRUSH CLEANING MACHINE, SUPERFICI MAGNUM FULLY ENCLOSED LACQUER SPRAY MACHINE, A STEAM/HOT WATER-HEATED VERTICAL DRYER, AND ASSOCIATED CONVEYING SYSTEM. THE DUST FROM THE SANDING MACHINE, MANUAL SANDING STATION, AND BRUSH CLEANING MACHINE WILL BE ROUTED TO THE BAGHOUSE UNDER PERMIT N-4065-6.

3. RMR Report

3.1 Analysis

The District performed an analysis pursuant to the District’s Risk Management Policy for Permitting New and Modified Sources (APR 1905, May 28, 2015) to determine the possible cancer and non-cancer health impact to the nearest resident or worksite. This policy requires that an assessment be performed on a unit by unit basis, project basis, and on a facility-wide basis. If a preliminary prioritization analysis demonstrates that:

• A unit’s prioritization score is less than the District’s significance threshold and;

• The project’s prioritization score is less than the District’s significance threshold and;
• The facility’s total prioritization score is less than the District’s significance threshold

Then, generally no further analysis is required.

The District’s significant prioritization score threshold is defined as being equal to or greater than 1.0. If a preliminary analysis demonstrates that either the unit(s) or the project’s or the facility’s total prioritization score is greater than the District threshold, a screening or a refined assessment is required.

If a refined assessment is greater than one in a million but less than 20 in one million for carcinogenic impacts (Cancer Risk) and less than 1.0 for the Acute and Chronic hazard indices (Non-Carcinogenic) on a unit by unit basis, project basis and on a facility-wide basis the proposed application is considered less than significant. For unit’s that exceed a cancer risk of 1 in one million, Toxic Best Available Control Technology (TBACT) must be implemented.

Toxic emissions for this project were calculated using the following methods:

• The SDS sheets for the coatings used in the operation were reviewed by CAS# for Toxic Air Contaminants (TACs). The TAC emissions were calculated based on the process rates provided by the processing engineer.

These emissions were input into the San Joaquin Valley APCD’s Hazard Assessment and Reporting Program (SHARP). In accordance with the District’s Risk Management Policy, risks from the proposed unit’s toxic emissions were prioritized using the procedure in the 2016 CAPCOA Facility Prioritization Guidelines. The prioritization score for this proposed facility was greater than 1.0 (see RMR Summary Table). Therefore, a refined health risk assessment was required.

The AERMOD model was used, with the parameters outlined below and meteorological data for 2004-2008 from Tracy (rural dispersion coefficient selected) to determine the dispersion factors (i.e., the predicted concentration or X divided by the normalized source strength or Q) for a receptor grid. These dispersion factors were input into the SHARP Program, which then used the Air Dispersion Modeling and Risk Tool (ADMRT) of the Hot Spots Analysis and Reporting Program Version 2 (HARP 2) to calculate the chronic and acute hazard indices and the carcinogenic risk for the project.

The following parameters were used for the review:

<table>
<thead>
<tr>
<th>Unit ID</th>
<th>Process ID</th>
<th>Process Material</th>
<th>Process Units</th>
<th>Hourly Process Rate</th>
<th>Annual Process Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-0</td>
<td>1</td>
<td>VOC</td>
<td>Lbs.</td>
<td>5.25</td>
<td>2,873</td>
</tr>
<tr>
<td>18-0</td>
<td>1</td>
<td>PM</td>
<td>Lbs.</td>
<td>0.00065</td>
<td>0.32</td>
</tr>
<tr>
<td>19-0</td>
<td>1</td>
<td>VOC</td>
<td>Lbs.</td>
<td>0.0018</td>
<td>7.82</td>
</tr>
<tr>
<td>20-0</td>
<td>1</td>
<td>VOC</td>
<td>Lbs.</td>
<td>6.35</td>
<td>8,857</td>
</tr>
<tr>
<td>20-0</td>
<td>1</td>
<td>PM</td>
<td>Lbs.</td>
<td>0.0134</td>
<td>18.40</td>
</tr>
</tbody>
</table>
### Area Source Parameters

<table>
<thead>
<tr>
<th>Unit ID</th>
<th>Unit Description</th>
<th>Release Height (m)</th>
<th>X-Length (m)</th>
<th>Y-Length (m)</th>
<th>Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-0²</td>
<td>Stack 1 (Stain Coating)</td>
<td>12.5</td>
<td>37.65</td>
<td>39.71</td>
<td>1,495.1</td>
</tr>
<tr>
<td>18-0³</td>
<td>Stack 2 (Dryer)</td>
<td>12.5</td>
<td>28.66</td>
<td>62.53</td>
<td>1,792.1</td>
</tr>
<tr>
<td>18-0³</td>
<td>Stack 3 (Dryer)</td>
<td>12.5</td>
<td>22.8</td>
<td>99.65</td>
<td>2,272.0</td>
</tr>
<tr>
<td>19-0²</td>
<td>Stack 1 (Clear Coating)</td>
<td>12.5</td>
<td>66.19</td>
<td>93.93</td>
<td>6,217.2</td>
</tr>
<tr>
<td>19-0³</td>
<td>Stack 2 (Dryer)</td>
<td>12.5</td>
<td>79.79</td>
<td>44.62</td>
<td>3,560.2</td>
</tr>
<tr>
<td>19-0³</td>
<td>Stack 3 (Dryer)</td>
<td>12.5</td>
<td>54.06</td>
<td>43.43</td>
<td>2,077.5</td>
</tr>
<tr>
<td>20-0²</td>
<td>Stack 1 (Lacquer Coating)</td>
<td>12.5</td>
<td>104.64</td>
<td>67.16</td>
<td>7,027.6</td>
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<td>20-0³</td>
<td>Stack 2 (Dryer)</td>
<td>12.5</td>
<td>113.01</td>
<td>105.52</td>
<td>11,924.8</td>
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<tr>
<td>20-0³</td>
<td>Stack 3 (Dryer)</td>
<td>12.5</td>
<td>107.47</td>
<td>105.52</td>
<td>11,340.2</td>
</tr>
</tbody>
</table>

**Note:**
1. Point Capped sources were modeled as Area sources based on District guidance.
2. Emissions from the paint booth were modeled at 10% to represent the VOC distribution between the stacks.
3. Emissions from the dryers were modeled at 45% to represent the VOC distribution between the stacks.

### 4. AAQA Report

The District modeled the impact of the proposed project on the National Ambient Air Quality Standard (NAAQS) and/or California Ambient Air Quality Standard (CAAQS) in accordance with District Policy APR-1925 (Policy for District Rule 2201 AAQA Modeling) and EPA’s Guideline for Air Quality Modeling (Appendix W of 40 CFR Part 51). The District uses a progressive three level approach to perform AAQAs. The first level (Level 1) uses a very conservative approach. If this analysis indicates a likely exceedance of an AAQS or Significant Impact Level (SIL), the analysis proceeds to the second level (Level 2) which implements a more refined approach. For the 1-hour NO₂ standard, there is also a third level that can be implemented if the Level 2 analysis indicates a likely exceedance of an AAQS or SIL.

The modeling analyses predicts the maximum air quality impacts using the appropriate emissions for each standard’s averaging period. Required model inputs for a refined AAQA include background ambient air quality data, land characteristics, meteorological inputs, a receptor grid, and source parameters including emissions. These inputs are described in the sections that follow.

Ambient air concentrations of criteria pollutants are recorded at monitoring stations throughout the San Joaquin Valley. Monitoring stations may not measure all necessary pollutants, so background data may need to be collected from multiple sources. The following stations were used for this evaluation:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Station Name</th>
<th>County</th>
<th>City</th>
<th>Measurement Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td>HAZELTON-HD, STOCKTON</td>
<td>San Joaquin</td>
<td>Stockton</td>
<td>2018</td>
</tr>
<tr>
<td>NOx</td>
<td>TRACY AIRPORT</td>
<td>San Joaquin</td>
<td>Tracy</td>
<td>2018</td>
</tr>
<tr>
<td>PM10</td>
<td>TRACY AIRPORT</td>
<td>San Joaquin</td>
<td>Tracy</td>
<td>2018</td>
</tr>
<tr>
<td>PM2.5</td>
<td>Manteca</td>
<td>San Joaquin</td>
<td>Manteca</td>
<td>2018</td>
</tr>
<tr>
<td>SOx</td>
<td>Fresno - Garland</td>
<td>Fresno</td>
<td>Fresno</td>
<td>2018</td>
</tr>
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</table>
Technical Services performed modeling for directly emitted criteria pollutants with the emission rates below:

<table>
<thead>
<tr>
<th>Emission Rates (lbs/hour)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit ID</strong></td>
</tr>
<tr>
<td>18-0</td>
</tr>
<tr>
<td>19-0</td>
</tr>
<tr>
<td>20-0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emission Rates (lbs/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit ID</strong></td>
</tr>
<tr>
<td>18-0</td>
</tr>
<tr>
<td>19-0</td>
</tr>
<tr>
<td>20-0</td>
</tr>
</tbody>
</table>

The AERMOD model was used to determine if emissions from the project would cause or contribute to an exceedance of any state of federal air quality standard. The parameters outlined below and meteorological data for 2004-2008 from Tracy (rural dispersion coefficient selected) were used for the analysis:

The following parameters were used for the review:

<table>
<thead>
<tr>
<th>Area Source Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit ID</strong></td>
</tr>
<tr>
<td>18-0</td>
</tr>
<tr>
<td>19-0</td>
</tr>
<tr>
<td>20-0</td>
</tr>
</tbody>
</table>

Note:
1. Point Capped sources were modeled as Area sources based on District guidance.

5. Conclusion

5.1 RMR

The cumulative acute and chronic indices for this facility, including this project, are below 1.0; and the cumulative cancer risk for this facility, including this project, is less than 20 in a million. In addition, the cancer risk for each unit in this project is less than 1.0 in a million. In accordance with the District’s Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT).

These conclusions are based on the data provided by the applicant and the project engineer. Therefore, this analysis is valid only as long as the proposed data and parameters do not change.

5.2 AAQA

The emissions from the proposed equipment will not cause or contribute significantly to a violation of the State and National AAQS.
6. Attachments
   A. Modeling request from the project engineer
   B. Additional information from the applicant/project engineer
   C. Prioritization score w/ toxic emissions summary
   D. Facility Summary
   E. AAQA results
Appendix G
Quarterly Net Emissions Change
Quarterly Net Emissions Change (QNEC)

The Quarterly Net Emissions Change is used to complete the emission profile screen for the District’s PAS database. The QNEC shall be calculated as follows:

\[ \text{QNEC} = \text{PE2} - \text{PE1}, \]

where:

- \( \text{QNEC} \) = Quarterly Net Emissions Change for each emissions unit, lb/qtr.
- \( \text{PE2} \) = Post-Project Potential to Emit for each emissions unit, lb/qtr.
- \( \text{PE1} \) = Pre-Project Potential to Emit for each emissions unit, lb/qtr.

**N-4065-6:**
This permit involves PM10 emissions only. PE2 is equal to PE1 for PM10. Therefore, QNEC is zero for permit unit.

**N-4065-7, ‘-8, ‘-9, ‘-10, ‘-11, ‘-12, ‘-13:**
Each permit unit involves VOC and PM10 emissions only.

Currently, this facility is operating under facility-wide VOC and PM10 emissions. Pre and Post project facility-wide PM\(_{10}\) emissions remains same. Therefore, QNEC for PM10 emissions is zero for each permit unit.

\[
\text{QNEC}_{\text{VOC}} = \frac{(\text{SSPE2}_{\text{SLC}} - \text{SSPE1}_{\text{SLC}})}{4} \\
= \frac{(19,999 - 40,000)}{4} \\
= -5,000 \text{ lb-VOC/qtr}
\]

The QNEC value is assigned to permit N-4065-7 only.

**N-4065-16:**
PE2 is equal to PE1 for each pollutant. Therefore, QNEC is zero for permit unit.

**N-4065-18, ‘-19 and ‘-20:**
Each permit unit involves VOC and PM10 emissions only.

Currently, this facility is operating under facility-wide VOC and PM10 emissions. Pre and Post project facility-wide PM\(_{10}\) emissions remains same. Therefore, QNEC for PM10 emissions is zero for each permit unit.

QNEC for VOC is set equal to zero, as these units are going to be a part of the newly proposed reduced facility-wide VOC emissions limit.