



MAY 03 2016

Mr. Dan Deditius
Prison Industry Authority - Avenal
1 Kings Way
Avenal, CA 93204

**Re: Proposed Authority to Construct/Certificate of Conformity (Minor Mod)
District Facility # C-954
Project # C-1160694**

Dear Mr. Deditius:

Enclosed for your review is the District's analysis of an application for Authority to Construct for the facility identified above. You requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The included draft ATC is being issued to modify permit unit C-954-3, a woodworking operation served by a dust collector. The applicant has proposed to replace one of the five existing CNC routers with one new CNC router (five total). The facility has not proposed to increase their production or throughput rate; therefore, there will be no increase in emissions as a result of this modification.

After addressing all comments made during the 45-day EPA comment period, the District intends to issue the Authority to Construct with a Certificate of Conformity. Prior to operating with modifications authorized by the Authority to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

If you have any questions, please contact Mr. Errol Villegas, Permit Services Manager, at (559) 230-5900.

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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Mr. Dan Deditius
Page 2

Thank you for your cooperation in this matter.

Sincerely,



Arnaud Marjollet
Director of Permit Services

Enclosures

cc: Gerardo C. Rios, EPA (w/enclosure) via email

- {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4]

II. Applicable Rules

Rule 2201	New and Modified Stationary Source Review Rule (2/18/16)
Rule 2410	Prevention of Significant Deterioration (6/16/11)
Rule 2520	Federally Mandated Operating Permits (6/21/01)
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)
CH&SC 41700	Health Risk Assessment
CH&SC 42301.6	School Notice
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

This equipment is located at 1 Kings Way in Avenal, CA. The District has verified that this equipment is not 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

PIA – Avenal operates various woodworking equipment. Common woodworking operations include sawing, chipping, shaping, moulding, hogging, lathing, and sanding.

This facility typically operates 24 hours/day, 7 days/week, 365 days/year.

V. Equipment Listing

Pre-Project Equipment Description:

C-954-3-7: WOOD FURNITURE FACTORY LOCATED IN BLDG #290 WITH WOODWORKING OPERATION CONSISTING OF 4 TABLE SAWS, 1 CHOP SAW, 1 BAND SAW, 2 PANEL SAWS, 1 CNC PANEL SAW, 1 CNC SAW, 5 SANDERS, 2 SHAPERS, 1 CLEANER, 1 PLANER, 2 EDGE BANDERS, 5 CNC ROUTERS, 1 PIN ROUTER, 2 DRAWER DOVETAILER AND OTHER RELATED EQUIPMENT, ALL SERVED BY AN R.P. RICHARDS MODEL 12-216-3464 BAGHOUSE DUST COLLECTOR WITH REVERSE PULSED-JET CLEANING SYSTEM

Proposed Modification:

C-954-3-8: MODIFICATION OF WOOD FURNITURE FACTORY LOCATED IN BLDG #290 WITH WOODWORKING OPERATION CONSISTING OF 4 TABLE SAWS, 1 CHOP SAW, 1 BAND SAW, 2 PANEL SAWS, 1 CNC PANEL SAW, 1 CNC SAW, 5 SANDERS, 2 SHAPERS, 1 CLEANER, 1 PLANER, 2 EDGE BANDERS, 5 CNC ROUTERS, 1 PIN ROUTER, 2 DRAWER DOVETAILER AND OTHER RELATED EQUIPMENT, ALL SERVED BY AN R.P. RICHARDS MODEL 12-216-3464 BAGHOUSE DUST COLLECTOR WITH REVERSE PULSED-JET CLEANING SYSTEM: REPLACE ONE OF THE EXISTING CNC ROUTERS WITH ONE NEW CNC ROUTER (5 TOTAL)

Post Project Equipment Description:

C-954-3-8: WOOD FURNITURE FACTORY LOCATED IN BLDG #290 WITH WOODWORKING OPERATION CONSISTING OF 4 TABLE SAWS, 1 CHOP SAW, 1 BAND SAW, 2 PANEL SAWS, 1 CNC PANEL SAW, 1 CNC SAW, 5 SANDERS, 2 SHAPERS, 1 CLEANER, 1 PLANER, 2 EDGE BANDERS, 5 CNC ROUTERS, 1 PIN ROUTER, 2 DRAWER DOVETAILER AND OTHER RELATED EQUIPMENT, ALL SERVED BY AN R.P. RICHARDS MODEL 12-216-3464 BAGHOUSE DUST COLLECTOR WITH REVERSE PULSED-JET CLEANING SYSTEM

Dust Collector	
Manufacturer	R. P. Richards
Model Number	12-216-3464
Filter Cleaning Method	Pulse Jet
Total Filter Area	3,140 ft ³
Air Flow Rate	31,000 cfm

Woodworking Equipment			
Equipment Description	Manufacturer	Model No.	HP Rating
Existing Equipment Total Horsepower Rating			569.3*
1 CNC Router (removed)	Weeke	BP150	-32
1 CNC Router (proposed)**	Biesse	ROVER B	+21
Total HP			558.3

*Referenced from project C-1151495.

**The proposed CNC router has a total of 26 amps and 600 volts. The maximum power rating per CNC router is calculated as follows:

$$\begin{aligned}
 \text{Power Rating} &= \text{Amps} \times \text{Volts} \div 745.7 \text{ Watts/hp} \\
 &= (26 \text{ A} \times 600 \text{ V}) \div 745.7 \text{ W/hp} \\
 &= 15,600 \text{ Watts} \div 745.7 \text{ W/hp} \\
 &= 21 \text{ hp per CNC router}
 \end{aligned}$$

VI. Emission Control Technology Evaluation

This woodworking operation is served by an existing dust collector capable of achieving 99.9% control of PM₁₀ emissions. Since a control technology evaluation has already been conducted in Project C-1083785, further analysis is not required.

VII. General Calculations

A. Assumptions

- 40% of the total particulate matter generated by the woodworking operations is PM₁₀ (CARB speciation manual);
- PM₁₀ will be the only pollutant emission associated with this project;
- The dust collector will control 99.9% of the PM₁₀ emissions (Project C-940377);
- Maximum sawdust collected by the dust collector is 2,160 lb/day (Project C-940377);
- Operating Schedule: 24 hr/day, 365 day/yr (worst case).

B. Emission Factors

Pre-Project and Post-Project (EF)

As outlined in the application review for Project C-940377, the dust collector will control 99.9% of the PM₁₀ emissions. The facility has not proposed to modify the control efficiency (CE); therefore, $EF_1 = EF_2 = (1 - 0.999 \text{ lb-PM}_{10} \text{ emitted/lb-PM}_{10}) = 0.001 \text{ lb-PM}_{10} \text{ emitted/lb-PM}_{10}$.

C. Calculations

1. Pre-Project Potential to Emit (PE1)

Max. Quantity of Sawdust Collected:	2,160 lb/day
Baghouse Control Efficiency:	99.9%
PM ₁₀ Fraction:	0.4 lb-PM ₁₀ /lb-PM

$$\begin{aligned} \text{PM created by operation} &= \text{Amount collected} + \text{Amount emitted} \\ &= \text{Amount collected} + \text{Amount collected} \times (1 - \text{CE}) \\ &= 2,160 \text{ lb/day} + 2,160 \text{ lb/day} \times (1 - 0.999) \\ &= 2,160 \text{ lb/day} + 2 \text{ lb/day} \\ &= 2,162 \text{ lb PM/day} \end{aligned}$$

$$\begin{aligned} \text{PM}_{10} \text{ Emissions} &= 2,162 \text{ lb of PM/day} \times (1 - 0.999) \times 0.4 \text{ lb-PM}_{10}/\text{lb PM} \\ &= 0.9 \text{ lb-PM}_{10}/\text{day} \end{aligned}$$

The above calculated PM₁₀ emissions from this woodworking operation are below the current permit (PTO C-954-3-7) limit of 1.1 lb-PM₁₀/day. To be more conservative, current limit PM₁₀ of 1.1 lb/day will be used in this project. Therefore,

$$PE_1 = 1.1 \text{ lb-PM}_{10}/\text{day}$$

Annual PM₁₀ emissions are calculated below, assuming a 365 day operating schedule for the equipment.

$$\begin{aligned} \text{Annual PE}_1 &= (\text{Daily PE}_1, \text{ lb-PM}_{10}/\text{day}) \times (365 \text{ days/year}) \\ &= (1.1 \text{ lb-PM}_{10}/\text{day}) \times (365 \text{ days/year}) \\ &= 402 \text{ lb-PM}_{10}/\text{year} \end{aligned}$$

2. Post Project Potential to Emit (PE2)

There are no proposed changes to the throughput of the woodworking operation; therefore, PE2 = PE1 as shown below.

$$\text{Daily PE2} = 1.1 \text{ lb-PM}_{10}/\text{day}$$

$$\text{Annual PE2} = 402 \text{ lb-PM}_{10}/\text{year}$$

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.

Facility C-954 is a part of the same stationary source as Facility C-195 pursuant to the definition of Stationary Source in District Rule 2201, section 3.35. The potential emissions from both facilities are therefore included in this calculation. The SSPE1 for is referenced from Project C-1151495.

SSPE1 (lb/year)					
Permit Unit	NO _x	SO _x	PM ₁₀	CO	VOC
C-954-1-4	0	0	473	0	11,648
C-954-2-4					
C-954-14-2					
C-954-3-7	0	0	402	0	0
C-954-4-7	4,672	41	460	4,411	402
C-954-10-3	657	0	694	0	0
C-954-12-2	3,257	94	77	485	77
C-195-1-7	34,828	1,386	4,206	81,192	40,250
C-195-2-10	0	0	0	0	0
C-195-3-6	34,828	1,386	4,206	81,192	40,250
C-195-4-3	0	0	5,731	0	0
C-195-6-3	0	0	7,629	0	0
C-195-8-2	0	0	7,300	0	0
C-195-9-4	0	0	0	0	14,600
C-195-10-2	4,953	658	679	2,144	793
C-195-12-9	1,759	627	3,078	16,271	880
C-195-13-9	665	237	1,163	6,150	332
C-195-16-1	686	30	12	7	3
C-195-17-2	0	0	0	0	698
SSPE1	86,305	4,459	36,110	191,852	109,933

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.

The facility has not proposed to change the potential to emit for C-195-3. Therefore, SSPE1 = SSPE2.

SSPE2 (lb/year)					
Permit Unit	NO _x	SO _x	PM ₁₀	CO	VOC
SSPE2	86,305	4,459	36,110	191,852	109,933

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)
- Fugitive emissions, except for the specific source categories specified in 40 CFR 51.165

Major Source Determination (lb/year)					
	NO _x	SO _x	PM ₁₀	CO	VOC
Pre-Project SSPE (SSPE1)	86,305	4,459	36,110	191,852	109,933
Post Project SSPE (SSPE2)	86,305	4,459	36,110	191,852	109,933
Major Source Threshold	20,000	140,000	140,000	200,000	20,000
Major Source?	Yes	No	No	No	Yes

As seen in the table above, the facility is an existing Major Source for NO_x and VOC emissions and will remain a major source for NO_x and VOC with this project. The facility is not an existing Major Source for any other pollutant and will not become a Major Source for other pollutants with this project.

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)						
	NO2	VOC	SO2	CO	PM	PM10
Estimated Facility PE before Project Increase	43.2	54.9	2.2	95.9	18.1	18.1
PSD Major Source Thresholds	250	250	250	250	250	250
PSD Major Source ? (Y/N)	N	N	N	N	N	N

As shown 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.

As shown in Section VII.C.5 above, the facility is not a major source for PM₁₀ emissions. Therefore:

$$BE = PE1 = 402 \text{ lb PM}_{10}/\text{year}$$

7. SB 288 Major Modification

SB 288 Major Modification is defined in 40 CFR Part 51.165 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."

Since this facility is not a major source for any of the pollutants addressed in this project, this project does not constitute an SB 288 major modification.

8. 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.

Since this facility is not a major source for any of the pollutants addressed in this project, this project does not constitute a Federal major modification.

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)

- 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)(i). The PSD Major Source threshold is 250 tpy for any regulated NSR pollutant.

PSD Major Source Determination: Potential to Emit (tons/year)						
	NO2	VOC	SO2	CO	PM	PM10
Total PE from New and Modified Units	0	0	0	0	0.2	0.2
PSD Major Source threshold	250	250	250	250	250	250
New PSD Major Source?	N	N	N	N	N	N

As shown 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 C.

VIII. Compliance

Rule 2201 New and Modified Stationary Source Review Rule

A. Best Available Control Technology (BACT)

1. BACT Applicability

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 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

As discussed in Section VII above, the maximum potential to emit for this permit unit is 1.1 lb-PM₁₀/day. Therefore, it's not possible for the new emissions unit (new CNC router) to exceed 2 lb-PM₁₀/day individually; BACT for new units with PE > 2 lb/day purposes is not triggered.

b. Relocation of emissions units – PE > 2 lb/day

As discussed in Section I above, there are no emissions units being relocated from one stationary source to another; therefore BACT is not triggered.

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

As discussed in Section I above, the woodworking operation (permit unit C-954-3) is being modified by installing one new emissions unit (CNC router); there are no modified emissions units associated with this project. Therefore BACT is not triggered.

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 NO_x emissions. Therefore BACT is not triggered for any pollutant.

B. Offsets

1. Offset Applicability

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

This project only involves PM₁₀ emissions units. The SSPE2 is compared to the offset thresholds in the following table in order to determine whether offset requirements are triggered as the result of this project.

Offset Determination (lb/year)	
	PM ₁₀
SSPE2	39,157
Offset Thresholds	29,200
Offsets Triggered?	Yes

2. Quantity of Offsets Required

As seen above, the SSPE2 is greater than the offset thresholds for PM₁₀ emissions; therefore, offset calculations will be required for this project.

The quantity of offsets in pounds per year for PM₁₀ is calculated as follows for sources with an SSPE1 greater than the offset threshold levels before implementing the project being evaluated.

$$\text{Offsets Required} = (\sum[\text{PE2} - \text{BE}] + \text{ICCE}) \times \text{DOR}, \text{ for all new or modified emissions units in the project,}$$

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,

$$\text{BE} = \text{HAE}$$

With this project, the facility is proposing to modify the woodworking operation (permit unit C-954-3). As shown in Section VII.C.6, BE = PE1 = 402 lb/year for this operation.

Also, there is only one emissions unit associated with this project and there are no increases in cargo carrier emissions; therefore offsets can be determined as follows:

$$\text{Offsets Required} = ([\text{PE2} - \text{BE}] + \text{ICCE}) \times \text{DOR}$$

$$\begin{aligned} \text{PE2 (PM}_{10}\text{)} &= 402 \text{ lb/year} \\ \text{BE (PM}_{10}\text{)} &= 402 \text{ lb/year} \\ \text{ICCE} &= 0 \text{ lb/year} \end{aligned}$$

The correct distance offset ratio is dependent on the original location of emissions offsets and is only applicable if $([\text{PE2} - \text{BE}] + \text{ICCE})$ is greater than zero. The amount of PM_{10} offsets that need to be provided for this project is:

$$\begin{aligned} \text{Offsets Required} &= ([402 - 402] + 0) \times \text{DOR} \\ &= 0 \times \text{DOR} \\ &= 0 \text{ lb-PM}_{10}\text{/year} \end{aligned}$$

As seen above, quantity of offsets required for this project is 0 lb/year.

C. Public Notification

1. Applicability

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, and/or
- d. Any project with an SSIPE of greater than 20,000 lb/year for any pollutant.
- e. Any project which results in a Title V significant permit modification

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

New Major Sources are new facilities, which are also Major Sources. Since this is not a new facility, public noticing is not required for this project for New Major Source purposes.

As demonstrated in Sections VII.C.7 and VII.C.8, this project does not constitute an SB 288 or Federal Major Modification; therefore, public noticing for SB 288 or Federal 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, this project does not include a new emissions unit which has daily emissions greater than 100 lb/day for any pollutant, therefore public noticing for PE > 100 lb/day purposes is not required.

c. Offset Threshold

The SSPE1 and SSPE2 are compared to the offset thresholds in the following table.

Offset Thresholds				
Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	Offset Threshold	Public Notice Required?
NO _x	86,305	86,305	20,000 lb/year	No
SO _x	4,459	4,459	54,750 lb/year	No
PM ₁₀	36,110	36,110	29,200 lb/year	No
CO	191,852	191,852	200,000 lb/year	No
VOC	109,933	109,933	20,000 lb/year	No

As detailed 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.

SSIPE Public Notice Thresholds					
Pollutant	SSPE2 (lb/year)	SSPE1 (lb/year)	SSIPE (lb/year)	SSIPE Public Notice Threshold	Public Notice Required?
NO _x	86,305	86,305	0	20,000 lb/year	No
SO _x	4,459	4,459	0	20,000 lb/year	No
PM ₁₀	36,110	36,110	0	20,000 lb/year	No
CO	191,852	191,852	0	20,000 lb/year	No
VOC	109,933	109,933	0	20,000 lb/year	No

As demonstrated above, the SSIPEs for all pollutants were less than 20,000 lb/year; therefore public noticing for SSIPE purposes is not required.

e. Title V Significant Permit Modification

As shown in the Discussion of Rule 2520 below, this project does not constitute a Title V significant modification. Therefore, public noticing for Title V significant modifications is not required for this project.

2. Public Notice Action

As discussed above, this project will not result in emissions, for any pollutant, which would subject the project to any of the noticing requirements listed above. Therefore, public notice will not be required for 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:

- *The amount of sawdust collected shall not exceed 2,160 pounds per day. [District Rule 2201]*
- *The PM₁₀ emissions from the dust collector shall not exceed 1.1 pounds in any one day. [District Rule 2201]*

E. Compliance Assurance

1. Source Testing

District Policy 1705 (10/9/97) section II step 4 requires initial source testing for non-combustion equipment served by a baghouse with expected PM₁₀ emissions of 30 pounds per day or greater. Pursuant to section VII.C.2 of this document, the PM₁₀ emissions from this permit unit will not exceed 30 pounds per day; therefore, initial source testing will not be required.

2. Monitoring

The following monitoring requirements will be placed on the Authority to Construct permit:

- *{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]*
- *The baghouse shall operate at all times with a minimum differential pressure of 0.5 inches water column and a maximum differential pressure of 4.0 inches water column. [District Rule 2201]*

3. Recordkeeping

The following conditions will be placed on the Authority to Construct Permit.

- *Permittee shall record on a daily basis the amount of sawdust collected in pounds. [District Rule 2201]*
- *Records of all maintenance of the dust collector, including all change outs of filter media, shall be maintained. [District Rule 2201]*

- *Differential operating pressure shall be monitored and recorded on each day that the dust collector operates. [District Rule 2201]*
- *Records of the daily differential operating pressure readings shall be retained on-site. [District Rule 2201]*
- *{1958} All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]*

4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

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

This facility is subject to this Rule, and has received their Title V Operating Permit. The proposed modification is a Minor Modification to the Title V Permit.

In accordance with Rule 2520, these modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
 - a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
 - b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
6. Do not seek to consolidate overlapping applicable requirements.

As discussed above, the facility has not applied for a Certificate of Conformity (COC). Therefore, the facility must apply to modify their Title V permit with a minor modification, prior to operating with the proposed modifications. Continued compliance with this rule is expected. The facility may construct/operate under the ATC upon submittal of the Title V minor modification application.

Rule 2530 Federally Enforceable Potential to Emit

The purpose of this rule is to restrict the emissions of a stationary source so that the source may elect to be exempt from the requirements of Rule 2520. Pursuant to Rule 2530, since this facility has elected exemption from the requirements of Rule 2520 by ensuring actual emissions from the stationary source in every 12-month periods to not exceed the following: ½ the major source thresholds for NO_x, VOCs, CO, and PM₁₀; 50 tons per year SO₂; 5 tons per year of a single HAP; 12.5 tons per year of any combination of HAPs; 50 percent of any lesser threshold for a single HAP as the EPA may establish by rule; and 50 percent of the major source threshold for any other regulated air pollutant not listed in Rule 2530.

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 wood furniture operations.

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 requirements of 40 CFR Part 63, Subpart JJ (National Emission Standards for Wood Furniture Manufacturing Operations) are applicable to facilities that is engaged, either in part or in whole, in the manufacture of wood furniture or wood furniture components and that is a Major HAP source (as defined in 40 CFR 63.2 – Definitions).

As shown in Appendix D, the facility is not a Major Source of HAP emissions. Therefore, the requirements of 40 CFR 63 Subpart JJ do not apply.

Rule 4101 Visible Emissions

As long as the equipment is properly maintained and operated, the emission units shall not discharge, into the atmosphere, any air contaminant, other than uncombined water vapor, for a period or periods aggregating more than three (3) minutes in any one (1) hour which is as dark, or darker, in shade as that designated as No. 1 on the Ringelmann Chart or equivalent to 20% opacity. The following condition will be retained on the permit:

- *{15} 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]*

Per District Policy SSP 1005, the visible emissions from processes served by a baghouse or fabric filter shall not equal or exceed 5% opacity for a period or periods aggregating more than three (3) minutes in any one (1) hour. If the equipment is properly maintained this condition should not be exceeded. The following condition will be retained on the permit:

- *Visible emissions from the exhaust of the dust collector serving the woodworking operation shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201]*

Rule 4102 Nuisance

As long as the equipment is properly maintained and operated the emission units will not discharge any air contaminants or other materials which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such person or public or which cause or have a natural tendency to cause injury or damage to business or property. The following condition will be retained on the permit:

- *{98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]*

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.

As demonstrated above, there are no increases in emissions associated with this project, therefore a health risk assessment is not necessary and no further risk analysis is required.

Rule 4201 Particulate Matter Concentration

Rule 4201 requires that particulate matter emissions shall not exceed 0.1 grain per cubic foot of gas at dry standard condition.

The PM₁₀ concentration from the dust collector is limited 0.0004 grains/dscf; therefore, the particulate matter concentration from the dust collector should be less than the maximum allowable 0.1 grains/dscf.

PM₁₀ Emissions: 1.1 lb/day
Fraction PM₁₀: 0.4 lb PM₁₀/lb PM
Operating Hours: 24 hr/day
Air Flow Rate: 31,000 scfm

PM Emissions (lb/day) = PM₁₀ Emissions (lb/day) ÷ Fraction PM₁₀
= 1.1 lb/day ÷ 0.4
= 2.8 lb/day

PM Concentration (gr/ft³) = [2.8 lb/day x 7,000 gr/lb] ÷ [31,000 scfm x 60 min/hr x 24 hr/day]
= 0.0004 gr/dscf

Therefore, the particulate matter concentration from this dust collector will be less than the maximum allowable 0.1 grains/dscf.

Rule 4202 Particulate Matter - Emission Rate

The purpose of this rule is to limit particulate matter emissions by establishing allowable emission rates. Per section 4.1, particulate matter emissions from any source operation shall not exceed the allowable hourly emission rate as calculated using the following applicable formulas:

$$E = 3.59 \times P^{0.62} \quad \text{if } P \leq 30 \text{ tons/hr}$$
$$E = 17.31 \times P^{0.16} \quad \text{if } P > 30 \text{ tons/hr}$$

Where,

E = emissions in lb/hr

P = process weight rate in tons/hr

Assumptions:

- The maximum process weight is 2,160 lb/day (per applicant)
- The maximum daily operating schedule will not exceed 24 hr/day (per applicant)

Calculations:

$$\begin{aligned} \text{Process Weight} &= ((2,160 \text{ lbs/day}) \div (24 \text{ hr/day})) \times (1 \text{ ton}/2,000 \text{ lb}) \\ &= 0.045 \text{ ton/hr} \end{aligned}$$

$$\begin{aligned} E &= 3.59 P^{0.62} \\ &= 3.59(0.045)^{0.62} \\ &= 0.5 \text{ lb/hr} \end{aligned}$$

The applicant has proposed an emission rate of 0.1 lb PM/hr (1.1 lb PM₁₀/day ÷ 40% ÷ 24 hr).

$$\begin{aligned} E_{\text{max}} &= 0.5 \text{ lb/hr} \\ E_{\text{actual}} &= 0.1 \text{ lb/hr} \end{aligned}$$

Since the proposed PM emission rate of 0.1 lb/hr is less than the allowable maximum emission rate of 0.5 lb/hr, this unit is expected to operate in compliance with this rule.

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.

The District performed an Engineering Evaluation (this document) for the proposed project and determined that all project specific emission unit(s) are exempt from Best Available Control Technology (BACT) requirements. Furthermore, the District has determined that potential emission increases would have a less than significant health impact on sensitive receptors.

Issuance of permits for emissions units not subject to BACT requirements and with health impact less than significant is a matter of ensuring conformity with applicable District rules and regulations and does not require discretionary judgment or deliberation. Thus, the District concludes that this permitting action constitutes a ministerial approval. Section 21080 of the Public Resources Code exempts from the application of CEQA those projects over which a public agency exercises only ministerial approval. Therefore, the District finds that this project is exempt from the provisions of CEQA.

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Issue ATC C-954-3-8 subject to the permit conditions on the attached draft ATC in **Appendix A**.

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
C-954-3-8	3020-01-F	558.3 electric hp	\$637.00

Appendixes

- A: Draft ATC
- B: Current PTO and Recently Issued ATC
- C: Quarterly Net Emissions Change (QNEC)
- D: Major HAP Source Determination

APPENDIX A
Draft ATC

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: C-954-3-8

LEGAL OWNER OR OPERATOR: PRISON INDUSTRY AUTHORITY--AVENAL

MAILING ADDRESS: #1 KINGS WAY
AVENAL, CA 93204

LOCATION: 1 KINGS WAY
AVENAL, CA 93204

EQUIPMENT DESCRIPTION:

MODIFICATION OF WOOD FURNITURE FACTORY LOCATED IN BLDG #290 WITH WOODWORKING OPERATION CONSISTING OF 4 TABLE SAWS, 1 CHOP SAW, 1 BAND SAW, 2 PANEL SAWS, 1 CNC PANEL SAW, 1 CNC SAW, 5 SANDERS, 2 SHAPERS, 1 CLEANER, 1 PLANER, 1 EDGE BANDER, 4 CNC ROUTERS, 1 PIN ROUTER, 2 DRAWER DOVETAILER AND OTHER RELATED EQUIPMENT, ALL SERVED BY AN R.P. RICHARDS MODEL 12-216-3464 BAGHOUSE DUST COLLECTOR WITH REVERSE PULSED-JET CLEANING SYSTEM: REPLACE ONE CNC ROUTER WITH A NEW CNC ROUTER, NO INCREASE IN THROUGHPUT OR EMISSIONS

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Authority to Construct (ATC) C-954-3-7 shall be implemented prior to or concurrently to this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit
4. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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.

Seyed Sadredin, Executive Director, APCO

Arnaud Marjolle, Director of Permit Services

C-954-3-8 Apr 28 2016 11:11AM - OGDENA Joint Inspection NOT Required

6. 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] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
8. Visible emissions from the exhaust of the dust collector serving the woodworking operation shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The amount of sawdust collected shall not exceed 2,160 pounds per day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The PM10 emissions from the dust collector shall not exceed 1.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. All ducting and control equipment shall be in good working order to prevent fugitive particulate emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
12. All filters shall be properly maintained and must be in place during the woodworking operation(s). [District Rule 2201] Federally Enforceable Through Title V Permit
13. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
14. 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
15. The baghouse shall operate at all times with a minimum differential pressure of 0.5 inches water column and a maximum differential pressure of 4 inches water column. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Differential operating pressure shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Dust collector exhaust fan(s) shall be switched on prior to the start-up of any woodworking equipment. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Replacement bags numbering at least 10% of the total number of bags in the baghouse shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
19. 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
20. Dust collector filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes, or any evidence of particulate matter breakthrough and shall be replaced as needed. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Permittee shall record on a daily basis the amount of sawdust collected in pounds. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Records of dust collector maintenance, inspections, and repairs including all change outs of filter media, shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records of the daily differential operating pressure readings shall be retained on-site. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

APPENDIX B
Current PTO

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-954-3-6

EXPIRATION DATE: 08/31/2017

EQUIPMENT DESCRIPTION:

WOOD FURNITURE FACTORY LOCATED IN BLDG #290 WITH WOODWORKING OPERATION CONSISTING OF 4 TABLE SAWS, 1 CHOP SAW, 1 BAND SAW, 2 PANEL SAWS, 1 CNC PANEL SAW, 1 CNC SAW, 5 SANDERS, 2 SHAPERS, 1 CLEANER, 1 PLANER, 1 EDGE BANDER, 4 CNC ROUTERS, 1 PIN ROUTER, 2 DRAWER DOVETAILER AND OTHER RELATED EQUIPMENT, ALL SERVED BY AN R.P. RICHARDS MODEL 12-216-3464 BAGHOUSE DUST COLLECTOR WITH REVERSE PULSED-JET CLEANING SYSTEM

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
2. 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] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. Visible emissions from the exhaust of the dust collector serving the woodworking operation shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The PM10 emissions from the dust collector shall not exceed 1.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All ducting and control equipment shall be in good working order to prevent fugitive particulate emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
7. All filters shall be properly maintained and must be in place during the woodworking operation(s). [District Rule 2201] Federally Enforceable Through Title V Permit
8. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
9. 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
10. The baghouse shall operate at all times with a minimum differential pressure of 0.5 inches water column and a maximum differential pressure of 4 inches water column. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Differential operating pressure shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Dust collector exhaust fan(s) shall be switched on prior to the start-up of any woodworking equipment. [District Rule 2201] 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. Replacement bags numbering at least 10% of the total number of bags in the baghouse shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
14. 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
15. Dust collector filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes, or any evidence of particulate matter breakthrough and shall be replaced as needed. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Records of dust collector maintenance, inspections, and repairs including all change outs of filter media, shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Records of the daily differential operating pressure readings shall be retained on-site. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

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



AUTHORITY TO CONSTRUCT

PERMIT NO: C-954-3-7

ISSUANCE DATE: 07/28/2015

LEGAL OWNER OR OPERATOR: PRISON INDUSTRY AUTHORITY--AVENAL

MAILING ADDRESS: #1 KINGS WAY
AVENAL, CA 93204

LOCATION: 1 KINGS WAY
AVENAL, CA 93204

EQUIPMENT DESCRIPTION:

MODIFICATION OF WOOD FURNITURE FACTORY LOCATED IN BLDG #290 WITH WOODWORKING OPERATION CONSISTING OF 4 TABLE SAWS, 1 CHOP SAW, 1 BAND SAW, 2 PANEL SAWS, 1 CNC PANEL SAW, 1 CNC SAW, 5 SANDERS, 2 SHAPERS, 1 CLEANER, 1 PLANER, 1 EDGE BANDER, 4 CNC ROUTERS, 1 PIN ROUTER, 2 DRAWER DOVETAILER AND OTHER RELATED EQUIPMENT, ALL SERVED BY AN R.P. RICHARDS MODEL 12-216-3464 BAGHOUSE DUST COLLECTOR WITH REVERSE PULSED-JET CLEANING SYSTEM: REPLACE TWO OF THE FOUR EXISTING CNC ROUTERS WITH THREE NEW CNC ROUTERS (5 TOTAL) AND INSTALL AN ADDITIONAL EDGE BANDER (2 TOTAL)

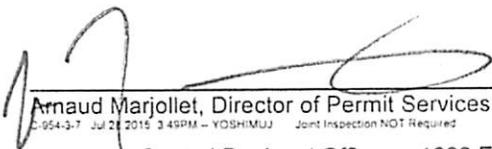
CONDITIONS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. 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] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
5. Visible emissions from the exhaust of the dust collector serving the woodworking operation shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The amount of sawdust collected shall not exceed 2,160 pounds per day. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU **MUST** NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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.

Seyed Sadredin, Executive Director / APCO



Arnaud Marjollet, Director of Permit Services
C-954-3-7 Jul 28 2015 3:45PM - YOSHIMUJ Joint Inspection NOT Required

7. The PM10 emissions from the dust collector shall not exceed 1.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. All ducting and control equipment shall be in good working order to prevent fugitive particulate emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
9. All filters shall be properly maintained and must be in place during the woodworking operation(s). [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. 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
12. The baghouse shall operate at all times with a minimum differential pressure of 0.5 inches water column and a maximum differential pressure of 4 inches water column. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Differential operating pressure shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Dust collector exhaust fan(s) shall be switched on prior to the start-up of any woodworking equipment. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Replacement bags numbering at least 10% of the total number of bags in the baghouse shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
16. 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
17. Dust collector filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes, or any evidence of particulate matter breakthrough and shall be replaced as needed. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Permittee shall record on a daily basis the amount of sawdust collected in pounds. [District Rule 2201]
19. Records of dust collector maintenance, inspections, and repairs including all change outs of filter media, shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Records of the daily differential operating pressure readings shall be retained on-site. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
22. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit

APPENDIX C
Quarterly Net Emissions Change (QNEC)

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:

QNEC = PE2 - PE1, where:

- QNEC = Quarterly Net Emissions Change for each emissions unit, lb/qtr.
- PE2 = Post Project Potential to Emit for each emissions unit, lb/qtr.
- PE1 = Pre-Project Potential to Emit for each emissions unit, lb/qtr.

Using the values in Sections VII.C.2 and VII.C.6 in the evaluation above, quarterly PE2 and quarterly PE1 can be calculated as follows:

$$\begin{aligned} \text{PE2}_{\text{quarterly}} &= \text{PE2}_{\text{annual}} \div 4 \text{ quarters/year} \\ &= 402 \text{ lb/year} \div 4 \text{ qtr/year} \\ &= 100.5 \text{ lb PM}_{10}\text{/qtr} \end{aligned}$$

$$\begin{aligned} \text{PE1}_{\text{quarterly}} &= \text{PE1}_{\text{annual}} \div 4 \text{ quarters/year} \\ &= 402 \text{ lb/year} \div 4 \text{ qtr/year} \\ &= 100.5 \text{ lb PM}_{10}\text{/qtr} \end{aligned}$$

Quarterly NEC [QNEC]			
	PE2 (lb/qtr)	PE1 (lb/qtr)	QNEC (lb/qtr)
NO _x	0	0	0
SO _x	0	0	0
PM ₁₀	100.5	100.5	0
CO	0	0	0
VOC	0	0	0

APPENDIX D
Major HAP Source Determination

Fuel Burning Permit Units	MMBtu/hr	BHP-hr
C-195-1-9	38.5	-
C-195-2-10	19.959	-
C-195-3-9	2.6	-
C-195-4-3	-	-
C-195-5-0	-	-
C-195-6-3	-	-
C-195-7-0	-	-
C-195-8-2	-	-
C-195-9-4	0.4	-
C-195-10-2	-	1,608
C-195-11-1	-	-
C-195-12-10	25.1	-
C-195-13-10	25.1	-
C-195-14-1	-	-
C-195-16-1	-	395
C-195-17-2	-	-
C-954-1-4	-	-
C-954-2-4	-	-
C-954-3-6	-	-
C-954-4-7	5.44	-
C-954-5-1	-	-
C-954-6-1	-	-
C-954-7-0	-	-
C-954-8-0	-	-
C-954-9-0	-	-
C-954-10-3	0.75	-
C-954-12-2	-	1,250
C-954-14-2	-	-
Btu-hr to MMBtu/hr conversion*	117.8	8.3
Total Facility MMBtu/hr	126.1	

* 1 BHP-hr = 0.002544 MMBtu/hr

HAP Pollutant	Pollutant Emission Factor (lb/MMBtu)	Total Facility Heat Input (MMBtu/hr)	Annual Operations (hours/year)	Ton- HAP/year
1,3-Butadiene	4.30E-07	126.1	8,760	2.3750E-04
Acetaldehyde	4.00E-05	126.1	8,760	2.2093E-02
Acrolein	6.40E-06	126.1	8,760	3.5348E-03
Benzene	1.20E-06	126.1	8,760	6.6278E-04
Ethylbenzene	1.12E-04	126.1	8,760	6.1860E-02
Formaldehyde	3.20E-05	126.1	8,760	1.7674E-02
Naphthalene	7.10E-04	126.1	8,760	3.9215E-01
PAH	1.30E-06	126.1	8,760	7.1801E-04
Propylene Oxide	2.90E-05	126.1	8,760	1.6017E-02
Toluene	1.30E-04	126.1	8,760	7.1801E-02
Xylenes	6.40E-05	126.1	8,760	3.5348E-02
Facility Total				0.62