# Notice of Construction (NOC) Worksheet

PUGET SOUND
Clean Air Agency

| | |
|---|---|
| **Source:** Canyon Creek Cabinet Co | **NOC Number:** 12215 |
| **Installation Address:** 16726 Tye St SE \| Monroe, WA 98272 | **Registration Number:** 18467 |
| **Contact Name:** John Earl | **Contact Email:** johne@canyoncreek.com |
| **Applied Date:** 12/15/2021 | **Contact Phone:** (206) 409-4438 |
| **Engineer:** Carl Slimp | **Inspector:** Carrie Miller |

## A. DESCRIPTION

For the Order of Approval:
Canyon Creek Cabinet Company (CCCC) will install a new line that consists of two automatic spray booths, two automatic sanding machines, two manual sanding tables, two automatic part cleaners, two vertical ovens and two horizontal ovens and one part flipper. To support the new system, two small (<2 MMBtu per hour heat input each) natural gas-fired boilers will be installed to provide heat for the four ovens in the system.

The proposed project will also require a baghouse to control particulate matter emissions from the sanding and parts cleaner equipment. For the proposed flat line system, a 45,000cfm Superior Filter Model #P14-494-12 with 7,410 square feet of filter media resulting in a 6.07:1 air-to-cloth ratio is proposed.

No increase in permitted emissions or changes in coating constituents is proposed. The new line will be as efficient as the current line.

**Facility**

The current finishing system consists of five sub systems: a hang line, Pater Noster, three batch booths, glaze booth, and small hang line. Within the hang line, there are four spray booths and six ovens. Two parallel conveyor tracks move parts through the process. The Pater Noster is a conveyor tray system with six booths and two large oven sections. The batch booths and small hang line allow finishing for larger parts that cannot be hung or put on a tray. The glaze booth is a small booth to spray glazes and accent finishes.

Most of the finish materials are supplied to each booth through stainless steel recirculating lines starting from three different supply rooms: paint pump room, paint kitchen, and stain booth. The paint finish process includes paint from the paint pump room and is catalyzed at the booths. It is a three-step process: paint, paint; topcoat. The stain process is a four-step process: stain, seal, seal; topcoat. The topcoats are catalyzed at the booths. Currently, finish is applied manually.

The proposed future operations would eliminate the hang line and Pater Noster, to be replaced with the conveyor belt finish system with two automated spray booths and four ovens. The project targets product quality and safety improvements; it will not increase capacity. The automation of the spray

operation will provide a better and more consistent application of the coatings as compared with manual spraying. This in turn will improve the quality of the finish that the consumer market requires. Additional benefits of the project include reduced re-work and improved transfer efficiency which will reduce the amount of finish materials used.

**Proposed Equipment/Activities**

Canyon Creek Cabinet Company (CCCC) is an existing and permitted (Registration Number 18467) facility located at 16726 Tye Street SE in Monroe, Washington. The existing hang line (NOC 7212) and Pater-Noster lines (NOC 9690) will be replaced with an automated and computerized conveyor and spraying flat line system.

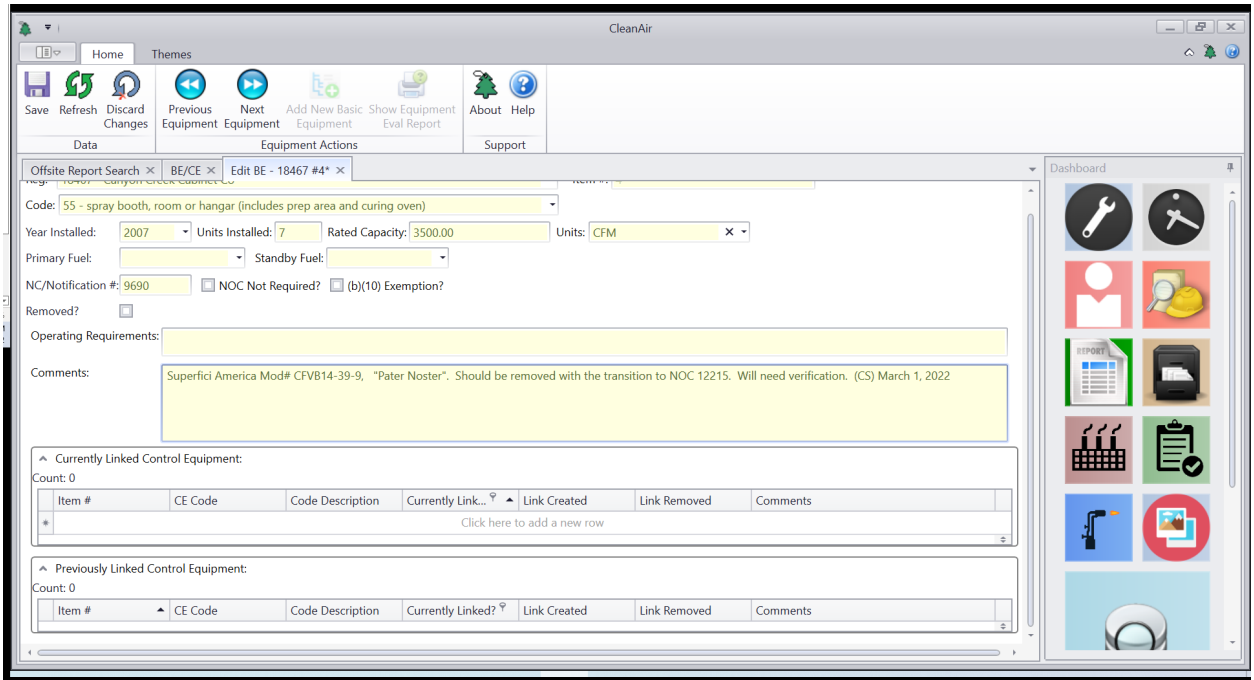
**Permit History**

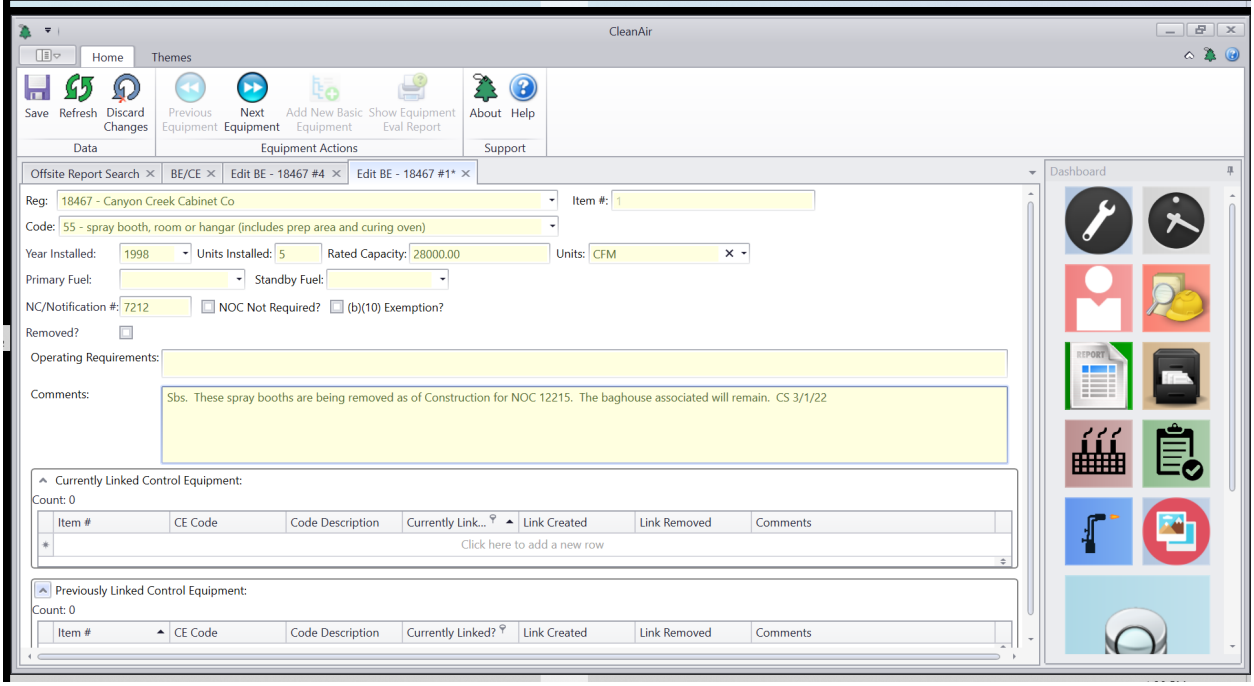
Canyon Creek Cabinet Co are currently operating under the following NOCs

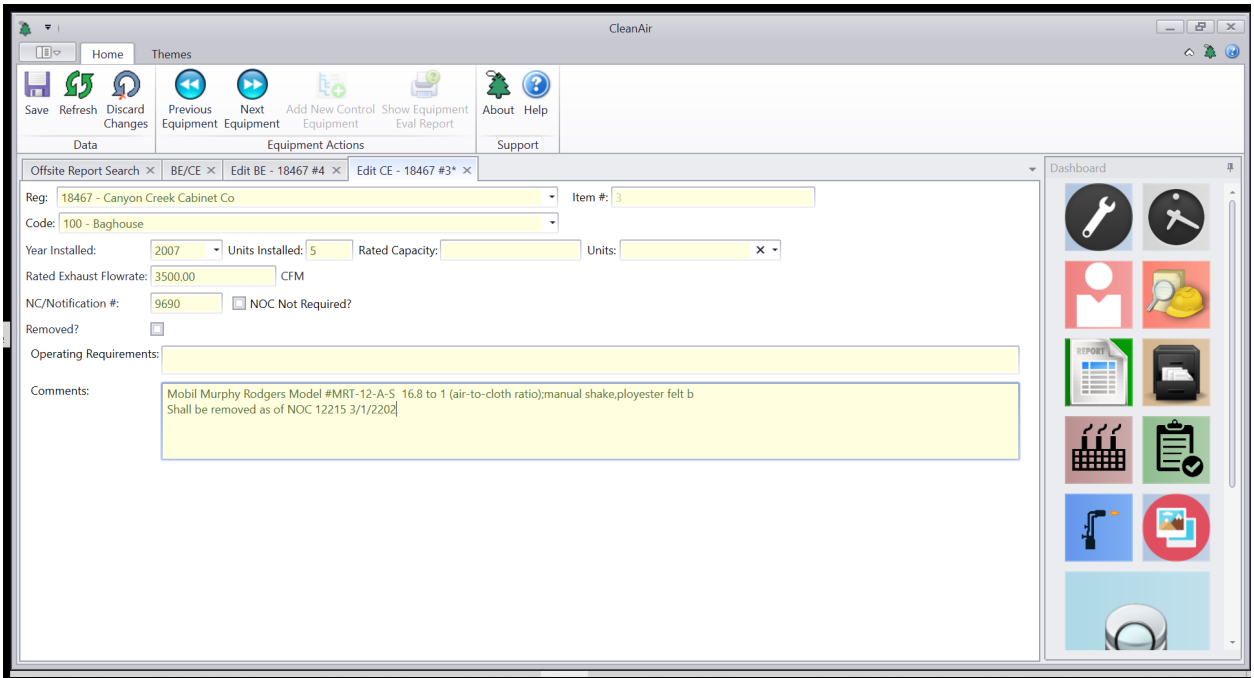
| | |
|---|---|
| NOC 7212 | One Superior Systems 14-494-12 Baghouse rated at 74,000 cfm and six SBS Dry Filter Spray Coating Booths rated at 28,000 cfm.<br>This permit defines canyon creek as a synthetic minor |
| NOC 7464 | One Torit Baghouse rated at 2,200 cfm to control emissions from Woodwoorking Equipment. |
| NOC 8861 | Two new Glazing Booths; one booth used for high transfer efficiency spray coating of wood stain and the other booth used for wiping off excess stain from application made in first booth. New UV Finishing Line consists of a combination roller-coating and ultraviolet curing unit (curing unit is exempt from new source review requirement under Puget Sound Clean Air Agency Regulation I, Section 6.03(c)(63)). |
| NOC 9559 | Spray Systems Inc. Model I-1687-C spray booth with dry filtration system, to be used exclusively for application of designated “hard to spray coatings” on the “HTSC line.” |
| NOC 9690 | A Superfici America pivoted tray conveyor “pater noster” which consists of seven x spray booth benches w/dry filter rated at 3,500 CFM, five x denibbing stations rated at 7,000 CFM each which exhaust to five x portable baghouses rated at 3,500 CFM each and two drying tunnels rated at 0.57 MMBtu/hr each. |
| NOC 9743 | One Global Finishing Solutions Model # SDG-1010PDT-26-S Spray booth rated at 13,000 CFM for spray coating miscellaneous wood parts. |

This Notice of Approval will require the removal of the pater noster system, denibbing stations and five portable baghouses permitted under 9690 as well as the six SBS dry filter spray coating booths permitted under NOC 7212. This permit will cancel and supersede NOC 9690.

## B. DATABASE INFORMATION




CleanAir
Home
Themes
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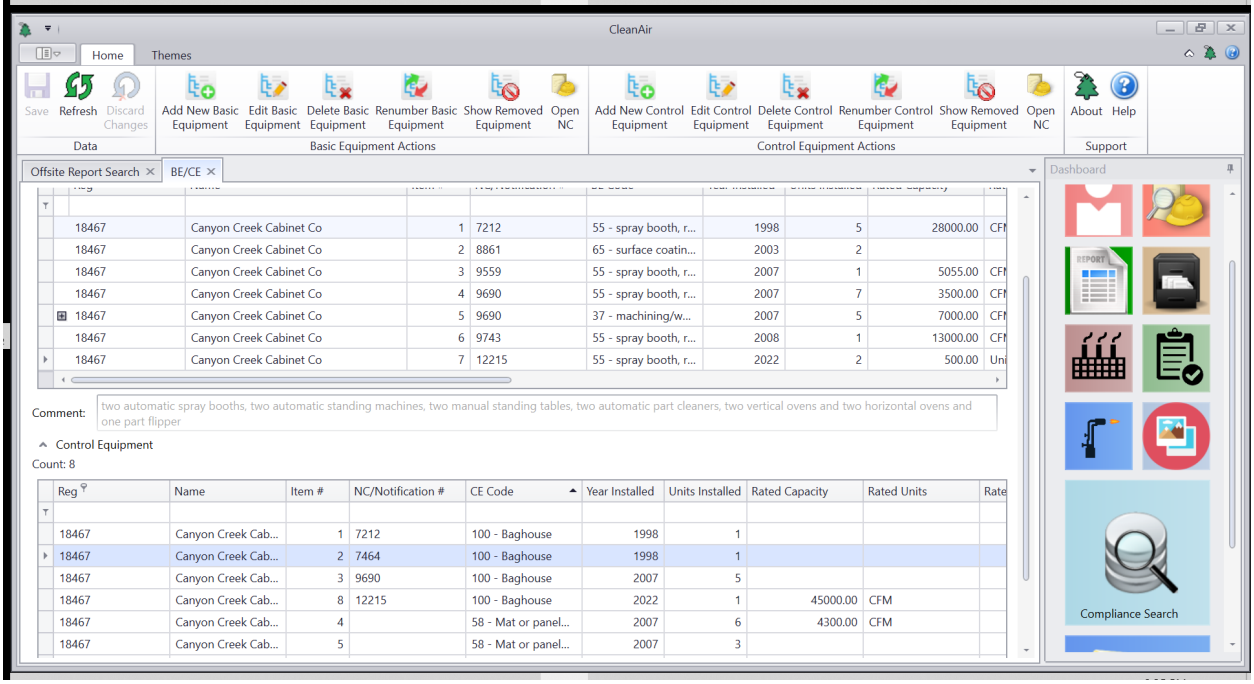
Discard Changes
Previous Equipment
Next Equipment
Add New Control Equipment
Show Equipment Eval Report
About
Help
Data
Equipment Actions
Support
Offsite Report Search
BE/CE
Edit BE - 18467 #4
Edit CE - 18467 #3*
Dashboard
Reg: 18467 - Canyon Creek Cabinet Co
Item #: 3
Code: 100 - Baghouse
Year Installed: 2007
Units Installed: 5
Rated Capacity:
Units:
Rated Exhaust Flowrate: 3500.00 CFM
NC/Notification #: 9690
NOC Not Required?
Removed?
Operating Requirements:
Comments:
Mobil Murphy Rodgers Model #MRT-12-A-S 16.8 to 1 (air-to-cloth ratio);manual shake,ployester felt b
Shall be removed as of NOC 12215 3/1/2202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Renumber Control Equipment
Show Removed Equipment
Open NC
About
Help
Data
Basic Equipment Actions
Control Equipment Actions
Support
Offsite Report Search
BE/CE
Dashboard
18467 Canyon Creek Cabinet Co 1 7212 55 - spray booth, r... 1998 5 28000.00 CFM
18467 Canyon Creek Cabinet Co 2 8861 65 - surface coatin... 2003 2
18467 Canyon Creek Cabinet Co 3 9559 55 - spray booth, r... 2007 1 5055.00 CFM
18467 Canyon Creek Cabinet Co 4 9690 55 - spray booth, r... 2007 7 3500.00 CFM
18467 Canyon Creek Cabinet Co 5 9690 37 - machining/w... 2007 5 7000.00 CFM
18467 Canyon Creek Cabinet Co 6 9743 55 - spray booth, r... 2008 1 13000.00 CFM
18467 Canyon Creek Cabinet Co 7 12215 55 - spray booth, r... 2022 2 500.00
Comment:
two automatic spray booths, two automatic standing machines, two manual standing tables, two automatic part cleaners, two vertical ovens and two horizontal ovens and one part flipper
Control Equipment
Count: 8
Reg
Name
Item #
NC/Notification #
CE Code
Year Installed
Units Installed
Rated Capacity
Rated Units
18467 Canyon Creek Cab... 1 7212 100 - Baghouse 1998 1
18467 Canyon Creek Cab... 2 7464 100 - Baghouse 1998 1
18467 Canyon Creek Cab... 3 9690 100 - Baghouse 2007 5
18467 Canyon Creek Cab... 8 12215 100 - Baghouse 2022 1 45000.00 CFM
18467 Canyon Creek Cab... 4 58 - Mat or panel... 2007 6 4300.00 CFM
18467 Canyon Creek Cab... 5 58 - Mat or panel... 2007 3
Compliance Search

| | | | |
|---|---|---|---|
| **New NSPS due to this NOCOA?** | **No** | **Applicable NSPS:** | **Delegated?** |
| **New NESHAP due to this NOCOA?** | **No** | **Applicable NESHAP:** | **Delegated?** |
| **New Synthetic Minor due to this NOCOA?** | **No** | | |

CCCC is an emission capped source, in order to avoid the requirement to have an air operating permit or applicability of a National Emission Standard for Hazardous Air Pollutants.
The SYN minor cap is from NOC # 7212: "Canyon Creek Cabinet Co. shall limit facility-wide emissions of hazardous air pollutants (HAPs) in Section 112(b) of the federal Clean Air Act to less than 9.9 tons of any single listed HAP, 24.9 tons of all HAPs combined, and 99 tons of volatile organic compounds (VOCs) during any 12 consecutive months after the date of this Order.

If CCCC were to emit enough to become a major source as defined in 40 CFR part 63, subpart A, § 63.2, then 40 CFR part 63 subpart JJ would apply.

**C. NOC FEES AND ANNUAL REGISTRATION FEES**

**NOC Fees:**

Fees have been assessed in accordance with the fee schedule in Regulation I, Section 6.04. All fees must be paid prior to issuance of the final Order of Approval.

| Fee Description | Cost | Amount Received (Date) |
|---|---|---|
| Filing Fee | $ 1,550 | |
| Equipment (6.04a / $650 per piece) 2 spray booths and 1 baghouse | $ 1,950 | |
| Public notice (6.04a) | $ 750 | |
| Document Review to Determine the Notice of Construction Permitting History of an Emissions Unit | $ 650 | |
| SEPA (DNS) | $ 900 | |
| Filing received | | $ 1,550 (12/16/2021) |
| Additional fee received | | $ 4,350 (5/9/2022) |
| **Total** | $ 5,800 | |

**Registration Fees**:
Registration fees are assessed to the facility on an annual basis. Fees are assessed in accordance with Regulation I, Section 5.07.

This NOC shall not change registration fees. The 2021 registration invoice is included below.

PUGET SOUND
Clean Air Agency

**Puget Sound Clean Air Agency**
1904 Third Avenue, Suite 105
Seattle, WA 98101-3317
Tax ID: 91-0823558
206.689.4072

## Invoice for Year 2021 Registration Fees

| Bill To: |
|---|
| Canyon Creek Cabinet Co<br>16726 Tye St SE<br>Monroe, WA 98272<br><br>Attention: Accounts Payable |

| Invoice Date: | Invoice #: |
|---|---|
| November 20, 2020 | 20210053 |
| **Due Date:** | **Terms:** |
| January 04, 2021 | Net 45 Days |
| **Facility ID (Registration #):** | |
| 18467 | |

**Site Address:** ***Canyon Creek Cabinet Co***
***16726 Tye St SE, Monroe, WA 98272***

The annual registration fee is required by Washington State law and Puget Sound Clean Air Agency's Regulation I.

| Facility Fees and Applicable Regulations | | | Charges |
|---|---|---|---|
| **Base Fee for Registered Sources. Reg I, 5.07(c)** | | | $ 1,150.00 |
| Reg I, 5.03(a)(3) - Facilities with annual emissions that meet or exceed thresholds<br>Reg I, 5.03(a)(4)(D) - Facilities with spray coating operations<br>Reg I, 5.03(a)(6) - Facilities with particulate control equipment (>= 2,000 cfm) | | | |
| **Additional Fees:** | | | |
| Reg I, 5.07(c)(2) - Facilities with annual emissions that meet or exceed thresholds | | | $ 2,300.00 |
| | | | **$ 3,450.00** |
| **Emission Surcharges - Reg I, 7.07(b)(2)** | **Tons in 2019** | **Per Ton** | |
| HAP (Hazardous Air Pollutants) | 2 | $ 60 | $ 120.00 |
| VOC (Volatile Organic Compounds) | 72 | $ 60 | $ 4,320.00 |
| | | | **$ 4,440.00** |
| **Fee Totals** | | | |
| **TOTAL REGISTRATION FEE** | | | **$ 7,890.00** |
| ***The Total Registration Fee is due by January 04, 2021. If unpaid after January 04, 2021, the facility may be subject to enforcement action with civil penalties (Reg I, 5.07(b)).*** | | | |

**Pay online and confirm payment: www.pscleanair.gov/annualfee**
This copy is for your records. If paying by check, please mail the yellow copy with your payment.
Your canceled check is your receipt.

11/06/2020

## D. STATE ENVIRONMENTAL POLICY ACT (SEPA) REVIEW

State Environmental Policy Act (SEPA) review was conducted in accordance with Regulation I, Article 2. The SEPA review is undertaken to identify and help government decision-makers, applicants, and the public to understand how a project will affect the environment. A review under SEPA is required for projects that are not categorically exempt in WAC 197-11-800 through WAC 197-11-890. A new source review action which requires a NOC application submittal to the Agency is not categorically exempt.

The original SEPA is quoted below:
*The City of Monroe was the lead agency for SEPA environmental review that was done for construction of the original building. Monroe City contact is Hiller West, the Director of Community Development and the SEPA Administrator for the City of Monroe (360) 863-4531, Kim Shaw at (360) 794-7400, or Judy Gribble at (360) 863-4533. According to Ms. Klaus, the City of Monroe issued a SEPA DNS for the building in which the proposed facility is to be housed. She faxed me a copy of the original DNS on May 1, 2003. The original DNS had been issued on April 10, 1997.*

***SEPA for the original proposal may be used for this project***
*DNS No. 970331-1.DNS was issued on April 10, 1997 by Mr. Richard D. Fredlund, former Director of Community Development. The DNS was issued for the SEPA analysis done for construction by Canyon Creek Cabinet Co. of a 160,000 square foot office, cabinet and wood products manufacturing and storage facility, with a future 40,000 square foot addition.*

*Under WAC 197-11-600, we may use environmental documents that have previously been prepared in order to evaluate environmental impacts due to a proposed action. The original DNS may be used without any changes, because we have seen no significant changes to the facility, and our inspectors have not found any new information indicating probable significant environmental impacts resulting from this proposal. We may use the existing environmental documents unchanged if we are not dissatisfied with the original DNS. We will be, in effect, adding information about a proposal (this NOC application and draft approval).*

***3. Addendum 1 – done for NOC No. 8861 in June 2003***
*That project was two new glazing booths; one booth used for high transfer efficiency spray coating of wood stain and the other booth used for wiping off excess stain from application made in first booth. Also a new UV finishing Line consists of a combination roller-coating and ultraviolet curing unit (curing unit is exempt from new source review requirement under Puget Sound Clean Air Agency Regulation I, Section 6.03(c)(63)).*

***4. Addendum 2 – done for NOC No. 9559 in January 2007***

*That project was Spray Systems Inc. Model I-1687-C spray booth with dry filtration system, to be used exclusively for application of designated "hard to spray coatings" on the "HTSC line."*

***5. Addendum 3 – done for NOC No. 9649 application August 2007***
*The third addendum to DNS No. 970331-1.DNS was for one conveyor line with Global Finishing Dry Arrestor Crossdraft Pressurized 20,000 CFM spray booth with Flash Off/Touch up Zone rated at 1.9 MMBTU/hr. I discussed the project and our addendum to the original DNS with Ms. Gribble of the City of Monroe, and informed her that we will use the original SEPA DNS with an addendum as provided under WAC 197-11-600(4)(c), using the procedure given in WAC 197-11-625. She told me that she agreed with our addendum procedure and rationale, and so did, Mr. Hiller West. In a phone conversation on July 16, 2007, Mr. West, SEPA Administrator for the City of Monroe, has no objection to Puget Sound Clean Air Agency use of DNS No. 970331-1.DNS for this spray booth project.*

***6. Addendum 4 – current NOC No. 9690 application***
*The forth addendum to DNS No. 970331-1.DNS was for the Pater Noster Tray conveyor line. I discussed the project and our intent to adopt by reference this addendum to the original DNS with Mr. West of the City of Monroe. In a phone conversation on October 8, 2007, Mr. West, SEPA Administrator for the City of Monroe, has no objection to Puget Sound Clean Air Agency use of DNS No. 970331-1.DNS for this spray booth project.*

***7. Addendum 5 – current NOC No. 9743 application***
*The fifth addendum to DNS No. 970331-1.DNS is the description of the new equipment contained in Section A, Project Description above. The last time I spoke with the City of Monroe they informed me that if there was another spray booth they would have no objections to Puget*

*Sound Clean Air Agency incorporating by reference DNS No. 970331-1.DNS for this spray booth project.*

***SEPA outcome***
*We are incorporating by reference DNS No. 970331-1.DNS as issued by the City of Monroe with the addendums in Sections C.3, C.4, C.5, C.6 and C.7 of this document; SEPA compliance has been completed.*

The City of Monroe was consulted for comments on February 11, 2022 and did not reply.

Canyon Creek Cabinet DNS.pdf

Environmental Checklist and DNS.pdf

PSCAA is the SEPA lead agency for this project. The applicant submitted a completed Environmental checklist that is included above.

Based on the proposed action and the information in the checklist, the project will not: adversely affect environmentally sensitive or special areas, or endangered or threatened species; conflict with local, state, or federal laws or requirements for the protection of the environment, or establish a precedent for future actions with significant effects. This proposal is not likely to have a probable significant adverse environmental impact, and I recommend the issuance of a Determination of Non-Significance.

## E. TRIBAL CONSULTATION

On November 21, 2019, the Agency's Interim Tribal Consultation Policy was adopted by the Board. Criteria requiring tribal consultation are listed in Section II.A of the policy and include establishment of a new air operating permit source, establishment of a new emission reporting source, modification of an existing emission reporting source to increase production capacity, or establishment or modification of certain equipment or activities. In addition, if the Agency receives an NOC application that does not meet the criteria in Section II.A but may represent similar types and quantities of emissions, the Agency has the discretion to provide additional consultation opportunities.

Since this project is not increasing production capacity, it does not meet any of the criteria for consultation listed in Section II.A of the Agency's Interim Tribal Consultation Policy.

## F. BEST AVAILABLE CONTROL TECHNOLOGY (BACT) REVIEW

COATING OPERATIONS

**Best Available Control Technology (BACT)**

New stationary sources of air pollution are required to use BACT to control all pollutants not previously emitted, or those for which emissions would increase as a result of the new source or modification. BACT is defined in WAC 173-400-030 as, "an emission limitation based on the maximum degree of

reduction for each air pollutant subject to regulation under Chapter 70.94 RCW emitted from or which results from any new or modified stationary source, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each pollutant."

An emissions standard or emissions limitation means "a requirement established under the Federal Clean Air Act or Chapter 70.94 RCW which limits the quantity, rate, or concentration of emissions of air contaminants on a continuous basis, including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction and any design, equipment, work practice, or operational standard adopted under the Federal Clean Air Act or Chapter 70.94 RCW."

## SPRAY BOOTHS

### Best Available Control Technology for Toxics (tBACT)

New or modified sources are required to use tBACT for emissions control for TAP. Best available control technology for toxics (tBACT) is defined in WAC 173-460-020 as, "the term defined in WAC 173-400-030, as applied to TAP."

**VOC BACT and tBACT Analysis:**

The applicant provided a top-down VOC BACT analysis for the coating line along with their notice of construction application. Their analysis is included for reference below. Elements of their analysis will be summarized in this section of the worksheet, Section F. The toxic emissions for this project will be controlled using the same methodology as the VOC emissions and this section will cover tBACT as well as VOC BACT.

Applicant BACT Analysis.pdf

Similar Permits

**Table 1: Similar PSCAA Permits**

| VOC BACT/Volatile HAP/TAC tBACT – VOC Content & Usage | |
|---|---|
| **Permit** | **BACT** |
| PSCAA OA # 11472<br>Spray coating for wood cabinets and parts | Weighted average VOC 4.7 lb/gal<br>Compliance with 40 CFR Part 63, Subpart JJ limits:<br>• Stains – 1.0 lb of VHAP per lb of solids, as applied.<br>• Coatings – 0.8 lb of VHAP per lb solids, as applied.<br>• Thinners – no more than 10.0% VHAP by weight. |
| PSCAA OA #11295 | • 12 month rolling total of material containing VOCs shall not exceed 12,000 gallon |

| | |
|---|---|
| Spray coating for wood furniture | • Consecutive 12 month weighted average of VHAP content across materials applied shall not exceed 0.8 lbs/ lbs solids<br>• Monthly volume-weighted average of VOC across all coating, solvents, and thinners shall not exceed 5 pounds per gallon<br>• Materials containing methylene chloride, di-2-ethylhexyl phthalate (DEHP), chromium, lead, manganese, nickel or cadmium are prohibited<br>• 12 month rolling total shall not exceed 9,700 gallons of material containing formaldehyde<br>• Thinners and cleaning solvents shall not contain any HAPS |
| PSCAA OA #11947 Spray coating for wood working operations | • Coatings shall not contain di-2-ethylhexyl phthalate (DEHP), lead, Chrome (VI), nickel, or cadmium<br>• The VOC content of all coatings applied in the booths permitted under this order shall not exceed 4.1 lbs/gallon (less water and exempt compounds) as applied<br>• The booth shall be operated so that all exhaust air passes through a filter system that meets one of the following standards:<br>○ A system with a minimum initial overspray arrestance of 98 percent. Overspray arrestance must be determined using the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Method 52.1 procedure and substituting the synthetic test dust feed with a high solids bake enamel delivered at a rate of at least 135 grams per minute from a conventional (non-HVLP) air-atomized spray gun operating at 40 pounds per square inch (psi) air pressure with an air flow rate across the filter of 150 feet per minute. A system that complies with 40 CFR Part 63, Subpart HHHHHH meets this requirement.<br>○ A system that meets a minimum initial efficiency reporting value (MERV) of 13 as determined by ASHRAE Method 52.2.<br>○ A system that meets a minimum initial filtration efficiency of 98 percent over the particle diameter range from 0.3 to 10 microns. The particle size dependent filtration efficiencies must be determined using either Environmental Protection Agency (EPA) Method 319 or an Agency approved method. |
| NOC 11086 Abodian Inc Spray coating for wood working operations | • The owner or operator shall not use coatings that contain compounds of chromium, cadmium, lead, manganese or nickel as determined by material safety data sheets or other documentation provided by the manufacturer or supplier.<br>• The owner or operator shall meet the following volatile hazardous air pollutant (VHAP) limits: |

| | |
|---|---|
| | ○ Stains – 1.0 (as lb VHAP/lb solids, as applied).<br>○ Coatings – 0.8 (as lb VHAP/lb solids, as applied).<br>○ Thinners – no more than 10.0% VHAP. |

Other Regulatory Agencies BACT

| **VOC and Volatile HAP/TAC Limits** | |
|---|---|
| **Regulatory Citation/Permit** | **VOC and Volatile HAP/TACs Controls** |
| NESHAP – Subpart JJ Major HAP Source Wood Furniture Manufacturing 40 CFR 63.802(b) | Limit HAP emissions from strippable spray booth coatings by using coatings that contain no more than 0.8 kg VOC/kg solids (40 CFR 63.802(a)(3))<br><br>Limit formaldehyde emissions to no more than 400 lbs per 12 month rolling period or use only low-formaldehyde coatings (40 CFR 63.802(b)(4)(i)) |

<table>
<tr>
<td>NESHAP 40 CFR 63 Subpart QQQQ Major HAP Source Surface Coating Of Wood Building Products</td>
<td>
Table 1 to Subpart QQQQ of Part 63—Emission Limits for New or Reconstructed Affected Sources<br><br>
You must comply with the emission limits that apply to your affected source in the following table as required by §63.4690.
<table>
<tr><th>If the affected source applies coating to products in the following subcategory. . .</th><th>Then, the organic HAP emission limit for the affected source, in grams HAP/liter solids (lb HAP/gal solids)[1] [2] is:</th></tr>
<tr><td>1. Exterior siding and primed door skins</td><td>0 (0.00)</td></tr>
<tr><td>2. Flooring</td><td>0 (0.00)</td></tr>
<tr><td>3. Interior wall paneling or tileboard</td><td>5 (0.04)</td></tr>
<tr><td>4. Other interior panels</td><td>0 (0.00)</td></tr>
<tr><td>5. Doors, windows, and miscellaneous</td><td>57 (0.48)</td></tr>
</table>
[1]Determined as a rolling 12-month emission rate according to the requirements in §63.4741, §63.4751, or §63.4761, as applicable.<br>
[2]If the affected source applies coatings to products in more than one of the subcategories listed in the table, then you must determine the applicable emission lim according to §63.4690(c).<br><br>
Table 2 to Subpart QQQQ of Part 63—Emission Limits for Existing Affected Sources<br><br>
You must comply with the emission limits that apply to your affected source in the following table as required by §63.4690.
<table>
<tr><th>If the affected source applies coating to products in the following subcategory. . .</th><th>Then, the organic HAP emission limit for the affected source, in grams HAP/liter solids (lb HAP/gal solids)[1] [2] is:</th></tr>
<tr><td>1. Exterior siding and primed doorskins</td><td>7 (0.06)</td></tr>
<tr><td>2. Flooring</td><td>93 (0.78)</td></tr>
<tr><td>3. Interior wall paneling or tileboard</td><td>183 (1.53)</td></tr>
<tr><td>4. Other interior panels</td><td>20 (0.17)</td></tr>
<tr><td>5. Doors, windows, and miscellaneous</td><td>231 (1.93)</td></tr>
</table>
</td>
</tr>
<tr>
<td>San Joaquin Valley APCD Rule 4606 (Amended Oct 16, 2008)</td>
<td>1. Utilizing HVLP or equivalent application equipment and using coatings compliant with District Rule 4606 (Achieved in practice); Or<br>2. Closed-face booth with thermal/catalytic incineration (Technologically feasible); Or<br>3. Closed-face booth with carbon adsorption (Technologically feasible)</td>
</tr>
</table>

| | |
|---|---|
| | Table 1 VOC Content Limits for Wood Product Coating Operation<br><br>\| Coating Category \| grams of VOC/liter of coating, excluding water and exempt compounds, as applied \| pounds of VOC/gallon of coating, excluding water and exempt compounds, as applied \|<br>\|---\|---\|---\|<br>\| Clear Topcoat \| 275 \| 2.3 \|<br>\| Filler \| 275 \| 2.3 \|<br>\| High-Solids Stain \| 240 \| 2.0 \|<br>\| Ink \| 500 \| 4.2 \|<br>\| Mold-Seal Coating \| 750 \| 6.3 \|<br>\| Multi-Colored Coating \| 275 \| 2.3 \|<br>\| Pigmented Coating \| 275 \| 2.3 \|<br>\| Sanding Sealer \| 275 \| 2.3 \| |
| Bay Area Air Quality Management District (9/13/2000) | 1. Coatings w/ VOC content less than that required by Reg. 8, Rule 32, and emissions controlled to overall capture/ destruction efficiency > 90% by weight, typical technology: Collection System Vented to Carbon Adsorber or Afterburner (*Technically Feasible*)<br>2. Coatings w/ VOC content less than that required by Reg. 8, Rule 32 through use of coatings with very low VOC contents (such as waterborne coatings, higher solids coatings, uv cured coatings, polyester or polyurethane coatings, higher solids nitro celluose lacquers, and solvent substituted coatings) (*Achieved in Practice*)<br><br>**8-32-302** **General Wood Product Limits:** No person shall apply to any general wood product, any coating with a VOC content in excess of the limits set forth below; expressed as grams VOC per liter (pounds VOC per gallon) of coating or grams VOC per gram of solids, as applied (after thinning), unless emissions to the atmosphere are controlled to an equivalent level by air pollution abatement equipment with an abatement device efficiency of at least 85 percent that meets the requirements of Regulation 2, Rule 1.<br><br>\| \| Effective July 1, 1995 VOC limit g/l (lb/gal) \| Effective July 1, 2010 VOC limit g/l (lb/gal) \| Effective July 1, 2010 VOC limit g/g solids \|<br>\|---\|---\|---\|---\|<br>\| Clear Sealer \| \| 275 (2.3) \| 0.36 \|<br>\| Clear Topcoat \| 275 (2.3) \| 275 (2.3) \| 0.35 \|<br>\| Sanding Sealer \| 550 (4.6) \| See clear or pigmented sealers \| \|<br>\| Pigmented Coating \| 275 (2.3) \| See pigmented sealers or topcoats \| \|<br>\| Pigmented Primer, Sealer and Undercoater \| \| 275 (2.3) \| 0.21 \|<br>\| Pigmented Topcoat \| \| 275 (2.3) \| 0.25 \|<br>\| High Solids Stain \| 700 (5.8) \| 350 (2.9) \| 0.42 \|<br>\| Filler \| 500 (4.2) \| 275 (2.3) \| 0.18 \|<br>\| Low Solids Stain* \| 480 (4.0) \| 120 (1.0) \| - \|<br>\| Low Solids Toner and Wash-coat* \| 480 (4.0) \| 120 (1.0) \| - \|<br><br>*Low-Solids Coatings VOC content is calculated including water and exempt compounds as set forth in Section 8-32-604. High-Solids Coatings VOC content is calculated excluding water and exempt compounds as set forth in Sections 8-32-605 and 8-32-606.<br>A person applying a coating subject to the standards effective July 1, 2010 will comply with this Section if the coating satisfies either of the alternative standards. Application of a coating exceeding one of the alternative standards applicable to that coating shall create a rebuttable presumption that the coating was applied in violation of this Section. The applicator may rebut the presumption of violation by demonstrating that the coating satisfies the other alternative standard.<br>*(Deleted 4/17/91; Re-adopted 6/19/96; Amended 8/5/09)* |

| RBLC ID | COMPANY/ FACILITY NAME | PROCESS DESCRIPTION | PRODUCTION | PERMIT NUMBER | PERMIT DATE | CONTROL |
|---|---|---|---|---|---|---|
| IN-0280 | MASTERBRAND CABINETS, INC. | Topcoat and opaque coating operations | 1500 units/hour | 037-38193-00051 | 12/6/2017 | 4.5 lb VOC/gal as applied for topcoats and 5.3 lb VOC/gal as applied for opaque coats. And aRTO 98% DRE with an overall control of 83%. |
| AL-0314 | LEGACY CABINETS, INC. | LINE NO. 6 | New Line | 309-0030-X006 | 10/18/2017 | Coating reformulation, VOC annual limit, and annual hours limit. |
| IL-0122 | MASTERBRAND CABINETS, INC. | Wood Furniture Coating Operation | Production Increase | 15050014 | 10/25/2016 | VOC content limits on coatings. |
| N/A | Bellmont Cabinet Company | CEFLA Spray Line | 3 Cefla Booths | 11855/12138/12172 | 9/3/2021 | RTO to allow increase in TAPs (and to address odor complaints?*) |
| N/A | CAYUCO CORP | Paint Spray Booth | ≤ 16,560 lbs VOC/year | 26395 | 6/9/2020 | HVLP or equivalent application equipment and VOC content limits on coatings. |

*"The Agency has received thirty-four (34) odor complaints between April 2014 and June 2016 from the Edgewood neighborhood directly west of the Bellmont facility." per PSCAA NOC Worksheet for 11855.

Analysis

Regenerative Thermal Oxidation: Thermal oxidation, also called direct-flame or direct-fired afterburners, uses an afterburner to combust the VOCs in the process exhaust steam. Because the exhaust stream from the proposed flatline contains insufficient VOCs to sustain incineration, supplemental fuel is required in the afterburner. The gas is passed through the combustion zone of the flame at a typical temperature range of approximately 1525F. As with other combustion systems, thermal oxidation combustors must be designed to provide sufficient residence times at high temperatures with adequate turbulence for efficient combustion. The high combustion temperatures used in the thermal oxidation process produce more NO2 emissions than with catalytic oxidation. Organic contaminant removal efficiencies of 99 percent can be achieved for exhaust streams with high concentrations of VOCs; however, emissions of CO and NO2 increase due to supplemental fuel combustion.

Catalytic Thermal Oxidation: With catalytic thermal oxidation, the process exhaust stream is pre-heated prior to passing through a catalyst. The maximum pre-heat temperature is approximately 800F. Because operating temperatures are lower in catalytic oxidation, less natural gas is used and, therefore, less NO2 and CO are produced as compared with thermal oxidation. As with an RTO, organic contaminant removal efficiencies of 99 percent can be achieved for exhaust streams with high concentrations of VOCs. And while there are less emissions of CO and NO2 with an RCO, there are still some emissions due to the supplemental fuel combustion.

Carbon Adsorption: Carbon adsorption is a process by which organics are captured on the surface of granular solids. Common adsorbents include activated carbon, silica gel, and alumina. Adsorbents can be regenerated in place using steam or hot air, producing a secondary waste stream. The adsorption process is not effective, however, at temperatures below 100□F, and high concentrations of volatile organic compounds (>1,000 ppm) are required to achieve removal efficiencies on the order of 95 percent.

Condensation: Condensation is another technology used to separate and remove organic contaminants from gas streams. This process involves reducing the temperature of the gas stream to below the saturation temperature of the contaminants, allowing the organics to condense, and collecting the liquid phase. Like the adsorption process, condensation is only effective for gases with high concentrations of organics, capable of achieving 95 percent removal for concentrations above 5,000 ppm. This process is used primarily for product recovery in chemical process lines.

Absorption: Absorption is another removal technology developed for gas streams containing high concentrations of organics (>500 ppm). Water or organic liquids serve as the liquid absorbent used in packed towers, spray chambers, or venturi scrubbers. The gradient between the actual and the equilibrium concentration of the organics in the absorbent drives the migration of the organics in the gas stream to the absorbent liquid and is typically enhanced at lower temperatures. The saturated liquid becomes a secondary waste stream.

Coating Reformulation and VOC/HAP Limits: Various agencies, particularly in California, have regulations limiting the VOC and HAP content of coatings, thinners, and cleaners. These, in turn, have promoted coating reformulations that are available for use by all wood product coating facilities.

For example, SMAQMD BACT Determination No. 254, June 9, 2020, states the "use of Super Clean Materials (<5% VOC by weight); OR use of low-VOC materials resulting in an equivalent emission reduction" is a proven BACT and tBACT option.

Best Management Practices: The following good work practices are referenced in MasterBrand's Indiana permit:
(1) Solvents containing no more than 8.0 percent by weight of VOC must be used for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, or plastic filters unless the spray booth is being refurbished.
(2) Requirements for storage of both fresh and used organic solvent in closed containers.
(3) Requirement to pump solvent used for line cleaning into closed containers.
(4) Requirement to collect solvent used for gun cleaning in closed containers.
(5) Requirement to control emissions from wash-off by using closed tanks.
(6) Requirements to minimize spills of any VOC-containing materials and to clean up any such spills immediately.
(7) Requirements to minimize emissions of VOC during the cleaning of storage, mixing and conveying equipment.
(8) Requirements to keep vessels that contain VOC-containing materials closed except when specifically in use.
(9) Requirements to convey VOC-containing materials in closed containers or pipes;
(10) Requirement to maintain a Work Practice Implementation Plan.
(11) Requirement to maintain and implement a Leak inspection and maintenance plan for VOC.

Recommendations

**Summary tBACT determination**

| Pollutant | BACT Limit or Work Practice | Method of Compliance |
|---|---|---|
| Tert-Butyl Acetate | ▪ Usage limit set -- 5156 lbs/year | Monthly records based on usage and % of pollutant in product based on SDS or other manufacturer data. Purchase records can be used in lieu of actual usage |
| Naphthalene | ▪ Usage limit set – 89 lbs/year | |
| Inorganic TAP including Amorphous Silica | ▪ 98% efficient filter | ▪ Manufacturer data or specification showing filter efficiency |
| Organic HAP | ▪ The owner or operator shall meet the following volatile hazardous air pollutant (VHAP) limits:<br>o Stains – 1.0 (as lb VHAP/lb solids, as applied).<br>o Coatings – 0.8 (as lb VHAP/lb solids, as applied).<br>o Thinners – no more than 10.0% VHAP. | ▪ Monthly records showing products used and HAP content based on SDS or other manufacturer's data. Purchase records can be used in lieu of actual usage. |

**Summary BACT determination**

| Pollutant | BACT Limit or Work Practice | Method of Compliance |
|---|---|---|
| $NO_x$ | Since an RTO/RCO is not being implemented, this project will not add to these pollutants, which are also not at the reportable level as is. | N/A |
| $SO_2$ | | |
| CO | | |
| Total VOCs | The VOC content of all coatings applied in the booths permitted under this order shall not exceed 4.1 lbs/gallon (less water and exempt compounds) as applied. The owner or operator shall either maintain records of the VOC content of each coating as described in Paint shall individually meet the VOC | Monthly records based on usage and % of pollutant in product based on SDS or other manufacturer data. Purchase records can be used in lieu of actual usage |

| Pollutant | BACT Limit or Work Practice | Method of Compliance |
|---|---|---|
| | limit; or, alternatively, the owner or operator can calculate the 12-month rolling volume-weighted average VOC content as described in Condition #4 (c) of this Order.<br><br>HVLP spray guns or other high efficiency spray equipment | High transfer spray equipment<br><br>Best management practices – closed containers, efficient spray gun cleaning |
| PM | Use of enclosed spray booth and filters meeting 98% efficiency<br>HVLP or other high efficiency spray guns | Manufacturer data or specification showing filter efficiency<br>Manufacturer's documentation or identification on spray equipment |

WOODWORKING AND DUST COLLECTOR OPERATIONS

BACT

| | |
|---|---|
| NOC 12104 Aim Aerospace Sumner Inc | Particulate matter from the dust collector shall not exceed 0.004 gr/dscf<br>The dust collector must be equipped with an operable gauge to indicate the pressure drop across the filters<br>There shall be no visible emissions from the dust collector or associated ductwork. |
| NOC 6807 Strasser Woodenworks | Emissions from the dust collector serving the sanding operations shall not exceed 0.005 gr/scf.<br>Once per week while the dust collectors are in operation, the facility shall determine if the pressure drop across the exhaust filters is in the acceptable range<br>Once per week while the dust collectors are in operation, the facility shall inspect the dust collectors and associated ductwork for visible emissions and fallout |
| NOC 12172 Pacific Crest Industries | Emissions from the dust collector serving the sander shall not exceed 0.005 gr/scf. |

| | |
|---|---|
| | There shall be no visible emissions from the dust collector.<br>Once per day the dust collector is in operation, the facility shall record the pressure drop across the exhaust filters and determine if it is in the acceptable range |

Recommendations

Baghouse shall be limited to 0.005 gr/dscf. A pressure gauge shall be installed, and proper operating parameters determined and marked on the gauge. This gauge should be checked every day. No opacity should be coming from the baghouse and this should be checked monthly.

## G. EMISSION ESTIMATES

### Proposed Project Emissions

Actual Emissions

The past 2 years of emissions were reported in the following screen shots. CCCC has implemented practices and low VOC paints to help lower the emissions generated every year, so that the actual emissions are well below their potential. The new automated spray line, should improve efficiency further, lowering the amount of paint needed per box, and lowering their actual emissions further.

Potential Emissions

The permitted potential to emit calculations are based on operating at 100% rated capacity and 8,760 hour per year.

Currently, CCCC operates as a synthetic minor permitted under Order of Approval No. 7212. This permit already limits facility-wide emissions are to 99 tons of VOC during any consecutive 12-month period

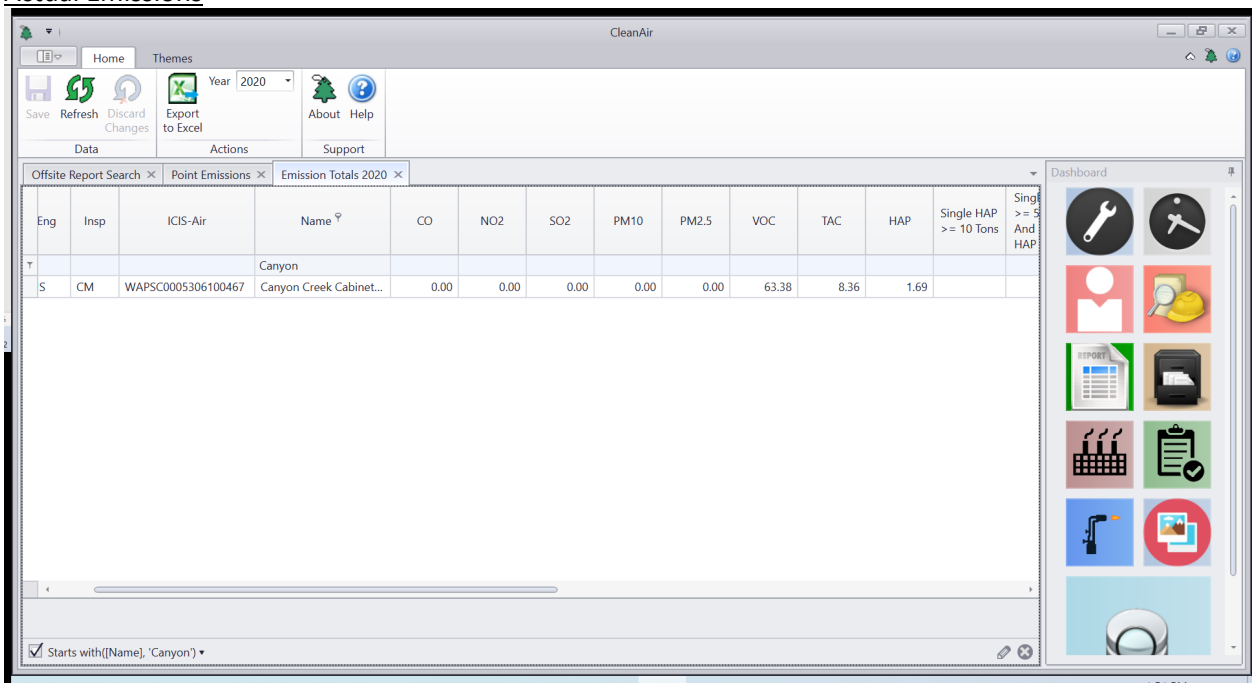
CCCC included calculations for emissions for the past 5 years on a per box bases. 1.1 lbs VOC/cabinet box seems to be the average rate after several improvements of paint and procedures were implemented. During the transition period, Canyon Creek has suggested that 500 boxes per day would be a plant wide maximum. If the transition period lasted for one year, 1.1 lbs/box * 500 spray finished boxes/day * 365 days/year yields 200,750 lbs/VOC per year or 100.375 tons of VOC's. If this is 498 spray finished boxes per day, it changes it to 99.97 tons per year. With this in mind, 498 spray finished boxes per day should provide a limit to ensure that production is not increasing while both lines are up. When the Pator Nastor and the 6 spray booths are removed from service, this limit can revert back to the 99 tons/year as tracked by SDS calculations.

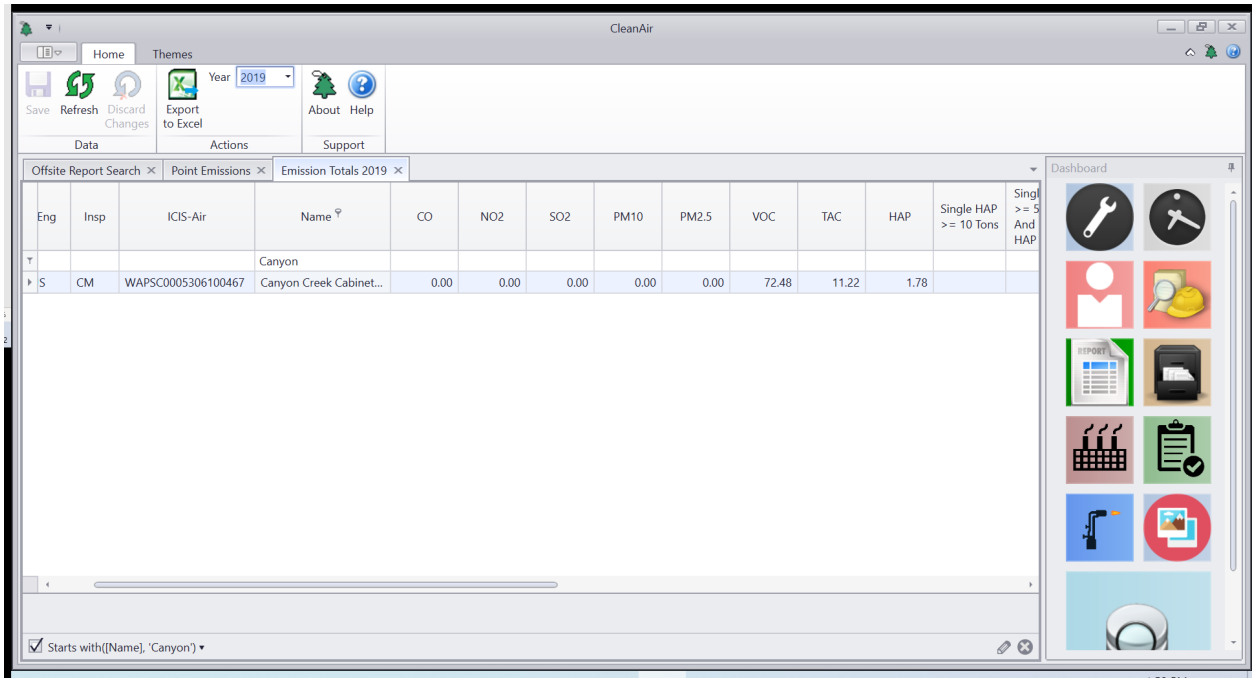
The baghouse is rated at 0.005 gr/dscf and 45,000 acfm.

0.005 gr/dscf * 45,000 acfm * 0.001428lbs/gr *60 minutes/hr*24hr/day*365days/year = 16,894 lbs/year or 8.4 tons. This will also be fed back into the building and is below threshold. If operating 16 hours a day, this would be reduced to 5.6 tons per year. Well below reporting thresholds for PM.

**Facility-wide Emissions**

Actual Emissions






Reporting Source? CCCC is currently a reporting source. The past 2 years are shown above.

Potential Emissions

**Facility-wide emissions from CCCC** are limited to 99 tons of VOC, 9.9 tons of a single HAP or 24.9 tons of all combined HAPS during any consecutive 12-month period under Order of Approval No. 7212.

In addition to the new baghouse, CCCC currently has a baghouse rated at 74,000 CFM, and the Torit is rated at 2,200 CFM, although not in use. The 74,000 CFM baghouse has the PTE to emit 27,781 lb/year, or 13.9 tons/year. Added to the new baghouse, this would be 22.3 tons/year. This is not quite at reporting level, but should be tracked.

## H. OPERATING PERMIT OR PSD

The Title V Air Operating Permit (AOP) program applicability for the entire source has been reviewed.

The facility is not a Title V air operating permit source because post project PTE remains below Title V applicability thresholds and criteria due to federally enforceable limits of the following order, Order of Approval No. 7212. The source is considered a "**synthetic minor**".

" Canyon Creek Cabinet Co. shall limit facility-wide emissions of hazardous air pollutants (HAPs) in Section 112(b) of the federal Clean Air Act to less than 9.9 tons of any single listed HAP, 24.9 tons of all HAPs combined, and 99 tons of volatile organic compounds (VOCs) during any 12 consecutive months after the date of this Order. "

## I. AMBIENT TOXICS IMPACT ANALYSIS

The estimated potential toxic air pollutant (TAP) emissions at operating at 100% rated capacity and 8760 hour per year for each new or modified emission unit (*or based on limit in permit*). The table below includes estimated potential emissions of all TAP and compares those to the Small Quantity Emission Rates (SQER) in WAC 173-460-150.

CCCC has calculated the past 4 years of TAP emission as well as the projected emissions once this project is complete. Tert-butyl acetate and naphthalene are over SQER for these compounds. As described in WAC 173-460-080(3) CCCC will take credit for removing the average emissions with the equipment being removed permitted under NOC 9690 and parts of NOC 7212 from years 2017 and 2018. The SQER rate added to those emissions will set a new limit for these TAPs.

**Canyon Creek Cabinet Company - New Flat Line PTE Emissions Analysis**

| | Annual Lbs | | | | | | | | | | | | 98% |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CAS, COMMON NAME | 2017 | 2018 | 2019 | 2020 | Max | Average of 2017 and 2018 | Averaging Period | SQER | New Flat Line TAPs PTE | PTE Increase over Actual for Averaging Period (lbs) | PTE Increase > SQER? | % Above SQER | Actual + SQER = Limit |
| 100414, ETHYL BENZENE | 200.03 | 192.69 | 166.29 | 197.39 | 200.03 | 196.36 | year | 65.00 | 224.47 | 28.11 | | | |
| 100425, STYRENE | 80.35 | 69.69 | 50.75 | 46.70 | 80.35 | 75.02 | 24-hr | 3.20 | 85.76 | 0.04 | | | |
| 105602, CAPROLACTAM | 0.25 | | | | 0.25 | 0.25 | 24-hr | 0.16 | 0.28 | 0.00 | | | |
| 107211, ETHANE-1,2-DIOL | 0.14 | | | | 0.14 | 0.14 | 24-hr | 30.00 | 0.16 | 0.00 | | | |
| 107982, 1-METHOXY-2-PROPANOL | 443.57 | 545.92 | 459.81 | 366.43 | 545.92 | 494.74 | 24-hr | 520.00 | 565.56 | 0.27 | | | |
| 108101, 4-METHYLPENTAN-2-ONE | 667.12 | 99.27 | 191.00 | 98.24 | 667.12 | 383.19 | 24-hr | 220.00 | 438.04 | 0.21 | | | |
| 108316, MALEIC ANHYDRIDE | | 0.38 | 0.07 | 0.07 | 0.38 | 0.38 | 24-hr | 0.05 | 0.43 | 0.00 | | | |
| 108678, MESITYLENE | 5.82 | 14.34 | 17.06 | 14.18 | 17.06 | 10.08 | 24-hr | 4.40 | 11.52 | 0.01 | | | |
| 108883, TOLUENE | 421.09 | 46.13 | 19.18 | 17.94 | 421.09 | 233.61 | 24-hr | 370.00 | 267.05 | 0.13 | | | |
| 111422, DIETHANOLAMINE | 0.05 | | | | 0.05 | 0.05 | 24-hr | 0.22 | 0.06 | 0.00 | | | |
| 111762, 2-BUTOXYETHANOL | 11650.07 | 1639.71 | 463.43 | 502.36 | 11650.07 | 6644.89 | 24-hr | 6.10 | 7595.98 | 3.66 | | | |
| 123911, DIETHYLENEDIOXIDE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | year | 32.00 | 0.00 | 0.00 | | | |
| 1310732, SODIUM HYDROXIDE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1-hr | 0.02 | 0.00 | 0.00 | | | |
| 1330207, XYLENE, MIXED ISOMERS | 882.40 | 999.68 | 825.46 | 980.84 | 999.68 | 941.04 | 24-hr | 16.00 | 1075.73 | 0.52 | | | |
| 50000, FORMALDEHYDE | 165.89 | 110.39 | 120.76 | 100.53 | 165.89 | 138.14 | year | 27.00 | 157.91 | 19.77 | | | |
| 540885, TERT-BUTYL ACETATE | 4630.35 | 5442.89 | 4268.46 | 3639.07 | 5442.89 | 5036.62 | year | 120.00 | 5757.51 | 720.90 | Yes | 601% | 5156.6 |
| 67561, METHANOL | 3338.80 | 2515.08 | 2053.26 | 1812.81 | 3338.80 | 2926.94 | 24-hr | 1500.00 | 3345.88 | 1.61 | | | |
| 67630, 2-PROPANOL | 18526.32 | 21517.83 | 16189.60 | 13123.61 | 21517.83 | 20022.07 | 1-hr | 5.90 | 22887.86 | 0.61 | | | |
| 67630, PROPAN-2-OL | 1678.17 | | | | 1678.17 | 1678.17 | 1-hr | 5.90 | 1918.37 | 0.05 | | | |
| 71432, BENZENE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | year | 21.00 | 0.00 | 0.00 | | | |
| 7631869, SYNTHETIC AMORPHOUS SILICA | 1389.98 | 1062.85 | 936.42 | 785.89 | 1389.98 | 1226.42 | 24-hr | 0.22 | 1401.95 | 0.68 | Yes | 307% | |
| 7631869, SILICA with PM control | 27.80 | 21.26 | 18.73 | 15.72 | 27.80 | 24.53 | 24-hr | 0.22 | 28.04 | 0.01 | No | | |
| 7664417, AMMONIA | 13.28 | 16.03 | 10.48 | 6.90 | 16.03 | 14.66 | 24-hr | 37.00 | 16.75 | 0.01 | | | |
| 7664939, SULPHURIC ACID | 27.00 | 32.57 | 26.65 | 23.49 | 32.57 | 29.79 | 24-hr | 0.07 | 34.05 | 0.02 | | | |
| 78933, BUTANONE | 2121.46 | 1125.22 | 1744.55 | 354.77 | 2121.46 | 1623.34 | 24-hr | 370.00 | 1855.69 | 0.89 | | | |
| 91203, NAPHTHALENE | 121.42 | 48.20 | 46.67 | 39.58 | 121.42 | 84.81 | year | 4.80 | 96.95 | 12.14 | Yes | 253% | 89.6 |
| 95636, 1,2,4-TRIMETHYLBENZENE | 1823.10 | 2230.32 | 1797.91 | 1621.04 | 2230.32 | 2026.71 | 24-hr | 4.40 | 2316.79 | 1.12 | | | |
| 98828, CUMENE | 85.58 | 104.62 | 84.46 | 76.11 | 104.62 | 95.10 | 24-hr | 30.00 | 108.72 | 0.05 | | | |
| VOC Total lbs, Actual | 180759 | 147688 | 144950 | 126756 | | 164224 | | New Line | Manual | | | | |
| VOC Total lbs (Moving to Flat Line, new equipment) | 148533 | 116178 | 108208 | 91299 | 148533 | 132356 | Production | 85% | 15% | | | | |
| VOC Total lbs ( Cleaning, unchanged) | 6014 | 11008 | 17646 | 19345 | 19345 | 8511 | Cleaning | | | | | | |
| VOC Total lbs (Existing Manual Spray, unchanged) | 26212 | 20502 | 19096 | 16112 | 26212 | 23357 | | | | | | | |
| Percent of New Flat Line VOCs to Facility Total | 82% | 79% | 75% | 72% | | 81% | | | | | | | |
| VOC Total tpy | 90.4 | 73.8 | 72.5 | 63.4 | | 82.1 | | | | | | | |

Based on the following emissions, Tert Butyl Acetate will be limited to 5156 lbs/year and Naphthalene will be limited to 89 lbs/year.

## J. APPLICABLE RULES & REGULATIONS

### Puget Sound Clean Air Agency Regulations

***SECTION 5.05 (c):*** The owner or operator of a registered source shall develop and implement an operation and maintenance plan to ensure continuous compliance with Regulations I, II, and III. A copy of the plan shall be filed with the Control Officer upon request. The plan shall reflect good industrial practice and shall include, but not be limited to, the following:
(1) Periodic inspection of all equipment and control equipment;
(2) Monitoring and recording of equipment and control equipment performance;
(3) Prompt repair of any defective equipment or control equipment;

(4) Procedures for startup, shut down, and normal operation;
(5) The control measures to be employed to ensure compliance with Section 9.15 of this regulation; and
(6) A record of all actions required by the plan.
The plan shall be reviewed by the source owner or operator at least annually and updated to reflect any changes in good industrial practice.

***SECTION 6.09***: Within 30 days of completion of the installation or modification of a stationary source subject to the provisions of Article 6 of this regulation, the owner or operator or applicant shall file a Notice of Completion with the Agency. Each Notice of Completion shall be submitted on a form provided by the Agency, and shall specify the date upon which operation of the stationary source has commenced or will commence.

***SECTION 9.03***: (a) It shall be unlawful for any person to cause or allow the emission of any air contaminant for a period or periods aggregating more than 3 minutes in any 1 hour, which is:
(1) Darker in shade than that designated as No. 1 (20% density) on the Ringelmann Chart, as published by the United States Bureau of Mines; or
(2) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in Section 9.03(a)(1).
(b) The density or opacity of an air contaminant shall be measured at the point of its emission, except when the point of emission cannot be readily observed, it may be measured at an observable point of the plume nearest the point of emission.
(c) This section shall not apply when the presence of uncombined water is the only reason for the failure of the emission to meet the requirements of this section.

***SECTION 9.09***: General Particulate Matter (PM) Standard. It shall be unlawful for any person to cause or allow the emission of particulate matter in excess of the following concentrations:
Equipment Used in a Manufacturing Process: 0.05 gr/dscf

***SECTION 9.11***: It shall be unlawful for any person to cause or allow the emission of any air contaminant in sufficient quantities and of such characteristics and duration as is, or is likely to be, injurious to human health, plant or animal life, or property, or which unreasonably interferes with enjoyment of life and property.

***SECTION 9.13***: It shall be unlawful for any person to cause or allow the installation or use of any device or use of any means designed to mask the emission of an air contaminant which causes detriment to health, safety or welfare of any person.

***SECTION 9.15***: It shall be unlawful for any person to cause or allow visible emissions of fugitive dust unless reasonable precautions are employed to minimize the emissions. Reasonable precautions include, but are not limited to, the following:
(1) The use of control equipment, enclosures, and wet (or chemical) suppression techniques, as practical, and curtailment during high winds;
(2) Surfacing roadways and parking areas with asphalt, concrete, or gravel;

(3) Treating temporary, low-traffic areas (e.g., construction sites) with water or chemical stabilizers, reducing vehicle speeds, constructing pavement or rip rap exit aprons, and cleaning vehicle undercarriages before they exit to prevent the track-out of mud or dirt onto paved public roadways; or
(4) Covering or wetting truck loads or allowing adequate freeboard to prevent the escape of dust-bearing materials.

***SECTION 9.16(c)***: General Requirements for Indoor Spray-Coating Operations. It shall be unlawful for any person subject to the provisions of this section to cause or allow spray-coating inside a structure, or spray-coating of any motor vehicles or motor vehicle components, unless all of the following requirements are met:
(1) Spray-coating is conducted inside an enclosed spray area;
(2) The enclosed spray area employs either properly seated paint arresters, or water-wash curtains with a continuous water curtain to control the overspray; and
(3) All emissions from the spray-coating operation are vented to the atmosphere through an unobstructed vertical exhaust vent.

***REGULATION I, SECTION 9.20(a)***: It shall be unlawful for any person to cause or allow the operation of any features, machines or devices constituting parts of or called for by plans, specifications, or other information submitted pursuant to Article 6 of Regulation I unless such features, machines or devices are maintained in good working order.

**Washington State Administrative Code**

WAC 173-400-040(3): Fallout. No person shall cause or allow the emission of particulate matter from any source to be deposited beyond the property under direct control of the owner or operator of the source in sufficient quantity to interfere unreasonably with the use and enjoyment of the property upon which the material is deposited.

WAC 173-400-040(4): Fugitive emissions. The owner or operator of any emissions unit engaging in materials handling, construction, demolition or other operation which is a source of fugitive emission:

(a) If located in an attainment area and not impacting any nonattainment area, shall take reasonable precautions to prevent the release of air contaminants from the operation.

WAC173-400-111(7): Construction limitations.

(a) Approval to construct or modify a stationary source becomes invalid if construction is not commenced within eighteen months after receipt of the approval, if construction is discontinued for a period of eighteen months or more, or if construction is not completed within a reasonable time. The permitting authority may extend the eighteen-month period upon a satisfactory showing by the permittee that an extension is justified.

**Federal**

None. Subpart JJ of the National Emission Standard for Hazardous Air Pollutants, Wood Furniture Manufacturing Operations would apply if Canyon Creek ever became a major source for hazardous air pollutants.

## K. PUBLIC NOTICE

This project meets the criteria for mandatory public notice under WAC 173-400-171(3)(k) for establishing a voluntary limit on emissions, is a project that exceeds emission threshold rates as defined in WAC 173-400-030 (e.g. 40 tpy NOx, VOC, or $SO_2$, 100 tpy CO, 15 tpy $PM_{10}$, 10 tpy $PM_{2.5}$,0.6 tpy lead), and includes a synthetic minor limit under WAC 173-400-091, and includes TAP netting.

A notice of application was posted on the Agency's website for 15 days. No requests or responses were received. A copy of the website posting is below:

### New Construction Projects

| Company | Address | Project Description | Date Posted | Contact Engineer |
|---|---|---|---|---|
| Canyon Creek Cabinet Co | 16726 Tye St SE, Monroe, WA 98272 | Replacement of existing hang-line and Pater Noster pivot tray conveyor finish line with a new flat line finishing system. Same amount of products will be finished with better transfer efficiency which in-turn will reduce the current VOC levels. | 12/21/21 | Carl Slimp |

## L. RECOMMENDED APPROVAL CONDITIONS

**Standard Conditions:**

1. Approval is hereby granted as provided in Article 6 of Regulation I of the Puget Sound Clean Air Agency to the applicant to install or establish the equipment, device or process described hereon at the installation address in accordance with the plans and specifications on file in the Engineering Division of the Puget Sound Clean Air Agency.

2. This approval does not relieve the applicant or owner of any requirement of any other governmental agency.

**Specific Conditions:**

**FINISHING OPERATIONS**

3. In the booths permitted under this Order, spray application of any individual material containing di-2-ethylhexyl phthalate (DEHP), lead, Chrome (VI), nickel, or cadmium is prohibited. If the chemical is not listed on the SDS or other data sheet it will be presumed the coating material does not contain the chemical.

4. The VOC content (as defined by 40 CFR 51.100) of all finishing materials applied in the booths permitted under this order shall not exceed 4.1 pounds per gallon (less water and exempt compounds) as applied as a 12-month rolling volume-weighted average. The owner or operator shall demonstrate compliance using one of the following methods:
   a. *Maintain records of the VOC content of each coating to demonstrate that all coatings, as applied, individually meets the VOC limit; or*

   b. *Within 30 days of the end of each month, calculate and record* the total VOC emissions (less water and exempt compounds) from coatings and divide by the total gallons of all VOC-containing material applied during the rolling 12-month period. Records must clearly show the 12-month rolling volume-weighted average VOC content in pounds per gallon. Purchase records may be used as a surrogate for coating application.

5. The volatile hazardous air pollutant (VHAP) content of all finishing materials applied in the booths permitted under this order shall not exceed 1.0 pound per pound of coating solids as applied, as a 12-month rolling volume-weighted average. The owner or operator shall demonstrate compliance using one of the following methods:
   a. Within 30 days of the end of each month, calculate the average VHAP content for all finishing materials as a 12-month rolling mass-weighted average using Equation 1 of 40 CFR 63.804(a)(1); or
   b. Use compliant finishing materials according to the following criteria:
      i. Demonstrate that each stain, sealer, and topcoat has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied, and each thinner contains no more than 10.0 percent VHAP by weight by maintaining certified product data sheets for each coating and thinner;
      ii. Demonstrate that each washcoat, basecoat, and enamel that is purchased pre-made has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied, and each thinner contains no more than 10.0 percent VHAP by weight by maintaining certified product data sheets for each coating and thinner; and
      iii. Demonstrate that each washcoat, basecoat, and enamel that is formulated onsite by thinning another finishing material is formulated using a finishing material containing no more than 1.0 lb VHAP/lb solids and a thinner containing no more than 3.0 percent VHAP by weight.

6. The owner or operation shall use manufacturer's formulation data, product safety data sheets, environmental data sheets or other manufacturer's provided data of each finishing material to determine the mass of organic HAP and the volume fraction of coating solids in all finishing materials used.

7. Tert-butyl acetate (CAS # 540-88-5) used and applied in the booths permitted under this Order must not exceed 5100 pounds during any consecutive 12-month period. Within 30 days of the end of each month, calculate the total amount of tert-butyl acetate used and applied based on usage and the associated chemical constituent compositions (Tert-butyl acetate content). Orders or purchase transactions of materials used in the booths may be used in lieu of usage information.

8. Naphthalene (CAS # 91-20-3) used and applied in the booths permitted under this Order must not exceed 89 pounds during any consecutive 12-month period. Within 30 days of the end of each month, calculate the total amount of naphthalene used and applied based on usage and the

associated chemical constituent compositions (naphthalene content). Orders or purchase transactions of materials used in the booths may be used in lieu of usage information.

9. Spray-coating of material shall be confined to agency approved booths equipped with a filter system that at all times covers the openings of the exhaust plenum including the edges of the filter bank. Compliance demonstration with this requirement must at a minimum include daily inspections of the filter system on days when the booths are in operation. Operation of the booths must cease if it is determined the filter system does not completely cover the openings of the exhaust plenum and corrective action must be taken prior to operation of the booths.

10. The air from the spray booths shall be operated so that all exhaust air passes through dry filters with a minimum initial overspray arrestance of 98%. Overspray arrestance must be determined using the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Method 52.1 procedure and substituting the synthetic test dust feed with a high solids bake enamel delivered at a rate of at least 135 grams per minute from a conventional (non-HVLP) air-atomized spray gun operating at 40 pounds per square inch (psi) air pressure with an air flow rate across the filter of 150 feet per minute. A system that complies with 40 CFR Part 63, Subpart HHHHHH meets this requirement.

11. All spray application of material must be applied with an air-assisted airless spray gun, electrostatic applicator, or high-volume low-pressure (HVLP) spray gun or the Model 40-25 Easy ASB Airless tested on 3.23.2022Alternative spray technology must meet a minimum transfer efficiency of 65 percent. The procedure used to demonstrate a spray technology's transfer efficiency must be equivalent to South Coast Air Quality Management District's "Spray Equipment Transfer Efficiency Test Procedure for Equipment User, May 24, 1989" and "Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns, September 26, 2002." A plan describing the test procedure must be developed and submitted to the Agency 30 days prior to conducting any spray technology transfer efficiency test.

12. The booths permitted under this order must be equipped with an operable gauge to indicate the pressure drop across the exhaust filtration system. The acceptable pressure drop range shall be established using the manufacturer's recommendations, specifications, or instruction; or shall be established based on operator experience to maintain filter integrity and compliance with Conditions #9 and #10. The established pressure drop minimum and maximum values must be clearly marked on or nearby the gauge.

13. The owner or operation shall inspect the spray booth at least once per day of operation, with each inspection to include the following:
    a. Check of differential pressure across the filters in the spray booth to ensure operation within the acceptable range, and
    b. Visual checks of filter condition and fit to ensure complete coverage over the exhaust plenum.
14. The booths permitted under this order shall always be operated within the acceptable pressure drop range across the exhaust filter bank. Compliance demonstration with this requirement must at a minimum include daily pressure drop inspections on days when the booths are in operation.

Operation of the booths must cease when the pressure drop across the filter bank deviates from the established range and corrective action must be taken prior to operation of the booth.

15. The owner or operation shall conduct visual inspections of the spray booth ductwork for corrosion and holes at least once per week when the unit is operating; of fans to ensure proper fan operation; and of all exhaust points for paint deposition. Correct problems identified by these inspections within 24 hours of initial discovery or discontinue spray coating operations. Paint deposition shall be removed from exhaust points within 10 days of initial discovery.

16. All materials from which VOCs can evaporate to the open air shall be disposed of in closed containers or bags. This includes rags, wipes, paper towels, and absorbents that become laden, soaked, or covered in VOC-containing material.

17. All containers used for mixing, storing, or disposing VOC-containing materials shall be kept closed at all times except during the following situations:
    a. Cleaning of containers.
    b. Depositing of materials in containers or removing of materials from containers.

**Dust Collection:**

18. All exhaust from the sanding and parts cleaner equipment shall be vented through the Superior Filter Model #P14-494-12.

19. There shall be no visible emissions from the Superior Filter Model #P14-494-12.

20. Emissions from the Superior Filter Model #P14-494-12 serving the sanding and parts cleaner equipment shall not exceed 0.005 gr/scf.

21. The owner or operator shall install and maintain a pressure drop measurement device, such as a manometer or Magnehelic, to measure the pressure drop between the inlet and outlet of the dust collector serving the sander. The acceptable pressure drop range for the effective operation of the dust collector shall be clearly marked on or nearby the gauge.

22. Once per day the dust collector is in operation, the facility shall record the pressure drop across the exhaust filters and determine if it is in the acceptable range. If the pressure drop is not within the acceptable range, the facility shall shut down the dust collector and the equipment vented to the dust collector upon discovery of the problem until corrective action has been taken.

23. When the dust collector is not in operation, the owner or operator must verify and record that emission units in the finish room are also not in operation.

24. The owner or operator shall conduct visual inspections of the dust collector and associated ductwork at least once per week for visible emissions and fallout. Records shall be maintained of these inspections. If visible emissions or fallout are observed, the facility shall either initiate repairs or shut down the dust collector and the equipment vented to the dust collector until corrective action has been taken.

**3. Recordkeeping:**

25. The following records shall be kept onsite and up-to-date, and be made readily available to Agency personnel upon request at all times:
    a. Safety Data Sheets (SDS) and formulation data for each VOC-containing material used inside the booths, including VOC content (minus water and exempt compounds) in pounds per gallon or gram per liter.
    b. Documentation to demonstrate compliance with filter requirements in Condition 10.
    c. Documentation to demonstrate compliance with spray gun requirements in Condition #11.
    d. The Operation and Maintenance (O&M) plan. The O&M plan shall be developed and implemented per Agency's Regulation I. At a minimum, the following shall be included in the O&M plan:
        i. Filter maintenance.
        ii. Filter inspection procedures.
        iii. Procedures to correct operation of the booths when the pressure drop across the filter bank deviates from the established range.

26. The following records shall be kept onsite and up-to-date for at least two years from the date of generation, and be made readily available to Agency personnel upon request:
    a. Documentation of the total amount in pounds of Tert-butyl acetate applied and used in the booths permitted under this Order during any consecutive 12-month period.
    b. Documentation of the total amount in pounds of naphthalene applied and used in the booths permitted under this Order during any consecutive 12-month period.
    c. Results of inspections to determine compliance with filter requirements in Condition #9.
    d. Documentation of pressure drop across the filter system as required by Condition #9.
    e. Documentation verifying any corrective action taken to maintain compliance with this Order of Approval.

27. Upon startup of the production on the automated spray line, the owners and operators will have 120 days to transition production to the new line and disable and remove from service the pater noster, denibbing station and six dry spray booths. CCCC is to notify PSCAA when production starts. The total plant wide daily production shall not exceed the 498 spray finished cabinets per day during this transition period. Canyon Creek shall inform PSCAA once the pater noster and six dry spray booths are disabled from being operational, and the transition period has ended.

28. At the end of the 120 day period cited in condition 27, NOC No 9690 dated Oct 25, 2007 will be cancelled and superseded.

CORRESPONDENCE AND SUPPORTING DOCUMENTS


NOC 9690


FW_ SDS'S.msg


RE_ Canyon Creek PTE and SQER Emissic


RE_ Canyon Creek Equipment.msg


RE_ Public Notice.msg


Transfer Efficiency Testing 3-23-22.pdf


NOC 7212


ASB Brochure.pdf

## M. REVIEWS

| Reviews | Name | Date |
|---|---|---|
| Engineer: | Carl Slimp | 3/3/2022, 4/23/22, 5/16/22, 5/23/22 |
| Inspector: | Mellissa McAfee | 3/3/2022, 5/23/22 |
| Second Review: | John Dawson | 3/3/2022, 4/25/22, 5/16/22 |
| Applicant Name: | Marie E. Piper, John Earl | 5/23/22 |