



VIA NJDEP Online

December 10, 2019

New Jersey Department of Environmental Protection
Air Quality Permitting and Planning
Bureau of Stationary Sources
Preconstruction Permits Section
401 E. State Street, 2nd Floor
P.O. Box 420
Mail Code 401-02
Trenton, New Jersey 08625-0420

**RE: Fabuwood Cabinetry Corp. (PI No. 09299)
69 95 Blanchard St, Newark City, NJ 07105
Preconstruction Permit (PCP180001) Revision Application**

Dear Sir/Madam:

On behalf of Fabuwood Cabinetry Corp. (Fabuwood), Trinity Consultants Inc. (Trinity) hereby submits a preconstruction permit revision application for the existing permit, PCP180001. Fabuwood currently operates two spray booths (E101 & E102) and one CEFLA unit (E103) as permitted under PCP180001. Through this permit revision application, Fabuwood is requesting the following changes to the current preconstruction permit PCP180001:

- Removal of VOC Control Devices (CD103, CD104, and CD106) for the Spray Booths and CEFLA unit due to conversion to use of compliant coatings;
- Removal of Operating Scenarios for Cleaning (OS4, OS5, and OS6) due to conversion to use of non-VOC solvent;
- Addition of two (2) sanding machines (E104 & E105) controlled by dust collector, CD107; and
- Updates to Emission Points Inventory section of the permit.

The changes being requested are discussed in detail below.

REMOVAL OF VOC CONTROL DEVICES (CD103, CD104 & CD106)

N.J.A.C. 7:27-16 (Subchapter 16) requires source operations at a facility to utilize reasonably available control technology (RACT) to control VOC emissions. N.J.A.C. 7:27-16.7 (Surface coating and graphic arts operations) applies to any surface coating operation or graphic arts operation to which any control criteria set forth in N.J.A.C. 7:27-16.7 Table 7A, 7B, 7C or 7D applies.

N.J.A.C. 7:27-16.7(c) provides various compliance options for surface coating operations. Currently, the facility is demonstrating compliance with the VOC RACT rule by installing and operating the Activated Carbon Adsorption Units (CD103, CD104 & CD106) with at least 90% by weight VOC emission reduction for the coating operation on an hourly basis (N.J.A.C. 7:27-16.7(c)(4)(i)).

Pursuant to N.J.A.C. 7:27-16.7(c)(1), the facility is proposing to show compliance with the VOC RACT rule by implementing the use of *VOC RACT compliant coatings* for all of their coating operations. The surface coating operations at the facility are subject to the VOC RACT rule under N.J.A.C. 7:27-16-7, Table 7B, the applicable maximum allowable VOC content per volume of coating (minus water) for the facility source operations are 2.7 lb/gal (for printed hardwood plywood panels and particleboard panels), 3.3 lb/gal (for natural finish hardwood plywood) or 3.6 lb/gal (for hardwood panels) based on the type of flat wood paneling being coated.

We therefore request the Department to remove all applicable monitoring, recordkeeping (including stack testing) requirements associated with the VOC control devices (CD103, CD104 & CD106) from the compliance plan and remove references to CD103, CD104 & CD106 from the control device and emission unit inventory section of the permit.

Revised potential emissions from the surface coating operations with new compliant coatings and without any VOC controls are summarized in Table 1 below. The compliant coating formulations (as applied) and detailed potential to emit calculations are provided in **Attachment 2**.

REMOVAL OF CLEANING OPERATING SCENARIOS (OS4, OS5 & OS6)

Previously, the facility used VOC containing solvents for cleaning operations. Fabuwood has implemented the use of zero VOC cleaning solvent (Sherwin-Williams R6K9) for all of its surface coating equipment cleaning. Thus, we kindly request that the Department remove the operating scenarios OS4, OS5 & OS6 from the permit.

ADDITION OF TWO SANDING MACHINES (E104 & E105)

Fabuwood is requesting to add the two sanding machines (E104 & E105) to the permit. The exhaust from both the sanding machines are controlled by the common dust collector (CD107).

Potential emissions from the sanding operations are summarized in Table 1 below. The detailed potential to emit calculations are provided in **Attachment 2**.

Details for the sanding machines (E104 & E105), associated dust collector (CD107), and associated emission point (PT107) are provided in the RADIUS application, **Attachment 1**. Since the two new operating scenarios are being added to the existing emission unit (U101), these are not included in the RADIUS application so as to not cause overwriting in Department's NJEMS software. Instead, the new operating scenario (OS11 & OS12) details are included as mark-ups to current permit as provided in **Attachment 3**. This is consistent with the guidance received by Trinity from the Department for similar applications.

Table 1: Revised Potential to Emit – Surface Coating and Sanding Operations

EU / OS	Facility Designation	Potential to Emit (lb/hr)					
		TSP/PM10/PM2.5	VOC	Total HAP	Ethylbenzene	Ethylene Glycol Monobutyl Ether	Formaldehyde
U101/OS1	Spray Booth 1 - Coating	D	5.855	1.5424	0.0832	1.4400	0.0193
U101/OS2	Spray Booth 2- Coating	D	5.855	1.5424	0.0832	1.4400	0.0193
U101/OS3	CEFLA Spray Booth- Coating	D	13.661	3.5989	0.1940	3.3599	0.0450
U101/OS11	Roba Simplex/Duplex -Sanding	D	-	-	-	-	-
U101/OS12	Roba Tech 1300 - Sanding	0.28	-	-	-	-	-
U101/ OSS	Total (tpy)	0.27	9.37	2.468	0.13	2.30	0.031

D:De-Minimis, Below Applicable Reporting Thresholds

EMISSION POINT INVENTORY TABLE UPDATES

Some of the stack parameters (number of stacks, stack diameter and exhaust volume information for the spray booths and CEFLA unit) need to be updated based on the final as-built design of these units. A detailed permit mark-up for the requested changes is included in **Attachment 3**.

HEALTH RISK ASSESMENT

The NJDEP requires that a first-level health risk screening be conducted if a source has potential to emit Hazardous Air Pollutants (HAPs) above Reporting Thresholds established under N.J.A.C 7:27-17, Table 2. A copy of the NJDEP Risk Screening Spreadsheet is provided in **Attachment 4**. The risk screening worksheet shows a negligible impact for all reportable HAPs.

The revised PTE for each emission source is below the State of the Art (SOTA) applicability thresholds as per N.J.A.C. 7:27-8, Appendix 1, Table A (for Criteria Pollutants) and N.J.A.C. 7:27-17.9, Table 2 (for HAPs). Hence a SOTA analysis is not required for any source/pollutant.

The RADIUS revision application (**Attachment 1**) along with this cover letter and other attachments is being submitted and certified via NJDEP Online.

If you have any questions or concerns, please feel free to contact me at (609) 318-5500 ext. 1756 or via email at rkekatpure@trinityconsultants.com.

Sincerely,

TRINITY CONSULTANTS



Rahul P. Kekatpure
Consultant

cc: Gisella Rivera (Fabuwood)
Joel Steinmetz (Fabuwood)
Solomon Eidlisz (Fabuwood)
Michael Trupin (Trinity)

Fabuwood Blanchard Street Facility, Newark, NJ

PI#09299

PCP180001 Permit Modification

PCP180001 Revised Potential to Emit (PTE)

Emission Unit	OS	ENJID	Facility Designation	Potential To Emit (lb/hr)					
				PM/PM10/PM2.5	VOC	Ethylbenzene	Ethylene Glycol Monobutyl Ether	Formaldehyde	Total HAP
U101	OS1	E101	Spray Booth 1 - Coating	D	5.855	0.0832	1.4400	0.0193	1.5424
	OS2	E102	Spray Booth 2- Coating	D	5.855	0.0832	1.4400	0.0193	1.5424
	OS3	E103	CEFLA Spray Booth- Coating	D	13.661	0.1940	3.3599	0.0450	3.5989
	OS4	E101	Spray Booth 1 - Cleaning	-	0.000	-	-	-	-
	OS5	E102	Spray Booth 2- Cleaning	-	0.000	-	-	-	-
	OS6	E103	CEFLA Spray Booth- Cleaning	-	0.000	-	-	-	-
	OS11	E104	Roba Simplex	D	-	-	-	-	-
	OS12	E105	Roba Tech 1300	0.28	-	-	-	-	-
			Potential to Emit (tpy)	0.27	9.37	0.133	2.304	0.031	2.468

Spray Booth 1: Potential to Emit (PTE) Calculations

Operational Data

Coating Operations ¹		
Max. Daily Usage (coating)	10.0	gals/day
Average Hourly Usage	1.25	gals/hr
Max. Short Term Hourly Usage	3.00	gals/hr
Overspray	15%	
Max. Hours of Operation	8	hrs/day
Max. Days of Operation	240	days/yr
Emissions Control ¹		
Particulate Emissions Control	Particulate filter	
Particulate Control Efficiency ²	99.84%	

Coating Emissions (U101/OS1)

Operating Scenario	Coating	Units	Short Term Usage	Potential To Emit						
				PM/PM10/PM2.5	VOC	Ethylbenzene	Ethylene Glycol Monobutyl Ether	Formaldehyde	Toluene	Xylene
U101/OS1 (Coating)	AUF4724 10HP	lb/hr	23.43	3.51	2.62	0.00	1.44	0.01	0.00	0.00
	AUW1080	lb/hr	29.59	4.44	2.76	0.08	0.00	0.00	0.00	0.40
	AUW4923	lb/hr	28.15	4.22	2.54	0.04	1.37	0.00	0.00	0.00
	AXA1026	lb/hr	20.78	3.12	5.85	0.00	0.00	0.00	0.00	0.00
	NUW3120	lb/hr	26.06	3.91	2.30	0.04	0.00	0.02	0.20	0.00
	YXC0412	lb/hr	19.92	2.99	1.00	0.00	0.20	0.00	0.00	0.00
Max. Pre-control Emissions ³		lb/hr	-	4.44	5.85	0.08	1.44	0.02	0.20	0.40
Max. Post-control Emissions		lb/hr	-	0.01	5.85	0.08	1.44	0.02	0.20	0.40
Annual Emissions ⁴		lb/yr		5.68	4683.85	66.52	1151.97	15.42	161.96	321.01
Reportable Thresholds ^{5,6}		lb/hr or lb/yr		0.05	0.05	19	1,000	3.5	2,000	2,000
SOTA Thresholds ^{5,6}		TPY or lb/yr		5	5	10,000	10,000	4,000	10,000	10,000
Emissions Above Reportable Threshold		-		No	Yes	Yes	Yes	Yes	No	No
Emissions Above SOTA Threshold		-		No	No	No	No	No	No	No

Notes:

- Information pertaining to spray booth and CEFLA operations provided by the client during the 07/08/2019 site visit.
- As per the filter pads manufacturer (Paint Pockets) technical specification sheet.
- Hourly emissions based on worst case coating (AXA1026) and maximum hourly usage of 3.0 gal/hr.
- Annual emissions based on worst case coating (AXA1026) and maximum annual usage of 2,400 gal/yr.
- The reporting threshold (in lbs/hr) and SOTA thresholds (in tpy) for criteria pollutants as per N.J.A.C 7:27 Subchapter 8, Appendix 1- Table 2 .
- The reporting threshold and SOTA thresholds (in lb/yr) for HAPs as per N.J.A.C 7:27 Subchapter 17, Table 2 .

Spray Booth 2: Potential to Emit (PTE) Calculations

Operational Data

Coating Operations ¹		
Max. Daily Usage (coating)	10.0	gals/day
Average Hourly Usage	1.25	gals/hr
Max. Short Term Hourly Usage	3.00	gals/hr
Overspray	15%	
Max. Hours of Operation	8	hrs/day
Max. Days of Operation	240	days/yr
Emissions Control ¹		
Particulate Emissions Control	Particulate filter	
Particulate Control Efficiency ²	99.84%	

Coating Emissions (U101/OS2)

Operating Scenario	Coating	Units	Short Term Usage	Potential To Emit						
				PM/PM10/PM2.5	VOC	Ethylbenzene	Ethylene Glycol Monobutyl Ether	Formaldehyde	Toluene	Xylene
U101/OS2 (Coating)	AUF4724 10HP	lb/hr	23.43	3.51	2.62	0.00	1.44	0.01	0.00	0.00
	AUW1080	lb/hr	29.59	4.44	2.76	0.08	0.00	0.00	0.00	0.40
	AUW4923	lb/hr	28.15	4.22	2.54	0.04	1.37	0.00	0.00	0.00
	AXA1026	lb/hr	20.78	3.12	5.85	0.00	0.00	0.00	0.00	0.00
	NUW3120	lb/hr	26.06	3.91	2.30	0.04	0.00	0.02	0.20	0.00
	YXC0412	lb/hr	19.92	2.99	1.00	0.00	0.20	0.00	0.00	0.00
Max. Pre-control Emissions ³		lb/hr	-	4.44	5.85	0.08	1.44	0.02	0.20	0.40
Max. Post-control Emissions		lb/hr	-	0.01	5.85	0.08	1.44	0.02	0.20	0.40
Annual Emissions ⁴		lb/yr		5.68	4683.85	66.52	1151.97	15.42	161.96	321.01
Reportable Thresholds ^{5,6}		lb/hr or lb/yr		0.05	0.05	19	1,000	3.5	2,000	2,000
SOTA Thresholds ^{5,6}		TPY or lb/yr		5	5	10,000	10,000	4,000	10,000	10,000
Emissions Above Reportable Threshold		-		No	Yes	Yes	Yes	Yes	No	No
Emissions Above SOTA Threshold		-		No	No	No	No	No	No	No

Notes:

- Information pertaining to spray booth and CEFLA operations provided by the client during the 07/08/2019 site visit.
- As per the filter pads manufacturer (Paint Pockets) technical specification sheet.
- Hourly emissions based on worst case coating (AXA1026) and maximum hourly usage of 3.0 gal/hr.
- Annual emissions based on worst case coating (AXA1026) and maximum annual usage of 2,400 gal/yr.
- The reporting threshold (in lbs/hr) and SOTA thresholds (in tpy) for criteria pollutants as per N.J.A.C 7:27 Subchapter 8, Appendix 1- Table 2 .
- The reporting threshold and SOTA thresholds (in lb/yr) for HAPs as per N.J.A.C 7:27 Subchapter 17, Table 2 .

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PCP180001 Permit Modification

CEFLA Unit: Potential to Emit (PTE) Calculations

Operational Data

Coating Operations ¹		
Max. Daily Usage (coating)	20.0	gals/day
Average Hourly Usage	2.50	gals/hr
Max. Short Term Hourly Usage	7.00	gals/hr
Overspray	15%	
Max. Hours of Operation	8	hrs/day
Max. Days of Operation	240	days/yr
Emissions Control ¹		
Particulate Emissions Control	Particulate filter	
Particulate Control Efficiency ²	99.84%	

Coating Emissions (U101/OS3)

Operating Scenario	Coating	Units	Short Term Usage	Potential To Emit						
				PM/PM10/PM2.5	VOC	Ethylbenzene	Ethylene Glycol Monobutyl Ether	Formaldehyde	Toluene	Xylene
U101/OS3 (Coating)	AUF4724 10HP	lb/hr	54.68	8.20	6.10	0.00	3.36	0.03	0.00	0.00
	AUW1080	lb/hr	69.05	10.36	6.45	0.19	0.00	0.00	0.00	0.94
	AUW4923	lb/hr	65.68	9.85	5.92	0.10	3.20	0.00	0.00	0.00
	AXA1026	lb/hr	48.48	7.27	13.66	0.00	0.00	0.00	0.00	0.00
	NUW3120	lb/hr	60.80	9.12	5.36	0.09	0.00	0.04	0.47	0.00
	YXC0412	lb/hr	46.49	6.97	2.33	0.00	0.47	0.00	0.00	0.00
Max. Pre-control Emissions ³		lb/hr	-	10.36	13.66	0.19	3.36	0.04	0.47	0.94
Max. Post-control Emissions		lb/hr	-	0.02	13.66	0.19	3.36	0.04	0.47	0.94
Annual Emissions ⁴		lb/yr		11.36	9367.70	133.05	2303.93	30.85	323.92	642.03
Reportable Thresholds ^{5,6}		lb/hr or lb/yr		0.05	0.05	19	1,000	3.5	2,000	2,000
SOTA Thresholds ^{5,6}		TPY or lb/yr		5	5	10,000	10,000	4,000	10,000	10,000
Emissions Above Reportable Threshold		-		No	Yes	Yes	Yes	Yes	No	No
Emissions Above SOTA Threshold		-		No	No	No	No	No	No	No

Notes:

- Information pertaining to spray booth and CEFLA operations provided by the client during the 07/08/2019 site visit.
- As per the filter pads manufacturer (Paint Pockets) technical specification sheet.
- Hourly emissions based on worst case coating (AXA1026) and maximum hourly usage of 7.0 gal/hr.
- Annual emissions based on worst case coating (AXA1026) and maximum annual usage of 4,800 gal/yr.
- The reporting threshold (in lbs/hr) and SOTA thresholds (in tpy) for criteria pollutants as per N.J.A.C 7:27 Subchapter 8, Appendix 1- Table 2.
- The reporting threshold and SOTA thresholds (in lb/yr) for HAPs as per N.J.A.C 7:27 Subchapter 17, Table 2.

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Sanding Operations: Potential to Emit (PTE) Calculations

Operational Data ¹

Sanding Operation	Roba Simplex	Roba Tech 1300	
Max. Hourly Throughput (area sanded)	75.0	9360.0	sq. ft
Max. Hours of Operation	8	8	hrs/day
Max. Days of Operation	240	240	days/yr
Emissions Control			
Particulate Emissions Control	Common Particulate Filter		

Sanding Operations Emissions (U101/OS11 & OS12)

Operating Scenario	Sander	Max. Hourly Throughput (ft ² /hr)	Annual Hours of Operation (hr/yr)	TSP/PM10/PM2.5 Post Control Emission Rate ² (lb/1,000 ft ²)	Potential to Emit TSP/PM10/PM2.5	
					lb/hr	tpy
U101/OS11	Roba Simplex	75.0	1920	0.03	0.002	D
U101/OS12	Roba Tech 1300	9360.0	1920	0.03	0.28	0.27
Annual Emissions						0.27

Notes:

1. Information pertaining to sanding operations provided by the client via email dated 09/26/2019.
2. As per AP-42, Chapter 10.6, Table 10.6.4-7, Emission Factors for Hardboard and Fiberboards Miscellaneous Sources - Particulate Matter (Hardboard Sander w/ Fabric Filter).

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New VOC RACT Compliant Coatings (As Applied)¹

Coating Code	Coating Name	Density	Total Solids		Total Volatiles		Water Content		VOC Content		Exempt Organic Substance		VOC HAPs		VOC Content (as applied)	VOC Content (minus water)	VOC HAPs
		lb/gal	Vol%	wt%	vol%	wt%	vol%	wt%	vol%	wt%	Vol%	wt%	Vol%	wt%	lb/gal	lb/gal	lb/gal
R6K9	Acetone (Cleaner)	6.59	0.0%	0.0%	100%	100%	0.0%	0.0%	0.0%	0.0%	100%	100%	0.0%	0.0%	0.00	0.00	0.00
AUF4724 10HP	Axalta - VALGUARD SELF-SEAL CONVERSION VARNISH-SOFT	7.81	28.5%	35.8%	71.5%	64.2%	0.0%	0.0%	12.1%	11.2%	59.4%	53.0%	6.7%	6.2%	0.87	0.87	0.48
AUW1080	Axalta - WHITE CONVERSION VARNISH UNDERCOAT	9.86	34.0%	51.9%	67.0%	48.1%	0.3%	0.3%	13.3%	9.3%	52.3%	38.5%	2.3%	1.6%	0.92	0.92	0.16
AUW4923	Axalta - WHITE CONVERSION VARNISH - 30 SHEEN	9.38	32.8%	49.6%	67.2%	50.4%	0.0%	0.0%	11.8%	9.0%	55.4%	41.4%	6.6%	5.0%	0.85	0.85	0.47
AXA1026	Axalta - KONA NGR STAIN	6.93	1.0%	2.4%	99.0%	97.6%	0.7%	0.9%	26.5%	28.2%	71.8%	68.6%	0.0%	0.0%	1.95	1.95	0.00
NUW3120	Axalta - VALTEC PC W LAC UC 275 HF	8.69	24.0%	41.6%	76.0%	58.4%	0.2%	0.2%	11.0%	8.8%	64.8%	49.4%	1.2%	1.0%	0.77	0.77	0.09
YXC0412	Axalta - LOW VOC STAIN BASE	6.64	0.2%	0.4%	99.8%	99.6%	0.0%	0.0%	4.8%	5.0%	94.9%	94.6%	1.0%	1.0%	0.33	0.33	0.07

Notes:

1. Coating EDSs (as applied) provided by the client (Gisella Rivera).

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New VOC RACT Compliant Coatings (As Applied) ¹

Coating Code	Coating Name	VOC	Ethylbenzene	Ethylene Glycol Monobutyl Ether	Formaldehyde	Toluene	Xylene
		wt%	wt%	wt%	wt%	wt%	wt%
R6K9	Acetone (Cleaner)	0.0%					
AUF4724 10HP	Axalta - VALGUARD SELF-SEAL CONVERSION VARNISH-SOFT	11.2%		6.1%	0.1%		
AUW1080	Axalta - WHITE CONVERSION VARNISH UNDERCOAT	9.3%	0.3%				1.4%
AUW4923	Axalta - WHITE CONVERSION VARNISH - 30 SHEEN	9.0%	0.2%	4.9%			
AXA1026	Axalta - KONA NGR STAIN	28.2%					
NUW3120	Axalta - VALTEC PC W LAC UC 275 HF	8.8%	0.2%		0.1%	0.8%	
YXC0412	Axalta - LOW VOC STAIN BASE	5.0%		1.0%	0.0%		

Notes:

1. Coating EDSs (as applied) provided by the client (Gisella Rivera).

NJDEP DIVISION OF AIR QUALITY HEALTH EFFECTS For Long-Term Carcinogenic and Noncarcinogenic

August 2010

Read these instructions carefully before using this worksheet.

This worksheet must be completed for the worst-case operating scenario for each new or existing source operation that emits air toxics. The following sources may not use this worksheet: (1) Sources without a stack as the sole point of air contaminant discharge, (2) sources with stacks with a horizontal or downward discharge direction, or (3) sources with stack heights less than 10 feet. Source information on Refined Health Risk Assessment.

To see a listing of air toxics by CAS number, click on the link below.

This is a protected file. Changes are allowed only to certain cells (those in yellow). It is also a "read-only" file, under the name of your choice. Input data only to yellow fields. Incremental cancer risk (IR) and non-cancer hazard index (NCI) (input height and distance to property line) and an emission rate.

For references for toxicity data (URFs and RfCs), see the lists at www.nj.gov/dep/aqpp/risk.html.

Further Evaluation Required (FER)

If the Worksheet generates a "FER" result for any air toxic, the facility should evaluate if the health risk level can be reduced to, the following:

1. Reducing air toxic emissions through:
 - i. Installation of an APC device or improving the efficiency of an existing APC device.
 - ii. Replacing the air toxic substance with a non-toxic or less toxic substance.
 - iii. Decreasing the annual operative hours.
 - iv. Decreasing the annual or hourly throughput.
2. Increasing the stack height.
3. Relocation of the source to a location further from the property line.

If the health risk levels need further review after this evaluation, Refined Health Risk Assessment must be conducted.

Refined Health Risk Assessment

If a Refined Health Risk Assessment is required, the applicant has two options.

Option 1: Facility Opts to Have the Department Perform the Refined Health Risk Assessment

The facility shall submit the following documents required for the Department to conduct the Refined Health Risk Ass

1. A detailed site plot plan that includes the information below. This plan shall have the signature and impression sea

- a. A depiction of the site, drawn to scale (with the scale indicated);
- b. Location of all proposed emission points (stacks, vents, etc.), all buildings and structures on-site, and facility prope
- c. Location of buildings and structures immediately adjacent to the applicant's property, if they are located near the p
- d. Height, width, and length of all buildings and structures;
- e. An indication of true north. (If plant north is shown on the plot plan, the relationship between true north and plant

2. A scaled map with the location of nearby residences and other sensitive receptors, such as hospitals, nursing home

The plot plan must be in the form of a physical, paper copy.

Option 2: Facility Opts to Perform its Own Refined Health Risk Assessment

The facility shall submit a modeling protocol for the Department's review and approval. The protocol must be develo
Modeling Protocol" and Technical Manual 1003 entitled "Guidance on Preparing a Risk Assessment for Air Contaminar
professional engineer and be in the form of a physical, paper copy. Should you have any questions on the Departme

Contact your permit evaluator to advise which option the facility chooses.

Notes

The emission points, stack parameters, short-term emission rates (lb/hr) and annual emission rates (tpy) provided in permit are needed, please contact your permit evaluator.

[For Storage Tanks] Short-term emission rates (lb/hr) for storage tanks must be based on the worst-case operatin applicable. Short-term emission rates for storage tanks are only required to be permitted for air toxics for which ther term reference concentrations in the health risk assessment submitted with the permit application.

Please mail the physical, paper copy plot plan addressed to your permit evaluator at 401 E. State Street, 2nd Floor, P please address the physical, paper copy to NJDEP - Air Quality Permitting and Planning, Bureau of Stationary Sources

HEALTH RISK SCREENING WORKSHEET

Carcinogenic Effects and Short-Term Effects

August 2018

Before completing the spreadsheet.

Facilities that have a potential to emit one or more air toxics above the reporting threshold. Based on the assumptions made, sources such as certain dry cleaners, degreasers, certain storage tanks, and gasoline stations, (2) sources with emissions that cannot use this worksheet require Refined Health Risk Assessment. See the instructions below for more

Click the "CAS Index" tab at the bottom of this worksheet page.

Save as your own "copy" file. To save the data you input, select "File" on the menu above, then "Save as" in your own file. The total hazard quotient (HQ) will calculate automatically when you type in the stack parameters (stack

Health risk levels can be reduced through mitigating actions. Mitigating actions that could lower health risk levels include, but are not limited to:

1. Only those air toxics with a "FER" result need to undergo a Refined Health Risk Assessment.

essment:

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e is a short-term reference concentration. Please indicate any HAPs listed in your permit that do not have short-

.O. Box 420, Mail Code 401-02, Trenton, NJ, 08265-0420. If you do not know the name of your permit evaluator,
i.

Fabwood Blanchard Street

H A P	CAS No.	Air Toxic	LONG-TERM EFFECTS								SHORT-TERM EFFECTS				
			Q (ton/yr)	C (ug/m ³)	URF [(ug/m ³) ⁻¹]	IR	Rslt	RFC (ug/m ³)	HQ	Rslt	Q _h (lb/hr)	C _{st} (ug/m ³)	RFC _{st} (ug/m ³)	HQ _{st}	Rslt
188	10595956	Nitrosomethylethylamine (N-)			6.3E-03										
189	59892	Nitrosomorpholine (N-)			1.9E-03										
190	759739	Nitroso-n-ethylurea (N-)			7.7E-03										
191	684935	Nitroso-n-methylurea (N-)			3.4E-02										
192	100754	Nitrosopiperidine (N-)			2.7E-03										
193	930552	Nitrosopyrrolidine (N-)			6.1E-04										
194	87865	Pentachlorophenol			5.1E-06										
195	108952	Phenol							200			5800			
196	75445	Phosgene							0.3			4			
197	7803512	Phosphine							0.3						
198	7664382	Phosphoric acid							10						
199		Phosphorus (white)							0.07						
200	85449	Phthalic anhydride							20						
201	1336363	Polychlorinated biphenyls (PCBs)			1.0E-04										
202		Polycyclic aromatic hydrocarbons (PAHs)													
203		Polycyclic organic matter (POM)													
204	7758012	Potassium bromate			1.4E-04										
205	1120714	Propane sultone (1,3-)			6.9E-04										
206	57578	Propiolactone (beta-)			4.0E-03										
207	123386	Propionaldehyde							8						
208	115071	Propylene							3000						
209	78875	Propylene dichloride			1.0E-05				4						
210	107982	Propylene glycol monomethyl ether							2000						
211	75569	Propylene oxide			3.7E-06				30			3100			
212	**	Selenium and compounds							20						
213	7631869	Silica (crystalline, respirable)							3						
214	1310732	Sodium hydroxide										8			
215	100425	Styrene			5.7E-07				1000			21000			
216	96093	Styrene oxide			4.6E-05										
217		Sulfates										120			
218	7664939	Sulfuric acid							1			120			
220	1746016	Tetrachlorodibenzo(p)dioxin (2,3,7,8-)			3.8E+01				0.00004						
221	630206	Tetrachloroethane (1,1,1,2-)			7.4E-06										
222	79345	Tetrachloroethane (1,1,2,2-)			5.8E-05										
223	127184	Tetrachloroethylene			5.9E-06				40			20000			
224	811972	Tetrafluoroethane (1,1,1,2-)							80000						
225	109999	Tetrahydrofuran							2000						
226	62555	Thioacetamide			1.7E-03										
227	7550450	Titanium tetrachloride							0.1						
228	108883	Toluene							5000			37000			
229	584849	Toluene diisocyanate (2,4-)			1.1E-05				0.07			14			
230	26471625	Toluene diisocyanate (2,4-/2,6-)			1.1E-05				0.07						
231	91087	Toluene diisocyanate (2,6-)			1.1E-05				0.07						
232	95807	Toluene-2,4-diamine			1.1E-03										
233	95534	Toluidine (o-)			5.1E-05										
234	8001352	Toxaphene			3.2E-04										
235	76131	Trichloro-1,2,2-trifluoroethane (1,1,2-)							30000						
236	120821	Trichlorobenzene (1,2,4-)							2						
237	79005	Trichloroethane (1,1,2-)			1.6E-05										
238	79016	Trichloroethylene			4.8E-06				2			2			
239	75694	Trichlorofluoromethane							700						
240	88062	Trichlorophenol (2,4,6-)			3.1E-06										
241	121448	Triethylamine							7			2800			
242	1582098	Trifluralin			2.2E-06										
243	95636	Trimethylbenzene (1,2,4-)							7						
244	7440622	Vanadium							0.1			0.8			
245	1314621	Vanadium pentoxide										30			
246	108054	Vinyl acetate							200						
247	593602	Vinyl bromide			3.2E-05				3						
248	75014	Vinyl chloride			8.8E-06				100			180000			
249	75354	Vinylidene chloride							200						
250	*	Xylene (m-, o-, p-, or mixed isomers)							100						

See footnote "b"

If any calculated long-term or short-term effects for an air toxic result in "Further Evaluation Required" (FER) on this Risk Screening Worksheet, a Refined Risk Assessment is required for that air toxic.

NOTE:

- * Clean Air Act hazardous air pollutant
- ** Clean Air Act hazardous air pollutant, but not listed individually (part of a group)
- a Dioxins may be considered to be all 2,3,7,8-tetrachlorodibenzo(p)dioxin, or separated into congeners (contact AQEV).
- b PAH or POM may be considered to be all benzo(a)pyrene, or separated into individual PAHs (contact AQEV).

The results are determined by comparing the long-term and short-term effects to the single-source thresholds, listed below.
 The threshold value of negligible risk for incremental risk (IR) is 1 in a million (1.0E-06). An IR value less than or equal to 1 in million is considered negligible.
 The threshold value of negligible risk for long-term hazard quotient (HQ) for non-carcinogenic risk is 1.0. An HQ less than or equal to 1.0 is considered negligible.
 The threshold value of negligible risk for short-term hazard quotient (HQ_{st}) for non-carcinogenic risk is 1.0. An HQ_{st} less than or equal to 1.0 is considered negligible.

NJDEP AIR QUALITY PERMITTING PROGRAM F
For Carcinogenic and Long-Term and Short-T

Air Toxics on the Risk Screening Workshee

To search for an air toxic by name, select "Edit" on menu above, then "Fin

Those marked with an asterisk (* or **) are HAPs under Section 112(b) of the 1990

CAS No.	Air Toxic
* 50000	Formaldehyde
50293	DDT
** 50328	Benzo(a)pyrene
* 51796	Ethyl carbamate
* 53963	Acetylaminofluorene (2-)
55185	Nitrosodiethylamine (N-)
* 56235	Carbon tetrachloride
* 57147	Dimethylhydrazine (1,1-)
* 57578	Propiolactone (beta-)
* 57749	Chlordane
* 58899	Hexachlorocyclohexane (gamma-)
* 59892	Nitrosomorpholine (N-)
* 60117	Dimethylaminoazobenzene (4-)
* 60344	Methylhydrazine
* 60355	Acetamide
60571	Dieldrin
* 62533	Aniline
62555	Thioacetamide
* 62737	Dichlorvos
* 62759	Nitrosodimethylamine (N-)
* 67561	Methanol
67630	Isopropanol
67641	Acetone
* 67663	Chloroform
* 67721	Hexachloroethane
* 68122	Dimethylformamide (N,N-)
* 71432	Benzene
* 71556	Methyl chloroform
* 72559	DDE
* 74839	Methyl bromide
* 74873	Methyl chloride
** 74908	Hydrogen cyanide
74975	Bromochloromethane
* 75003	Ethyl chloride
* 75014	Vinyl chloride
* 75058	Acetonitrile
* 75070	Acetaldehyde

* 75092 Methylene chloride
* 75150 Carbon disulfide
* 75218 Ethylene oxide
* 75252 Bromoform
75274 Bromodichloromethane
75296 Chloropropane (2-)
* 75343 Ethylidene dichloride
* 75354 Vinylidene chloride
75376 Difluoroethane (1,1-)
* 75445 Phosgene
75456 Chlorodifluoromethane
* 75569 Propylene oxide
75683 Chloro-1,1-difluoroethane (1-)
75694 Trichlorofluoromethane
75718 Dichlorodifluoromethane
75865 Acetone cyanohydrin
76062 Chloropicrin
76131 Trichloro-1,2,2-trifluoroethane (1,1,2-)
* 76448 Heptachlor
* 77474 Hexachlorocyclopentadiene
77736 Dicyclopentadiene
* 77781 Dimethyl sulfate
* 78591 Isophorone
* 78875 Propylene dichloride
78933 Methyl ethyl ketone
* 79005 Trichloroethane (1,1,2-)
* 79016 Trichloroethylene
* 79061 Acrylamide
* 79107 Acrylic acid
* 79345 Tetrachloroethane (1,1,2,2-)
* 79447 Dimethylcarbamyl chloride
* 79469 Nitropropane (2-)
* 80626 Methyl methacrylate
* 85449 Phthalic anhydride
86306 Nitrosodiphenylamine (N-)
* 87683 Hexachlorobutadiene
* 87865 Pentachlorophenol
* 88062 Trichlorophenol (2,4,6-)
88744 Nitroaniline (o-)
* 90040 Anisidine (o-)
90948 Michler's ketone
* 91087 Toluene diisocyanate (2,6-)
* 91203 Naphthalene
* 91941 Dichlorobenzidine (3,3'-)
* 92524 Biphenyl (1,1-)
* 92671 Aminobiphenyl (4-)
* 92875 Benzidine

95501 Dichlorobenzene (1,2-)
* 95534 Toluidine (o-)
95636 Trimethylbenzene (1,2,4-)
95692 Chloro-o-toluidine (p-)
* 95807 Toluene-2,4-diamine
95830 Chloro-o-phenylenediamine (4-)
* 96093 Styrene oxide
* 96128 Dibromo-3-chloropropane (1,2-)
* 96457 Ethylene thiourea
98011 Furfural
* 98077 Benzotrichloride
98828 Cumene
* 98862 Acetophenone
* 98953 Nitrobenzene
* 100414 Ethylbenzene
* 100425 Styrene
* 100447 Benzyl chloride
100754 Nitrosopiperidine (N-)
* 101144 Methylene bis(2-chloroaniline) (4,4'-)
* 101688 Methylenediphenyl diisocyanate (4,4'-)
101779 Methylenedianiline (4,4-)
103333 Azobenzene
105602 Caprolactam
* 106467 Dichlorobenzene (1,4-)
* 106887 Epoxybutane (1,2-)
* 106898 Epichlorohydrin
* 106934 Ethylene dibromide
* 106990 Butadiene (1,3-)
* 107028 Acrolein
* 107051 Allyl chloride
* 107062 Ethylene dichloride
* 107131 Acrylonitrile
* 107211 Ethylene glycol
* 107302 Chloromethyl methyl ether
107982 Propylene glycol monomethyl ether
* 108054 Vinyl acetate
* 108101 Methyl isobutyl ketone
* 108316 Maleic anhydride
108601 Bis(2-chloroisopropyl)ether
108872 Methylcyclohexane
* 108883 Toluene
* 108907 Chlorobenzene
* 108952 Phenol
** 109864 Ethylene glycol monomethyl ether
109999 Tetrahydrofuran
** 110496 Ethylene glycol monomethyl ether acetate
* 110543 Hexane (N-)

** 110805 Ethylene glycol monoethyl ether
110827 Cyclohexane
** 111159 Ethylene glycol monoethyl ether acetate
111308 Glutaraldehyde
* 111422 Diethanolamine
* 111444 Dichloroethyl ether
* 111762 Ethylene glycol monobutyl ether
112345 Diethylene glycol monobutyl ether
115071 Propylene
117793 Aminoanthraquinone (2-)
* 117817 Bis(2-ethylhexyl)phthalate
* 118741 Hexachlorobenzene
120718 Cresidine (p-)
* 120821 Trichlorobenzene (1,2,4-)
* 121142 Dinitrotoluene (2,4-)
* 121448 Triethylamine
* 122667 Diphenylhydrazine (1,2-)
* 123386 Propionaldehyde
* 123911 Dioxane (1,4-)
124481 Dibromochloromethane
126987 Methacrylonitrile
* 126998 Chloroprene
* 127184 Tetrachloroethylene
* 133062 Captan
135206 Cupferron
140578 Aramite
* 140885 Ethyl acrylate
* 151564 Ethyleneimine
156105 Nitrosodiphenylamine (p-)
* 302012 Hydrazine
309002 Aldrin
** 319846 Hexachlorocyclohexane (alpha-)
** 319857 Hexachlorocyclohexane (beta-)
* 510156 Chlorobenzilate
* 532274 Chloroacetophenone (2-)
540738 Dimethylhydrazine (1,2-)
* 542756 Dichloropropene (1,3-)
* 542881 Bis(chloromethyl)ether
* 584849 Toluene diisocyanate (2,4-)
* 593602 Vinyl bromide
** 608731 Hexachlorocyclohexane (technical grade)
615054 Diaminoanisoole (2,4-)
621647 Nitrosodi-n-propylamine (N-)
* 624839 Methyl isocyanate
630206 Tetrachloroethane (1,1,1,2-)
* 684935 Nitroso-n-methylurea (N-)
759739 Nitroso-n-ethylurea (N-)

764410 Dichloro-2-butene (1,4-)
765344 Glycidaldehyde
811972 Tetrafluoroethane (1,1,1,2-)
* 822060 Hexamethylene diisocyanate
924163 Nitrosodi-n-butylamine (N-)
930552 Nitrosopyrrolidine (N-)
1024573 Heptachlor epoxide
* 1120714 Propane sultone (1,3-)
** 1309644 Antimony trioxide
1310732 Sodium hydroxide
** 1313991 Nickel oxide
1314621 Vanadium pentoxide
* 1332214 Asbestos
* 1336363 Polychlorinated biphenyls (PCBs)
* 1582098 Trifluralin
* 1634044 Methyl tert butyl ether
* 1746016 Tetrachlorodibenzo(p)dioxin (2,3,7,8-)
* 7439976 Mercury (inorganic)
7440428 Boron (elemental)
7440622 Vanadium
* 7550450 Titanium tetrachloride
7631869 Silica (crystalline, respirable)
7637072 Boron trifluoride
* 7647010 Hydrogen chloride
* 7664382 Phosphoric acid
* 7664393 Hydrogen fluoride
7664417 Ammonia
7664939 Sulfuric acid
7697372 Nitric acid
7758012 Potassium bromate
* 7782505 Chlorine
7783064 Hydrogen sulfide
** 7783075 Hydrogen selenide
** 7784421 Arsine
* 7803512 Phosphine
* 8001352 Toxaphene
* 8007452 Coke oven emissions
10034932 Hydrazine sulfate
10049044 Chlorine dioxide
10595956 Nitrosomethylethylamine (N-)
16984488 Fluoride
** 18540299 Chromium VI (total)
19408743 Hexachlorodibenzo-p-dioxin, mixture
25013154 Methyl styrene (mixed isomers)
* 26471625 Toluene diisocyanate (2,4-/2,6-)
108171262 Chlorinated paraffins

RISK SCREENING WORKSHEET

Term Noncarcinogenic Effects

Sort in Order of CAS Number

Click on the name and type in part of name.

Clean Air Act Amendments.

Synonym

Urethane

Lindane

1,1,1-Trichloroethane

Bromomethane

Chloromethane

Chlorobromomethane

Dichloromethane

1,1-Dichloroethane

1,1-Dichloroethylene

HCFC-152a

HCFC-22

HCFC-142b

Freon 113

1,2-Dichloropropane

MEK

2,4-Diaminotoluene

Chloromethylbenzene

1,2-Dibromoethane

1,2-Dichloroethane

MIBK

2-Methoxyethanol

2-Ethoxyethanol

Bis(2-chloroethyl)ether
2-Butoxyethanol; EGBE

Di(2-ethylhexyl)phthalate; DEHP

Chlorodibromomethane

2-Chloro-1,3-butadiene
Perchloroethylene

Aziridine

Ethyl-4,4'-dichlorobenzilate

Bromoethene

MTBE
Dioxin

Hydrochloric acid

NJDEP DIVISION OF AIR QUALITY HEALTH RISK ASSESSMENT For Long-Term Carcinogenic and Noncarcinogenic Air Toxics

August 2013

Read these instructions carefully before using this worksheet.

This worksheet must be completed for the worst-case operating scenario for each new or existing source operation that emits air toxics. The following sources may not use this worksheet: (1) Sources without a stack as the sole point of air contaminant discharge, (2) sources with stacks with a horizontal or downward discharge direction, or (3) sources with stack heights less than 10 feet. Source information on Refined Health Risk Assessment.

To see a listing of air toxics by CAS number, click on the link below.

This is a protected file. Changes are allowed only to certain cells (those in yellow). It is also a "read-only" file, under the name of your choice. Input data only to yellow fields. Incremental cancer risk (IR) and non-cancer hazard index (HI) (height and distance to property line) and an emission rate.

For references for toxicity data (URFs and RfCs), see the lists at www.nj.gov/dep/aqpp/risk.html.

Further Evaluation Required (FER)

If the Worksheet generates a "FER" result for any air toxic, the facility should evaluate if the health risk level can be reduced to the following:

1. Reducing air toxic emissions through:
 - i. Installation of an APC device or improving the efficiency of an existing APC device.
 - ii. Replacing the air toxic substance with a non-toxic or less toxic substance.
 - iii. Decreasing the annual operative hours.
 - iv. Decreasing the annual or hourly throughput.
2. Increasing the stack height.
3. Relocation of the source to a location further from the property line.

If the health risk levels need further review after this evaluation, Refined Health Risk Assessment must be conducted.

Refined Health Risk Assessment

If a Refined Health Risk Assessment is required, the applicant has two options.

Option 1: Facility Opts to Have the Department Perform the Refined Health Risk Assessment

The facility shall submit the following documents required for the Department to conduct the Refined Health Risk Ass

1. A detailed site plot plan that includes the information below. This plan shall have the signature and impression sea

- a. A depiction of the site, drawn to scale (with the scale indicated);
- b. Location of all proposed emission points (stacks, vents, etc.), all buildings and structures on-site, and facility prope
- c. Location of buildings and structures immediately adjacent to the applicant's property, if they are located near the p
- d. Height, width, and length of all buildings and structures;
- e. An indication of true north. (If plant north is shown on the plot plan, the relationship between true north and plant

2. A scaled map with the location of nearby residences and other sensitive receptors, such as hospitals, nursing home

The plot plan must be in the form of a physical, paper copy.

Option 2: Facility Opts to Perform its Own Refined Health Risk Assessment

The facility shall submit a modeling protocol for the Department's review and approval. The protocol must be develo
Modeling Protocol" and Technical Manual 1003 entitled "Guidance on Preparing a Risk Assessment for Air Contaminar
professional engineer and be in the form of a physical, paper copy. Should you have any questions on the Departme

Contact your permit evaluator to advise which option the facility chooses.

Notes

The emission points, stack parameters, short-term emission rates (lb/hr) and annual emission rates (tpy) provided in permit are needed, please contact your permit evaluator.

[For Storage Tanks] Short-term emission rates (lb/hr) for storage tanks must be based on the worst-case operatin applicable. Short-term emission rates for storage tanks are only required to be permitted for air toxics for which ther term reference concentrations in the health risk assessment submitted with the permit application.

Please mail the physical, paper copy plot plan addressed to your permit evaluator at 401 E. State Street, 2nd Floor, P please address the physical, paper copy to NJDEP - Air Quality Permitting and Planning, Bureau of Stationary Sources

HEALTH RISK SCREENING WORKSHEET

Carcinogenic Effects and Short-Term Effects

2018

Before completing the spreadsheet.

that has a potential to emit one or more air toxics above the reporting threshold. Based on the assumptions made, discharge, such as certain dry cleaners, degreasers, certain storage tanks, and gasoline stations, (2) sources with emissions that cannot use this worksheet require Refined Health Risk Assessment. See the instructions below for more

Use the "CAS Index" tab at the bottom of this worksheet page.

Save as your own file. To save the data you input, select "File" on the menu above, then "Save as" in your own file. The hazard quotient (HQ) will calculate automatically when you type in the stack parameters (stack

reduced through mitigating actions. Mitigating actions that could lower health risk levels include, but are not limited

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nt's Technical Manuals 1002 and 1003, please contact the Bureau of Evaluation and Planning at 609-292-6722.

the protocol and entered in the Worksheet must be consistent with your permit application. If changes to your

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.O. Box 420, Mail Code 401-02, Trenton, NJ, 08265-0420. If you do not know the name of your permit evaluator,
i.

Fabwood Blanchard Street

H A P	CAS No.	Air Toxic	LONG-TERM EFFECTS								SHORT-TERM EFFECTS				
			Q (ton/yr)	C (ug/m ³)	URF [(ug/m ³) ⁻¹]	IR	Rslt	RFC (ug/m ³)	HQ	Rslt	Q _h (lb/hr)	C _{st} (ug/m ³)	RFC _{st} (ug/m ³)	HQ _{st}	Rslt
188	10595956	Nitrosomethylethylamine (N-)			6.3E-03										
189	59892	Nitrosomorpholine (N-)			1.9E-03										
190	759739	Nitroso-n-ethylurea (N-)			7.7E-03										
191	684935	Nitroso-n-methylurea (N-)			3.4E-02										
192	100754	Nitrosopiperidine (N-)			2.7E-03										
193	930552	Nitrosopyrrolidine (N-)			6.1E-04										
194	87865	Pentachlorophenol			5.1E-06										
195	108952	Phenol							200			5800			
196	75445	Phosgene							0.3			4			
197	7803512	Phosphine							0.3						
198	7664382	Phosphoric acid							10						
199		Phosphorus (white)							0.07						
200	85449	Phthalic anhydride							20						
201	1336363	Polychlorinated biphenyls (PCBs)			1.0E-04										
202		Polycyclic aromatic hydrocarbons (PAHs)													
203		Polycyclic organic matter (POM)													
204	7758012	Potassium bromate			1.4E-04										
205	1120714	Propane sultone (1,3-)			6.9E-04										
206	57578	Propiolactone (beta-)			4.0E-03										
207	123386	Propionaldehyde							8						
208	115071	Propylene							3000						
209	78875	Propylene dichloride			1.0E-05				4						
210	107982	Propylene glycol monomethyl ether							2000						
211	75569	Propylene oxide			3.7E-06				30			3100			
212	**	Selenium and compounds							20						
213	7631869	Silica (crystalline, respirable)							3						
214	1310732	Sodium hydroxide										8			
215	100425	Styrene			5.7E-07				1000			21000			
216	96093	Styrene oxide			4.6E-05										
217		Sulfates										120			
218	7664939	Sulfuric acid							1			120			
220	1746016	Tetrachlorodibenzo(p)dioxin (2,3,7,8-)			3.8E+01				0.00004						
221	630206	Tetrachloroethane (1,1,1,2-)			7.4E-06										
222	79345	Tetrachloroethane (1,1,2,2-)			5.8E-05										
223	127184	Tetrachloroethylene			5.9E-06				40			20000			
224	811972	Tetrafluoroethane (1,1,1,2-)							80000						
225	109999	Tetrahydrofuran							2000						
226	62555	Thioacetamide			1.7E-03										
227	7550450	Titanium tetrachloride							0.1						
228	108883	Toluene							5000			37000			
229	584849	Toluene diisocyanate (2,4-)			1.1E-05				0.07			14			
230	26471625	Toluene diisocyanate (2,4-/2,6-)			1.1E-05				0.07						
231	91087	Toluene diisocyanate (2,6-)			1.1E-05				0.07						
232	95807	Toluene-2,4-diamine			1.1E-03										
233	95534	Toluidine (o-)			5.1E-05										
234	8001352	Toxaphene			3.2E-04										
235	76131	Trichloro-1,2,2-trifluoroethane (1,1,2-)							30000						
236	120821	Trichlorobenzene (1,2,4-)							2						
237	79005	Trichloroethane (1,1,2-)			1.6E-05										
238	79016	Trichloroethylene			4.8E-06				2			2			
239	75694	Trichlorofluoromethane							700						
240	88062	Trichlorophenol (2,4,6-)			3.1E-06										
241	121448	Triethylamine							7			2800			
242	1582098	Trifluralin			2.2E-06										
243	95636	Trimethylbenzene (1,2,4-)							7						
244	7440622	Vanadium							0.1			0.8			
245	1314621	Vanadium pentoxide										30			
246	108054	Vinyl acetate							200						
247	593602	Vinyl bromide			3.2E-05				3						
248	75014	Vinyl chloride			8.8E-06				100			180000			
249	75354	Vinylidene chloride							200						
250	*	Xylene (m-, o-, p-, or mixed isomers)							100						22000

See footnote "b"

If any calculated long-term or short-term effects for an air toxic result in "Further Evaluation Required" (FER) on this Risk Screening Worksheet, a Refined Risk Assessment is required for that air toxic.

NOTE:

- * Clean Air Act hazardous air pollutant
- ** Clean Air Act hazardous air pollutant, but not listed individually (part of a group)
- a Dioxins may be considered to be all 2,3,7,8-tetrachlorodibenzo(p)dioxin, or separated into congeners (contact AQEV).
- b PAH or POM may be considered to be all benzo(a)pyrene, or separated into individual PAHs (contact AQEV).

The results are determined by comparing the long-term and short-term effects to the single-source thresholds, listed below.
 The threshold value of negligible risk for incremental risk (IR) is 1 in a million (1.0E-06). An IR value less than or equal to 1 in million is considered negligible.
 The threshold value of negligible risk for long-term hazard quotient (HQ) for non-carcinogenic risk is 1.0. An HQ less than or equal to 1.0 is considered negligible.
 The threshold value of negligible risk for short-term hazard quotient (HQ_{st}) for non-carcinogenic risk is 1.0. An HQ_{st} less than or equal to 1.0 is considered negligible.

NJDEP AIR QUALITY PERMITTING PROGRAM F
For Carcinogenic and Long-Term and Short-T

Air Toxics on the Risk Screening Workshee

To search for an air toxic by name, select "Edit" on menu above, then "Fin

Those marked with an asterisk (* or **) are HAPs under Section 112(b) of the 1990

CAS No.	Air Toxic
* 50000	Formaldehyde
50293	DDT
** 50328	Benzo(a)pyrene
* 51796	Ethyl carbamate
* 53963	Acetylaminofluorene (2-)
55185	Nitrosodiethylamine (N-)
* 56235	Carbon tetrachloride
* 57147	Dimethylhydrazine (1,1-)
* 57578	Propiolactone (beta-)
* 57749	Chlordane
* 58899	Hexachlorocyclohexane (gamma-)
* 59892	Nitrosomorpholine (N-)
* 60117	Dimethylaminoazobenzene (4-)
* 60344	Methylhydrazine
* 60355	Acetamide
60571	Dieldrin
* 62533	Aniline
62555	Thioacetamide
* 62737	Dichlorvos
* 62759	Nitrosodimethylamine (N-)
* 67561	Methanol
67630	Isopropanol
67641	Acetone
* 67663	Chloroform
* 67721	Hexachloroethane
* 68122	Dimethylformamide (N,N-)
* 71432	Benzene
* 71556	Methyl chloroform
* 72559	DDE
* 74839	Methyl bromide
* 74873	Methyl chloride
** 74908	Hydrogen cyanide
74975	Bromochloromethane
* 75003	Ethyl chloride
* 75014	Vinyl chloride
* 75058	Acetonitrile
* 75070	Acetaldehyde

* 75092 Methylene chloride
* 75150 Carbon disulfide
* 75218 Ethylene oxide
* 75252 Bromoform
75274 Bromodichloromethane
75296 Chloropropane (2-)
* 75343 Ethylidene dichloride
* 75354 Vinylidene chloride
75376 Difluoroethane (1,1-)
* 75445 Phosgene
75456 Chlorodifluoromethane
* 75569 Propylene oxide
75683 Chloro-1,1-difluoroethane (1-)
75694 Trichlorofluoromethane
75718 Dichlorodifluoromethane
75865 Acetone cyanohydrin
76062 Chloropicrin
76131 Trichloro-1,2,2-trifluoroethane (1,1,2-)
* 76448 Heptachlor
* 77474 Hexachlorocyclopentadiene
77736 Dicyclopentadiene
* 77781 Dimethyl sulfate
* 78591 Isophorone
* 78875 Propylene dichloride
78933 Methyl ethyl ketone
* 79005 Trichloroethane (1,1,2-)
* 79016 Trichloroethylene
* 79061 Acrylamide
* 79107 Acrylic acid
* 79345 Tetrachloroethane (1,1,2,2-)
* 79447 Dimethylcarbamyl chloride
* 79469 Nitropropane (2-)
* 80626 Methyl methacrylate
* 85449 Phthalic anhydride
86306 Nitrosodiphenylamine (N-)
* 87683 Hexachlorobutadiene
* 87865 Pentachlorophenol
* 88062 Trichlorophenol (2,4,6-)
88744 Nitroaniline (o-)
* 90040 Anisidine (o-)
90948 Michler's ketone
* 91087 Toluene diisocyanate (2,6-)
* 91203 Naphthalene
* 91941 Dichlorobenzidine (3,3'-)
* 92524 Biphenyl (1,1-)
* 92671 Aminobiphenyl (4-)
* 92875 Benzidine

95501 Dichlorobenzene (1,2-)
* 95534 Toluidine (o-)
95636 Trimethylbenzene (1,2,4-)
95692 Chloro-o-toluidine (p-)
* 95807 Toluene-2,4-diamine
95830 Chloro-o-phenylenediamine (4-)
* 96093 Styrene oxide
* 96128 Dibromo-3-chloropropane (1,2-)
* 96457 Ethylene thiourea
98011 Furfural
* 98077 Benzotrichloride
98828 Cumene
* 98862 Acetophenone
* 98953 Nitrobenzene
* 100414 Ethylbenzene
* 100425 Styrene
* 100447 Benzyl chloride
100754 Nitrosopiperidine (N-)
* 101144 Methylene bis(2-chloroaniline) (4,4'-)
* 101688 Methylenediphenyl diisocyanate (4,4'-)
101779 Methylenedianiline (4,4-)
103333 Azobenzene
105602 Caprolactam
* 106467 Dichlorobenzene (1,4-)
* 106887 Epoxybutane (1,2-)
* 106898 Epichlorohydrin
* 106934 Ethylene dibromide
* 106990 Butadiene (1,3-)
* 107028 Acrolein
* 107051 Allyl chloride
* 107062 Ethylene dichloride
* 107131 Acrylonitrile
* 107211 Ethylene glycol
* 107302 Chloromethyl methyl ether
107982 Propylene glycol monomethyl ether
* 108054 Vinyl acetate
* 108101 Methyl isobutyl ketone
* 108316 Maleic anhydride
108601 Bis(2-chloroisopropyl)ether
108872 Methylcyclohexane
* 108883 Toluene
* 108907 Chlorobenzene
* 108952 Phenol
** 109864 Ethylene glycol monomethyl ether
109999 Tetrahydrofuran
** 110496 Ethylene glycol monomethyl ether acetate
* 110543 Hexane (N-)

** 110805 Ethylene glycol monoethyl ether
110827 Cyclohexane
** 111159 Ethylene glycol monoethyl ether acetate
111308 Glutaraldehyde
* 111422 Diethanolamine
* 111444 Dichloroethyl ether
* 111762 Ethylene glycol monobutyl ether
112345 Diethylene glycol monobutyl ether
115071 Propylene
117793 Aminoanthraquinone (2-)
* 117817 Bis(2-ethylhexyl)phthalate
* 118741 Hexachlorobenzene
120718 Cresidine (p-)
* 120821 Trichlorobenzene (1,2,4-)
* 121142 Dinitrotoluene (2,4-)
* 121448 Triethylamine
* 122667 Diphenylhydrazine (1,2-)
* 123386 Propionaldehyde
* 123911 Dioxane (1,4-)
124481 Dibromochloromethane
126987 Methacrylonitrile
* 126998 Chloroprene
* 127184 Tetrachloroethylene
* 133062 Captan
135206 Cupferron
140578 Aramite
* 140885 Ethyl acrylate
* 151564 Ethyleneimine
156105 Nitrosodiphenylamine (p-)
* 302012 Hydrazine
309002 Aldrin
** 319846 Hexachlorocyclohexane (alpha-)
** 319857 Hexachlorocyclohexane (beta-)
* 510156 Chlorobenzilate
* 532274 Chloroacetophenone (2-)
540738 Dimethylhydrazine (1,2-)
* 542756 Dichloropropene (1,3-)
* 542881 Bis(chloromethyl)ether
* 584849 Toluene diisocyanate (2,4-)
* 593602 Vinyl bromide
** 608731 Hexachlorocyclohexane (technical grade)
615054 Diaminoanisoole (2,4-)
621647 Nitrosodi-n-propylamine (N-)
* 624839 Methyl isocyanate
630206 Tetrachloroethane (1,1,1,2-)
* 684935 Nitroso-n-methylurea (N-)
759739 Nitroso-n-ethylurea (N-)

764410 Dichloro-2-butene (1,4-)
765344 Glycidaldehyde
811972 Tetrafluoroethane (1,1,1,2-)
* 822060 Hexamethylene diisocyanate
924163 Nitrosodi-n-butylamine (N-)
930552 Nitrosopyrrolidine (N-)
1024573 Heptachlor epoxide
* 1120714 Propane sultone (1,3-)
** 1309644 Antimony trioxide
1310732 Sodium hydroxide
** 1313991 Nickel oxide
1314621 Vanadium pentoxide
* 1332214 Asbestos
* 1336363 Polychlorinated biphenyls (PCBs)
* 1582098 Trifluralin
* 1634044 Methyl tert butyl ether
* 1746016 Tetrachlorodibenzo(p)dioxin (2,3,7,8-)
* 7439976 Mercury (inorganic)
7440428 Boron (elemental)
7440622 Vanadium
* 7550450 Titanium tetrachloride
7631869 Silica (crystalline, respirable)
7637072 Boron trifluoride
* 7647010 Hydrogen chloride
* 7664382 Phosphoric acid
* 7664393 Hydrogen fluoride
7664417 Ammonia
7664939 Sulfuric acid
7697372 Nitric acid
7758012 Potassium bromate
* 7782505 Chlorine
7783064 Hydrogen sulfide
** 7783075 Hydrogen selenide
** 7784421 Arsine
* 7803512 Phosphine
* 8001352 Toxaphene
* 8007452 Coke oven emissions
10034932 Hydrazine sulfate
10049044 Chlorine dioxide
10595956 Nitrosomethylethylamine (N-)
16984488 Fluoride
** 18540299 Chromium VI (total)
19408743 Hexachlorodibenzo-p-dioxin, mixture
25013154 Methyl styrene (mixed isomers)
* 26471625 Toluene diisocyanate (2,4-/2,6-)
108171262 Chlorinated paraffins

RISK SCREENING WORKSHEET

Term Noncarcinogenic Effects

Sort in Order of CAS Number

Click on the "CAS" column header to sort by CAS Number, and type in part of name.

Clean Air Act Amendments.

Synonym

Urethane

Lindane

1,1,1-Trichloroethane

Bromomethane

Chloromethane

Chlorobromomethane

Dichloromethane

1,1-Dichloroethane

1,1-Dichloroethylene

HCFC-152a

HCFC-22

HCFC-142b

Freon 113

1,2-Dichloropropane

MEK

2,4-Diaminotoluene

Chloromethylbenzene

1,2-Dibromoethane

1,2-Dichloroethane

MIBK

2-Methoxyethanol

2-Ethoxyethanol

Bis(2-chloroethyl)ether
2-Butoxyethanol; EGBE

Di(2-ethylhexyl)phthalate; DEHP

Chlorodibromomethane

2-Chloro-1,3-butadiene
Perchloroethylene

Aziridine

Ethyl-4,4'-dichlorobenzilate

Bromoethene

MTBE
Dioxin

Hydrochloric acid

**New Jersey Department of Environmental Protection
Reason for Application**

Permit Being Modified

Permit Class: PCP **Number:** 180001

Description of Modifications: Fabuwood Cabinetry Corp. (Fabuwood), hereby submits a preconstruction permit revision application for the existing permit PCP180001. Through this permit revision application, Fabuwood is requesting the following changes to the current preconstruction permit PCP180001:

- 1) Removal of VOC control devices (CD103, CD104, and CD106) for the Spray Booths and CEFLA unit due to conversion to use of compliant coatings;
- 2) Updates to the cleaning operating scenarios (OS4, OS5, and OS6) due to use of non-VOC cleaning solvent;
- 3) Addition of two (2) sanding machines (E104 & E105) controlled by common dust collector (CD107); and
- 4) Updates to emission points inventory table of the permit.

The changes being requested are discussed in detail in the cover letter attached to the preconstruction permit revision application. Revised potential to emit calculations, NJDEP Risk Screening worksheets, compliant coating/Cleanign solvent SDSs, Fabuwood Operations fact sheet and block diagram are included in the separate attachment to this permit application.

New Jersey Department of Environmental Protection
Facility Profile (General)

Facility Name (AIMS): Fabuwood Blanchard Street

Facility ID (AIMS): 09299

Street 69-95 BLANCHARD ST
Address: NEWARK, NJ 07105

Mailing 69-95 BLANCHARD ST
Address: NEWARK, NJ 07105

County: Essex
Location
Description:

State Plane Coordinates:	
X-Coordinate:	594,971
Y-Coordinate:	693,934
Units:	Feet
Datum:	NAD83
Source Org.:	DEP-GIS
Source Type:	DEP Program Database

Industry:	
Primary SIC:	
Secondary SIC:	
NAICS:	337110

**New Jersey Department of Environmental Protection
Facility Profile (General)**

Contact Type: Air Permit Information Contact

Organization: Fabuwood

Org. Type: Corporation

Name: Solomon Eidlisz

NJ EIN: 26342532300

Title: General Manager

Phone: (201) 432-6555 x

Mailing Address: 69-95 Blanchard Street

Fax: (201) 432-6055 x

Newark, NJ 07105

Other: () - x

Type:

Email: seidlisz@fabuwood.com

Contact Type: Consultant

Organization: Trinity Consultants

Org. Type:

Name: Rahul P. Kekatpure

NJ EIN:

Title: Consultant

Phone: (609) 318-5500 x1756

Mailing Address: 15 Roszel Road, Suite 105

Fax: () - x

Princeton, NJ 08540

Other: () - x

Type:

Email: rkekatpure@trinityconsultants.com

Contact Type: Fees/Billing Contact

Organization: Fabuwood

Org. Type: Corporation

Name: Solomon Eidlisz

NJ EIN: 26342532300

Title: General Manager

Phone: (201) 432-6555 x

Mailing Address: 69-95 Blanchard Street

Fax: (201) 432-6055 x

Newark, NJ 07105

Other: () - x

Type:

Email: seidlisz@fabuwood.com

**New Jersey Department of Environmental Protection
Facility Profile (General)**

Contact Type: General Contact

Organization: Fabuwood

Org. Type: Corporation

Name: Solomon Eidlisz

NJ EIN: 26342532300

Title: General Manager

Phone: (201) 432-6555 x

Mailing Address: 69-95 Blanchard Street

Fax: (201) 432-6055 x

Newark, NJ 07105

Other: () - x

Type:

Email: seidlisz@fabuwood.com

Contact Type: On-Site Manager

Organization: Fabuwood

Org. Type: Corporation

Name: Solomon Eidlisz

NJ EIN: 26342532300

Title: General Manager

Phone: (201) 432-6555 x

Mailing Address: 69-95 Blanchard Street

Fax: (201) 432-6055 x

Newark, NJ 07105

Other: () - x

Type:

Email: seidlisz@fabuwood.com

Contact Type: Operator

Organization: Fabuwood

Org. Type: Corporation

Name: Solomon Eidlisz

NJ EIN: 26342532300

Title: General Manager

Phone: (201) 432-6555 x

Mailing Address: 69-95 Blanchard Street

Fax: (201) 432-6055 x

Newark, NJ 07105

Other: () - x

Type:

Email: seidlisz@fabuwood.com

**New Jersey Department of Environmental Protection
Facility Profile (General)**

Contact Type: Owner (Current Primary)

Organization: The Morris Company

Org. Type: Corporation

Name: James Turb

NJ EIN:

Title:

Phone: (973) 344-4370 x

Mailing Address: 69-95 Blanchard Street

Fax: () - x

Newark, NJ 07105

Other: () - x

Type:

Email: jturb@morriscompanies.com

Contact Type: Responsible Official

Organization: Fabuwood

Org. Type: Corporation

Name: Solomon Eidlitz

NJ EIN: 26342532300

Title: General Manager

Phone: (201) 432-6555 x

Mailing Address: 69-95 Blanchard Street

Fax: (201) 432-6055 x

Newark, NJ 07105

Other: () - x

Type:

Email: seidlitz@fabuwood.com

**New Jersey Department of Environmental Protection
Facility Profile (Permitting)**

1. Is this facility classified as a small business by the USEPA? No
2. Is this facility subject to N.J.A.C. 7:27-22? No
3. Are you voluntarily subjecting this facility to the requirements of Subchapter 22? No
4. Has a copy of this application been sent to the USEPA? No
5. If not, has the EPA waived the requirement? No
6. Are you claiming any portion of this application to be confidential? No
7. Is the facility an existing major facility? No
8. Have you submitted a netting analysis? No
9. Are emissions of any pollutant above the SOTA threshold? No
10. Have you submitted a SOTA analysis? No
11. If you answered "Yes" to Question 9 and "No" to Question 10, explain why a SOTA analysis was not required

12. Have you provided, or are you planning to provide air contaminant modeling? No

**New Jersey Department of Environmental Protection
Equipment Inventory**

Equip. NJID	Facility's Designation	Equipment Description	Equipment Type	Certificate Number	Install Date	Grand-Fathered	Last Mod. (Since 1968)	Equip. Set ID
E101	SB1	Spray Booth 1	Surface Coating Equipment (Non-Fabric Material)		8/30/2018			
E102	SB2	Spray Booth 2	Surface Coating Equipment (Non-Fabric Material)		8/30/2018			
E103	CEFLA	CEFLA Unit	Surface Coating Equipment (Non-Fabric Material)		8/30/2018			
E104	AS1	Roba Simplex	Other Equipment		1/28/2019			
E105	AS2	Roba Tech 1300	Other Equipment		1/28/2019			

**New Jersey Department of Environmental Protection
Control Device Inventory**

CD NJID	Facility's Designation	Description	CD Type	Install Date	Grand-Fathered	Last Mod. (Since 1968)	CD Set ID
CD101	SB1-FP	Spray Booth 1 - Filter Pads	Particulate Filter (Other)	8/30/2018			
CD102	SB2-FP	Spray Booth 2 - Filter Pads	Particulate Filter (Other)	8/30/2018			
CD105	CEFLA-ACCOI	CEFLA Unit - Accordion Style Filter	Particulate Filter (Other)	8/30/2018			
CD107	SANDERS BH	Automatic Sanders Baghouse	Particulate Filter (Baghouse)	1/28/2019			

New Jersey Department of Environmental Protection
Emission Points Inventory

PT NJID	Facility's Designation	Description	Config.	Equiv. Diam. (in.)	Height (ft.)	Dist. to Prop. Line (ft)	Exhaust Temp. (deg. F)			Exhaust Vol. (acfm)			Discharge Direction	PT Set ID
							Avg.	Min.	Max.	Avg.	Min.	Max.		
PT101	SB1 - STK	Spray Booth 1 - Stack	Round	18	46	130	75.0	50.0	110.0	1,600.0	0.0	1,740.0	Up	
PT103	SB2 - STK	Spray Booth 2 - Stack	Round	18	46	130	75.0	50.0	110.0	1,600.0	0.0	1,740.0	Up	
PT105	CEFLA STK	CEFLA Unit Stack	Round	10	46	130	75.0	50.0	110.0	6,000.0	0.0	6,000.0	Up	
PT106	CR EXHAUST	Coating Room Exhaust	Round	36	46	130	75.0	50.0	110.0	36,000.0	0.0	36,000.0	Up	
PT107	SANDER BH	Sanders Baghouse Exhaust	Rectangle	24	18	130	75.0	50.0	110.0	6,000.0	0.0	7,000.0	Down	

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 101 SB AND AS Spray Booths (Spray Booth 1, Spray Booth 2 and CEFLA Unit) & Sanders

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS1	SB1-COAT	Spray Booth 1: Coating Operation	Normal - Steady State	E101	CD101 (P)	PT101 PT106	4-02-019-01	0.0	1,920.0	A	0.0	1,740.0	50.0	110.0
OS2	SB2-COAT	Spray Booth 2: Coating Operation	Normal - Steady State	E102	CD102 (P)	PT103 PT106	4-02-019-01	0.0	1,920.0	A	0.0	1,740.0	50.0	110.0
OS3	CEFLA-COAT	CEFLA Unit: Coating Operation	Normal - Steady State	E103	CD105 (P)	PT105 PT106	4-02-019-01	0.0	1,920.0	A	0.0	6,000.0	50.0	110.0
OS4	SB1-CLN	Spray Booth 1: Cleaning Operation	Normal - Steady State	E101	CD101 (P)	PT101 PT106	4-02-019-99	0.0	1,920.0		0.0	1,740.0	50.0	110.0
OS5	SB2-CLN	Spray Booth 2: Cleaning Operation	Normal - Steady State	E102	CD102 (P)	PT103 PT106	4-02-019-99	0.0	1,920.0		0.0	1,740.0	50.0	110.0
OS6	CEFLA-CLN	CEFLA Unit: Cleaning Operation	Normal - Steady State	E103	CD105 (P)	PT105 PT106	4-02-019-99	0.0	1,920.0		0.0	6,000.0	50.0	110.0
OS11	AS1	Roba Simplex/Duplex - Operation	Normal - Steady State	E104	CD107 (P)	PT107	3-07-020-03	0.0	1,920.0		0.0	7,000.0	50.0	110.0
OS12	AS2	Roba Tech 1300 - Operation	Normal - Steady State	E105	CD107 (P)	PT107	3-07-020-03	0.0	1,920.0		0.0	7,000.0	50.0	110.0

**New Jersey Department of Environmental Protection
Potential to Emit**

Subject Item: U2
Operating Scenario: OS1
Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)					lb/hr	No
PM-10 (Total)					lb/hr	No
TSP					lb/hr	No
VOC (Total)					lb/hr	No

Subject Item: U101 SB AND AS
Operating Scenario: OS0 Summary
Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
Ethylene glycol mono-n-butyl ether (butyl cellosolve)			2.30400000	2.30400000	tons/yr	No
Ethylbenzene			0.13300000	0.13300000	tons/yr	No
Formaldehyde			0.03100000	0.03100000	tons/yr	No
HAPs (Total)			2.46800000	2.46800000	tons/yr	No
PM-10 (Total)			0.27000000	0.27000000	tons/yr	No
PM-2.5 (Total)			0.27000000	0.27000000	tons/yr	No
TSP			0.27000000	0.27000000	tons/yr	No
VOC (Total)			9.37000000	9.37000000	tons/yr	No

**New Jersey Department of Environmental Protection
Potential to Emit**

Subject Item: U101 SB AND AS

Operating Scenario: OS1

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
Ethylene glycol mono-n-butyl ether (butyl cellosolve)		1.44000000	1.44000000	1.44000000	lb/hr	No
Ethylbenzene		0.08320000	0.08320000	0.08320000	lb/hr	No
Formaldehyde		0.01930000	0.01930000	0.01930000	lb/hr	No
HAPs (Total)		1.54240000	1.54240000	1.54240000	lb/hr	No
PM-10 (Total)		4.44000000	D	D	lb/hr	No
PM-2.5 (Total)		4.44000000	D	D	lb/hr	No
TSP		4.44000000	D	D	lb/hr	No
VOC (Total)		5.85500000	5.85500000	5.85500000	lb/hr	No

Subject Item: U101 SB AND AS

Operating Scenario: OS2

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
Ethylene glycol mono-n-butyl ether (butyl cellosolve)		1.44000000	1.44000000	1.44000000	lb/hr	No
CO					lb/hr	No
Ethylbenzene		0.08320000	0.08320000	0.08320000	lb/hr	No
Formaldehyde		0.01930000	0.01930000	0.01930000	lb/hr	No
HAPs (Total)		1.54240000	1.54240000	1.54240000	lb/hr	No
NOx (Total)					lb/hr	No
Pb					lb/hr	No
PM-10 (Total)		4.44000000	D	D	lb/hr	No
PM-2.5 (Total)		4.44000000	D	D	lb/hr	No
SO2					lb/hr	No

**New Jersey Department of Environmental Protection
Potential to Emit**

Subject Item: U101 SB AND AS

Operating Scenario: OS2

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
TSP		4.44000000	D	D	lb/hr	No
VOC (Total)		5.85500000	5.85500000	5.85500000	lb/hr	No

Subject Item: U101 SB AND AS

Operating Scenario: OS3

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
Ethylene glycol mono-n-butyl ether (butyl cellosolve)		3.35990000	3.35990000	3.35990000	lb/hr	No
Ethylbenzene		0.19400000	0.19400000	0.19400000	lb/hr	No
Formaldehyde		0.04500000	0.04500000	0.04500000	lb/hr	No
HAPs (Total)		3.59890000	3.59890000	3.59890000	lb/hr	No
PM-10 (Total)		10.36000000	D	D	lb/hr	No
PM-2.5 (Total)		10.36000000	D	D	lb/hr	No
TSP		10.36000000	D	D	lb/hr	No
VOC (Total)		13.66100000	13.66100000	13.66100000	lb/hr	No

Subject Item: U101 SB AND AS

Operating Scenario: OS4

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)					lb/hr	No
VOC (Total)		0.00000000	0.00000000	0.00000000	lb/hr	No

**New Jersey Department of Environmental Protection
Potential to Emit**

Subject Item: U101 SB AND AS

Operating Scenario: OS5

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)		0.00000000	0.00000000	0.00000000	lb/hr	No

Subject Item: U101 SB AND AS

Operating Scenario: OS6

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)		0.00000000	0.00000000	0.00000000	lb/hr	No

Subject Item: U101 SB AND AS

Operating Scenario: OS11

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)			D	D	lb/hr	No
PM-2.5 (Total)			D	D	lb/hr	No
TSP			D	D	lb/hr	No

**New Jersey Department of Environmental Protection
Potential to Emit**

Subject Item: U101 SB AND AS

Operating Scenario: OS12

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)			0.28000000	0.28000000	lb/hr	No
PM-2.5 (Total)			0.28000000	0.28000000	lb/hr	No
TSP			0.28000000	0.28000000	lb/hr	No

000000 E101 (Surface Coating Equipment (Non-Fabric Material))
Print Date: 1/31/2020

Make:			
Manufacturer:	Col-Met		
Model:	VTLS-20		
Method of Application:	Spray	Spray Type:	Air-Assisted
Description:			

Have you attached a diagram showing the location and/or the configuration of this equipment?

Yes
 No

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?

Yes
 No

Comments:

000000 E102 (Surface Coating Equipment (Non-Fabric Material))
Print Date: 1/31/2020

Make:

Manufacturer:

Model:

Method of Application:

Description:

Have you attached a diagram showing the location and/or the configuration of this equipment?

 Yes
 No

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?

 Yes
 No

Comments:

000000 E103 (Surface Coating Equipment (Non-Fabric Material))
Print Date: 1/31/2020

Make:

Manufacturer:

Model:

Method of Application:

 Spray Type:

Description:

Have you attached a diagram showing the location and/or the configuration of this equipment?

 Yes
 No

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?

 Yes
 No

Comments:

000000 E104 (Other Equipment)
Print Date: 1/31/2020

Make:	Roba Simplex
Manufacturer:	MB Machinery
Model:	RB-Simplex-002
Equipment Type:	Automatic Sanding machine
Capacity:	75.00
Units:	other units
Description:	sq. ft / hr (Sanding Rate)

Have you attached a diagram showing the location and/or the configuration of this equipment?

Yes
 No

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?

Yes
 No

Comments:

000000 E105 (Other Equipment)
Print Date: 1/31/2020

Make:	Roba Tech 1300
Manufacturer:	MB Machinery
Model:	Roba-T-13-D4D3
Equipment Type:	Automatic Sanding machine
Capacity:	9,360.00
Units:	other units
Description:	sq. ft / hr (Sanding Rate)

Have you attached a diagram showing the location and/or the configuration of this equipment?

Yes
 No

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?

Yes
 No

Comments:

000000 CD101 (Particulate Filter (Other))
Print Date: 1/31/2020

Make:
Manufacturer:
Model:
Filter Description:

Total Filter Area (ft²):
Maximum Design Temperature Capability (°F):
Maximum Design Air Flow Rate (acfm):
Maximum Air Flow Rate to Filter Area Ratio:
Minimum Operating Pressure Drop (in. H2O):
Maximum Operating Pressure Drop (in. H2O):
Maximum Inlet Temperature (°F):
Maximum Operating Exhaust Gas Flow Rate (acfm):

Method for Determining When Filter Replacement is Required:

Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):

Alternative Method to Demonstrate Control Apparatus is Operating Properly:

Have you attached a Particle Size Distribution Analysis? Yes No

Have you attached data from recent performance testing? Yes No

Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No

Have you attached a diagram showing the location and/or configuration of this control apparatus? Yes No

Comments:

000000 CD101 (Particulate Filter (Other))
Print Date: 1/31/2020

000000 CD102 (Particulate Filter (Other))
Print Date: 1/31/2020

Make:

Manufacturer:

Model:

Filter Description:

Total Filter Area (ft²):

Maximum Design Temperature Capability (°F):

Maximum Design Air Flow Rate (acfm):

Maximum Air Flow Rate to Filter Area Ratio:

Minimum Operating Pressure Drop (in. H2O):

Maximum Operating Pressure Drop (in. H2O):

Maximum Inlet Temperature (°F):

Maximum Operating Exhaust Gas Flow Rate (acfm):

Method for Determining When Filter Replacement is Required:

Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):

Alternative Method to Demonstrate Control Apparatus is Operating Properly:

Have you attached a Particle Size Distribution Analysis?

 Yes No

Have you attached data from recent performance testing?

 Yes No

Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?

 Yes No

Have you attached a diagram showing the location and/or configuration of this control apparatus?

 Yes No

Comments:

000000 CD102 (Particulate Filter (Other))
Print Date: 1/31/2020

000000 CD105 (Particulate Filter (Other))
Print Date: 1/31/2020

Make: COM-PLEAT Accordion-Style
Manufacturer:
Model: PAF-90
Filter Description: COM-PLEAT Accordion-Style Paint Arrestor Filter with Fiber Glass Filter Pads

Total Filter Area (ft²):
Maximum Design Temperature Capability (°F):
Maximum Design Air Flow Rate (acfm): 6,600.0
Maximum Air Flow Rate to Filter Area Ratio:
Minimum Operating Pressure Drop (in. H2O): 0.05
Maximum Operating Pressure Drop (in. H2O): 0.50
Maximum Inlet Temperature (°F): 110.0
Maximum Operating Exhaust Gas Flow Rate (acfm): 6,600.0

Method for Determining When Filter Replacement is Required: Pressure Drop - Manometer

Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): 1

Alternative Method to Demonstrate Control Apparatus is Operating Properly:

Have you attached a Particle Size Distribution Analysis? Yes No

Have you attached data from recent performance testing? Yes No

Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No

Have you attached a diagram showing the location and/or configuration of this control apparatus? Yes No

Comments:

000000 CD105 (Particulate Filter (Other))
Print Date: 1/31/2020

00000 CD107 (Particulate Filter (Baghouse))
Print Date: 1/31/2020

Make:	NFPZ3000
Manufacturer:	Nederman
Model:	NFPZ3000-2HE
Number of Bags:	50
Size of Bags (ft ²):	18.30
Total Bag Area (ft ²):	900.0
Bag Fabric:	100% Polyester
Fabric Weight (oz/ft ²):	16.00
Fabric Weave:	Patented weaving technique in tubular format
Fabric Finish:	No finish, Polyester Bag
Maximum Design Temperature Capability (°F):	289.0
Maximum Design Air Flow Rate (acfm):	7,000.0
Draft Type:	Induced
Maximum Air Flow Rate to Cloth Area Ratio:	7.77
Minimum Operating Pressure Drop (in. H ₂ O):	0.50
Maximum Operating Pressure Drop (in. H ₂ O):	5.00
Method of Monitoring Pressure Drop:	Magnehelic Differential Pressure Gage
Maximum Inlet Temperature (°F):	110.0
Minimum Inlet Temperature (°F):	50.0
Dew Point of Gas Stream Maximum Inlet Temperature (°F):	
Maximum Operating Exhaust Gas Flow Rate (acfm):	
Maximum Inlet Gas Stream Moisture Content (%):	
Method for Determining When Bag Replacement is Required:	Post cleaning, constant pressure drop of > 3" WC
Method for Determining When Cleaning is Required:	When system is shut down. Option to clean on timer or pressure drop set point
Method of Bag Cleaning:	Reverse Air
Description:	
Is Bag Cleaning Conducted On-Line?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached a Particle Size Distribution Analysis?	<input type="radio"/> Yes <input checked="" type="radio"/> No

000000 CD107 (Particulate Filter (Baghouse))
Print Date: 1/31/2020

Have you attached data from recent performance testing?

Yes No

Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?

Yes No

Have you attached a diagram showing the location and/or configuration of this control apparatus?

Yes No

Comments:

09299 Fabuwood Blanchard Street PCP000000 U101 OS1 (Surface Coating (NFM))
Print Date: 1/31/2020

Objects being Coated?	Wood panels
Material of Objects being Coated?	Flat Wood Paneling
VOC Content in Coating as applied (after thinning) (lbs/gal):	1.95
Density of Coating as applied (after thinning) (lbs/gal):	6.93
Type of Coating Being Applied:	Stain and Varnish
Maximum coating used (gal/hr):	3.00
Maximum coating used (gal/day):	10.00
Maximum coating used (gal/yr):	2,400.00
% VOC in Coating Emitted During Process:	99.99
% Overspray (Fraction of the solid component of the Coating Material that does not adhere to the object when the Coating is sprayed. Usually 10-15% for a Booth in good operating condition. About 20% for an old unit.)	15.00
Maximum % Weight of VOC in Coating:	28.20
Maximum % Weight of Solids in Coating:	51.90
Maximum % Weight of Water in Coating:	0.90
Maximum % Volume of VOC in Coating:	26.50
Maximum % Volume of Solids in Coating:	34.00
Maximum % Volume of Water in Coating:	0.70
Operating Hours per Day:	8
Operating Hours per Week:	40
Have you Attached the MSDS for the Coating?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Comments:	

09299 Fabuwood Blanchard Street PCP000000 U101 OS1 (Efficiency Table - CD101)
Print Date: 1/31/2020

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
TSP	100.00	99.84	99.84
VOC (Total)			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10	100.00	99.84	99.84
PM-2.5	100.00	99.84	99.84
SO2			

09299 Fabuwood Blanchard Street PCP000000 U101 OS2 (Surface Coating (NFM))
Print Date: 1/31/2020

Objects being Coated?	<input type="text" value="Wood panels"/>
Material of Objects being Coated?	<input type="text" value="Flat Wood Paneling"/>
VOC Content in Coating as applied (after thinning) (lbs/gal):	<input type="text" value="1.95"/>
Density of Coating as applied (after thinning) (lbs/gal):	<input type="text" value="6.93"/>
Type of Coating Being Applied:	<input type="text" value="Stain and Varnish"/>
Maximum coating used (gal/hr):	<input type="text" value="3.00"/>
Maximum coating used (gal/day):	<input type="text" value="10.00"/>
Maximum coating used (gal/yr):	<input type="text" value="2,400.00"/>
% VOC in Coating Emitted During Process:	<input type="text" value="99.99"/>
% Overspray (Fraction of the solid component of the Coating Material that does not adhere to the object when the Coating is sprayed. Usually 10-15% for a Booth in good operating condition. About 20% for an old unit.)	<input type="text" value="15.00"/>
Maximum % Weight of VOC in Coating:	<input type="text" value="28.20"/>
Maximum % Weight of Solids in Coating:	<input type="text" value="51.90"/>
Maximum % Weight of Water in Coating:	<input type="text" value="0.90"/>
Maximum % Volume of VOC in Coating:	<input type="text" value="26.50"/>
Maximum % Volume of Solids in Coating:	<input type="text" value="34.00"/>
Maximum % Volume of Water in Coating:	<input type="text" value="0.70"/>
Operating Hours per Day:	<input type="text" value="8"/>
Operating Hours per Week:	<input type="text" value="40"/>
Have you Attached the MSDS for the Coating?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Comments:	

09299 Fabuwood Blanchard Street PCP000000 U101 OS2 (Efficiency Table - CD102)
Print Date: 1/31/2020

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10	100.00	99.84	99.84
PM-2.5	100.00	99.84	99.84
SO2			
TSP	100.00	99.84	99.84
VOC (Total)			

09299 Fabuwood Blanchard Street PCP000000 U101 OS3 (Surface Coating (NFM))
Print Date: 1/31/2020

Objects being Coated?	Wood panels
Material of Objects being Coated?	Flat Wood Paneling
VOC Content in Coating as applied (after thinning) (lbs/gal):	1.95
Density of Coating as applied (after thinning) (lbs/gal):	6.93
Type of Coating Being Applied:	Stain and Varnish
Maximum coating used (gal/hr):	7.00
Maximum coating used (gal/day):	20.00
Maximum coating used (gal/yr):	4,800.00
% VOC in Coating Emitted During Process:	99.99
% Overspray (Fraction of the solid component of the Coating Material that does not adhere to the object when the Coating is sprayed. Usually 10-15% for a Booth in good operating condition. About 20% for an old unit.)	15.00
Maximum % Weight of VOC in Coating:	28.20
Maximum % Weight of Solids in Coating:	51.90
Maximum % Weight of Water in Coating:	0.90
Maximum % Volume of VOC in Coating:	26.50
Maximum % Volume of Solids in Coating:	34.00
Maximum % Volume of Water in Coating:	0.70
Operating Hours per Day:	8
Operating Hours per Week:	40
Have you Attached the MSDS for the Coating?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Comments:	

09299 Fabuwood Blanchard Street PCP000000 U101 OS3 (Efficiency Table - CD105)
Print Date: 1/31/2020

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10	100.00	99.84	99.84
PM-2.5	100.00	99.84	99.84
SO2			
TSP	100.00	99.84	99.84
VOC (Total)			

09299 Fabuwood Blanchard Street PCP000000 U101 OS4 (Surface Coating (NFM))
Print Date: 1/31/2020

Objects being Coated?	<input type="text" value="Cleaning Operation"/>
Material of Objects being Coated?	<input type="text"/>
VOC Content in Coating as applied (after thinning) (lbs/gal):	<input type="text"/>
Density of Coating as applied (after thinning) (lbs/gal):	<input type="text" value="6.59"/>
Type of Coating Being Applied:	<input type="text" value="Cleaner"/>
Maximum coating used (gal/hr):	<input type="text" value="2.50"/>
Maximum coating used (gal/day):	<input type="text" value="2.50"/>
Maximum coating used (gal/yr):	<input type="text" value="600.00"/>
% VOC in Coating Emitted During Process:	<input type="text"/>
% Overspray (Fraction of the solid component of the Coating Material that does not adhere to the object when the Coating is sprayed. Usually 10-15% for a Booth in good operating condition. About 20% for an old unit.)	<input type="text"/>
Maximum % Weight of VOC in Coating:	<input type="text"/>
Maximum % Weight of Solids in Coating:	<input type="text"/>
Maximum % Weight of Water in Coating:	<input type="text"/>
Maximum % Volume of VOC in Coating:	<input type="text"/>
Maximum % Volume of Solids in Coating:	<input type="text"/>
Maximum % Volume of Water in Coating:	<input type="text"/>
Operating Hours per Day:	<input type="text" value="8"/>
Operating Hours per Week:	<input type="text" value="40"/>
Have you Attached the MSDS for the Coating?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Comments:	<input type="text" value="90% of applied cleaner volume is recovered and recycled/disposed"/>

09299 Fabuwood Blanchard Street PCP000000 U101 OS4 (Efficiency Table - CD101)
Print Date: 1/31/2020

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10			
PM-2.5			
SO2			
TSP			
VOC (Total)			

09299 Fabuwood Blanchard Street PCP000000 U101 OS5 (Surface Coating (NFM))
Print Date: 1/31/2020

Objects being Coated?	Cleaning Operation
Material of Objects being Coated?	
VOC Content in Coating as applied (after thinning) (lbs/gal):	
Density of Coating as applied (after thinning) (lbs/gal):	6.59
Type of Coating Being Applied:	Cleaner
Maximum coating used (gal/hr):	2.50
Maximum coating used (gal/day):	2.50
Maximum coating used (gal/yr):	600.00
% VOC in Coating Emitted During Process:	
% Overspray (Fraction of the solid component of the Coating Material that does not adhere to the object when the Coating is sprayed. Usually 10-15% for a Booth in good operating condition. About 20% for an old unit.)	
Maximum % Weight of VOC in Coating:	
Maximum % Weight of Solids in Coating:	
Maximum % Weight of Water in Coating:	
Maximum % Volume of VOC in Coating:	
Maximum % Volume of Solids in Coating:	
Maximum % Volume of Water in Coating:	
Operating Hours per Day:	8
Operating Hours per Week:	40
Have you Attached the MSDS for the Coating?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Comments:	90% of applied cleaner volume is recovered and recycled/disposed

09299 Fabuwood Blanchard Street PCP000000 U101 OS5 (Efficiency Table - CD102)
Print Date: 1/31/2020

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10			
PM-2.5			
SO2			
TSP			
VOC (Total)			

09299 Fabuwood Blanchard Street PCP000000 U101 OS6 (Surface Coating (NFM))
Print Date: 1/31/2020

Objects being Coated?	Cleaning Operation
Material of Objects being Coated?	
VOC Content in Coating as applied (after thinning) (lbs/gal):	
Density of Coating as applied (after thinning) (lbs/gal):	6.59
Type of Coating Being Applied:	Cleaner
Maximum coating used (gal/hr):	5.00
Maximum coating used (gal/day):	5.00
Maximum coating used (gal/yr):	1,200.00
% VOC in Coating Emitted During Process:	
% Overspray (Fraction of the solid component of the Coating Material that does not adhere to the object when the Coating is sprayed. Usually 10-15% for a Booth in good operating condition. About 20% for an old unit.)	
Maximum % Weight of VOC in Coating:	
Maximum % Weight of Solids in Coating:	
Maximum % Weight of Water in Coating:	
Maximum % Volume of VOC in Coating:	
Maximum % Volume of Solids in Coating:	
Maximum % Volume of Water in Coating:	
Operating Hours per Day:	8
Operating Hours per Week:	40
Have you Attached the MSDS for the Coating?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Comments:	90% of applied cleaner volume is recovered and recycled/disposed

09299 Fabuwood Blanchard Street PCP000000 U101 OS6 (Efficiency Table - CD105)
Print Date: 1/31/2020

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10			
PM-2.5			
SO2			
TSP			
VOC (Total)			

09299 Fabuwood Blanchard Street PCP000000 U101 OS11 (Other Equipment)
Print Date: 1/31/2020

Volume of Gas Discharged
from this Source (acfm):

3,000.00

09299 Fabuwood Blanchard Street PCP000000 U101 OS11 (Efficiency Table - CD107)
Print Date: 1/31/2020

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10			
PM-2.5			
SO2			
TSP			
VOC (Total)			

09299 Fabuwood Blanchard Street PCP000000 U101 OS12 (Other Equipment)
Print Date: 1/31/2020

Volume of Gas Discharged
from this Source (acfm):

3,000.00
