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

#### **Permit Being Modified**

Number: 0 **Permit Class:** 

**Description** 

Air permit application for the installation and operation of equipment at a plastics of Modifications: packaging manufacturing and commercial printing facility. The details of the application are provided below.

Date: 1/27/2025

Four (4) printing presses and an Ink Storage Room ducted to a Regenerative Thermal Oxidizer (RTO1) as CD1:

E-1 Press #1 with OS1 Printiing Operations and O2 Cleaning Operations E-2 Press #2 with OS3 Printing Operations and O4 Cleaning Operations E-3 Press #3 with OS5 Printing Operations and O6 Cleaning Operations E-4 Press #4 with OS7 Printing Operations and O8 Cleaning Operations E-5 Ink Storage Room, OS9 Operations

E-6 Solventless Lamination, OS10 Operations E-7 Solvent Storage Tank, OS11 Operations

The facility is requesting the permit VOC limit to be capped at 19 Tons/Year based on 95% destruction efficiency of the RTO. Actual descruction efficiency is anticipated to be greater than 98%.

Date: 1/27/2025

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

Facility Name (AIMS): NAP Industries Group, LLC. Facility ID (AIMS): 09625

Street 80 AVE K

Address: NEWARK, NJ 07105

**Y-Coordinate:** 686,649

**State Plane Coordinates:** 

**X-Coordinate:** 589,545

Units: Feet

**Industry:** 

Mailing 80 AVE K
Address: NEWARK, NJ 07105

Datum: NAD83

Source Org.: DEP-GIS

**Source Type:** Approx. Addr. Match

**County:** Essex

Location
Description:

Primary SIC:
Secondary SIC:

**NAICS:** 326111

Type: Mobile

Email: shulem@napind.com

Date: 1/27/2025

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

**Contact Type: Air Permit Information Contact** Organization: NAP Industries Group, LLC. Org. Type: Corporation Name: Chaim Sholam Sternhill NJ EIN: 00882258788 **Title:** Plant Manager **Phone:** (718) 625-4948 x Mailing 80 Avenue K Address: Newark, NJ 07105 **Fax:** ( ) - x **Other:** (917) 202-2946 x Type: Mobile Email: shulem@napind.com **Contact Type: Consultant Organization:** Total Environmental & Safety, LLC. Org. Type: Corporation NJ EIN: Name: William Bromirski **Title:** Environmental Compliance Manager **Phone:** (973) 459-2279 x 2630 Johnson Fork Road Mailing Address: Salem, WV 26426 **Fax:** ( ) - x **Other:** ( ) - x Type: Email: bbromirski@totalenvironmental.com **Contact Type: Fees/Billing Contact Organization:** NAP Industries Group, LLC. Org. Type: Corporation Name: Chaim Sholam Sternhill NJ EIN: 00882258788 Title: Plant Manager **Phone:** (718) 625-4948 x Mailing 80 Avenue K Address: Newark, NJ 07105 **Fax:** ( ) - x **Other:** (917) 202-2946 x

Page 2 of 3

Date: 1/27/2025

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

**Contact Type: General Contact** Organization: NAP Industries Group, LLC. Org. Type: Corporation Name: Chaim Sholam Sternhill NJ EIN: 00882258788 Title: Plant Manager **Phone:** (718) 625-4948 x Mailing 80 Avenue K Address: Newark, NJ 07105 **Fax:** ( ) - x **Other:** (917) 202-2946 x Type: Mobile Email: shulem@napind.com **Contact Type: On-Site Manager** Organization: NAP Industries Group, LLC. Org. Type: Corporation Name: Chaim Sholam Sternhill NJ EIN: 00882258788 Title: Plant Manager **Phone:** (718) 625-4948 x 80 Avenue K Mailing Address: Newark, NJ 07105 **Fax:** ( ) - x **Other:** (917) 202-2946 x Type: Mobile Email: shulem@napind.com **Contact Type: Responsible Official Organization:** NAP Industries Group, LLC. Org. Type: Corporation Name: Chaim Sholam Sternhill NJ EIN: 00882258788 **Title:** Plant Manager **Phone:** (718) 625-4948 x Mailing 80 Avenue K Address: Newark, NJ 07105 **Fax:** ( ) - x

Type: Mobile

Email: shulem@napind.com

**Other:** (917) 202-2946 x

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

Date: 1/27/2025

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?

### Date: 1/27/2025

# 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
E1	Press #1	Printing Press #1	Printing Press (Graphic Arts)	250001	5/1/2025	No		
E2	Press #2	Printing Press #2	Printing Press (Graphic Arts)	250001	5/1/2025	No		
E3	Press #3	Printing Press #3	Printing Press (Graphic Arts)	250001	5/1/2025	No		
E4	Press #4	Printing Press #4	Printing Press (Graphic Arts)	250001	5/1/2025	No		
E5	Ink Room	Ink Room	Other Equipment	250001	5/1/2025	No		
E6	Lam #1	Laminator #1	Surface Coating Equipment (Non-Fabric Material)	250001	5/1/2025	No		
E7	Tank1	Solvent Storage Tank	Storage Vessel	250001	5/1/2025	No		

NAP Industries Group, LLC. (09625)

# New Jersey Department of Environmental Protection Control Device Inventory

Date: 1/27/2025

CD NJID	Facility's Designation	Description	СD Туре	Install Date	Grand- Fathered	Last Mod. (Since 1968)	CD Set ID	
CD1	RTO1	Regenerative Thermal Oxidizer	Oxidizer (Thermal)	5/1/2025	No			

NAP Industries Group, LLC. (09625)

Date: 1/27/2025

## New Jersey Department of Environmental Protection Emission Points Inventory

PT NJID	Facility's Designation	Description	Config.	Equiv. Diam.	Height (ft.)	Dist. to Prop.	Exhaus	t Temp.	(deg. F)	Exha	aust Vol. (a	cfm)	Discharge Direction	PT Set ID
NJID	Designation			(in.)	(11.)	Line (ft)	Avg.	Min.	Max.	Avg.	Min.	Max.	Direction	Set ID
PT1	RTOexhaust	RTO Exhaust	Round	52	40	50	1,550.0	1,500.0	1,600.0	35,000.0	20,000.0	50,000.0	Up	
PT2	Lam1Exhaust	Laminator 1 Exhaust	Round	20	30	130	200.0	200.0	200.0	4,000.0	3,000.0	5,000.0	Up	
PT3	Tank Exhaust	Tank Stack	Door	64	48	65	70.0	65.0	75.0	50.0	50.0	50.0	Horizontal	

### Date: 1/27/2025

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

### **U1** Printing Printing Operations

UOS	Facility's	UOS	Operation	Signif.	Control	Emission	SCC(s)	Annual Oper. Hours	voc	Flov (acfi			mp. eg F)
NJID	Designation	Description	Type	Equip.	<b>Device</b> (s)	Point(s)	SCC(S)	Min. Max.	Range	Min.	Max.	Min.	Max.
OS1	Press #1	Press #1 Printing	Normal - Steady State	E1	CD1 (P)	PT1	4-05-003-01	0.0 5,200.0		10,150.0	10,150.0	500.0	800.0
OS2	Press #1	Press #1 Cleaning	Normal - Steady State	E1	CD1 (P)	PT1		0.0 5,200.0		10,150.0	10,150.0	500.0	800.0
OS3	Press #2	Press #2 Printing	Normal - Steady State	E2	CD1 (P)	PT1	4-05-003-01	0.0 5,200.0		6,150.0	6,150.0	500.0	800.0
OS4	Press #2	Press #2 Cleaning	Normal - Steady State	E2	CD1 (P)	PT1		0.0 5,200.0		6,150.0	6,150.0	500.0	800.0
OS5	Press #3	Press #3 Printing	Normal - Steady State	E3	CD1 (P)	PT1	4-05-003-01	0.0 5,200.0		8,500.0	8,500.0	500.0	800.0
OS6	Press #3	Press #3 Cleaning	Normal - Steady State	E3	CD1 (P)	PT1		0.0 5,200.0		8,500.0	8,500.0	500.0	800.0
OS7	Press #4	Press #4 Printing	Normal - Steady State	E4	CD1 (P)	PT1	4-05-003-01	0.0 5,200.0		8,500.0	8,500.0	500.0	800.0
OS8	Press #4	Press #4 Cleaning	Normal - Steady State	E4	CD1 (P)	PT1		0.0 5,200.0		8,500.0	8,500.0	500.0	800.0
OS9	Ink Room	Ink Room	Normal - Steady State	E5	CD1 (P)	PT1	4-05-006-01	0.0 2,600.0	A	2,000.0	2,000.0	70.0	70.0
OS10	Lam1	Solventless Laminator	Normal - Steady State	E6		PT2	A23-99-000-000	0.0 5,200.0		3,000.0	5,000.0	200.0	200.0
OS11	Tank1	Solvent Storage Tank	Normal - Steady State	E7		PT3	4-07-008-10	0.0 8,760.0		50.0	50.0	65.0	75.0

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

Date: 1/27/2025

Subject Item: U1 Printing
Operating Scenario: OS0 Summary

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
СО		2.99000000	2.99000000	2.99000000	tons/yr	No
NOx (Total)		3.56000000	3.56000000	3.56000000	tons/yr	No
Pb		0.00001800	0.00001800	0.00001800	tons/yr	No
PM-10 (Total)		0.27000000	0.27000000	0.27000000	tons/yr	No
SO2		0.02000000	0.02000000	0.02000000	tons/yr	No
TSP		0.27000000	0.27000000	0.27000000	tons/yr	No
VOC (Total)		380.00000000	19.00000000	19.00000000	tons/yr	No

Subject Item: U1 Printing

**Operating Scenario: OS1** 

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No
VOC (Total)		85.00000000	4.25000000	4.25000000	lb/hr	No

Subject Item: U1 Printing

Operating Scenario: OS2

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

Date: 1/27/2025

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

Subject Item: U1 Printing

**Operating Scenario: OS2** 

Step:

Air Contaminant Category	Fugitive	Emissions	Emissions	Total	Units	Alt. Em.
(HAPS)	Emissions	Before Controls	After Controls	Emissions		Limit
VOC (Total)		80.00000000	4.00000000	4.00000000	lb/hr	No

Subject Item: U1 Printing

**Operating Scenario: OS3** 

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No
VOC (Total)		85.00000000	4.25000000	4.25000000	lb/hr	No

Subject Item: U1 Printing

**Operating Scenario: OS4** 

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No
VOC (Total)		80.00000000	4.00000000	4.00000000	lb/hr	No

Date: 1/27/2025

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

**U1 Printing Subject Item:** 

**Operating Scenario: OS5** 

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No
VOC (Total)		85.00000000	4.25000000	4.25000000	lb/hr	No

**U1 Printing Subject Item:** 

**Operating Scenario: OS6** 

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No
VOC (Total)		8.00000000	4.00000000	4.00000000	lb/hr	No

**U1 Printing Subject Item:** 

**Operating Scenario: OS7** 

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No
VOC (Total)		85.00000000	4.25000000	4.25000000	lb/hr	No

Date: 1/27/2025

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

Subject Item: U1 Printing

**Operating Scenario: OS8** 

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No
VOC (Total)		80.00000000	4.00000000	4.00000000	lb/hr	No

Subject Item: U1 Printing

**Operating Scenario: OS9** 

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No
VOC (Total)		0.05300000	0.00100000	0.00100000	lb/hr	No

Subject Item: U1 Printing

**Operating Scenario: OS10** 

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

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

Date: 1/27/2025

Subject Item: U1 Printing

**Operating Scenario: OS11** 

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No
VOC (Total)		2.29000000	2.29000000	2.29000000	lb/hr	No

#### 000000 E1 (Printing Press (Graphic Arts)) Print Date: 1/27/2025

Make:	Soma
Manufacturer:	Soma
Model:	OPTIMA2 850-1450 8 & 2 EG/WG
Type of Press:	Flexographic
Does this Press use Fountain Solution?	Yes No
Maximum Consumption of Fountain Solution (gals/year):	
Density of VOC in the Fountain Solution (lbs/gal):	
Maximum % Volume of VOC as Applied in the Fountain Solution:	
Maximum % Volume of Water in the Fountain Solution:	
Maximum Temperature of the Fountain Solution (°F):	
Solution used for Cleaning the Press:	Solvent, No HAPs
Maximum Cleaning Solution used in any one hour (gal/hr):	10.00
Maximum Cleaning Solution used in any one year (gal/yr):	15,000.00
Density of VOC in the Cleaning Solution (lbs/gal):	7.00
Have you Attached the MSDS for the Fountain and Cleaning Solutions?	<ul><li>Yes</li><li>No</li></ul>

#### 000000 E2 (Printing Press (Graphic Arts)) Print Date: 1/27/2025

Make:	Soma
Manufacturer:	Soma
Model:	OPTIMA 2 1450-8-EG
Type of Press: Does this Press use Fountain Solution?	Flexographic  Yes No
Maximum Consumption of Fountain Solution (gals/year):	
Density of VOC in the Fountain Solution (lbs/gal):	
Maximum % Volume of VOC as Applied in the Fountain Solution:	
Maximum % Volume of Water in the Fountain Solution:	
Maximum Temperature of the Fountain Solution (°F):	
Solution used for Cleaning the Press:	Solvent, No HAPs
Maximum Cleaning Solution used in any one hour (gal/hr):	10.00
Maximum Cleaning Solution used in any one year (gal/yr):	15,000.00
Density of VOC in the Cleaning Solution (lbs/gal):	7.00
Have you Attached the MSDS for the Fountain and Cleaning Solutions?	<ul><li>✓ Yes</li><li>♠ No</li></ul>

#### 000000 E3 (Printing Press (Graphic Arts)) Print Date: 1/27/2025

Make:	Soma
Manufacturer:	Soma
Model:	Premia 8-Color
Type of Press:	Flexographic
Does this Press use Fountain Solution?	Yes No
Maximum Consumption of Fountain Solution (gals/year):	
Density of VOC in the Fountain Solution (lbs/gal):	
Maximum % Volume of VOC as Applied in the Fountain Solution:	
Maximum % Volume of Water in the Fountain Solution:	
Maximum Temperature of the Fountain Solution (°F):	
Solution used for Cleaning the Press:	Solvent, No HAPs
Maximum Cleaning Solution used in any one hour (gal/hr):	10.00
Maximum Cleaning Solution used in any one year (gal/yr):	15,000.00
Density of VOC in the Cleaning Solution (lbs/gal):	7.00
Have you Attached the MSDS for the Fountain and Cleaning Solutions?	<ul><li>✓ Yes</li><li>♠ No</li></ul>

#### 000000 E4 (Printing Press (Graphic Arts)) Print Date: 1/27/2025

Make:	Uteco
Manufacturer:	Uteco
Model:	Onyx 2295 8-Color
Type of Press:	Flexographic
Does this Press use Fountain Solution?	◯ Yes ● No
Maximum Consumption of Fountain Solution (gals/year):	
Density of VOC in the Fountain Solution (lbs/gal):	
Maximum % Volume of VOC as Applied in the Fountain Solution:	
Maximum % Volume of Water in the Fountain Solution:	
Maximum Temperature of the Fountain Solution (°F):	
Solution used for Cleaning the Press:	Solvent, No HAPs
Maximum Cleaning Solution used in any one hour (gal/hr):	10.00
Maximum Cleaning Solution used in any one year (gal/yr):	15,000.00
Density of VOC in the Cleaning Solution (lbs/gal):	7.00
Have you Attached the MSDS for the Fountain and Cleaning Solutions?	<ul><li>Yes</li><li>No</li></ul>
Comments:	

#### 000000 E5 (Other Equipment) Print Date: 1/27/2025

Make:			
Manufacturer:			
Model:			
Equipment Type:	Ink Room		
Capacity:			
Units:			~
Description:			
Have you attached a diagram showing the location and/or		Have you attached any manuf.'s data or	
the configuration of this equipment?	O Yes	specifications to aid the Dept. in its review of this	O Yes
	No	application?	No

# 000000 E6 (Surface Coating Equipment (Non-Fabric Material)) Print Date: 1/27/2025

Make:	Nordmecanica					
Manufacturer:	Nordmecanica					
Model:						
Method of Application:	Other	Spray Type:		▼		
Description:	Solventless Lamination Unit					
Have you attached a diagram showing the location and/or the configuration of this equipment?	Yes No	Have you attac manuf.'s data specifications Dept. in its rev application?	or to aid the	◯ Yes		
Comments:	Process an	d cleaning materia	als do not co	ntain any		

#### 000000 E7 (Storage Vessel) Print Date: 1/27/2025

What type of contents is this storage vessel equipped to contain by design? Liquids Only Storage Vessel Type: Tank • Design Capacity: 2,000 gallons Units: ▼ Ground Location: Above Ground  $\overline{\phantom{a}}$ Is the Shell of the Equipment Exposed to Sunlight? ▼ Shell Color: ▼ Description (if other): Shell Condition: Good Paint Condition: Welded Shell Construction: No Is the Shell Insulated? ▼ Type of Insulation: Insulation Thickess (in): Thermal Conductivity of Insulation [(BTU)(in)(hr)(ft2)(deg F)]: Shape of Storage Vessel: Rectangular ▼ Shell Height (From Ground to Roof Bottom) (ft): 65.00 Length (ft): 19.00 Width (ft): 40.00 Diameter (ft): Other Dimension Description: Value: Units: Top Pipe ▼ Fill Method: Description (if other): 50.00 Maximum Design Fill Rate: gal/min |lacksquareDoes the storage vessel have a roof or an open top? Roof ▼ Roof Type: Horizontal fixed roof tank ▼ Roof Height (From Roof Bottom to Roof Top) (ft): 65.00 Roof Construction: ₩ Primary Seal Type: ▼ ▼ Secondary Seal Type: Total Number of Seals: Roof Support: Does the storage vessel have a Vapor Return Loop? No

#### 000000 E7 (Storage Vessel) Print Date: 1/27/2025

Does the storage vessel have a Conservation Vent?

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

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



#### 000000 CD1 (Oxidizer (Thermal)) Print Date: 1/27/2025

Make:	
Manufacturer:	Ship & Shore Environmental
Model:	50,000 SCFM
Minimum Chamber Temperature (°F):	1500.0
Minimum Residence Time (sec):	0.50
Fuel Type:	Natural gas
Description:	
Maximum Rated Gross Heat Input (MMBtu/hr):	8.30
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	5
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	CEMS Unit, THC Monitoring
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

# 09625 NAP Industries Group, LLC. PCP000000 U1 OS1 (Printing Press (Graphic Arts)) Print Date: 1/27/2025

Objects being Printed?	bags
Material of Objects being Printed?	Plastic
Describe:	
VOC Content in Ink as applied (after thinning) (lbs/gal):	
	7.50
Type of Ink Being Applied:	Flexographic
Maximum Ink used (gal/hr):	10.00
Maximum Ink used (gal/day):	50.00
Maximum Ink used (gal/yr):	12,500.00
Maximum % Weight of VOC in Ink as applied:	75.00
Maximum % Weight of Water in Ink as applied:	
Maximum % Volume of VOC in Ink as applied:	
Maximum % Volume of VOC in Ink as Emitted:	
Maximum % Volume of Water in Ink as applied:	
Have you Attached the MSDS for the Ink?	Yes No
Comments:	

# 09625 NAP Industries Group, LLC. PCP000000 U1 OS1 (Oxidizer (Thermal) - CD1) Print Date: 1/27/2025

Maximum Feed Rate to the Oxidizer (tons/hr):	0.06
Maximum Air Supply Flow Rate (acfm):	10150.0
Minimum Air Supply Flow Rate (acfm):	10150.0
Oxygen Content in Exhuast (%O2):	14.00
CO Concentration in Exhaust (ppmvd):	
Total VOC Concentration in Exhaust (ppmvd):	

# 09625 NAP Industries Group, LLC. PCP000000 U1 OS2 (Oxidizer (Thermal) - CD1) Print Date: 1/27/2025

Maximum Feed Rate to the Oxidizer (tons/hr):	0.05
Maximum Air Supply Flow Rate (acfm):	10500.0
Minimum Air Supply Flow Rate (acfm):	10500.0
Oxygen Content in Exhuast (%O2):	14.00
CO Concentration in Exhaust (ppmvd):	
Total VOC Concentration in Exhaust (ppmvd):	

# 09625 NAP Industries Group, LLC. PCP000000 U1 OS3 (Printing Press (Graphic Arts)) Print Date: 1/27/2025

Objects being Printed?	bags	
Material of Objects being Printed?	Plastic	
Describe:		
VOC Content in Ink as applied (after thinning) (lbs/gal):		
	7.50	
Type of Ink Being Applied:	Flexographic	
Maximum Ink used (gal/hr):	10.00	
Maximum Ink used (gal/day):	50.00	
Maximum Ink used (gal/yr):	12,500.00	
Maximum % Weight of VOC in Ink as applied:	75.00	
Maximum % Weight of Water in Ink as applied:		
Maximum % Volume of VOC in Ink as applied:		
Maximum % Volume of VOC in Ink as Emitted:		
Maximum % Volume of Water in Ink as applied:		
Have you Attached the MSDS for the Ink?	Yes No	

# 09625 NAP Industries Group, LLC. PCP000000 U1 OS3 (Oxidizer (Thermal) - CD1) Print Date: 1/27/2025

Maximum Feed Rate to the Oxidizer (tons/hr):	0.06
Maximum Air Supply Flow Rate (acfm):	6150.0
Minimum Air Supply Flow Rate (acfm):	6150.0
Oxygen Content in Exhuast (%O2):	14.00
CO Concentration in Exhaust (ppmvd):	
Total VOC Concentration in Exhaust (ppmvd):	

# 09625 NAP Industries Group, LLC. PCP000000 U1 OS4 (Oxidizer (Thermal) - CD1) Print Date: 1/27/2025

Maximum Feed Rate to the Oxidizer (tons/hr):	0.05
Maximum Air Supply Flow Rate (acfm):	6150.0
Minimum Air Supply Flow Rate (acfm):	6150.0
Oxygen Content in Exhuast (%O2):	14.00
CO Concentration in Exhaust (ppmvd):	
Total VOC Concentration in Exhaust (ppmvd):	

# 09625 NAP Industries Group, LLC. PCP000000 U1 OS5 (Printing Press (Graphic Arts)) Print Date: 1/27/2025

Objects being Printed?	bags	
Material of Objects being Printed?	Plastic	
Describe:		
VOC Content in Ink as applied (after thinning) (lbs/gal):		
	7.50	
Type of Ink Being Applied:	Flexographic	
Maximum Ink used (gal/hr):	10.00	
Maximum Ink used (gal/day):	50.00	
Maximum Ink used (gal/yr):	12,500.00	
Maximum % Weight of VOC in Ink as applied:	75.00	
Maximum % Weight of Water in Ink as applied:		
Maximum % Volume of VOC in Ink as applied:		
Maximum % Volume of VOC in Ink as Emitted:		
Maximum % Volume of Water in Ink as applied:		
Have you Attached the MSDS for the Ink?	Yes No	

# 09625 NAP Industries Group, LLC. PCP000000 U1 OS6 (Oxidizer (Thermal) - CD1) Print Date: 1/27/2025

Maximum Feed Rate to the Oxidizer (tons/hr):	0.05
Maximum Air Supply Flow Rate (acfm):	8500.0
Minimum Air Supply Flow Rate (acfm):	8500.0
Oxygen Content in Exhuast (%O2):	14.00
CO Concentration in Exhaust (ppmvd):	
Total VOC Concentration in Exhaust (ppmvd):	

# 09625 NAP Industries Group, LLC. PCP000000 U1 OS7 (Printing Press (Graphic Arts)) Print Date: 1/27/2025

Objects being Printed?	bags	
Material of Objects being Printed?	Plastic	
Describe:		
VOC Content in Ink as applied (after thinning) (lbs/gal):		
	7.50	
Type of Ink Being Applied:	Flexographic	
Maximum Ink used (gal/hr):	10.00	
Maximum Ink used (gal/day):	50.00	
Maximum Ink used (gal/yr):	12,500.00	
Maximum % Weight of VOC in Ink as applied:	75.00	
Maximum % Weight of Water in Ink as applied:		
Maximum % Volume of VOC in Ink as applied:		
Maximum % Volume of VOC in Ink as Emitted:		
Maximum % Volume of Water in Ink as applied:		
Have you Attached the MSDS for the Ink?	Yes No	
Comments:		

# 09625 NAP Industries Group, LLC. PCP000000 U1 OS7 (Oxidizer (Thermal) - CD1) Print Date: 1/27/2025

Maximum Feed Rate to the Oxidizer (tons/hr):	0.05
Maximum Air Supply Flow Rate (acfm):	8500.0
Minimum Air Supply Flow Rate (acfm):	8500.0
Oxygen Content in Exhuast (%O2):	14.00
CO Concentration in Exhaust (ppmvd):	
Total VOC Concentration in Exhaust (ppmvd):	

# 09625 NAP Industries Group, LLC. PCP000000 U1 OS8 (Oxidizer (Thermal) - CD1) Print Date: 1/27/2025

Maximum Feed Rate to the Oxidizer (tons/hr):	0.05
Maximum Air Supply Flow Rate (acfm):	8500.0
Minimum Air Supply Flow Rate (acfm):	8500.0
Oxygen Content in Exhuast (%O2):	14.00
CO Concentration in Exhaust (ppmvd):	
Total VOC Concentration in Exhaust (ppmvd):	

# 09625 NAP Industries Group, LLC. PCP000000 U1 OS9 (Raw Material) Print Date: 1/27/2025

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70°F (mmHg)	Organic Density	Units
INK 🔻		Liquid <b>T</b>		Yes ▼				lb/gal ▼

# 09625 NAP Industries Group, LLC. PCP000000 U1 OS9 (Other Equipment) Print Date: 1/27/2025

Volume of Gas Discharged	
from this Source (acfm):	2,000.00

# 09625 NAP Industries Group, LLC. PCP000000 U1 OS9 (Oxidizer (Thermal) - CD1) Print Date: 1/27/2025

Maximum Feed Rate to the Oxidizer (tons/hr):	0.01
Maximum Air Supply Flow Rate (acfm):	2000.0
Minimum Air Supply Flow Rate (acfm):	2000.0
Oxygen Content in Exhuast (%O2):	21.00
CO Concentration in Exhaust (ppmvd):	
Total VOC Concentration in Exhaust (ppmvd):	

# 09625 NAP Industries Group, LLC. PCP000000 U1 OS10 (Surface Coating (NFM)) Print Date: 1/27/2025

Objects being Coated?	plastic packaging	
Material of Objects being Coated?	Other	▼
VOC Content in Coating as applied (after thinning) (lbs/gal):		
Density of Coating as applied (after thinning) (lbs/gal):	10.00	
Type of Coating Being Applied:	Waterbased Adhesive	
Maximum coating used (gal/hr):	15.00	
Maximum coating used (gal/day):	312.00	
Maximum coating used (gal/yr):	78,000.00	
% 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:		
Operating Hours per Week:		
Have you Attached the MSDS for the Coating?	Yes No	
Comments:	No VOC or HAPs used in lamination operations	

# 09625 NAP Industries Group, LLC. PCP000000 U1 OS11 (Storage Vessel Content) Print Date: 1/27/2025

Content Name:	Solvent Mixture	▼
CAS Number:		
Is the Content Under Pressure?	No 🔻	
Pressure (PSIG):		
Physical State:	Liquid 🔻	
Estimated Average Working Volume:	2,000	
Units:	gallons	_
Density of Contents:		
Units:	lb/gal	
Estimated Minimum Storage Temperature (deg F):	65.000	
Estimated Maximum Storage Temperature (deg F):	75.000	
Estimated Average Storage Temperature (deg F):	,	
Does the Content Contain VOCs?:	Yes ▼	
Organic Density:	6.660	
Units:	lb/gal	▼
Molecular Weight (Lbs/Lbs-Mole):		
Vapor Pressure at Average Storage Temperature (PSIA):	0.740	
Vapor Pressure at 70 deg F (mmHg):	38.200	
Estimated Average Annual Throughput:	200,000.0000	
Units:	gallons	▼
Estimated Maximum Annual Throughput:	400,000.0000	
Units:	gallons	▼

#### **VOC Emission Calculations**

			NJID	OS
Assumptions	:	Press #1	E-1	OS1, OS2
100	Worst Case Ink lb/hour	Press #2	E-2	OS3, OS4
75%	Ink VOC by weight	Press #3	E-3	OS5, OS6
10	Worst Case Solvent Use for Ink lb/hour	Press #4	E-4	<b>OS7, OS8</b>
0	HAPs	RTO	CD-1	
100	Worst Case Cleaning Solvent lb/hour (100% VOC)			
95%	Worst Case Destruction Efficiency (DE)			
98%	Anticipated Actual DE			
5,200	Annual Operating Hours - 24 hrs/day Mon-Thurs,	Friday 8 hrs,	no weekend	ls, 50 wks/yr
250	Days/yr			
4	Cleaning hrs/day			

#### **Press Printing Operations**

### Worst Case Hourly VOC Emissions Before controls for OS1, OS3, OS5, OS7

VOC (lb/hr) = VOC ink (lb/hr) + VOC solvent (lb/hr)

VOC (lb/hr) = (lnk lb/hr \* % VOC) + (solvent lb/hr at 100% VOC)

VOC (lb/hr) = 100 X 75% + 10 VOC (lb/hr) 85.00 Each Press

### Worst Case Hourly VOC Emissions After Controls for each OS1, OS3, OS5, OS7

95% Destruction Efficiency (DE) = VOC (lb/hr) \* (1 - DE)

95% DE = 85.00 X 5%

Worst Case Emissions per press 4.25 lb/hr

### **Press Cleaning Operations**

### Worst Case Hourly VOC Emissions Before Controls for OS2, OS4, OS6, OS8

VOC (lb/hour) = Solvent Usage/hour

VOC (lb/hour 80 lb/h

### Worst Case Hourly VOC Emissions After Controls for OS2, OS4, OS6, OS8

95% Destruction Efficiency (DE) = VOC (lb/hr) \* (1 - DE)

95% DE = 80.00 X 5%
Worst Case Emissions 4.00 lb/hr each

### **Annual VOC Emissions (OS0)**

Annual Emissions for all four (4) presses combined

Press #1 = 4.75 tpy, Press #2 = 4.75 tpy, Press #3 = 4.75 tpy, Press #4 = 4.75 tpy

Annual VOC = 19 Tons/Yr

# Total Environmental and Safety (973) 459-2279

### **Emission Calculations for Laminator**

		NJID
Assumptions:	Laminator	E-6
150 lbs/hour "worst case" maximum adhesive coating		OS10
Coating application contains 0% VOC		
HAPs are not found/used in any lamination coating or operations		
Water is used for cleaning operations		
No particulate emissions are generated during the process		
Deminimis particulate emissions are a worst case scenario		

780,000	ibs/yr
3,120	lbs/day
78,000	gals/yr
312	gals/day
15	gals/hr

CD-1 (RTO) - Max Input Rating MMBTU/Hr:	RTO CD-1 - Printing Operations								
8,300,000	NOx	SOx	VOC	Pb	PM-10	TSP	CO		
Total Burner(s) Rating	8,300,000	8,300,000	8,300,000	8,300,000	8,300,000	8,300,000	8,300,000	BTU/hr	
Heating Value of fuel used	1020	1020	1020	1020	1020	1020	1020	BTU/gal or cf	
Amount of fuel burned in an hour	8,137	8,137	8,137	8,137	8,137	8,137	8,137	gal or cf/hr	
Emission Factor	0.0001	0.0000006	0.0000055	5E-10	0.0000076	0.0000076	0.000084	lbs/cf	
Pounds emitted per hour	0.814	0.005	0.045	4.06863E-06	0.062	0.062	0.684	lbs/hour	

Total Emissions									
	Total Hrs	Lbs/Hr	Lbs/yr	Tons/yr					
NOX	8,760	0.814	7,128	3.56					
SOX	8,760	0.005	43	0.02					
VOC	8,760	0.045	392	0.20					
Lead	8,760	0.000004	0.04	0.000018					
PM-10	8,760	0.062	542	0.27					
TSP	8,760	0.062	542	0.27					
CO	8,760	0.684	5,988	2.99					

**INK ROOM EMISSIONS** 

Equipment and														lbs/per		
Operating				max	gal (tank		constituent,		VP				lb/1000	gal	moles of	
Scenario	VOC constituent	CAS	VP, mmhg	conc	size)	lb/gal	lbs	S	PSI	MW	const	temp., R	gal	container	constituents	lb/hr
E-5, OS9, CD1	Ink (Ethanol used for worst case)	64-17-5	50	1	5.00	7.70	38.50	1.45	0.97	46.07	12.4600	537.0000	2.7602	0.0138	0.0018	0.0531

Notes:

Worst case emissions from mixing

Worst Case VOC Before Control

0.053 lbs/hour 138.012 lb/yr 0.069 ton/yr

Worst Case VOC After Control

0.001 lbs/hour 2.760 lb/yr 0.001 ton/yr

### Mixing in five gallon containers

400,000 lbs ink

50,000 gals ink

10,000 containers mixed

5,200 hrs/yr facility operations

2,600 hrs/yr ink room mix hours

250 days/yr total

10.4 total hrs /day

40 containers/day

3.85 containers/hr

#### NJAC 27-16.16d - Maximum allowable emission rate

Five gallon ink container mixing operation

1. Determine vapor pressure.

2. Determine % by volume

P= 14.7 psi v= 2000 cfm

R= 10.73 PSI-Ft3/mole-r

T= 537 R

n (air)=PV/RT 5.10 moles/min.

VOC, moles per hour from calc sheet

0.001792

VOC, Mole/min

0.0000299

mole % =volume % in an ideal gas. Concentration of VOC by volume, percent

0.00059

3. Based on values from 1 and 2 above, Table 16B yields Range C

4. NA. VP below 14.7

- 5. From table A the allowable % VOC is 15. This operation is below that.
- 6. From table A the allowable emission rate is 2.5 lb/hr. This operation is below that.

Comparison values

_	Table A Limit	Process
% Volume of VOC	15	0.000585
Emission rate lbs/hr	2.5	0.0530816

Loading

Equipment nd Operating Scenario	VOC constituent	CAS	VP, mmhg	max conc	gal (tank size)	lb/gal	constituent, lbs	S	VP PSI	MW	const	T, R	lb/1000 gal	lbs	moles of constituent	moles total	liquid mole fraction, x
E7, OS11	80/20 Solvent		38.2	1	2,000	6.67	13,332	1.45	0.739	46.07	12.4600	537.00	1.1452	2.2905	0.0497	0.0497	1.0000

Notes: psi 0.74

Worst case emissions occur during loading

### **Worst Case VOC**

2.290 lbs/hour 200 Fills/Year 458 lb/yr 400,000 gals/yr 0.229 ton/yr

Product Identity 80/20 Solvent - from Pride Solvents & Chemical

Ethanol 65-75% n-Propoanol 15-25% n-Propyl Acetate 0-5% isopropanol 0-5%

#### NJAC 27-16.2 - VOC storage tank

2000 gallon Solvent Storage Tank

Step 1: Determine the vapor pressure at standard conditions in pounds per square inch absolute of the VOC to be stored.

Determination: VP =0.74 PSI (38.2 mmHg)

Step 2: Select the appropriate line in Table 2A for the vapor pressure determined in Step 1.

See table 2A for Tank Capacity provided in Thousands of Gallons

Step 3: Determine the maximum tank capacity in thousands of gallons.

Determination: 300,000 gallons

Step 4: Find the tank capacity Range classification for the vapor pressure determined under Step 1.

Determination: Range I

Step 5: Determine the control requirements in accordance with the following (Range I: No control apparatus required under this subsection. Range II: Conservation vent required. Range III: Floating roof required)

Determination: Range I: No control apparatus required under this subsection.