


MEMORANDUM

TO: **FILE – 3FORM MATERIAL SOLUTIONS, INC. – Ecoresin Panels Plant**

THROUGH: Chad Gilgen, Minor Source Compliance Section Manager **CG**

FROM: Jordan Garahana, Environmental Scientist   
Jordan Garahana

DATE: July 22, 2025

**SUBJECT: FULL COMPLIANCE EVALUATION, Minor, Salt Lake County**

---

INSPECTION DATE: March 6, 2025

SOURCE LOCATION: 955 South 3800 West  
Salt Lake City, UT 84104

SOURCE CONTACTS: Steve Allen, EHS Director  
801-228-7839

OPERATING STATUS: Operating normally at the time of inspection

PROCESS DESCRIPTION: Manufactures Ecoresin panels. Panels are primarily used for architectural features in commercial buildings. Equipment includes two paint booths, one paint mix room, cutting machines which are controlled by a particulate removal system that feeds into the baghouse. Two natural gas-powered ovens are used to cure the product.

APPLICABLE REGULATIONS: Approval Order (AO) DAQE-AN141970006-20, dated April 30, 2020

SOURCE EVALUATION:

**Name of Permittee:**

3form Material Solutions, Inc. - Ecoresin Panels  
Plant  
2300 South 2300 West Suite B  
West Valley City, UT 84119

**Permitted Location:**

955 South 3800 West  
Salt Lake City, 84104

**SIC Code:** 2542: (Office & Store Fixtures, Partitions, Shelving, & Lockers, Except Wood)

## Section I: GENERAL PROVISIONS

- I.1 All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]
- I.2 Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]
- I.3 The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]
- I.4 All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Director or Director's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of two (2) years. [R307-401-8]
- I.5 At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]
- I.6 The owner/operator shall comply with UAC R307-107. General Requirements: Breakdowns. [R307-107]
- I.7 The owner/operator shall comply with UAC R307-150 Series. Emission Inventories. [R307-150]

**Status: In Compliance. No limits appear to have been exceeded, and no unapproved equipment was observed at the time of inspection. No breakdowns have occurred since the previous inspection. Records are maintained as required. The source submitted their 2023 Emission Inventory by the submission deadline in 2024. A copy of the Emission Inventory can be found in the attachments section.**

## Section II: SPECIAL PROVISIONS

- II.A **The approved installations shall consist of the following equipment:**
  - II.A.1 **Ecoresin Panels Plant**
  - II.A.2 **Paint Booths**  
One (1) Main and one (1) Sample Paint Booths equipped with filters
  - II.A.3 **Mix Room**
  - II.A.4 **Degreaser**  
VOC condensation unit
  - II.A.5 **Baghouse**  
Controls: All cutting machines such as laser machines, saws, shapers, polishers, and planers used at the plant
  - II.A.6 **Two (2) Ovens**  
Rating: <5 MMBtu/hr each  
Fuel: Natural Gas

II.A.7 **Twelve (12) Heaters**  
Rating: <5 MMBtu/hr each  
Fuel: Natural Gas

II.A.8 **Powder Coating Booth**  
Vents to the inside of the building, listed for information only

II.A.9 **Two (2) Updraft Systems**  
Ratings: 1.5 and 1.7 MMBtu/hr

**Status: In Compliance. No unapproved equipment was observed at the time of inspection. As noted in the previous inspection memo, II.A.8 is not its own separate booth and has never been its own separate booth. The powder coating is conducted in the paint booths listed in II.A.2. The twelve heaters listed in II.A.7 are small, less than 2 MMBtu/hr space heaters used for comfort during the winter months. The degreaser listed in II.A.4 is a sealed five-gallon bucket that is used to catch the condensate from cleaning paintbrushes into another sealed bucket.**

### II.B Requirements and Limitations

II.B.1 **Paint Booths and Mix Room Requirements**

II.B.1.a The owner/operator shall equip each paint booth with a set of filters to control particulate emissions. All air exiting the paint booths shall pass through this control system before being vented to the atmosphere (outside building/operation). [R307-401-8]

**Status: In Compliance. Filters are equipped in the paint booths. Air from the paint booths are vented through the filters before exiting to the atmosphere.**

II.B.1.b The owner/operator shall not allow visible emissions from any stationary or fugitive emission source to exceed 10% opacity. [R307-401-8]

II.B.1.b.1 Opacity observations of visible emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9. [R307-201-3]

**Status: In Compliance. No visible emissions were observed at the time of inspection. See the attached VEO form for additional information.**

II.B.1.c The owner/operator shall store all VOC-containing materials and VOC-laden rags in covered containers (except when in use). [R307-401-8]

**Status: In Compliance. All VOC laden rags and materials are stored in covered containers and were not in use at the time of inspection.**

II.B.1.d The owner/operator shall not emit more than the following from the paint booths, the mix room and associated operations on site:

10 tons per rolling 12-month period for VOCs (including HAPs)  
0.005 tons per rolling 12-month period for hexamethylene-1,6-diisocyanate  
1.42 tons per rolling 12-month period for methanol  
2.03 tons per rolling 12-month period for toluene  
5 tons per rolling 12-month period for total HAPs combined. [R307-401-8]

II.B.1.d.1 To determine compliance, the owner/operator shall calculate a new 12-month total by the 20th day of each month using data from the previous 12 months. [R307-401-8]

- II.B.1.d.2 The owner/operator shall maintain a record of VOCs- and HAPs-emitting materials used each month. The record shall include the following data for each material used:
- A. Name of the VOC- and HAPs-emitting material, such as: paint, adhesive, solvent, thinner, reducers, chemical compounds, isocyanates, etc.
  - B. Density of each material used (pound per gallon)
  - C. Percent by weight of all VOC or HAPs in each material used
  - D. Gallons of each VOC- or HAP- emitting material used
  - E. The amount of VOCs and HAPs emitted monthly shall be calculated using the following formulas as appropriate:  
  

$$\text{VOC} = (\% \text{ VOC by Weight}/100) \times [\text{Density (lb/gal)}] \times \text{Gal Consumed} \times 1 \text{ ton}/2000 \text{ lbs}$$

$$\text{HAP} = (\% \text{ HAP by Weight}/100) \times [\text{Density (lb/gal)}] \times \text{Gal Consumed} \times 1 \text{ ton}/2000 \text{ lbs}$$
  - F. The amount of VOC or HAP emitted monthly from all materials used.
  - G. The amount of VOCs or HAPs reclaimed for the month shall be similarly quantified and subtracted from the quantities calculated above to provide the monthly total VOC or HAP emissions. [R307-401-8]

**Status: In Compliance. The rolling 12-month total for VOCs and HAPs emitted from March 2024 to February 2025, are as follows:**

**1.07 tons of VOCs emitted**  
**0.0004 tons of hexamethylene-1, 6-diisocyanate emitted**  
**0.00042 tons of methanol emitted**  
**0.03 tons of toluene emitted**  
**0.316 tons of total HAPs combined emitted**

**A new total is calculated by the 20th of each month. Calculations of the VOCs and HAPs emitted include the data listed within II.B.1.d.2. The table that contains the calculations and the rolling 12-month total was viewed onsite at the time of inspection and can be found in the attachments section.**

**II.B.2 Degreaser Requirements**

- II.B.2.a The owner/operator shall comply with the applicable requirements under R307-335 for degreasing and solvent cleaning operations. [R307-335]

**Status: In Compliance. The source operates the degreaser according to the rules established within R307-335. The degreaser was not in use and the lid was closed at the time of inspection.**

**II.B.3 Baghouse and the Powder Coating Booth Requirements**

- II.B.3.a The owner/operator shall control emissions from all cutting machines, such as laser machines, saws, shapers, polishers, and planers with a baghouse. All exhaust air from these processes shall be routed through the operating baghouse. [R307-401-8]

**Status: In Compliance. All cutting machines and laser cutters onsite have their emissions routed through a baghouse.**

II.B.3.b The owner/operator shall not allow visible emissions from the baghouse to exceed 10% opacity. [R307-401-8]

II.B.3.b.1 Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [40 CFR 60, R307-401-8]

**Status: In Compliance. No visible emissions were observed at the time of inspection. See the attached VEO form for additional information.**

II.B.3.c The owner/operator shall install a manometer or magnehelic pressure gauge to measure the differential pressure across the baghouse. The static pressure differential across the baghouse shall be maintained between 1 to 5 inches of water column. The monitoring device shall measure the pressure drop in 1-inch water column increments or less. [R307-401-8]

II.B.3.c.1 Pressure drop readings shall be recorded daily while the baghouse is operating. Records documenting the pressure drop shall be kept in a log and shall include the following:

- A. Unit identification;
- B. Daily pressure drop readings;
- C. Date of reading. [R307-401-8]

II.B.3.c.2 Each pressure gauge shall be located such that an inspector/operator can safely read the indicator at any time. [R307-401-8]

II.B.3.c.3 The owner/operator shall calibrate the instrument in accordance with the manufacturer's instructions or recommendations or replaced at least once every 12 months. The owner/operator shall maintain the documentation of calibrations. [R307-401-8]

**Status: In Compliance. The baghouse is equipped with a magnehelic gauge and at the time of inspection read at 1 inch of water column. Readings are taken daily and are entered into a computer system for tracking. The gauge is located in an easily accessible place and was viewed at the time of inspection. The source calibrates and maintains the gauges according to manufacturer's specifications. A sticker is placed on the gauge showing the date of the previous calibration, as well as the upcoming date of the next calibration. Documents are also maintained by the source when the calibration has been conducted. Those documents were viewed onsite at the time of inspection.**

II.B.3.d The owner/operator shall vent the powder coating operations to the inside of the building. [R307-401-8]

**Status: Out of Compliance with no additional compliance action recommended. The powder coating operations occur inside the main paint booth described by item II.A.2 permitted equipment. The EHS Manager, Steve Allen, states that a separate powder coat booth has never existed at this location. The existing booths are filtered. This was confirmed over email by Steve Allen. Steve Allen is addressing this condition by requesting an administrative change in order to get the separate powder booth removed from the AO, as well as addressing that the source is conducting powder coating within the paint booths. See the attachments section for additional information regarding the powder coating operations.**

### **Section III: APPLICABLE FEDERAL REQUIREMENTS**

In addition to the requirements of this AO, all applicable provisions of the following federal programs have been found to apply to this installation. This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including UAC R307.

#### **AREA SOURCE RULES EVALUATION:**

The following Area Source Rules were evaluated during this inspection:

NOX and CO Emission Controls for Natural Gas-Fired Boilers 2.0-5.0 MMBtu [R307-315]

**Status: Not Applicable. The heaters onsite do not apply to this state rule.**

Ozone Nonattainment and Maintenance Areas: General Requirements [R307-325]

**Status: In Compliance. VOCs are stored, used, and disposed of according to the current state rules. No VOC containers were open when not in use at the time of inspection and no VOC-laden rags were seen uncovered.**

Degreasing and Solvent Cleaning Operations [R307-335]

**Status: In Compliance. Compliance with R-307-335 is satisfied by compliance with AO condition II.B.2.a.**

#### **EMISSION INVENTORY:**

Listed below are the Actual Emissions Inventory provided from 3form Material Solutions, Inc. - Ecoresin Panels Plant. A comparison of the estimated total potential emissions (PTE) on AO: DAQE-AN141970006-20, dated April 30, 2020, is provided. The 2023 Emission Inventory is listed below and can be found in the attachments section. *PTE are supplied for supplemental purposes only.*

<b>Criteria Pollutant</b>	<b>PTE tons/yr</b>	<b>Actuals tons/yr</b>
CO <sub>2</sub> Equivalent	541.00	
Carbon Monoxide	0.43	0.29
Nitrogen Oxides	0.64	0.35
Particulate Matter - PM <sub>10</sub>	13.82	6.60
Particulate Matter - PM <sub>2.5</sub>	13.82	6.60
Sulfur Dioxide	0.00	0.00
Volatile Organic Compounds	10.00	1.11

<b>Hazardous Air Pollutant</b>	<b>PTE lbs/yr</b>	<b>Actuals lbs/yr</b>
Generic HAPs (CAS #GHAPS)	3100	
Hexamethylene-1,6-Diisocyanate (CAS #822060)	10	0.50
Methanol (CAS #67561)	2840	1.10
Toluene (CAS #108883)	4060	57.32

PREVIOUS ENFORCEMENT  
ACTIONS:

None within the past 5 years

COMPLIANCE STATUS &

RECOMMENDATIONS: In regard to Approval Order (AO) DAQE-AN141970006-20, dated April 30, 2020, the overall status is: In Compliance.

Out of compliance with condition II.B.3.d for powder booth coating operations being conducted in the paint booths onsite. As stated by Steve Allen, there is no powder coating booth onsite and stated that it should have been removed in the 2020 AO update. This is being addressed by requesting an administrative amendment to update their AO to remove the powder booth. No further action is currently recommended.

In compliance with all other conditions listed within the AO. Records were provided upon request. Facility appears to be well maintained.

HPV STATUS:

Not Applicable.

RECOMMENDATION FOR  
NEXT INSPECTION:

Inspect at the normal frequency. Make sure the administrative amendment AO is issued to remove the powder coating booth before inspecting.

NSR RECOMMENDATIONS:

None at this time

ATTACHMENTS:

Applicable Supporting Documentation Included

**Total**

CAS Number	HAP Name	HQ Permitted Quantity (lbs)	HQ Total (lbs)	Fab Permitted Quantity (lbs)	Fab Total (lbs)
123319	Hydroquinone	<del>2.00</del>		200.00	0.01
75092	Methylene chloride (Dichloromethane)	<del>32.00</del>		500.00	146.66
67561	Methanol	<del>8.00</del>		2,840.00	0.15
91203	Naphthalene	<del>10.00</del>		200.00	0.00
1330207	Xylenes (isomers and mixture)	<del>42.00</del>	<del>0.08</del>	1,000.00	109.33
131113	Dimethyl phthalate	<del>118.00</del>	<del>6.19</del>	0.00	
110543	Hexane	<del>2.00</del>	<del>0.05</del>	400.00	3.12
108883	Toluene	<del>256.00</del>		4,060.00	71.44
80626	Methyl methacrylate	<del>10.00</del>		1,000.00	338.26
822060	Hexamethylene-1,6-diisocyanate	<del>0.00</del>		10.00	0.09
84742	Dibutylphthalate	<del>0.00</del>		400.00	12.85
108101	Methyl isobutyl ketone (Hexone)	<del>2.00</del>		6,000.00	1.32
100425	Styrene	<del>650.00</del>	<del>17.82</del>	400.00	2.21
100414	Ethyl benzene	<del>14.00</del>	<del>0.01</del>	160.00	5.29
<b>Total HAPs</b>			<b>24.15</b>		<b>690.74</b>

**February 24**

CAS Number	HAP Name	HQ Permitted Quantity (lbs)	HQ Total (lbs)	Fab Permitted Quantity (lbs)	Fab Total (lbs)
75092	Methylene chloride (Dichloromethane)	<del>32.00</del>		500.00	2.63
123319	Hydroquinone	<del>2.00</del>		200.00	0.00
80626	Methyl methacrylate	<del>10.00</del>		1,000.00	0.00
<b>Total HAPs</b>					<b>2.63</b>

**March 24**

CAS Number	HAP Name	HQ Permitted Quantity (lbs)	HQ Total (lbs)	Fab Permitted Quantity (lbs)	Fab Total (lbs)
75092	Methylene chloride (Dichloromethane)	<del>32.00</del>		500.00	7.29
100414	Ethyl benzene	<del>14.00</del>		160.00	0.33
1330207	Xylenes (isomers and mixture)	<del>42.00</del>		1,000.00	17.06
108883	Toluene	<del>256.00</del>		4,060.00	6.07
80626	Methyl methacrylate	<del>10.00</del>		1,000.00	35.76
67561	Methanol	<del>8.00</del>		2,840.00	0.03
84742	Dibutylphthalate	<del>0.00</del>		400.00	2.09
<b>Total HAPs</b>					<b>68.63</b>

**April 24**

CAS Number	HAP Name	HQ Permitted Quantity (lbs)	HQ Total (lbs)	Fab Permitted Quantity (lbs)	Fab Total (lbs)
1330207	Xylenes (isomers and mixture)	<del>42.00</del>		1,000.00	1.75
100414	Ethyl benzene	<del>14.00</del>		160.00	0.58
100425	Styrene	<del>650.00</del>		400.00	0.41
75092	Methylene chloride (Dichloromethane)	<del>32.00</del>		500.00	14.58
80626	Methyl methacrylate	<del>10.00</del>		1,000.00	37.10
108883	Toluene	<del>256.00</del>		4,060.00	5.83
<b>Total HAPs</b>					<b>60.24</b>

May 24

CAS Number	HAP Name	HQ Permitted Quantity (lbs)	HQ Total (lbs)	Fab Permitted Quantity (lbs)	Fab Total (lbs)
75092	Methylene chloride (Dichloromethane)	<del>32.00</del>		500.00	7.29
123319	Hydroquinone	<del>2.00</del>		200.00	0.00
67561	Methanol	<del>8.00</del>		2,840.00	0.03
100414	Ethyl benzene	<del>14.00</del>		160.00	1.33
108883	Toluene	<del>256.00</del>		4,060.00	7.40
1330207	Xylenes (isomers and mixture)	<del>42.00</del>		1,000.00	11.90
84742	Dibutylphthalate	<del>0.00</del>		400.00	1.25
80626	Methyl methacrylate	<del>10.00</del>		1,000.00	0.00
80626	Methyl methacrylate	<del>10.00</del>		1,000.00	2.38
<b>Total HAPs</b>					<b>31.59</b>

June 24

CAS Number	HAP Name	HQ Permitted Quantity (lbs)	HQ Total (lbs)	Fab Permitted Quantity (lbs)	Fab Total (lbs)
110543	Hexane	2.00	0.02	400.00	
80626	Methyl methacrylate	10.00		1,000.00	0.00
80626	Methyl methacrylate	10.00		1,000.00	3.17
123319	Hydroquinone	2.00		200.00	0.00
108101	Methyl isobutyl ketone (Hexone)	2.00		6,000.00	1.05
108883	Toluene	256.00		4,060.00	3.13
100425	Styrene	650.00		400.00	1.80
75092	Methylene chloride (Dichloromethane)	32.00		500.00	1.75
75092	Methylene chloride (Dichloromethane)	32.00		500.00	7.29
100414	Ethyl benzene	14.00	0.00	160.00	
1330207	Xylenes (isomers and mixture)	42.00	0.02	1,000.00	10.31
84742	Dibutylphthalate	0.00		400.00	1.67
<b>Total HAPs</b>			<b>0.05</b>		<b>30.16</b>

July 24

CAS Number	HAP Name	HQ Permitted Quantity (lbs)	HQ Total (lbs)	Fab Permitted Quantity (lbs)	Fab Total (lbs)
1330207	Xylenes (isomers and mixture)	<del>42.00</del>	<del>0.02</del>	1,000.00	15.40
123319	Hydroquinone	<del>2.00</del>		200.00	0.00
67561	Methanol	<del>8.00</del>		2,840.00	0.09
108883	Toluene	<del>256.00</del>		4,060.00	23.68
108101	Methyl isobutyl ketone (Hexone)	<del>2.00</del>		6,000.00	0.18
100414	Ethyl benzene	<del>14.00</del>	<del>0.00</del>	160.00	1.21
110543	Hexane	<del>2.00</del>	<del>0.02</del>	400.00	3.12
75092	Methylene chloride (Dichloromethane)	<del>32.00</del>		500.00	0.88
80626	Methyl methacrylate	<del>10.00</del>		1,000.00	26.70
80626	Methyl methacrylate	<del>10.00</del>		1,000.00	0.00
75092	Methylene chloride (Dichloromethane)	<del>32.00</del>		500.00	29.16
<b>Total HAPs</b>			<b>0.05</b>		<b>100.42</b>

**August 24**

CAS Number	HAP Name	HQ Permitted Quantity (lbs)	HQ Total (lbs)	Fab Permitted Quantity (lbs)	Fab Total (lbs)
123319	Hydroquinone	2.00		200.00	0.00
75092	Methylene chloride (Dichloromethane)	32.00		500.00	1.75
91203	Naphthalene	10.00		200.00	0.00
80626	Methyl methacrylate	10.00		1,000.00	66.76
80626	Methyl methacrylate	10.00		1,000.00	0.00
75092	Methylene chloride (Dichloromethane)	32.00		500.00	7.29

**Total HAPs**

75.80

September 24

CAS Number	HAP Name	HQ Permitted Quantity (lbs)	HQ Total (lbs)	Fab Permitted Quantity (lbs)	Fab Total (lbs)
108883	Toluene	<del>256.00</del>		4,060.00	0.00
<b>Total HAPs</b>					0.00

**October 24**

CAS Number	HAP Name	HQ Permitted Quantity (lbs)	HQ Total (lbs)	Fab Permitted Quantity (lbs)	Fab Total (lbs)
80626	Methyl methacrylate	<del>10.00</del>		1,000.00	67.38
822060	Hexamethylene-1,6-diisocyanate	<del>0.00</del>		10.00	0.09
100425	Styrene	<del>650.00</del>	<del>1.07</del>	400.00	
84742	Dibutylphthalate	<del>0.00</del>		400.00	2.00
100414	Ethyl benzene	<del>14.00</del>	<del>0.00</del>	160.00	1.83
91203	Naphthalene	<del>10.00</del>		200.00	0.00
75092	Methylene chloride (Dichloromethane)	<del>32.00</del>		500.00	4.38
75092	Methylene chloride (Dichloromethane)	<del>32.00</del>		500.00	29.16
123319	Hydroquinone	<del>2.00</del>		200.00	0.00
80626	Methyl methacrylate	<del>10.00</del>		1,000.00	0.00
1330207	Xylenes (isomers and mixture)	<del>42.00</del>	<del>0.02</del>	1,000.00	42.90
108883	Toluene	<del>256.00</del>		4,060.00	24.04
110543	Hexane	<del>2.00</del>	<del>0.01</del>	400.00	
<b>Total HAPs</b>			<b><del>1.10</del></b>		<b>171.78</b>

**November 24**

CAS Number	HAP Name	HQ Permitted Quantity (lbs)	HQ Total (lbs)	Fab Permitted Quantity (lbs)	Fab Total (lbs)
75092	Methylene chloride (Dichloromethane)	<del>32.00</del>		500.00	8.75
1330207	Xylenes (isomers and mixture)	<del>42.00</del>		1,000.00	8.34
131113	Dimethyl phthalate	<del>118.00</del>	<del>3.10</del>	0.00	
84742	Dibutylphthalate	<del>0.00</del>		400.00	4.17
108101	Methyl isobutyl ketone (Hexone)	<del>2.00</del>		6,000.00	0.09
123319	Hydroquinone	<del>2.00</del>		200.00	0.00
80626	Methyl methacrylate	<del>10.00</del>		1,000.00	0.00
75092	Methylene chloride (Dichloromethane)	<del>32.00</del>		500.00	7.29
80626	Methyl methacrylate	<del>10.00</del>		1,000.00	43.22
108883	Toluene	<del>256.00</del>		4,060.00	1.28
<b>Total HAPs</b>			<del>3.10</del>		73.15

**December 24**

CAS Number	HAP Name	HQ Permitted Quantity (lbs)	HQ Total (lbs)	Fab Permitted Quantity (lbs)	Fab Total (lbs)
123319	Hydroquinone	<del>2.00</del>		200.00	0.00
1330207	Xylenes (isomers and mixture)	<del>42.00</del>	<del>0.01</del>	1,000.00	1.67
131113	Dimethyl phthalate	<del>118.00</del>	<del>3.10</del>	0.00	
75092	Methylene chloride (Dichloromethane)	<del>32.00</del>		500.00	14.58
80626	Methyl methacrylate	<del>10.00</del>		1,000.00	0.00
84742	Dibutylphthalate	<del>0.00</del>		400.00	1.67
75092	Methylene chloride (Dichloromethane)	<del>32.00</del>		500.00	1.75
100425	Styrene	<del>650.00</del>	<del>16.75</del>	400.00	
<b>Total HAPs</b>			<b>19.86</b>		<b>19.67</b>

**January 25**

CAS Number	HAP Name	HQ Permitted Quantity (lbs)	HQ Total (lbs)	Fab Permitted Quantity (lbs)	Fab Total (lbs)
80626	Methyl methacrylate	<del>10.00</del>		1,000.00	0.00
75092	Methylene chloride (Dichloromethane)	<del>32.00</del>		500.00	0.88
80626	Methyl methacrylate	<del>10.00</del>		1,000.00	55.78
91203	Naphthalene	<del>10.00</del>		200.00	0.00
123319	Hydroquinone	<del>2.00</del>		200.00	0.00
<b>Total HAPs</b>					<b>56.66</b>

Location	Month	VOC Permit Level (Tons)	VOC Total (Tons)
Fabrication	February 24		0.004
Fabrication	March 24		0.0785
Fabrication	April 24		0.0853
Fabrication	May 24		0.0913
Fabrication	June 24		0.072
Fabrication	July 24		0.2054
Fabrication	August 24		0.0788
Fabrication	September 24		0.0008
Fabrication	October 24		0.2061
Fabrication	November 24		0.1563
Fabrication	December 24		0.0628
Fabrication	January 25		0.0578
Fabrication	Total	10	1.0992
HQ	February 24		0.0003
HQ	March 24		0
HQ	April 24		0.7257
HQ	May 24		0.726
HQ	June 24		0.0034
HQ	July 24		0.7254
HQ	August 24		0.0043
HQ	September 24		0.7259
HQ	October 24		0.7257
HQ	November 24		0.3592
HQ	December 24		0.0116
HQ	January 25		0.71
HQ	Total	24.9	4.7175

## 2023 Emissions Inventory Report

3form Material Solutions, Inc. - Ecoresin Panels Plant (14197)

### Emissions Summary

#### CRITERIA AIR POLLUTANT (CAP) EMISSIONS TOTALS

Pollutant Code/CAS #	Pollutant Name	Emissions (tons, excluding tailpipe)	Tailpipe Emissions (tons)	Total Emissions (tons)*
PM10-PRI	PM10 Primary (Filt + Cond)	6.59893	0.00125	6.60018
PM10-FIL	PM10 Filterable	6.57993	<.00001	6.57993
PM25-PRI	PM2.5 Primary (Filt + Cond)	6.59893	0.00125	6.60018
PM25-FIL	PM2.5 Filterable	6.57993	<.00001	6.57993
PM-CON	PM Condensable	0.019	<.00001	0.019
SO2	Sulfur Dioxide	0.002	0.0005	0.0025
NOX	Nitrogen Oxides	0.3334	0.02316	0.35656
VOC	Volatile Organic Compounds	1.10834	0.00178	1.11012
CO	Carbon Monoxide	0.28006	0.01336	0.29342
7439921	Lead	<.00001	<.00001	<.00001
NH3	Ammonia	0.00163	<.00001	0.00163

#### HAZARDOUS AIR POLLUTANT (HAP) and/or OTHER POLLUTANT EMISSIONS TOTALS

Pollutant Code/CAS #	Pollutant Name	Is VOC/PM?	Total Emissions (tons)*
100414	Ethyl Benzene (HAP)	VOC	0.00413
107211	Ethylene Glycol (HAP)	VOC	0.00004
50000	Formaldehyde (HAP)	VOC	0.00004
822060	Hexamethylene Diisocyanate (HAP)	VOC	0.00023
110543	Hexane (HAP)	VOC	0.0025
123319	Hydroquinone (HAP)	VOC	0.00001
67561	Methanol (HAP)	VOC	0.00005
80626	Methyl Methacrylate (HAP)	VOC	0.298
75092	Methylene Chloride (HAP)	-	0.098
91203	Naphthalene (HAP)	VOC	0.00001
100425	Styrene (HAP)	VOC	0.002
108883	Toluene (HAP)	VOC	0.026
540841	2,2,4-Trimethylpentane (HAP)	VOC	0.0002
1330207	Xylenes (Mixed Isomers) (HAP)	VOC	0.032

\*Rounded to 5 digits past the decimal point. Note that where rounding results in 0, <.00001 is indicated.



EPA METHOD 9 - VISIBLE EMISSION OBSERVATION FORM

Source Name: 3 Form Flooring LLC  
Street Address: 955 South 3800 West  
City/County: Salt Lake City / Salt Lake  
Phone: \_\_\_\_\_  
Site ID: 14197  
Facility: \_\_\_\_\_  
Equipment/Process: Ovens, heater, degreaser  
Control Equipment: baghouse  
Emission Point: vent

OBSERVATION DATE: 3/6/25  
Start time: 11:30 Stop time: 12:00

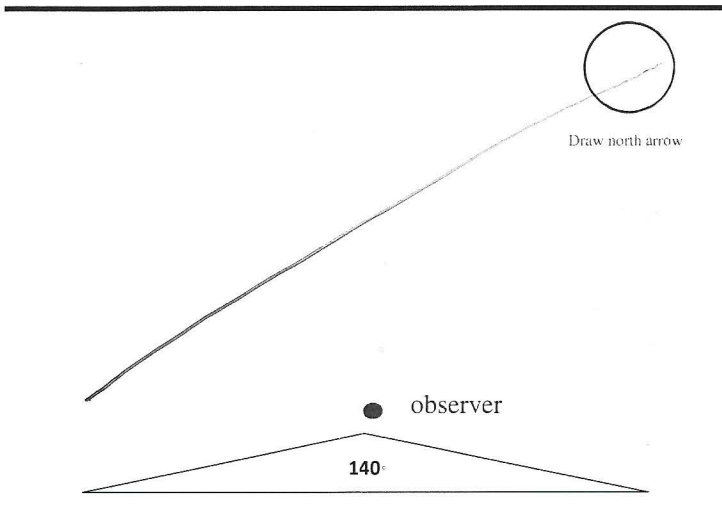
min \ sec	0	15	30	45
1	no Visible emissions observed			
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				

Sky Conditions: Clear  Partly Cloudy  Overcast   
Precipitation: No  Yes   
Wind: Direction: \_\_\_\_\_ Speed: \_\_\_\_\_ mph  
Ambient Temp: \_\_\_\_\_ °F RH: \_\_\_\_\_ %  
Height Relative to Observer: \_\_\_\_\_  
Distance From Observer: \_\_\_\_\_  
Condensed Water Vapor Present: No  Yes   
Attached  Detached   
Length of Condensed Water Vapor Plume: \_\_\_\_\_  
Background: \_\_\_\_\_

COMMENTS:

D.B.1.d - VOCs & HAPs Mar 24 - Feb 25  
D.B.3.c - baghouse readings  
& calibration

Sketch process unit: indicate observer position relative to source; indicate potential emission points and/or actual emission points.



Sun ☉ Wind ► Emission Point with Plume ○  
Observer Position ✕

Observer's Signature: [Signature]

Distrib: white-file; canary-inspector; pink-owner/operator

I have received a copy of these observations:

SIGNATURE: [Signature]  
Printed Name: Steven Allen  
Title: EHS Director



Jordan Garahana &lt;jordangarahana@utah.gov&gt;

## 3form Fabrication Inspection

13 messages

Steve Allen &lt;steve.allen@3-form.com&gt;

Wed, Mar 19, 2025 at 11:51 AM

To: "jordangarahana@utah.gov" &lt;jordangarahana@utah.gov&gt;

Jordan, I had a follow up conversation with Chad yesterday about our HQ building inspection report and him wanting to see monthly reports on VOC and HAPS. I provided this to him for our other location and so I thought I would send you the same for our Fabrication building from your visit. In the attached files I have lined out our HQ buildings information so that Fabrication is what should be used based on your inspection. Please feel free to give me a call on my cell if you have any questions.

Thank you,

**Steve Allen**

ENVIRONMENTAL, HEALTH AND SAFETY DIRECTOR

**steve.allen@3-form.com****801.649.2540** OFFICE**801.228.7839** MOBILE**@3form** | SALT LAKE CITY**CLEARLY POSSIBLE, CLEARLY RESPONSIBLE, CLEARLY CREATE.**

---

### 2 attachments

 **2-6-2025 Rolling Period Voc Totals.pdf**  
95K **2-6-2025 Rolling Period HAPs.pdf**  
231K

Jordan Garahana &lt;jordangarahana@utah.gov&gt;

Wed, Mar 19, 2025 at 12:21 PM

To: Steve Allen &lt;steve.allen@3-form.com&gt;

Hey Steve,

Thanks for sending that over. I was waiting for Chad to respond with comments to my memo since he still hasn't sent it back to me, but I figured that would be one of the comments he would have. Once I receive that from him, I will resubmit the memo with the numbers you provided me and let you know how that goes.

Thanks,

Jordan

[Quoted text hidden]

--



Jordan Garahana

Environmental Scientist | Minor Source Compliance

M: (385) 271-2871

[airquality.utah.gov](http://airquality.utah.gov)

Emails to and from this email address may be considered public records and thus subject to Utah GRAMA requirements.

---

**Jordan Garahana** <[jordangarahana@utah.gov](mailto:jordangarahana@utah.gov)>  
To: Steve Allen <[steve.allen@3-form.com](mailto:steve.allen@3-form.com)>

Fri, Apr 4, 2025 at 12:10 PM

Hey Steve,

I received a couple more comments from Chad that need clarification in order to get my memo approved. Here is the information I am looking for from your permit:

II.A.7 - Twelve heaters rated less than 5 MMBtu (can you confirm the ratings of the twelve heaters and if any of them are considered boilers?)

II.B.3.d- The owner/operator shall vent the powder coating operations inside the building (I know that you had previously told me that there is no separate booth for powder coating and that powder coating is done in the paint booths. I am just verifying that the booth does vent inside the building)

Please provide me with this information as soon as you can, and let me know if you have any questions about the information I am requesting.

Thanks,

Jordan

[Quoted text hidden]

---

**Steve Allen** <[steve.allen@3-form.com](mailto:steve.allen@3-form.com)>  
To: Jordan Garahana <[jordangarahana@utah.gov](mailto:jordangarahana@utah.gov)>

Fri, Apr 4, 2025 at 1:23 PM

Jordan, Please see responses below, Please also give me a call on my cell if you can.



**Steve Allen**  
ENVIRONMENTAL, HEALTH AND SAFETY DIRECTOR

[steve.allen@3-form.com](mailto:steve.allen@3-form.com)

801.649.2540 OFFICE  
801.228.7839 MOBILE

@3form | SALT LAKE CITY

**CLEARLY POSSIBLE, CLEARLY RESPONSIBLE, CLEARLY CREATE.**

On Fri, Apr 4, 2025 at 12:10 PM Jordan Garahana <[jordangarahana@utah.gov](mailto:jordangarahana@utah.gov)> wrote:  
| Hey Steve,

I received a couple more comments from Chad that need clarification in order to get my memo approved. Here is the information I am looking for from your permit:

II.A.7 - Twelve heaters rated less than 5 MMBtu (can you confirm the ratings of the twelve heaters and if any of them are considered boilers?) **These are all just normal warehouse ceiling mounted comfort heaters rated at <0.25 mm/BTU**

II.B.3.d- The owner/operator shall vent the powder coating operations inside the building (I know that you had previously told me that there is no separate booth for powder coating and that powder coating is done in the paint booths. I am just verifying that the booth does vent inside the building) - **We no longer have a Powder coating booth as I mentioned. Our current paint booths comply with all provisions in II.B.1.a. Our 2020 AO was done exclusively to remove the old AO requirements to vent the bag house inside the building statements. The current AO was updated for II.B.3 requirements they just forget and left the old powder coat booth that used to be on that system.**

[Quoted text hidden]

[Quoted text hidden]

---

**Jordan Garahana** <jordangarahana@utah.gov>  
To: Steve Allen <steve.allen@3-form.com>

Thu, Jul 17, 2025 at 2:46 PM

Hey Steve,

I received some feedback about my inspection memo and my manager wants some more clarification about the powder coating operations. He wants to confirm whether the powder coating operations are venting internally or externally, and if you have some sort of written record or O&M plan that confirms that information.

Thanks,

Jordan

[Quoted text hidden]

---

**Steve Allen** <steve.allen@3-form.com>  
To: Jordan Garahana <jordangarahana@utah.gov>

Thu, Jul 17, 2025 at 2:52 PM

Jordan, As I mentioned below in my email: **We no longer have a Powder coating booth as I mentioned. Our current paint booths comply with all provisions in II.B.1.a. Our 2020 AO was done exclusively to remove the old AO requirements to vent the bag house inside the building statements. The current AO was updated for II.B.3 requirements they just forget and left the old powder coat booth that used to be on that system.**

Please reach out or have Chad call me if there are any questions.

[Quoted text hidden]

---

**Jordan Garahana** <jordangarahana@utah.gov>  
To: Chad Gilgen <cgilgen@utah.gov>

Thu, Jul 17, 2025 at 2:53 PM

Here is Steve's response to the information I requested regarding the powder coating operations. Please let me know your thoughts.

Thanks,

Jordan

[Quoted text hidden]

---

**Jordan Garahana** <jordangarahana@utah.gov>  
To: Steve Allen <steve.allen@3-form.com>  
Cc: Chad Gilgen <cgilgen@utah.gov>

Thu, Jul 17, 2025 at 3:19 PM

Hey Steve,

Just for clarity, the powder coating operations take place in the paint booths, in which those booths are equipped with filters and then vent externally. When powder coating is conducted in the paint booths, are those operations being vented similarly to when painting is occurring in the booth, meaning the emissions from powder coating would be passing through

the filter and venting externally? Or does the powder coating operations follow a different procedure when they are operating in the paint booths?

Thanks,

Jordan

[Quoted text hidden]

---

**Chad Gilgen** <cgilgen@utah.gov>  
To: Jordan Garahana <jordangarahana@utah.gov>

Thu, Jul 17, 2025 at 3:49 PM

Hi Jordan,

Yes, I saw that email previously.

We still need to know if they are venting powder coating operations internally or externally. If that was the sole purpose of their last AO modification, they should have made sure the requirements were changed during their review period rather than letting it go final without those changes being made.

I have looked at that NOI and there is no reference to any of that. The modification they requested was to allow them to vent the painting operations baghouse emissions 8,760 hours per year. You can see that NOI here - <https://if-public.deq.utah.gov/WebLink/DocView.aspx?id=397125&dbid=0&repo=Public>

I think based on all of this we should probably talk with Steve. He emailed me earlier today asking the status of this memo so I will let him know we would like to set up a time to talk.

...and, as I was writing this, Steve called me and we had a long discussion about everything so hold off on what's discussed above.

I'll get an email out to Steve and CC you on it here sometime today or tomorrow.

Chad

**Chad Gilgen | Manager | Minor Source Compliance**  
385-306-6500 (cell)



*Emails to and from this email address may be considered public records and thus subject to Utah GRAMA requirements.*

[Quoted text hidden]

---

**Steve Allen** <steve.allen@3-form.com>  
To: Jordan Garahana <jordangarahana@utah.gov>  
Cc: Chad Gilgen <cgilgen@utah.gov>

Thu, Jul 17, 2025 at 4:12 PM

Hi Jordan, I just spoke with Chad and explained we rarely do any powder coating but when we do it is done in the paint booth just like painting following the paint booth permit conditions which requires venting through the filters externally. This was a "listed for information only" source and does not increase emissions, so Chad is going to see if we can get this condition removed administratively from the permit.

Thanks again for all of your help. Please let me know if you have any further questions.

[Quoted text hidden]

---

**Jordan Garahana** <jordangarahana@utah.gov>  
To: Chad Gilgen <cgilgen@utah.gov>

Thu, Jul 17, 2025 at 4:25 PM

Hey Chad,

Thanks for providing that update and for letting me know you and Steve had a conversation. I will await your email about proceeding forward with this memo.

Thanks,

Jordan

[Quoted text hidden]

---

**Chad Gilgen** <cgilgen@utah.gov>

Fri, Jul 18, 2025 at 12:53 PM

To: Steve Allen <steve.allen@3-form.com>, Jordan Garahana <jordangarahana@utah.gov>

Hello Steve,

Thanks for the call yesterday. Per our discussion, it was 3Form's intent/understanding that the 2020 Approval Order (AO) modification was done, in part, to update powder coating operations to be conducted in the existing paint booth (II.A.2). We also discussed addressing this now through an administrative amendment with DAQ's NSR group. I will follow-up with a separate email to Alan Humpherys who is the DAQ's Minor Source NSR manager to get that process started.

You also indicated that powder coating is rarely conducted at this location anymore and, when conducted, is primarily for touch-up purposes. Do you know if any powder coating took place within the last 12 months? This information will be helpful in evaluating the compliance status for AO condition II.B.3.d.

We also discussed the potential applicability of R307-342 for adhesives as well as a few other state rules. I have attached those for your reference/evaluation. Let me know if you have any questions or would like to discuss anything further.

Thanks again,  
Chad

**Chad Gilgen | Manager | Minor Source Compliance**  
385-306-6500 (cell)





*Emails to and from this email address may be considered public records and thus subject to Utah GRAMA requirements.*


[Quoted text hidden]


---

#### 4 attachments

 **R307-342.pdf**  
103K

 **R307-350.pdf**  
99K

 **R307-353.pdf**  
97K

 **R307-349.pdf**  
74K

---

**Steve Allen** <steve.allen@3-form.com>

Fri, Jul 18, 2025 at 2:03 PM

To: Chad Gilgen <cgilgen@utah.gov>

Cc: Jordan Garahana <jordangarahana@utah.gov>

Hi Chad, Thank you again for your time yesterday. To answer your question, Yes, powder coating has been done in the last 12 months although very infrequently in very small quantities in our permitted main paint booth.

I think it's very important to point out that the powder coating booth as we discussed does not exist anymore and was on the permit listed as "for information purposes only" not as a permitted source. So to apply a permit condition to an info only

source that does not exist has never been done on our AO. As you mentioned we have had this AO Inspected every year by multiple different inspector's and supervisor sign offs and were told what we were doing in the paint booth was allowed and in compliance with our AO. I'm all for an admin change to make our permit better reflect our current process and I will reach out to Alan to discuss that. If applying powder coat in our paint booth is now being seen as a compliance issue I would really like to escalate this to discuss it further because that's not what we were told over all previous years. I think we both agreed also that doing powder coating in our paint booth does not create an emissions change.

Thank you again for all your help and please feel free to give me a call on my cell if you need any further information or details from me.

Thanks Again,



**Steve Allen**  
ENVIRONMENTAL, HEALTH AND SAFETY DIRECTOR

**steve.allen@3-form.com**

**801.649.2540** OFFICE

**801.228.7839** MOBILE

**@3form** | SALT LAKE CITY

**CLEARLY POSSIBLE, CLEARLY RESPONSIBLE, CLEARLY CREATE.**

On Jul 18, 2025, at 12:54 PM, Chad Gilgen <[cgilgen@utah.gov](mailto:cgilgen@utah.gov)> wrote:

[Quoted text hidden]

<R307-342.pdf>

<R307-350.pdf>

<R307-353.pdf>

<R307-349.pdf>



Jordan Garahana <jordangarahana@utah.gov>

## Fwd: 3form DAQE-AN141970006-20 Administrative Change

2 messages

**Chad Gilgen** <cgilgen@utah.gov>  
To: Jordan Garahana <jordangarahana@utah.gov>

Tue, Jul 22, 2025 at 1:05 PM

FYI.

**Chad Gilgen | Manager | Minor Source Compliance**  
385-306-6500 (cell)



*Emails to and from this email address may be considered public records and thus subject to Utah GRAMA requirements.*

----- Forwarded message -----

From: **Steve Allen** <steve.allen@3-form.com>  
Date: Fri, Jul 18, 2025 at 2:44 PM  
Subject: 3form DAQE-AN141970006-20 Administrative Change  
To: Alan Humpherys <ahumpherys@utah.gov>  
Cc: Chad Gilgen <cgilgen@utah.gov>

Alan, Thank you for your time today. Attached is the official request to remove the Powder Coating booth and associated conditions in our AO.

Please let me know if you need anything further to assist in making this change.

Thank you and have a great weekend.



**Steve Allen**  
ENVIRONMENTAL, HEALTH AND SAFETY DIRECTOR

**steve.allen@3-form.com**

**801.649.2540** OFFICE  
**801.228.7839** MOBILE

@3form | SALT LAKE CITY

**CLEARLY POSSIBLE, CLEARLY RESPONSIBLE, CLEARLY CREATE.**

 **3form - DAQ-Fabrication Building Administrative Change to remove Powder coating booth from AO-2025.pdf**  
83K

**Chad Gilgen** <cgilgen@utah.gov>  
To: Jordan Garahana <jordangarahana@utah.gov>

Tue, Jul 22, 2025 at 1:05 PM

FYI - Part 2.

**Chad Gilgen | Manager | Minor Source Compliance**

385-306-6500 (cell)



*Emails to and from this email address may be considered public records and thus subject to Utah GRAMA requirements.*

----- Forwarded message -----

From: **Alan Humpherys** <ahumpherys@utah.gov>  
Date: Fri, Jul 18, 2025 at 2:47 PM  
Subject: Re: 3form DAQE-AN141970006-20 Administrative Change  
To: Steve Allen <steve.allen@3-form.com>  
Cc: Chad Gilgen <cgilgen@utah.gov>

Steve,

Thanks for submitting this. I'll get it assigned for processing.

Thanks,  
Alan

On Fri, Jul 18, 2025 at 2:44 PM Steve Allen <steve.allen@3-form.com> wrote:

Alan, Thank you for your time today. Attached is the official request to remove the Powder Coating booth and associated conditions in our AO.

Please let me know if you need anything further to assist in making this change.

Thank you and have a great weekend.



**Steve Allen**  
ENVIRONMENTAL, HEALTH AND SAFETY DIRECTOR

**steve.allen@3-form.com**

**801.649.2540** OFFICE  
**801.228.7839** MOBILE

**@3form | SALT LAKE CITY**

**CLEARLY POSSIBLE, CLEARLY RESPONSIBLE, CLEARLY CREATE.**



**Alan Humpherys**

Manager | Minor NSR Section

**P:** (385) 306-6520

**F:** (801) 536-4099

airquality.utah.gov

[Quoted text hidden]





July 17, 2025

Utah Department of Environmental Quality  
Division of Air Quality  
195 North 1950 West  
P O Box 144820  
Salt Lake City, Utah 84114-4820

Re: **DAQE-AN141970006-20** Administrative Change to remove equipment  
Source Location: 3form Fabrication 955 S 3800 W SLC Utah

3form would like to request to remove from section II.A Approved Equipment, the II.A.8 Powder Coating Booth, as this equipment no longer exists. We also request to remove the condition associated with this equipment listed in II.B.3.d “the owner/operator shall vent the powder coating operations to the inside of the building” listed in section II.B.3. This change will require the removal from II.B.3 section title the words “and Powder Coating Booth”. The source information general description in the AO also has the powder coating booth listed which will need removed as well. Please let me know if you need any further details or additional information to make the requested changes.

Sincerely,

Steve Allen  
Environmental, Health, and Safety Director

[Steve.Allen@3-form.com](mailto:Steve.Allen@3-form.com)

Cell:801-228-7839

3form

2300 South 2300 West

Salt Lake City, Utah, 84119