

**DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection**

N537447096

FACILITY: Brooklyn Products Incorporated		SRN / ID: N5374
LOCATION: 171 Wamplers Lake Road, BROOKLYN		DISTRICT: Jackson
CITY: BROOKLYN		COUNTY: JACKSON
CONTACT: Lisa Bascom, Vice President		ACTIVITY DATE: 11/28/2018
STAFF: Stephanie Weems	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS:
SUBJECT: Scheduled inspection of Brooklyn Products Inc.		
RESOLVED COMPLAINTS:		

Minor Source: Inspection of Brooklyn Products Inc.

State Registration Number (SRN): N5374

Facility Contacts

Lisa M. Bascom – Vice President

Phone 517-592-285 x 122

Email: lbascos@brooklynproducts.comWebsite: brooklynproducts.com**Purpose**

On November 28, 2018, I conducted an unannounced compliance inspection of Brooklyn Products Inc. located in Brooklyn, Michigan in Jackson county. I was accompanied by Mike Kovalchick with the AQD Jackson District Office. The purpose of the inspection was to determine the facility's compliance status with the applicable federal and state air pollution regulations, particularly Michigan Act 451, Part 55, Air Pollution Control Act and administrative rules.

Facility Location

The facility is located between residential homes to the east and commercial properties to the west. See attached aerial photo.

Facility Background

The facility does not have a documented inspection conducted by the AQD on file. This facility manufactures various polyurethane foam products, including wax applicator sponges, medical devices, reticulated and non-reticulated foam filter sleeves for vacuum systems, soft trim components for automotive markets, and novelty and promotional products, like stadium cushions and foam hands.

The manufacturing process consists of taking their raw material, large foam blocks, and die cutting or thermal sealing them. The die cutting process produces no heat or release agents, whereas the facility's thermal sealing processes uses 13 heated presses which are vented through "smog hogs" and which release internally within the facility. The facility also has two oven dryers, a small (325F) one which is rarely used, and a large one (310F). These dryers are used to dry products after they have been screen-printed using the facility's silkscreen process.

The facility also houses an adhesive spray booth and 2 hot melt glue machines that they use for producing interior foam products for the inside of firetrucks. There is one HVLP gun inside the spray booth, and it uses only one type of adhesive. This adhesive spray booth is equipped with dry filters and an exhaust system that serves only this coating booth.

A hot wire booth is also located within the facility. This booth cuts large blocks of foam by running a heated wire through the material.

Regulatory Applicability

Brooklyn Products has been using Rule 287 permit exemption rules to operate their spray booth and hot melt glue processes.

Rule 287(2)(c) permit exemption rules apply to the adhesive spray booth surfacing coating line.

Rule 287(2)(e) permit exemption rules apply to the silkscreen process.

Rule 287(2)(i) permit exemption rules apply to equipment used in the application of a hot melt adhesive.

Rule 285(2)(l)(vi)(B) permit exemption rules apply to the heated presses that are vented into the general in-plant

environment.

This facility is subject to 40 CFR 63 Subpart OOOOOO – National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production and Fabrication Area Sources. They are subject under 63.11414(a)(2) as a flexible polyurethane foam fabrication facility, meeting criteria under 63.11414(b)(4).

40 CFR 63 Subpart M MMMM – National Emission Standards for Hazardous Air Pollutants: Flexible Polyurethane Foam Fabrication Operations doesn't apply to this facility because the facility does not operate a flame lamination process or a loop slitter process.

Arrival & Facility Contact

There were no visible emissions or odors observed as we arrived at the facility. We arrived at 10:51 am, proceeded to the facility office to request access for an inspection, provided our identification and spoke with Lisa Bascom. Mike informed her of our intent to conduct a facility inspection and to review the various records as necessary.

Lisa extended her full cooperation, accompanied us throughout our entire visit, and fully addressed any questions that we had.

Pre-Inspection Meeting

Lisa explained that the facility currently has 24 full-time and 8 temporary employees. The facility runs from 7 AM -5:30 PM Monday through Friday, and from 7 AM – 1 PM on Saturday. They currently have no plans to expand their operations.

Onsite Inspection

Lisa gave us a tour of the facility and explained the observed processes. A moderate, unpleasant odor of burnt foam was noticed upon first entering the facility. Lisa began by showing us the heated presses and the "smog hogs" used to capture their emissions. These "smog hogs" exhaust into the general in-plant environment. (See Images 2 &3)

She then proceeded to show us the dryers that are used to heat the ink into their product for the silkscreen process. The smaller dryer, which Lisa states is rarely used, was not operating. The larger dryer was running, but no product was running through the dryer during the inspection. (See Images 4 &5) The dryers do exhaust outside, but the stacks were not visible from the parking lot, and the weather did not allow for a roof inspection.

Next, Lisa showed us the adhesive spray booth and the hot melt glue device used for the firetruck product process. The inside of the spray booth is equipped with dry filters (see Image 6) and one HVLG gun. Lisa explained that they only use one type of adhesive in the booth, 3M™ Fastbond™ Foam Adhesive 100, Lavender. The spray booth is exhausted from the facility externally through an exhaust system that only services this spray booth. (See Images 7-9)

We then walked around to the west side of the facility where the hot wire booth is located. This is an enclosed booth that uses a heated set of wires to cut through the large blocks of foam. The booth was not operating during the inspection. Lisa explained to us that smoke is emitted from this process, and that it is exhausted outside. We then proceeded to exit the building through a door nearby so that we could inspect the exhaust outlet. The covered outlet was located on the side of the building. (See attached photos)

Upon our way back to the office a large thermal press was observed. Lisa explained that this press had not been in use since 2003, and that some of the parts had been sold off to other companies.

Post-Inspection Meeting

We held a brief post-inspection meeting with Lisa. The SDS and purchase records for the spray booth were requested, and she graciously supplied them. We then discussed the hot wire booth. We asked what the normal cutting time is for the machine, and Lisa stated that it was about 5 minutes. We expressed concern that, with that long of a cutting time, the smoke that is emitted may be above allowable opacity, but since it was not operating, we couldn't know for sure. We asked her to keep watch and monitor the opacity levels.

We thanked Lisa for her time and cooperation, and we departed the facility at approximately 12 PM.

Post-Inspection Correspondence

After arriving back at the office, it was necessary to gain more information from Lisa in order to better understand the permit rules surrounding the hot wire cutting booth and the oven dryers. The following series of emails were exchanged with Lisa (attachments from emails are attached to this report):

From: Weems, Stephanie (DEQ)
Sent: Friday, December 7, 2018 12:28 PM
To: lbascos@brooklynproducts.com

Ms. Bascom,

As a follow up to our inspection last week there were a few things I wanted to request from you.

In regards to the wire cutting booth, I was hoping to see that in operation. Please let me know when that will be operating so that we can come out and observe it.

Also, if you could please gather information on how often you run that process (i.e. how often you cut the foam blocks per day or per week), when that wire cutting booth was installed, and the material data for the foam that is being cut with that process, that would be beneficial. If you could supply that information before we observe the process that would be helpful.

If you could please respond by December 14th with the requested information and an ideal time to observe the process, I would greatly appreciate it.

Thank you,
Stephanie Weems
MDEQ Air Quality
517-416-3351

From: Weems, Stephanie (DEQ) <WeemsS@michigan.gov>

Ms. Bascom,

I am writing in regards to the email I sent last week requesting information for the wire cutting booth. It is important for me to get this information so that I may determine your facility's compliance with air permit rules and regulations.

Thank you,

Department of Environmental Quality
Air Quality Division

Stephanie~ It was installed in our building in 2005. SDS sheet attached.

Let me know if you need anything else. Thanks

Lisa,

Thank you for the information you sent. It is helpful. Unfortunately, the SDS that you provided doesn't give us much information about what chemicals are contained in the foam and emitted during the cutting process. The emissions are released as smoke, and that is what is being emitted out the exhaust. All processes that emit an air contaminant need to have an Air Use Permit to Install or must meet an exemption from the Permit to Install Exemption Handbook that we gave you during the inspection. If you can demonstrate that it meets one of these exemptions, then it would not be necessary for you to apply for an air permit for this wire cutting process.

It appears from the information you provided the process may qualify for the exemptions R 336.1290 (Rule 290) or R 336.1291 (Rule 291). We suggest that you contact your foam supplier, and/or the cutting process manufacturer, explain to them how the foam is used and that you are looking for air permit related information in order to estimate emissions. They should be able to help you with this. From there, you may be able to calculate your emissions using the size of the foam and the amount of foam lost (burned) during the cutting process.

We understand that you may need more assistance with the exemption Rule 290 and Rule 291 requirements. AQD also has a recordkeeping form to assist companies, and we can provide that to you. Please start by reviewing the exemptions, looking into obtaining more information, and I will plan to call you after the first of the year to discuss further.

Thank you for your cooperation, and I hope you enjoy the holidays.

Department of Environmental Quality
Air Quality Division

On January 10, 2019, a follow-up phone call was made to Lisa. Diane Kavanaugh Vetort from the AQD Jackson District Office was present. Lisa was out of the office, so we left a voicemail asking for her to email us with a time that she could be reached. Another call was attempted January 11, 2019, and again a voicemail was left asking for an email response. As of January 23, 2019 no response was received.

Recordkeeping/Permit Requirements Review

Attachment (1) includes the Safety Data Sheets (SDS), provided during the inspection, for the 3M™ Fastbond™ Foam Adhesive used in the surface coating booth and the 3M™ Hot Melt Adhesive used in the hot melt glue devices. The SDS provided demonstrate compliance with 40 CFR 63 Subpart OOOOOO by showing that Methylene Chloride is not contained in the adhesives, as required by 63.11417(e).

Attachment (2) is the purchase orders provided during the inspection. These show the amount of each adhesive purchased and used during the last calendar year. Based on the information provided 650 gallons of the 3M™ Fastbond™ Foam Adhesive was purchased. According to the records, not more than 60 gallons of the adhesive were purchased in a given month. Furthermore, if all of this adhesive were to be used, it would average out to 54.17 gallons per month, well below the 200 gallon/mo limit specified in rule 287(2)(c)(i). Since the adhesive used in the hot melt glue device is exempt per rule 287(2)(i), the amount of adhesive used is not of concern.

Attachment (3) is the SDS, provided in an email from Lisa, for the polyurethane foam that is used at the facility.

Compliance Summary

The facility is out of compliance in regards to the hot wire cutting booth and the two dryer ovens. Since information cannot be obtained and a permit exemption has not been provided for these operations, a Violation Notice (VN) will be sent to the company outlining a Rule 201 violation for not having a Permit to Install (PTI).

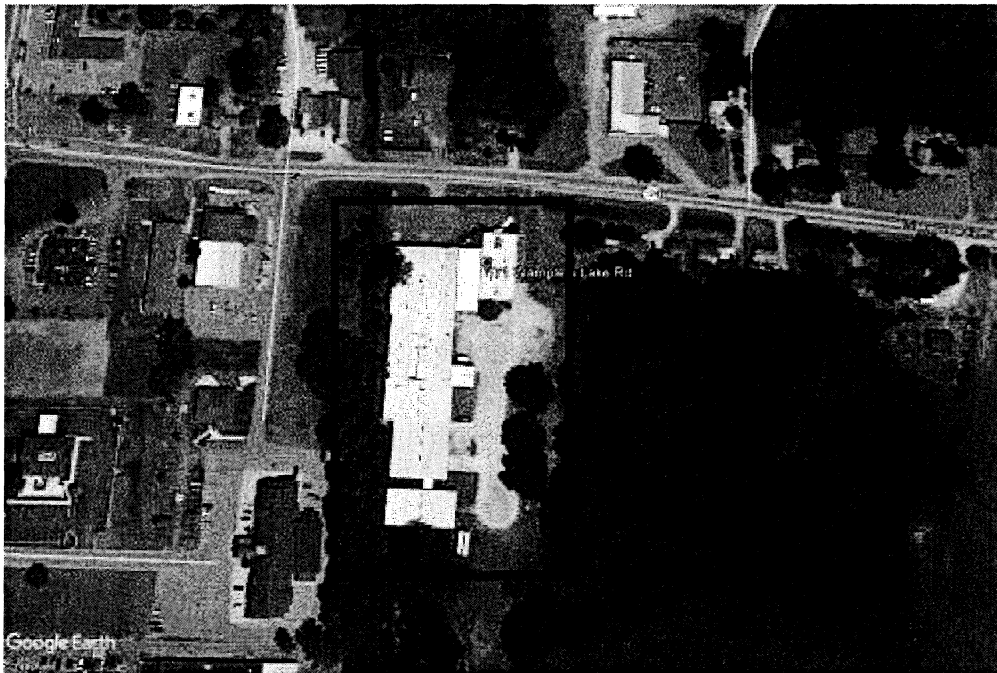


Image 1(Image 1) : Aerial photo

A handwritten signature or mark, possibly a checkmark or initials, located in the bottom right corner of the page.

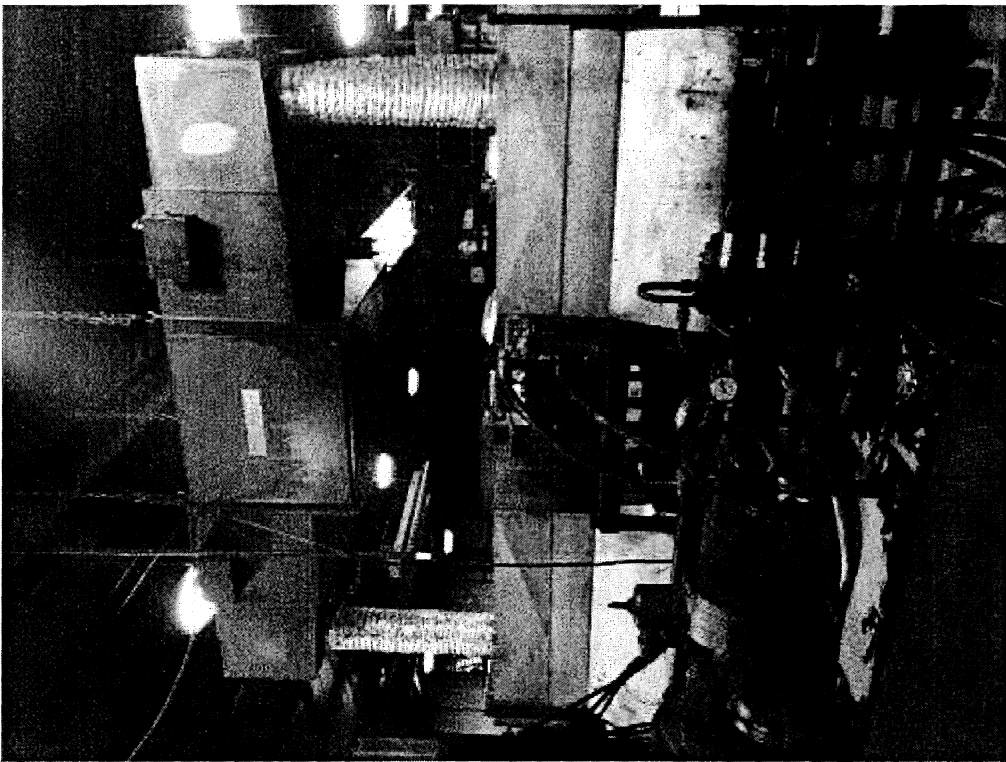


Image 2(Image 2) : Back-side of "smog hog"

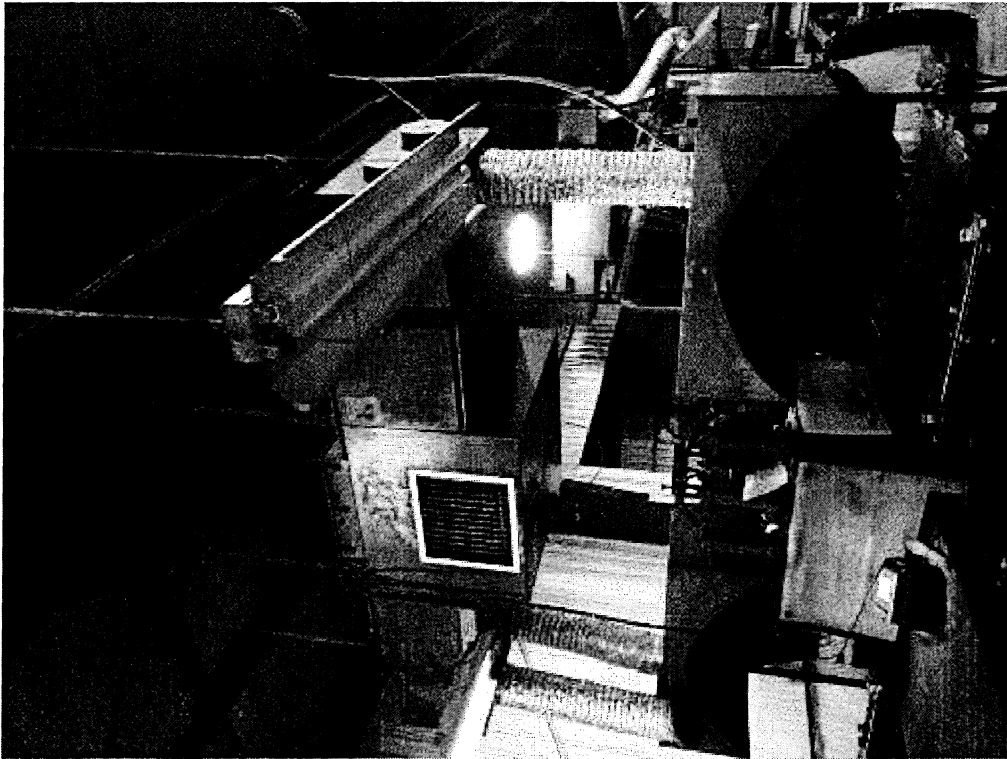


Image 3(Image 3) : Front of "smog hog"



Image 4(Image 4) : Small dryer

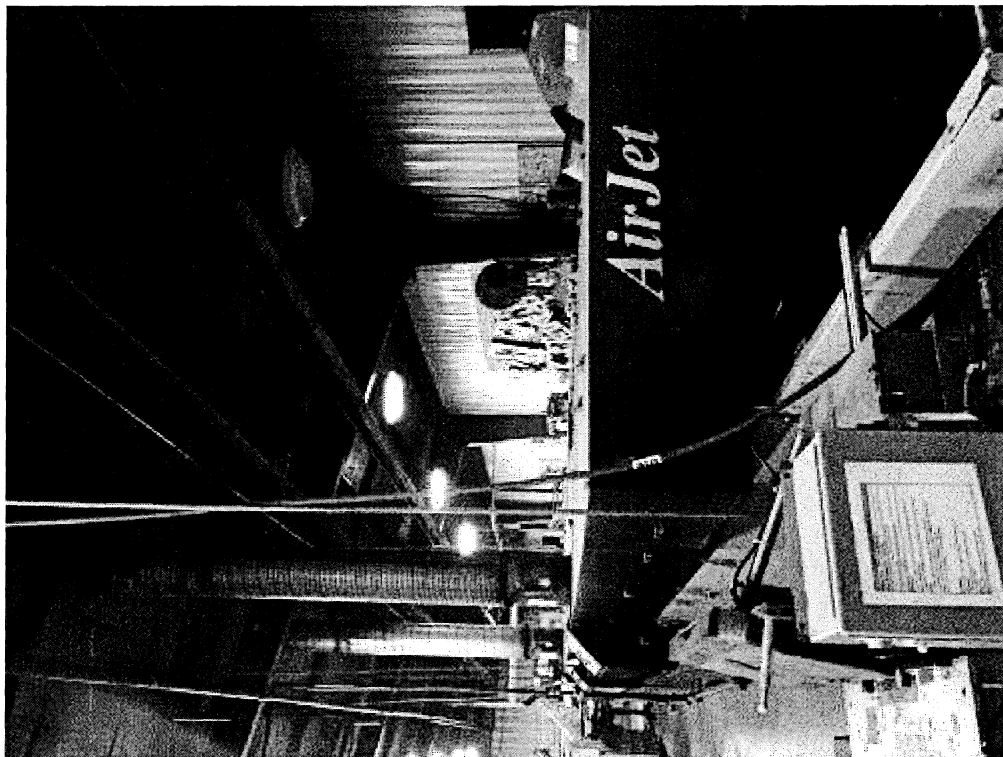


Image 5(Image 5) : Large dryer

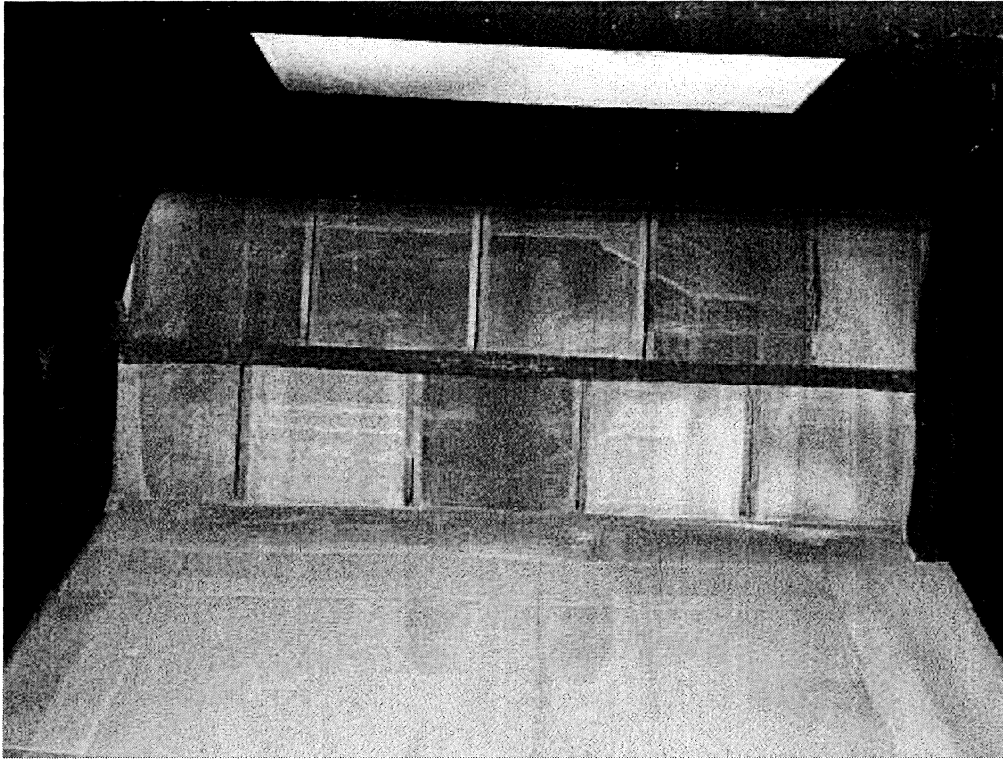


Image 6(Image 6) : Filters located inside surface coating booth

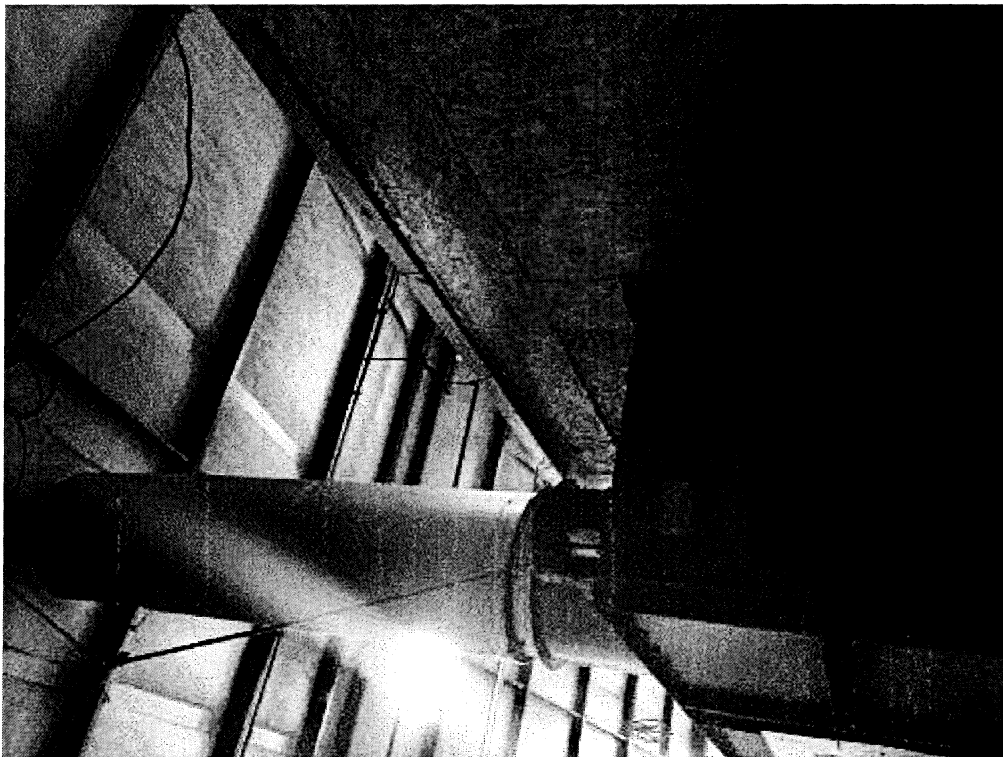


Image 7(Image 7) : Exhaust for surface coating booth

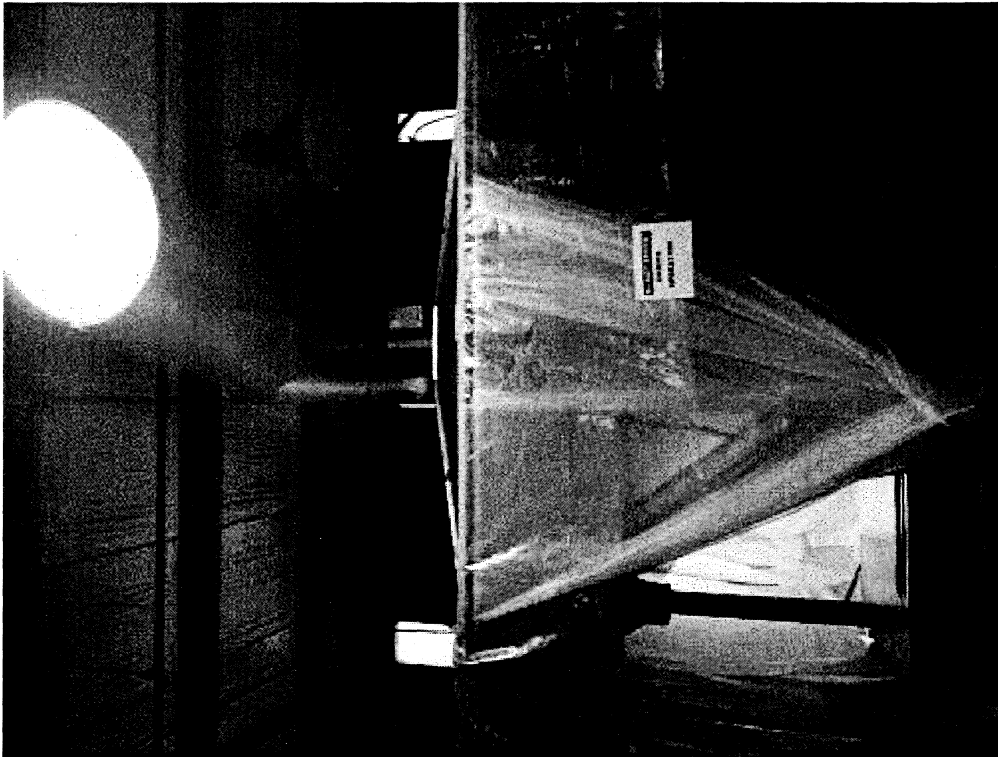


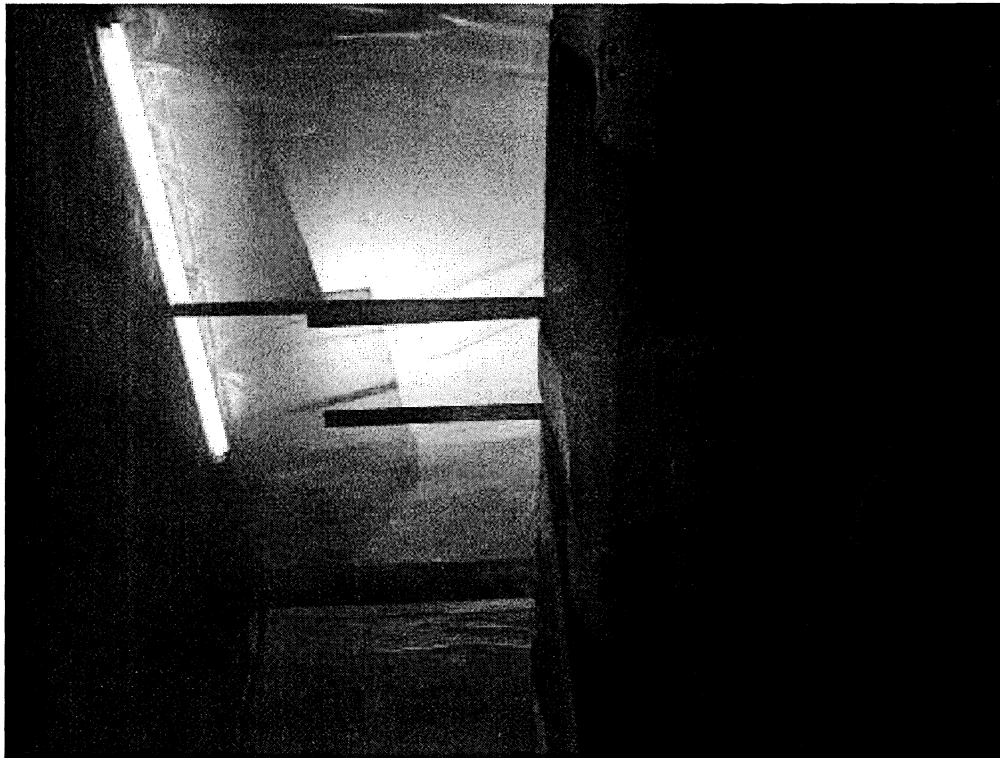
Image 8(Image 8) : Hot wire cutting booth



Image 9(Image 9) : Hot wire cutting booth exterior exhaust



Image 10(Hot Wire Exhaust) : Photo of exhaust inside hot wire cutting booth; Provided by Lisa Bascom of Brooklyn Products



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Image 11(Hot Wire Exhaust) : Exhaust inside the hot wire cutting booth; Photo provided by Lisa Bascom of Brooklyn Products.



Image 12(Hot Wire Exhaust) : Exterior exhaust while hot wire cutting booth was in operation; Photo provided by Lisa Bascom of Brooklyn Products.

NAME Steph Weems

DATE 1.23.19

SUPERVISOR _____