



Permit / Application Information Sheet
Division of Environmental Protection
West Virginia Office of Air Quality

Company:	Rubberlite Inc.	Facility:	Huntington
Region:		Plant ID:	011-00174
		Application #:	13-2948B
Engineer:	Pursley, Steve	Category:	
Physical Address:	2501 Guyan Avenue Huntington WV 25703	SIC: [3061] RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS - MECHANICAL RUBBER GOODS NAICS: [326291] Rubber Product Manufacturing for Mechanical Use	
County:	Cabell		
Other Parties:	VICE PRES - Goad, Jeffrey 304-525-3166 Consultant - WARD, PATRICK (304)-342-1400		

Information Needed for Database and AIRS
 1. Need valid physical West Virginia address with zip

Regulated Pollutants

Summary from this Permit 13-2948B		
Air Programs	Fee	Applicable Regulations
	\$2,000.00	Application Type
		MODIFICATION

Notes from Database

Activity Dates

APPLICATION RECEIVED	09/16/2015
APPLICATION FEE PAID	09/17/2015
ASSIGNED DATE	09/17/2015

NON-CONFIDENTIAL

Please note, this information sheet is not a substitute for file research and is limited to data entered into the AIRTRAX database.

Company ID: 011-00174
 Company: Rubberlite Inc.
 Printed: 09/17/2015
 Engineer: Pursley, Steve

NON-CONFIDENTIAL

INTERNAL PERMITTING DOCUMENT TRACKING MANIFEST

Company Name Rubber line

Permitting Action Number R13-2948B Total Days 232 DAQ Days 162

Permitting Action:

- | | | |
|---|------------------------------------|---|
| <input type="radio"/> Permit Determination | <input type="radio"/> Temporary | <input checked="" type="radio"/> Modification |
| <input type="radio"/> General Permit | <input type="radio"/> Relocation | <input type="radio"/> PSD (Rule 14) |
| <input type="radio"/> Administrative Update | <input type="radio"/> Construction | <input type="radio"/> NNSR (Rule 19) |

Documents Attached:

- | | |
|--|--|
| <input checked="" type="radio"/> Engineering Evaluation/Memo. | <input type="radio"/> Completed Database Sheet |
| <input checked="" type="radio"/> Draft Permit | <input type="radio"/> Withdrawal |
| <input checked="" type="radio"/> Notice | <input type="radio"/> Letter |
| <input type="radio"/> Denial | <input type="radio"/> Other (specify) _____ |
| <input type="radio"/> Final Permit/General Permit Registration | _____ |

Date	From	To	Action Requested
5-5-16	Steven Pursley	Rev	please review
5/11	Bev	Steve	Go to Notice
			Entire Document NON-CONFIDENTIAL

NOTE: Retain a copy of this manifest for your records when transmitting your document(s).

AIR QUALITY PERMIT NOTICE

Notice of Intent to Approve

On September 17, 2015, Rubberlite Inc. applied to the WV Department of Environmental Protection, Division of Air Quality (DAQ) for a permit to modify a foam production and processing facility located at 2501 Guyan Avenue, Huntington, Cabell County, WV at latitude 38.4308 and longitude -82.4128. A preliminary evaluation has determined that all State and Federal air quality requirements will be met by the proposed facility. The DAQ is providing notice to the public of its preliminary determination to issue the permit as R13-2948B.

The following increase in potential emissions will be authorized by this permit action: Particulate Matter less than 10 microns, 3.63 tons per year (TPY); Particulate Matter, 5.28 TPY; Sulfur Dioxide, 0.15 TPY; Oxides of Nitrogen, 11.47 TPY; Carbon Monoxide, 14.15 TPY; Volatile Organic Compounds, 71.18 TPY; Total Hazardous Air Pollutants 20.24 TPY.

Written comments or requests for a public meeting must be received by the DAQ before 5:00 p.m. on **DRAFT**. A public meeting may be held if the Director of the DAQ determines that significant public interest has been expressed, in writing, or when the Director deems it appropriate.

The purpose of the DAQ's permitting process is to make a preliminary determination if the proposed modification will meet all State and Federal air quality requirements. The purpose of the public review process is to accept public comments on air quality issues relevant to this determination. Only written comments received at the address noted below within the specified time frame, or comments presented orally at a scheduled public meeting, will be considered prior to final action on the permit. All such comments will become part of the public record.

Steven R. Pursley, PE
WV Department of Environmental Protection
Division of Air Quality
601 57th Street, SE
Charleston, WV 25304
Telephone: 304/926-0499, ext. 1218
FAX: 304/926-0478

Additional information, including copies of the draft permit, application and all other supporting materials relevant to the permit decision may be obtained by contacting the engineer listed above. The draft permit and engineering evaluation can be downloaded at:

www.dep.wv.gov/daq/Pages/NSRPermitsforReview.aspx



west virginia department of environmental protection

Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone (304) 926-0475 • FAX: (304) 926-0479

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.: R13-2948B
Plant ID No.: 011-00174
Applicant: Rubberlite Inc.
Facility Name: Huntington Facility
Location: Huntington
NAICS Code: 326291
Application Type: Modification
Received Date: September 16, 2015
Engineer Assigned: Steven R. Pursley, PE
Fee Amount: \$2,000.00
Date Received: September 17, 2015
Complete Date: November 25, 2015
Due Date: February 23, 2016
Applicant Ad Date: September 22, 2015
Newspaper: *The Herald Dispatch*
UTM's: Easting: 376.625 km Northing: 4,254.558 km Zone: 17
Description: Addition of a foam production line, a bun press, hot melt laminator, three (3) roll coaters, a solvent cleaning station, a flame laminator and an emergency generator.

DESCRIPTION OF PROCESS

Rubberlite, Incorporated produces foam and then fabricates laminates and other products from the foam produced at the facility and from foam that is purchased from other sources. The facility is contained in five buildings and is either categorized as production or fabrication. Production is the actual foam making equipment at the site. This includes the chemical storage tanks, day tanks, mix tanks, the mix-pour head and the conveyor which the material is poured onto to form the bun. There is one existing production line and one proposed production line. The fabrication at the facility is basically everything else which is developed to take the bun (or delivered buns) and process them into the required finished goods.

Fabrication includes the Bun Presses, Hot Melt Laminators, Flame Laminator, Buffer, Misting Unit, and Roll Coater. There are splitters and other equipment used at the site in the fabrication process which are not emission sources.

Additional sources include solvent cleaning, a lab production unit, emergency generator and vehicle activity for delivery and shipping.

Foam Production Units

Rubberlite uses a two-component system consisting of Part A - Isocyanate (ISO) and Part B - Polyol Resin. The two-part system is pumped into a specially designed mixing head that combines the two components to react to form polyurethane foam that is poured onto a lined conveyor. The formulated ratio of isocyanate content to polyol resin is specific to meet customers' specifications. No auxiliary blowing agents (ABAs) are used as the process uses water as the blowing agent. This facility does not use toluene diisocyanate (TDI).

Methylene diphenyl diisocyanate (MDI)/polymeric methylene diphenyl diisocyanate (PMDI) is received by tank car and off-loaded into two 7,000 gallon storage tanks. MDI/PMDI is also received in 275 gallon totes and 55 gallon drums and off loaded into three (3) 800 gallon and one (1) 150 gallon day tanks. All tanks are located inside the manufacturing building and are maintained at a constant temperature. ISO tanks are vented to the outside when pumping/filling; however, all other tanks are vented inside the building during such instances.

Material is pumped into 7,000 gallon bulk storage tanks from tanker trucks (2 Polyol and 2 ISO tanks). Based on typical demands, these tanks are filled once per month.

Material is pumped out of bulk storage tanks using diaphragm pumps into 800 gallon day tanks (3-Polyol and 3-ISO) as well as a 150 gallon Poly Lab tank. Material is also pumped from totes into daily batch tanks (Polyol, ISO, EG) and from drums (additives, surfactants, catalysts).

Poly batch chemicals (i.e. catalysts, surfactants, chain extenders, etc.) are batched and mixed overnight. No batching is performed on ISO tanks. Batched chemicals, ISO and pigments are pumped separately into the mix head, which blends them together at the conveyor.

Material is poured onto a liner, which is conveyed on an open conveyor. Material rises to maximum peak heights at approximately 10 - 15 feet high and is cut into 100-foot master rolls (buns) using an automated cut-off saw. Once cut, the roll continues to be conveyed and is transported to a staging area using an overhead vacuum crane. Master rolls (buns) are allowed to cure for at least 24 hours prior to skiving (slicing). From this point on, the foam is in the Fabrication Area for forming the final products.

The existing foam production unit (Foam Production Unit No. 1, 1S) is the entire production unit except for the ISO tanks and glycol tanks (which are listed separately in the existing permit as 10S and 11S respectively). There is no change proposed for the existing unit. The applicant is proposing to add another production line (Foam Production Unit No. 2, 15S) along with ISO tanks (16S) and glycol tanks (17S).

Fabrication

Fabrication is taking the produced bun or master roll and forming it into a finished good. The finished goods include fabricated and non-fabricated products depending on the order that is being prepared. What the order requires also dictates what processes the foam undertakes at the facility. Fabrication includes both the foam that is produced at the site and foam that is purchased from others. The following process descriptions apply to the fabrication area equipment:

Bun Presses

This is the process of joining buns together to make longer buns or master rolls. An adhesive

is applied to each end of the bun. The end of the buns are then pressed together and a bond is formed. The buns can be joined end to end to make a long bun that can then be processed further. The existing bun press is 2S. The new, proposed, bun press is 18S.

Hot Melt Laminators

The Hot Melt Laminators involve the lamination of fabric to foam. Adhesive is stored in a 55 gallon drum and is positioned into drum unloading equipment which heats and pumps the adhesive to the fabrication screen. The foam is unwound in conjunction with the fabric which is going to be laminated onto the foam. The system uses a screen printing technology to apply adhesive in a specific pattern across the width of the foam. The screen tunnel is heated to between 225 and 275 degrees Fahrenheit. The screen tunnel is vented to the outside of the building. As the adhesive is applied to the foam, the fabric is nipped along the top of the substrate and is cut and rolled to various lengths. The existing hot melt laminators are No. 1 (3S) and No. 2 (4S). The new, proposed, hot melt laminator is No. 3 (19S).

Buffer

The buffer unit allows a foam product to be finished to a tight tolerance. Depending on the required thickness of the foam, the feed foam may be of different thicknesses. The buffer removes the foam to the correct thickness. Fines created during the process enter ductwork that carries it through the wall to an outside cyclone and double baghouse system for removing the fines. The baghouses are sufficient efficiency to allow the exhaust air to be returned into the building. This unit does not vent directly to the outside of the building.

Misting Unit:

The misting unit applies a material to foam that allows a crust or skin to be developed on the foam. The foam material passes through a mist/spray of the material being applied and then is sent through an electric oven for curing the skin producing the final material.

Roll Coaters:

Similar to the misting unit, the roll coaters allow the crust or skin to be put on the foam. The process uses chemicals and then froths them with air to make a shaving cream consistency froth and applies the froth to the foam. The material then passes through an oven for drying of the skin.

There are two existing roll coaters. Roll coater No. 1 (7S) has a natural gas oven which dries the coating. Roll Coater No. 2 (13S) has an infrared oven which cures the coating. There are three (3) proposed roll coaters (20S, 21S, and 22S) which will be similar to Roll Coater No. 1 with a natural gas oven.

Production Solvent Cleaning:

There is one existing production solvent cleaning station (8S) at the site and one proposed for the new production unit (23S).

Lab Line (9S):

A lab line has been transported from the R&D location to the Huntington Facility. This equipment is similar to that of the main manufacturing line; however, it is on a much smaller scale. The equipment consists of three 80-gallon tanks that store ISO, POLY, and Butanediol. These chemicals are metered from the tanks to a small mixing/dispensing unit and poured into molds for further analysis. This process is currently not in operation (although it WAS included in the original permit R13-2948) but Rubberlite does have intentions in getting this process operational for R&D purposes. This is a small scale mold production for R&D purposes and it currently does not have ventilation to the outside. Due to its size and capabilities, the lab line's primary purpose is to conduct trials for developing a new product offering going forward.

Vehicle Activity (12S):

Vehicles that bring material to the site and take product from the site travel on public roads and then enter the sites paved areas.

Solvent Cleaning Stations:

There are four solvent cleaning stations (14S) that are used in different areas of the facility (one for roll coating, two in glue lamination, and one in maintenance.) The solvents used in these parts washers are different than used in the production solvent cleaning stations and so are identified as a separate source.

Emergency Generator (24S):

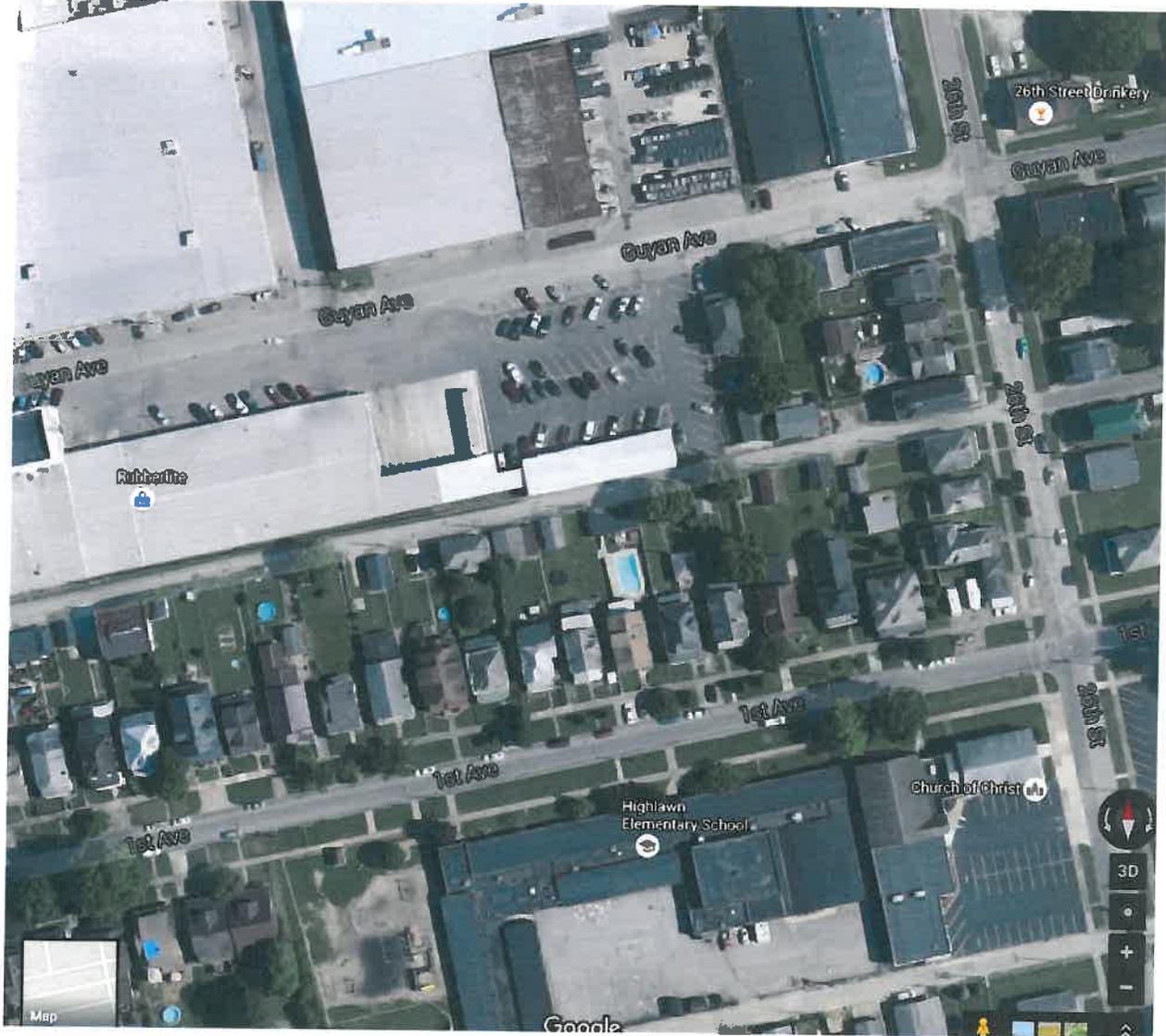
The facility has an existing emergency generator that was omitted when the applicant obtained their previous permit.

Flame Laminator (25S):

A flame laminator applies the lamination material to the foam by heating (natural gas flame) the foam to the point where the foam material becomes sticky allowing the laminate material to adhere to the foam without glue. As the foam cools the laminate material becomes permanently adhered to the foam.

SITE INSPECTION

Dan Baurle of DAQs Compliance and Enforcement section conducted a full on site inspection of the facility on December 16, 2016, and found the facility to be in compliance. The facility is located across the street from many homes and is less than 100 yards from an elementary school and a church. Below is a google map image of the facility and surrounding area.



ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

The facilities existing PTE is uncertain. The permit application, Engineering Evaluation R13-2948A and permit R13-2948A all indicate different PTEs. In order to be conservative (regarding the increase in emissions) I set the existing baseline for each pollutant at the smallest of the three numbers. Based on that, emissions from the existing facility are as follows:

Regulated Pollutant	lb/hr	tpy
PM _{2.5}	0.07	0.23
PM ₁₀	0.07	0.23
PM	0.07	0.23
CO	0.56	2.43
NO _x	0.66	2.90
SO ₂	0.01	0.02
VOC	9.77	24.16
Total HAP	2.69	4.75
Acrylonitrile	<0.01	<0.01
Ethyl Acrylate	<0.01	<0.01
Ethyleneimine	<0.01	<0.01
Vinyl Chloride	0.06	0.26

Proposed emissions from the modified facility are based on the following:

Foam Production Units

Emissions from the foam production units vary depending on the specific formula which is being produced. Therefore, Rubberlite calculated emissions for various formulas on a mass balance basis and selected the highest result.

Source	VOCs		MDI	
	lb/hr	tpy	lb/hr	tpy
Foam Prod. Unit 1 (1S)	3.44	15.08	0.01	0.01
Foam Prod. Unit 2 (15S)	3.44	15.08	0.01	0.01
Total	6.89	30.16	0.02	0.02

Bun Presses

Adhesives are used to join buns. The glue is in a pail and is applied manually with a brush to the end of the buns. The VOC and HAP emissions are based on the weight percent of the material in the glue. The highest VOC and HAP emissions are used to establish the emissions from this process. Each unit uses a maximum of 300 gallons per year with an estimated 0.5 gallons per hour. Total use is 600 gallons per year with an estimated 1.0 gallon per hour.

Source	VOCs		Toluene	
	lb/hr	tpy	lb/hr	tpy
Bun Press No. 1 (2S)	2.74	0.82	1.38	0.41
Bun Press No. 2 (18S)	2.74	0.82	1.38	0.41
Total	5.48	1.64	2.76	0.82

Hot Melt Laminators

The Hot Melt Laminators use glue to laminate foam with other materials. The glue is heated by an electric heating device so that it can be spread on the laminated side of the foam. VOC and HAP calculations were performed using a mass balance. Total maximum usage for all three units were estimated at 75 pounds per hour and 351,000 pounds per year.

Source	VOCs		MDI	
	lb/hr	tpy	lb/hr	tpy
Glue Laminator No.1 (3S)	1.25	2.93	1.25	2.93
Glue Laminator No.2 (3S)	1.25	2.93	1.25	2.93
Glue Laminator No.3 (3S)	1.25	2.93	1.25	2.93
Total	3.75	8.79	3.75	8.79

Buffer Unit

Buffer emissions are based on the run time of the unit and the amount of material removed by the operation. The unit is controlled by a baghouse which vents back into the building. Therefore, both the baghouse and the building are utilized as control devices. Annual emissions are based on 2,080 hours of operation per year.

Source	PM/PM ₁₀ /PM _{2.5}	
	lb/hr	tpy
Buffer Unit (5S)	0.01	0.01
Total	0.01	0.01

Misting Unit

The misting unit uses a material which is applied to allow a crust or skin to form on the foam. VOC and HAP (formaldehyde) emissions are calculated using a material balance.

Source	VOCs		Formaldehyde	
	lb/hr	tpy	lb/hr	tpy
Misting Unit (6S)	0.62	0.40	0.62	0.40
Total	0.62	0.40	0.62	0.40

Roll Coaters

The roll coaters use a material which is applied to allow a crust or skin to form on the foam. The hourly VOC and HAP emissions are based on the maximum width of material and maximum thickness of the coat. The annual emissions are based on the yearly usage. One existing roll coater unit (7S) and all three new roll coater units (20S-22S) have a natural gas fueled Apollo Dryer. Emissions from the dryers were calculated based on emission factors from AP-42, Section 1.4 for natural gas combustion for the criteria pollutants and for VOC-HAPs. It was assumed that PM, PM10, and PM2.5 are equal. The existing permit has no limits for HAP emissions from the roll coaters, only a facility wide limit of 25 tpy for aggregated haps and 10 tons per year of any individual HAP. Additionally, the permit appears to only require monitoring of the roll coaters to determine compliance with the facility wide limit. The new permit will correct this. The facility requested a limit of 25 tpy for total HAP emissions from the roll coaters. However, in the writers opinion, this would make the facility a major source of HAPs. Therefore, the following annual HAP emissions were limited by taking 24.99 tpy and subtracting the annual HAP emissions from combustion sources and the flame laminator (i.e. all HAP emissions that cannot be calculated using a mass balance approach).

Coating Emissions

Source	VOCs		Total HAPs	
	lb/hr	tpy	lb/hr	tpy
Roll Coater No. 1 (7S)	40	43.00	15	22.93
Roll Coater No. 2 (13S)	40		15	
Roll Coater No. 3 (20S)	40		15	
Roll Coater No. 4 (21S)	40		15	
Roll Coater No. 5 (22S)	40		15	
Total	200	43	75	22.93

Natural gas fired dryer emissions

	CO		NO _x		PM/PM _{2.5}		SO ₂		VOCs		HAPs	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
Dryer 1	0.56	2.43	0.66	2.90	0.06	0.22	0.01	0.02	0.04	0.16	0.02	0.06
Dryer 3	0.56	2.43	0.66	2.90	0.06	0.22	0.01	0.02	0.04	0.16	0.02	0.06
Dryer 4	0.56	2.43	0.66	2.90	0.06	0.22	0.01	0.02	0.04	0.16	0.02	0.06
Dryer 5	0.56	2.43	0.66	2.90	0.06	0.22	0.01	0.02	0.04	0.16	0.02	0.06
Total	2.24	9.72	2.64	11.6	0.24	0.88	0.04	0.08	0.16	0.64	0.08	0.24

Multiple Parts Washer Emissions (8S, 23S and 14S)

The parts washer systems are different in size and cleaning fluid throughout the site. AP-42, Table 4.6-2 emission factors were used to calculate the emissions from all of the parts washers on site. An emissions reduction factor of 13% was used for covers on the parts washers. Annual emissions are based on 8,760 hours per year. There are 6 units at the site (14S actually consists of four different existing stations) that are included in the calculations.

Source	VOCs		HAPs	
	lb/hr	tpy	lb/hr	tpy
Production Part Washer (8S)	0.07	0.29	--	--
Production Part Washer (23S)	0.07	0.29	--	--
Part Washer (14S)	0.26	1.15	0.01	0.01
Total	0.4	1.73	0.01	0.01

Vehicle Activity

Haulroad emissions were based on AP-42 Chapter 13. All haul roads are paved and no control efficiency was claimed.

PM		PM ₁₀		PM _{2.5}	
lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
2.70	2.03	0.50	0.38	0.10	0.08

Emergency Generator No. 1 (24S)

Emissions from the 157.5 hp diesel fired emergency generator were based on AP-42 Table 3.3-1 (SO₂ and VOCs), manufacturer information (PM/PM_{2.5}, CO and NO_x) and Table 3.3-2 (HAPs). It should be noted that the emission factor used for NO_x is actually NO_x + NMHC. Therefore, it should be very conservative. Similarly, the VOC emission factor is actually for TOCs and should, therefore, also be conservative. All annual emissions are based on 500 hours per year of operating time.

CO		NO _x		PM/PM _{2.5}		SO ₂		VOCs		HAPs	
lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
0.16	0.04	1.40	0.35	0.08	0.02	0.31	0.08	0.39	0.10	0.01	0.01

Flame Laminator (25S)

Emissions from the operation of the flame laminator (except for SO₂) comes from a stack test performed on a similar operation in March of 1995 in New Mexico. That facility used both TDI and

MDI. Since Rubberlite will not use TDI, they added the TDI and MDI emissions from the New Mexico facility together for total emissions of MDI from the Huntington facility. Additionally, the New Mexico stack test showed emissions of HCl. This was due to the lamination of foams containing chlorinated fire retardants. Since the fire retardant used by Rubberlite is not chlorinated, no HCl emissions are anticipated from this source. SO₂ emissions are based on AP-42.

CO		NO _x		PM/PM _{2.5}		SO ₂		VOCs		HAPs	
lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
1.52	6.65	0.51	2.22	0.58	2.55	--	--	2.02	8.87	0.42	1.80

In addition to the emissions from the flame laminator described above, there will also be emissions from the flame laminator due to the combustion of natural gas. Emissions due to the combustion of natural gas by the flame laminator were based on AP-42 chapter 1.4.

CO		NO _x		PM/PM _{2.5}		SO ₂		VOCs		HAPs	
lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
0.04	0.17	0.04	0.20	0.01	0.02	0.01	0.01	0.01	0.02	0.01	0.01

Based on the above methodologies, criteria emissions from the modified facility will be as follows:

CO		NO _x		PM		PM ₁₀		PM _{2.5}		SO ₂		VOCs	
lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
3.96	16.58	4.59	14.37	3.62	5.51	1.42	3.86	1.02	3.56	0.36	0.17	219.71	95.34

Based on the above methodologies, HAP emissions from the modified facility will be as follows:

HAP	lb/hr	tpy
Lead	0.01	0.01
Acrylonitrile	1.00	0.25
Formaldehyde	1.63	0.50
Vinylidene Chloride	1.00	1.00
Vinyl Chloride	1.00	0.50
Benzene	1.00	0.50
Ethylene Oxide	1.00	0.25
Propylene Oxide	1.00	2.50
Ethyl Acrylate	75.00	9.99
Antimony Compounds	75.00	9.99

Arsenic Compounds	75.00	9.99
Triethylamine	75.00	9.99
Styrene	75.00	9.99
MDI	78.84	9.99
Toluene	77.77	9.99
Glycol Ethers	75.03	9.99
Ethylene Glycol	75.00	9.99
1,4 Dioxane	75.00	9.99
Acetaldehyde	75.00	9.99
HCN	0.33	1.45
Total HAPs	87.67¹	24.99

¹Total hourly HAP emissions are not the sum of the emissions of each individual HAP. This is because the speciated HAP emissions are based on a worst case scenario of a maximum usage for a material containing the maximum content of that individual HAP. Obviously all of these scenarios cannot occur at the same time. Therefore, total HAPs were calculated by adding the maximum roll coater HAP emissions of 75 pounds per hour with the rest of the facility wide HAP emissions.

Based on the tables above, the increase in PTE due to this modification will be as follows:

Regulated Pollutant	lb/hr	tpy
PM _{2.5}	0.95	3.33
PM ₁₀	1.35	3.63
PM	3.55	5.28
CO	3.40	14.15
NO _x	3.93	11.47
SO ₂	0.35	0.15
VOC	209.94	71.18
Total HAP	84.98	20.24

REGULATORY APPLICABILITY

The facility is subject to the following state and federal rules:

STATE RULES

45CSR2 TO PREVENT AND CONTROL PARTICULATE AIR POLLUTION FROM COMBUSTION OF FUEL IN INDIRECT HEAT EXCHANGERS

The Roll Coaters with dryers are subject to 45CSR2 because they meets the definition of fuel burning units. They are subject to the 10% opacity requirements in Section 3. They are exempt from sections 4, 5, 6, 8, and 9 because the heat input is less than 10 MMBtu/hr and meets the exemption of §45-2-11.1. Rubberlite will demonstrate compliance with the opacity requirements by demonstrating compliance with the permit requirements.

45CSR7 TO PREVENT AND CONTROL PARTICULATE MATTER AIR POLLUTION FROM MANUFACTURING PROCESSES AND ASSOCIATED OPERATIONS

Rubberlite is not subject to the provisions of 45CSR7 for the Roll Coater [7S] because the particulate matter emissions are regulated by 45CSR2 and meet the exemption of §45-7-10.1.

Rubberlite is subject to the particulate matter emission limits of §45-7-4.1 for the Buffer Unit [5S]. The source operation type is 'a' because it is a manufacturing process that involving a physical change. The process weight rate for the 20% buffer is 134 lb/hr and the corresponding allowable particulate matter emission rate is 0.17 lb/hr. Rubberlite has demonstrated compliance with this requirement with a potential particulate matter emission limit of 0.01 lb/hr which is less than the required limit for 45CSR7.

Fugitive emissions are minimized by have the Buffer operations [5S] performed inside the building and by use of paved haul roads [12S] at the site, both demonstrating compliance with §45-7-5.

Compliance with the opacity requirements of 45CSR7 is based on the cyclone and baghouse operations for control device and the design of the system that cleans the air and routes the clean air back into the building after being filtered at the exhaust point inside the building.

45CSR10 TO PREVENT AND CONTROL AIR POLLUTION FROM THE EMISSION OF SULFUR OXIDES

The Roll Coaters with dryers are subject to 45CSR10 because they meet the definition of fuel burning units. They are exempt from sections 3 and sections 6 through 8 because the heat input is less than 10 MMBtu/hr and meet the exemption of §45-10-10.1 and the natural gas exemption of §45-10-10.3.

45CSR13 PERMITS FOR CONSTRUCTION, MODIFICATION, RELOCATION AND OPERATION OF STATIONARY SOURCES OF AIR POLLUTANTS, NOTIFICATION REQUIREMENTS, ADMINISTRATIVE UPDATES, TEMPORARY PERMITS, GENERAL PERMITS, PERMISSION TO COMMENCE CONSTRUCTION, AND PROCEDURES FOR EVALUATION

The proposed modification of the Huntington facility has a potential to emit in excess of six (6) lbs/hour and ten (10) TPY of a regulated pollutant and, therefore, pursuant to §45-13-2.24, the modification is defined as a "stationary source" under 45CSR13. Pursuant to §45-13-5.1, "[n]o person shall cause, suffer, allow or permit the construction . . . and operation of any stationary source to be commenced without . . . obtaining a permit to construct." Therefore, Rubberlite is required to obtain a permit under 45CSR13 for the modification and operation of the facility.

As required under §45-13-8.3 ("Notice Level A"), Rubberlite placed a Class I legal advertisement in a "newspaper of general circulation in the area where the source is . . . located." The ad ran on September 22, 2015 in *The Herald Dispatch* and the affidavit of publication for this legal advertisement was submitted on November 3, 2015.

45CSR21 REGULATION TO PREVENT AND CONTROL AIR POLLUTION FROM THE EMISSION OF VOLATILE ORGANIC COMPOUNDS

Rubberlite meets the general scope of 45CSR21 because it is a source of VOC emissions located in Cabell County. Cabell County is one of the applicable counties that this rule applies.

Section 40 applies to Other Facilities that Emit Volatile Organic Compound (VOC). This section 40 applies to any facility that has aggregate maximum theoretical emissions of 100 tons or more of VOCs per calendar year in the absence of control devices. The maximum potential uncontrolled VOC emissions at the Rubberlite facility continue to be below this applicability threshold defined in §45-21-40.1.a.

Rubberlite continues to be subject to the certification, recordkeeping, and reporting requirements of section 40.6.b. Compliance with these requirements will be demonstrated by compliance with permit requirements.

Section 13 applies to any paper coating operation. The roll coating operations are not dedicated to paper coating operations. The applicant is subject to Section 13 for the paper coating operations [7S, 13S, 20S, 21S and 22S] when the roll coaters are used in paper coating operation service, based on the worst case assumption of potential to emit emissions provided in the application and assuming 100% fabric coating service of the roll coaters. Section 13 limits the VOC content of any coating to 0.35 kilograms per liter (kg/L) (2.9 pounds per gallon [lb/gal]), minus water and exempt compounds, as applied.

Section 14 applies to any fabric coating operation; The roll coating operations are not dedicated to fabric coating operations. The applicant is

subject to section 14 for the roll coating operations [7S, 13S, 20S, 21S and 22S] when the roll coaters are used in fabric coating operation service, based on the worst case assumption of potential to emit emissions provided in the application and assuming 100% fabric coating service of the roll coaters. Section 14 limits the VOC content of any coating to 0.35 kilograms per liter (kg/L) (2.9 pounds per gallon [lb/gal]), minus water and exempt compounds, as applied.

45CSR27 TO PREVENT AND CONTROL THE EMISSIONS OF TOXIC AIR POLLUTANTS

The purpose of 45CSR27 is to prevent and control the discharge of toxic air pollutants requiring the application of best available control technology.

Rubberlite is not subject to 45CSR27 because the permit will limit the potential emissions of TAPs from the Roll Coaters to less than the thresholds in Table A of 45CSR27.

45CSR30 REQUIREMENTS FOR OPERATING PERMITS

Facilities that are subject to 40 CFR 63, Subpart OOOOOO are exempt from the obligation to obtain a permit under 40 CFR part 70 or part 71, provided they are not otherwise required by law to obtain a Title V permit.

FEDERAL RULES

40 CFR 63, Subpart OOOOOO NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR FLEXIBLE POLYURETHANE FOAM PRODUCTION AND FABRICATION AREA SOURCES

You are subject to this subpart if you own or operate an area source of hazardous air pollutant (HAP) emissions that meets the criteria in (a)(1) or (a)(2) according to §63.11414. This subpart does not apply to R&D facilities, as defined in section 112 (c)(7) of the Clean Air Act.

(a)(1) You own or operate a plant that produces flexible polyurethane foam or rebond foam as defined in §63.1292 below:

Flexible polyurethane foam means a flexible cellular polymer containing urea and carbamate linkages in the chain backbone produced by reacting a diisocyanate, polyol, and water. Flexible polyurethane foams are open-celled, permit the passage of air through the foam, and possess the strength and flexibility to allow repeated distortion or compression under stress with essentially complete recovery upon removal of the stress.

Rebond foam means the foam resulting from a process of adhering small particles of foam (usually scrap or recycled foam) together to make a usable cushioning product. Various adhesives and bonding processes are used. A typical application for rebond foam is for carpet underlay.

- (a)(2) You own or operate a flexible polyurethane foam fabrication facility as defined in §63.11419 below:

Flexible polyurethane foam fabrication facility means a facility where pieces of flexible polyurethane foam are cut, bonded, and/or laminated together or to other substrates.

The foam production process description taken from the application and states that Rubberlite uses diisocyanate and polyol and uses water as the blowing agent. Rubberlite therefore meets the applicability criterion (a)(1) for flexible polyurethane foam production.

The applicant is subject to the provisions of slabstock flexible polyurethane foam production affected sources which is the collection of all equipment and activities necessary to produce slabstock flexible polyurethane foam (§ 63.11414(b)(1)). The foam production unit [1S], the ISO tanks [10S], and the Glycol tanks [11S] are "existing" affected sources because construction commenced on or before April 4, 2007. Foam production unit (15S) would be a new existing source.

The fabrication processes at Rubberlite include both the foam that is produced at the site and the foam that is purchased from others. Fabrication processes include: Bun Presses (joining the buns together to make longer buns or master rolls by applying adhesive to each end of the buns) and then pressing together to form a bond; Hot Melt Laminators (involve the lamination of fabric to foam); Buffer (finished to a tight tolerance for the desired thickness); Misting Unit (applies material to foam that allows a crust or skin to be developed on the foam and then cured); and Roll Coaters (producing a foam material with a crust or skin). Rubberlite meets the applicability criterion (a)(2) for the flexible polyurethane foam fabrication.

The applicant is subject to the provisions for flexible polyurethane foam production affected source which is the collection of all equipment and activities at a flexible polyurethane foam fabrication facility where adhesives are used to bond foam to foam or other substrates. Equipment and activities at flexible foam fabrication facilities which do not use adhesives to bond foam to foam or other substrates are not flexible polyurethane affected sources.

The Bun Press [2S] is defined as "existing" because construction commenced on or before April 4, 2007. Bun Press [18S], The Hot Melt Laminators [3S], [4S] and [19S], the Roll Coaters [7S], [13S], [20S], [21S] and [22S] are defined as "new" fabrication affected sources because construction commenced after April 4, 2007.

Emission units 1S, 10S, 11S and 13S are subject to the standards provided in § 63.11416(b), the compliance requirements in § 63.11417(b) and the General Provisions of subpart A as specified in Table 1 of subpart OOOOOO.

Emission units 2S, 3S, 4S, 7S, 13S, 19S, 20S, 21S and 22S are subject to the standards provided in § 63.11416(e). There were four

loop splitters identified as miscellaneous fabrication equipment in the application and evaluation of permit R13-2948. The loop splitters, are subject to the compliance requirements in § 63.11417 (c) and (d).

40 CFR 60, Subpart III: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Subpart III of 40 CFR 60 is the NSPS for stationary compression ignition internal combustion engines (diesel fired engines). Section §60.4200 states that "provisions of [Subpart III] are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE)." Specifically, §60.4200(a)(2) states that Subpart III applies to "[o]wners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are:

- (i) Manufactured after April 1, 2006, and are not fire pump engines...

Rubberlite has indicated in it's permit application that the emergency generator was manufactured on October 21, 2006. Therefore it is subject to Subpart III. Based on the standards for owner/operators of emergency generator CI ICE under §60.4205, the following table details the emission standards for the engine:

Duty	Size (hp)	Displacement (L/cyl)	Emission Standards (g/kw-hr)
			NO _x
Emergency	157.5	<10	9.2

Compliance with these standards are met primarily by, pursuant to §60.4211(b)(1), "purchasing an engine certified to the emission standards." Rubberlite has indicated in their permit application that the engine is a certified Subpart III engine.

40 CFR 63, Subpart ZZZZ: National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

The facility is an area source of HAPs and, therefore, the emergency generator is subject to the area source provisions of Subpart ZZZZ. However, it is a new (built after June 12, 2006), emergency engine rated at less than 500 hp and located at an area source of HAPs, the only requirements are to comply with 40CFR60 Subpart III.

TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

Material Safety Data Sheets were provided for all materials used in the production process. The following family of materials were included: Isocyanates (ISO), Polyols, Colorants, Pigments, Light Stabilizers, Surfactants, Fillers, Catalysts, Chain Extenders, Dispersants, Fire Retardants, Antimicrobials, Holt Melt Lamination Adhesives, Bun Press Adhesives, Solvent Cleaners/ Parts Washers, Roll Coating Material, Misting Unit Material, and Reliant Web Adhesive.

Information is provided below for each of the hazardous air pollutants that have potential to be emitted from the site at a rate of at least 0.01 pounds per hour.

The following information comes directly from engineering evaluations R13-2948 and R13-2948A:

Ethylene Glycol:

Ethylene glycol has many uses, including as antifreeze in cooling and heating systems, in hydraulic brake fluids, and as a solvent. Acute (short-term) exposure of humans to ethylene glycol by ingesting large quantities causes three stages of health effects: central nervous system (CNS) depression, followed by cardiopulmonary effects, and later renal damage. The only effects noted in one study of individuals exposed to low levels of ethylene glycol by inhalation for about a month were throat and upper respiratory tract irritation. Rats and mice chronically (long-term) exposed to ethylene glycol in their diet exhibited signs of kidney toxicity and liver effects. Several studies of rodents exposed orally or by inhalation showed ethylene glycol to be fetotoxic. An epidemiologic study on renal cancer mortality did not find an increased risk for workers exposed to ethylene glycol. EPA has not classified ethylene glycol for carcinogenicity.

4,4'-Methylenediphenyl Diisocyanate (MDI):

The commercial form of 4,4'-methylenediphenyl diisocyanate (MDI) is used to produce polyurethane foams. Acute (short-term) inhalation of high concentrations of MDI may cause sensitization and asthma in humans. Acute dermal contact with MDI has induced dermatitis and eczema in workers. MDI has been observed to irritate the skin and eyes of rabbits. Chronic (long-term) inhalation exposure to MDI has been shown to cause asthma, dyspnea, and other respiratory impairments in workers. Respiratory effects have also been observed in animals. No adequate information is available on the reproductive, developmental, or carcinogenic effects of MDI in humans. EPA has classified MDI as a Group D, not classifiable as to human carcinogenicity.

Toluene:

The acute toxicity of toluene is low. Toluene may cause eye, skin, and respiratory tract irritation. Short-term exposure to high concentrations of toluene (e.g., 600 ppm) may produce fatigue, dizziness, headaches, loss of coordination, nausea, and stupor; 10,000 ppm may cause death from respiratory failure. Ingestion of toluene may cause nausea and vomiting and central nervous system depression. Contact of liquid toluene with the eyes causes temporary irritation. Toluene is a skin irritant and may cause redness and pain when trapped beneath clothing or shoes; prolonged or repeated contact with toluene may result in dry and cracked skin. Because of its odor and irritant effects, toluene is regarded as having good warning properties. The chronic effects of exposure to toluene are much less severe than those of benzene. No carcinogenic effects were reported in animal studies. Equivocal results were obtained in studies to determine developmental effects in animals. Toluene was not observed to be mutagenic in standard studies. The major use of toluene is as a mixture added to gasoline to improve octane ratings. Toluene is also used to produce benzene and as a solvent in paints, coatings, synthetic fragrances, adhesives, inks, and cleaning agents. Toluene is also used in the production of polymers used to make nylon, plastic soda bottles, and polyurethanes and for pharmaceuticals, dyes, cosmetic nail products, and the synthesis of organic chemicals.

Formaldehyde:

Formaldehyde is used mainly to produce resins used in particle board products and as an intermediate in the synthesis of other chemicals. Exposure to formaldehyde may occur by breathing contaminated indoor air, tobacco smoke, or ambient urban air. Acute (short-term) and chronic (long-term) inhalation exposure to formaldehyde in humans can result in respiratory symptoms, and eye, nose, and throat irritation. Limited human studies have reported an association between formaldehyde exposure and lung and nasopharyngeal cancer. Animal inhalation studies have reported an increased incidence of nasal squamous cell cancer. EPA considers formaldehyde a probable human carcinogen (Group B1).

Glycol Ethers:

Glycol ethers have many uses; these include use as solvents and as an ingredient in cleaning compounds, liquid soaps, and cosmetics. Acute (short-term) exposure to high levels of the glycol ethers in humans results in narcosis, pulmonary edema, and severe liver and kidney damage. Chronic (long-term) exposure to the glycol ethers in humans may result in neurological and blood effects, including fatigue, nausea, tremor, and anemia. No information is available on the reproductive, developmental, or carcinogenic effects of the glycol ethers in humans. Animal studies have reported reproductive and developmental effects from inhalation and oral exposure to the glycol ethers. EPA has not classified the glycol ethers for carcinogenicity. The glycol ethers are used as solvents for resins, lacquers, paints, varnishes, gum, perfume, dyes, inks, as a constituent of paints and pastes, cleaning compounds, liquid soaps, cosmetics, and hydraulic fluids. 2-Butoxyethanol is used in the production of cleaning agents and as a general solvent.

Acrylonitrile:

Exposure to acrylonitrile is primarily occupational: it is used in the manufacture of acrylic acid and modacrylic fibers. Acute (short-term) exposure of workers to acrylonitrile has been observed to cause mucous membrane irritation, headaches, dizziness, and nausea. No information is available on the reproductive or developmental effects of acrylonitrile in humans. Based on limited evidence in humans and evidence in rats, EPA has classified acrylonitrile as a probable human carcinogen (Group B1).

Antimony Compounds:

Everyone is exposed to low levels of antimony in the environment. Acute (short-term) exposure to antimony by inhalation in humans results in effects on the skin and eyes. Respiratory effects, such as inflammation of the lungs, chronic bronchitis, and chronic emphysema, are the primary effects noted from chronic (long-term) exposure to antimony in humans via inhalation. Human studies are inconclusive regarding antimony exposure and cancer, while animal studies have reported lung tumors in rats exposed to antimony trioxide via inhalation. EPA has not classified antimony for carcinogenicity. Antimony is alloyed with other metals such as lead to increase its hardness and strength; its primary use is in antimonial lead, which is used in grid metal for lead acid storage batteries.

Arsenic Compounds:

Arsenic, a naturally occurring element, is found throughout the environment; for most people, food is the major source of exposure. Acute (short-term) high-level inhalation exposure to arsenic dust or fumes has resulted in gastrointestinal effects (nausea, diarrhea, abdominal pain); central and peripheral nervous system disorders have occurred in workers acutely exposed to inorganic arsenic. Chronic (long-term) inhalation exposure to inorganic arsenic of humans is associated with irritation of the skin and mucous membranes and effects in the brain and nervous system. Chronic oral exposure to elevated levels of inorganic arsenic has resulted in gastrointestinal effects, anemia, peripheral neuropathy, skin lesions, hyperpigmentation, and liver or kidney damage in humans. Inorganic arsenic exposure of humans, by the inhalation route, has been shown to be strongly associated with lung cancer, while ingestion of inorganic arsenic by humans has been linked to a

form of skin cancer and also to bladder, liver, and lung cancer. EPA has classified inorganic arsenic as a human carcinogen.

Arsine is a gas consisting of arsenic and hydrogen. It is extremely toxic to humans, with headaches, vomiting, and abdominal pains occurring within a few hours of exposure. EPA has not classified arsine for carcinogenicity.

Chromium Compounds:

Chromium occurs in the environment primarily in two valence states, trivalent chromium (Cr III) and hexavalent chromium (Cr VI). Exposure may occur from natural or industrial sources of chromium. Chromium III is much less toxic than chromium (VI). The respiratory tract is also the major target organ for chromium (III) toxicity, similar to chromium (VI). Chromium (III) is an essential element in humans. The body can detoxify some amount of chromium (VI) to chromium (III).

The respiratory tract is the major target organ for chromium (VI) toxicity, for acute (short-term) and chronic (long-term) inhalation exposures. Shortness of breath, coughing, and wheezing were reported from a case of acute exposure to chromium (VI), while perforations and ulcerations of the septum, bronchitis, decreased pulmonary function, pneumonia, and other respiratory effects have been noted from chronic exposure. Human studies have clearly established that inhaled chromium (VI) is a human carcinogen, resulting in an increased risk of lung cancer. Animal studies have shown chromium (VI) to cause lung tumors via inhalation exposure.

The metal chromium is used mainly for making steel and other alloys. Chromium compounds, in either the chromium (III) or chromium (VI) forms, are used for chrome plating, the manufacture of dyes and pigments, leather and wood preservation, and treatment of cooling tower water. Smaller amounts are used in drilling muds, textiles, and toner for copying machines.

Ethyl Acrylate:

Exposure to ethyl acrylate is primarily occupational. Acute (short-term) exposure of workers to ethyl acrylate vapors has been reported to cause drowsiness, lethargy, headache, nausea, convulsions, and respiratory and gastrointestinal irritation. Noncancerous lesions and inflammation of the nasal mucosa and depressed body weight gain have been observed in rats and mice exposed by inhalation for a chronic (long-term) duration. Human studies on occupational exposure to ethyl acrylate/methyl methacrylate have suggested a relationship between exposure to the chemical(s) and colorectal cancer, but the evidence is conflicting and inconclusive. In a study by the National Toxicology Program (NTP), increased incidences of squamous cell papillomas and carcinomas of the forestomach were observed in rats and mice exposed via gavage (experimentally placing the chemical in the stomach). However, the NTP recently determined that these data were not relevant to human carcinogenicity and removed ethyl acrylate from its list of carcinogens. EPA has classified ethyl acrylate as a Group B2, probable human carcinogen, but has not developed a potency estimate to quantify risk by inhalation.

Ethyleneimine (Aziridine):

Ethyleneimine has many uses, including in polymerization products and in adhesives and binders. Acute (short-term) inhalation exposure to ethyleneimine causes severe respiratory tract irritation and inflammation in humans, but symptoms may be delayed for several hours. Some symptoms of acute inhalation exposure in humans include tearing and burning of the eyes, sore throat, nasal secretion, bronchitis, shortness of breath, and edema of the lungs. Ethyleneimine is a severe blistering agent, causing third degree chemical burns of the skin. It is also corrosive to eye tissue and may cause permanent corneal opacity and conjunctival scarring. At low levels, chronic (long-term) inhalation exposure has been reported to result in effects on the blood in humans. EPA has not classified ethyleneimine for carcinogenicity.

Vinyl Chloride

Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Acute (short-term) exposure to high levels of vinyl chloride in air has resulted in central nervous system effects (CNS), such as dizziness, drowsiness, and headaches in humans. Chronic (long-term) exposure to vinyl chloride through inhalation and oral exposure in humans has resulted in liver damage. Cancer is a major concern from exposure to vinyl chloride via inhalation, as vinyl chloride exposure has been shown to increase the risk of a rare form of liver cancer in humans. EPA has classified vinyl chloride as a Group A, human carcinogen.

The following information comes directly from EPA's Health Effect Notebook which can be found at <http://www.epa.gov/ttn/atw/hlthef/hapindex.html> :

Styrene:

Styrene is primarily used in the production of polystyrene plastics and resins. Acute (short-term) exposure to styrene in humans results in mucous membrane and eye irritation, and gastrointestinal effects. Chronic (long-term) exposure to styrene in humans results in effects on the central nervous system (CNS), such as headache, fatigue, weakness, and depression, CNS dysfunction, hearing loss, and peripheral neuropathy. Human studies are inconclusive on the reproductive and developmental effects of styrene; several studies did not report an increase in developmental effects in women who worked in the plastics industry, while an increased frequency of spontaneous abortions and decreased frequency of births were reported in another study. Several epidemiologic studies suggest there may be an association between styrene exposure and an increased risk of leukemia and lymphoma. However, the evidence is inconclusive due to confounding factors. EPA has not given a formal carcinogen classification to styrene.

Vinylidene Chloride

Vinylidene chloride is used as an intermediate in chemical synthesis and to produce polyvinylidene chloride copolymers. The primary acute (short-term) effects in humans from vinylidene chloride exposure are on the central nervous system (CNS), including CNS depression and symptoms of inebriation, convulsions, spasms, and unconsciousness at high concentrations. Low-level, chronic (long-term) inhalation exposure of vinylidene chloride in humans may affect the liver. Animal studies indicate that chronic exposure to vinylidene chloride can affect the liver, kidneys, CNS and lungs. Human data are considered inadequate in providing evidence of cancer from exposure to vinylidene chloride.

Benzene

Benzene is found in the air from emissions from burning coal and oil, gasoline service stations, and motor vehicle exhaust. Acute (short-term) inhalation exposure of humans to benzene may cause drowsiness, dizziness, headaches, as well as eye, skin, and respiratory tract irritation, and, at high levels, unconsciousness. Chronic (long-term) inhalation exposure has caused various disorders in the blood, including reduced numbers of red blood cells and aplastic anemia, in occupational settings. Reproductive effects have been reported for women exposed by inhalation to high levels, and adverse effects on the developing fetus have been observed in animal tests. Increased incidence of leukemia (cancer of the tissues that form white blood cells) have been observed in humans occupationally exposed to benzene. EPA has classified benzene as known human carcinogen for all routes of exposure.

Ethylene Oxide

The major use for ethylene oxide is as a chemical intermediate in industry. The acute (short-term) effects of ethylene oxide in humans consist mainly of central nervous system (CNS) depression and irritation of the eyes and mucous membranes. Chronic (long-term) exposure to ethylene oxide in humans can cause irritation of the eyes, skin, and mucous membranes, and problems in the functioning of the brain and nerves. Some human cancer data show an increase in

the incidence of leukemia, stomach cancer, cancer of the pancreas, and Hodgkin's disease in workers exposed to ethylene oxide. However these data are considered to be limited and inconclusive due to uncertainties in the studies. EPA has classified ethylene oxide as a Group B1, probable human carcinogen.

Propylene Oxide

Propylene oxide is used in the production of polyethers (the primary component of polyurethane foams) and propylene glycol. Acute (short-term) exposure of humans and animals to propylene oxide has caused eye and respiratory tract irritation. Dermal contact, even with dilute solutions, has caused skin irritation and necrosis in humans. Propylene oxide is also a mild central nervous system (CNS) depressant in humans. Inflammatory lesions of the nasal cavity, trachea, and lungs and neurological effects have been observed in animals chronically (long-term) exposed to propylene oxide by inhalation. Propylene oxide has been observed to cause tumors at or near the site of administration in rodents, causing forestomach tumors following ingestion via gavage (experimentally placing the chemical in the stomach) and nasal tumors after inhalation exposure. EPA has classified propylene oxide as a Group B2, probable human carcinogen.

Triethylamine

Acute (short-term) exposure of humans to triethylamine vapor causes eye irritation, corneal swelling, and halo vision. People have complained of seeing "blue haze" or having "smoky vision." These effects have been reversible upon cessation of exposure. Acute exposure can irritate the skin and mucous membranes in humans. Chronic (long-term) exposure of workers to triethylamine vapor has been observed to cause reversible corneal edema. Chronic inhalation exposure has resulted in respiratory and hematological effects and eye lesions in rats and rabbits. No information is available on the reproductive, developmental, or carcinogenic effects of triethylamine in humans. EPA has not classified triethylamine with respect to potential carcinogenicity.

1,4 Dioxane

1,4-Dioxane is used as a solvent. Acute (short-term) inhalation exposure to high levels of 1,4-dioxane has caused vertigo, drowsiness, headache, anorexia and irritation of the eyes, nose, throat, and lungs in humans. It may also irritate the skin. Damage to the liver and kidneys has been observed in rats chronically (long-term) exposed in their drinking water. In three epidemiologic studies on workers exposed to 1,4-dioxane, the observed number of cancer cases did not differ from the expected cancer deaths. Tumors have been observed in orally exposed animals. EPA has classified 1,4-dioxane as a Group B2, probable human carcinogen.

Acetaldehyde

Acetaldehyde is mainly used as an intermediate in the synthesis of other chemicals. It is ubiquitous in the environment and may be formed in the body from the breakdown of ethanol. Acute (short-term) exposure to acetaldehyde results in effects including irritation of the eyes, skin, and respiratory tract. Symptoms of chronic (long-term) intoxication of acetaldehyde resemble those of alcoholism. Acetaldehyde is considered a probable human carcinogen (Group B2) based on inadequate human cancer studies and animal studies that have shown nasal tumors in rats and laryngeal tumors in hamsters.

Hydrogen Cyanide

Cyanide is used in a number of industries and is found at low levels in air from car exhaust. Cyanide is extremely toxic to humans. Chronic (long-term) inhalation exposure of humans to cyanide results primarily in effects on the central nervous system (CNS). Other effects in humans include cardiovascular and respiratory effects, an enlarged thyroid gland, and irritation to the eyes and skin. No data are available on the carcinogenic effects of cyanide in humans via inhalation. Animal studies have suggested that oral exposure to cassava (a cyanide-containing vegetable) may be associated with malformations in the fetus and low fetal body weights. EPA has classified cyanide as a Group D, not classifiable as to human carcinogenicity.

AIR QUALITY IMPACT ANALYSIS

Since this is a modification to an existing non major source (as defined in 45CSR14) no modeling was required.

MONITORING OF OPERATIONS

Monitoring requirements for the new roll coaters, foam production line, bun press, hot melt laminator, and solvent cleaning station will be the same as is already required in the permit. Additionally, the permittee shall monitor and record the following:

- * The amount of laminate (ft²) applied to foam by the flame laminator.
- * Number of hours of operation of the emergency generator.

CHANGES TO PERMIT R13-2948A

The following changes will be made to R13-2948A:

- * Table 1.0 was updated to include the new equipment.
- * The new equipment was added to condition 4.1.2.
- * New TAPs that will be emitted from the facility were added to condition 4.1.4
- * Condition 4.1.5 was changed to apply to the new foam production line in addition to the old one. Additionally, the old production limit did not show compliance with the emission limit because the product type which resulted in maximum emissions was not the product which could be produced at the maximum rate. Therefore, the limit was changed to limit the production rate to the amount listed in new Attachment B of the permit.
- * The glue usage in condition 4.1.6 was reduced from 2,000 gallons per year to 600 gallons per year (combined).
- * Condition 4.1.7 was changed to add hot melt laminator 19E and remove the exemption for non MDI containing glue since emissions were calculated based on total glue usage.
- * Condition 4.1.9 was changed significantly. The new roll coaters were added and conditions 4.1.9.1 and 4.1.9.2 were added in order to separate combustion emissions from coating emissions.
- * Condition 4.1.10 was changed to add solvent cleaning station 23E. Additionally, condition 4.1.10.1 was added to limit HAP content in the washing fluid.
- * New conditions 4.1.12 through 4.1.16 were added. All subsequent conditions in section 4.1 were renumbered.
- * Old condition 4.1.12 (new condition 4.1.17) was changed to add the Apollo Dryers 20S, 21S and 22S.
- * Condition 4.4.4 was changed to add roll coaters 20S, 21S and 22S.

- * Condition 4.4.6 was changed to add foam production unit 9E and remove the non MDI containing glue exemption.
- * Condition 4.4.7 was modified to change the reference to condition 4.1.9 to 4.1.9.1.
- * New Condition 4.4.8 was added to require the permittee to keep records of the HAP content of all washing fluids used.
- * Old conditions 4.4.8 and 4.4.9 were renumbered to 4.4.9 and 4.4.10.
- * New conditions 4.4.11 was added. All subsequent conditions in section 4.4 were renumbered.

RECOMMENDATION TO DIRECTOR

Information supplied in the application indicates that compliance with all applicable regulations will be achieved.



Steven R. Pursley, PE
Engineer

5-5-16

May 5, 2016

Summary of Requirements¹
40 CFR part 60, subpart III
Standards of Performance for Stationary Compression Ignition
Internal Combustion Engines

For pre-2007 model year **emergency** engines with displacement of less than 10 liters/cylinder,
(except fire pump engines)
constructed after July 11, 2005 and manufactured after April 1, 2006

NOTE: To refer directly to the regulatory text, please go to [Subpart III](#) (scroll down to almost the end of the page).

Temporary Engines:

Per 60.4200(e) Owners and operators of facilities with CI ICE that are acting as temporary replacement units and that are located at a stationary source for less than 1 year and that have been properly certified as meeting the standards that would be applicable to such engine under the appropriate nonroad engine provisions, are not required to meet any other provisions under this subpart with regard to such engines.

Emission Standards: 60.4205(a), Table 1

60.4205(a) Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pump engines must comply with the emission standards in Table 1 to this subpart. Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards in 40 CFR 94.8(a)(1).

Per 60.4215(a) Stationary CI ICE with a displacement of less than 30 liters per cylinder that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the applicable emission standards in §§60.4202 and 60.4205. Stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the emission standards in 60.4215(c).

Special requirements apply to engines used in Alaska. Please refer to 60.4216 for the specific requirements and provisions that apply to engines that are located in areas of Alaska not accessible by the FAHS.

¹Disclaimer: The content provided in this software tool is intended solely as assistance for potential reporters to aid in assessing requirements for compliance under the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR Part 60 Subpart III. Any variation between the rule and the information provided in this tool is unintentional, and, in the case of such variations, the requirements of the rule govern. Use of this tool does not constitute an assessment by EPA of the applicability of the rule to any particular facility. In a particular case, EPA will make its assessment by applying the law and regulations to the specific facts of

Fuel Requirements: 60.4207(a), (b), (e)

60.4207(a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must purchase diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

(e) Stationary CI ICE that have a national security exemption under §60.4200(d) are also exempt from the fuel requirements in this section.

Per 60.4215(b) Stationary CI ICE that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are not required to meet the fuel requirements in 40 CFR 60.4207.

Per 60.4217 Owners and operators of stationary CI ICE that do not use diesel fuel may petition the Administrator for approval of alternative emission standards, if they can demonstrate that they use a fuel that is not the fuel on which the manufacturer of the engine certified the engine and that the engine cannot meet the applicable standards required in §60.4204 or §60.4205 using such fuels and that use of such fuel is appropriate and reasonably necessary, considering cost, energy, technical feasibility, human health and environmental, and other factors, for the operation of the engine.

Importing/Installing Requirements: 60.4208(a), (b), (h), (i)

60.4208(a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.

(b) After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines.

(h) In addition to the requirements specified in §§60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (g) of this section after the dates specified in paragraphs (a) through (g) of this section.

(i) The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

Monitoring Requirements: 60.4209(a); if equipped with diesel particulate filter: 60.4209(b)

60.4209(a) If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.

If your engine is equipped with a diesel particulate filter: 60.4209(b)

60.4209(b) If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in §60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

Compliance Requirements: 60.4206, 60.4211(a), (b), (f), (g)

60.4206 Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§60.4204 and 60.4205 over the entire life of the engine.

60.4211(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under paragraph (g) of this section:

(1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;

(2) Change only those emission-related settings that are permitted by the manufacturer; and

(3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

(b) If you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in §§60.4204(a) or 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of this section.

(1) Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

(2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

(3) Keeping records of engine manufacturer data indicating compliance with the standards.

(4) Keeping records of control device vendor data indicating compliance with the standards.

(5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in §60.4212, as applicable.

(f) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3) of this section, is prohibited.

If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary ICE in emergency situations.

(2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see § 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

(g) If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

(1) If you are an owner or operator of a stationary CI internal combustion engine with maximum engine power less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if you do not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

(2) If you are an owner or operator of a stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.

(3) If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

Testing Requirements: 60.4212

60.4212 Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (e) of this section.

(a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F, for stationary CI ICE with a displacement of less than 10 liters per cylinder, and

according to 40 CFR part 1042, subpart F, for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.

(b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.

(c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

$$\text{NTE requirement for each pollutant} = (1.25) \times (\text{STD}) \quad (\text{Eq. 1})$$

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in §60.4213 of this subpart, as appropriate.

(d) Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in §60.4204(a), §60.4205(a), or §60.4205(c), determined from the equation in paragraph (c) of this section.

Where:

STD = The standard specified for that pollutant in §60.4204(a), §60.4205(a), or §60.4205(c).

Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) may follow the testing procedures specified in §60.4213, as appropriate.

(e) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1042 must not exceed the NTE standards for the same model year and maximum engine power as required in 40 CFR 1042.101(c).

Notification, Reports, and Records Requirements: 60.4214(b); If equipped with DPF: 60.4214(c); If >100 HP and > 15 hrs/yr for emergency DR: 60.4214(d)

60.4214(b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

If your engine is equipped with a diesel particulate filter: 60.4214(c)

60.4214(c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

If your engine is greater than 100 HP and used more than 15 hours a year for emergency demand response:

60.4214(d) If you own or operate an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 60.4211(f)(2)(ii) and (iii) or that operates for the purposes specified in § 60.4211(f)(3)(i), you must submit an annual report according to the requirements in paragraphs (d)(1) through (3) of this section.

(1) The report must contain the following information:

- (i) Company name and address where the engine is located.
- (ii) Date of the report and beginning and ending dates of the reporting period.
- (iii) Engine site rating and model year.
- (iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
- (v) Hours operated for the purposes specified in § 60.4211(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in § 60.4211(f)(2)(ii) and (iii).
- (vi) Number of hours the engine is contractually obligated to be available for the purposes specified in § 60.4211(f)(2)(ii) and (iii).
- (vii) Hours spent for operation for the purposes specified in § 60.4211(f)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in § 60.4211(f)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in § 60.4.

General Provisions: Table 8

Modification Permit



R13-2948B

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45 C.S.R. 13 — Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the facility listed below is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Issued to:
Rubberlite, Incorporated
Huntington Facility
011-00174

William F. Durham
Deputy Director

Effective: Draft

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1.0 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/Modified	Design Capacity	Control Device
Production Process					
1S	1E	Foam Production Unit No.1	1999	1,314,000 ft/yr	None
10S	10E	ISO Tanks	1999	2 - 7,000 gallon 3 - 800 gallon	None
11S	11E	Glycol Tanks	1999	5 to 330 gallons	None
15S	15E	Foam Production Unit No.2	2016	1,314,000 ft/yr	None
16S	16E	ISO Tanks	2016	2 - 7,000 gallon 3 - 800 gallon	None
17S	17E	Glycol Tanks	2016	5 to 330 gallons	None
Fabrication Process					
2S	2E	Bun press No.1	1989	N/A	None
3S	3E	Hot Melt Laminator No. 1	2007	45.92 ft/min	None
4S	4E	Hot Melt Laminator No. 2	2012	45.92 ft/min	None
5S	5E	Buffer	2005	30 ft/min	1C, 2C
6S	6E	Misting Unit	2010	27.0 ft/min	None
7S	7E	Roll Coater #1 with Natural Gas Oven	2013	minimum 8.2 ft/min* 6.54 MMBtu/hr	None
13S	13E	Roll Coater #2 with Infrared	2013	minimum 8.2 ft/min*	None
18S	18E	Bun Press No. 2	2016	N/A	None
19S	19E	Hot Melt Laminator No. 3	2016	45.92 ft/min	None
20S	20E	Roll Coater #3 with Natural Gas Oven	2016	minimum 8.2 ft/min* 6.54 MMBtu/hr	None
21S	21E	Roll Coater #4 with Natural Gas Oven	2016	minimum 8.2 ft/min* 6.54 MMBtu/hr	None
22S	22E	Roll Coater #5 with Natural Gas Oven	2016	minimum 8.2 ft/min* 6.54 MMBtu/hr	None
25S	25E	Flame Laminator	2016	37 ft/min	None
Miscellaneous					
8S	8E	Solvent Cleaning Stations	1999/ 2007	N/A	None
9S	9E	Lab Production Unit (R&D)	2011	N/A	None

1.0 Emission Units

12S	12E	Vehicle Activity	1989	N/A	None
14S	14E	Solvent Cleaning Station	2013	N/A	None
23S	23E	Solvent Cleaning Stations	2016	N/A	None
24S	24E	Emergency Generator (Diesel)	2007	157.5 hp	None
Control Devices					
Control Device ID		Control Device Description	Year Installed/ Modified	Design Capacity	
1C		Sternvent single-stage mechanical collector; Model No. CYA-4800	2005	n/a	
2C (BH1, BH2)		Sternvent baghouse; Model No. AFAE 5612D	2005	99.9% (urethane dust)	

2.0. General Conditions

2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45 CSR § 30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.2. Acronyms

CAAA	Clean Air Act Amendments	pph	Pounds per Hour
CBI	Confidential Business Information	ppm	Parts per Million
CEM	Continuous Emission Monitor	Ppmv or ppmv	Parts per million by volume
CES	Certified Emission Statement	PSD	Prevention of Significant Deterioration
C.F.R. or CFR	Code of Federal Regulations	psi	Pounds per Square Inch
CO	Carbon Monoxide	SIC	Standard Industrial Classification
C.S.R. or CSR	Codes of State Rules	SIP	State Implementation Plan
DAQ	Division of Air Quality	SO₂	Sulfur Dioxide
DEP	Department of Environmental Protection	TAP	Toxic Air Pollutant
dscm	Dry Standard Cubic Meter	TPY	Tons per Year
FOIA	Freedom of Information Act	TRS	Total Reduced Sulfur
HAP	Hazardous Air Pollutant	TSP	Total Suspended Particulate
HON	Hazardous Organic NESHAP	USEPA	United States Environmental Protection Agency
HP	Horsepower	UTM	Universal Transverse Mercator
lbs/hr	Pounds per Hour	VEE	Visual Emissions Evaluation
LDAR	Leak Detection and Repair	VOC	Volatile Organic Compounds
M	Thousand	VOL	Volatile Organic Liquids
MACT	Maximum Achievable Control Technology		
MDHI	Maximum Design Heat Input		
MM	Million		
MMBtu/hr or mmbtu/hr	Million British Thermal Units per Hour		
MMCF/hr or mmcf/hr	Million Cubic Feet per Hour		
NA	Not Applicable		
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		
NO_x	Nitrogen Oxides		
NSPS	New Source Performance Standards		
PM	Particulate Matter		
PM_{2.5}	Particulate Matter less than 2.5µm in diameter		
PM₁₀	Particulate Matter less than 10µm in diameter		
Ppb	Pounds per Batch		

2.3. Authority

This permit is issued in accordance with West Virginia Air Pollution Control Law W.Va. Code §§22-5-1 et seq. and the following Legislative Rules promulgated thereunder:

- 2.3.1. 45CSR13 – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation.*

2.4. Term and Renewal

- 2.4.1. This permit supercedes and replaces previously issued Permit R13-2948A. This permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any applicable legislative rule.

2.5. Duty to Comply

- 2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-2948, R13-2948A, R13-2948B and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to;
[45CSR§§13-5.11 and 13-10.3]
- 2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;
- 2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;
- 2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses and/or approvals from other agencies; i.e., local, state and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

2.6. Duty to Provide Information

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

2.7. Duty to Supplement and Correct Information

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

2.8. Administrative Update

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-4]

2.9. Permit Modification

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-5.4.]

2.10. Major Permit Modification

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.
[45CSR§13-5.1]

2.11. Inspection and Entry

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
- d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

2.12. Emergency

- 2.12.1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
- 2.12.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.12.3 are not met.
- 2.12.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and,
 - d. The permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice must contain a detailed description of the emergency, any steps taken to mitigate emission, and corrective actions taken.

- 2.12.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 2.12.5. The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

2.13. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

2.14. Suspension of Activities

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

2.15. Property Rights

This permit does not convey any property rights of any sort or any exclusive privilege.

2.16. Severability

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

2.17. Transferability

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13. [45CSR§13-10.1]

2.18. Notification Requirements

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

2.19. Credible Evidence

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40CFR§61.145(b) and 45CSR§34]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.
[45CSR§13-10.5.]
- 3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45 C.S.R. 11.
[45CSR§11-5.2.]

3.2. Monitoring Requirements

[Reserved]

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4 or 45CSR§13-5.4 as applicable.
- b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4 or 45CSR§13-5.4 as applicable.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
- d. The permittee shall submit a report of the results of the stack test within sixty (60) days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1.; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
 1. The permit or rule evaluated, with the citation number and language;
 2. The result of the test for each permit or rule condition; and,
 3. A statement of compliance or noncompliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

- 3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.
- 3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§4. *State-Enforceable only.*]

3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
- 3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
- 3.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street, SE
Charleston, WV 25304-2345

If to the USEPA:

Associate Director
Office of Air Enforcement and Compliance
Assistance
(3AP20)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

3.5.4. **Operating Fee.**

- 3.5.4.1. In accordance with 45CSR22 – Air Quality Management Fee Program, the permittee shall not operate nor cause to operate the permitted facility or other associated facilities on the same or contiguous sites comprising the plant without first obtaining and having in current effect a Certificate to Operate (CTO). Such Certificate to Operate (CTO) shall be renewed annually, shall be maintained on the premises for which the certificate has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.
- 3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

4.0. Source-Specific Requirements

4.1. Limitations and Standards

- 4.1.1. In accordance with the information filed in Permit Application R13-2948, R13-2948A and R13-2948B, the equipment identified under Section 1.0 of this permit shall be installed, maintained, and operated so as to minimize any fugitive escape of pollutants, shall not exceed the listed maximum design capacities, and shall use the specified control devices.
- 4.1.2. The permittee shall not exceed the hourly and annual emission limits established in Table 4.1.2. Annual emission limits are on a 12-month rolling basis.

Table 4.1.2. - Emission Limits

Emission Point ID	Emission Unit ID	Emission Unit Description	Regulated Pollutant	Maximum Potential Controlled Emissions	
				lb/hr	tpy
1E and 9E	1S, 9S	Foam Production Unit #1 and Lab Production Unit (R&D)	Total VOC	3.44	15.08
			Total HAP	0.01	0.01
2E & 18E	2S & 18S	Bun Press	Total VOC	5.48	1.65
			Total HAP	2.76	0.83
3E, 4E & 19E	3S, 4S & 19S	Hot Melt Laminator No. 1, No. 2 & No. 3	Total VOC	3.75	8.78
			Total HAP	3.75	8.78
5E	5S	Buffer	PM	0.01	0.01
			PM ₁₀	0.01	0.01
			PM _{2.5}	0.01	0.01
6E	6S	Misting Unit	Total VOC	0.62	0.40
			Total HAP	0.62	0.40
7E, 13E, 20E, 21E & 22E	7S, 13S, 20S, 21S & 22S	Roll Coaters and NG Ovens	CO	2.24	9.72
			NO _x	2.64	11.60
			PM	0.24	0.88
			PM ₁₀	0.24	0.88
			PM _{2.5}	0.24	0.88
			SO ₂	0.04	0.08
			VOC (combustion)	0.16	0.64
VOC (coatings)	40.04	43.00			
8E	8S	Solvent Cleaning Stations	Total VOC	0.27	1.15
			Total HAP	0.03	0.09

14E	14S	Solvent Cleaning Station	Total VOC	0.26	1.15
			Total HAP	0.01	0.01
15E	15S	Foam Production Unit #2	Total VOC	3.44	15.08
			Total HAP	0.01	0.01
23E	23S	Solvent Cleaning Station	Total VOC	0.26	1.15
			Total HAP	0.03	0.09
24E	24S	Emergency Generator	CO	0.16	0.04
			NO _x	1.40	0.35
			PM/PM ₁₀ /PM _{2.5}	0.08	0.02
			SO ₂	0.31	0.08
			VOCs	0.39	0.10
			Total HAPs	0.01	0.01
25E	25S	Flame Laminator No.1	CO	1.56	6.82
			NO _x	0.55	2.42
			PM/PM ₁₀ /PM _{2.5}	0.59	2.57
			SO ₂	0.01	0.01
			VOCs	2.03	8.89
			VOC HAPs	0.09	0.35
			Lead	0.01	0.01
			Formaldehyde	0.01	0.01
			HF	0.01	0.01
			HCN	0.33	1.45

- 4.1.3. **Hazardous Air Pollutants.** The facility-wide emission rate of hazardous air pollutants (HAPs) shall exceed 9.99 tons per year of any individual HAP nor 24.99 tons per year of all aggregated HAPs based on a rolling 12 month basis.

Use of any coating containing any constituent identified in Section 112(b) of the 1990 Clean Air Act Amendments as a HAP shall be in accordance with the following:

- a. An estimate of emissions associated with the use of the coating shall be determined and incorporated into the record keeping requirements contained herein.
- b. For the purposes of this permit, coatings shall be defined as a material applied onto, or impregnated into, a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, stains, thinners, solvents, sealers, varnishes, paints, primers, catalysts, acrylics, lacquers, and temporary protective coatings, or combinations of the above materials as applied.

- 4.1.4. **Toxic Air Pollutants.** No coating or solvent containing any toxic air pollutant (TAP), as defined by 45CSR27, section 2.10 shall be used without prior approval of the Director. The following are the

known TAPs to be emitted from the source and the corresponding emissions limitation, calculated on a 12-month rolling total:

<u>TAP</u>	<u>Emissions Limit</u>
Acrylonitrile	500 pounds per year
Benzene	1,000 pounds per year
Ethylene Oxide	500 pounds per year
Formaldehyde	1,000 pounds per year
Propylene Oxide	5,000 pounds per year
Vinyl Chloride	1,000 pounds per year
Vinylidene Chloride	2,000 pounds per year

Should the permittee exceed this limit, they shall immediately become subject to all applicable requirements of 45CSR27, including the use of Best Available Technology "BAT". [45CSR27]

- 4.1.5. To ensure compliance with the foam production [1E & 15E] emission limits in Table 4.1.2, foam production for each of the two lines shall not exceed the length (of each specific product) listed on page N2 of application R13-2948B. Compliance with the annual production shall be determined using a twelve (12) month rolling total. A twelve (12) month rolling total shall mean the sum of linear feet of foam produced at any given time for the previous twelve (12) consecutive months.
- 4.1.6. To ensure compliance with the Bun Press [2E & 18E] emission limits in Table 4.1.2, the permittee shall limit the glue usage to a maximum of 600 gallons per year of V-4055. Compliance with the annual usage shall be determined using a twelve (12) month rolling total. A twelve (12) month rolling total shall mean the sum of V-4055 used at any given time for the previous twelve (12) consecutive months.
- 4.1.7. To ensure compliance with the Hot Melt Laminators [3E, 4E, 19E] emission limits in Table 4.1.2, the permittee shall limit the glue usage to a maximum of 351,000 pounds per year for all three units. Compliance with the annual usage shall be determined using a twelve (12) month rolling total. A twelve (12) month rolling total shall mean the sum of all glue used at any given time for the previous twelve (12) consecutive months.
- 4.1.8. To ensure compliance with the Misting Unit [6E] emission limits in Table 4.1.2, the permittee shall limit the usage of misting agent to 200,000 pounds per year. Compliance with the annual usage shall be determined using a twelve (12) month rolling total. A twelve (12) month rolling total shall mean the sum of misting agent used at any given time for the previous twelve (12) consecutive months.
- 4.1.9. In order to ensure compliance with the [7E, 13E, 20E, 21E, and 22E,] emission limits in Table 4.1.2, the permittee shall comply with the following:
 - 4.1.9.1 To ensure compliance with the Roll Coaters [13E, 20E, 21E, and 22E] combustion emission limits in Table 4.1.2, the permittee shall limit the annual fuel usage to the four (4) Apollo Dryers, combined, to 231.28 MM SCF. The fuel type shall be limited to Natural Gas. Compliance with the annual usage shall be determined using a twelve (12) month rolling total. A twelve (12) month rolling total shall mean the sum of natural gas used at any given time for the previous twelve (12) consecutive months.
 - 4.1.9.2 Compliance with the VOC and HAP emission limits in Table 4.1.2 shall be determined by multiplying the VOC/HAP content of each coating used by the amount used per month. Said results shall then be summed for all coatings used in a particular month.
- 4.1.10. To ensure compliance with the multiple solvent cleaning stations [8E, 14E and 23E] emission limits in Table 4.1.2, the permittee shall keep the lids to the parts washers closed when solvent is present in the system(s) and not in use.
 - 4.1.10.1 Additionally, washing fluids used in solvent cleaning stations 8E and 23E shall contain no HAPs. Washing fluids used in solvent cleaning station 14E shall not exceed 0.6% HAP by weight.

- 4.1.11. The permittee shall establish and adhere to a preventive maintenance program for the Sternvent mechanical collector [1C] and baghouses [2C] that is consistent with manufacturer's recommendation to ensure the 99.9% efficiency stated in the Emissions Unit Table 1.0 of this permit. At a minimum, the preventive maintenance program shall include at what frequency or at what trigger (such as change in differential pressure) the filters are to be replaced.
- 4.1.12. In order to ensure compliance with the flame laminator [25E] emission limits in Table 4.1.2, the flame laminator capacity shall not exceed 11,100 square feet per hour.
- 4.1.13. The emergency generator shall fire only ultra low sulfur diesel fuel with a sulfur content of no greater than 0.0015% by weight.
- 4.1.14. The emergency generator shall not consume more than 7.84 gallons of fuel oil per hour.
- 4.1.15. The emergency generator shall not operate more than 500 hours per year for non emergency purposes (e.g. maintenance and testing).
- 4.1.16. Emissions of NO_x from the emergency generator shall not exceed 9.2 g/kw-hr.
[§60.4205(a)]
- 4.1.17. For the Roll Coater with Apollo Dryers [7S, 20S, 21S, 22S], the permittee shall comply with all applicable requirements of 45CSR2. The principle provision of 45CSR2 applicable to the permitted facility is:
- a. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average. [45CSR-2.3.1]
- 4.1.18. For the Buffer Unit [5S], the permitted facility shall comply with all applicable requirements of 45CSR7, with the exception of any more stringent limitations set forth in Table 4.1.2 of this permit. The principle provisions of 45CSR7, applicable to the permitted facility are:
- a. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity; [45CSR 7-3.1]
 - b. The provisions of subsection 3.1 shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period; [45 CSR 7-3.2]
 - c. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design opr operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable. [45CSR 7-5.1];
 - d. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment. [45CSR 7-5.2]
- 4.1.19. The roll coating operations [7S, 13S, 20S, 21S and 22S] are subject to 45CSR21§ 13 when they are in paper coating service, § 14 when they are in fabric coating service, and § 15 when they are in vinyl coating service.

- a. *Exempt from Emission Limits.* If the actual emissions without control devices for all paper coating operations, fabric coating operations, or vinyl coating operations at the facility are less than 15 pounds VOC's per day, the permittee shall comply with the certification, recordkeeping, and reporting requirements of 45CSR21 §13.7.a, § 14.7a, or § 15.7.a. [45CSR21§§ 13.1.b, 14.1.b, and 15.1.b]
- b. If the actual emissions without control devices for all fabric coating operations at the facility are equal to or greater than 15 pounds VOC's per day, the permittee shall comply with the following:
 - i. *Complying Coatings.* No owner or operator of a paper coating operation or fabric coating operation subject to section 13 or 14 of 45CSR21, shall cause or allow the application of any coating on that operation with VOC content in excess of 2.9 lb/gal of coating, minus water and exempt compounds, as applied. No owner or operator of a vinyl coating operation subject to section 15 of 45CSR21, shall cause or allow the application of any coating on that operation with VOC content in excess of 3.8 lb/gal of coating, minus water and exempt compounds, as applied. [45CSR21§§ 13.3.a, 14.3.a, and 15.3.a]
 - ii. As an alternative to compliance with the emission limit in sections 13.3.a, 14.3.a, or 15.3.a of 45CSR21, an owner or operator of a paper, fabric, or vinyl coating operation subject to section 13, 14, or 15 of 45CSR21 may meet the requirements of section 13.4, 14.4, or 15.4 or 13.5, 14.5, or 15.5 of 45CSR21. [45CSR21§§ 13.3.b, 14.3.b, and 15.3.b]
 - iii. *Daily-weighted average Limitation.* No owner or operator of a paper, fabric, or vinyl coating operation subject to this sections 13, 14, or 15 of 45CSR21, shall apply coatings on that operation, during any day, whose daily-weighted average VOC content, calculated in accordance with the procedure specified in section 43 of 45CSR21, exceeds the emission limit in sections 13.3.a, 14.3.a, or 15.3.a of 45CSR21. [45CSR21§§ 13.4, 14.4, and 15.5]
 - iv. *Control Devices.* An owner or operator of a paper, fabric, or vinyl coating operation subject to sections 13, 14, or 15 of 45CSR21, shall comply with this by:
 - (a) Installing and operating a capture system on that operation;
 - (b) Installing and operating a control device on that operation;
 - (c) Determining for each day the overall emission reduction efficiency needed to demonstrate compliance. The overall emission reduction needed for a day is the lesser of the value calculated according to the procedure in section 43.2 of 45CSR21 for that day or 95 percent; and
 - (d) Demonstrating each day that the overall emission reduction efficiency achieved for that day, as determined in section 44.3 of 45CSR21, is greater than or equal to the overall emission reduction efficiency required for that day. [45CSR21§§ 13.5, 14.5, and 15.5]
 - v. *Test Methods.* Test methods found in sections 41 through 44 of 45CSR21 shall be used to determine compliance with section 13, 14, or 15 of 45CSR21 for paper, fabric, or vinyl coating operations. [45CSR21§§ 13.6, 14.6, and 15.6]

4.1.20. *Handling, Storage, and Disposal of Volatile Organic Compounds (VOCs).*

1. No owner or operator of a facility subject to the requirements of sections 13, 14, or 15 of 45CSR21 shall cause, allow, or permit the disposal of any volatile organic compound (VOC), or of any materials containing any VOC, at that facility in any 1 ay in a manner that would permit the evaporation of more than 15 pounds of VOC into the ambient air. This provision does not apply to coating sources that are specifically exempt from the emission limitations of sections 13, 14, or 15. [45CSR21 § 8.1]

2. No owner or operator of a facility subject to this section 8 of 45CSR21, shall use open containers for the storage or disposal of cloth or paper impregnated with VOCs that are used for surface preparation, cleanup, or coating removal. [45CSR21 § 8.2]
 3. No owner or operator of a facility subject to this section 8 of 45CSR21, shall store in open containers spent or fresh VOCs to be used for surface preparation, cleanup or coating removal. [45CSR21 § 8.3]
 4. No owner or operator of a facility subject to this section 8 of 45CSR21, shall use VOCs for the cleanup of spray equipment unless equipment is used to collect the cleaning compounds and to minimize their evaporation to the atmosphere. [45CSR21 § 8.4]
- 4.1.21. The permittee is subject to the slabstock flexible polyurethane foam production requirements of 40 CFR 63, subpart OOOOOO for the production of flexible polyurethane foam. The foam production units [1S and 9S], the ISO tanks [10S], and the Glycol tanks [11S] are subject to the applicable “existing” affected source requirements. [§ 63.11414; GACT, Subpart OOOOOO]

- i. If you own or operate a new or existing slabstock polyurethane foam production affected source, you must comply with the requirements in either paragraph (1) or (2) of this section.
 1. Comply with §63.1293(a) or (b) of subpart III, except that you must use Equation 1 of this section to determine the HAP auxiliary blowing agent (ABA) formulation limit for each foam grade instead of Equation 3 of §63.1297 of subpart III. You must use zero as the formulation limitation for any grade of foam where the result of the formulation equation (using Equation 1 of this section) is negative (i.e., less than zero):

$$ABA_{\text{limit}} = 0.2 (\text{IFD}) - 19.1 (1/\text{IFD}) - 15.3 (\text{DEN}) - 6.8 (1/\text{DEN}) + 36.5 \text{ (Equation 1)}$$

Where:

ABA_{limit} = HAP ABA formulation limitation, parts methylene chloride ABA allowed per hundred parts polyol (pph).
IFD = Indentation force deflection, pounds.
DEN = Density, pounds per cubic foot.

2. Use no material containing methylene chloride for any purpose in any slabstock flexible foam production process.
[§ 63.11416(b); GACT, Subpart OOOOOO]
- ii. You must demonstrate compliance with the above requirement using adhesive usage records, Material Safety Data Sheets, and engineering calculations.
[§ 63.11416(f); GACT, Subpart OOOOOO]
 - iii. Each owner or operator of a new or existing slabstock flexible polyurethane foam production affected source who chooses to comply with §63.11416(b)(1) must comply with paragraph (1) of this section. Each owner or operator of a new or existing slabstock flexible polyurethane foam production affected source who chooses to comply with §63.11416(b)(2) must comply with paragraphs (2) and (3) of this section.
 1. You must comply with paragraphs (1)(i) through (v) of this section.
 - (i) The monitoring requirements in §63.1303 of subpart III.
 - (ii) The testing requirements in §63.1304 or §63.1305 of subpart III.
 - (iii) The reporting requirements in §63.1306 of subpart III, with the exception of the reporting requirements in §63.1306(d)(1), (2), (4), and (5) of subpart III.
 - (iv) The recordkeeping requirements in §63.1307 of subpart III, with the exception of the recordkeeping requirements in §63.1307(a)(1), (b)(1)(i), and (b)(2).
 - (v) The compliance demonstration requirements in §63.1308(a), (c), and (d) of subpart III.

2. You must submit a notification of compliance status report no later than 180 days after your compliance date. The report must contain this certification of compliance, signed by a responsible official, for the standards in §63.11416(b)(2): "This facility uses no material containing methylene chloride for any purpose on any slabstock flexible foam process."
 3. You must maintain records of the information used to demonstrate compliance, as required in §63.11416(f). You must maintain the records for 5 years, with the last 2 years of data retained on site. The remaining 3 years of data may be maintained off site.
[§ 63.11417(b); GACT, Subpart OOOOOO]
 - iv. The permittee is subject to the general provisions of subpart A as specified in Table 1 of subpart OOOOOO. [§ 63.11418; GACT, Subpart OOOOOO]
- 4.1.22. The permittee is subject to the the flexible polyurethane foam fabrication requirements of 40 CFR 63, subpart OOOOOO for the fabrication operations. The bun press [2S] is subject to the applicable "existing" affected source requirements. The hot melt laminators [3S, 4S and 19S], and the roll coaters [7S, 13S, 20S, 21S and 22S] are subject to the "new" affected source requirements.
[§63.11414; GACT, Subpart OOOOOO]
- i. If you own or operate a new or existing flexible polyurethane foam fabrication affected source, you must not use any adhesive containing methylene chloride in a flexible polyurethane foam fabrication process. [§ 63.11416(e); GACT, Subpart OOOOOO]
 - ii. You many demonstrate compliance with the above requirement using adhesive usage records, Material Safety Data Sheets, and engineering calculations.
[§ 63.11416(f); GACT, Subpart OOOOOO]
- 4.1.23. The loop splitters used in the fabrication process are subject to the compliance requirements of 40 CFR 63, subpart OOOOOO for loop splitters.
- i. You must have a compliance certification on file by the compliance date. This certification must contain the statements in paragraph (3) of this section, as applicable, and must be signed by a responsible official.
 1. *Reserved*
 2. *Reserved*
 3. For a flexible polyurethane foam fabrication affected source containing a loop splitter: "This facility does not use any adhesive containing methylene chloride on a loop splitter process in accordance with §63.11416(e)."
[§ 63.11417(c); GACT, Subpart OOOOOO]
 - ii. For flexible polyurethane foam fabrication affected sources containing a loop splitter, you must maintain records of the information used to demonstrate compliance, as required in §63.11416(f). You must maintain the records for 5 years, with the last 2 years of data retained on site. The remaining 3 years of data may be maintained off site.
[§ 63.11417(d); GACT, Subpart OOOOOO]
 - iii. You many demonstrate compliance with the above requirement using adhesive usage records, Material Safety Data Sheets, and engineering calculations.
[§ 63.11416(f); GACT, Subpart OOOOOO]
- 4.1.24. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.11.]

4.2. Monitoring Requirements

- 4.2.1. For the purpose of determining compliance with the opacity limits of 45CSR2-3.1 and section 4.1.17 of this permit, the permittee shall conduct visible emission checks and/or opacity monitoring and record keeping for all emission sources subject to an opacity limit.
- The visible emission checks shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40CFR Part 60, Appendix A, Method 22 or from the lecture portion of the 40CFR Part 60, Appendix A, Method 9 certification course.
 - Visible emission checks shall be conducted at least once per calendar month with a maximum of forty-five (45) days between consecutive readings. These checks shall be performed at each source (stack, transfer point, fugitive emission source, etc.) for a sufficient time interval, but no less than one (1) minute, to determine if any visible emissions are present. Visible emission checks shall be performed during appropriate weather conditions.
 - If visible emissions are present at a source(s) for three (3) consecutive monthly checks, the permittee shall conduct an opacity reading at that source(s) using the procedures and requirements of Method 9 as soon as practicable, but within seventy-two (72) hours of the final visual emission check. A Method 9 observation at a source(s) restarts the count of the number of consecutive readings with the presence of visible emissions.

4.3. Testing Requirements

- 4.3.1. *Daily-weighted average.* To demonstrate compliance with 4.1.19.b.iii, 4.4.13, and 4.5.7 of this permit, the daily weighted average VOC content, in units of mass of VOC per unit volume of coating, minus water and exempt compounds, as applied, of the coatings used on a day on a coating line or operation shall be calculated using the following equation:

$$\text{VOCW} = \frac{\sum_{i=1}^n V_i C_i}{V_T}$$

where:

- VOCw = The daily-weighted average VOC content of the coatings, as applied, used on a coating line or operation in units of kilograms of VOC per liter of coating (kg VOC/L) (pounds of VOC per gallon of coating [lb VOC/gal]), minus water and exempt compounds;
- n = The number of different coatings, as applied, each day on a coating line or operation;
- V_i = The volume of each coating, as applied, each day on a coating line or operation in units of L (gal), minus water and exempt compounds; and
- C_i = The VOC content of each coating, as applied, each day on a coating line or operation in units of kg VOC/L of coating (lb VOC/gal), minus water and exempt compounds; and
- V_T = The total volume of all coating, as applied, each day on a coating line or operation in units of L (gal), minus water and exempt compounds.
[45CSR21 §43.1]

- 4.3.2. *Control Systems.* To demonstrate compliance with 4.1.19.b.iii and 4.1.19.b.iv.c of this permit, the overall emission reduction efficiency needed to demonstrate compliance is determined each day as follows:
- Obtain the emission limitation from the applicable section of this regulation.
 - Calculate the emission limitation on a solids basis according to the following equation:

$$S = \frac{C}{1 - (C/d)}$$

where:

- S = The VOC emission limitation in terms of kg VOC/L of coating solids (lb VOC/gal);
- C = The VOC emission limitation in terms of kg VOC/L of coating (lb/gal), minus water and exempt compounds; and
- d = The density of VOC for converting emission limitation to a solids basis. The density equals 0.882 kg/L (7.36 lb/gal).

- c. Calculate the required overall emission reduction efficiency of the control system for the day according to the following equation:

$$E = ((VOCa - S)/VOCa) \times 100$$

where:

- E = The required overall emission reduction efficiency of the control system for the day;
- VOCa =

(1) The maximum VOC content of the coatings, as applied, used each day on the subject coating line or operation, in units of kg VOC/L of coating solids (lb/gal), as determined by the applicable test methods and procedures specified in section 42.; or (2) The daily-weighted average VOC content, as applied, of the coatings used each day on the subject coating line or operation, in units of kg VOC/L of coating solids (lb/gal), as determined by the applicable test methods and procedures specified in section 42. and the procedure in section 43.2.d.; and

- S = VOC emission limitation in terms of kg VOC/L of coating solids (lb VOC/gal).

- d. The daily-weighted average VOC content, as applied, of the coatings used on a coating line or operation in units of mass of VOC per unit volume of coating solids shall be calculated by the following equation:

$$VOC\ WS = \frac{\sum_{i=1}^n W_{VOCi} D_i}{\sum_{i=1}^n V_i VS_i}$$

where:

- VOCws = The daily-weighted average VOC content, as applied, of the coatings used on a coating line or operation in units of mass of VOC per unit volume of coating solids;
 - n = The number of different coatings, as applied, used in a day on a coating line or operation;
 - Vi = The volume of each coating (i), as applied, used in a day on a coating line or operation in units of liters (L) (gallons [gal]);
 - Wvoci = The weight fraction of VOC in each coating (i), as applied, used in a day on a coating line or operation in units of kg VOC/kg coating (lb/lb);
 - Di = The density of each coating (i), as applied, used in a day on a coating line or operation in units of kg coating/L of coating (lb/gal);
 - Vsi = The volume fraction solids content of each coating (i), as applied, used on a day on a coating line or operation in units of L solids/L coating (gal/gal);
- [45CSR21 §43.2]

- 4.3.3. To demonstrate compliance with for 4.1.19.b.iv.d of this permit, the permittee shall determine the overall emission reduction efficiency of the emission control system each day as the product of the capture efficiency and the control device destruction or removal efficiency. The results of the capture efficiency test and control device destruction or removal efficiency test remain valid for each day until

a subsequent test is performed. The results of any valid test may be used for each day until superseded by the results of a valid test subsequently performed. [45CSR21 § 44.3]

4.3.4. *General Provisions.* To demonstrate compliance with 4.1.14.b.v of this permit, the permittee shall comply with the applicable general provisions of the test methods and compliance procedures of § 45-21-41 and that are provided below:

1. *Test methods.* The owner or operator of any volatile organic compound (VOC) source required to comply with sections 11. through 40. shall, at the owner's or operator's expense, demonstrate compliance by using the methods of sections 41. through 47. or alternative methods that are approved by the Director and the U.S. EPA and shall meet all the requirements of this section 41.
2. *Preparation of test plan and quality assurance program.* At least 30 days before the initiation of a required test under section 44., the owner or operator shall submit a test plan that shall be approved by the Director before the results of the test will be considered acceptable. This test plan shall include the following minimum information:
 - a. The purpose of the proposed test and the applicable section of sections 11. through 40. of this regulation;
 - b. A detailed description of the facility to be tested, including a line diagram of the facility, locations of test sites, and facility operation conditions for the test;
 - c. A detailed description of the test methods and procedures, equipment, and sampling sites, i.e., a test plan;
 - d. A time table for the following:
 1. Date for the compliance test;
 2. Date of submittal of preliminary results to the Director (not later than 30 days after sample collection); and
 3. Date of submittal of final test report (not later than 60 days after completion of on-site sampling); and
 - e. Proposed corrective actions should the test results show noncompliance.
 - f. *Internal QA program.* -- The internal QA program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of test data precision. An example of internal QA is the sampling and analysis of replicable samples.
 - g. *External QA program.*
 1. The external QA program shall include, at a minimum, application of plans for a test method performance audit (PA) during the performance test.
 2. The external QA program may also include systems audits, which include the opportunity for on-site evaluation by the Director of instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities.
 3. The PA's shall consist of blind audit samples provided by the Director and analyzed during the performance test to provide a measure of test data bias.
 - A. The Director shall require the owner or operator to analyze PA samples during each performance test when audit samples are available.
 - B. Information concerning the availability of audit materials for a specific performance test may be obtained by contacting the Emission Measurement Technical Information Center at (919) 541-2237.
 - C. If the Director has prior knowledge that an audit material is available, he or she may contact the Atmospheric Research and Exposure Assessment Laboratory directly at (919)541-4531.
 - D. All other audit materials may be obtained by calling (919) 541-7834.

3. For determination of the water content and density of multi-component coatings, samples shall be taken from the same 100 ml mixture of coating and shall be analyzed by the appropriate ASTM method referenced in Method 24 of 40 CFR Part 60, Appendix A.
 - c. Method 24A of 40 CFR Part 60, Appendix A, shall be used in the determination of total volatile content, water content, and density of any publication rotogravure printing ink and related coatings.
 - d. The following ASTM method may be used as an additional procedure related to determining VOC: ASTM D4457-85 - Standard test method for determination of dichloromethane and 1,1,1, trichloroethane in paints and coatings by direct injection into a gas chromatograph (the procedure delineated above may be used to develop protocols for any compounds specifically exempted from the definition of VOC).
3. *Use of adaptations to test methods.* Use of an adaptation to any of the analytical methods specified in section 42.2. may be approved by the Director and the U.S. EPA on a case-by case basis. An owner or operator shall submit sufficient documentation for the Director and the U.S. EPA to find that the analytical methods specified in sections 42.2.a., 42.2.b., and 42.2.c. will yield inaccurate results and that the proposed adaptation is appropriate.
4. *Samples.* Each sample collected for analysis shall meet the following criteria:
 - a. Each sample shall be at least 1 pint taken into a 1-pint container at a location and time such that the sample will be representative of the coating or ink, as applied (i.e., the sample shall include any dilution solvent or VOC added during the manufacturing process);
 - b. If a sample larger than 1 pint is obtained, the sample container shall be of a size such that the sample completely fills the container;
 - c. The container shall be tightly sealed immediately after the sample is taken;
 - d. Any solvent or other VOC added after the sample is taken shall be measured and accounted for in the calculations in section 42.3.; and
 - e. For multiple-component coatings, separate samples of each component shall be obtained.
5. *Calculations.* Calculations for determining the VOC content of coatings and inks from data as determined by Method 24 or 24A of 40 CFR Part 60, Appendix A, shall follow the guidance provided in the following documents:
 - a. "A Guideline for Surface Coating Calculations", EPA-340/1-86-016; and
 - b. "Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by Paint, Ink and Other Coatings", (Revised June 1986) EPA-450/3-84-019.
[45CSR21§ 42]

4.4. Recordkeeping Requirements

- 4.4.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:
 - a. The date, place as defined in this permit and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of the analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.

- 4.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
- 4.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:
- a. The equipment involved.
 - b. Steps taken to minimize emissions during the event.
 - c. The duration of the event.
 - d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
 - f. Steps taken to correct the malfunction.
 - g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.
- 4.4.4. To demonstrate compliance with the hazardous air pollutant emission limits set forth in 4.1.3 and 4.1.4, and the VOC emission limits for the roll coating machines [7S, 13S, 20S, 21S and 22S] established in table 4.1.2 of this permit, the permittee shall maintain monthly and annual records for coatings that are used on the roll coating machines that include the following information:
- a. The name or identification of each coating used;
 - b. The mass of VOC and HAP of each coating; and
 - c. The volume of each coating used each month.
- The permittee shall maintain a summary report for the facility that includes monthly and annual emission rates for aggregate HAPs and speciated HAPs. Annual records shall be maintained on a 12-month rolling total basis. If the annual aggregate emission rates are less than 10 tons of HAPs, the reporting for speciated HAPs is not required.
- 4.4.5. To demonstrate compliance with the production limit set forth in section 4.1.5 of this permit, the permittee shall maintain monthly and annual production records. Annual records shall be maintained on a 12-month rolling total basis.
- 4.4.6. To demonstrate compliance with the usage limits set forth in sections 4.1.6, 4.1.7, and 4.1.8 of this permit and the emission limit for [1E and 9E] set forth in Table 4.1.2, the permittee shall maintain records indicating the amount of ISO purchased, V-4055 purchased, hot melt laminator glue purchased, the amount of misting agent purchased, and the amount of PF4211 purchased. Annual usage records shall be maintained on a 12-month rolling total basis.
- 4.4.7. To demonstrate compliance with the natural gas usage limit established in section 4.1.9.1 of this permit, the permittee shall maintain records of the fuel usage. Annual records shall be maintained on a 12-month rolling total basis.

- 4.4.8 To demonstrate compliance with the HAP content limits established in section 4.1.10.1 of this permit, the permittee shall maintain records of washing fluid HAP content.
- 4.4.9. To demonstrate compliance with the maintenance requirements established in section 4.1.11 of this permit, the permittee shall maintain records indicating all maintenance that has been performed on the mechanical collector and baghouses. At a minimum the records shall include the date that the maintenance was performed and shall include all filter changes that were made.
- 4.4.10. The permittee shall maintain records of all monitoring data required by section 4.1.17 of this permit documenting the date and time of each visible emission check, the emission point or equipment / source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). An example form is supplied as Appendix A. Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9. For an emission unit out of service during the normal monthly evaluation, the record of observation may note "out of service" (O/S) or equivalent.
- 4.4.11 In order to determine compliance with the emergency generator requirements of conditions 4.1.13, 4.1.14, 4.1.15 and 4.1.16 of this permit the permittee shall monitor the following:
- 4.4.11.1 In order to determine compliance with the fuel sulfur limits of 4.1.13 of this permit the permittee shall monitor fuel sulfur content of the fuel oil combusted by the emergency generator. In lieu of this monitoring, the permittee may maintain onsite a valid purchase contract, tariff sheet or transportation contract guaranteeing that the maximum sulfur content of the fuel is not greater than 0.0015% by weight.
- 4.4.11.2 In order to determine compliance with the operating limits of 4.1.15 of this permit, the permittee shall monitor the emergency generator operating time.
- 4.4.11.3 In order to determine compliance with the emission limitations of 4.1.16 of this permit, the permittee shall only use an emergency generator certified by the manufacturer to meet those emission limitations.
- 4.4.12. *Emissions Exception.* To demonstrate compliance with the exempt from emissions requirement 4.1.14.a of this permit, the permittee shall collect and record all of the following information for the roll coating machines [7S, 13S, 20S, 21S and 22S] each day and maintain the information at the facility for a period of 3 years:
1. Indication if the machine is in paper, fabric, or vinyl coating service that day;
 2. If the machine is in paper, fabric, or vinyl coating service that day, the name and identification number of each coating, as applied;
 3. If the machine is in paper, fabric, or vinyl coating service that day, the mass of VOC per volume (minus water and exempt compounds) and the volume of coating (minus water and exempt compounds), as applied, used each day; and
 4. If the machine is in paper, fabric, or vinyl coating service that day, the total VOC emissions at the facility, as calculated using the equation in section 4.2.a.4 of 45CSR21.
[45CSR21 §§ 13.7.a, 14.7.a, 15.7.a, and 4.2.b]
- 4.4.13. *Complying Coatings.* To demonstrate compliance with the complying coatings requirement 4.1.14.b.i of this permit, the permittee shall collect and record all of the following information each day for each roll coating machines[7S, 13S, 20S, 21S, and 22S] in paper, fabric, or vinyl coating service on and after the initial startup date and maintain the information at the facility for a period of 3 years:
1. Indication if the machine is in paper, fabric, or vinyl coating service that day;
 2. If the machine is in paper, fabric, or vinyl coating service that day, the name and identification number of each coating, as applied on each coating line or operation; and

3. If the machine is in paper, fabric, or vinyl coating service that day, the mass of VOC per volume (minus water and exempt compounds) and the volume of coating (minus water and exempt compounds), as applied, used each day on each paper, fabric, or vinyl coating line or operation.
[45CSR21 §§ 13.7.b, 14.7.b, 15.7.b, and 4.3.b]

4.4.14. *Daily-Weighted Averaging.* To demonstrate compliance with the daily-weighted averaging requirement 4.1.14.b.iii of this permit, the permittee shall collect and record all of the following information each day for each roll coating machines[7S, 13S, 20S, 21S, and 22S] in paper, fabric, or vinyl coating service on and after the initial startup date and maintain the information at the facility for a period of 3 years:

1. Indication if the machine is in paper, fabric, or vinyl coating service that day;
2. If the machine is in paper, fabric, or vinyl coating service that day, the name and identification number of each coating, as applied on each coating line or operation; and
3. If the machine is in paper, fabric, or vinyl coating service that day, the mass of VOC per volume (minus water and exempt compounds) and the volume of coating (minus water and exempt compounds), as applied, used each day on each coating line or operation; and
4. The daily-weighted average VOC content of all coatings, as applied, on each paper, fabric, or vinyl coating line or operation calculated according to the procedure in 45CSR21 § 43.1.
[45CSR21 §§ 13.7.c, 14.7.c, 15.7.c, and 4.4.b]

4.4.15. *Control Devices.* To demonstrate compliance with the control device requirement 4.1.19.b.iv of this permit, the permittee shall collect and record all of the following information each day for each roll coating machines[7S, 13S, 20S, 21S and 22S] in paper, fabric, or vinyl coating service on and after the initial startup date and maintain the information at the facility for a period of 3 years:

1. Indication if the machine is in paper, fabric, or vinyl coating service that day;
2. If the machine is in paper, fabric, or vinyl coating service that day, the name and identification number of each coating, as applied on each coating line or operation; and
3. If the machine is in paper, fabric, or vinyl coating service that day, the mass of VOC per volume (minus water and exempt compounds) and the volume of coating (minus water and exempt compounds), as applied, used each day on each coating line or operation;
4. The maximum VOC content (mass of VOC per unit volume of coating solids, as applied) or the daily-weighted average VOC content (mass of VOC per unit volume of coating solids, as applied) of the coatings used each day on each coating line or operation;
5. The required overall emission reduction efficiency for each day for each coating line or operation as determined in section 14.5.c of 45CSR21.;
6. The actual overall emission reduction efficiency achieved for each day for each coating line or operation as determined in section 45CSR21 § 44.3.;
7. Control device monitoring data;
8. A log of operating time for the capture system, control device, monitoring equipment, and the associated coating line or operation;
9. A maintenance log for the capture system, control device, and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages;
10. For thermal incinerators, all 3-hour periods of operation in which the average combustion temperature was more than 28°C (50°F) below the average combustion temperature during the most recent performance test that demonstrated that the facility was in compliance;
11. For catalytic incinerators, all 3-hour periods of operation in which the average temperature of the process vent stream immediately before the catalyst bed is more than 28°C (50°F) below the average temperature of the process vent stream during the most recent performance test that demonstrated that the facility was in compliance; and
12. For carbon adsorbers, all 3-hour periods of operation during which the average VOC concentration or reading of organics in the exhaust gases is more than 20 percent greater than the average exhaust gas concentration or reading measured by the organics monitoring device during the most recent determination of the recovery efficiency of the carbon adsorber that demonstrated that the facility was in compliance.
[45CSR21 §§ 13.7.d, 14.7.d, 15.7.d, and 4.5.b]

4.5. Reporting Requirements

- 4.5.1. Any violation(s) of the allowable visible emission requirement for any emission source discovered during observation using (40CFR Part 60, Appendix A, Method 9) must be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.
- 4.5.2. The permittee shall submit, upon request by the Director, records that the document that the source is exempt from the emission limitations of 45CSR21-40.3.
- a. These records shall be submitted to the Director within 30 days from the date of request.
- b. If such records are not made available, the source will be considered subject to the limits in 45CSR21-40.3.
[45CSR21-40.6b]
- 4.5.3. *Emissions Exemption Certification.* To demonstrate compliance with 4.1.19.a of this permit, the permittee shall certify to the Director that the facility is exempt by providing the following:
1. Name and location of the facility;
 2. Address and telephone number of the person responsible for the facility;
 3. A declaration that the facility is exempt from the emission limitations of section 13, 14, or 15 of 45CSR21 because combined VOC emissions from all paper, fabric, or vinyl coating lines and operations at the facility are below the applicability threshold before the application of capture systems and control devices; and
 4. Calculations of the daily-weighted average that demonstrate that the combined VOC emissions from all coating lines and operations at the facility for a day representative of current maximum production levels are 15 pounds or less before the application of capture systems and control devices. The following equation shall be used to calculate total VOC emissions for that day:

$$T = \sum_{i=1}^n A_i B_i$$

where:

- T = Total VOC emissions from coating lines and operations at the facility before the application of capture systems and control devices in units of lb/day;
- n = Number of different coatings applied on each coatings applied on each fabric coating line or each fabric coating operation at the facility;
- i = Subscript denoting an individual coating;
- A_i = Mass of VOC per volume of coating (i) (minus water and exempt compounds), as applied, used at the facility in units of pounds VOC per gallon; and
- B_i = Volume of coating (i) ((minus water and exempt compounds), as applied, used at the facility in units of gallons per day). The instrument or method by which the permittee accurately measured or calculated the volume of each coating, as applied, used shall be described in the certification to the Director.

[45CSR21 §§ 13.7.a, 14.7.a, 15.7.a, and 4.2.a]

- 4.5.4. To demonstrate compliance with 4.1.14.a of this permit, the permittee shall notify the Director of any record showing that combined VOC emissions from all paper, fabric, or vinyl coating lines and operations at the facility exceed 15 pounds on any day, before the application of capture systems and control devices. A copy of such record shall be sent to the Director within 30 days after the exceedance occurs. [45CSR21 §§ 13.7.a, 14.7.a, 15.7.a, and 4.2.c]

- 4.5.5. *Complying Coating Certification.* To demonstrate compliance with 4.1.19.b.i of this permit using complying coatings, the permittee shall upon startup of a new paper, fabric, or vinyl coating line or operation, or upon changing the method of compliance for an existing coating line or operation from daily-weighted averaging or control devices to the use of complying coatings, the permittee shall certify to the Director that the coating line or operations is or will be in compliance with the requirements of section 14 of 45CSR21 on and after the initial startup date. Such certification shall include:
1. The name and location of the facility;
 2. The address and telephone number of the person responsible for the facility;
 3. Identification of subject sources;
 4. The name and identification number of each coating, as applied, on each coating line or operation;
 5. The mass of VOC per volume (minus water and exempt compounds) and the volume of each coating (minus water and exempt compounds), as applied; and
 6. The time at which the facility's "day" begins if a time other than midnight local time is used to define a "day".
- [45CSR21 §§ 13.7.b, 14.7.b, 15.7.b, and 4.3.a]
- 4.5.6. *Complying Coating.* To demonstrate compliance with 4.1.19.b.i of this permit, the permittee shall notify the Director in the following instances:
1. Any record showing use of any non-complying coatings shall be reported by sending a copy of such record to the Director within 30 days following that use; and
 2. At least 30 calendar days before changing the method of compliance from the use of complying coatings to daily-weighted averaging or control devices, the permittee shall comply with all requirements of section 4.4.a or 4.5.a of 45CSR21 respectively. Upon changing the method of compliance from the use of complying coatings to daily-weighted averaging or control devices, the permittee shall comply with all requirements of section 14 of 45CSR21 applicable to the fabric coating line or operation referenced in section 4.3.
- [45CSR21 §§ 14.7.b and 4.3.c]
- 4.5.7. *Daily-Weighted Averaging.* To demonstrate compliance with 4.1.19.b.iii of this permit using daily-weighted averaging, the permittee shall upon startup of a new paper, fabric, or vinyl coating line or operation, or upon changing the method of compliance for an existing coating line or operation from complying coatings or control devices to the use of daily-weighted averaging, the permittee shall certify to the Director that the coating line or operations is or will be in compliance with the requirements of section 14 of 45CSR21 on and after the initial startup date. Such certification shall include:
1. The name and location of the facility;
 2. The address and telephone number of the person responsible for the facility;
 3. Identification of subject sources;
 4. The name and identification number of each coating line or operation which will comply by means of daily-weighted averaging;
 5. The instrument or method by which the owner or operator will accurately measure or calculate the volume of each coating (minus water and exempt compounds), as applied, used each day on each coating line or operation;
 6. The method by which the permittee will create and maintain records each day as required in section 4.4.b of 45CSR21;
 7. An example of the format in which the records required in section 4.4.b of 45CSR21 will be kept;
 8. Calculation of the daily-weighted average, using the procedure in section 43.1 of 45CSR21, for a day representative of current or projected maximum production levels; and
 9. The time at which the facility's "day" begins if a time other than midnight local time is used to define a "day".
- [45CSR21 §§ 13.7.c, 14.7.c, 15.7.c, and 4.4.a]

4.5.8. *Daily-Weighted Averaging.* To demonstrate compliance with 4.1.19.b.iii of this permit, the permittee shall notify the Director in the following instances:

1. Any record showing noncompliance with the applicable daily-weighted average requirements shall be reported by sending a copy of the record to the Director within 30 days following the occurrence, except as provided in section 9.3 of 45CSR21, as shown below:

If the provisions of this regulation cannot be satisfied due to repairs made as the result of routine maintenance or in response to the unavoidable malfunction of equipment, the Director may permit the owner or operator of a source subject to this regulation to continue to operate said source for periods not to exceed 10 days upon specific application to the Director. Such application shall be made prior to the making of repairs and, in the case of equipment malfunction, within 24 hours of the equipment malfunction. Where repairs will take in excess of 10 days to complete, additional time periods may be granted by the Director. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director. During such time periods, the owner or operator shall take all reasonable and practicable steps to minimize VOC emissions.

2. At least 30 calendar days before changing the method of compliance from the use of daily-weighted averaging to the use of complying coatings or control devices, the permittee shall comply with all requirements of section 4.3.a or section 4.5.a respectively. Upon changing the method of compliance from the use of daily-weighted averaging to the use of complying coatings or control devices, the permittee shall comply with all requirements of section 14 of 45CSR21 applicable to the paper, fabric, or vinyl coating line or operation referenced in section 4.4 of 45CSR21. [45CSR21 §§ 13.7.c, 14.7.c, 15.7.c, and 4.4.c]

4.5.9. *Control Devices.* To demonstrate compliance with 4.1.19.b.iv of this permit, the permittee shall notify the Director in the following instances:

1. Any record showing noncompliance with the applicable requirements for control devices shall be reported by sending a copy of the record to the Director within 30 days following the occurrence, except as provided in section 9.3 of 45CSR21, as shown below:

If the provisions of this regulation cannot be satisfied due to repairs made as the result of routine maintenance or in response to the unavoidable malfunction of equipment, the Director may permit the owner or operator of a source subject to this regulation to continue to operate said source for periods not to exceed 10 days upon specific application to the Director. Such application shall be made prior to the making of repairs and, in the case of equipment malfunction, within 24 hours of the equipment malfunction. Where repairs will take in excess of 10 days to complete, additional time periods may be granted by the Director. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director. During such time periods, the owner or operator shall take all reasonable and practicable steps to minimize VOC emissions.

2. At least 30 calendar days before changing the method of compliance from control devices to the use of daily-weighted averaging or complying coatings, the permittee shall comply with all requirements of section 4.3.a or section 4.4.a respectively. Upon changing the method of compliance from the use of control devices to the use of complying coatings or daily-weighted averaging, the permittee shall comply with all requirements of section 14 of 45CSR21 applicable to the paper, fabric, or vinyl coating line or operation referenced in section 4.5 of 45CSR21. [45CSR21 §§ 13.7.d, 14.7.d, 15.7.d, and 4.5.d]

4.5.10. *Control Devices.* Paper, fabric, or vinyl coating sources complying with 45CSR21 § 14 by means of control devices shall upon startup of a new paper, fabric, or vinyl coating line or operation, or upon changing the method of compliance for an existing coating line or operation from the use of complying coatings or daily-weighted averaging to control devices, the permittee shall perform a compliance test. Testing shall be performed pursuant to the procedures in sections 41 through 44 of 45CSR21. The permittee shall submit to the Director the results of all tests and calculations necessary to demonstrate

that the subject coating line or operation is or will be in compliance with the applicable sections of 45CSR21 on or after the initial startup date. [45CSR21 §§ 13.7.d, 14.7.d, 15.7.d, and 4.5.a]

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature¹
(please use blue ink)

_____ Responsible Official or Authorized Representative

_____ Date

Name and Title
(please print or type)

_____ Name

_____ Title

Telephone No. _____

Fax No. _____

¹

This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

- a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
 - (i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or
 - (ii) the delegation of authority to such representative is approved in advance by the Director;
- b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of USEPA); or
- d. The designated representative delegated with such authority and approved in advance by the Director.

Pursley, Steven R

From: Patrick E. Ward <PEWard@potesta.com>
Sent: Thursday, May 05, 2016 10:54 AM
To: Pursley, Steven R
Cc: Dowdy, Corbet (cdowdy@rubberlite.com)
Subject: FW: Engine Data for E4M03726

Steve, see the responses below.

Regards,
Patrick Ward
Potesta & Associates, Inc.
7012 MacCorkle Avenue, S.E.
Charleston, West Virginia 25304
Ph: (304) 342-1400
Direct: (304) 414-4751
Fax: (304) 343-9031

011-00174

FILE:	
COMPANY	Rubberlite
FACILITY	Hungry
REGION	3
REG.	13-29487

This electronic communication and its attachments contain confidential information. The recommendations and/or design data included herein are provided as a matter of convenience and should not be used for final design or ultimate decision making. Rely only on the final hardcopy materials bearing the consultant's original signature and seal. If you have received this information in error, please notify the sender immediately.

From: Dowdy, Corky [mailto:cdowdy@rubberlite.com]
Sent: Thursday, May 05, 2016 10:25 AM
To: Patrick E. Ward <PEWard@potesta.com>
Cc: Goad, Jeff <jgoad@rubberlite.com>
Subject: FW: Engine Data for E4M03726

Patrick,

Emergency Back-up Generator:

Below is the email from Caterpillar on the official build date on the generator. A second phone call was made and confirmation was made for this date as well as to confirm the Certificate of Conformity that was submitted. If you need anything further on this please let me know.

Flame Laminator:

We have basically missed the initial business opportunity that was the specific and immediate driver on the flame lamination component of the permit update request. The customer relocated their operation from New York State to North Carolina and have purchased their own substantial equipment. They are not up and running yet, but we expect them to be successful. With that said, we are still evaluating the market potential and would like to still include it on the permit if possible, albeit there are no immediate plans to purchase and install it. It has become low priority and specific details such as duct sizing are basically unknown.

If we can keep the flame laminator in our permit as a future option, this would be ideal, but if we need to drop it from the list, this is understandable. Just let us know which course is the most practical and expedient.

From: Gandee, David [mailto:dgandee@walker-cat.com]
Sent: Tuesday, March 22, 2016 1:55 PM

NON-CONFIDENTIAL

To: Dowdy, Corky <cdowdy@rubberlite.com>
Cc: Young, Timothy <tyoung@walker-cat.com>
Subject: Engine Data for E4M03726

Corky,

It looks like the official build date of the engine used in N4E00980 (generator) is indeed 2006.

Engine Emissions Data

For Emissions / Certification feedback and questions, please submit a ticket via our ERC [Request Portal](#)

This emission data is Caterpillar's best estimate for this rating. If actual emissions are required then an emission test needs to be run on your engine.

Serial Number (Machine)	
Serial Number (Engine)	E4M03720
Sales Model	
Build Date	21Oct2006
Interlock Code Progression	
As Shipped Data	
Engine Arrangement Number	2910360
Test Spec Number	
Regulatory Status	Please Contact Engine Certification using Request portal



David Gandee
Project Manager
dgandee@walker-cat.com
Office: 304-949-1600
Fax:304-949-7380

NON-CONFIDENTIAL

Pursley, Steven R

From: Patrick E. Ward <PEWard@potesta.com>
Sent: Tuesday, March 22, 2016 11:35 AM
To: Pursley, Steven R
Subject: RE: rubberlite

Last week they were looking at it. I will see what the status is.

Regards,
Patrick Ward
Potesta & Associates, Inc.
7012 MacCorkle Avenue, S.E.
Charleston, West Virginia 25304
Ph: (304) 342-1400
Direct: (304) 414-4751
Fax: (304) 343-9031

011-001704

COMPANY	FILE: Rubberlite
FACILITY	Harryton
REGION	3 REG. 13-2448D

This electronic communication and its attachments contain confidential information. The recommendations and/or design data included herein are provided as a matter of convenience and should not be used for final design or ultimate decision making. Rely only on the final hardcopy materials bearing the consultant's original signature and seal. If you have received this information in error, please notify the sender immediately.

From: Pursley, Steven R [mailto:Steven.R.Pursley@wv.gov]
Sent: Monday, March 21, 2016 9:26 AM
To: Patrick E. Ward <PEWard@potesta.com>
Subject: RE: rubberlite

Patrick,
Any info on this?

From: Pursley, Steven R
Sent: Wednesday, March 09, 2016 5:11 PM
To: Patrick E. Ward (PEWard@potesta.com) <PEWard@potesta.com>
Subject: rubberlite

Patrick,
One more question. Re: the generator.

Application states it was manufactured in 2007. If I follow Subpart IIII's logic train correctly, the generator would have to meet the requirements of §89.112. Table 1, 75kW – 130 kW, 2007 model year limits NOx+NMHC to 4.0 g/kW-hr. Page N23 of the application lists the emission factor as 5.4 g/kW-hr. Is it possible it's actually a pre 2007 model engine?

NON-CONFIDENTIAL

Pursley, Steven R

From: Pursley, Steven R
Sent: Wednesday, November 25, 2015 8:45 AM
To: 'jgoad@rubberlite.com'
Cc: McKeone, Beverly D; Patrick E. Ward (PEWard@potesta.com); 'cdowdy@rubberlite.com'
Subject: WV DAQ NSR Permit Application Complete for Rubberlite, Incorporated

**RE: Application Status: Complete
Rubberlite, Incorporated
Permit Application R13-2948B
Plant ID No. 011-0174**

Mr. Goad

Your application for a modification permit for a foam production and fabrication facility was received by this Division on September 16, 2015 and was originally determined to be incomplete. Upon the submittal of additional information received on October 30, 2015, it has now been determined that the application is complete and, therefore, the statutory review period commenced on November 25, 2015.

In the case of this application, the agency believes it will take approximately 90 days to make a final permit determination.

This determination of completeness shall not relieve the permit applicant of the requirement to subsequently submit, in a timely manner, any additional or corrected information deemed necessary for a final permit determination.

Should you have any questions, please contact Steven R. Pursley, PE at (304) 926-0499 ext. 1218 or reply to this email.

NON-CONFIDENTIAL

LEGAL ADVERTISEMENT

AIR QUALITY PERMIT NOTICE Notice of Application

Notice is given that Rubberlite, Incorporated has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a permit for the construction and modification of Permit R13-2948A for a Foam Production and Fabrication Facility located on Guyan Avenue in Huntington, Cabell County, West Virginia. The latitude and longitude coordinates are: 38.430764 and -82.41350.

The applicant estimates the increased potential to discharge the following Regulated Air Pollutants will be: VOC of 71.18 tons per year (tpy); PM of 4.27 tpy; PM10 of 3.44 tpy; PM2.5 of 3.29 tpy; NOx of 11.47 tpy; SO2 of 0.15 tpy; CO of 14.15 tpy, and total HAPS of 20.25 tpy.

This is an existing operation with proposed installation to occur in January 2016 and will begin operation under the permit upon issuance of permit. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57th Street, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926 0499, Extension 1250, during normal business hours.

Dated this the 22nd day of September, 2015.

By: Rubberlite, Incorporated Jeffrey D. Goad Vice President of Business Technology 2501 Guyan Avenue Huntington, West Virginia 25703

LH-36177 9-22; 2015

AFFIDAVIT OF PUBLICATION

Becky Jarvis

being duly sworn, depose and say that I am Legal Clerk for *Herald-Dispatch*, HD Media Co., LLC, who publishes at Huntington, Cabell County, West Virginia the newspaper *The Herald-Dispatch*, an Independent newspaper, the morning seven days a week, Monday through Sunday including New Year's Day, Memorial Day, the Fourth of July, Labor Day, Thanksgiving and Christmas; that I have been duly authorized by the Board of Directors of the corporation and the newspaper mentioned herein; that the legal advertisement attached in the back of this affidavit and made a part herof and bearing number 36177 was duly published in *The Herald-Dispatch* once a week for 1 successive weeks, commencing with its issue of 09/22/2015 and ending with the issue of 09/22/2015, that said legal advertisement was published on the following dates: 09/22/2015 that the cost of publishing said annexed advertisement as aforesaid is \$0; that such newspaper in which such legal advertisement was published has been and is published regularly, at least as frequently as once a week for at least fifty weeks during the year as prescribed by its mailing permit and has been so published in the municipality of Huntington, Cabell County, West Virginia, for at least one year immediately preceding the date on which the legal advertisement set forth herein was delivered to such newspaper for publication; that said newspaper is a newspaper of "general circulation" as defined in article 3, chapter 59, of the West Virginia Code within the publication area or areas of the municipality of Huntington, Cabell, Putnam and Boone Counties, West Virginia, and that such newspaper is circulated to the general public at a price or consideration; that such newspaper on each date published consists of not less than four pages without a cover; and that it is a newspaper to which the general public resorts for passing news of political, religious, commercial and social nature, and for current happenings, news items, miscellaneous reading matter, advertisements and other notices.

scribed and sworn to before me in my said county this day: 09/22/2015

Commission expires June 6, 2022

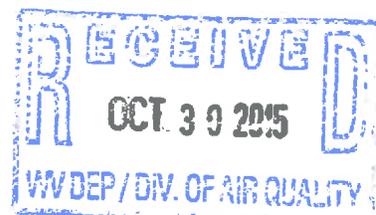
Constance S. Rappold
Notary Public
Cabell County, West Virginia



[Signature]

NON-CONFIDENTIAL

**REVISED PAGES FOR
REDACTED APPLICATION**



Attachment Q Business Confidential Claim

This form contains each of the required elements for the cover document required under 45CSR31. The person submitting this form may wish to attach an additional page(s) to provide adequate justification under the ARationale@ section of the form.

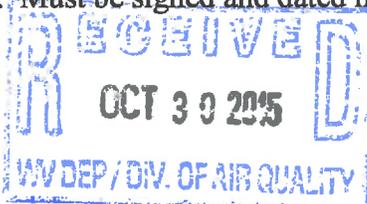
Company Name	Rubberlite, Incorporated	Responsible Official Jeffrey D. Goad		
Company Address	2501 Guyan Ave.	Confidential Information Designee in State of WV	Name	Patrick Ward
			Title	Senior Engineer
	Huntington, WV 25703		Address	7012 MacCorkle Avenue, S.E.
Person/Title Submitting Confidential Information	Jeffrey D. Goad			Charleston, WV 25304
	Vice President of Technology		Phone	(304) 342-1400
		Fax	(304) 343-9031	

Reason for Submittal of Confidential Information: Allow review of information pertaining to DAQ issuing a Regulation 13 Permit Application.

Identification of Confidential Information	Rationale for Confidential Claim	Confidential Treatment Time Period
All marked Claimed Confidential Information is proprietary formulation information.	Provide justification that the criteria set forth in ' 45CSR31-4.1.a - e have been met. The information shown on the pages marked as confidential is to be treated as such. The mixture for each product is confidential and could harm Rubberlite's or others business if released. See Page Q4 of Q4.	This information is to be maintained confidential; there is no timeframe for expiration of confidential treatment.

Responsible Official Name:	Jeffrey D. Goad
Responsible Official Title:	Vice President of Technology
Date Signed: 10-22-15	Signature: <i>Jeffrey D. Goad</i>

NOTE: Must be signed and dated in BLUE INK.



Rubberlite, Inc.
Misting Unit

POTESTA & ASSOCIATES, INC.
Project No. 0101-15-0160

By: PEW
Date: August 27, 2015

Checked By: ADM
Date: August 28, 2015

Misting Unit (6S)

The misting unit uses a material which is applied to allow a crust or skin to form on the foam. The emissions estimate is based on the amount of usage and the VOC and HAP in the material. The material contains formaldehyde which is both a VOC and a HAP. There is no change to this emission unit requested in this application. The total emissions are shown below. See Application R13-2948 for the emissions estimate.

Total Misting Unit Emissions				
	Uncontrolled		Controlled	
Type	lbs/hr	tpy	lbs/hr	tpy
VOC	0.6197	0.4	0.6197	0.4
Formaldehyde	0.6197	0.4	0.6197	0.4

REDACTED COPY - CLAIM OF CONFIDENTIALITY JUNE 1, 2012

Key to Emission Rates Spreadsheet

Product Name		Catalyst	Catalyst
	1		A
	2		B
	3		C
	4		D
	5		E
	6		F
	7		G
	8		
	9		
	10		
	11		
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	31		
	32		

REDACTED COPY - CLAIM OF CONFIDENTIALITY JUNE 1, 2012

Pursley, Steven R

From: Pursley, Steven R
Sent: Monday, October 12, 2015 1:57 PM
To: 'jgoad@rubberlite.com'
Cc: McKeone, Beverly D; 'cdowdy@rubberlite.com'; Patrick E. Ward (PEWard@potesta.com)
Subject: WV DAQ Permit Application Incomplete for Company Name and Location

**RE: Application Status: Incomplete
Rubberlite, Incorporated
Permit Application No. R13-2948B
Plant ID No. 011-00174**

Mr.Goad:

Your application for a Modification permit for a foam production and fabrication facility was received by this Division on September 16, 2015 and assigned to the writer for review. Upon initial review of said application, it has been determined that the application as submitted is incomplete based on the following items:

1. Original affidavit of publication for Class I legal advertisement has not been submitted.
2. Confidential Business Information (CBI) not properly submitted. Specifically, the information was not submitted on colored paper, was not properly marked "Claimed Confidential", and was not specifically identified on the Business Confidential Claim form (Attachment Q). Additionally, some of the information appears to be used to calculate emissions. Please be aware that any information used to calculate emissions likely meets the definition of "emissions data" in 45CSR31 and would not be able to be held as confidential.

Please address the above deficiencies in writing within fifteen (15) days of the receipt of this email. Application review will not commence until the application has been deemed to be technically complete. Failure to respond to this request in a timely manner may result in the denial of the application.

Should you have any questions, please contact Steven R. Pursley at (304) 926-0499 ext. 1218 or reply to this email.

NON-CONFIDENTIAL

Pursley, Steven R

From: Ward, Beth A
Sent: Friday, September 18, 2015 3:57 PM
To: Pursley, Steven R
Subject: RUBBERLITE INC PERMIT APPLICATION FEE

Categories: Red Category

This is the receipt for payment received from:

RUBBERLITE INC, CHECK NUMBER 147220, CHECK DATE 09/11/2015, \$2,000.00
HUNTINGTON R13-2948B ID#011-00174

OASIS Deposit CR 1600031520

NON-CONFIDENTIAL

Pursley, Steven R

From: Adkins, Sandra K
Sent: Thursday, September 17, 2015 5:03 PM
To: jgoad@rubberlite.com; cdowdy@rubberlite.com; potesta@potesta.com
Cc: McKeone, Beverly D; Pursley, Steven R
Subject: WV DAQ Permit Application Status for Rubberlite, Inc.; Huntington

Categories: Red Category

**RE: Application Status
Rubberlite Inc.
Huntington
Plant ID No. 011-00174
Application No. R13-2948B**

Mr. Goad,

Your application for a modification permit for the Huntington facility was received by this Division on September 16, 2015, and was assigned to Steve Pursley. The following item was not included in the initial application submittal:

Original affidavit for Class I legal advertisement not submitted.
**Please note to use the new phone extension 1250 for future legal ads.*

This item is necessary for the assigned permit writer to continue the 30-day completeness review.

Within 30 days, you should receive a letter from Steve stating the status of the permit application and, if complete, given an estimated time frame for the agency's final action on the permit.

Any determination of completeness shall not relieve the permit applicant of the requirement to subsequently submit, in a timely manner, any additional or corrected information deemed necessary for a final permit decision.

For future reference, please submit two electronic applications. These must include signatures.

Should you have any questions, please contact the assigned engineer, Steve Pursley, at 304-926-0499, extension 1218.

NON-CONFIDENTIAL

