

PUBLIC NOTICE

Hutchinson Sealing Systems, Inc. has applied to the Tennessee Department of Environment and Conservation, Division of Air Pollution Control a federally enforceable state operating permit to opt out of being subject to the provisions of paragraph 1200-03-09-.02(11) of the Tennessee Air Pollution Control Regulations (Title V Regulations). **Hutchinson Sealing Systems, Inc.** has agreed to be bound by a permit that limits their potential to emit Volatile Organic Compounds (VOC) to less than 100 tons per year. Additionally, they agree to be bound by a permit that limits their potential to emit Hazardous Air Pollutants (HAP) such that they are below the applicability thresholds for a single HAP of 10 tons per year and for a combination of HAPS of 25 tons per year. It should be noted that this facility has a current major source operating permit.

The applicant is **Hutchinson Sealing Systems, Inc.** with a site address of 309 Press Road, Church Hill, TN 37642. They seek to obtain a Conditional Major operating permit for their automotive glass channels and sealing strips manufacturing facility.

EPA has agreed to perform its 45-day review provided by the law concurrently with the public notice period. If any substantive comments are received, EPA's 45-day review period will cease to be performed concurrently with the public notice period. In this case, EPA's 45-day review period will start once the public notice period has been completed and EPA receives notification from the Tennessee Air Pollution Control Division that comments have been received and resolved. The status regarding EPA's 45-day review of these permits and the deadline for submitting a citizen's petition can be found at the following website address:

<https://www.epa.gov/caa-permitting/tennessee-proposed-title-v-permits>

Copies of the application materials and draft permits are available for public inspection during normal business hours at the following locations:

Johnson City Environmental Field Office
Division of Air Pollution Control
2305 Silverdale Drive
Johnson City, TN 37601

and Tennessee Department of Environment and Conservation
Division of Air Pollution Control
Davy Crockett Tower, 7th Floor
500 James Robertson Parkway
Nashville, TN 37243

Electronic copies of the draft permits are available by accessing the TDEC internet site located at:

<https://www.tn.gov/environment/ppo-public-participation/ppo-public-participation/ppo-air.html>

Questions concerning the source(s) may be addressed to Chelsea Materi at (865) 314-0470 or by e-mail at Chelsea.Meadows@tn.gov.

Interested parties are invited to review these materials and comment. In addition, a public hearing may be requested at which written or oral presentations may be made. To be considered, written comments or requests for a public hearing must be received no later than 4:30 PM on **July 25, 2025**. To assure that written comments are received and addressed in a timely manner, written comments must be submitted using one of the following methods:

1. **Mail, private carrier, or hand delivery:** Address written comments to Ms. Michelle W. Owenby, Director, Division of Air Pollution Control, Davy Crockett Tower, 500 James Robertson Parkway, 7th Floor, Nashville, Tennessee 37243.
2. **E-mail:** Submit electronic comments to air.pollution.control@tn.gov.

A final determination will be made after weighing all relevant comments.

Individuals with disabilities who wish to review information maintained at the above-mentioned depositories should contact the Tennessee Department of Environment and Conservation to discuss any auxiliary aids or services needed to facilitate such review. Such contact may be in person, by writing, telephone, or other means, and should be made no less than ten days prior to the end of the public comment period to allow time to provide such aid or services. Contact the Tennessee Department of Environment and Conservation ADA Coordinator, Davy Crockett Tower, 5th Floor, 500 James Robertson Parkway, Nashville, TN 37243, 1-(615)-532-0200. Hearing impaired callers may use the Tennessee Relay Service, 1-(800)-848-0298.



DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF AIR POLLUTION CONTROL
Davy Crockett Tower, 7th Floor
500 James Robertson Parkway, Nashville, TN 37243
Telephone: (615) 532-0554, Email: Air.Pollution.Control@TN.gov

APC 100

**NON-TITLE V PERMIT APPLICATION
FACILITY IDENTIFICATION**

Type or print and submit. Attach appropriate source description forms.			
SITE INFORMATION			
1. Organization's legal name and SOS control number [as registered with the TN Secretary of State (SOS)] Hutchinson Sealing System 00037-5869			
2. Site name (if different from legal name)			
3. Is a construction permit application fee being submitted? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (see instructions for appropriate fee to submit)			
4. Site address (St./Rd./Hwy.) 309 Press Road			County name Hawkins
City Church Hill		Zip code 37642	5. NAICS or SIC code 326291
6. Site location (In lat. /long.)	Latitude 36.5032998		Longitude -82.7691294
CONTACT INFORMATION (RESPONSIBLE PERSON)			
7. Responsible person/Authorized contact Jeff Batt			Phone number with area code 423-357-2043
Mailing address (St./Rd./Hwy.) 309 Press Road			Fax number with area code
City Church Hill	State TN	Zip code 37642	Email address Jeffrey.Batt@Hutchinson.com
CONTACT INFORMATION (TECHNICAL)			
8. Principal technical contact Amy Nevels			Phone number with area code 432-357-2045
Mailing address (St./Rd./Hwy.) 309 Press Road			Fax number with area code
City Church Hill	State TN	Zip code 37642	Email address Amy.Nevels@Hutchinson.com
CONTACT INFORMATION (BILLING)			
9. Billing contact Billy Minton			Phone number with area code 432-817-1468
Mailing address (St./Rd./Hwy.) 309 Press Road			Fax number with area code
City Church Hill	State TN	Zip code 37642	Email address Billy.Minton@Hutchinson.com

AIR CONTAMINANT SOURCE(S) INFORMATION

10. Description of air contaminant source(s) and Unique Source ID(s). List, identify, and briefly describe process emission sources, fuel burning installations, and incinerators that are contained in this application and include a Unique Source ID for each source. The Unique Source ID is a name/number/letter, which uniquely identifies the air contaminant source(s), like Boiler #1, Paint Line #1, Engine #1, etc. (see instructions for more details)

01-001 ext line 1S-002. 02-001 ext. line 1 S-050. 03-001 ext line 1 40200601 evp surf coatops, Surf coat application. 04-001 ext line 1 S-067 4020071 Evap surcoat application general.

01-001 ext line 2 S-042. 01-011 ext line 2 S-042. 02-011 ext line 2 S-043 40200601 Evap surf coatops surf coat application general. 03-001 ext line 2 S-456. 04-001 ext line 2 S-051. 05-001 ext line 2 S-078 INACTIVE.

01-013 ext line 3 S-.037 .01-13 ext line 3 S-.037 03-013 ext line 3 S-039 40200701 Evap surf coatops surf coat application general. 04-13 ext line 3 S-069. 05-013 ext line 3 S-070. 06-013 next line S-071.

01-014 ext line 4 S-057. 04-014 ext line 4 S-060. 05-014 ext line 4 S-061 - coating/adhesive application booth. 03-014 line 4 S-059 Plasma treat unit and primer application booth. 06-014 ext line 4 S-062. 07-014 ext line 4 S-063. 08.014 ext line 4 S-064.

01-015 ext line 5 S-073. 02-015 ext line 5 S-073. 01-015 ext line 5 S-073. 02-015 ext line 5 S-075 Primer Application booth and coating booth. 03-015 ext 5 S-076 coating adhesive application booth. 01-015 ext line 5 S-073 oven. 01-015 ext line 5 S-073 oven. 01-015 ext line 5 S-073 oven.

11. Is the air contaminant source(s) in a nonattainment area? If "Yes", then minor source BACT must be addressed. Yes No

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12. Normal operation:	Hours/Day 24	Days/Week 5	Weeks/Year 51	Days/Year
13. Percent annual throughput	Dec. - Feb. 25	March - May 25	June - August 25	Sept. - Nov. 25

TYPE OF PERMIT REQUESTED (check appropriate box)

14. Operating permit <input checked="" type="checkbox"/>	Date construction started	Date completed	Date of ownership change (if applicable)
	Last permit number(s) 574642		Emission Source Reference Number(s)
Construction permit <input type="checkbox"/>	Last permit number(s)		Emission Source Reference Number(s)

If you chose Construction permit above, then choose either New Construction, Modification, or Location Transfer

New Construction <input type="checkbox"/>	Starting date	Completion date
Modification <input type="checkbox"/>	Date modification started or will start	Date completed or will complete
Location Transfer <input type="checkbox"/>	Transfer date	Address of last location

15. Describe changes that have been made to this equipment or operation(s) since the last construction or operating permit application:

The facility is requesting to lower emissions and receive a conditional major permit.

16. Comments

SIGNATURE

Based upon information and belief formed after a reasonable inquiry, I, as the responsible person of the above mentioned facility, certify that the information contained in this application is accurate and true to the best of my knowledge. As specified in TCA Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

17. Signature (application must be signed before it will be processed)

Date

05.29.2025

Signer's name (type or print)

Title

Phone number with area code

Jeff Batt

Plant Manager

423-639-3999



**TITLE V PERMIT APPLICATION
OPERATIONS AND FLOW DIAGRAMS**

1. Please list, identify, and describe briefly process emission sources, fuel burning installations, and incinerators that are contained in this application. Please attach a flow diagram for this application.

Source No. 37-0067-01

Extrusion Line #1: Rubber extrusion line that is equipped with flock, primer, coating, and adhesive application equipment. Extrusion line is equipped with electric/natural gas-fired curing ovens.

Source No. 37-0067-02

Secondaries (Corner Flocking and Mold Presses): Individual sections are molded into different rubber profiles which involve trimming, notching, and hand-fitting activities. This source includes a glass preparation process where primer is applied by a robotic mechanism and a flock application process.

Source No. 37-0067-11

Extrusion Line #2: Rubber extrusion line that is equipped with flock, primer, coating, and adhesive application equipment. Extrusion line is equipped with electric/natural gas-fired curing ovens.

Source No. 37-0067-13

Extrusion Line #3: Rubber extrusion line that is equipped with flock, primer, coating, and adhesive application equipment. Extrusion line is equipped with electric/natural gas-fired curing ovens.

Source No. 37-0067-14

Extrusion Line #4: Rubber extrusion line that is equipped with flock, primer, coating, and adhesive

2. List all insignificant activities which are exempted because of size or production rate and cite the applicable regulations.

1200-3-9-.04(5)(f)(14) – Natural gas-fired boiler used exclusively for heating purposes - *was replaced w/ electric boiler.*
1200-3-9-.04(5)(f)(24) and (72) – Polyethylene reticulate (PER) extruder's
1200-3-9-.04(5)(f)(18) – Sandblasting equipment
1200-3-9-.04(5)(f)(51) – Rubber on Glass (ROG) Units and molding presses
1200-3-9-.04(5)(g)(31) – Electric curing ovens
1200-3-9-.04(i) – Natural gas-fired curing ovens - *400,000 BTU*
1200-3-9-.04(i) – Plasma Treat Units
1200-3-9-.04(5)(g)(10) Diesel aboveground storage tank: Diesel tank is 275 gallons in capacity. Therefore, since the diesel tank is less than 10,000 gallons in capacity, the tank is exempt

3. Are there any storage piles?

YES

NO

X

4. List the states that are within 50 miles of your facility.

Kentucky and Virginia

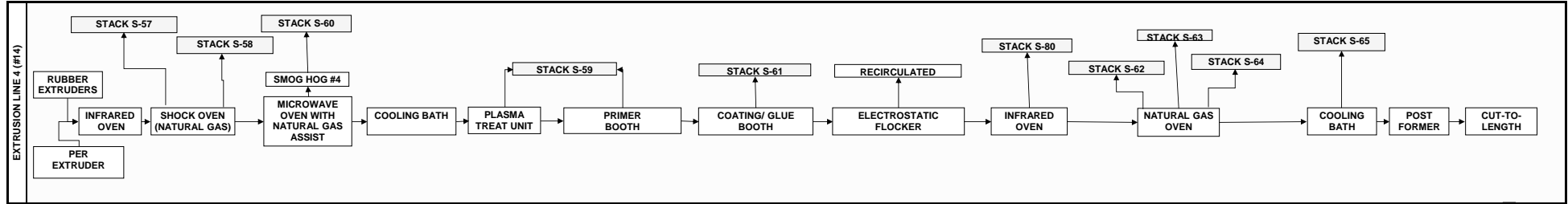
5. Page number:

Revision Number:

Date of Revision:

2

Extrusion Line 4 PROCESS FLOW DIAGRAM



Stack ID #	Area	Emission Source	Stack Height	Inside Diameter at Outlet (FT)	Exhaust Temperature (F)	Velocity	Exhaust Flow Rate	Exhaust Flow Rate	Moisture Content	Status	Reference
S-57	Extrusion Line #4	Natural gas-fired shock oven and microwave	40	1	101	37	29	1760/1663	0	Removed	
S-58	Extrusion Line #4	Natural gas-fired curing	40	1	199	25	19.6	1200/965	0	Removed	
S-59	Extrusion Line #4	Plasma Treat Unit and Primer	40	1.5	70	17	30	1800/1539	0	Active	4A
S-60	Extrusion Line #4	Microwave oven with	40	0.75	101	66	29.1	1730/1663	0	Active	
S-61	Extrusion Line #4	Glue Booth	40	1.5	70	42	74.2	4500/4352	0	Active	4C
S-62	Extrusion Line #4	Natural gas-fired curing oven	40	1	326	17	13.3	800/539	0	Active	4D
S-63	Extrusion Line #4	Natural gas-fired curing oven	40	1	326	17	13.3	800/539	0	Active	4E
S-64	Extrusion Line #4	Natural gas-fired curing oven	40	1	326	17	13.3	800/539	0	Active	4F
S-65	Extrusion Line #4	Cooling Bath	40	1	117	37	29			Active	
S-80	Extrusion Line #4	Infrared Oven									

2014 # Tons

39000689 NATURAL GENERAL Rubber 3514165 1757.083

39000689 NATURAL GENERAL

40200601 PRIMER

39000689 NATURAL GENERAL

40200701 ADHESIVE APPLICATION

39000689 NATURAL GENERAL

39000689 NATURAL GENERAL

39000689 NATURAL GENERAL

39999999

NATURAL GAS COMBUSTION EMISSIONS FOR GERLACH/JET AIR CURING OVEN LOCATED ON							
Pollutant	BTU Content of Natural Gas (BTU/ft3)	Oven Rating (BTU/hr)	Emission Factor (lb/ft3)	Operating Hours	Number of Burners	Amount of Pollutant Emitted from all Extrusion Lines (lbs/year)	Amount of Pollutant Emitted from all Extrusion Lines (tons/month)
Particulate	100000	105000	0.0000076	4608	1	0.0368	0.000002
Sulfur Dio	100000	105000	0.0000006	4608	1	0.0029	0.000000
Nitrogen C	100000	105000	0.00017	4608	1	0.8225	0.000034
Carbon Mo	100000	105000	0.000024	4608	1	0.1161	0.000005
VOCs	100000	105000	0.0000055	4608	1	0.0266	0.000001

NATURAL GAS COMBUSTION EMISSIONS FOR INFRATROL CURING OVEN LOCATED ON EXTRUSION LINE							
Pollutant	BTU Content of Natural Gas (BTU/ft3)	Oven Rating (BTU/hr)	Emission Factor (lb/ft3)	Operating Hours	Number of Burners	Amount of Pollutant Emitted from all Extrusion Lines (lbs/year)	Amount of Pollutant Emitted from all Extrusion Lines (tons/month)
Particulate Matter	100000	800000	0.0000076	4608	3	0.8405	0.000035
Sulfur Dioxide	100000	800000	0.0000006	4608	3	0.0664	0.000003
Nitrogen Oxides	100000	800000	0.00017	4608	3	18.8006	0.000783
Carbon Monoxide	100000	800000	0.000024	4608	3	2.6542	0.000111
VOCs	100000	800000	0.0000055	4608	3	0.6083	0.000025

NATURAL GAS COMBUSTION EMISSIONS FOR GERLACH/MICROWAVE CURING OVEN LOCATED							
Pollutant	BTU Content of Natural Gas (BTU/ft3)	Oven Rating (BTU/hr)	Emission Factor (lb/ft3)	Operating Hours	Number of Burners	Amount of Pollutant Emitted from all Extrusion Lines (lbs/year)	Amount of Pollutant Emitted from all Extrusion Lines (tons/month)
Particulate	100000	87000	0.0000076	4608	4	0.1219	0.000005
Sulfur Dio	100000	87000	0.0000006	4608	4	0.0096	0.000000
Nitrogen C	100000	87000	0.00017	4608	4	2.7261	0.000114
Carbon Mo	100000	87000	0.000024	4608	4	0.3849	0.000016
VOCs	100000	87000	0.0000055	4608	4	0.0882	0.000004



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STACK DESCRIPTION	
3. Stack ID (or flow diagram point identification): S-2	
4. Stack height above grade in feet: 35	
5. Velocity (data at exit conditions): _____ (Actual feet per second)	6. Inside dimensions at outlet in feet: 1
7. Exhaust flowrate at exit conditions (ACFM): 1000	8. Flow rate at standard conditions (DSCFM): 868
9. Exhaust temperature: X _____ Degrees Fahrenheit (°F)	10. Moisture content (data at exit conditions): 5 _____ Percent _____ Grains per dry standard cubic foot (gr./dscf.)
11. Exhaust temperature that is equaled or exceeded during ninety (90) percent or more of the operating time (<u>for stacks subject to diffusion equation only</u>): _____ N/A _____ (°F)	
12. If this stack is equipped with continuous pollutant monitoring equipment required for compliance, what pollutant(s) does this equipment monitor (e.g., Opacity, SO ₂ , NO _x , etc.)? N/A	
Complete the appropriate APC form(s) 4, 5, 7, 8, 9, or 10 for each source exhausting through this stack.	
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14. Page number: Revision Number: Date of Revision: 5 12	



TITLE V PERMIT APPLICATION STACK IDENTIFICATION

GENERAL IDENTIFICATION AND DESCRIPTION	
1. Facility name: Hutchinson Body Sealing Systems	
2. Emission source (identify): Source No. 37-0067-01 (Extrusion Line #1) and 37-0067-11 (Extrusion Line #2) – Stack S-2 vents the e	
STACK DESCRIPTION	
3. Stack ID (or flow diagram point identification): S-2	
4. Stack height above grade in feet: 35	
5. Velocity (data at exit conditions): _____ (Actual feet per second)	6. Inside dimensions at outlet in feet: 1
7. Exhaust flowrate at exit conditions (ACFM): 1000	8. Flow rate at standard conditions (DSCFM): 868
9. Exhaust temperature: X _____ Degrees Fahrenheit (°F)	10. Moisture content (data at exit conditions): 5 _____ Percent _____ Grains per dry standard cubic foot (gr./dscf.)
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14. Page number: 13 Revision Number: Date of Revision:	



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14. Page number: 14 Revision Number: Date of Revision:	



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14. Page number: 15 Revision Number: Date of Revision:	



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14. Page number: 16 Revision Number: Date of Revision:	



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14. Page number: 19 Revision Number: Date of Revision:	



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14. Page number: 5 20 Revision Number: Date of Revision:	



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14. Page number: 5 Revision Number: 21 Date of Revision:	



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14. Page number: 22 Revision Number: Date of Revision:	



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14. Page number: 23 Revision Number: Date of Revision:	



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14. Page number: 24 Revision Number: Date of Revision:	



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14. Page number: 25 Revision Number: Date of Revision:	



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14. Page number: 26 Revision Number: Date of Revision:	



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14. Page number: 27 Revision Number: Date of Revision:	



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14. Page number: 5 28 Revision Number: Date of Revision:	



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14. Page number: 29 Revision Number: Date of Revision:	



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GENERAL IDENTIFICATION AND DESCRIPTION	
1. Facility name: Hutchinson Body Sealing Systems	
2. Emission source (identify): Source No. 37-0067-01 (Extrusion Line #1) and 37-0067-11 (Extrusion Line #2) – Stack S-2 vents the e	
STACK DESCRIPTION	
3. Stack ID (or flow diagram point identification): S-2	
4. Stack height above grade in feet: 35	
5. Velocity (data at exit conditions): _____ (Actual feet per second)	6. Inside dimensions at outlet in feet: 1
7. Exhaust flowrate at exit conditions (ACFM): 1000	8. Flow rate at standard conditions (DSCFM): 868
9. Exhaust temperature: X _____ Degrees Fahrenheit (°F)	10. Moisture content (data at exit conditions): 5 _____ Percent _____ Grains per dry standard cubic foot (gr./dscf.)
11. Exhaust temperature that is equaled or exceeded during ninety (90) percent or more of the operating time (<u>for stacks subject to diffusion equation only</u>): _____ N/A _____ (°F)	
12. If this stack is equipped with continuous pollutant monitoring equipment required for compliance, what pollutant(s) does this equipment monitor (e.g., Opacity, SO ₂ , NO _x , etc.)? N/A	
Complete the appropriate APC form(s) 4, 5, 7, 8, 9, or 10 for each source exhausting through this stack.	
BYPASS STACK DESCRIPTION	
13. Do you have a bypass stack? _____ Yes _____ No If yes, describe the conditions which require its use & complete APC form 4 for the bypass stack. Please identify the stack number(s) of flow diagram point number(s) exhausting through this bypass stack.	
14. Page number: Revision Number: _____ Date of Revision: _____ 5 30	



TITLE V PERMIT APPLICATION STACK IDENTIFICATION

GENERAL IDENTIFICATION AND DESCRIPTION	
1. Facility name: Hutchinson Body Sealing Systems	
2. Emission source (identify): Source No. 37-0067-01 (Extrusion Line #1) and 37-0067-11 (Extrusion Line #2) – Stack S-2 vents the e	
STACK DESCRIPTION	
3. Stack ID (or flow diagram point identification): S-2	
4. Stack height above grade in feet: 35	
5. Velocity (data at exit conditions): _____ (Actual feet per second)	6. Inside dimensions at outlet in feet: 1
7. Exhaust flowrate at exit conditions (ACFM): 1000	8. Flow rate at standard conditions (DSCFM): 868
9. Exhaust temperature: X _____ Degrees Fahrenheit (°F)	10. Moisture content (data at exit conditions): 5 _____ Percent _____ Grains per dry standard cubic foot (gr./dscf.)
11. Exhaust temperature that is equaled or exceeded during ninety (90) percent or more of the operating time (<u>for stacks subject to diffusion equation only</u>): _____ N/A _____ (°F)	
12. If this stack is equipped with continuous pollutant monitoring equipment required for compliance, what pollutant(s) does this equipment monitor (e.g., Opacity, SO ₂ , NO _x , etc.)? N/A	
Complete the appropriate APC form(s) 4, 5, 7, 8, 9, or 10 for each source exhausting through this stack.	
BYPASS STACK DESCRIPTION	
13. Do you have a bypass stack? _____ Yes _____ No If yes, describe the conditions which require its use & complete APC form 4 for the bypass stack. Please identify the stack number(s) of flow diagram point number(s) exhausting through this bypass stack.	
14. Page number: 31 Revision Number: Date of Revision:	



TITLE V PERMIT APPLICATION PAINTING AND COATING OPERATIONS **GENERAL IDENTIFICATION AND DESCRIPTION**

1. Facility name: Hutchinson Body Sealing Systems	
2. Process description: 37-0067-01 (Extrusion Line #1) – Primer and coating application	
3. Year of construction or last modification: 1989	4. Stack ID or flow diagram point identification (s): S-66 and S-67
If the emissions are controlled for compliance, attach an appropriate Air Pollution Control system form. If this printing operation is monitored for compliance, please attach the appropriate compliance demonstration form.	
5. Normal operating schedule 24 Hrs./Day <input checked="" type="checkbox"/> Days/Wk. 365 N/A Days/Yr.	
6. Location of this operation in UTM coordinates: UTM Vertical: 4061.6 UTM Horizontal: 341.58	
7. Oven curing (complete if applicable): Number of ovens: 2 Temperature of air contacting coated material as it leaves the oven (°F): >200 Specify oven fuels: Total maximum heat input to each oven: 88 MMBTU/HR	
8. Application technique and transfer efficiency (%):	

COATINGS AND SOLVENTS

9. Complete the following table – Attach additional tables as needed – Fill in only the items necessary for determination of compliance with emission standard(s).													
Identify coatings	Maximum Usage		Normal Usage Gal./Mo.	Coating Composition: Volume and weight percent as applied								Density of Solvent Fraction Lbs./Gal.	Coating Density Lbs./Gal.
	Gal./Hr.	Gal./Mo.		Solids		Solvents (VOCs) Wt. %	Water		Exempt Solvent				
			Vol. %	Wt. %	Vol. %		Wt. %	Vol.	Wt.	Vol.	Wt.		
Primer	0.38	277.2	49.5	0	0	100	0	0	0	0	7.2558	7.2558	
Coatings	0.55	402.3	71.8	---	27	44.26	0	0	0	0	3.8389	8.6736	
Crosslinker	0.02	16.0	2.86	0	0	99.7	0	0	0	0	8.8970	8.9238	
Total coatings													
List the Thinning Solvents used with the coatings identified above:													
(1):													
(2):													
Clean-up solvents: Methyl Ethyl Ketone	0.03	21.8	3.9	0	0	100	0	0	0	0	6.76	6.76	
Other (specify):													
10. Page number: 32 Revision Number: Date of Revision:													



TITLE V PERMIT APPLICATION PAINTING AND COATING OPERATIONS

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name: Hutchinson Body Sealing Systems	
2. Process description: 37-0067-01 (Extrusion Line #2) – Primer and coating application	
3. Year of construction or last modification: 1989	4. Stack ID or flow diagram point identification (s): S-66 and S-67
If the emissions are controlled for compliance, attach an appropriate Air Pollution Control system form. If this printing operation is monitored for compliance, please attach the appropriate compliance demonstration form.	
5. Normal operating schedule <u>24</u> Hrs./Day <input checked="" type="checkbox"/> Days/Wk. <u>365</u> N/A Days/Yr.	
6. Location of this operation in UTM coordinates: UTM Vertical: 4061.6 UTM Horizontal: 341.58	
7. Oven curing (complete if applicable): Number of ovens: 2 Temperature of air contacting coated material as it leaves the oven (°F): <u>>200</u> Specify oven fuels: _____ Total maximum heat input to each oven: <u>88 MMBTU/HR</u>	
8. Application technique and transfer efficiency (%): _____	

COATINGS AND SOLVENTS

9. Complete the following table – Attach additional tables as needed – Fill in only the items necessary for determination of compliance with emission standard(s).													
Identify coatings	Maximum Usage		Normal Usage	Coating Composition: Volume and weight percent as applied								Density of Solvent Fraction	Coating Density
	Gal./Hr.	Gal./Mo.		Solids		Solvents (VOCs)		Water		Exempt Solvent			
			Gal./Mo.	Vol. %	Wt. %	Wt. %	Vol.	Wt.	Vol.	Wt.	Lbs./Gal.	Lbs./Gal.	
Primer	0.38	277.2	49.5	0	0	100	0	0	0	0	7.2558	7.2558	
Coatings	0.55	402.3	71.8	---	27	44.26	0	0	0	0	3.8389	8.6736	
Crosslinker	0.02	16.0	2.86	0	0	99.7	0	0	0	0	8.8970	8.9238	
Total coatings													
List the Thinning Solvents used with the coatings identified above:													
(1):													
(2):													
Clean-up solvents: Methyl Ethyl Ketone	0.03	21.8	3.9	0	0	100	0	0	0	0	6.76	6.76	
Other (specify):													
10. Page number: 33 Revision Number: _____ Date of Revision: _____													



TITLE V PERMIT APPLICATION PAINTING AND COATING OPERATIONS

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name: Hutchinson Body Sealing Systems	
2. Process description:	
3. Year of construction or last modification: 1989	4. Stack ID or flow diagram point identification (s): S-66 and S-67
If the emissions are controlled for compliance, attach an appropriate Air Pollution Control system form. If this printing operation is monitored for compliance, please attach the appropriate compliance demonstration form.	
5. Normal operating schedule <u>24</u> Hrs./Day <input checked="" type="checkbox"/> <u>7</u> Days/Wk. <u>365</u> N/A Days/Yr.	
6. Location of this operation in UTM coordinates: UTM Vertical: 4061.6 UTM Horizontal: 341.58	
7. Oven curing (complete if applicable): Number of ovens: 2 Temperature of air contacting coated material as it leaves the oven (°F): <u>>200</u> Specify oven fuels: _____ Total maximum heat input to each oven: <u>88 MMBTU/HR</u>	
8. Application technique and transfer efficiency (%):	

COATINGS AND SOLVENTS

9. Complete the following table – Attach additional tables as needed – Fill in only the items necessary for determination of compliance with emission standard(s).													
Identify coatings	Maximum Usage		Normal Usage	Coating Composition: Volume and weight percent as applied								Density of Solvent Fraction	Coating Density
	Gal./Hr.	Gal./Mo.		Solids		Solvents (VOCs)		Water		Exempt Solvent			
			Gal./Mo.	Vol. %	Wt. %	Wt. %	Vol.	Wt.	Vol.	Wt.	Lbs./Gal.	Lbs./Gal.	
Primer	0.38	277.2	49.5	0	0	100	0	0	0	0	7.2558	7.2558	
Coatings	0.55	402.3	71.8	---	27	44.26	0	0	0	0	3.8389	8.6736	
Crosslinker	0.02	16.0	2.86	0	0	99.7	0	0	0	0	8.8970	8.9238	
Total coatings													
List the Thinning Solvents used with the coatings identified above:													
(1):													
(2):													
Clean-up solvents: Methyl Ethyl Ketone	0.03	21.8	3.9	0	0	100	0	0	0	0	6.76	6.76	
Other (specify):													
10. Page number: 34 Revision Number: _____ Date of Revision: _____													



TITLE V PERMIT APPLICATION PAINTING AND COATING OPERATIONS

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name: Hutchinson Body Sealing Systems	
2. Process description:	
3. Year of construction or last modification: 1989	4. Stack ID or flow diagram point identification(s): S-66 and S-67
If the emissions are controlled for compliance, attach an appropriate Air Pollution Control system form. If this printing operation is monitored for compliance, please attach the appropriate compliance demonstration form.	
5. Normal operating schedule <u>24</u> Hrs./Day <input checked="" type="checkbox"/> <u>7</u> Days/Wk. <u>365</u> N/A Days/Yr.	
6. Location of this operation in UTM coordinates: UTM Vertical: 4061.6 UTM Horizontal: 341.58	
7. Oven curing (complete if applicable): Number of ovens: 2 Temperature of air contacting coated material as it leaves the oven (°F): <u>>200</u> Specify oven fuels: _____ Total maximum heat input to each oven: _____	
8. Application technique and transfer efficiency (%):	

COATINGS AND SOLVENTS

9. Complete the following table – Attach additional tables as needed – Fill in only the items necessary for determination of compliance with emission standard(s).													
Identify coatings	Maximum Usage		Normal Usage	Coating Composition: Volume and weight percent as applied								Density of Solvent Fraction	Coating Density
	Gal./Hr.	Gal./Mo.		Solids		Solvents (VOCs)	Water		Exempt Solvent				
			Gal./Mo.	Vol. %	Wt. %		Wt. %	Vol.	Wt.	Vol.	Wt.	Lbs./Gal.	Lbs./Gal.
Primer	0.38	277.2	49.5	0	0	100	0	0	0	0	7.2558	7.2558	
Coatings	0.55	402.3	71.8	---	27	44.26	0	0	0	0	3.8389	8.6736	
Crosslinker	0.02	16.0	2.86	0	0	99.7	0	0	0	0	8.8970	8.9238	
Total coatings													
List the Thinning Solvents used with the coatings identified above:													
(1):													
(2):													
Clean-up solvents: Methyl Ethyl Ketone	0.03	21.8	3.9	0	0	100	0	0	0	0	6.76	6.76	
Other (specify):													
10. Page number: 35 Revision Number: _____ Date of Revision: _____													



TITLE V PERMIT APPLICATION PAINTING AND COATING OPERATIONS

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name: Hutchinson Body Sealing Systems	
2. Process description:	
3. Year of construction or last modification: 1989	4. Stack ID or flow diagram point identification(s): S-66 and S-67
If the emissions are controlled for compliance, attach an appropriate Air Pollution Control system form. If this printing operation is monitored for compliance, please attach the appropriate compliance demonstration form.	
5. Normal operating schedule <u>24</u> Hrs./Day <input checked="" type="checkbox"/> <u>7</u> Days/Wk. <u>365</u> N/A Days/Yr.	
6. Location of this operation in UTM coordinates: UTM Vertical: 4061.6 UTM Horizontal: 341.58	
7. Oven curing (complete if applicable): Number of ovens: 2 Temperature of air contacting coated material as it leaves the oven (°F): <u>>200</u> Specify oven fuels: _____ Total maximum heat input to each oven: _____	
8. Application technique and transfer efficiency (%):	

COATINGS AND SOLVENTS

9. Complete the following table – Attach additional tables as needed – Fill in only the items necessary for determination of compliance with emission standard(s).													
Identify coatings	Maximum Usage		Normal Usage	Coating Composition: Volume and weight percent as applied								Density of Solvent Fraction	Coating Density
	Gal./Hr.	Gal./Mo.		Solids		Solvents (VOCs)	Water		Exempt Solvent				
			Gal./Mo.	Vol. %	Wt. %		Wt. %	Vol.	Wt.	Vol.	Wt.	Lbs./Gal.	Lbs./Gal.
Primer	0.38	277.2	49.5	0	0	100	0	0	0	0	7.2558	7.2558	
Coatings	0.55	402.3	71.8	---	27	44.26	0	0	0	0	3.8389	8.6736	
Crosslinker	0.02	16.0	2.86	0	0	99.7	0	0	0	0	8.8970	8.9238	
Total coatings													
List the Thinning Solvents used with the coatings identified above:													
(1):													
(2):													
Clean-up solvents: Methyl Ethyl Ketone	0.03	21.8	3.9	0	0	100	0	0	0	0	6.76	6.76	
Other (specify):													
10. Page number: 36 Revision Number: _____ Date of Revision: _____													



TITLE V PERMIT APPLICATION CONTROL EQUIPMENT - MISCELLANEOUS

GENERAL IDENTIFICATION AND DESCRIPTION		
1. Facility name: Hutchinson Body Sealing Systems	2. Emission source (identify): Source No. 37-0067-01 (Extrusion Line #1) and 37-0067-11 (Extrusion Line #2)	
3. Stack ID or flow diagram point identification (s): <div style="text-align: center;">S-38</div>		
CONTROL EQUIPMENT DESCRIPTION		
4. Describe the device in use. List the key operating parameters of this device and their normal operating range (e.g., pressure drop, gas flow rate, temperature): Overspray filters used in primer application booth.		
5. Manufacturer and model number (if available): Engineering and Industrial Services, Inc.		
6. Year of installation: 2000		
7. List of pollutant (s) to be controlled by this equipment and the expected control efficiency for each pollutant.		
Pollutant	Efficiency (%)	Source of data
Particulate matter	99	Manufacturer
8. Discuss how collected material is handled for reuse or disposal. Filters are disposed in local landfill per the facility's Special Waste Permit.		
9. If this control equipment is in series with some other control equipment, state and specify the overall efficiency. N/A		
10. Page number:	Revision Number:	Date of Revision:



TITLE V PERMIT APPLICATION CONTROL EQUIPMENT - MISCELLANEOUS

GENERAL IDENTIFICATION AND DESCRIPTION		
1. Facility name: Hutchinson Body Sealing Systems	2. Emission source (identify): Source No. 37-0067-01 (Extrusion Line #1) and 37-0067-11 (Extrusion Line #2)	
3. Stack ID or flow diagram point identification (s): <div style="text-align: center;">S-38</div>		
CONTROL EQUIPMENT DESCRIPTION		
4. Describe the device in use. List the key operating parameters of this device and their normal operating range (e.g., pressure drop, gas flow rate, temperature): Overspray filters used in primer application booth.		
5. Manufacturer and model number (if available): Engineering and Industrial Services, Inc.		
6. Year of installation: 2000		
7. List of pollutant (s) to be controlled by this equipment and the expected control efficiency for each pollutant.		
Pollutant	Efficiency (%)	Source of data
Particulate matter	99	Manufacturer
8. Discuss how collected material is handled for reuse or disposal. Filters are disposed in local landfill per the facility's Special Waste Permit.		
9. If this control equipment is in series with some other control equipment, state and specify the overall efficiency. N/A		
10. Page number: <div style="text-align: center;">38</div>	Revision Number:	Date of Revision:



TITLE V PERMIT APPLICATION CONTROL EQUIPMENT - MISCELLANEOUS

GENERAL IDENTIFICATION AND DESCRIPTION		
1. Facility name: Hutchinson Body Sealing Systems	2. Emission source (identify): Source No. 37-0067-01 (Extrusion Line #1) and 37-0067-11 (Extrusion Line #2)	
3. Stack ID or flow diagram point identification (s): <div style="text-align: center;">S-38</div>		
CONTROL EQUIPMENT DESCRIPTION		
4. Describe the device in use. List the key operating parameters of this device and their normal operating range (e.g., pressure drop, gas flow rate, temperature): Overspray filters used in primer application booth.		
5. Manufacturer and model number (if available): Engineering and Industrial Services, Inc.		
6. Year of installation: 2000		
7. List of pollutant (s) to be controlled by this equipment and the expected control efficiency for each pollutant.		
Pollutant	Efficiency (%)	Source of data
Particulate matter	99	Manufacturer
8. Discuss how collected material is handled for reuse or disposal. Filters are disposed in local landfill per the facility's Special Waste Permit.		
9. If this control equipment is in series with some other control equipment, state and specify the overall efficiency. N/A		
10. Page number:	39	Revision Number: Date of Revision:



TITLE V PERMIT APPLICATION CONTROL EQUIPMENT - MISCELLANEOUS

GENERAL IDENTIFICATION AND DESCRIPTION		
1. Facility name: Hutchinson Body Sealing Systems	2. Emission source (identify): Source No. 37-0067-01 (Extrusion Line #1) and 37-0067-11 (Extrusion Line #2)	
3. Stack ID or flow diagram point identification (s): <div style="text-align: center;">S-38</div>		
CONTROL EQUIPMENT DESCRIPTION		
4. Describe the device in use. List the key operating parameters of this device and their normal operating range (e.g., pressure drop, gas flow rate, temperature): Overspray filters used in primer application booth.		
5. Manufacturer and model number (if available): Engineering and Industrial Services, Inc.		
6. Year of installation: 2000		
7. List of pollutant (s) to be controlled by this equipment and the expected control efficiency for each pollutant.		
Pollutant	Efficiency (%)	Source of data
Particulate matter	99	Manufacturer
8. Discuss how collected material is handled for reuse or disposal. Filters are disposed in local landfill per the facility's Special Waste Permit.		
9. If this control equipment is in series with some other control equipment, state and specify the overall efficiency. N/A		
10. Page number: <div style="text-align: center;">40</div>	Revision Number:	Date of Revision:



TITLE V PERMIT APPLICATION CONTROL EQUIPMENT - MISCELLANEOUS

GENERAL IDENTIFICATION AND DESCRIPTION		
1. Facility name: Hutchinson Body Sealing Systems	2. Emission source (identify): Source No. 37-0067-01 (Extrusion Line #1) and 37-0067-11 (Extrusion Line #2)	
3. Stack ID or flow diagram point identification (s): <div style="text-align: center;">S-38</div>		
CONTROL EQUIPMENT DESCRIPTION		
4. Describe the device in use. List the key operating parameters of this device and their normal operating range (e.g., pressure drop, gas flow rate, temperature): Overspray filters used in primer application booth.		
5. Manufacturer and model number (if available): Engineering and Industrial Services, Inc.		
6. Year of installation: 2000		
7. List of pollutant (s) to be controlled by this equipment and the expected control efficiency for each pollutant.		
Pollutant	Efficiency (%)	Source of data
Particulate matter	99	Manufacturer
8. Discuss how collected material is handled for reuse or disposal. Filters are disposed in local landfill per the facility's Special Waste Permit.		
9. If this control equipment is in series with some other control equipment, state and specify the overall efficiency. N/A		
10. Page number: <div style="text-align: center;">41</div>	Revision Number:	Date of Revision:



TITLE V PERMIT APPLICATION CONTROL EQUIPMENT - MISCELLANEOUS

GENERAL IDENTIFICATION AND DESCRIPTION		
1. Facility name: Hutchinson Body Sealing Systems	2. Emission source (identify): Source No. 37-0067-01 (Extrusion Line #1) and 37-0067-11 (Extrusion Line #2)	
3. Stack ID or flow diagram point identification (s): <div style="text-align: center;">S-38</div>		
CONTROL EQUIPMENT DESCRIPTION		
4. Describe the device in use. List the key operating parameters of this device and their normal operating range (e.g., pressure drop, gas flow rate, temperature): Overspray filters used in primer application booth.		
5. Manufacturer and model number (if available): Engineering and Industrial Services, Inc.		
6. Year of installation: 2000		
7. List of pollutant (s) to be controlled by this equipment and the expected control efficiency for each pollutant.		
Pollutant	Efficiency (%)	Source of data
Particulate matter	99	Manufacturer
8. Discuss how collected material is handled for reuse or disposal. Filters are disposed in local landfill per the facility's Special Waste Permit.		
9. If this control equipment is in series with some other control equipment, state and specify the overall efficiency. N/A		
10. Page number:	42	Revision Number: Date of Revision:



TITLE V PERMIT APPLICATION CONTROL EQUIPMENT - MISCELLANEOUS

GENERAL IDENTIFICATION AND DESCRIPTION		
1. Facility name: Hutchinson Body Sealing Systems	2. Emission source (identify): Source No. 37-0067-01 (Extrusion Line #1) and 37-0067-11 (Extrusion Line #2)	
3. Stack ID or flow diagram point identification (s): <div style="text-align: center;">S-38</div>		
CONTROL EQUIPMENT DESCRIPTION		
4. Describe the device in use. List the key operating parameters of this device and their normal operating range (e.g., pressure drop, gas flow rate, temperature): Overspray filters used in primer application booth.		
5. Manufacturer and model number (if available): Engineering and Industrial Services, Inc.		
6. Year of installation: 2000		
7. List of pollutant (s) to be controlled by this equipment and the expected control efficiency for each pollutant.		
Pollutant	Efficiency (%)	Source of data
Particulate matter	99	Manufacturer
8. Discuss how collected material is handled for reuse or disposal. Filters are disposed in local landfill per the facility's Special Waste Permit.		
9. If this control equipment is in series with some other control equipment, state and specify the overall efficiency. N/A		
10. Page number: <div style="text-align: center;">43</div>	Revision Number:	Date of Revision:



TITLE V PERMIT APPLICATION CONTROL EQUIPMENT - MISCELLANEOUS

GENERAL IDENTIFICATION AND DESCRIPTION		
1. Facility name: Hutchinson Body Sealing Systems	2. Emission source (identify): Source No. 37-0067-01 (Extrusion Line #1) and 37-0067-11 (Extrusion Line #2)	
3. Stack ID or flow diagram point identification (s): <div style="text-align: center;">S-38</div>		
CONTROL EQUIPMENT DESCRIPTION		
4. Describe the device in use. List the key operating parameters of this device and their normal operating range (e.g., pressure drop, gas flow rate, temperature): Overspray filters used in primer application booth.		
5. Manufacturer and model number (if available): Engineering and Industrial Services, Inc.		
6. Year of installation: 2000		
7. List of pollutant (s) to be controlled by this equipment and the expected control efficiency for each pollutant.		
Pollutant	Efficiency (%)	Source of data
Particulate matter	99	Manufacturer
8. Discuss how collected material is handled for reuse or disposal. Filters are disposed in local landfill per the facility's Special Waste Permit.		
9. If this control equipment is in series with some other control equipment, state and specify the overall efficiency. N/A		
10. Page number:	44	Revision Number:
		Date of Revision:



TITLE V PERMIT APPLICATION CONTROL EQUIPMENT - MISCELLANEOUS

GENERAL IDENTIFICATION AND DESCRIPTION		
1. Facility name: Hutchinson Body Sealing Systems	2. Emission source (identify): Source No. 37-0067-01 (Extrusion Line #1) and 37-0067-11 (Extrusion Line #2)	
3. Stack ID or flow diagram point identification (s): <div style="text-align: center;">S-38</div>		
CONTROL EQUIPMENT DESCRIPTION		
4. Describe the device in use. List the key operating parameters of this device and their normal operating range (e.g., pressure drop, gas flow rate, temperature): Overspray filters used in primer application booth.		
5. Manufacturer and model number (if available): Engineering and Industrial Services, Inc.		
6. Year of installation: 2000		
7. List of pollutant (s) to be controlled by this equipment and the expected control efficiency for each pollutant.		
Pollutant	Efficiency (%)	Source of data
Particulate matter	99	Manufacturer
8. Discuss how collected material is handled for reuse or disposal. Filters are disposed in local landfill per the facility's Special Waste Permit.		
9. If this control equipment is in series with some other control equipment, state and specify the overall efficiency. N/A		
10. Page number:	45	Revision Number:
		Date of Revision:



TITLE V PERMIT APPLICATION

COMPLIANCE CERTIFICATION - MONITORING AND REPORTING

DESCRIPTION OF METHODS USED FOR DETERMINING COMPLIANCE

All sources that are subject to 1200-03-09-.02(11) of the Tennessee Air Pollution Control Regulations are required to certify compliance with all applicable requirements by including a statement within the permit application of the methods used for determining compliance. This statement must include a description of the monitoring, recordkeeping, and reporting requirements and test methods. In addition, the application must include a schedule for compliance certification submittals during the permit term. These submittals must be no less frequent than annually and may need to be more frequent if specified by the underlying applicable requirement or the Technical Secretary.

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name: Hutchinson Body Sealing Systems
2. Process emission source, fuel burning installation, or incinerator (identify): 37-0067-01 (Extrusion Line #1)
3. Stack ID or flow diagram point identification(s): S-66, S-67, S-2, and S-50

METHODS OF DETERMINING COMPLIANCE

4. This source as described under Item #2 of this application will use the following method(s) for determining compliance with applicable requirements (and special operating conditions from an existing permit). Check all that apply and attach the appropriate form(s)

- ☐ Continuous Emission Monitoring (CEM) - APC 20
 Pollutant(s): _____
- ☐ Emission Monitoring Using Portable Monitors - APC 21
 Pollutant(s): _____
- ☐ Monitoring Control System Parameters or Operating Parameters of a Process - APC 22
 Pollutant(s): _____
- ☐ Monitoring Maintenance Procedures - APC 23
 Pollutant(s): _____
- ☐ Stack Testing - APC 24
 Pollutant(s): _____
- ☐ Fuel Sampling & Analysis (FSA) - APC 25
 Pollutant(s): _____
- ☒ Recordkeeping - APC 26
 Pollutant(s): VOCs ; HAPs
- ☒ Other (please describe) - APC 27
 Pollutant(s): Visible emissions, SO₂, PM, and NO_x

5. Compliance certification reports will be submitted to the Division according to the following schedule:

Start date: 9/30/2018
 And every 365 days thereafter.

6. Compliance monitoring reports will be submitted to the Division according to the following schedule:

Start date: 11/30/2018
 And every 180 days thereafter.

7. Page number: 46 Revision number: _____ Date of revision: _____



TITLE V PERMIT APPLICATION

COMPLIANCE CERTIFICATION - MONITORING AND REPORTING

DESCRIPTION OF METHODS USED FOR DETERMINING COMPLIANCE

All sources that are subject to 1200-03-09-.02(11) of the Tennessee Air Pollution Control Regulations are required to certify compliance with all applicable requirements by including a statement within the permit application of the methods used for determining compliance. This statement must include a description of the monitoring, recordkeeping, and reporting requirements and test methods. In addition, the application must include a schedule for compliance certification submittals during the permit term. These submittals must be no less frequent than annually and may need to be more frequent if specified by the underlying applicable requirement or the Technical Secretary.

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name: Hutchinson Body Sealing Systems
2. Process emission source, fuel burning installation, or incinerator (identify): 37-0067-01 (Extrusion Line #1)
3. Stack ID or flow diagram point identification(s): S-66, S-67, S-2, and S-50

METHODS OF DETERMINING COMPLIANCE

4. This source as described under Item #2 of this application will use the following method(s) for determining compliance with applicable requirements (and special operating conditions from an existing permit). Check all that apply and attach the appropriate form(s)

- ☐ Continuous Emission Monitoring (CEM) - APC 20
 Pollutant(s): _____
- ☐ Emission Monitoring Using Portable Monitors - APC 21
 Pollutant(s): _____
- ☐ Monitoring Control System Parameters or Operating Parameters of a Process - APC 22
 Pollutant(s): _____
- ☐ Monitoring Maintenance Procedures - APC 23
 Pollutant(s): _____
- ☐ Stack Testing - APC 24
 Pollutant(s): _____
- ☐ Fuel Sampling & Analysis (FSA) - APC 25
 Pollutant(s): _____
- ☒ Recordkeeping - APC 26
 Pollutant(s): VOCs ; HAPs
- ☒ Other (please describe) - APC 27
 Pollutant(s): Visible emissions, SO2, PM, and NOx

5. Compliance certification reports will be submitted to the Division according to the following schedule:

Start date: 9/30/2018
 And every 365 days thereafter.

6. Compliance monitoring reports will be submitted to the Division according to the following schedule:

Start date: 11/30/2018
 And every 180 days thereafter.

7. Page number: 47 Revision number: _____ Date of revision: _____



TITLE V PERMIT APPLICATION

COMPLIANCE CERTIFICATION - MONITORING AND REPORTING

DESCRIPTION OF METHODS USED FOR DETERMINING COMPLIANCE

All sources that are subject to 1200-03-09-.02(11) of the Tennessee Air Pollution Control Regulations are required to certify compliance with all applicable requirements by including a statement within the permit application of the methods used for determining compliance. This statement must include a description of the monitoring, recordkeeping, and reporting requirements and test methods. In addition, the application must include a schedule for compliance certification submittals during the permit term. These submittals must be no less frequent than annually and may need to be more frequent if specified by the underlying applicable requirement or the Technical Secretary.

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 Pollutant(s): _____
- ☐ Emission Monitoring Using Portable Monitors - APC 21
 Pollutant(s): _____
- ☐ Monitoring Control System Parameters or Operating Parameters of a Process - APC 22
 Pollutant(s): _____
- ☐ Monitoring Maintenance Procedures - APC 23
 Pollutant(s): _____
- ☐ Stack Testing - APC 24
 Pollutant(s): _____
- ☐ Fuel Sampling & Analysis (FSA) - APC 25
 Pollutant(s): _____
- ☒ Recordkeeping - APC 26
 Pollutant(s): VOCs ; HAPs
- ☒ Other (please describe) - APC 27
 Pollutant(s): Visible emissions, SO₂, PM, and NO_x

5. Compliance certification reports will be submitted to the Division according to the following schedule:

Start date: 9/30/2018
 And every 365 days thereafter.

6. Compliance monitoring reports will be submitted to the Division according to the following schedule:

Start date: 11/30/2018
 And every 180 days thereafter.

7. Page number: 48 Revision number: _____ Date of revision: _____



TITLE V PERMIT APPLICATION

COMPLIANCE CERTIFICATION - MONITORING AND REPORTING

DESCRIPTION OF METHODS USED FOR DETERMINING COMPLIANCE

All sources that are subject to 1200-03-09-.02(11) of the Tennessee Air Pollution Control Regulations are required to certify compliance with all applicable requirements by including a statement within the permit application of the methods used for determining compliance. This statement must include a description of the monitoring, recordkeeping, and reporting requirements and test methods. In addition, the application must include a schedule for compliance certification submittals during the permit term. These submittals must be no less frequent than annually and may need to be more frequent if specified by the underlying applicable requirement or the Technical Secretary.

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name: Hutchinson Body Sealing Systems
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3. Stack ID or flow diagram point identification(s): S-66, S-67, S-2, and S-50

METHODS OF DETERMINING COMPLIANCE

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 Pollutant(s): _____
- ☐ Emission Monitoring Using Portable Monitors - APC 21
 Pollutant(s): _____
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 Pollutant(s): _____
- ☐ Stack Testing - APC 24
 Pollutant(s): _____
- ☐ Fuel Sampling & Analysis (FSA) - APC 25
 Pollutant(s): _____
- ☒ Recordkeeping - APC 26
 Pollutant(s): VOCs ; HAPs
- ☒ Other (please describe) - APC 27
 Pollutant(s): Visible emissions, SO2, PM, and NOx

5. Compliance certification reports will be submitted to the Division according to the following schedule:

Start date: 9/30/2018
 And every 365 days thereafter.

6. Compliance monitoring reports will be submitted to the Division according to the following schedule:

Start date: 11/30/2018
 And every 180 days thereafter.

7. Page number: 49 Revision number: _____ Date of revision: _____



TITLE V PERMIT APPLICATION

COMPLIANCE CERTIFICATION - MONITORING AND REPORTING

DESCRIPTION OF METHODS USED FOR DETERMINING COMPLIANCE

All sources that are subject to 1200-03-09-.02(11) of the Tennessee Air Pollution Control Regulations are required to certify compliance with all applicable requirements by including a statement within the permit application of the methods used for determining compliance. This statement must include a description of the monitoring, recordkeeping, and reporting requirements and test methods. In addition, the application must include a schedule for compliance certification submittals during the permit term. These submittals must be no less frequent than annually and may need to be more frequent if specified by the underlying applicable requirement or the Technical Secretary.

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 Pollutant(s): _____
- ☐ Emission Monitoring Using Portable Monitors - APC 21
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 Pollutant(s): _____
- ☐ Monitoring Maintenance Procedures - APC 23
 Pollutant(s): _____
- ☐ Stack Testing - APC 24
 Pollutant(s): _____
- ☐ Fuel Sampling & Analysis (FSA) - APC 25
 Pollutant(s): _____
- ☒ Recordkeeping - APC 26
 Pollutant(s): VOCs ; HAPs
- ☒ Other (please describe) - APC 27
 Pollutant(s): Visible emissions, SO₂, PM, and NO_x

5. Compliance certification reports will be submitted to the Division according to the following schedule:

Start date: 9/30/2018
 And every 365 days thereafter.

6. Compliance monitoring reports will be submitted to the Division according to the following schedule:

Start date: 11/30/2018
 And every 180 days thereafter.

7. Page number: 50 Revision number: _____ Date of revision: _____



TITLE V PERMIT APPLICATION

COMPLIANCE CERTIFICATION - MONITORING AND REPORTING

DESCRIPTION OF METHODS USED FOR DETERMINING COMPLIANCE

All sources that are subject to 1200-03-09-.02(11) of the Tennessee Air Pollution Control Regulations are required to certify compliance with all applicable requirements by including a statement within the permit application of the methods used for determining compliance. This statement must include a description of the monitoring, recordkeeping, and reporting requirements and test methods. In addition, the application must include a schedule for compliance certification submittals during the permit term. These submittals must be no less frequent than annually and may need to be more frequent if specified by the underlying applicable requirement or the Technical Secretary.

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name: Hutchinson Body Sealing Systems
2. Process emission source, fuel burning installation, or incinerator (identify): 37-0067-01 (Extrusion Line #1)
3. Stack ID or flow diagram point identification(s): S-66, S-67, S-2, and S-50

METHODS OF DETERMINING COMPLIANCE

4. This source as described under Item #2 of this application will use the following method(s) for determining compliance with applicable requirements (and special operating conditions from an existing permit). Check all that apply and attach the appropriate form(s)

- ☐ Continuous Emission Monitoring (CEM) - APC 20
 Pollutant(s): _____
- ☐ Emission Monitoring Using Portable Monitors - APC 21
 Pollutant(s): _____
- ☐ Monitoring Control System Parameters or Operating Parameters of a Process - APC 22
 Pollutant(s): _____
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 Pollutant(s): _____
- ☐ Stack Testing - APC 24
 Pollutant(s): _____
- ☐ Fuel Sampling & Analysis (FSA) - APC 25
 Pollutant(s): _____
- ☒ Recordkeeping - APC 26
 Pollutant(s): VOCs ; HAPs
- ☒ Other (please describe) - APC 27
 Pollutant(s): Visible emissions, SO₂, PM, and NO_x

5. Compliance certification reports will be submitted to the Division according to the following schedule:

Start date: 9/30/2018
 And every 365 days thereafter.

6. Compliance monitoring reports will be submitted to the Division according to the following schedule:

Start date: 11/30/2018
 And every 180 days thereafter.

7. Page number: 51 Revision number: _____ Date of revision: _____



TITLE V PERMIT APPLICATION

COMPLIANCE DEMONSTRATION BY RECORDKEEPING

Recordkeeping shall be acceptable as a compliance demonstration method provided that a correlation between the parameter value recorded and the applicable requirement is established.

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name: Hutchinson Body Sealing Systems	2. Stack ID or flow diagram point identification(s): S-66 and S-67
3. Emission source (identify): 37-0067-01 (Extrusion Line #1)	

MONITORING AND RECORDKEEPING DESCRIPTION

4. Pollutant(s) or parameter being monitored: VOCs and HAPs
5. Material or parameter being monitored and recorded: Usage of VOC and HAP-containing materials
6. Method of monitoring and recording: Monthly usage records will be maintained. Materials usage is multiplied by the VOC and HAP content of the material to determine compliance with the permitted VOC and HAP emission limits. VOC content will be determined by Method 24 or vendor information (i.e., materials safety data sheets). HAP content will use vendor information (i.e., materials safety data sheets).
7. Compliance demonstration frequency (specify the frequency with which compliance will be demonstrated): Monthly recordkeeping

8. Page number: <div style="text-align: center;">52</div>	Revision number:	Date of revision:
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TITLE V PERMIT APPLICATION

COMPLIANCE DEMONSTRATION BY RECORDKEEPING

Recordkeeping shall be acceptable as a compliance demonstration method provided that a correlation between the parameter value recorded and the applicable requirement is established.

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name: Hutchinson Body Sealing Systems	2. Stack ID or flow diagram point identification(s): S-66 and S-67
3. Emission source (identify): 37-0067-01 (Extrusion Line #1)	

MONITORING AND RECORDKEEPING DESCRIPTION

4. Pollutant(s) or parameter being monitored: VOCs and HAPs
5. Material or parameter being monitored and recorded: Usage of VOC and HAP-containing materials
6. Method of monitoring and recording: Monthly usage records will be maintained. Materials usage is multiplied by the VOC and HAP content of the material to determine compliance with the permitted VOC and HAP emission limits. VOC content will be determined by Method 24 or vendor information (i.e., materials safety data sheets). HAP content will use vendor information (i.e., materials safety data sheets).
7. Compliance demonstration frequency (specify the frequency with which compliance will be demonstrated): Monthly recordkeeping

8. Page number: <div style="text-align: center;">53</div>	Revision number:	Date of revision:
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TITLE V PERMIT APPLICATION

COMPLIANCE DEMONSTRATION BY RECORDKEEPING

Recordkeeping shall be acceptable as a compliance demonstration method provided that a correlation between the parameter value recorded and the applicable requirement is established.

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name: Hutchinson Body Sealing Systems	2. Stack ID or flow diagram point identification(s): S-66 and S-67
3. Emission source (identify): 37-0067-01 (Extrusion Line #1)	

MONITORING AND RECORDKEEPING DESCRIPTION

4. Pollutant(s) or parameter being monitored: VOCs and HAPs
5. Material or parameter being monitored and recorded: Usage of VOC and HAP-containing materials
6. Method of monitoring and recording: Monthly usage records will be maintained. Materials usage is multiplied by the VOC and HAP content of the material to determine compliance with the permitted VOC and HAP emission limits. VOC content will be determined by Method 24 or vendor information (i.e., materials safety data sheets). HAP content will use vendor information (i.e., materials safety data sheets).
7. Compliance demonstration frequency (specify the frequency with which compliance will be demonstrated): Monthly recordkeeping

8. Page number: <div style="text-align: center; font-size: 1.2em;">54</div>	Revision number:	Date of revision:
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TITLE V PERMIT APPLICATION

COMPLIANCE DEMONSTRATION BY RECORDKEEPING

Recordkeeping shall be acceptable as a compliance demonstration method provided that a correlation between the parameter value recorded and the applicable requirement is established.

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name: Hutchinson Body Sealing Systems	2. Stack ID or flow diagram point identification(s): S-66 and S-67
3. Emission source (identify): 37-0067-01 (Extrusion Line #1)	

MONITORING AND RECORDKEEPING DESCRIPTION

4. Pollutant(s) or parameter being monitored: VOCs and HAPs
5. Material or parameter being monitored and recorded: Usage of VOC and HAP-containing materials
6. Method of monitoring and recording: Monthly usage records will be maintained. Materials usage is multiplied by the VOC and HAP content of the material to determine compliance with the permitted VOC and HAP emission limits. VOC content will be determined by Method 24 or vendor information (i.e., materials safety data sheets). HAP content will use vendor information (i.e., materials safety data sheets).
7. Compliance demonstration frequency (specify the frequency with which compliance will be demonstrated): Monthly recordkeeping

8. Page number: <div style="text-align: center;">55</div>	Revision number:	Date of revision:
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TITLE V PERMIT APPLICATION

COMPLIANCE DEMONSTRATION BY RECORDKEEPING

Recordkeeping shall be acceptable as a compliance demonstration method provided that a correlation between the parameter value recorded and the applicable requirement is established.

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name: Hutchinson Body Sealing Systems	2. Stack ID or flow diagram point identification(s): S-66 and S-67
3. Emission source (identify): 37-0067-01 (Extrusion Line #1)	

MONITORING AND RECORDKEEPING DESCRIPTION

4. Pollutant(s) or parameter being monitored: VOCs and HAPs
5. Material or parameter being monitored and recorded: Usage of VOC and HAP-containing materials
6. Method of monitoring and recording: Monthly usage records will be maintained. Materials usage is multiplied by the VOC and HAP content of the material to determine compliance with the permitted VOC and HAP emission limits. VOC content will be determined by Method 24 or vendor information (i.e., materials safety data sheets). HAP content will use vendor information (i.e., materials safety data sheets).
7. Compliance demonstration frequency (specify the frequency with which compliance will be demonstrated): Monthly recordkeeping

8. Page number: 56	Revision number:	Date of revision:
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TITLE V PERMIT APPLICATION COMPLIANCE DEMONSTRATION BY OTHER METHOD(S)

GENERAL IDENTIFICATION AND DESCRIPTION		
1. Facility name: Hutchinson Body Sealing Systems	2. Stack ID or flow diagram point identification(s): S-2 and S-50	
3. Emission source (identify): 37-0067-01 (Extrusion Line #1)		
MONITORING DESCRIPTION		
4. Pollutant(s) or parameter being monitored: VOCs and HAPs		
5. Description of the method of monitoring: Visible emissions: In accordance with the Tennessee Opacity Matrix per memo dated 06/18/1996 from Mr. Alvin Pratt. SO ₂ , PM, NO _x , and VOCs: Maximum heat input shall not exceed 0.88 MMBtu/hr and only natural gas (or electricity) shall be used as a fuel source.		
6. Compliance demonstration frequency (specify the frequency with which compliance will be demonstrated): Opacity matrix		
7. Page number:	Revision number:	Date of revision:



TITLE V PERMIT APPLICATION COMPLIANCE DEMONSTRATION BY OTHER METHOD(S)

GENERAL IDENTIFICATION AND DESCRIPTION		
1. Facility name: Hutchinson Body Sealing Systems	2. Stack ID or flow diagram point identification(s): S-2 and S-50	
3. Emission source (identify): 37-0067-01 (Extrusion Line #1)		
MONITORING DESCRIPTION		
4. Pollutant(s) or parameter being monitored: VOCs and HAPs		
5. Description of the method of monitoring: Visible emissions: In accordance with the Tennessee Opacity Matrix per memo dated 06/18/1996 from Mr. Alvin Pratt. SO ₂ , PM, NO _x , and VOCs: Maximum heat input shall not exceed 0.88 MMBtu/hr and only natural gas (or electricity) shall be used as a fuel source.		
6. Compliance demonstration frequency (specify the frequency with which compliance will be demonstrated): Opacity matrix		
7. Page number: <div style="text-align: center;">58</div>	Revision number:	Date of revision:



TITLE V PERMIT APPLICATION COMPLIANCE DEMONSTRATION BY OTHER METHOD(S)

GENERAL IDENTIFICATION AND DESCRIPTION		
1. Facility name: Hutchinson Body Sealing Systems	2. Stack ID or flow diagram point identification(s): S-2 and S-50	
3. Emission source (identify): 37-0067-01 (Extrusion Line #1)		
MONITORING DESCRIPTION		
4. Pollutant(s) or parameter being monitored: VOCs and HAPs		
5. Description of the method of monitoring: Visible emissions: In accordance with the Tennessee Opacity Matrix per memo dated 06/18/1996 from Mr. Alvin Pratt. SO ₂ , PM, NO _x , and VOCs: Maximum heat input shall not exceed 0.88 MMBtu/hr and only natural gas (or electricity) shall be used as a fuel source.		
6. Compliance demonstration frequency (specify the frequency with which compliance will be demonstrated): Opacity matrix		
7. Page number: <div style="text-align: center; font-weight: bold;">59</div>	Revision number:	Date of revision:



TITLE V PERMIT APPLICATION COMPLIANCE DEMONSTRATION BY OTHER METHOD(S)

GENERAL IDENTIFICATION AND DESCRIPTION		
1. Facility name: Hutchinson Body Sealing Systems	2. Stack ID or flow diagram point identification(s): S-2 and S-50	
3. Emission source (identify): 37-0067-01 (Extrusion Line #1)		
MONITORING DESCRIPTION		
4. Pollutant(s) or parameter being monitored: VOCs and HAPs		
5. Description of the method of monitoring: Visible emissions: In accordance with the Tennessee Opacity Matrix per memo dated 06/18/1996 from Mr. Alvin Pratt. SO ₂ , PM, NO _x , and VOCs: Maximum heat input shall not exceed 0.88 MMBtu/hr and only natural gas (or electricity) shall be used as a fuel source.		
6. Compliance demonstration frequency (specify the frequency with which compliance will be demonstrated): Opacity matrix		
7. Page number: <div style="text-align: center;">60</div>	Revision number:	Date of revision:



TITLE V PERMIT APPLICATION COMPLIANCE DEMONSTRATION BY OTHER METHOD(S)

GENERAL IDENTIFICATION AND DESCRIPTION		
1. Facility name: Hutchinson Body Sealing Systems	2. Stack ID or flow diagram point identification(s): S-2 and S-50	
3. Emission source (identify): 37-0067-01 (Extrusion Line #1)		
MONITORING DESCRIPTION		
4. Pollutant(s) or parameter being monitored: VOCs and HAPs		
5. Description of the method of monitoring: Visible emissions: In accordance with the Tennessee Opacity Matrix per memo dated 06/18/1996 from Mr. Alvin Pratt. SO ₂ , PM, NO _x , and VOCs: Maximum heat input shall not exceed 0.88 MMBtu/hr and only natural gas (or electricity) shall be used as a fuel source.		
6. Compliance demonstration frequency (specify the frequency with which compliance will be demonstrated): Opacity matrix		
7. Page number: <div style="text-align: center; font-size: 1.2em;">61</div>	Revision number:	Date of revision:



TITLE V PERMIT APPLICATION

EMISSIONS FROM PROCESS EMISSION SOURCE / FUEL BURNING INSTALLATION / INCINERATOR

GENERAL IDENTIFICATION AND DESCRIPTION				
1. Facility name: Hutchinson Body Sealing Systems		2. Stack ID or flow diagram point identification(s): S-2 and S-50		
3. Process emission source / Fuel burning installation / Incinerator (identify): 37-0067-01 (Extrusion Line #1)				
EMISSIONS SUMMARY TABLE – CRITERIA AND FUGITIVE EMISSIONS				
4. Complete the following <u>emissions summary for regulated air pollutants</u> . Fugitive emissions shall be included. Attach calculations and emission factor references.				
Air Pollutant	Maximum Allowable Emissions		Actual Emissions	
	Tons per Year	Reserved for State use (Pounds per Hour - Item 7, APC 30)	Tons per Year	Reserved for State use (Pounds per Hour - Item 8, APC 30)
Particulate Matter (TSP)	5.75		N/A	
(Fugitive Emissions)	N/A		N/A	
Sulfur Dioxide	0.0000		N/A	
(Fugitive Emissions)	N/A		N/A	
Volatile Organic Compounds	29.68		N/A	
(Fugitive Emissions)	N/A		N/A	
Carbon Monoxide	0.0009		N/A	
(Fugitive Emissions)	N/A		N/A	
Lead	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Nitrogen Oxides	0.0066		N/A	
(Fugitive Emissions)	N/A		N/A	
Total Reduced Sulfur	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Mercury	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	

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AIR POLLUTANT	Maximum Allowable Emissions		Actual Emissions	
	Tons per Year	Reserved for State use (Pounds per Hour - Item 7, APC 30)	Tons per Year	Reserved for State use (Pounds per Hour - Item 8, APC 30)
Asbestos	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Beryllium	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Vinyl Chloride	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Fluorides	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Gaseous Fluorides	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Greenhouse Gases in CO ₂ Equivalents	N/A		N/A	

EMISSIONS SUMMARY TABLE – FUGITIVE HAZARDOUS AIR POLLUTANTS

5. Complete the following emissions summary for regulated air pollutants that are hazardous air pollutant(s). Fugitive emissions shall be included. Attach calculations and emission factor references.

Air Pollutant & CAS	Maximum Allowable Emissions		Actual Emissions	
	Tons per Year	Reserved for State use (Pounds per Hour - Item 7, APC 30)	Tons per Year	Reserved for State use (Pounds per Hour - Item 8, APC 30)
See Attached				

6. Page number: Revision number: Date of revision

PROCESS EMISSION SOURCE: 37-0067-01 (Extrusion Line #1)

AIR POLLUTANT & CAS	MAXIMUM ALLOWABLE EMISSIONS		ACTUAL EMISSIONS	
	TONS/YEAR	RESERVED FOR STATE USE (POUNDS PER HOUR – ITEM 7, APC V.30)	TONS/YEAR	RESERVED FOR STATE USE (POUNDS PER HOUR – ITEM 8, APC V.30)
Diethylene glycol monobutyl ether 112-34-5	0.7456		N/A	
Ethylbenzene 100-41-4	0.5840		N/A	
Methyl isobutyl ketone 108-10-1	1.5783		N/A	
Methylene chloride 75-09-2	0.0610		N/A	
Methylene diphenyl diisocyanate 101-68-8	3.74E-04		N/A	
P-xylene 106-42-3	0.0347		N/A	
Toluene 108-88-3	12.3947		N/A	
Xylene 1330-20-7	1.9258		N/A	



TITLE V PERMIT APPLICATION

EMISSIONS FROM PROCESS EMISSION SOURCE / FUEL BURNING INSTALLATION / INCINERATOR

GENERAL IDENTIFICATION AND DESCRIPTION				
1. Facility name: Hutchinson Body Sealing Systems		2. Stack ID or flow diagram point identification(s): S-2 and S-50		
3. Process emission source / Fuel burning installation / Incinerator (identify): 37-0067-01 (Extrusion Line #1)				
EMISSIONS SUMMARY TABLE – CRITERIA AND FUGITIVE EMISSIONS				
4. Complete the following <u>emissions summary for regulated air pollutants</u> . Fugitive emissions shall be included. Attach calculations and emission factor references.				
Air Pollutant	Maximum Allowable Emissions		Actual Emissions	
	Tons per Year	Reserved for State use (Pounds per Hour - Item 7, APC 30)	Tons per Year	Reserved for State use (Pounds per Hour - Item 8, APC 30)
Particulate Matter (TSP)	5.75		N/A	
(Fugitive Emissions)	N/A		N/A	
Sulfur Dioxide	0.0000		N/A	
(Fugitive Emissions)	N/A		N/A	
Volatile Organic Compounds	29.68		N/A	
(Fugitive Emissions)	N/A		N/A	
Carbon Monoxide	0.0009		N/A	
(Fugitive Emissions)	N/A		N/A	
Lead	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Nitrogen Oxides	0.0066		N/A	
(Fugitive Emissions)	N/A		N/A	
Total Reduced Sulfur	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Mercury	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	

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AIR POLLUTANT	Maximum Allowable Emissions		Actual Emissions	
	Tons per Year	Reserved for State use (Pounds per Hour - Item 7, APC 30)	Tons per Year	Reserved for State use (Pounds per Hour - Item 8, APC 30)
Asbestos	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Beryllium	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Vinyl Chloride	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Fluorides	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Gaseous Fluorides	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Greenhouse Gases in CO ₂ Equivalents	N/A		N/A	

EMISSIONS SUMMARY TABLE – FUGITIVE HAZARDOUS AIR POLLUTANTS

5. Complete the following emissions summary for regulated air pollutants that are hazardous air pollutant(s). Fugitive emissions shall be included. Attach calculations and emission factor references.

Air Pollutant & CAS	Maximum Allowable Emissions		Actual Emissions	
	Tons per Year	Reserved for State use (Pounds per Hour - Item 7, APC 30)	Tons per Year	Reserved for State use (Pounds per Hour - Item 8, APC 30)
See Attached				

6. Page number: Revision number: Date of revision

PROCESS EMISSION SOURCE: 37-0067-14 (Extrusion Line #4)

AIR POLLUTANT & CAS	MAXIMUM ALLOWABLE EMISSIONS		ACTUAL EMISSIONS	
	TONS/YEAR	RESERVED FOR STATE USE (POUNDS PER HOUR – ITEM 7, APC V.30)	TONS/YEAR	RESERVED FOR STATE USE (POUNDS PER HOUR – ITEM 8, APC V.30)
Diethylene glycol monobutyl ether 112-34-5	0.4514		N/A	
Ethylbenzene 100-41-4	1.0402		N/A	
Methyl isobutyl ketone 108-10-1	2.1152		N/A	
Methylene chloride 75-09-2	0.0610		N/A	
Methylene diphenyl diisocyanate 101-68-8	3.74E-04		N/A	
P-xylene 106-42-3	0.0480		N/A	
Toluene 108-88-3	12.0474		N/A	
Xylene 1330-20-7	2.4209		N/A	



TITLE V PERMIT APPLICATION

EMISSIONS FROM PROCESS EMISSION SOURCE / FUEL BURNING INSTALLATION / INCINERATOR

GENERAL IDENTIFICATION AND DESCRIPTION				
1. Facility name: Hutchinson Body Sealing Systems		2. Stack ID or flow diagram point identification(s): S-2 and S-50		
3. Process emission source / Fuel burning installation / Incinerator (identify): 37-0067-01 (Extrusion Line #1)				
EMISSIONS SUMMARY TABLE – CRITERIA AND FUGITIVE EMISSIONS				
4. Complete the following <u>emissions summary for regulated air pollutants</u> . Fugitive emissions shall be included. Attach calculations and emission factor references.				
Air Pollutant	Maximum Allowable Emissions		Actual Emissions	
	Tons per Year	Reserved for State use (Pounds per Hour - Item 7, APC 30)	Tons per Year	Reserved for State use (Pounds per Hour - Item 8, APC 30)
Particulate Matter (TSP)	5.75		N/A	
(Fugitive Emissions)	N/A		N/A	
Sulfur Dioxide	0.0000		N/A	
(Fugitive Emissions)	N/A		N/A	
Volatile Organic Compounds	29.68		N/A	
(Fugitive Emissions)	N/A		N/A	
Carbon Monoxide	0.0009		N/A	
(Fugitive Emissions)	N/A		N/A	
Lead	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Nitrogen Oxides	0.0066		N/A	
(Fugitive Emissions)	N/A		N/A	
Total Reduced Sulfur	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Mercury	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	

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AIR POLLUTANT	Maximum Allowable Emissions		Actual Emissions	
	Tons per Year	Reserved for State use (Pounds per Hour - Item 7, APC 30)	Tons per Year	Reserved for State use (Pounds per Hour - Item 8, APC 30)
Asbestos	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Beryllium	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Vinyl Chloride	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Fluorides	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Gaseous Fluorides	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Greenhouse Gases in CO ₂ Equivalents	N/A		N/A	

EMISSIONS SUMMARY TABLE – FUGITIVE HAZARDOUS AIR POLLUTANTS

5. Complete the following emissions summary for regulated air pollutants that are hazardous air pollutant(s). Fugitive emissions shall be included. Attach calculations and emission factor references.

Air Pollutant & CAS	Maximum Allowable Emissions		Actual Emissions	
	Tons per Year	Reserved for State use (Pounds per Hour - Item 7, APC 30)	Tons per Year	Reserved for State use (Pounds per Hour - Item 8, APC 30)
See Attached				

6. Page number: Revision number: Date of revision

PROCESS EMISSION SOURCE: 37-0067-15 (Extrusion Line #5)

AIR POLLUTANT & CAS	MAXIMUM ALLOWABLE EMISSIONS		ACTUAL EMISSIONS	
	TONS/YEAR	RESERVED FOR STATE USE (POUNDS PER HOUR – ITEM 7, APC V.30)	TONS/YEAR	RESERVED FOR STATE USE (POUNDS PER HOUR – ITEM 8, APC V.30)
Diethylene glycol monobutyl ether 112-34-5	0.4514		N/A	
Ethylbenzene 100-41-4	0.7403		N/A	
Methyl isobutyl ketone 108-10-1	1.9889		N/A	
Methylene chloride 75-09-2	0.0610		N/A	
Methylene diphenyl diisocyanate 101-68-8	3.74E-04		N/A	
P-xylene 106-42-3	0.0347		N/A	
Toluene 108-88-3	12.3947		N/A	
Xylene 1330-20-7	1.9258		N/A	



TITLE V PERMIT APPLICATION

EMISSIONS FROM PROCESS EMISSION SOURCE / FUEL BURNING INSTALLATION / INCINERATOR

GENERAL IDENTIFICATION AND DESCRIPTION				
1. Facility name: Hutchinson Body Sealing Systems		2. Stack ID or flow diagram point identification(s): S-2 and S-50		
3. Process emission source / Fuel burning installation / Incinerator (identify): 37-0067-01 (Extrusion Line #1)				
EMISSIONS SUMMARY TABLE – CRITERIA AND FUGITIVE EMISSIONS				
4. Complete the following <u>emissions summary for regulated air pollutants</u> . Fugitive emissions shall be included. Attach calculations and emission factor references.				
Air Pollutant	Maximum Allowable Emissions		Actual Emissions	
	Tons per Year	Reserved for State use (Pounds per Hour - Item 7, APC 30)	Tons per Year	Reserved for State use (Pounds per Hour - Item 8, APC 30)
Particulate Matter (TSP)	5.75		N/A	
(Fugitive Emissions)	N/A		N/A	
Sulfur Dioxide	0.0000		N/A	
(Fugitive Emissions)	N/A		N/A	
Volatile Organic Compounds	29.68		N/A	
(Fugitive Emissions)	N/A		N/A	
Carbon Monoxide	0.0009		N/A	
(Fugitive Emissions)	N/A		N/A	
Lead	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Nitrogen Oxides	0.0066		N/A	
(Fugitive Emissions)	N/A		N/A	
Total Reduced Sulfur	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Mercury	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	

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AIR POLLUTANT	Maximum Allowable Emissions		Actual Emissions	
	Tons per Year	Reserved for State use (Pounds per Hour - Item 7, APC 30)	Tons per Year	Reserved for State use (Pounds per Hour - Item 8, APC 30)
Asbestos	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Beryllium	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Vinyl Chloride	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Fluorides	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Gaseous Fluorides	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Greenhouse Gases in CO ₂ Equivalents	N/A		N/A	

EMISSIONS SUMMARY TABLE – FUGITIVE HAZARDOUS AIR POLLUTANTS

5. Complete the following emissions summary for regulated air pollutants that are hazardous air pollutant(s). Fugitive emissions shall be included. Attach calculations and emission factor references.

Air Pollutant & CAS	Maximum Allowable Emissions		Actual Emissions	
	Tons per Year	Reserved for State use (Pounds per Hour - Item 7, APC 30)	Tons per Year	Reserved for State use (Pounds per Hour - Item 8, APC 30)
See Attached				

6. Page number: Revision number: Date of revision

PROCESS EMISSION SOURCE: 37-0067-02 (Secondaries)

AIR POLLUTANT & CAS	MAXIMUM ALLOWABLE EMISSIONS		ACTUAL EMISSIONS	
	TONS/YEAR	RESERVED FOR STATE USE (POUNDS PER HOUR – ITEM 7, APC V.30)	TONS/YEAR	RESERVED FOR STATE USE (POUNDS PER HOUR – ITEM 8, APC V.30)
2-(2-butoxyethoxy) ethanol 112-34-5	0.0161		N/A	
2-(2-methoxyethoxy) ethanol 111-77-3	0.0161		N/A	
2-ethoxyethanol 110-80-5	0.0161		N/A	
2-methoxyethanol 109-86-4	0.0161		N/A	
Carbon tetrachloride 56-23-5	0.0679		N/A	
Chlorobenzene 108-90-7	0.0995		N/A	
Ethylbenzene 100-41-4	0.6502		N/A	
Ethylene glycol 107-21-1	0.0804		N/A	
Formaldehyde 50-00-0	0.0161		N/A	
Methanol 67-56-1	0.0161		N/A	
P-xylene 106-42-3	0.0316		N/A	
Triethylamine 121-44-8	0.0161		N/A	
Toluene 108-88-3	0.0679		N/A	
Triethylene glycol monobutyl ether 143-22-6	0.0161		N/A	
Xylene 1330-20-7	2.6010		N/A	



TITLE V PERMIT APPLICATION

EMISSIONS FROM PROCESS EMISSION SOURCE / FUEL BURNING INSTALLATION / INCINERATOR

GENERAL IDENTIFICATION AND DESCRIPTION				
1. Facility name: Hutchinson Body Sealing Systems		2. Stack ID or flow diagram point identification(s): S-2 and S-50		
3. Process emission source / Fuel burning installation / Incinerator (identify): 37-0067-01 (Extrusion Line #1)				
EMISSIONS SUMMARY TABLE – CRITERIA AND FUGITIVE EMISSIONS				
4. Complete the following <u>emissions summary for regulated air pollutants</u> . Fugitive emissions shall be included. Attach calculations and emission factor references.				
Air Pollutant	Maximum Allowable Emissions		Actual Emissions	
	Tons per Year	Reserved for State use (Pounds per Hour - Item 7, APC 30)	Tons per Year	Reserved for State use (Pounds per Hour - Item 8, APC 30)
Particulate Matter (TSP)	5.75		N/A	
(Fugitive Emissions)	N/A		N/A	
Sulfur Dioxide	0.0000		N/A	
(Fugitive Emissions)	N/A		N/A	
Volatile Organic Compounds	29.68		N/A	
(Fugitive Emissions)	N/A		N/A	
Carbon Monoxide	0.0009		N/A	
(Fugitive Emissions)	N/A		N/A	
Lead	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Nitrogen Oxides	0.0066		N/A	
(Fugitive Emissions)	N/A		N/A	
Total Reduced Sulfur	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Mercury	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	

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AIR POLLUTANT	Maximum Allowable Emissions		Actual Emissions	
	Tons per Year	Reserved for State use (Pounds per Hour - Item 7, APC 30)	Tons per Year	Reserved for State use (Pounds per Hour - Item 8, APC 30)
Asbestos	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Beryllium	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Vinyl Chloride	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Fluorides	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Gaseous Fluorides	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Greenhouse Gases in CO ₂ Equivalents	N/A		N/A	

EMISSIONS SUMMARY TABLE – FUGITIVE HAZARDOUS AIR POLLUTANTS

5. Complete the following emissions summary for regulated air pollutants that are hazardous air pollutant(s). Fugitive emissions shall be included. Attach calculations and emission factor references.

Air Pollutant & CAS	Maximum Allowable Emissions		Actual Emissions	
	Tons per Year	Reserved for State use (Pounds per Hour - Item 7, APC 30)	Tons per Year	Reserved for State use (Pounds per Hour - Item 8, APC 30)
See Attached				

6. Page number: Revision number: Date of revision

PROCESS EMISSION SOURCE: 37-0067-01 (Extrusion Line #2)

AIR POLLUTANT & CAS	MAXIMUM ALLOWABLE EMISSIONS		ACTUAL EMISSIONS	
	TONS/YEAR	RESERVED FOR STATE USE (POUNDS PER HOUR – ITEM 7, APC V.30)	TONS/YEAR	RESERVED FOR STATE USE (POUNDS PER HOUR – ITEM 8, APC V.30)
Diethylene glycol monobutyl ether 112-34-5	0.7456		N/A	
Ethylbenzene 100-41-4	0.7103		N/A	
Methyl isobutyl ketone 108-10-1	1.4207		N/A	
Methylene chloride 75-09-2	0.0610		N/A	
Methylene diphenyl diisocyanate 101-68-8	3.74E-04		N/A	
P-xylene 106-42-3	0.0347		N/A	
Toluene 108-88-3	11.7002		N/A	
Xylene 1330-20-7	1.9000		N/A	



TITLE V PERMIT APPLICATION

EMISSIONS FROM PROCESS EMISSION SOURCE / FUEL BURNING INSTALLATION / INCINERATOR

GENERAL IDENTIFICATION AND DESCRIPTION				
1. Facility name: Hutchinson Body Sealing Systems		2. Stack ID or flow diagram point identification(s): S-2 and S-50		
3. Process emission source / Fuel burning installation / Incinerator (identify): 37-0067-01 (Extrusion Line #1)				
EMISSIONS SUMMARY TABLE – CRITERIA AND FUGITIVE EMISSIONS				
4. Complete the following <u>emissions summary for regulated air pollutants</u> . Fugitive emissions shall be included. Attach calculations and emission factor references.				
Air Pollutant	Maximum Allowable Emissions		Actual Emissions	
	Tons per Year	Reserved for State use (Pounds per Hour - Item 7, APC 30)	Tons per Year	Reserved for State use (Pounds per Hour - Item 8, APC 30)
Particulate Matter (TSP)	5.75		N/A	
(Fugitive Emissions)	N/A		N/A	
Sulfur Dioxide	0.0000		N/A	
(Fugitive Emissions)	N/A		N/A	
Volatile Organic Compounds	29.68		N/A	
(Fugitive Emissions)	N/A		N/A	
Carbon Monoxide	0.0009		N/A	
(Fugitive Emissions)	N/A		N/A	
Lead	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Nitrogen Oxides	0.0066		N/A	
(Fugitive Emissions)	N/A		N/A	
Total Reduced Sulfur	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Mercury	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	

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AIR POLLUTANT	Maximum Allowable Emissions		Actual Emissions	
	Tons per Year	Reserved for State use (Pounds per Hour - Item 7, APC 30)	Tons per Year	Reserved for State use (Pounds per Hour - Item 8, APC 30)
Asbestos	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Beryllium	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Vinyl Chloride	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Fluorides	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Gaseous Fluorides	N/A		N/A	
(Fugitive Emissions)	N/A		N/A	
Greenhouse Gases in CO ₂ Equivalents	N/A		N/A	

EMISSIONS SUMMARY TABLE – FUGITIVE HAZARDOUS AIR POLLUTANTS

5. Complete the following emissions summary for regulated air pollutants that are hazardous air pollutant(s). Fugitive emissions shall be included. Attach calculations and emission factor references.

Air Pollutant & CAS	Maximum Allowable Emissions		Actual Emissions	
	Tons per Year	Reserved for State use (Pounds per Hour - Item 7, APC 30)	Tons per Year	Reserved for State use (Pounds per Hour - Item 8, APC 30)
See Attached				

6. Page number: Revision number: Date of revision

PROCESS EMISSION SOURCE: 37-0067-13 (Extrusion Line #3)

AIR POLLUTANT & CAS	MAXIMUM ALLOWABLE EMISSIONS		ACTUAL EMISSIONS	
	TONS/YEAR	RESERVED FOR STATE USE (POUNDS PER HOUR – ITEM 7, APC V.30)	TONS/YEAR	RESERVED FOR STATE USE (POUNDS PER HOUR – ITEM 8, APC V.30)
Diethylene glycol monobutyl ether 112-34-5	0.7456		N/A	
Ethylbenzene 100-41-4	5.3222		N/A	
Methyl isobutyl ketone 108-10-1	20.4120		N/A	
Methylene chloride 75-09-2	0.0610		N/A	
Methylene diphenyl diisocyanate 101-68-8	3.74E-04		N/A	
Toluene 108-88-3	26.5986		N/A	
Xylene 1330-20-7	20.4120		N/A	



TITLE V PERMIT APPLICATION EMISSION SUMMARY FOR THE FACILITY OR FOR THE SOURCES CONTAINED IN THIS APPLICATION

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name:
 Hutchinson Body Sealing Systems

EMISSIONS SUMMARY TABLE – CRITERIA AND SELECTED POLLUTANTS

2. Complete the following emissions summary for regulated air pollutants at this facility or for the sources contained in this application.

Air Pollutant	Summary of Maximum Allowable Emissions		Summary of Actual Emissions	
	Tons per Year	Reserved for State use (Pounds per Hour- Item 4, APC 28)	Tons per Year	Reserved for State use (Pounds per Hour- Item 4, APC 28)
Particulate Matter (TSP)	41.0		N/A	
Sulfur Dioxide	0.0000		N/A	
Volatile Organic Compounds	29.68		N/A	
Carbon Monoxide	0.0009		N/A	
Lead	N/A		N/A	
Nitrogen Oxides	0.0066		N/A	
Total Reduced Sulfur	N/A		N/A	
Mercury	N/A		N/A	
Asbestos	N/A		N/A	
Beryllium	N/A		N/A	
Vinyl Chlorides	N/A		N/A	
Fluorides	N/A		N/A	
Gaseous Fluorides	N/A		N/A	
Greenhouse Gases in CO ₂ Equivalents	N/A		N/A	

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EMISSIONS SUMMARY TABLE – HAZARDOUS AIR POLLUTANTS

3. Complete the following emissions summary for regulated air pollutants that are hazardous air pollutant(s) at this facility or for the sources contained in this application.

Air Pollutant & CAS	Summary of Maximum Allowable Emissions		Summary of Actual Emissions	
	Tons per Year	Reserved for State use (Pounds per Hour- Item 5, APC 28)	Tons per Year	Reserved for State use (Pounds per Hour- Item 5, APC 28)
2-(2-butoxyethoxy) ethanol 112-34-5				
2-(2-methoxyethoxy) ethanol 111-77-3				
2-ethoxyethanol 110-80-5				
2-methoxyethanol 109-86-4				
Carbon tetrachloride 56-23-5				
Chlorobenzene 108-90-7				
Diethylene glycol monobutyl ether 112-34-5				
Ethylbenzene 100-41-4				
Ethylene glycol 107-21-1				
Formaldehyde 50-00-0	.0164		N/A	
Methanol 67-56-1	.0161		N/A	
Methyl isobutyl ketone 108-10-1				
Methylene chloride 75-09-2				
Methylene diphenyl diisocyanate 101-68-8	1.87E-03		N/A	
P-xylene 106-42-3	.2318		N/A	
Triethylamine 121-44-8	.0161		N/A	
Toluene 108-88-3	75.2112		N/A	
Triethylene glycol monobutyl ether 143-22-6	.0161		N/A	
Xylene 1330-20-7	31.1104		N/A	

4. Page number:

Revision number:

Date of revision:

69



TITLE V PERMIT APPLICATION CURRENT EMISSIONS REQUIREMENTS AND STATUS

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name: Hutchinson Body Sealing Systems	2. Emission source number 37-0067-01, 37-0067-02, 37-0067-11, 37-0067-13, 37-0067-14, and 37-0067-15
-------------------------------------------------------------	---------------------------------------------------------------------------------------------------------

3. Describe the process emission source / fuel burning installation / incinerator.
Extrusion Lines 1-5 and Secondaries

EMISSIONS AND REQUIREMENTS

4. Identify if only a part of the source is subject to this requirement	5. Pollutant	6. Applicable requirement(s): TN Air Pollution Control Regulations, 40 CFR, permit restrictions, air quality based standards	7. Limitation	8. Maximum actual emissions	9. Compliance status (In/Out)
	VOCs	1200-3-7-.07(2)	217 tons/12 months	41.7 tons/yr	IN
	Total HAPs	1200-3-5-.01	25 tons/12 months	19.4 tons/yr	IN
	Individual HAPs	1200-3-5-.01	10 tons/12 months	1.942 tons/yr	IN
	Visible Emissions	1200-3-5-.01(1) and 1200-3-5-.03(6)	20% Opacity	10%	IN
	Particulates	1200-3-7	.02 grains/dscf 41 tons/12 months	0.06t ons/yr	IN
	SO2	1200-3-14	.02 tons/yr	0.0002 tons/yr	IN
	NOX	1200-3-7-.07	4.0 tons/yr	0.1 tons/yr	IN

10. Other applicable requirements (new requirements that apply to this source during the term of this permit)

11. Page number: **70** Revision number: Date of revision:



TITLE V PERMIT APPLICATION COMPLIANCE PLAN AND COMPLIANCE CERTIFICATION

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name:

Hutchinson Body Sealing Systems

2. List all the process emission source(s) or fuel burning installation(s) or incinerator(s) that are part of this application.

Source No. 37-0067-01- Extrusion Line #1, Source No. 37-0067-02 - Secondaries (Corner Flocking and Press Molding Processes), Source No. 37-0067-11 - Extrusion Line #2, Source No. 37-0067-13 - Extrusion Line #3, Source No. 37-0067-14 - Extrusion Line #4, and Source No. 37-0067-15 - Extrusion Line #5

COMPLIANCE PLAN AND CERTIFICATION

3. Indicate that source(s) which are contained in this application are presently in compliance with all applicable requirements, by checking the following:

X

A. Attached is a statement of identification of the source(s) currently in compliance. We will continue to operate and maintain the source(s) to assure compliance with all the applicable requirements for the duration of the permit.

B. APC 30 form(s) includes new requirements that apply or will apply to the source(s) during the term of the permit. We will meet such requirements on a timely basis.

4. Indicate that there are source(s) that are contained in this application which are not presently in full compliance, by checking both of the following:

N/A

A. Attached is a statement of identification of the source(s) not in compliance, non-complying requirement(s), brief description of the problem, and the proposed solution.

N/A

B. We will achieve compliance according to the following schedule:

Action

Deadline

Progress reports will be submitted:

Start date: N/A

and every 180 days thereafter until compliance is achieved.

5. State the compliance status with any applicable compliance assurance monitoring and compliance certification requirements that have been promulgated under section 114(a)(3) of the Clean Air Act as of the date of submittal of this APC 31.

N/A

6. Page number:

Revision number:

Date of revision:

Manufacturer



TITLE V PERMIT APPLICATION APPLICATION COMPLETENESS CHECK LIST

Note to Applicants: The Application Completeness Check List is required by Division Rule 1200-03-09-.02(11)(d)1(ii)(I) and is used by Division staff to determine whether or not an application is complete. This checklist will be used to resolve any dispute between the applicant and the Division regarding the completeness of an application.

Section 1: Identification and Diagrams (APC 1 and APC 2)		
Requirement	Complete	Incomplete
Site Information	<input type="checkbox"/>	<input type="checkbox"/>
Contact Information (Responsible Official)	<input type="checkbox"/>	<input type="checkbox"/>
Contact Information (Technical)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Contact Information (Billing)	<input type="checkbox"/>	<input type="checkbox"/>
Type of Permit Requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Accidental Release Information	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Nonattainment/Additional Control Area Designation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
List of Valid Permits	<input checked="" type="checkbox"/>	<input type="checkbox"/>
List and description of process emission sources, fuel burning installations, and incinerators	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Flow diagram attached?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
List of Insignificant Activities	<input checked="" type="checkbox"/>	<input type="checkbox"/>
List of Storage Piles	<input checked="" type="checkbox"/>	<input type="checkbox"/>
List of States within 50 Miles	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Section 2: Emission Source Description Forms		
Forms are complete as received:	<input type="checkbox"/>	
Forms are incomplete (one or more application forms not submitted)	<input type="checkbox"/>	
Forms are incomplete (missing information on the following application forms):	APC Form 3, Stack Identification	<input checked="" type="checkbox"/>
	APC Form 4, Fuel Burning Non-Process Equipment	<input checked="" type="checkbox"/>
	APC Form 5, Stationary Gas Turbines or Internal Combustion Engines	<input type="checkbox"/>
	APC Form 6, Storage Tanks	<input type="checkbox"/>
	APC Form 7, Incinerators	<input type="checkbox"/>
	APC Form 8, Printing Operations	<input type="checkbox"/>
	APC Form 9, Painting and Coating Operations	<input checked="" type="checkbox"/>
	APC Form 10, Miscellaneous Processes	<input type="checkbox"/>
	APC Form 33, Stage I and Stage II Vapor Recovery Equipment	<input type="checkbox"/>
	APC Form 34, Open Burning	<input type="checkbox"/>

Section 3: Air Pollution Control System Forms			
Forms are complete as received:		<input type="checkbox"/>	
Forms are incomplete (one or more application forms not submitted)		<input type="checkbox"/>	
Forms are incomplete (missing information on the following application forms):	APC Form 11, Control Equipment - Miscellaneous	<input checked="" type="checkbox"/>	
	APC Form 13, Adsorbers	<input type="checkbox"/>	
	APC Form 14, Catalytic or Thermal Oxidation Equipment	<input type="checkbox"/>	
	APC Form 15, Cyclones/Settling Chambers	<input type="checkbox"/>	
	APC Form 17, Wet Collection Systems	<input type="checkbox"/>	
	APC Form 18, Baghouse/Fabric Filters	<input type="checkbox"/>	
Section 4: Compliance Demonstration Forms			
Forms are complete as received:		<input type="checkbox"/>	
Forms are incomplete (one or more application forms not submitted)		<input type="checkbox"/>	
Forms are incomplete (missing information on the following application forms):	APC Form 19, Compliance Certification - Monitoring and Reporting - Description of Methods for Determining Compliance	<input checked="" type="checkbox"/>	
	APC Form 20, Continuous Emissions Monitoring	<input type="checkbox"/>	
	APC Form 21, Portable Monitors	<input type="checkbox"/>	
	APC Form 22, Control System Parameters or Operating Parameters of a Process	<input type="checkbox"/>	
	APC Form 23, Monitoring Maintenance Procedures	<input type="checkbox"/>	
	APC Form 24, Stack Testing	<input type="checkbox"/>	
	APC Form 25, Fuel Sampling and Analysis	<input type="checkbox"/>	
	APC Form 26, Recordkeeping	<input checked="" type="checkbox"/>	
	APC Form 27, Other Methods	<input checked="" type="checkbox"/>	
	APC Form 28, Emissions from Process Emissions Sources / Fuel Burning Installations / Incinerators	<input checked="" type="checkbox"/>	
	APC Form 29, Emissions Summary for the Facility or for the Source Contained in This Application	<input checked="" type="checkbox"/>	
	APC Form 30, Current Emissions Requirements and Status	<input checked="" type="checkbox"/>	
	APC Form 32, Air Monitoring Network	<input type="checkbox"/>	
Section 5: Statement of Completeness and Certification of Compliance			
Requirement	Complete	Incomplete	Not Applicable
Certification of Truth, Accuracy, and Completeness (Form APC 1, Section 5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
General Identification and Description (Form APC 31, Items 1 and 2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Compliance Certification for Sources Currently in Compliance (Form APC 31, Item 3A)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Compliance Certification for New Applicable Requirements (Form APC 31, Item 3B)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Identification of Sources Currently Not in Compliance (Form APC 31, Item 4A)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Compliance Schedule for Sources Currently Not in Compliance (Form APC 31, Item 4B)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Compliance Certification for Enhanced Monitoring (Form APC 31, Item 5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section 6: Miscellaneous Information		
Item	Included	Not Included
For Title V modifications, is a description of the modification included?	<input type="checkbox"/>	<input type="checkbox"/>
Request for Permit Shield	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Calculations on which emissions-related information are based	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Identification of alternative operating scenarios, as applicable	<input type="checkbox"/>	<input type="checkbox"/>
Explanation of any proposed exemptions from otherwise applicable requirements	<input type="checkbox"/>	<input type="checkbox"/>
Other information needed for completeness (explain in comments)	<input type="checkbox"/>	<input type="checkbox"/>
Section 7: Comments		
Describe any missing information below or in a separate attachment:		
Section 8: Application Completeness		
Application is Complete	<input type="checkbox"/>	
Application is Incomplete	<input checked="" type="checkbox"/>	

Instructions for Form APC 35

The following minimum requirements for Title V applications are established by 40 CFR §70.5(c), and the information described below must be included in the application. An application may not omit information needed to determine the applicability of, or to impose, any applicable requirement¹, or to evaluate the fee amount required under the approved fee schedule. **Sources subject to Title IV of the Clean Air Act (Acid Rain Program) must use nationally-standardized forms for Acid Rain portions of permit applications and compliance plans.**

General Information – applications must include the following information:

- (1) Identifying information, including company name and address (or plant name and address if different from the company name), owner's name and agent, and telephone number and names of plant site manager/contact.
- (2) A description of the source's processes and products by SIC Code, including those associated with any proposed alternative operating scenarios².
- (3) The following information to the extent it is needed to determine or regulate emissions: fuels, fuel use, raw materials, production rates, and operating schedules.
- (4) A list of insignificant activities. Tennessee Air Pollution Control Regulations (TAPCR) 1200-03-09-.04(5)(g) includes a list of insignificant activities that do not need to be included in permit applications. However, insignificant activities that are exempted because of size or production rate but are not listed in 1200-03-09-.04(5)(g) must be included in the application.

Emissions-Related Information – applications must include the following information:

- (1) All emissions of regulated air pollutants³ from any emissions unit, except where such units are exempted. Emission rates must be reported in tons per year and in units that are consistent with the applicable standard reference test method. For applicants subject to a facility-wide emissions cap, emissions can be reported as an aggregate value for the entire facility, except where more specific information is needed (e. g., where it is necessary to assure compliance with an applicable requirement for a specific emissions unit).
- (2) Identification and description of all stacks/emission points (information required on Form APC 3).
- (3) Any limits on the source that affect emissions (e. g., operating hours or work practice standards).
- (4) Any information needed to identify or implement proposed alternative operating scenarios. The application must demonstrate that the facility has obtained all required authorizations for any proposed alternative operating scenarios or a certification that the facility has submitted all relevant materials to the permitting authority for obtaining the required authorizations.
- (5) Calculations on which emissions and/or stack information is based.

Compliance Information – applications must include the following information:

- (1) Identification and description of air pollution control equipment and compliance monitoring devices or activities.
- (2) A citation and description of all applicable requirements.

¹ **Applicable requirements** include: approved State Implementation Plan (SIP) requirements, major New Source Review requirements, NSPS and MACT requirements, Acid Rain Program requirements, requirements established pursuant to §504(b) of the Clean Air Act (Title V compliance methods), and requirements for solid waste combustion (Clean Air Act Section 129). For a complete list, see the definition in TAPCR 1200-03-09-.02(11)(b).

² **Alternative operating scenarios** are authorized scenarios that subject an emissions unit to different applicable requirements, depending on the mode of operation.

³ **Regulated air pollutant** means NO_x, VOC, any pollutant subject to a National Ambient Air Quality Standard, any pollutant regulated by an NSPS or MACT standard, or any Class I or II substance regulated under Title VI of the Clean Air Act (ozone depleting substances).

- (3) A description of (or reference to) any test method used to determine compliance with applicable requirements.
- (4) An explanation of any proposed exemptions from otherwise applicable requirements.
- (5) Other specific information that may be necessary to implement and enforce other applicable requirements of the Clean Air Act (e. g., information related to stack height limitations developed pursuant to Clean Air Act section 123).

Compliance Certification and Compliance Plan – applications must include the following information:

- (1) A description of the compliance status of the source with respect to all applicable requirements, as follows:
 - (a) For applicable requirements with which the source is in compliance, a statement that the source will continue to comply with such requirements.
 - (b) For applicable requirements that will become effective during the permit term, a statement that the source will meet such requirements on a timely basis.
 - (c) For requirements for which the source is not in compliance at the time of permit issuance, submit the following information:
 - (i) A narrative description of how the source will achieve compliance with such requirements.
 - (ii) A schedule of compliance for sources that are not in compliance with all applicable requirements at the time of permit issuance. The schedule must include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirements for which the source will be in noncompliance at the time of permit issuance. This compliance schedule must be at least as stringent as the schedule contained in any enforcement order or consent decree to which the source is subject.
 - (iii) A schedule for submission of certified progress reports no less frequently than every six months.
- (2) A schedule for submission of compliance certifications during the permit term.
- (3) A statement indicating the source's compliance status with any applicable enhanced monitoring and compliance certification requirements of the Act.
- (4) A certification of the truth, accuracy, and completeness of the application.

STEP #1

Enter Month

Permit Renewal

Enter Year

8/5/2018

STEP #2

Enter pounds of EPDM Extruded per month (Data acquired from Common/Extusion/Daily Log/Monthly Extrusion

Line1	586,848
Line 2	558,179
Line 3	2,308,669
Line 4	2,909,685
Line 5	2,320,673
	8,684,054 lbs/month
	4,342 tons/month

STEP #3**Days Extrusion Operated(Daily Log):**

60

Days

Data acquired from Common/Extusion
/Daily Log/Monthly Extrusion Report

Hours Extrusion Lines Operated During the Month:

644

hours/month

STEP #4**Days Secondaries Operated(Daily Log)**

60

Days/Month

Hours Secondaries Operated During the Month:

1440

hours/month

Step #5

Sum of Steps 6-8

Total

2084

hours/month

STEP #6

Enter the amount of each material used during the month in usage tab.

STEP #7

Complete Cumulative Summary Page and Individual HAPs Page

STEP #8

Print out all worksheets

Compare Emissions to Permit Limits

**VOC CONTAINING MATERIALS
HUTCHINSON SEALING SYSTEMS, INC.
CHURCH HILL, TENNESSEE**

Permit Renewal 43317												
Process Material	Specific Gravity	Density	%VOC	VOCs (lbs/gal)	Container Size	Monthly Usage	Conversion Factors		Monthly Usage (gal)	VOC	HAP	
3M Adhesion Promotor	0.8153	6.8000	93.00	6.3240	260 gal	260 gal	1	1	260.00	1,644.24	#REF!	
Acheson Part C (Emralon 8370C)	1.0700	8.9238	100.00	8.9238	301 qt	300.5 qt	4	1	75.13	670.40	#REF!	
Acheson TW-040	1.0300	8.5902	21.37	1.8357	735 gal	2735 gal	1	1	2735.00	5,020.71	#REF!	
Acheson TW-077	1.0400	8.6736	44.26	3.8391	750 gal	750 gal	1	1	750.00	2,879.35	#REF!	
Aerkroil	0.8700	7.2558	60.00	4.3535	41 oz	40.603 oz	16	7.2558	0.35	1.52	0.00	
Apollo 2077	1.0600	8.8404	1.89	0.1669	1 lb	35.859 lb	8.8404	1	4.06	0.68	0.00	
Apollo Blast 6003 (Cyberbond)	0.8770	7.3142	99.90	7.3069	4 gal	14 gal	1	1	14.00	102.30	0.00	
Bostik Hot Melt	1.5311	12.7693	0.00	0.0000	350 lb	837.05 lb	1	12.7693	65.55	0.00	0.00	
Bostik Mastic	1.5311	12.7693	3.00	0.4800	5 gal	0 gal	1	1	0.00	0.00	#REF!	
ChemLok 459X	0.8729	7.2800	96.50	7.0252	5 gal	0 gal	1	1	0.00	0.00	0.664	
Chemglaze 9956	0.8717	7.2700	94.30	6.8556	1 gal	0 gal	1	1	0.00	0.00	#REF!	
Chemglaze 9986	0.8753	7.3000	90.40	6.5992	1 gal	7 gal	1	1	7.00	46.19	#REF!	
FlockLok 6389	0.9952	8.3000	43.00	3.5690	1 gal	0 gal	1	1	0.00	0.00	0.00	
Focklok 852	0.9900	8.2600	48.00	3.9648	55 gal	0 gal	1	1	0.00	0.00	#REF!	
FlockLok 853A	0.9976	8.3200	48.00	3.9936	55 gal	0 gal	1	1	0.00	0.00	1.56	
FlockLok 855	0.9832	8.2000	46.76	3.8343	55 gal	2750 gal	1	1	2750.00	10,544.38	#REF!	
FlockLok 870	0.9712	8.1000	44.89	3.6500	55 gal	440 gal	1	1	440.00	1,606.00	#REF!	
Isopropyl Alcohol	0.7906	6.5933	100.00	6.5933	55 gal	55 gal	1	1	55.00	362.63	0.00	
Loctite 411/Frekote Aqualine R-120	1.0500	8.7570	2.00	0.1751	12.8 oz	0 oz	16	8.7570	0.00	0.00	0.00	
McLube 1829T2	1.1000	9.1740	0.00	0.0000	55 gal	0 gal	1	1.0000	0.00	0.00	0.00	
MEK/Acetone (50%/50%)	0.8600	7.1724	100.00	7.1724	55 gal	165 gal	1	1	165.00	591.72	#REF!	
Misty	0.8500	7.0890	50.00	3.5445	14 oz	540.39 oz	16	7.0890	4.76	16.89	0.00	
Nulube	1.0100	8.4234	90.00	7.5811	5 gal	60 gal	1	1.0000	60.00	454.86	#REF!	
Plasti Dip	1.1000	9.1740	5.10	0.4679	14.5 oz	0.5927 oz	16	9.1740	0.00	0.00	0.00	
Rohm and Haas 6008	0.9400	7.8396	42.00	3.2926	55 gal	0 gal	1	1	0.00	0.00	0.00	
Rohm and Haas 6009	0.9200	7.6728	44.80	3.4374	55 gal	0 gal	1	1	0.00	0.00	0.00	
Rohm and Haas Robond TR 5125	1.0900	9.0906	14.30	1.3000	5 gal	340 gal	1	1	340.00	442.00	302.40	
Stahl WT-21-270	1.0100	8.4234	22.34	1.8818	5 gal	200 gal	1	1	200.00	376.36	0.74	
Stahl XR-21-498	1.0000	8.3400	50.00	4.1700	5 gal	32 gal	1	1	32.00	133.44	0.00	
Tint AYD 8003 STT	1.8900	15.7626	20.00	3.1600	5 gal	5 gal	1	1	5.00	15.80	7.90	
Unistole P-401 Toluene/HPT Blend	0.8700	7.2558	100.00	7.2558	55 gal	1815 gal	1	1	1815.00	13,169.28	#REF!	
UV Dye (TA-001 Fluorescent)	1.0200	8.5068	0.00	0.0000	5 gal	9 gal	1	1	9.00	0.00	0.00	
UV Dye MA 21 678					5 gal	10 gal	1	1	10.00	0.00	0.00	
WD-40	0.8170	6.8138	49.50	3.3728	8 oz	0 oz	16	6.8138	0.00	0.00	0.00	
Unlock	1.0000	8.3400	0.10	0.0083	20 oz	248.24 oz	16	8.3400	1.86	0.02	0.00	
WDA	0.9800	8.1732	10.00	0.8173	1 qt	25 gal	4	1	6.25	5.11	0.00	
Xylene	0.9800	8.1732	10.00	0.8173	1 gal	0 gal	1	1	0.00	0.00	#REF!	
Rubber						4,525,055 lbs			4,525,055	3749.10	4416.45	
										41,832.98	#REF!	

3M Adhesion Promotor
Acheson Part C (Emralon 8370C)
Acheson TW-040
Acheson TW-077
Aerkroil
Apollo 2077
Apollo Blast 6003 (Cyberbond)
Bostik Hot Melt
Bostik Mastic
ChemLok 459X
Chemglaze 9956
Chemglaze 9986
FlockLok 6389
Focklok 852
FlockLok 853A
FlockLok 855
FlockLok 870
Isopropyl Alcohol
Loctite 411/Frekote Aqualine R-120
McLube 1829T2
MEK/Acetone (50%/50%)
Misty
Nulube
Plasti Dip
Rohm and Haas 6008
Rohm and Haas 6009
Rohm and Haas Robond TR 5125
Stahl WT-21-270
Stahl XR-21-498
Tint AYD 8003 STT
Unistole P-401 Toluene/HPT Blend
UV Dye (TA-001 Aqueous Fluorescent)
UV Dye MA 21 678
WD-40
Unlock
WDA
Xylene
Rubber

**ANNUAL MATERIAL USAGE
HUTCHINSON SEALING SYSTEMS, INC.
CHURCH HILL, TENNESSEE**

	Chemical Name	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Totals
1	3M Adhesion Promotor	0 gal	0 gal	0 gal	52 gal	0 gal	0 gal	52 gal	0 gal	0 gal	52 gal	0 gal	0 gal	156
2	Acheson Part C (Emralon 8370C)	70 qt	50 qt	80 qt	55 qt	60 qt	55 qt	60 qt	75 qt	50 qt	65 qt	55 qt	55 qt	730
3	Acheson TW-040	300 gal	250 gal	400 gal	300 gal	300 gal	250 gal	350 gal	350 gal	250 gal	250 gal	300 gal	300 gal	3,600
4	Acheson TW-077	95 gal	35 gal	90 gal	60 gal	90 gal	70 gal	80 gal	90 gal	55 gal	50 gal	70 gal	70 gal	855
5	Aerkroil	10 oz	30 oz	20 oz	10 oz	10 oz	10 oz	10 oz	2 oz	0 oz	1 oz	1 oz	1 oz	105
6	Apollo 2077	0 lb	30 lb	20 lb	20 lb	0 lb	20 lb	0 lb	40 lb	23 lb	20 lb	20 lb	20 lb	213
7	Apollo Blast 6003 (Cyberbond)	4 gal	8 gal	8 gal	4 gal	8 gal	8 gal	4 gal	8 gal	16 gal	8 gal	10 gal	10 gal	96
8	Bostik Hot Melt	1050 lb	1050 lb	700 lb	700 lb	1050 lb	350 lb	1050 lb	1050 lb	350 lb	1050 lb	700 lb	700 lb	9,800
9	Bostik Mastic	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0
10	ChemLok 459X	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0
11	Chemglaze 9956	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0
12	Chemglaze 9986	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0
13	FlockLok 6389	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0
14	Flocklok 852	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0
15	FlockLok 853A	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0
16	FlockLok 855	330 gal*	385 gal*	275 gal*	385 gal	440 gal*	385 gal*	330 gal*	440 gal	495 gal*	275 gal*	440 gal*	440 gal*	4,620
17	FlockLok 870	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0
18	Isopropyl Alcohol	110 gal	110 gal	220 gal	220 gal	385 gal	220 gal	330 gal	385 gal	495 gal	495 gal	385 gal	385 gal	3,740
19	Loctite 411/Frekote Aqualine R-	0 oz	0 oz	0 oz	0 oz	0 oz	0 oz	0 oz	0 oz	0 oz	0 oz	0 oz	0 oz	0
20	McLube 1829T2	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0
21	MEK	55 gal	55 gal	110 gal	55 gal	55 gal	55 gal	110 gal	55 gal	110 gal	55 gal	55 gal	55 gal	825
22	Misty	168 oz	364 oz	0 oz	14 oz	12 oz	12 oz	12 oz	24 oz	12 oz	16 oz	16 oz	16 oz	666
23	NuLube	10 gal	5 gal	15 gal	5 gal	5 gal	5 gal	5 gal	5 gal	10 gal	5 gal	5 gal	5 gal	80
24	Plasti Dip	0 oz	0 oz	0 oz	0 oz	0 oz	0 oz	0 oz	0 oz	0 oz	0 oz	0 oz	0 oz	0
25	Rohm and Haas 6008	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0
26	Rohm and Haas 6009	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0
27	Rohm and Haas Robond TR 5125	20 gal	35 gal	30 gal	25 gal	40 gal	40 gal	25 gal	35 gal	30 gal	30 gal	20 gal	10 gal	340
28	Stahl WT-21-270	20 gal	20 gal	20 gal	20 gal	0 gal	20 gal	5 gal	10 gal	10 gal	10 gal	15 gal	15 gal	165
29	Stahl XR-21-498	1 gal	0 gal	5 gal	1 gal	0 gal	1 gal	1 gal	1 gal	1 gal	0 gal	1 gal	1 gal	13
30	Tint AYD 8003 ST	0 gal	5 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	5
31	Unistole P-401 Toluene/HPT Blend	110 gal	55 gal	55 gal	55 gal	110 gal	55 gal	55 gal	165 gal	110 gal	110 gal	110 gal	110 gal	1,100
32	UV Dye (TA-001 Fluorescent)	0 gal	1 gal	1 gal	1 gal	0 gal	0 gal	0 gal	1 gal	0 gal	0 gal	1 gal	1 gal	6
33	UV Dye MA 21 001	5 gal	5 gal	0 gal	0 gal	5 gal	0 gal	0 gal	5 gal	0 gal	0 gal	0 gal	0 gal	20
34	WD-40	0 oz	0 oz	0 oz	0 oz	0 oz	0 oz	0 oz	0 oz	0 oz	0 oz	0 oz	0 oz	0
35	Unlock	240 oz	0 oz	0 oz	0 oz	8 oz	0 oz	0 oz	24 oz	24 oz	24 oz	6 oz	6 oz	332
36	WDA (Emissions included under	0 qt	13 qt	0 qt	0 qt	13 qt	0 qt	0 qt	0 qt	0 qt	0 qt	0 qt	0 qt	25
37	Xylene	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0
38	Rubber Usage	627,274 lbs	700,305 lbs	1,505,685 lbs	626,748 lbs	743,460 lbs	729,546 lbs	442,408 lbs	763,804 lbs	679,924 lbs	718,384 lbs	525,295 lbs	621,221 lbs	8,684,054
	Line 1	46,849 lbs	51,447 lbs	51,605 lbs	54,458 lbs	54,453 lbs	41,463 lbs	42,147 lbs	53,180 lbs	39,334 lbs	55,533 lbs	63,803 lbs	32,576 lbs	586,848
	Line 2	38,649 lbs	48,234 lbs	54,757 lbs	56,890 lbs	65,239 lbs	50,701 lbs	36,221 lbs	47,305 lbs	41,398 lbs	49,869 lbs	21,575 lbs	47,341 lbs	558,179
	Line 3	145,050 lbs	150,827 lbs	902,357 lbs	126,552 lbs	129,793 lbs	163,919 lbs	71,007 lbs	127,835 lbs	138,282 lbs	86,530 lbs	158,228 lbs	108,289 lbs	2,308,669
	Line 4	199,064 lbs	221,522 lbs	243,587 lbs	219,355 lbs	306,583 lbs	273,447 lbs	163,304 lbs	266,381 lbs	259,541 lbs	288,400 lbs	255,084 lbs	213,417 lbs	2,909,685
	Line 5	197,662 lbs	228,275 lbs	253,379 lbs	169,493 lbs	187,392 lbs	200,016 lbs	129,729 lbs	269,103 lbs	201,369 lbs	238,052 lbs	266,005 lbs	219,598 lbs	2,560,073
		627,274	700,305	1,505,685	626,748	743,460	729,546	442,408	763,804	679,924	718,384	764,695	621,221	8,923,454

**CUMULATIVE EMISSIONS
HUTCHINSON SEALING SYSTEMS, INC.
CHURCH HILL, TENNESSEE**

Title V Major Source Operating Permit Number 560527

Emission Source Reference No.: 37-0067

Condition E5

Emission Source	VOC Emitted (tons/month)	HAP Emitted (tons/month)	PM Emitted (tons/month)
Source 01 Emissions	29.6766	22.7576	5.6670
Source 02 Emissions	25.2506	4.1040	0.0000
Source 11 Emissions	28.5297	21.8896	9.5673
Source 13 Emissions	73.3490	78.7471	9.5676
Source 14 Emissions	30.1348	23.3316	8.6667
Source 15 Emissions	29.6766	22.7576	7.5667
Natural Gas combustion (all	0.0000	0.0000	0.0000
	216.6174	173.5875	41.0353

Hutchinson Sealing Systems, Inc.
Church Hill, TN
PERMIT RENEWAL

SECONDARIES (37-0067-02)

Permit Renewal

Process Material	Usage (gals/mo)	VOC Content (lb/gal)	VOC Emissions (tons/mo)	PM Content (lb/gal)	PM Emissions (tons/mo)	110-80-2- (Butoxyethoxy) Ethanol (lb/gal)	110-80-4- 2- (Butoxyethoxy) Ethanol (lb/gal)	111-77-3 2-(2- Methoxyethoxy) Ethanol (tons/mo)	111-77-3 2-(2- Methoxyethoxy) Ethanol (tons/mo)	110-80-5 2- Ethoxyethanol lb/gal	110-80-5 2- Ethoxyethanol tons/mo	109-86-2 2- Methoxyethan ol - lb/gal	109-86-4 2- Methoxyethan ol - (tons/mo)	56-23-5 Carbon Tetrachlorid e - lb/gal	56-23-5 Carbon Tetrachlorid e - tons/mo
Aerokrol or equivalent	160.15	4.35	0.3483	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Apollo 2077 or equivalent	38.01	0.17	0.0032	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Chemlok 459X or equivalent	868.00	7.03	3.0510	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Flocklok 6389 or equivalent	88.40	3.57	0.1578	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Isopropyl Alcohol or equivalent	6104.00	6.59	20.1127	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Locitite 411/Frekote Aqualine R-120	0.00	0.18	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Locitite 454 or Equivalent	0.00	0.18	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Misty or Equivalent	214.82	3.54	0.3802	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Plasti Dip or Equivalent	215.40	0.47	0.0506	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Locitite 401 or Equivalent	246.40	0.18	0.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Rohm and Haas Robond TR 5125	1680.00	0.89	0.7466	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0900	0.0756
TAK Pak 7452 or Equivalent	352.40	0.07	0.0119	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Stahl WT-21-988 or Equivalent	364.00	1.24	0.2253	0.0000	0.0000	1.0000	0.1820	1.0000	0.1820	1.0000	0.1820	1.0000	0.1820	0.0000	0.0000
WD 40 or Equivalent	83.83	3.3728	0.1414	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total			25.250574		0.000000		0.182000		0.182000		0.182000		0.182000		0.075600

LN 1 29.6766
2 28.53
3 73.35
4 30.13
5 29.68
Total 216.617174

5.667
9.57
9.57
8.67
7.57
41.047

Process Material	Chlorobenzene (108-90-7) lb/gal	Chlorobenzene (108-90-7) tons/mo	Ethyl Benzene (100- 41-4) lb/gal	Ethyl Benzene (100- 41-4) tons/mo	Ethylene Glycol (107-21-1) lb/gal	Ethylene Glycol (107-21-1) tons/mo	Formaldehyde (50-00-0) lb/gal	Formaldehyde (50-00-0) tons/mo	Methanol (67-56- 5)-lb/gal	Methanol (67- 56-1) tons/mo	Triethylamine (121-44-8) lb/gal	Triethylamine (121-44-8) tons/mo	Toluene 108-88-3 (lb/gal)	Toluene 108-88-3 (tons/mo)	Total HAPs (tons/mo)
Aerokrol or equivalent	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000000	0.0000	0.0000	0.0000
Apollo 2077 or Equivalent	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000000	0.0000	0.0000	0.0000
Chemlok 459X or equivalent	0.07	0.0304	1.4600	0.6336	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000000	0.0000	0.0000	0.6640
Flocklok 6389 or equivalent	0.00	0.0000	0.4200	0.0186	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000000	0.0000	0.0000	0.0186
Isopropyl Alcohol or equivalent	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000000	0.0000	0.0000	0.0000
Locitite 411/Frekote Aqualine R-120	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000000	0.0000	0.0000	0.0000
Locitite 454 or Equivalent	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000000	0.0000	0.0000	0.0000
Misty or Equivalent	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000000	0.0000	0.0000	0.0000
Plasti Dip or Equivalent	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000000	0.0000	0.0000	0.0000
Locitite 401 or Equivalent	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000000	0.0000	0.0000	0.0000
Rohm and Haas Robond TR 5125	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000000	0.0900	0.0756	0.1512
Apollo Blast 6300	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000000	0.0000	0.0000	0.0000
Stahl WF-21-988 or Equivalent	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0164	0.0000	0.0000	0.0000	0.0000	0.000000	0.0000	0.0000	0.7444
WD 40 or Equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000000	0.0000	0.0000	0.0000
Total		0.030380		0.652204		0.000000		0.016380		0.000000		0.000000		0.075600	1.5782

0.7403
0.8666
5.3222
1.0402
0.7403
8.7096

0.4514
0.7456
0.7456
0.4514
0.4514
2.8454

12.3947
11.7002
26.5996
12.0474
12.3947
75.211200

PAGE 96

Process Material	Triethylene Glycol Monobutyl Ether (1423-22-6) lb/gal	Triethylene Glycol Monobutyl Ether (1423-22-6) tons/mo	Xylene (1330-20-7) lb/gal	Xylene (1330-20-7) tons/mo	MIBK lb/gal	Mibk tons/mo	Methylene Chloride lb/gal	Methylene Chloride tons/mo							Total HAP Emissions (tons/month)
Aerokrol or equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Apollo 2077 or Equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Chemlok 459X or equivalent	0.0000	0.0000	5.8200	2.5259	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.1899
Isopropyl Alcohol or equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0186
Locitite 411/Frekote Aqualine R-120	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Locitite 454 or Equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Misty or Equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Plasti Dip or Equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Locitite 401 or Equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Rohm and Haas Robond TR 5125	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1512
Apollo Blast 6300	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Stahl WT-21-988 or Equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.7444
WD 40 or Equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000		2.5259		0.0000		0.0000		0.0000		0.0000		0.0000	4.1040

1.9258
1.9
20.412
2.4209
1.9258
31.1104

1.9889
1.4207
20.412
2.1152
1.9258
27.8603

0.061
0.061
0.061
0.061
0.061
0.305

37-0067-02 Secondaries Emission Summary

Total VOCs 25.250574 Tons
Total HAPs 4.104044 Tons
Total PM 0.000000 Tons

PAGE 97

Hutchinson Sealing Systems, Inc.
Church Hill, TN
Permit Renewal

EXTRUSION Line #1 (37-0067-01)

Process Material	Usage (gal/yr)	VOC Content (lb/gal)	VOC Emissions (tons/yr)	PM (lb/gal)	PM Emitted (tons/yr)	Diethylene Glycol Monobutyl Ether (lb/gal)	Diethylene Glycol Monobutyl Ether Emitted (tons/yr)	100-41-4 Ethyl Benzene lbs/gal	100-41-4 Ethyl Benzene Emitted tons/yr	108-10-1 MIBK Content (lb/gal)	108-10-1 MIBK Emissions (tons/yr)	79-09-2 Methylene Chloride (lb/gal)	79-9-2 Methylene Chloride (tons/yr)
Acheson Part C (Emralon 8370C) or equivalent	192.36	8.92	0.8579	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Acheson TW-077 or equivalent	1355.20	3.84	2.6020	2.3409	0.0159	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0900	0.0610
FlockLok 853A or equivalent	847.00	4.25	1.7999	0.0000	0.0000	0.0000	0.0000	0.4100	0.1736	0.8200	0.3473	0.0000	0.0000
FlockLok 855 or equivalent	2002.00	3.79	3.7938	0.0000	0.0000	0.0000	0.0000	0.4100	0.4104	1.6400	1.6416	0.0000	0.0000
MEK or equivalent	262.08	7.20	0.9435	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
TW-040 or equivalent	3472.00	1.84	3.1942	2.9200	0.0507	0.2600	0.4514	0.0900	0.1562	0.0000	0.0000	0.0000	0.0000
Unistole P-401 Toluene/HPT Blend or equivalent	3326.40	7.26	12.0748	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total			25.2661		0.0666		0.4514		0.7403		1.9889		0.0610

Process Material	91-20-3 Naphthalene (lb/gal)	91-20-3 Naphthalene Emitted (tons/yr)	108-88-3 Toluene Content (lb/gal)	108-88-3 Toluene (tons/yr)	1330-20-7 Xylene Content (lb/gal)	1330-20-7 Xylene Emissions (tons/yr)							Total HAP Emissions (tons/yr)
Acheson Part C (Emralon 8370C) or equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Acheson TW-077 or equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0610
FlockLok 853A or equivalent	0.0000	0.0000	0.8200	0.3473	1.6400	0.6945	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.5627
FlockLok 855 or equivalent	0.0000	0.0000	0.8200	0.8208	1.2300	1.2312	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.1041
MEK or equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
TW-040 or equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.6076
Unistole P-401 Toluene/HPT Blend or equivalent	0.0000	0.0000	6.7500	11.2266	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	11.2266
Total		0.0000		12.3947		1.9258		0.0000		0.0000		0.0000	17.5620

Rubber Processed (lbs/yr)	VOCs (extrusion + rubber curing)	HAPs (rubber curing + MDI)	PM Rubber Extrusion	PM Natural Gas Combustion	PM Stack Exhausts
10,646,720	8,821.02 lbs/mo	10,391.20 lbs/mo	0.2843 lbs/yr	0.60 lbs/yr	
	4.410510 tons/mo	5.196 tons/mo	0.000142 tons/yr	0.0003 tons/yr	5.6 Tons/yr

37-0067-01 Emission Summary

Total VOCs 29.6766 Tons/yr
Total HAPs 22.7576 Tons/yr
Total PM 5.6670 Tons/yr

Note #1 Rubber emission factors obtained from AP-42, 5th Edition, Volume 1, Chapter 4: Evaporation Loss Sources, Section 4.12: Manufacture of Rubber Products, U.S. Environmental Protection Agency (Compound #8).

Note #2 Emissions are the amount of VOCs or HAPs emitted to the air. No VOC emission controls are installed.

Hutchinson Sealing Systems, Inc.
Church Hill, TN
PERMIT RENEWAL

SECONDARIES (37-0067-02)														Permit Renewal	
Process Material	Usage (gal/mo)	VOC Content (lb/gal)	VOC Emissions (tons/mo)	PM Content (lb/gal)	PM Emissions (tons/mo)	110-80-2- (Butoxyethoxy) Ethanol (lb/gal)	110-80-4- 2- (Butoxyethoxy) Ethanol (lb/gal)	111-77-3 2-(2- Methoxyethoxy) Ethanol (lb/gal)	111-77-3 2-(2- Methoxyethoxy) Ethanol (tons/mo)	110-80-5 3- Ethoxyethanol (lb/gal)	110-80-5 2- Ethoxyethanol (tons/mo)	109-86-2 2- Methoxyethanol (lb/gal)	109-86-4 2- Methoxyethanol (tons/mo)	56-23-5 Carbon Tetrachloride (lb/gal)	56-23-5 Carbon Tetrachloride (tons/mo)
Aerokroll or equivalent	160.15	4.35	0.3483	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Apollo 2077 or equivalent	38.01	0.17	0.0032	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Chemlok 459X or equivalent	868.00	7.03	3.0510	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Flocklok 6389 or equivalent	88.40	3.57	0.1578	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Isopropyl Alcohol or equivalent	6104.00	6.59	20.1127	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Loctite 411/Fiekote Aqualine R-120	0.00	0.18	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Loctite 454 or Equivalent	0.00	0.18	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Misty or Equivalent	214.82	3.54	0.3802	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Plasti Dip or Equivalent	215.40	0.47	0.0506	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Loctite 401 or Equivalent	246.40	0.18	0.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Rohm and Haas Robond TR 5125	1680.00	0.89	0.7466	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0900	0.0756
TAK Pak 7452 or Equivalent	352.40	0.07	0.0119	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Stahl WT-21-988 or Equivalent	364.00	1.24	0.2253	0.0000	0.0000	1.0000	0.1820	1.0000	0.1820	1.0000	0.1820	1.0000	0.1820	0.0000	0.0000
WD 40 or Equivalent	83.83	3.3728	0.1414	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total			25.250574		0.000000		0.182000		0.182000		0.182000		0.182000		0.075600

Process Material	Chlorobenzene (108-90-7) lbs/gal	Chlorobenzene (108-90-7) tons/mo	Ethyl Benzene (100-41-4) lbs/gal	Ethyl Benzene (100-41-4) tons/yr	Ethylene Glycol (197-21-1) lbs/gal	Ethylene Glycol (197-21-1) tons/mo	Formaldehyde (50-00-0) lbs/gal	Formaldehyde (50-00-0) tons/mo	Methanol (67-56-1) lbs/gal	Methanol (67-56-1) tons/mo	Triethylamine (121-44-8) lbs/gal	Triethylamine (121-44-8) tons/mo	Toluene 108-88-3 (lb/gal)	Toluene 108-88-3 (tons/mo)	Total HAPS (tons/mo)
Aerokroll or equivalent	0.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000000	0.00000	0.00000	0.00000
Apollo 2077 or Equivalent	0.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000000	0.00000	0.00000	0.00000
Chemlok 459X or equivalent	0.07	0.0304	1.4600	0.6336	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.00000	0.00000	0.6640
Flocklok 6389 or equivalent	0.00	0.00000	0.4200	0.0186	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.00000	0.00000	0.0186
Isopropyl Alcohol or equivalent	0.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000000	0.00000	0.00000	0.00000
Loctite 411/Fiekote Aqualine R-	0.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000000	0.00000	0.00000	0.00000
Loctite 454 or Equivalent	0.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000000	0.00000	0.00000	0.00000
Misty or Equivalent	0.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000000	0.00000	0.00000	0.00000
Plasti Dip or Equivalent	0.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000000	0.00000	0.00000	0.00000
Loctite 401 or Equivalent	0.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000000	0.00000	0.00000	0.00000
Rohm and Haas Robond TR 5125	0.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000000	0.09000	0.07560	0.1512
Apollo Blast 6300	0.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000000	0.00000	0.00000	0.00000
Stahl WT-21-988 or Equivalent	0.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000000	0.00000	0.00000	0.7444
WD 40 or Equivalent	0.0000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000000	0.00000	0.00000	0.00000
Total		0.030380		0.652204		0.000000		0.016380		0.000000		0.000000		0.075600	1.5782

PAGE 96

Process Material	Triethylene Glycol Monobutyl Ether (1423-22-6) lbs/gal	Triethylene Glycol Monobutyl Ether (1423-22-6) tons/mo	Xylene (1330-20-7) lbs/gal	Xylene (1330-20-7) (tons/mo)											Total HAP Emissions (tons/month)
Aerokroll or equivalent	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Apollo 2077 or Equivalent	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Chemlok 459X or equivalent	0.00000	0.00000	5.82000	2.52590	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	3.18990
Isopropyl Alcohol or equivalent	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01860
Loctite 411/Fiekote Aqualine R-120	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Loctite 454 or Equivalent	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Misty or Equivalent	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Plasti Dip or Equivalent	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Loctite 401 or Equivalent	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Rohm and Haas Robond TR 5125	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.15120
Apollo Blast 6300	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Stahl WT-21-988 or Equivalent	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.74440
WD 40 or Equivalent	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total		0.00000		2.52590		0.000000		0.000000		0.000000		0.000000		0.000000	4.10400

(1) Emissions are the amount of VOCs or HAPs emitted to air. This log will be used to calculate air emissions.

37-0067-02 Secondaries Emission Summary		
Total VOCs	25.250574	Tons
Total HAPs	4.104044	Tons
Total PM	0.000000	Tons

PAGE 97

Hutchinson Sealing Systems, Inc.
Church Hill, TN
Permit Renewal

EXTRUSION Line #2 (37-0067-11)

Process Material	Usage (gal/yr)	VOC Content (lb/gal)	VOC Emissions (tons/yr)	PM (lb/gal)	PM Emitted (tons/yr)	Diethylene Glycol Monobutyl Ether (lb/gal)	Diethylene Glycol Monobutyl Ether Emitted (tons/yr)	100-41-4 Ethyl Benzene lbs/gal	100-41-4 Ethyl Benzene Emitted tons/yr	108-10-1 MIBK Content (lb/gal)	108-10-1 MIBK Emissions (tons/yr)	79-09-2 Methylene Chloride (lb/gal)	79-9-2 Methylene Chloride (tons/yr)
Acheson Part C (Emralon 8370C) or equivalent	192.36	8.92	0.8579	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Acheson TW-077 or equivalent	1355.20	3.84	2.6020	2.3409	0.0159	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0900	0.0610
FlockLok 852 or equivalent	1155.00	3.91	2.2580	0.0000	0.0000	0.0000	0.0000	0.8200	0.4736	0.8200	0.4736	0.0000	0.0000
FlockLok 855 or equivalent	1155.00	3.79	2.1887	0.0000	0.0000	0.0000	0.0000	0.4100	0.2368	1.6400	0.9471	0.0000	0.0000
MEK or equivalent	262.08	7.20	0.9435	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
TW-040 or equivalent	3472.00	1.84	3.1942	2.9200	0.0507	0.4295	0.7456	0.0900	0.1562	0.0000	0.0000	0.0000	0.0000
Unistole P-401 Toluene/HPT Blend or equivalent	3326.40	7.26	12.0748	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total			24.1192		0.0666		0.7456		0.8666		1.4207		0.0610

Process Material	91-20-3 Naphthalene (lb/gal)	91-20-3 Naphthalene Emitted (tons/yr)	108-88-3 Toluene Content (lb/gal)	108-88-3 Toluene (tons/yr)	1330-20-7 Xylene Content (lb/gal)	1330-20-7 Xylene Emissions (tons/yr)							Total HAP Emissions (tons/yr)
Acheson Part C (Emralon 8370C) or equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Acheson TW-077 or equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0610
FlockLok 852 or equivalent	0.0000	0.0000	0.0000	0.0000	2.0600	1.1897	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.1368
FlockLok 855 or equivalent	0.0000	0.0000	0.8200	0.4736	1.2300	0.7103	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.3678
MEK or equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
TW-040 or equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.9019
Unistole P-401 Toluene/HPT Blend or equivalent	0.0000	0.0000	6.7500	11.2266	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	11.2266
Total		0.0000		11.7002		1.9000		0.0000		0.0000		0.0000	16.6940

Rubber Processed (lbs/yr)	VOCs (extrusion + rubber curing)	HAPs (rubber curing + MDI)	PM Rubber Extrusion	PM Natural Gas	PM Stack
10,646,720	8,821.02 lbs/mo	10,391.20 lbs/mo	0.2843 lbs/yr	1.2 lbs/yr	
	4.410510 tons/mo	5.1956 tons/mo	0.00014 tons/yr	0.0006 tons/yr	9.5 tons/yr

37-0067-01 Emission Summary

Total VOCs 28.53 Tons/yr
Total HAPs 21.89 Tons/yr
Total PM 9.57 Tons/yr

Note #1 Rubber emission factors obtained from AP-42, 5th Edition, Volume 1, Chapter 4: Evaporation Loss Sources, Section 4.12: Manufacture of Rubber Products, U.S. Environmental Protection Agency (Compound #8).

Note #2 Emissions are the amount of VOCs or HAPs emitted to the air. No VOC emission controls are installed.

Hutchinson Sealing Systems, Inc.
Church Hill, TN
Permit Renewal

EXTRUSION Line #3 (37-0067-13)

Process Material	Usage (gal/yr)	VOC Content (lb/gal)	VOC Emissions (tons/yr)	PM (lb/gal)	PM Emitted (tons/yr)	Diethylene Glycol Monobutyl Ether (lb/gal)	Diethylene Glycol Monobutyl Ether Emitted (tons/yr)	100-41-4 Ethyl Benzene lbs/gal	100-41-4 Ethyl Benzene Emitted tons/yr	108-10-1 MIBK Content (lb/gal)	108-10-1 MIBK Emissions (tons/yr)	79-09-2 Methylene Chloride (lb/gal)	79-09-2 Methylene Chloride (tons/yr)
Acheson Part C (Emralon 8370C) or equivalent	192.36	8.92	0.8579	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Acheson TW-077 or equivalent	1355.20	3.84	2.6020	2.3409	0.0159	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0900	0.0610
FlockLok 870 or equivalent	25200.00	3.91	49.2660	0.0000	0.0000	0.0000	0.0000	0.4100	5.1660	1.6200	20.4120	0.0000	0.0000
MEK or equivalent	262.08	7.20	0.9435	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
TW-040 or equivalent	3472.00	1.84	3.1942	2.9200	0.0507	0.4295	0.7456	0.0900	0.1562	0.0000	0.0000	0.0000	0.0000
Unistole P-401 Toluene/HPT Blend or equivalent	3326.40	7.26	12.0748	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total			68.9385		0.0666		0.7456		5.3222		20.4120		0.0610

Process Material	91-20-3 Naphthalene (lb/gal)	91-20-3 Naphthalene Emissions (tons/yr)	108-88-3 Toluene Content (lb/gal)	108-88-3 Toluene (tons/yr)	1330-20-7 Xylene Content (lb/gal)	1330-20-7 Xylene Emissions (tons/yr)							Total HAP Emissions (tons/yr)
Acheson Part C (Emralon 8370C) or equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Acheson TW-077 or equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0610
FlockLok 870 or equivalent	0.0000	0.0000	1.2200	15.3720	1.6200	20.4120	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	61.3620
MEK or equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
TW-040 or equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.9019
Unistole P-401 Toluene/HPT Blend or equivalent	0.0000	0.0000	6.7500	11.2266	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	11.2266
Total		0.0000		26.5986		20.4120		0.0000		0.0000		0.0000	73.5515

Rubber Processed (lbs/yr)	VOCs (extrusion + rubber curing)	HAPs (rubber curing + MDI)	PM Rubber Extrusion	PM Natural Gas	PM Stack Emissions
10,646,720	8,821.02 lbs/mo 4.410510 tons/mo	10,391.20 lbs/mo 5.1956 tons/mo	0.2843 lbs/yr 0.000142 tons/yr	0 lbs/yr 0.0009 tons/yr	9.5 tons/yr

37-0067-01 Emission Summary

Total VOCs 73.35 Tons/yr
Total HAPs 78.75 Tons/yr
Total PM 9.57 Tons/yr

Note #1 Rubber emission factors obtained from AP-42, 5th Edition, Volume 1, Chapter 4: Evaporation Loss Sources, Section 4.12: Manufacture of Rubber Products, U.S. Environmental Protection Agency (Compound #8).

Note #2 Emissions are the amount of VOCs or HAPs emitted to the air. No VOC emission controls are installed.

Hutchinson Sealing Systems, Inc.
Church Hill, TN
Permit Renewal

EXTRUSION Line #4 (37-0067-14)

Process Material	Usage (gal/yr)	VOC Content (lb/gal)	VOC Emissions (tons/yr)	PM (lb/gal)	PM Emitted (tons/yr)	Diethylene Glycol Monobutyl Ether (lb/gal)	Diethylene Glycol Monobutyl Ether Emitted (tons/yr)	100-41-4 Ethyl Benzene lbs/gal	100-41-4 Ethyl Benzene Emitted tons/yr	108-10-1 MIBK Content (lb/gal)	108-10-1 MIBK Emissions (tons/yr)	79-09-2 Methylene Chloride (lb/gal)	79-09-2 Methylene Chloride (tons/yr)
Acheson Part C (Emralon 8370C) or equivalent	192.36	8.92	0.8579	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Acheson TW-077 or equivalent	1355.20	3.84	2.6020	2.3409	0.0159	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0900	0.0610
FlockLok 852 or equivalent	1155.00	3.91	2.2580	0.0000	0.0000	0.0000	0.0000	0.8200	0.4736	0.8200	0.4736	0.0000	0.0000
FlockLok 855 or equivalent	2002.00	3.79	3.7938	0.0000	0.0000	0.0000	0.0000	0.4100	0.4104	1.6400	1.6416	0.0000	0.0000
MEK or equivalent	262.08	7.20	0.9435	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
TW-040 or equivalent	3472.00	1.84	3.1942	2.9200	0.0507	0.2600	0.4514	0.0900	0.1562	0.0000	0.0000	0.0000	0.0000
Unistole P-401 Toluene/HPT Blend or equivalent	3326.40	7.26	12.0748	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total			25.7243		0.0666		0.4514		1.0402		2.1152		0.0610

Process Material	91-20-3 Naphthalene (lb/gal)	91-20-3 Naphthalene Emitted (tons/yr)	108-88-3 Toluene (lb/gal)	108-88-3 Toluene (tons/yr)	1330-20-7 Xylene Content (lb/gal)	1330-20-7 Xylene Emissions (tons/yr)							Total HAP Emissions (tons/yr)
Acheson Part C (Emralon 8370C) or equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Acheson TW-077 or equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0610
FlockLok 852 or equivalent	0.0000	0.0000	0.0000	0.0000	2.0600	1.1897	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.1368
FlockLok 855 or equivalent	0.0000	0.0000	0.8200	0.8208	1.2300	1.2312	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.1041
MEK or equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
TW-040 or equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.6076
Unistole P-401 Toluene/HPT Blend or equivalent	0.0000	0.0000	6.7500	11.2266	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	11.2266
Total		0.0000		12.0474		2.4209		0.0000		0.0000		0.0000	18.1360

Rubber Processed (lbs/yr)	VOCs (extrusion + rubber curing)	HAPs (rubber curing + MDI)	PM Rubber Extrusion	PM Natural Gas	
10,646,720	8,821.02 lbs/mo	10,391.20 lbs/mo	0.2843 lbs/yr	0 lbs/yr	
	4.410510 tons/mo	5.19559936 tons/mo	0.000142134 tons/yr	0 tons/yr	8.6 tons/yr

37-0067-01 Emission Summary

Total VOCs 30.13 Tons/yr
Total HAPs 23.33 Tons/yr
Total PM 8.67 Tons/yr

Note #1 Rubber emission factors obtained from AP-42, 5th Edition, Volume 1, Chapter 4: Evaporation Loss Sources, Section 4.12: Manufacture of Rubber Products, U.S. Environmental Protection Agency (Compound #8).

Note #2 Emissions are the amount of VOCs or HAPs emitted to the air. No VOC emission controls are installed.

Hutchinson Sealing Systems, Inc.
Church Hill, TN
Permit Renewal

EXTRUSION Line #5 (37-0067-15)

Process Material	Usage (gal/yr)	VOC Content (lb/gal)	VOC Emissions (tons/yr)	PM (lb/gal)	PM Emitted (tons/yr)	Diethylene Glycol Monobutyl Ether (lb/gal)	Diethylene Glycol Monobutyl Ether Emitted (tons/yr)	100-41-4 Ethyl Benzene lbs/gal	100-41-4 Ethyl Benzene Emitted tons/yr	108-10-1 MIBK Content (lb/gal)	108-10-1 MIBK Emissions (tons/yr)	79-09-2 Methylene Chloride (lb/gal)	79-09-2 Methylene Chloride (tons/yr)
Acheson Part C (Emralon 8370C) or equivalent	192.36	8.92	0.8579	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Acheson TW-077 or equivalent	1355.20	3.84	2.6020	2.3409	0.0159	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0900	0.0610
FlockLok 853A or equivalent	847.00	4.25	1.7999	0.0000	0.0000	0.0000	0.0000	0.4100	0.1736	0.8200	0.3473	0.0000	0.0000
FlockLok 855 or equivalent	2002.00	3.79	3.7938	0.0000	0.0000	0.0000	0.0000	0.4100	0.4104	1.6400	1.6416	0.0000	0.0000
MEK or equivalent	262.08	7.20	0.9435	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
TW-040 or equivalent	3472.00	1.84	3.1942	2.9200	0.0507	0.2600	0.4514	0.0900	0.1562	0.0000	0.0000	0.0000	0.0000
Unistole P-401 Toluene/HPT Blend or equivalent	3326.40	7.26	12.0748	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total			25.2661		0.0666		0.4514		0.7403		1.9889		0.0610

Process Material	91-20-3 Naphthalene (lb/gal)	91-20-3 Naphthalene Emitted (tons/yr)	108-88-3 Toluene Content (lb/gal)	108-88-3 Toluene (tons/yr)	1330-20-7 Xylene Content (lb/gal)	1330-20-7 Xylene Emissions (tons/yr)							Total HAP Emissions (tons/yr)
Acheson Part C (Emralon 8370C) or equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Acheson TW-077 or equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0610
FlockLok 853A or equivalent	0.0000	0.0000	0.8200	0.3473	1.6400	0.6945	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.5627
FlockLok 855 or equivalent	0.0000	0.0000	0.8200	0.8208	1.2300	1.2312	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.1041
MEK or equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
TW-040 or equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.6076
Unistole P-401 Toluene/HPT Blend or equivalent	0.0000	0.0000	6.7500	11.2266	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	11.2266
Total		0.0000		12.3947		1.9258		0.0000		0.0000		0.0000	17.5620

Rubber Processed (lbs/yr)	VOCs (extrusion + rubber curing)	HAPs (rubber curing + MDI)	PM Rubber Extrusion	PM - Natural Gas	PM Stack Emissions
10,646,720	8,821.02 lbs/mo 4.4105 tons/mo	10,391.20 lbs/mo 5.1956 tons/mo	0.2843 lbs/yr 0.000142134 tons/yr	0.0000 lbs/yr 0.0000 tons/yr	7.5 tons/yr

37-0067-01 Emission Summary

Total VOCs 29.68 Tons/yr
Total HAPs 22.76 Tons/yr
Total PM 7.57 Tons/yr

Note #1 Rubber emission factors obtained from AP-42, 5th Edition, Volume 1, Chapter 4: Evaporation Loss Sources, Section 4.12: Manufacture of Rubber Products, U.S. Environmental Protection Agency (Compound #8).

Note #2 Emissions are the amount of VOCs or HAPs emitted to the air. No VOC emission controls are installed.

Hutchinson Sealing Systems, Inc.
Church Hill, TN
Condition E11-2

Monthly Individual HAPs

Permit Renew: 43317

Process Material		110-80-4 2- (Butoxyethoxy) Ethanol (tons/mon)	111-77-3 2- (2-Methoxyethoxy) Ethanol (tons/mo)	110-80-5 2-Ethoxyethanol tons/mo	109-86-4 2-Methoxyethanol (tons/mo)	Benzene Emitted (tons/month)	56-23-5 Carbon Tetrachloride tons/mo	108-90-7 Chlorobenzene tons/mo	Diethylene Glycol Monobutyl Ether Emitted (tons/month)	100-41-4 Ethyl Benzene Emitted tons/yr	107-21-1 Ethylene Glycol tons/mo
1		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.4514	0.7403	0.0000
2		0.1820	0.1820	0.1820	0.1820	0.0000	0.0756	0.0304	0.0000	0.6522	0.0000
11		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	#REF!	#REF!	#REF!
13		0.0000	0.0000	0.0000	0.0000	#REF!	0.0000	0.0000	#REF!	#REF!	#REF!
14		0.0000	0.0000	0.0000	0.0000	#REF!	0.0000	0.0000	#REF!	#REF!	#REF!
15		0.0000	0.0000	0.0000	0.0000	#REF!	0.0000	0.0000	#REF!	#REF!	#REF!
Total		0.18200	0.18200	0.18200	0.18200	#REF!	0.07560	0.03038	#REF!	#REF!	#REF!

Process Material	50-00-0 Formaldehyde tons/mo	75-09-2 Methylene Chloride (tons/month)	67-56-1 Methanol tons/mo	108-10-1 MIBK Emissions (tons/month)	91-20-3 Naphthalene (tons/mo)	108-88-3 Toluene (tons/mo)	1423-22-6 Triethylene Glycol Monobutyl Ether tons/mo	121-44-8 Triethylamine tons/mo	1330-20-7 Xylene (tons/mo)	Rubber HAPs	Total HAP Emissions (tons/month)
1	0.0000	0.0610	0.0000	1.9889	#REF!	12.3947	0.0000	0.0000	1.9258	5.19560	#REF!
2	0.0164	0.0000	0.0000	0.0000	0.0000	0.0756	0.0000	0.0000	2.5259	0.00000	4.1040
11	#REF!	#REF!	0.0000	#REF!	#REF!	#REF!	0.0000	0.0000	#REF!	#REF!	#REF!
13	#REF!	#REF!	0.0000	#REF!	#REF!	#REF!	0.0000	0.0000	#REF!	#REF!	#REF!
14	#REF!	#REF!	0.0000	#REF!	#REF!	#REF!	0.0000	0.0000	#REF!	#REF!	#REF!
15	#REF!	#REF!	0.0000	#REF!	#REF!	#REF!	0.0000	0.0000	#REF!	#REF!	#REF!
Total	#REF!	#REF!	0.0000	#REF!	#REF!	#REF!	0.0000	0.0000	#REF!	#REF!	#REF!

Hutchinson Sealing Systems, Inc.
Church Hill, TN
Condition E11-2

12 Month Rolling HAPs

Permit Renew: 43317

Date	110-80-4 2- (Butoxyethoxy) Ethanol (tons/mo)	111-77-3 2 (2-Methoxyethoxy) Ethanol (tons/mo)	110-80-5 2 Ethoxyethanol tons/mo	109-86-4 2-Methoxyethanol (tons/mo)	Benzene (tons/mo)	56-23-5 Carbon Tetrachloride (tons/mo)	108-90-7 Chlorobenzene (tons/mo)	Glycol Monobutyl Ether (tons/mo)	Ethyl Benzene (tons/yr)	(107-21-1) Ethylene Glycol (tons/mo)
December-10	0.00000	0.00000	0.00000	0.00000	0.00000	0.00113	0.00000	0.04295	0.04015	0.00000
January-11	0.00000	0.00000	0.00000	0.00000	0.00000	0.00090	0.00000	0.04295	0.02379	0.00000
February-11	0.00000	0.00000	0.00000	0.00000	0.00000	0.00158	0.00000	0.06443	0.02530	0.00000
March-11	0.00000	0.00000	0.00000	0.00000	0.00000	0.00135	0.00000	0.08268	0.05717	0.00000
April-11	0.00000	0.00000	0.00000	0.00000	0.00000	0.00113	0.00000	0.03221	0.03680	0.00000
May-11	0.00000	0.00000	0.00000	0.00000	0.00000	0.00180	0.00000	0.06443	0.05680	0.00000
June-11	0.00000	0.00000	0.00000	0.00000	0.00000	0.00180	0.00000	0.02148	0.05272	0.00000
July-11	0.00000	0.00000	0.00000	0.00000	0.00000	0.00113	0.00000	0.02148	0.03644	0.00000
August-11	0.00000	0.00000	0.00000	0.00000	0.00000	0.00158	0.00000	0.06443	0.04603	0.00000
September-11	0.00000	0.00000	0.00000	0.00000	0.00000	0.00135	0.00000	0.04295	0.03011	0.00000
October-11	0.00000	0.00000	0.00000	0.00000	0.00000	0.00090	0.00000	0.06443	0.05717	0.00000
November 2011	0.00000	0.00000	0.00000	0.00000	0.00000	0.00090	0.00000	0.06443	0.03832	0.00000
December-11	0.00000	0.00000	0.00000	0.00000	0.00000	0.00045	0.00000	0.04295	0.04452	0.00000
12 Month Rolling Ave	0.00000	0.00000	0.00000	0.00000	0.00000	0.01553	0.00000	0.60883	0.50079	0.00000

Date	50-00-0 Formaldehyde (tons/mo)	Methylene Chloride (tons/mo)	67-56-1 Methanol (tons/mo)	MIBK (tons/mo)	Naphthalene 91-20-3 Emitted (tons/mo)	Toluene (tons/mo)	1423-22-6 Triethylene Glycol Monobutyl	121-44-8 Triethylamine (tons/mo)	Xylene Emissions (tons/mo)	Rubber Curing/MDI
December-10	0.00000	0.00090	0.00000	0.13750	0.00000	0.46763	0.00000	0.00000	0.16913	0.18073
January-11	0.00000	0.00338	0.00000	0.11330	0.00000	0.84008	0.00000	0.00000	0.07508	0.14081
February-11	0.00000	0.00203	0.00000	0.13750	0.00000	0.85071	0.00000	0.00000	0.10560	0.18720
March-11	0.00000	0.00270	0.00000	0.21716	0.00000	1.09863	0.00000	0.00000	0.21543	0.21200
April-11	0.00000	0.00158	0.00000	0.18278	0.00000	0.30972	0.00000	0.00000	0.12897	0.17467
May-11	0.00000	0.00360	0.00000	0.21643	0.00000	0.90456	0.00000	0.00000	0.21434	0.21356
June-11	0.00203	0.00315	0.00000	0.20771	0.00000	0.69455	0.00000	0.00000	0.22065	0.23585
July-11	0.00090	0.00158	0.00000	0.18205	0.00000	0.11677	0.00000	0.00000	0.12788	0.12286
August-11	0.00135	0.00383	0.00000	0.17261	0.00000	0.87215	0.00000	0.00000	0.19316	0.21507
September-11	0.00113	0.00315	0.00000	0.14768	0.00000	0.48101	0.00000	0.00000	0.10148	0.13866
October-11	0.00158	0.00248	0.00000	0.21716	0.00000	0.90488	0.00000	0.00000	0.21543	0.21579
November-11	0.00180	0.00405	0.00000	0.20698	0.00000	0.70065	0.00000	0.00000	0.15950	0.24408
December-11	0.00068	0.00158	0.00000	0.14841	0.00000	0.29264	0.00000	0.00000	0.16263	0.18480
12 Month Individual	0.0088	0.0324	0.0000	2.1388	0.0000	8.2414	0.0000	0.0000	1.9266	2.2813

Project Information		Financial Summary		Performance Metrics		Risk Assessment		Compliance Status	
Project Name	Project ID	Budget (USD)	Actual Cost (USD)	Progress (%)	Quality Score	Risk Level	Compliance Status	Approval Status	Notes
Project A: New Product Development Project A is a new product development project. It is currently in the design phase. The project is on track and within budget.									
Project B: Marketing Campaign Project B is a marketing campaign project. It is currently in the execution phase. The project is on track and within budget.									
Project C: IT System Upgrade Project C is an IT system upgrade project. It is currently in the testing phase. The project is on track and within budget.									
Project D: HR Training Program Project D is an HR training program project. It is currently in the implementation phase. The project is on track and within budget.									
Project E: Facility Renovation Project E is a facility renovation project. It is currently in the construction phase. The project is on track and within budget.									
Project F: Legal Review Project F is a legal review project. It is currently in the review phase. The project is on track and within budget.									
Project G: Financial Audit Project G is a financial audit project. It is currently in the audit phase. The project is on track and within budget.									
Project H: Customer Satisfaction Survey Project H is a customer satisfaction survey project. It is currently in the survey phase. The project is on track and within budget.									
Project I: Employee Wellness Program Project I is an employee wellness program project. It is currently in the implementation phase. The project is on track and within budget.									
Project J: Environmental Impact Assessment Project J is an environmental impact assessment project. It is currently in the assessment phase. The project is on track and within budget.									
Project K: Social Media Strategy Project K is a social media strategy project. It is currently in the strategy phase. The project is on track and within budget.									
Project L: Data Analytics Platform Project L is a data analytics platform project. It is currently in the development phase. The project is on track and within budget.									
Project M: Supply Chain Optimization Project M is a supply chain optimization project. It is currently in the optimization phase. The project is on track and within budget.									
Project N: Cybersecurity Enhancement Project N is a cybersecurity enhancement project. It is currently in the enhancement phase. The project is on track and within budget.									
Project O: Talent Acquisition Strategy Project O is a talent acquisition strategy project. It is currently in the strategy phase. The project is on track and within budget.									
Project P: Customer Retention Program Project P is a customer retention program project. It is currently in the implementation phase. The project is on track and within budget.									
Project Q: Business Process Automation Project Q is a business process automation project. It is currently in the automation phase. The project is on track and within budget.									
Project R: Sustainability Initiative Project R is a sustainability initiative project. It is currently in the initiative phase. The project is on track and within budget.									
Project S: Innovation Pipeline Project S is an innovation pipeline project. It is currently in the pipeline phase. The project is on track and within budget.									
Project T: Global Expansion Strategy Project T is a global expansion strategy project. It is currently in the strategy phase. The project is on track and within budget.									
Project U: Digital Transformation Project Project U is a digital transformation project. It is currently in the transformation phase. The project is on track and within budget.									
Project V: Strategic Partnership Development Project V is a strategic partnership development project. It is currently in the development phase. The project is on track and within budget.									
Project W: Market Research Study Project W is a market research study project. It is currently in the study phase. The project is on track and within budget.									
Project X: Brand Revitalization Project Project X is a brand revitalization project. It is currently in the revitalization phase. The project is on track and within budget.									
Project Y: Customer Segmentation Analysis Project Y is a customer segmentation analysis project. It is currently in the analysis phase. The project is on track and within budget.									
Project Z: Product Diversification Strategy Project Z is a product diversification strategy project. It is currently in the strategy phase. The project is on track and within budget.									

Item	Quantity	Unit	Material	Unit Price	Total Price	Remarks
1	1	m	Steel Pipe	100	100	
2	1	m	Steel Pipe	100	100	
3	1	m	Steel Pipe	100	100	
4	1	m	Steel Pipe	100	100	
5	1	m	Steel Pipe	100	100	
6	1	m	Steel Pipe	100	100	
7	1	m	Steel Pipe	100	100	
8	1	m	Steel Pipe	100	100	
9	1	m	Steel Pipe	100	100	
10	1	m	Steel Pipe	100	100	
11	1	m	Steel Pipe	100	100	
12	1	m	Steel Pipe	100	100	
13	1	m	Steel Pipe	100	100	
14	1	m	Steel Pipe	100	100	
15	1	m	Steel Pipe	100	100	
16	1	m	Steel Pipe	100	100	
17	1	m	Steel Pipe	100	100	
18	1	m	Steel Pipe	100	100	
19	1	m	Steel Pipe	100	100	
20	1	m	Steel Pipe	100	100	
21	1	m	Steel Pipe	100	100	
22	1	m	Steel Pipe	100	100	
23	1	m	Steel Pipe	100	100	
24	1	m	Steel Pipe	100	100	
25	1	m	Steel Pipe	100	100	
26	1	m	Steel Pipe	100	100	
27	1	m	Steel Pipe	100	100	
28	1	m	Steel Pipe	100	100	
29	1	m	Steel Pipe	100	100	
30	1	m	Steel Pipe	100	100	
31	1	m	Steel Pipe	100	100	
32	1	m	Steel Pipe	100	100	
33	1	m	Steel Pipe	100	100	
34	1	m	Steel Pipe	100	100	
35	1	m	Steel Pipe	100	100	
36	1	m	Steel Pipe	100	100	
37	1	m	Steel Pipe	100	100	
38	1	m	Steel Pipe	100	100	
39	1	m	Steel Pipe	100	100	
40	1	m	Steel Pipe	100	100	
41	1	m	Steel Pipe	100	100	
42	1	m	Steel Pipe	100	100	
43	1	m	Steel Pipe	100	100	
44	1	m	Steel Pipe	100	100	
45	1	m	Steel Pipe	100	100	
46	1	m	Steel Pipe	100	100	
47	1	m	Steel Pipe	100	100	
48	1	m	Steel Pipe	100	100	
49	1	m	Steel Pipe	100	100	
50	1	m	Steel Pipe	100	100	
51	1	m	Steel Pipe	100	100	
52	1	m	Steel Pipe	100	100	
53	1	m	Steel Pipe	100	100	
54	1	m	Steel Pipe	100	100	
55	1	m	Steel Pipe	100	100	
56	1	m	Steel Pipe	100	100	
57	1	m	Steel Pipe	100	100	
58	1	m	Steel Pipe	100	100	
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60	1	m	Steel Pipe	100	100	
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64	1	m	Steel Pipe	100	100	
65	1	m	Steel Pipe	100	100	
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67	1	m	Steel Pipe	100	100	
68	1	m	Steel Pipe	100	100	
69	1	m	Steel Pipe	100	100	
70	1	m	Steel Pipe	100	100	
71	1	m	Steel Pipe	100	100	
72	1	m	Steel Pipe	100	100	
73	1	m	Steel Pipe	100	100	
74	1	m	Steel Pipe	100	100	
75	1	m	Steel Pipe	100	100	
76	1	m	Steel Pipe	100	100	
77	1	m	Steel Pipe	100	100	
78	1	m	Steel Pipe	100	100	
79	1	m	Steel Pipe	100	100	
80	1	m	Steel Pipe	100	100	
81	1	m	Steel Pipe	100	100	
82	1	m	Steel Pipe	100	100	
83	1	m	Steel Pipe	100	100	
84	1	m	Steel Pipe	100	100	
85	1	m	Steel Pipe	100	100	
86	1	m	Steel Pipe	100	100	
87	1	m	Steel Pipe	100	100	
88	1	m	Steel Pipe	100	100	
89	1	m	Steel Pipe	100	100	
90	1	m	Steel Pipe	100	100	
91	1	m	Steel Pipe	100	100	
92	1	m	Steel Pipe	100	100	
93	1	m	Steel Pipe	100	100	
94	1	m	Steel Pipe	100	100	
95	1	m	Steel Pipe	100	100	
96	1	m	Steel Pipe	100	100	
97	1	m	Steel Pipe	100	100	
98	1	m	Steel Pipe	100	100	
99	1	m	Steel Pipe	100	100	
100	1	m	Steel Pipe	100	100	

HUTCHINSON SEALING SYSTEMS, INC.
CHURCH HILL, TENNESSEE
VOC CONTAINING MATERIAL INVENTORY

Process Material Description	Specific Gravity	Density	%VOC	VOCs (lbs/gal)	MSDS Date	Usage Start	Status
3M Adhesion Promotor	0.8153	6.8	93.00	6.324	12/16/2004	7/1/2007	Currently in use.
Acheson Part C (Emralon 8370C)	1.0700	8.9238	100.00	8.8968	06/02/09		Currently in use
TW-040	1.0300	8.5902	21.37	1.8361	06/02/09		Currently in use
Acheson TW-077	1.0400	8.6736	44.26	3.8391	06/02/09		Currently in use
Aerkroil	0.8700	7.2558	60.00	4.3535	06/15/09		Currently in use
Apollo 2077	1.0600	8.8404	1.89	0.1669	08/01/08		Currently in use
Bostik Hot Melt	1.5311	12.7693	0.00	0.0000	12/02/02		Currently in use
Bostik Mastic	1.5311	12.7693	3.00	0.3831	04/02/02		Currently in use
Chemglaze 9956	0.8717	7.2700	94.30	6.8556	08/11/06		Currently in use
Chemglaze 9986	0.8741	7.2900	90.42	6.5916	11/19/07		Currently in use
ChemLoc 459X	0.8729	7.2800	96.50	7.0252	11/18/05		Currently in use
FlockLoc 6389	0.9952	8.3000	43.00	3.5690	12/16/05		Currently in use
fLOCKIOK 855	0.9832	8.2000	46.76	3.8343	08/10/07		Currently in use
FlockLok 870	0.9712	8.1000	44.89	3.6361	08/15/06	02/01/07	Currently in use
Isopropyl Alcohol	0.7906	6.5933	100.00	6.5933	10/20/04		Currently in use
Loctite 411 (Frekote)	1.0500	8.7570	2.00	0.1751	08/08/05		Currently in use
McLube 1829T2	1.1000	9.1740	95.00	8.7153	01/01/04		Currently in use
MEK	0.8600	7.1700	100.00	7.1724	04/01/03	10/01/06	Currently in use
Misty	0.8500	7.0890	50.00	3.5445	10/14/05		Currently in use
Plasti Dip	1.1000	9.1740	5.10	0.4679	10/20/04		Currently in use
Rohm and Haas Robond TR 5125	1.0800	8.0800	72.00	5.8176	10/23/06		Currently in use
Stahl WT-21-836	1.0000	8.3400	11.00	0.9174	09/09/05	01/01/06	Currently in use
Stahl WT-21-270	1.0100	8.4234	22.34	1.8818	04/22/10		Currently in use
Stahl XR-21-498	1.0000	8.3400	50.00	4.1700	04/10/05		Currently in use
Tak Pak 7452	0.7926	6.6103	1.02	0.0674	01/04/06		Currently in use
Tint AYD 8003 ST	1.8900	15.7626	20.00	3.1600	01/28/08		Currently in use
Titanium Dioxide Pigment	2.4000	20.0160	0.00	0.0000	02/15/07		Currently in use
Unistole P-401 Toluene/HPT Blend	0.8700	7.2558	100.00	7.2558	11/07/05		Currently in use
Unlock	1.0000	8.3400	0.10	0.0083	11/07/05		Currently in use
UV Dye (TA-001 Aqueous Fluorescent Dye)	1.0200	8.5068	0.00	0.0000	07/09/03		Currently in use
WDA	0.9800	8.1732	10.00	0.8173			Currently in use

MDI Stack Emissions Calculations for Extrusion Line #1 Hutchinson Sealing Systems, Inc. Church Hill, Tennessee 37-0067									
<p>Equation: $W = 25.4 \times VP_{MDI} \times (M_{w}/T_{proc}) \times u^{0.78} \times S_A \times t_{TF}$</p> <p>W = the evaporation losses from the open process in grams/day</p> <p>VP_{MDI} = the vapor pressure of MDI in atmospheres @ process temperature</p> <p>T_{proc} = the process temperature in K 298 K</p> <p>M_{w} = the molecular weight of MDI = 250.26</p> <p>u = the airflow speed in m/sec</p> <p>S_A = the exposed surface area in m²</p> <p>t_{TF} = the "tack free" time in seconds</p>									
<p>Step I: Determine Vapor Pressure of 1.5% MDI at ambient temperature (25 degrees Celsius) in atmospheres</p> <p>Vapor pressure of MDI at 25 degrees C: 1.02E-05 mm</p> <p>Convert vapor pressure to atmospheres and for a 5% mixture of MDI</p> <p>$VP_{MDI} = 0.0000102 \text{ mm Hg} \times \frac{1 \text{ atm}}{760 \text{ mm}} \times \frac{1.5 \text{ lbs of MDI}}{100 \text{ lbs of FlockLok 855}} = 1.53E-07 \text{ atm}$</p>									
<p>Step II: Determine Ventilation Rate in meters/second</p> <p>Ventilation rate (u) = $\frac{\text{Velocity @ STP}}{\text{Roller Surface Area}}$ (Note: STP = Standard Temperature and Pressure)</p> <p>Roller Surface Area = 29 in² = 0.20 ft²</p> <p>Velocity @ STP = 1700 ACFM x $\frac{298 \text{ K}}{308 \text{ K}}$ = 1644.81 SCFM ACFM = Actual cubic feet per minute SCFM = Standard cubic feet per minute</p> <p>Velocity = 1644.81 SCFM</p> <p>Ventilation rate (u) = $\frac{\text{Velocity}}{\text{Roller Surface Area}}$</p> <p>Ventilation rate (u) = $\frac{1644.81 \text{ SCFM}}{0.20 \text{ ft}^2} \times \frac{1 \text{ min}}{60 \text{ sec}} \times \frac{0.3048 \text{ m}}{1 \text{ ft}} = 41.49 \text{ m/sec}$</p>									
<p>Step III: Determine Tack Time</p> <p>Tack time = 6 sec</p>									
<p>Step IV: Determine the Exposed Surface Area</p> <p>The exposed area is determined from the area of rubber processed.</p> <p>The roller applicator coats: 5.83 $\frac{\text{ft}^2}{\text{min}}$ x $\frac{60 \text{ min}}{1 \text{ hr}}$ = 349.80 ft²/hour</p> <p>Based upon 24 hour production:</p> <p>$S_A = 349.80 \frac{\text{ft}^2}{\text{hour}} \times \frac{24 \text{ hours}}{1 \text{ day}} = 8395.2 \text{ ft}^2/\text{day}$</p>									
MDI Stack Emissions Calculations for Extrusion Line #1 Hutchinson Sealing Systems, Inc. Church Hill, Tennessee 37-0067									
<p>Converting ft² to m²:</p> <p>$S_A = 8395.2 \frac{\text{ft}^2}{\text{day}} \times \frac{1 \text{ m}^2}{10.76 \text{ ft}^2} = 780.223048 \text{ m}^2/\text{day}$</p> <p>Therefore,</p> <p>MDI Stack Emissions = $W = 25.4 \times VP_{MDI} \times (M_{w}/T_{proc}) \times u^{0.78} \times S_A \times t_{TF}$</p> <p>$W = 25.4 \times 0.000000153 \text{ atm} \times \frac{250.26}{298} \times 18.28 \frac{\text{m}}{\text{sec}} \times 780.22 \frac{\text{m}^2}{\text{day}} \times 6 \text{ sec} = 0.28 \text{ grams/day}$</p>									
<p>Step V: Convert grams/day to pounds/year</p> <p>$W = 0.28 \frac{\text{grams}}{\text{day}} \times \frac{1 \text{ lb}}{454 \text{ grams}} \times 365 \frac{\text{days}}{\text{year}} = 0.22 \text{ lbs/year}$</p> <p>Convert lbs/year to lbs/hour</p> <p>$W = 0.22 \frac{\text{lbs}}{\text{year}} \times \frac{1 \text{ year}}{8760 \text{ hours}} = 2.56E-05 \text{ lbs/hour}$ Emissions (1 booth)</p> <p>3.37E-03 lbs/hour Standard Exemption</p> <p>Convert lbs/year to tons/year</p> <p>$W = 0.22 \frac{\text{lbs}}{\text{year}} \times \frac{1 \text{ ton}}{2000 \text{ lbs}} = 1.12E-04 \text{ tons/year}$ (1 booth)</p> <p>7.40E-03 tons/hour Standard Exemption</p> <p>Convert tons/year to tons/month</p> <p>$W = 1.12E-04 \frac{\text{tons}}{\text{year}} \times \frac{1 \text{ year}}{12 \text{ months}} = 9.36E-06 \text{ tons/month}$ (1 booth)</p>									

MDI Stack Emissions Calculations for Extrusion Line #2 Hutchinson Sealing Systems, Inc. Church Hill, Tennessee 37-0067									
<p>Equation: $W = 25.4 \times VP_{MDI} \times (M_W/T_{proc}) \times u^{0.79} \times S_A \times t_{TF}$</p> <p>W = the evaporation losses from the open process in grams/day</p> <p>VP_{MDI} = the vapor pressure of MDI in atmospheres @ process temperature</p> <p>T_{proc} = the process temperature in K = 298 K</p> <p>M_W = the molecular weight of MDI = 250.26</p> <p>u = the airflow speed in m/sec</p> <p>S_A = the exposed surface area in m²</p> <p>t_{TF} = the "tack free" time in seconds</p>									
<p>Step I: Determine Vapor Pressure of 1.5% MDI at ambient temperature (25 degrees Celsius) in atmospheres</p> <p>Vapor pressure of MDI at 25 degrees C: 1.02E-05 mm</p> <p>Convert vapor pressure to atmospheres and for a 5% mixture of MDI</p> <p>$VP_{MDI} = 0.0000102 \text{ mm Hg} \times \frac{1 \text{ atm}}{760 \text{ mm}} \times \frac{1.5 \text{ lbs of MDI}}{100 \text{ lbs of Flock Loc 852}} = 1.53E-07 \text{ atm}$</p>									
<p>Step II: Determine Ventilation Rate in meters/second</p> <p>Ventilation rate (u) = $\frac{\text{Velocity @ STP}}{\text{Roller Surface Area}}$ (Note: STP = Standard Temperature and Pressure)</p> <p>Roller Surface Area = 29 in² = 0.20 ft²</p> <p>Velocity @ STP = 1700 ACFM x $\frac{298 \text{ K}}{308 \text{ K}}$ = 1644.81 SCFM ACFM = Actual cubic feet per minute SCFM = Standard cubic feet per minute</p> <p>Velocity = 1644.81 SCFM</p> <p>Ventilation rate (u) = $\frac{\text{Velocity}}{\text{Roller Surface Area}}$</p> <p>$\text{Ventilation rate (u)} = \frac{1644.81 \text{ SCFM}}{0.20 \text{ ft}^2} \times \frac{1 \text{ min}}{60 \text{ sec}} \times \frac{0.3048 \text{ m}}{1 \text{ ft}} = 41.49 \text{ m/sec}$</p>									
<p>Step III: Determine Tack Time</p> <p>Tack time = 6 sec</p>									
<p>Step IV: Determine the Exposed Surface Area</p> <p>The exposed area is determined from the area of rubber processed.</p> <p>The roller applicator coats: 5.83 $\frac{\text{ft}^2}{\text{min}}$ x $\frac{60 \text{ min}}{1 \text{ hr}}$ = 349.80 ft²/hour</p> <p>Based upon 24 hour production:</p> <p>$S_A = 349.80 \frac{\text{ft}^2}{\text{hour}} \times \frac{24 \text{ hours}}{1 \text{ day}} = 8395.2 \text{ ft}^2/\text{day}$</p>									
MDI Stack Emissions Calculations for Extrusion Line #2 Hutchinson Sealing Systems, Inc. Church Hill, Tennessee 37-0067									
<p>Converting ft² to m²:</p> <p>$S_A = 8395.2 \frac{\text{ft}^2}{\text{day}} \times \frac{1 \text{ m}^2}{10.76 \text{ ft}^2} = 780.2230483 \text{ m}^2/\text{day}$</p> <p>Therefore,</p> <p>MDI Stack Emissions = $W = 25.4 \times VP_{MDI} \times (M_W/T_{proc}) \times u^{0.79} \times S_A \times t_{TF}$</p> <p>$W = 25.4 \times 1.53E-07 \text{ atm} \times \frac{250.26}{298} \times 18.28 \frac{\text{m}}{\text{sec}} \times 780.22 \frac{\text{m}^2}{\text{day}} \times 6 \text{ sec} = 0.28 \text{ grams/day}$</p>									
<p>Step V: Convert grams/day to pounds/year</p> <p>$W = 0.28 \frac{\text{grams}}{\text{day}} \times \frac{1 \text{ lb}}{454 \text{ grams}} \times 365 \text{ days} = 0.22 \text{ lbs/year}$</p> <p>Convert lbs/year to lbs/hour</p> <p>$W = 0.22 \frac{\text{lbs}}{\text{year}} \times \frac{1 \text{ year}}{8760 \text{ hours}} = 2.56E-05 \text{ lbs/hour}$ (1 booth)</p> <p>3.37E-03 lbs/hour Standard Exemption</p> <p>Convert lbs/year to tons/year</p> <p>$W = 0.22 \frac{\text{lbs}}{\text{year}} \times \frac{1 \text{ ton}}{2000 \text{ lbs}} = 1.12E-04 \text{ tons/year}$ (1 booth)</p> <p>7.40E-03 tons/year Standard Exemption</p> <p>Convert tons/year to tons/month</p> <p>$W = 1.12E-04 \frac{\text{tons}}{\text{year}} \times \frac{1 \text{ year}}{12 \text{ months}} = 9.36E-06 \text{ tons/month}$ (1 booth)</p>									

MDI Stack Emissions Calculations for Extrusion Line #3 Hutchinson Sealing Systems, Inc. Church Hill, Tennessee 37-0067									
<p>Equation: $W = 25.4 \times VP_{MDI} \times (M_w/T_{proc}) \times u^{0.78} \times S_A \times t_{TF}$</p> <p>W = the evaporation losses from the open process in grams/day</p> <p>VP_{MDI} = the vapor pressure of MDI in atmospheres @ process temperature</p> <p>T_{proc} = the process temperature in K = 298 K</p> <p>M_w = the molecular weight of MDI = 250.26</p> <p>u = the airflow speed in m/sec</p> <p>S_A = the exposed surface area in m²</p> <p>t_{TF} = the "tack free" time in seconds</p>									
<p>Step I: Determine Vapor Pressure of 5% MDI at ambient temperature (25 degrees Celsius) in atmospheres</p> <p>Vapor pressure of MDI at 25 degrees C: 1.02E-05 mm</p> <p>Convert vapor pressure to atmospheres and for a 5% mixture of MDI</p> $VP_{MDI} = 0.0000102 \text{ mm Hg} \times \frac{1 \text{ atm}}{760 \text{ mm}} \times \frac{5 \text{ lbs of MDI}}{100 \text{ lbs of Flock Loc 870}} = 5.10E-07 \text{ atm}$									
<p>Step II: Determine Ventilation Rate in meters/second</p> <p>Ventilation rate (u) = $\frac{\text{Velocity @ STP}}{\text{Roller Surface Area}}$ (Note: STP = Standard Temperature and Pressure)</p> <p>Roller Surface Area = 29 in² = 0.20 ft²</p> <p>Velocity @ STP = 1700 ACFM x $\frac{298 \text{ K}}{308 \text{ K}}$ = 1644.81 SCFM ACFM = Actual cubic feet per minute SCFM = Standard cubic feet per minute</p> <p>Velocity = 1644.81 SCFM</p> <p>Ventilation rate (u) = $\frac{\text{Velocity}}{\text{Roller Surface Area}}$</p> $\text{Ventilation rate (u)} = \frac{1644.81 \text{ SCFM}}{0.20 \text{ ft}^2} \times \frac{1 \text{ min}}{60 \text{ sec}} \times \frac{0.3048 \text{ m}}{1 \text{ ft}} = 41.49 \text{ m/sec}$									
<p>Step III: Determine Tack Time</p> <p>Tack time = 6 sec</p>									
<p>Step IV: Determine the Exposed Surface Area</p> <p>The exposed area is determined from the area of rubber processed.</p> <p>The roller applicator coats: 5.83 $\frac{\text{ft}^2}{\text{min}}$ x $\frac{60 \text{ min}}{1 \text{ hr}}$ = 349.80 ft²/hour</p> <p>Based upon 24 hour production:</p> $S_A = 349.80 \frac{\text{ft}^2}{\text{hour}} \times \frac{24 \text{ hours}}{1 \text{ day}} = 8395.2 \text{ ft}^2/\text{day}$									
MDI Stack Emissions Calculations for Extrusion Line #3 Hutchinson Sealing Systems, Inc. Church Hill, Tennessee 37-0067									
<p>Converting ft² to m²:</p> $S_A = 8395.2 \frac{\text{ft}^2}{\text{day}} \times \frac{1 \text{ m}^2}{10.76 \text{ ft}^2} = 780.22305 \text{ m}^2/\text{day}$ <p>Therefore,</p> <p>MDI Stack Emissions = $W = 25.4 \times VP_{MDI} \times (M_w/T_{proc}) \times u^{0.78} \times S_A \times t_{TF}$</p> $W = 25.4 \times 5.1E-07 \text{ atm} \times \frac{250.26}{298} \times 18.28 \frac{\text{m}}{\text{sec}} \times 780.22 \frac{\text{m}^2}{\text{day}} \times 6 \text{ sec} = 0.93 \text{ grams/day}$									
<p>Step V: Convert grams/day to pounds/year</p> $W = 0.93 \frac{\text{grams}}{\text{day}} \times \frac{1 \text{ lb}}{454 \text{ grams}} \times 365 \frac{\text{days}}{\text{year}} = 0.75 \text{ lbs/year}$ <p>Convert lbs/year to lbs/hour</p> $W = 0.75 \frac{\text{lbs}}{\text{year}} \times \frac{1 \text{ year}}{8760 \text{ hours}} = 8.54E-05 \text{ lbs/hour} \quad (1 \text{ booth})$ <p>3.37E-03 lbs/hour Standard Exemption</p> <p>Convert lbs/year to tons/year</p> $W = 0.75 \frac{\text{lbs}}{\text{year}} \times \frac{1 \text{ ton}}{2000 \text{ lbs}} = 3.74E-04 \text{ tons/year} \quad (1 \text{ booth})$ <p>7.40E-03 tons/year Standard Exemption</p> <p>Convert tons/year to tons/month</p> $W = 3.74E-04 \frac{\text{tons}}{\text{year}} \times \frac{1 \text{ year}}{12 \text{ months}} = 3.12E-05 \text{ tons/month} \quad (1 \text{ booth})$									

MDI Stack Emissions Calculations for Extrusion Line #4 Hutchinson Sealing Systems, Inc. Church Hill, Tennessee 37-0067									
<p>Equation: $W = 25.4 \times VP_{MDI} \times (M_w/T_{proc}) \times u^{0.78} \times S_A \times t_{TF}$</p> <p>W = the evaporation losses from the open process in grams/day</p> <p>VP_{MDI} = the vapor pressure of MDI in atmospheres @ process temperature</p> <p>T_{proc} = the process temperature in K 298 K</p> <p>M_w = the molecular weight of MDI = 250.26</p> <p>u = the airflow speed in m/sec</p> <p>S_A = the exposed surface area in m²</p> <p>t_{TF} = the "tack free" time in seconds</p>									
<p>Step I: Determine Vapor Pressure of 1.5% MDI at ambient temperature (25 degrees Celsius) in atmospheres</p> <p>Vapor pressure of MDI at 25 degrees C: 1.02E-05 mm</p> <p>Convert vapor pressure to atmospheres and for a 5% mixture of MDI</p> <p>$VP_{MDI} = 0.0000102 \text{ mm Hg} \times \frac{1 \text{ atm}}{760 \text{ mm}} \times \frac{1.5 \text{ lbs of MDI}}{100 \text{ lbs of Flock Loc 852}} = 1.53E-07 \text{ atm}$</p>									
<p>Step II: Determine Ventilation Rate in meters/second</p> <p>Ventilation rate (u) = $\frac{\text{Velocity @ STP}}{\text{Roller Surface Area}}$ (Note: STP = Standard Temperature and Pressure)</p> <p>Roller Surface Area = 29 in² = 0.20 ft²</p> <p>Velocity @ STP = 1700 ACFM x $\frac{298 \text{ K}}{308 \text{ K}}$ = 1644.81 SCFM ACFM = Actual cubic feet per minute SCFM = Standard cubic feet per minute</p> <p>Velocity = 1644.81 SCFM</p> <p>Ventilation rate (u) = $\frac{\text{Velocity}}{\text{Roller Surface Area}}$</p> <p>Ventilation rate (u) = $\frac{1644.81 \text{ SCFM}}{0.20 \text{ ft}^2} \times \frac{1 \text{ min}}{60 \text{ sec}} \times \frac{0.3048 \text{ m}}{1 \text{ ft}} = 41.49 \text{ m/sec}$</p>									
<p>Step III: Determine Tack Time</p> <p>Tack time = 6 sec</p>									
<p>Step IV: Determine the Exposed Surface Area</p> <p>The exposed area is determined from the area of rubber processed.</p> <p>The roller applicator coats: 5.83 $\frac{\text{ft}^2}{\text{min}}$ x $\frac{60 \text{ min}}{1 \text{ hr}}$ = 349.80 ft²/hour</p> <p>Based upon 24 hour production:</p> <p>$S_A = 349.80 \frac{\text{ft}^2}{\text{hour}} \times \frac{24 \text{ hours}}{1 \text{ day}} = 8395.2 \text{ ft}^2/\text{day}$</p>									
MDI Stack Emissions Calculations for Extrusion Line #4 Hutchinson Sealing Systems, Inc. Church Hill, Tennessee 37-0067									
<p>Converting ft² to m²:</p> <p>$S_A = 8395.2 \frac{\text{ft}^2}{\text{day}} \times \frac{1 \text{ m}^2}{10.76 \text{ ft}^2} = 780.22305 \text{ m}^2/\text{day}$</p> <p>Therefore,</p> <p>MDI Stack Emissions = $W = 25.4 \times VP_{MDI} \times (M_w/T_{proc}) \times u^{0.78} \times S_A \times t_{TF}$</p> <p>$W = 25.4 \times 1.53E-07 \text{ atm} \times \frac{250.26}{298} \times 18.28 \frac{\text{m}}{\text{sec}} \times 780.22 \frac{\text{m}^2}{\text{day}} \times 6 \text{ sec} = 0.28 \text{ grams/day}$</p>									
<p>Step V: Convert grams/day to pounds/year</p> <p>$W = 0.28 \frac{\text{grams}}{\text{day}} \times \frac{1 \text{ lb}}{454 \text{ grams}} \times 365 \frac{\text{days}}{\text{year}} = 0.22 \text{ lbs/year}$</p> <p>Convert lbs/year to lbs/hour</p> <p>$W = 0.22 \frac{\text{lbs}}{\text{year}} \times \frac{1 \text{ year}}{8760 \text{ hours}} = 2.56E-05 \text{ lbs/hour}$ (1 booth)</p> <p>3.37E-03 lbs/hour Standard Exemption</p> <p>Convert lbs/year to tons/year</p> <p>$W = 0.22 \frac{\text{lbs}}{\text{year}} \times \frac{1 \text{ ton}}{2000 \text{ lbs}} = 1.12E-04 \text{ tons/year}$ (1 booth)</p> <p>7.40E-03 tons/year Standard Exemption</p> <p>Convert tons/year to tons/month</p> <p>$W = 1.12E-04 \frac{\text{tons}}{\text{year}} \times \frac{1 \text{ year}}{12 \text{ months}} = 9.36E-06 \text{ tons/month}$ (1 booth)</p>									

COMBUSTION POLLUTANTS EMITTED FROM CONSUMPTION OF NATURAL GAS BY CURING OVENS
HUTCHINSON SEALING SYSTEMS, INC.
MURFreesboro, TENNESSEE

[illegible]

NOTE #1:
Calculation
Ovens Heating (BTU/hr) \times (1BTU/Content of Natural Gas (BTU/lb)) \times Emission Factor (lb/lb) \times Operating Hours (hours/year) \times Number of Ovens

 \times Amount of Pollutant Emitted from all Emission Lines (lb/year)

NOTE #2: BTU Content of Natural Gas confirmed by natural gas supplier on November 15, 2006.

NOTE #3: Natural Gas combustion emission factors obtained from AP-42, 6th Edition, Volume 1: Chapter 1: External Combustion Sources, Section 1.4: Natural Gas.

**VOC CONTAINING MATERIALS
HUTCHINSON SEALING SYSTEMS, INC.
CHURCH HILL, TENNESSEE**

Process Material	Specific Gravity	Density	%VOC	VOCs (lbs/gal)	Container Size	Annual Usage	Conversion Factors	Annual Usage (gal)
Acheson Part C (Emralon 8370C) or equivalent	1.0700	8.9238	99.70	8.8968	1 qt	3847.2 qt	4 1	961.80
Acheson TW-077 or equivalent	1.0400	8.6736	44.26	3.8391	5 gal	6776 gal	1 1	6776.00
Aer kroil or equivalent	0.8700	7.2558	60.00	4.3535	10 oz	18592 oz	16 7.2558	160.15
Apollo 2077 or equivalent	1.0600	8.8404	1.89	0.1669	1 lb	336 lb	8.8404 1	38.01
Bostik Mastic or equivalent	1.5311	12.7693	3.00	0.3831	5 gal	224 gal	1 1	224.00
Chem Loc 459X or equivalent	0.8729	7.2800	96.50	7.0252	5 gal	868 gal	1 1	868.00
Chemglaze 9956 or equivalent	0.8717	7.2700	94.30	6.8556	1 gal	22.4 gal	1 1	22.40
Chemglaze 9986 or equivalent	0.8753	7.3000	90.40	6.5992	1 gal	39.2 gal	1 1	39.20
FlockLok 6389 or equivalent	0.9952	8.3000	43.00	3.5690	1 gal	88.4 gal	1 1	88.40
FlockLok 852 or equivalent	0.9976	8.3200	48.00	3.9936	55 gal	4620 gal	1 1	4620.00
FlockLok 853A or equivalent	0.9826	8.1950	51.25	4.1999	55 gal	3388 gal	1 1	3388.00
FlockLok 855 or equivalent	0.9832	8.2000	48.10	3.9442	55 gal	8008 gal	1 1	8008.00
FlockLok 870 or equivalent	0.9712	8.1000	44.89	3.6361	55 gal	28745.6 gal	1 1	28745.60
Isopropyl Alcohol or equivalent	0.7906	6.5933	100.00	6.5933	55 gal	6104 gal	1 1	6104.00
Loctite 401 or equivalent	1.0500	8.7570	2.00	0.1751	1 gal	246.4 gal	1 1	246.40
Loctite 411 or equivalent	1.0500	8.7570	2.00	0.1751	12.8 oz	22422.4 oz	16 8.7570	160.03
Loctite 454 or equivalent	1.0500	8.7570	2.00	0.1751	20 gram	11872 gram	0.0022046 8.7570	2.99
Misty or equivalent	0.8500	7.0890	50.00	3.5445	12 oz	24365.6 oz	16 7.0890	214.82
Plasti Dip or equivalent	1.1000	9.1740	5.10	0.4679	14.5 oz	31617.6 oz	16 9.1740	215.40
Rohm and Haas 6008 or equivalent	0.9400	7.8396	42.00	3.2926	55 gal	0 gal	1 1	0.00
Rohm and Haas 6009 or equivalent	0.9200	7.6728	44.60	3.4218	55 gal	0 gal	1 1	0.00
Rohm and Haas Robond TR 5125 or equivalent	1.0800	8.0800	11.00	0.8888	5 gal	1680 gal	1 1	1680.00
Stahl WT-21-836 or equivalent	1.0000	8.3400	11.00	0.9174	55 gal	4312 gal	1 1	4312.00
Stahl WD-2870 or equivalent	1.0000	8.3400	1.00	0.0834	5 gal	140 gal	1 1	140.00
Stahl WT-21-988 or equivalent	1.0600	8.8404	14.00	1.2377	5 gal	364 gal	1 1	364.00
Stahl XR-21-498 or equivalent	1.0000	8.3400	50.00	4.1700	5 gal	336 gal	1 1	336.00
Tak Pak 7452 or equivalent	0.7926	6.6103	1.02	0.0674	1 gal	352.4 gal	1 1	352.40
Methyl Ethyl Ketone or equivalent	0.8100	6.7554	100.00	6.7554	55 gal	1310.4 gal	1 1	1310.40
Acheson TW-040 or equivalent	1.0300	8.5902	21.37	1.8361	50 gal	17360 gal	1 1	17360.00
Unistole P-401 Toluene/HPT Blend or equivalent	0.8700	7.2558	100.00	7.2558	55 gal	16632 gal	1 1	16632.00
WD-40 or equivalent	0.8170	6.8138	49.50	3.3728	8 oz	9139.2 oz	16 6.8138	83.83

Maximum Tonnage/Year:
Maximum Pounds/Year:

26616.8
53233600

26616.8
53233600

VOCs	216.7	215.2
HAPs	167.1	
PM	41.0	75.5
SO2	0.0002	0.02
Nox	0.1	4
CO	0.0093	

RUBBER USAGE
HUTCHINSON SEALING SYSTEMS, INC.
CHURCH HILL, TENNESSEE

Month	Year	EPDM Processed Extrusion Line #1 (lbs/month)	EPDM Processed Extrusion Line #2 (lbs/month)	EPDM Processed Extrusion Line #3 (lbs/month)	EPDM Processed Extrusion Line #4 (lbs/month)	EPDM Processed Extrusion Line #5 (lbs/month)	Total EPDM Processed (lbs/month)	Total EPDM Processed (tons/month)
January	2016	46849	38649	145050	199064	197622	627234	314
February	2016	51447	48234	150827	221522	228275	700305	350
March	2016	51605	54757	902357	243587	253379	1505685	753
April	2016	54458	56890	126552	219355	169493	626748	313
May	2016	54453	65239	129793	306583	187392	743460	372
June	2016	41463	50701	163919	273447	200016	729546	365
July	2016	42147	36221	71007	163304	129729	442408	221
August	2016	53180	47305	127835	266381	269103	763804	382
September	2016	39334	41398	138282	259541	201369	679924	340
October	2016	55533	49869	86530	288400	238052	718384	359
November	2016	63803	21575	158288	255084	266005	764755	382
December	2016	32576	47341	108289	213417	219598	621221	311
		586848	558179	2308729	2909685	2560033		4462

Standard Tonnage/Year: 26,617
Standard Pounds/Year: 53,233,600

16,636
33,271,000

**VOC EMISSIONS FROM EXTRUSION LINE #1
(SOURCE 01)
HUTCHINSON SEALING SYSTEMS, INC.
CHURCH HILL, TENNESSEE**

Process Material	Density of Process Material (lbs/gal)	VOC WT% Contained in Process Material	VOCs Contained in Process Material (lbs/gal)	Amount of Process Material Used (gal/year)	VOCs Emitted (lbs/year)	VOCs Emitted (tons/year)
Acheson Part C (Emralon 8370C) or equivalent	8.9238	99.70	8.8968	192.36	1711.3851	0.8557
Acheson TW-077 or equivalent	8.6736	44.26	3.8391	1355.20	5202.7985	2.6014
FlockLok 853A or equivalent	8.1950	51.25	4.1999	847.00	3557.3471	1.7787
FlockLok 855 or equivalent	8.2000	48.10	3.9442	2002.00	7896.2884	3.9481
Methyl Ethyl Ketone or equivalent	6.7554	100.00	6.7554	262.08	1770.4552	0.8852
Acheson TW-040 or equivalent	8.5902	21.37	1.8361	3472.00	6374.9705	3.1875
Unistole P-401 Toluene/HPT Blend or equivalent	7.2558	100.00	7.2558	3326.40	24135.6931	12.0678
Total Tons of VOCs Emitted from Chemical Usage on Extrusion Line #1:						25.3245

VOCs from Rubber Extrusion

Amount of Rubber Processed (lbs/year) x VOC Emission Factor = Amount of VOCs Emitted (lbs/year)
10646720 x 3.52E-06 = 37.4765 lbs/year
Total Tons of VOCs Emitted from Rubber Extrusion on Extrusion Line #1: 1.87E-02 tons/year

VOCs from Rubber Curing

Amount of Rubber Processed (lbs/year) x VOC Emission Factor = Amount of VOCs Emitted (lbs/year)
10646720 x 8.25E-04 = 8783.5440 lbs/year
Total Tons of VOCs Emitted from Rubber Curing on Extrusion Line #1: 4.39E+00 tons/year

VOCs from Natural Gas Combustion: 0.0002 tons/year (Calculations Attached)

Total Tons of VOCs Emitted from Extrusion Line #1:	29.7352	tons/year
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NOTE #1: Rubber emission factors obtained from AP-42, 5th Edition, Volume I, Chapter 4: Evaporation Loss Sources, Section 4.12: Manufacture of Rubber Products, U.S. Environmental Protection Agency (Compound #8).

NOTE #2: No VOC emission controls installed.

HAP EMISSIONS FROM EXTRUSION LINE #1
(SOURCE 01)
HUTCHINSON SEALING SYSTEMS, INC.
CHURCH HILL, TENNESSEE

Process Material	Amount of Process Material Used (gal/year)	Density of Process Material Used (lbs/gal)	Diethylene Glycol Monobutyl Ether [112-34-5] (%Wt)	Diethylene Glycol Monobutyl Ether Emitted (tons/year)	Ethyl Benzene [100-41-4] (WT%)	Ethyl Benzene Emitted (tons/year)	Methyl Isobutyl Ketone (MIBK) [108-10-1] (WT%)	Methyl Isobutyl Ketone (MIBK) Emitted (tons/year)	Methylene Chloride 75-09-2 (WT%)	Methylene Chloride Emitted (tons/year)	P-Xylene [106-42-3] (WT%)	P-Xylene Emitted (tons/year)	Toluene [108-88-3] (WT%)	Toluene Emitted (tons/year)	Xylene [1330-20-7] (WT%)	Xylene Emitted (tons/year)	HAP Content (lbs/gal)	Total HAPS Emitted by Material (tons/year)
Acheson Part C (Emralon 8370C) or equivalent	192.36	8.9238	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Acheson TW-077 or equivalent	1355.20	8.6736	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.0588	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0588
FlockLok 853A or equivalent	847.00	8.1950	0.0000	0.0000	5.0000	0.1735	10.0000	0.3471	0.0000	0.0000	1.0000	0.0347	10.0000	0.3471	20.0000	0.6941	3.7697	1.5965
FlockLok 855 or equivalent	2002.00	8.2000	0.0000	0.0000	5.0000	0.4104	15.0000	1.2312	0.0000	0.0000	0.0000	0.0000	10.0000	0.8208	15.0000	1.2312	3.6900	3.6937
Methyl Ethyl Ketone or equivalent	262.08	6.7554	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Acheson TW-040 or equivalent	3472.00	8.5902	5.0000	0.7456	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.1491	0.0000	0.0000	0.5154	0.8948
Unistole P-401 Toluene/HPT Blend or equivalent	3326.40	7.2558	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	95.0000	11.4645	0.0000	0.0000	6.8930	11.4645
Total HAPs Emitted from Chemical Usage (tons/year):				0.7456		0.5839		1.5783		0.0588		0.0347		12.7815		1.9253		17.7081

MDI Emitted: 3.74E-04 tons/year (Calculations Attached)

HAPs Emitted from Rubber Curing

Amount of Rubber Processed (lbs/year) x HAP Emission Factor = Amount of HAPs Emitted (lbs/year)
10646720 x 9.76E-04 = 10391.1987 lbs/year
Total Tons of HAPs Emitted from Rubber Extrusion on Extrusion Line #1: 5.20E+00 tons/year

Total Tons of HAPs Emitted from Extrusion Line #1:	22.9041 tons/year
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NOTE #1: Rubber emission factors obtained from AP-42, 5th Edition, Volume I, Chapter 4: Evaporation Loss Sources, Section 4.12: Manufacture of Rubber Products, U.S. Environmental Protection Agency (Compound #8).

MDI Stack Emissions Calculations for Extrusion Line #1
Hutchinson Sealing Systems, Inc.
Church Hill, Tennessee
37-0067

Equation: $W = 25.4 \times VP_{MDI} \times (M_W/T_{proc}) \times u^{0.78} \times S_A \times t_{TF}$
 W = the evaporation losses from the open process in grams/day
 VP_{MDI} = the vapor pressure of MDI in atmospheres @ process temperature
 T_{proc} = the process temperature in K 298 K
 M_W = the molecular weight of MDI 250.26
 u = the airflow speed in m/sec
 S_A = the exposed surface area in m²
 t_{TF} = the "tack free" time in seconds

Step 1: Determine Vapor Pressure of 5% MDI at ambient temperature (25 degrees Celsius) in atmospheres

Vapor pressure of MDI at 25 degrees C: 1.02E-05 mm
Convert vapor pressure to atmospheres and for a 5% mixture of MDI

$$VP_{MDI} = 0.0000102 \text{ mm Hg} \times \frac{1 \text{ atm}}{760 \text{ mm}} \times \frac{5 \text{ lbs of MDI}}{100 \text{ lbs of Flock Loc 852}} = 5.10E-07 \text{ atm}$$

Step II: Determine Ventilation Rate in meters/second

$$\text{Ventilation rate (u)} = \frac{\text{Velocity @ STP}}{\text{Roller Surface Area}} \quad (\text{Note: STP} = \text{Standard Temperature and Pressure})$$

Roller Surface Area =	29	in ² =	0.20	ft ²	
Velocity @ STP =	1700	ACFM x	$\frac{298}{308}$	$\frac{K}{K}$	= 1644.81 SCFM
					ACFM = Actual cubic feet per minute SCFM = Standard cubic feet per minute

Velocity = 1644.81 SCFM

$$\text{Ventilation rate (u)} = \frac{\text{Velocity}}{\text{Roller Surface Area}}$$

$$\text{Ventilation rate (u)} = \frac{1644.81}{0.20} \text{ SCFM} \times \frac{1}{60} \frac{\text{min}}{\text{sec}} \times \frac{0.3048 \text{ m}}{1 \text{ ft}} = 41.49 \text{ m/sec}$$

Step III: Determine Tack Time

Tack time = 6 sec

Step IV: Determine the Exposed Surface Area

The exposed area is determined from the area of rubber processed.

$$\text{The roller applicator coats: } 5.83 \frac{\text{ft}^2}{\text{min}} \times \frac{60}{1} \frac{\text{min}}{\text{hr}} = 349.80 \frac{\text{ft}^2}{\text{hour}}$$

Based upon 24 hour production:

$$S_A = 349.80 \frac{\text{ft}^2}{\text{hour}} \times \frac{24}{1} \frac{\text{hours}}{\text{day}} = 8395.2 \text{ ft}^2/\text{day}$$

MDI Stack Emissions Calculations for Extrusion Line #1
Hutchinson Sealing Systems, Inc.
Church Hill, Tennessee
37-0067

Converting ft^2 to m^2 :

$$S_A = 8395.2 \frac{\text{ft}^2}{\text{day}} \times \frac{1}{10.76} \frac{\text{m}^2}{\text{ft}^2} = 780.22305 \text{ m}^2/\text{day}$$

$$\text{MDI Stack Emissions} = W = 25.4 \times VP_{\text{MDI}} \times (M_W/T_{\text{proc}}) \times u^{0.78} \times S_A \times t_{\text{TF}}$$

$$W = 25.4 \times 5.1E-07 \text{ atm} \times \frac{250.26}{298} \times 18.28 \frac{\text{m}}{\text{sec}} \times 780.22 \frac{\text{m}^2}{\text{day}} \times 6 \text{ sec} = 0.93 \text{ grams/day}$$

Step V: Convert grams/day to pounds/year

$$W = 0.93 \frac{\text{grams}}{\text{day}} \times \frac{1}{454} \frac{\text{lb}}{\text{grams}} \times 365 \frac{\text{days}}{\text{year}} = 0.75 \text{ lbs/year}$$

Convert lbs/year to lbs/hour

W	=	0.75	$\frac{\text{lbs}}{\text{year}}$	x	$\frac{1}{8760}$	$\frac{\text{year}}{\text{hours}}$	=	Emissions 8.54E-05 lbs/hour	(1 booth)
								3.37E-03 lbs/hour	Standard Exemption

year	8760	hours		
Convert lbs/year to tons/year			3.37E-03 lbs/hour	Standard Exemption

$$W = 0.75 \frac{\text{lbs}}{\text{year}} \times \frac{1}{2000} \frac{\text{ton}}{\text{lbs}} = 3.74\text{E-}04 \text{ tons/year (1 booth)}$$

$$7.40\text{E-}03 \text{ tons/hour Standard Exemption}$$

Convert tons/year to tons/month	7.40E-03 tons/hour	Standard Exemption
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$$W = 3.74E-04 \frac{\text{tons}}{\text{year}} \times \frac{1}{12} \frac{\text{year}}{\text{months}} = 3.12E-05 \text{ tons/month} \quad (1 \text{ booth})$$

PM EMISSIONS FROM EXTRUSION LINE #1
(SOURCE 01)
HUTCHINSON SEALING SYSTEMS, INC.
CHURCH HILL, TENNESSEE

Process Material	Amount of Process Material Used (gal/year)	Density of Process Material Used (lbs/gal)	% Solids Contained in Process Material	Emission Factor	PMs Emitted (lbs/year)	PMs Emitted (tons/year)
Acheson Part C (Emralon 8370C) or equivalent	192.36	8.92	0.0000	0.0100	0.0000	0.0000
Acheson TW-077 or equivalent	1355.20	8.67	27.0000	0.0100	31.7370	0.0159
FlockLok 853A or equivalent	847.00	8.20	0.0000	0.0100	0.0000	0.0000
FlockLok 855 or equivalent	2002.00	8.20	0.0000	0.0100		
Methyl Ethyl Ketone or equivalent	262.08	6.76	0.0000	0.0100	0.0000	0.0000
Acheson TW-040 or equivalent	3472.00	8.59	0.0000	0.0100	0.0000	0.0000
Unistole P-401 Toluene/HPT Blend or equivalent	3326.40	7.26	0.0000	0.0100	0.0000	0.0000
Total Tons of PMs Emitted from Chemical Usage on Extrusion Line #1:						0.0159

PM Emitted from Rubber Extrusion

Amount of Rubber Processed (lbs/year) x PM Emission Factor = Amount of PM Emitted (lbs/year)

10646720 x 2.67E-08 = 0.2843 lbs/year

Total Tons of PM Emitted from Rubber Extrusion on Extrusion Line #1: 1.42E-04 tons/year

PM Emitted from Stack Exhausts

Combined Stack Flow Rate (dscf/min) x Particulate Matter per Volume (grains/cf) x Conversion of Pounds to grains x Conversion of Minutes to Hours
x Conversion of Hours to Year x Conversion of Pounds to Tons = Particulate Matter Emitted (tons/year)

7562 dscf/min x 0.02 grains/cf x 60 min/hr x 1.43E-04 lb/grain x

8760 hours/year x 0.0005 ton/pounds = 5.68 tons/year

PM Emitted from Natural Gas Combustion: 0.0003 tons/year (Calculations Attached)

Total Tons of PM Emitted from Extrusion Line #5:	5.70	tons/year
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Note: Emission factor obtained from AP-42, 5th Edition, Volume I, Chapter 4: Evaporation Loss Sources, Section 4.12: Manufacture of Rubber Products, U.S. Environmental Protection Agency (Compound #8).

NATURAL GAS COMBUSTION EMISSIONS FROM EXTRUSION LINE #1
(SOURCE 01)
HUTCHINSON SEALING SYSTEMS, INC.
CHURCH HILL, TENNESSEE

NATURAL GAS COMBUSTION EMISSIONS FOR INFRATROL CURING OVEN LOCATED ON EXTRUSION LINE #1							
Pollutant	BTU Content of Natural Gas (BTU/ft3)	Oven Rating (BTU/hr)	Emission Factor (lb/ft3)	Operating Hours	Number of Burners	Amount of Pollutant Emitted from all Extrusion Lines (lbs/year)	Amount of Pollutant Emitted from all Extrusion Lines (tons/year)
Particulate Matter	100000	880000	0.0000076	8760	1	0.5859	0.0003
Sulfur Dioxide	100000	880000	0.0000006	8760	1	0.0463	0.0000
Nitrogen Oxides	100000	880000	0.00017	8760	1	13.1050	0.0066
Carbon Monoxide	100000	880000	0.000024	8760	1	1.8501	0.0009
VOCs	100000	880000	0.0000055	8760	1	0.4240	0.0002

SUMMARY OF NATURAL GAS COMBUSTION EMISSIONS FOR OVEN LOCATED ON EXTRUSION LINES #1	
Pollutant	Amount of Pollutant Emitted (tons/year)
Particulate Matter	0.0003
Sulfur Dioxide	0.0000
Nitrogen Oxides	0.0066
Carbon Monoxide	0.0009
VOCs	0.0002

NOTE #1:

Calculation

Oven Rating (BTU/hr) x (1/BTU Content of Natural Gas (BTU/ft3) x Emission Factor (lb/ft3) x Operating Hours (hours/year) x Number of Ovens

= Amount of Pollutant Emitted from all Extrusion Lines (lbs/year)

NOTE #2: BTU Content of Natural Gas confirmed by natural gas supplier on November 15, 2006.

NOTE #3: Natural Gas combustion emission factors obtained from AP-42, 5th Edition, Volume I, Chapter 1: External Combustion Sources, Section 1.4: Natural Gas Combustion, U.S. Environmental Protection Agency, July 1998.

**VOC EMISSIONS FROM EXTRUSION LINE #2
(SOURCE 11)
HUTCHINSON SEALING SYSTEMS, INC.
CHURCH HILL, TENNESSEE**

Process Material	Density of Process Material (lbs/gal)	VOC WT% Contained in Process Material	VOCs Contained in Process Material (lbs/gal)	Amount of Process Material Used (gal/year)	VOCs Emitted (lbs/year)	VOCs Emitted (tons/year)
Acheson Part C (Emralon 8370C) or equivalent	8.9238	99.6972	8.8968	192.36	1711.3851	0.8557
Acheson TW-077 or equivalent	8.6736	44.2623	3.8391	1355.20	5202.7985	2.6014
FlockLok 852 or equivalent	8.3200	48.0000	3.9936	1155.00	4612.6080	2.3063
FlockLok 853A or equivalent	8.1950	51.2500	4.1999375	847.00	3557.3471	1.7787
Methyl Ethyl Ketone or equivalent	6.7554	100.0000	6.7554	262.08	1770.4552	0.8852
Acheson TW-040 or equivalent	8.5902	21.3745	1.8361	3472.00	6374.9705	3.1875
Unistole P-401 Toluene/HPT Blend or equivalent	7.2558	100.0000	7.2558	3326.40	24135.6931	12.0678
Total Tons of VOCs Emitted from Chemical Usage on Extrusion Line #2:						23.6826

VOCs from Rubber Extrusion

Amount of Rubber Processed (lbs/year) x VOC Emission Factor = Amount of VOCs Emitted (lbs/year)

10646720 x 3.52E-06 = 37.4765 lbs/year
Total Tons of VOCs Emitted from Rubber Extrusion on Extrusion Line #2: 1.87E-02 tons/year

VOCs from Rubber Curing

Amount of Rubber Processed (lbs/year) x VOC Emission Factor = Amount of VOCs Emitted (lbs/year)

10646720 x 8.25E-04 = 8783.5440 lbs/year
Total Tons of VOCs Emitted from Rubber Curing on Extrusion Line #2: 4.39E+00 tons/year

VOCs from Natural Gas Combustion: 0.0004 tons/year (Calculations Attached)

Total Tons of VOCs Emitted from Extrusion Line #2:	28.0935	tons/year
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NOTE #1: Rubber emission factors obtained from AP-42, 5th Edition, Volume I, Chapter 4: Evaporation Loss Sources, Section 4.12: Manufacture of Rubber Products, U.S. Environmental Protection Agency (Compound #8).

NOTE #2: No VOC emission controls installed.

HAP EMISSIONS FROM EXTRUSION LINE #2
(SOURCE 11)
HUTCHINSON SEALING SYSTEMS, INC.
CHURCH HILL, TENNESSEE

Process Material	Amount of Process Material Used (gal/year)	Density of Process Material Used (lbs/gal)	Diethylene Glycol Monobutyl Ether [112-34-5] (WT%)	Diethylene Glycol Monobutyl Ether Emitted (tons/year)	Ethyl Benzene [100-41-4] (WT%)	Ethyl Benzene Emitted (tons/year)	Methyl Isobutyl Ketone (MIBK) [108-10-1] (WT%)	Methyl Isobutyl Ketone (MIBK) Emitted (tons/year)	Methylene Chloride (WT%)	Methylene Chloride Emitted (tons/year)	P-Xylene [106-42-3] (WT%)	P-Xylene Emitted (tons/year)	Toluene [108-88-3] (WT%)	Toluene Emitted (tons/year)	Xylene [1330-20-7] (WT%)	Xylene Emitted (tons/year)	HAP Content (lbs/gal)	Total HAPS Emitted by Material (tons/year)
Acheson Part C (Emralon 8370C) or	192.36	8.9238	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Acheson TW-077 or equivalent	1355.20	8.6736	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.0588	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0588
FlockLok 852 or equivalent	1155.00	8.3200	0.0000	0.0000	10.0000	0.4805	10.0000	0.4805	0.0000	0.0000	1.0000	0.0480	0.0000	0.0000	25.0000	1.2012	3.8272	2.2102
FlockLok 853A or equivalent	847.00	8.1950	0.0000	0.0000	5.0000	0.1735	10.0000	0.3471	0.0000	0.0000	1.0000	0.0347	10.0000	0.3471	20.0000	0.6941	3.7697	1.5965
Methyl Ethyl Ketone or equivalent	262.08	6.7554	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Acheson TW-040 or equivalent	3472.00	8.5902	5.0000	0.7456	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.1491	0.0000	0.0000	0.5154	0.8948
Unistole P-401 Toluene/HPT Blend or equivalent	3326.40	7.2558	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	95.0000	11.4645	0.0000	0.0000	6.8930	11.4645
Total HAPs Emitted from Chemical Usage (tons/year):				0.7456		0.6540		0.8275		0.0588		0.0828		11.9606		1.8953		16.2247

MDI Emitted: 3.74E-04 tons/year (Calculations Attached)

HAPs Emitted from Rubber Curing

Amount of Rubber Processed (lbs/year) x HAP Emission Factor = Amount of HAPs Emitted (lbs/year)
10646720 x 9.76E-04 = 10391.1987 lbs/year
Total Tons of HAPs Emitted from Rubber Extrusion on Extrusion Line #2: 5.20E+00 tons/year

Total Tons of HAPs Emitted from Extrusion Line #2:	21.4206	tons/year
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NOTE #1: Rubber emission factors obtained from AP-42, 5th Edition, Volume I, Chapter 4: Evaporation Loss Sources, Section 4.12: Manufacture of Rubber Products, U.S. Environmental Protection Agency (Compound #8).

MDI Stack Emissions Calculations for Extrusion Line #2 Hutchinson Sealing Systems, Inc. Church Hill, Tennessee 37-0067										
EQUATION: W = 25.4 x VP _{MDI} X (M _w /T _{p roc}) x u ^{0.78} x S _A x t _{T F}										
W = the evaporation losses from the open process in grams/day										
VP _{MDI} = the vapor pressure of MDI in atmospheres @ process temperature										
T _{P roc} = the process temperature in K 298 K										
M _w = the molecular weight of MDI = 250.26										
u = the airflow speed in m/sec										
S _A = the exposed surface area in m²										
t _{T F} = the "lack free" time in seconds										
Step I: Determine Vapor Pressure of 5% MDI at ambient temperature (25 degrees Celsius) in atmospheres										
Vapor pressure of MDI at 25 degrees C: 1.02E-05 mm Hg										
Convert vapor pressure to atmospheres and for a 5% mixture of MDI										
VP_{MDI} =	0.0000102	mm Hg	x	$\frac{1 \text{ atm}}{760 \text{ mm}}$	x	$\frac{5}{100}$	$\frac{\text{lbs of MDI}}{\text{lbs of Flock Loc 852}}$	=	5.10E-07 atm	
Step II: Determine Ventilation Rate in meters/second										
Ventilation rate (u) =	$\frac{\text{Velocity @ STP}}{\text{Roller Surface Area}}$ (<i>Note: STP = Standard Temperature and Pressure</i>)									
Roller Surface Area =	29	in²	=	0.20	ft²					
Velocity @ STP =	1700	ACFM	x	$\frac{298}{308} \frac{\text{K}}{\text{K}}$	=	1644.81	SCFM	ACFM = Actual cubic feet per minute SCFM = Standard cubic feet per minute		
Velocity =	1644.81	SCFM								
Ventilation rate (u) =	$\frac{\text{Velocity}}{\text{Roller Surface Area}}$									
Ventilation rate (u) =	$\frac{1644.81}{0.20}$	$\frac{\text{SCFM}}{\text{ft}^2}$	x	$\frac{1}{60}$	$\frac{\text{min}}{\text{sec}}$	x	$\frac{0.3048}{1}$	$\frac{\text{m}}{\text{ft}}$	=	41.49 m/sec
Step III: Determine Tack Time										
Tack time =	6	sec								
Step IV: Determine the Exposed Surface Area										
The exposed area is determined from the area of rubber processed.										
The roller applicator coats:	5.83	$\frac{\text{ft}^2}{\text{min}}$	x	$\frac{60}{1}$	$\frac{\text{min}}{\text{hr}}$	=	349.80	$\frac{\text{ft}^2}{\text{hour}}$		
Based upon 24 hour production:										
S _A =	349.80	$\frac{\text{ft}^2}{\text{hour}}$	x	$\frac{24}{1}$	$\frac{\text{hours}}{\text{day}}$	=	8395.2	$\frac{\text{ft}^2}{\text{day}}$		
MDI Stack Emissions Calculations for Extrusion Line #2 Hutchinson Sealing Systems, Inc. Church Hill, Tennessee 37-0067										
Converting ft² to m²:										
S _A =	8395.2	$\frac{\text{ft}^2}{\text{day}}$	x	$\frac{1}{10.76}$	$\frac{\text{m}^2}{\text{ft}^2}$	=	780.22305	m²/day		
Therefore,										
MDI Stack Emissions = W = 25.4 x VP _{MDI} X (M _w /T _{p roc}) x u ^{0.78} x S _A X t _{T F}										
W =	25.4		x	5.1E-07	atm	x	$\frac{250.26}{298}$		x	18.28 $\frac{\text{m}}{\text{sec}}$ x 780.22 $\frac{\text{m}^2}{\text{day}}$ x 6 sec = 0.93 grams/day
Step V: Convert grams/day to pounds/year										
W =	0.93	$\frac{\text{grams}}{\text{day}}$	x	$\frac{1}{454}$	$\frac{\text{lb}}{\text{grams}}$	x	365 $\frac{\text{days}}{\text{year}}$	=	0.75	lbs/year
Convert lbs/year to lbs/hour										
W =	0.75	$\frac{\text{lbs}}{\text{year}}$	x	$\frac{1}{8760}$	$\frac{\text{year}}{\text{hours}}$	=	8.54E-05	lbs/hour	(1 booth)	
Convert lbs/year to tons/year										
W =	0.75	$\frac{\text{lbs}}{\text{year}}$	x	$\frac{1}{2000}$	$\frac{\text{ton}}{\text{lbs}}$	=	3.74E-04	tons/year	(1 booth)	
Convert tons/year to tons/month										
W =	3.74E-04	$\frac{\text{tons}}{\text{year}}$	x	$\frac{1}{12}$	$\frac{\text{year}}{\text{months}}$	=	3.12E-05	tons/month	(1 booth)	

PM EMISSIONS FROM EXTRUSION LINE #2
(SOURCE 11)
HUTCHINSON SEALING SYSTEMS, INC.
CHURCH HILL, TENNESSEE

Process Material	Amount of Process Material Used (gal/year)	Density of Process Material Used (lbs/gal)	% Solids Contained in Process Material	Emission Factor	PMs Emitted (lbs/year)	PMs Emitted (tons/year)
Acheson Part C (Emralon 8370C) or equivalent	192.36	8.92	0.0000	0.0100	0.0000	0.0000
Acheson TW-077 or equivalent	44.26	8.67	27.0000	0.0100	1.0366	0.0005
FlockLok 852 or equivalent	1155.00	8.32	0.0000	0.0100	0.0000	0.0000
FlockLok 853A or equivalent	847.00	8.20	0.0000	0.0100	0.0000	0.0000
Methyl Ethyl Ketone or equivalent	262.08	6.76	0.0000	0.0100	0.0000	0.0000
Acheson TW-040 or equivalent	3472.00	8.59	0.0000	0.0100	0.0000	0.0000
Unistole P-401 Toluene/HPT Blend or equivalent	3326.40	7.26	0.0000	0.0100	0.0000	0.0000
Total Tons of PMs Emitted from Chemical Usage on Extrusion Line #2:						0.0005

PM Emitted from Rubber Extrusion

Amount of Rubber Processed (lbs/year) x PM Emission Factor = Amount of PM Emitted (lbs/year)

$$10646720 \times 2.67\text{E-}08 = 0.2843 \text{ lbs/year}$$

$$\text{Total Tons of PM Emitted from Rubber Extrusion on Extrusion Line \#2: } 1.42\text{E-}04 \text{ tons/year}$$

PM Emitted from Stack Exhausts

Combined Stack Flow Rate (dscf/min) x Particulate Matter per Volume (grains/cf) x Conversion of Pounds to grains x Conversion of Minutes to Hours
x Conversion of Hours to Year x Conversion of Pounds to Tons = Particulate Matter Emitted (tons/year)

$$12757 \text{ dscf/min} \times 0.02 \text{ grains/cf} \times 60 \text{ min/hr} \times 1.43\text{E-}04 \text{ lb/grain} \times 8760 \text{ hours/year} \times 0.0005 \text{ ton/pounds} = 9.58 \text{ tons/year}$$

PM Emitted from Natural Gas Combustion:

0.0006 tons/year (Calculations Attached)

Total Tons of PM Emitted from Extrusion Line #2:	9.58	tons/year
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Note: Emission factor obtained from AP-42, 5th Edition, Volume I, Chapter 4: Evaporation Loss Sources, Section 4.12: Manufacture of Rubber Products, U.S. Environmental Protection Agency (Compound #8).

NATURAL GAS EMISSIONS FROM EXTRUSION LINE #2

(SOURCE 11)

HUTCHINSON SEALING SYSTEMS, INC.

CHURCH HILL, TENNESSEE

NATURAL GAS COMBUSTION EMISSIONS FOR GERLACH/JET AIR CURING OVEN LOCATED ON EXTRUSION LINE #2							
Pollutant	BTU Content of Natural Gas (BTU/ft3)	Oven Rating (BTU/hr)	Emission Factor (lb/ft3)	Operating Hours	Number of Oven Sections	Amount of Pollutant Emitted from all Extrusion Lines (lbs/year)	Amount of Pollutant Emitted from all Extrusion Lines (tons/year)
Particulate Matter	100000	105000	0.0000076	8760	1	0.0699	0.0000
Sulfur Dioxide	100000	105000	0.0000006	8760	1	0.0055	0.0000
Nitrogen Oxides	100000	105000	0.00017	8760	1	1.5637	0.0008
Carbon Monoxide	100000	105000	0.000024	8760	1	0.2208	0.0001
VOCs	100000	105000	0.0000055	8760	1	0.0506	0.0000

NATURAL GAS COMBUSTION EMISSIONS FOR GERLACH/MICROWAVE CURING OVEN LOCATED ON EXTRUSION LINE #2							
Pollutant	BTU Content of Natural Gas (BTU/ft3)	Oven Rating (BTU/hr)	Emission Factor (lb/ft3)	Operating Hours	Number of Oven Sections	Amount of Pollutant Emitted from all Extrusion Lines (lbs/year)	Amount of Pollutant Emitted from all Extrusion Lines (tons/year)
Particulate Matter	100000	87000	0.0000076	8760	4	0.2317	0.0001
Sulfur Dioxide	100000	87000	0.0000006	8760	4	0.0183	0.0000
Nitrogen Oxides	100000	87000	0.00017	8760	4	5.1824	0.0026
Carbon Monoxide	100000	87000	0.000024	8760	4	0.7316	0.0004
VOCs	100000	87000	0.0000055	8760	4	0.1677	0.0001

NATURAL GAS COMBUSTION EMISSIONS FOR GERLACH/HOT AIR CURING OVEN LOCATED ON EXTRUSION LINE #2							
Pollutant	BTU Content of Natural Gas (BTU/ft3)	Oven Rating (BTU/hr)	Emission Factor (lb/ft3)	Operating Hours	Number of Burners	Amount of Pollutant Emitted from all Extrusion Lines (lbs/year)	Amount of Pollutant Emitted from all Extrusion Lines (tons/year)
Particulate Matter	100000	87000	0.0000076	8760	5	0.2896	0.0001
Sulfur Dioxide	100000	87000	0.0000006	8760	5	0.0229	0.0000
Nitrogen Oxides	100000	87000	0.00017	8760	5	6.4780	0.0032
Carbon Monoxide	100000	87000	0.000024	8760	5	0.9145	0.0005
VOCs	100000	87000	0.0000055	8760	5	0.2096	0.0001

NATURAL GAS COMBUSTION EMISSIONS FOR INFRATROL CURING OVEN LOCATED ON EXTRUSION LINE #2							
Pollutant	BTU Content of Natural Gas (BTU/ft3)	Oven Rating (BTU/hr)	Emission Factor (lb/ft3)	Operating Hours	Number of Burners	Amount of Pollutant Emitted from all Extrusion Lines (lbs/year)	Amount of Pollutant Emitted from all Extrusion Lines (tons/year)
Particulate Matter	100000	800000	0.0000076	8760	1	0.5326	0.0003
Sulfur Dioxide	100000	800000	0.0000006	8760	1	0.0420	0.0000
Nitrogen Oxides	100000	800000	0.00017	8760	1	11.9136	0.0060
Carbon Monoxide	100000	800000	0.000024	8760	1	1.6819	0.0008
VOCs	100000	800000	0.0000055	8760	1	0.3854	0.0002

SUMMARY OF NATURAL GAS COMBUSTION EMISSIONS FOR OVENS LOCATED ON EXTRUSION LINES #2	
Pollutant	Amount of Pollutant Emitted (tons/year)
Particulate Matter	0.0006
Sulfur Dioxide	0.0000
Nitrogen Oxides	0.0126
Carbon Monoxide	0.0018
VOCs	0.0004

NOTE #1:

Calculation

Oven Rating (BTU/hr) x (1/BTU Content of Natural Gas (BTU/ft3) x Emission Factor (lb/ft3) x Operating Hours (hours/year) x Number of Ovens

= Amount of Pollutant Emitted from all Extrusion Lines (lbs/year)

NOTE #2: BTU Content of Natural Gas confirmed by natural gas supplier on November 15, 2006.

NOTE #3: Natural Gas combustion emission factors obtained from AP-42, 5th Edition, Volume I, Chapter 1: External Combustion Sources, Section 1.4: Natural Gas Combustion, U.S. Environmental Protection Agency, July 1998.

VOC EMISSIONS FROM EXTRUSION LINE #3
(SOURCE 13)
HUTCHINSON SEALING SYSTEMS, INC.
CHURCH HILL, TENNESSEE

Process Material	Density of Process Material (lbs/gal)	VOC WT% Contained in Process Material	VOCs Contained in Process Material (lbs/gal)	Amount of Process Material Used (gal/year)	VOCs Emitted (lbs/year)	VOCs Emitted (tons/year)
Acheson Part C (Emralon 8370C) or equivalent	8.9238	99.6972	8.8968	192.36	1711.3851	0.8557
Acheson TW-077 or equivalent	8.6736	44.2623	3.8391	1355.20	5202.7985	2.6014
FlockLok 870 or equivalent	8.1000	44.8900	3.6361	28745.60	104521.5887	52.2608
Methyl Ethyl Ketone or equivalent	6.7554	100.0000	6.7554	262.08	1770.4552	0.8852
Acheson TW-040 or equivalent	8.5902	21.3745	1.8361	3472.00	6374.9705	3.1875
Unistole P-401 Toluene/HPT Blend or equivalent	7.2558	100.0000	7.2558	3326.40	24135.6931	12.0678
Total Tons of VOCs Emitted from Chemical Usage on Extrusion Line #3:						71.8584

VOCs from Rubber Extrusion

Amount of Rubber Processed (lbs/year) x VOC Emission Factor = Amount of VOCs Emitted (lbs/year)

10646720 x 3.52E-06 = 37.4765 lbs/year
Total Tons of VOCs Emitted from Rubber Extrusion on Extrusion Line #3: 1.87E-02 tons/year

VOCs from Rubber Curing

Amount of Rubber Processed (lbs/year) x VOC Emission Factor = Amount of VOCs Emitted (lbs/year)

10646720 x 8.25E-04 = 8783.5440 lbs/year
Total Tons of VOCs Emitted from Rubber Curing on Extrusion Line #3: 4.39E+00 tons/year

VOCs from Natural Gas Combustion: 0.0007 tons/year (Calculations Attached)

Total Tons of VOCs Emitted from Extrusion Line #3:	76.2696	tons/year
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NOTE #1: Rubber emission factors obtained from AP-42, 5th Edition, Volume I, Chapter 4: Evaporation Loss Sources, Section 4.12: Manufacture of Rubber Products, U.S. Environmental Protection Agency (Compound #8).

NOTE #2: No VOC emission controls installed.

HAP EMISSIONS FROM EXTRUSION LINE #3
(SOURCE 13)
HUTCHINSON SEALING SYSTEMS, INC.
CHURCH HILL, TENNESSEE

Process Material	Amount of Process Material Used (gal/year)	Density of Process Material Used (lbs/gal)	Methyl Isobutyl Ketone (MIBK) [108-10-1] (WT%)	Methyl Isobutyl Ketone (MIBK) Emitted (tons/month)	Methylene Chloride (WT%)	Methylene Chloride Emitted (tons/year)	Toluene [108-88-3] (WT%)	Toluene Emitted (tons/year)	Xylene [1330-20-7] (WT%)	Xylene Emitted (tons/year)	HAP Content (lbs/gal)	Total HAPS Emitted by Material (tons/year)
Acheson Part C (Emralon 8370C) or	192.36	8.9238	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Acheson TW-077 or equivalent	1355.20	8.6736	0.0000	0.0000	1.0000	0.0588	0.0000	0.0000	0.0000	0.0000	0.0000	0.0588
FlockLok 870 or equivalent	28745.60	8.1000	20.0000	23.2839	0.0000	0.0000	15.0000	17.4630	10.0000	11.6420	2.4300	58.2098
Methyl Ethyl Ketone or equivalent	286.65	6.7554	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Acheson TW-040 or equivalent	3472.00	8.5902	0.0000	0.0000	0.0000	0.0000	1.0000	0.1491	0.0000	0.0000	0.5154	0.8948
Unistole P-401 Toluene/HPT Blend	3326.40	7.2558	0.0000	0.0000	0.0000	0.0000	95.0000	11.4645	0.0000	0.0000	6.8930	11.4645
Total HAPs Emitted from Chemical Usage (tons/year):				23.2839		0.0588		29.0765		11.6420		70.6278

MDI Emitted: 3.74E-04 tons/year

HAPs Emitted from Rubber Curing

Amount of Rubber Processed (lbs/year) x HAP Emission Factor = Amount of HAPs Emitted (lbs/year)
10646720 x 9.76E-04

ons of HAPs Emitted from Rubber Extrusion on Extrusion Line #3:

NOTE #1: Rubber emission factors obtained from AP-42, 5th Edition, Volume I, Chapter 4: Evaporation Loss Sources, Section 4.12:

MDI Stack Emissions Calculations for Extrusion Line #3
Hutchinson Sealing Systems, Inc.
Church Hill, Tennessee
37-0067

Equation: $W = 25.4 \times V_{MDI}^{0.78} \times (M_{MDI}/T_{proc}) \times u^{0.78} \times S_A \times t_{TF}$
 W = the evaporation losses from the open process in grams/day
 V_{MDI} = the vapor pressure of MDI in atmospheres @ process temperature
 T_{proc} = the process temperature in K 298
 M_{MDI} = the molecular weight of MDI 250.26
 u = the airflow speed in m/sec
 S_A = the exposed surface area in m²
 t_{TF} = the "tack free" time in seconds

Step I: Determine Vapor Pressure of 5% MDI at ambient temperature (25 degrees Celsius) in atmospheres

Vapor pressure of MDI at 25 degrees C: 1.02E-05 mm
Convert vapor pressure to atmospheres and for a 5% mixture of MDI

$$VP_{MDI} = 0.0000102 \text{ mm Hg} \times \frac{1 \text{ atm}}{760 \text{ mm}} \times \frac{5 \text{ lbs of MDI}}{100 \text{ lbs of Flock Loc 852}} = 5.10\text{E-}07 \text{ atm}$$

Step II: Determine Ventilation Rate in meters/second

$$\text{Ventilation rate (u)} = \frac{\text{Velocity @ STP}}{\text{Roller Surface Area}} \quad (\text{Note: STP} = \text{Standard Temperature and Pressure})$$

Roller Surface Area = 29 in² = 0.20 ft²

$$\text{Velocity @ STP} = 1700 \text{ ACFM} \times \frac{298 \text{ K}}{308 \text{ K}} = 1644.81 \text{ SCFM}$$

ACFM = Actual cubic feet per minute
SCFM = Standard cubic feet per minute

Velocity = 1644.81 SCFM

$$\text{Ventilation rate (u)} = \frac{\text{Velocity}}{\text{Roller Surface Area}}$$

$$\text{Ventilation rate (u)} = \frac{1644.81 \text{ SCFM}}{0.20 \text{ ft}^2} \times \frac{1 \text{ min}}{60 \text{ sec}} \times \frac{0.3048 \text{ m}}{1 \text{ ft}} = 41.49 \text{ m/sec}$$

Step III: Determine Tack Time

Tack time = 6 sec

Step IV: Determine the Exposed Surface Area

The exposed area is determined from the area of rubber processed.

The roller applicator coats: $5.83 \frac{\text{ft}^2}{\text{min}} \times \frac{60}{1} \frac{\text{min}}{\text{hr}} = 349.80 \text{ ft}^2/\text{hour}$

Based upon 24 hour production:

$$S_A = 349.80 \frac{\text{ft}^2}{\text{hour}} \times \frac{24}{1} \frac{\text{hours}}{\text{day}} = 8395.2 \text{ ft}^2/\text{day}$$

MDI Stack Emissions Calculations for Extrusion Line #3
Hutchinson Sealing Systems, Inc.
Church Hill, Tennessee
37-0067

Converting ft² to m²:

$$S_A = 8395.2 \frac{\text{ft}^2}{\text{day}} \times \frac{1}{10.76} \frac{\text{m}^2}{\text{ft}^2} = 780.22305 \text{ m}^2/\text{day}$$

Therefore,

$$\text{MDI Stack Emissions} = W = 25.4 \times VP_{\text{MDI}} \times (M_W/T_{\text{proc}}) \times u^{0.78} \times S_A \times t_{\text{TF}}$$

$$W = 25.4 \times 5.1E-07 \text{ atm} \times \frac{250.26}{298} \times 18.28 \frac{\text{m}}{\text{sec}} \times 780.22 \frac{\text{m}^2}{\text{dav}} \times 6 \text{ sec} = 0.93 \text{ grams/day}$$

Step V: Convert grams/day to pounds/year

$$W = 0.93 \frac{\text{grams}}{\text{day}} \times \frac{1}{454} \frac{\text{lb}}{\text{grams}} \times 365 \frac{\text{days}}{\text{year}} = 0.75 \text{ lbs/year}$$

Convert lbs/year to lbs/hour

$$W = 0.75 \frac{\text{lbs}}{\text{year}} \times \frac{1}{8760} \frac{\text{year}}{\text{hours}} = 8.54\text{E-}05 \text{ lbs/hour} \quad (1 \text{ booth})$$

Convert lbs/year to tons/year	3.37E-03 lbs/hour	Standard Exemption
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$$W = 0.75 \frac{\text{lbs}}{\text{year}} \times \frac{1}{2000} \frac{\text{ton}}{\text{lbs}} = 3.74\text{E-}04 \text{ tons/year} \quad (1 \text{ booth})$$

7.40E-03 tons/hour	Standard Exemption
Convert tons/year to tons/month	

$$W = 3.74E-04 \frac{\text{tons}}{\text{year}} \times \frac{1}{12} \frac{\text{year}}{\text{months}} = 3.12E-05 \text{ tons/month} \quad (1 \text{ booth})$$

PM EMISSIONS FROM EXTRUSION LINE #3
(SOURCE 13)
HUTCHINSON SEALING SYSTEMS, INC.
CHURCH HILL, TENNESSEE

Process Material	Amount of Process Material Used (gal/year)	Density of Process Material Used (lbs/gal)	% Solids Contained in Process Material	Emission Factor	PMs Emitted (lbs/year)	PMs Emitted (tons/year)
Acheson Part C (Emralon 8370C) or	192.36	8.92	0.0000	0.0100	0.0000	0.0000
Acheson TW-077 or equivalent	1355.20	8.67	27.0000	0.0100	31.7370	0.0159
FlockLok 870 or equivalent	28745.60	8.10	0.0000	0.0100	0.0000	0.0000
Methyl Ethyl Ketone or equivalent	286.65	6.76	0.0000	0.0100	0.0000	0.0000
Acheson TW-040 or equivalent	3472.00	8.59	0.0000	0.0100	0.0000	0.0000
Unistole P-401 Toluene/HPT Blend	3326.40	7.26	0.0000	0.0100	0.0000	0.0000
Total Tons of PMs Emitted from Chemical Usage on Extrusion Line #3:						0.0159

PM Emitted from Rubber Extrusion

Amount of Rubber Processed (lbs/year) x PM Emission Factor = Amount of PM Emitted (lbs/year)

10646720 x 2.67E-08 = 0.2843 lbs/year

Total Tons of PM Emitted from Rubber Extrusion on Extrusion Line #3: 1.42E-04 tons/year

PM Emitted from Stack Exhausts

Combined Stack Flow Rate (dscf/min) x Particulate Matter per Volume (grains/cf) x Conversion of Pounds to grains x Conversion of Minutes to Hours
x Conversion of Hours to Year x Conversion of Pounds to Tons = Particulate Matter Emitted (tons/year)

12743 dscf/min x 0.02 grains/cf x 60 min/hr x 1.43E-04 lb/grain x
8760 hours/year x 0.0005 ton/pounds = 9.57 tons/year

PM Emitted from Natural Gas Combustion:

0.0009 tons/year (Calculations Attached)

Total Tons of PM Emitted from Extrusion Line #3:	9.59 tons/year
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Note: Emission factor obtained from AP-42, 5th Edition, Volume I, Chapter 4: Evaporation Loss Sources, Section 4.12: Manufacture of Rubber Products, U.S. Environmental Protection Agency (Compound #8).

NATURAL GAS COMBUSTION EMISSIONS FROM EXTRUSION LINE #3

(SOURCE 13)

HUTCHINSON SEALING SYSTEMS, INC.

CHURCH HILL, TENNESSEE

NATURAL GAS COMBUSTION EMISSIONS FOR GERLACH/JET AIR CURING OVEN LOCATED ON EXTRUSION LINE #3							
Pollutant	BTU Content of Natural Gas (BTU/ft3)	Oven Rating (BTU/hr)	Emission Factor (lb/ft3)	Operating Hours	Number of Burners	Amount of Pollutant Emitted from all Extrusion Lines (lbs/year)	Amount of Pollutant Emitted from all Extrusion Lines (tons/year)
Particulate Matter	100000	105000	0.0000076	8760	1	0.0699	0.0000
Sulfur Dioxide	100000	105000	0.0000006	8760	1	0.0055	0.0000
Nitrogen Oxides	100000	105000	0.00017	8760	1	1.5637	0.0008
Carbon Monoxide	100000	105000	0.000024	8760	1	0.2208	0.0001
VOCs	100000	105000	0.0000055	8760	1	0.0506	0.0000

NATURAL GAS COMBUSTION EMISSIONS FOR GERLACH/MICROWAVE CURING OVEN LOCATED ON EXTRUSION LINE #3							
Pollutant	BTU Content of Natural Gas (BTU/ft3)	Oven Rating (BTU/hr)	Emission Factor (lb/ft3)	Operating Hours	Number of Burners	Amount of Pollutant Emitted from all Extrusion Lines (lbs/year)	Amount of Pollutant Emitted from all Extrusion Lines (tons/year)
Particulate Matter	100000	87000	0.0000076	8760	4	0.2317	0.0001
Sulfur Dioxide	100000	87000	0.0000006	8760	4	0.0183	0.0000
Nitrogen Oxides	100000	87000	0.00017	8760	4	5.1824	0.0026
Carbon Monoxide	100000	87000	0.000024	8760	4	0.7316	0.0004
VOCs	100000	87000	0.0000055	8760	4	0.1677	0.0001

NATURAL GAS COMBUSTION EMISSIONS FOR INFRATROL CURING OVEN LOCATED ON EXTRUSION LINE #3							
Pollutant	BTU Content of Natural Gas (BTU/ft3)	Oven Rating (BTU/hr)	Emission Factor (lb/ft3)	Operating Hours	Number of Burners	Amount of Pollutant Emitted from all Extrusion Lines (lbs/year)	Amount of Pollutant Emitted from all Extrusion Lines (tons/year)
Particulate Matter	100000	800000	0.0000076	8760	3	1.5978	0.0008
Sulfur Dioxide	100000	800000	0.0000006	8760	3	0.1261	0.0001
Nitrogen Oxides	100000	800000	0.00017	8760	3	35.7408	0.0179
Carbon Monoxide	100000	800000	0.000024	8760	3	5.0458	0.0025
VOCs	100000	800000	0.0000055	8760	3	1.1563	0.0006

SUMMARY OF NATURAL GAS COMBUSTION EMISSIONS FOR OVENS LOCATED ON EXTRUSION LINE #3	
Pollutant	Amount of Pollutant Emitted (tons/year)
Particulate Matter	0.0009
Sulfur Dioxide	0.0001
Nitrogen Oxides	0.0212
Carbon Monoxide	0.0030
VOCs	0.0007

NOTE #1:

Calculation

Oven Rating (BTU/hr) x (1/BTU Content of Natural Gas (BTU/ft3) x Emission Factor (lb/ft3) x Operating Hours (hours/year) x Number of Ovens

= Amount of Pollutant Emitted from all Extrusion Lines (lbs/year)

NOTE #2: BTU Content of Natural Gas confirmed by natural gas supplier on November 15, 2006.

NOTE #3: Natural Gas combustion emission factors obtained from AP-42, 5th Edition, Volume I, Chapter 1: External Combustion Sources, Section 1.4: Natural Gas Combustion, U.S. Environmental Protection Agency, July 1998.

**VOC EMISSIONS FROM LINE #4
(SOURCE 14)
HUTCHINSON SEALING SYSTEMS, INC.
CHURCH HILL, TENNESSEE**

Process Material	Density of Process Material (lbs/gal)	VOC WT% Contained in Process Material	VOCs Contained in Process Material (lbs/gal)	Amount of Process Material Used (gal/year)	VOCs Emitted (lbs/year)	VOCs Emitted (tons/year)
Acheson Part C (Emralon 8370C) or equivalent	8.9238	99.6972	8.8968	192.36	1711.3851	0.8557
Acheson TW-077 or equivalent	8.6736	44.2623	3.8391	1355.20	5202.7985	2.6014
FlockLok 852 or equivalent	8.3200	48.0000	3.9936	1155.00	4612.6080	2.3063
FlockLok 855 or equivalent	8.2000	48.1000	3.9442	2002.0000	7896.2884	3.9481
Methyl Ethyl Ketone or equivalent	6.7554	100.0000	6.7554	262.08	1770.4552	0.8852
Acheson TW-040 or equivalent	8.5902	21.3745	1.8361	3472.00	6374.9705	3.1875
Unistole P-401 Toluene/HPT Blend or equivalent	7.2558	100.0000	7.2558	3326.40	24135.6931	12.0678
Total Tons of VOCs Emitted from Chemical Usage on Extrusion Line #4:						25.8521

VOCs from Rubber Extrusion

Amount of Rubber Processed (lbs/year) x VOC Emission Factor = Amount of VOCs Emitted (lbs/year)

10646720 x 3.52E-06 = 37.4765 lbs/year
Total Tons of VOCs Emitted from Rubber Extrusion on Extrusion Line #4: 1.87E-02 tons/year

VOCs from Rubber Curing

Amount of Rubber Processed (lbs/year) x VOC Emission Factor = Amount of VOCs Emitted (lbs/year)

10646720 x 8.25E-04 = 8783.5440 lbs/year
Total Tons of VOCs Emitted from Rubber Curing on Extrusion Line #4: 4.39E+00 tons/year

VOCs from Natural Gas Combustion: 0.0007 tons/year (Calculations Attached)

Total Tons of VOCs Emitted from Extrusion Line #4:	30.2633	tons/year
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NOTE #1: Rubber emission factors obtained from AP-42, 5th Edition, Volume I, Chapter 4: Evaporation Loss Sources, Section 4.12: Manufacture of Rubber Products, U.S. Environmental Protection Agency (Compound #8).

NOTE #2: No VOC emission controls installed.

HAP EMISSIONS FROM EXTRUSION LINE #4
(SOURCE 14)
HUTCHINSON SEALING SYSTEMS, INC.
CHURCH HILL, TENNESSEE

Process Material	Amount of Process Material Used (gal/year)	Density of Process Material Used (lbs/gal)	Diethylene Glycol Monobutyl Ether [112-34-5] (%Wt)	Diethylene Glycol Monobutyl Ether Emitted (tons/year)	Ethyl Benzene [100-41-4] (WT%)	Ethyl Benzene Emitted (tons/year)	Methyl Isobutyl Ketone (MIBK) [108-10-1] (WT%)	Methyl Isobutyl Ketone Emitted (tons/year)	Methylene Chloride (WT%)	Methylene Chloride Emitted (tons/year)	P-Xylene [106-42-3] (WT%)	P-Xylene Emitted (tons/year)	Toluene [108-88-3] (WT%)	Toluene Emitted (tons/year)	Xylene [1330-20-7] (WT%)	Xylene Emitted (tons/year)	HAP Content (lbs/gal)	Total HAPS Emitted by Material (tons/year)
Acheson Part C (Emralon 8370C) or	192.36	8.9238	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Acheson TW-077 or equivalent	1355.20	8.6736	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.0588	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0588
FlockLok 852 or equivalent	1155.00	8.3200	0.0000	0.0000	10.0000	0.4805	10.0000	0.4805	0.0000	0.0000	1.0000	0.0480	0.0000	0.0000	25.0000	1.2012	3.8272	2.2102
FlockLok 855 or equivalent	2002.00	8.2000	0.0000	0.0000	5.0000	0.4104	15.0000	1.2312	0.0000	0.0000	0.0000	0.0000	10.0000	0.8208	15.0000	1.2312	3.6900	3.6937
Methyl Ethyl Ketone or equivalent	262.08	6.7554	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Acheson TW-040 or equivalent	3472.00	8.5902	5.0000	0.7456	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.1491	0.0000	0.0000	0.5154	0.8948
Unistole P-401 Toluene/HPT Blend or equivalent	3326.40	7.2558	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	95.0000	11.4645	0.0000	0.0000	6.8930	11.4645
Total HAPs Emitted from Chemical Usage (tons/year):				0.7456		0.8909		1.7117		0.0588		0.0480		12.4344		2.4324		18.3219

MDI Emitted: 3.74E-04 tons/year (Calculations Attached)

HAPs Emitted from Rubber Curing

Amount of Rubber Processed (lbs/year) x HAP Emission Factor = Amount of HAPs Emitted (lbs/year)
10646720 x 9.76E-04 = 10391.1987 lbs/year
Total Tons of HAPs Emitted from Rubber Extrusion on Extrusion Line #4: 5.20E+00 tons/year

Total Tons of HAPs Emitted from Extrusion Line #4: 23.5179 tons/year

NOTE #1: Rubber emission factors obtained from AP-42, 5th Edition, Volume I, Chapter 4: Evaporation Loss Sources, Section 4.12: Manufacture of Rubber Products, U.S. Environmental Protection Agency (Compound #8).

MDI Stack Emissions Calculations for Extrusion Line #4
Hutchinson Sealing Systems, Inc.
Church Hill, Tennessee
37-0067

Equation: $W = 25.4 \times VP_{MDI} \times (M_W/T_{proc}) \times u^{0.78} \times S_A \times t_{TF}$
W = the evaporation losses from the open process in grams/day
 VP_{MDI} = the vapor pressure of MDI in atmospheres @ process temperature
 T_{proc} = the process temperature in K 298 K
 M_W = the molecular weight of MDI = 250.26
u = the airflow speed in m/sec
 S_A = the exposed surface area in m²
 t_{TF} = the "tack free" time in seconds

Step I: Determine Vapor Pressure of 5% MDI at ambient temperature (25 degrees Celsius) in atmospheres

Vapor pressure of MDI at 25 degrees C: 1.02E-05 mm
Convert vapor pressure to atmospheres and for a 5% mixture of MDI

$VP_{MDI} = 0.0000102 \text{ mm Hg} \times \frac{1 \text{ atm}}{760 \text{ mm}} \times \frac{5 \text{ lbs of MDI}}{100 \text{ lbs of Flock Loc 852}} = 5.10E-07 \text{ atm}$

Step II: Determine Ventilation Rate in meters/second

Ventilation rate (u) = $\frac{\text{Velocity @ STP}}{\text{Roller Surface Area}}$ (Note: STP = Standard Temperature and Pressure)

Roller Surface Area = 29 in² = 0.20 ft²

Velocity @ STP = 1700 ACFM x $\frac{298 \text{ K}}{308 \text{ K}}$ = 1644.81 SCFM ACFM = Actual cubic feet per minute
SCFM = Standard cubic feet per minute

Velocity = 1644.81 SCFM

Ventilation rate (u) = $\frac{\text{Velocity}}{\text{Roller Surface Area}}$

Ventilation rate (u) = $\frac{1644.81 \text{ SCFM}}{0.20 \text{ ft}^2} \times \frac{1 \text{ min}}{60 \text{ sec}} \times \frac{0.3048 \text{ m}}{1 \text{ ft}} = 41.49 \text{ m/sec}$

Step III: Determine Tack Time

Tack time = 6 sec

Step IV: Determine the Exposed Surface Area

The exposed area is determined from the area of rubber processed.

The roller applicator coats: 5.83 $\frac{\text{ft}^2}{\text{min}}$ x $\frac{60 \text{ min}}{1 \text{ hr}}$ = 349.80 ft²/hour

Based upon 24 hour production:

$S_A = 349.80 \frac{\text{ft}^2}{\text{hour}} \times \frac{24 \text{ hours}}{1 \text{ day}} = 8395.2 \text{ ft}^2/\text{day}$

MDI Stack Emissions Calculations for Extrusion Line #4
Hutchinson Sealing Systems, Inc.
Church Hill, Tennessee
37-0067

Converting ft² to m²:

$S_A = 8395.2 \frac{\text{ft}^2}{\text{day}} \times \frac{1 \text{ m}^2}{10.76 \text{ ft}^2} = 780.22305 \text{ m}^2/\text{day}$

Therefore,

MDI Stack Emissions = $W = 25.4 \times VP_{MDI} \times (M_W/T_{proc}) \times u^{0.78} \times S_A \times t_{TF}$

$W = 25.4 \times 5.1E-07 \text{ atm} \times \frac{250.26}{298} \times 18.28 \frac{\text{m}}{\text{sec}} \times 780.22 \frac{\text{m}^2}{\text{day}} \times 6 \text{ sec} = 0.93 \text{ grams/day}$

Step V: Convert grams/day to pounds/year

$W = 0.93 \frac{\text{grams}}{\text{day}} \times \frac{1 \text{ lb}}{454 \text{ grams}} \times 365 \frac{\text{days}}{\text{year}} = 0.75 \text{ lbs/year}$

Convert lbs/year to lbs/hour

$W = 0.75 \frac{\text{lbs}}{\text{year}} \times \frac{1 \text{ year}}{8760 \text{ hours}} = 8.54E-05 \text{ lbs/hour}$ (1 booth)

3.37E-03 lbs/hour Standard Exemption

Convert lbs/year to tons/year

$W = 0.75 \frac{\text{lbs}}{\text{year}} \times \frac{1 \text{ ton}}{2000 \text{ lbs}} = 3.74E-04 \text{ tons/year}$ (1 booth)

7.40E-03 tons/hour Standard Exemption

Convert tons/year to tons/month

$W = 3.74E-04 \frac{\text{tons}}{\text{year}} \times \frac{1 \text{ year}}{12 \text{ months}} = 3.12E-05 \text{ tons/month}$ (1 booth)

Permit Renewal Emission Calculations

PM EMISSIONS FROM EXTRUSION LINE #4
(SOURCE 14)
HUTCHINSON SEALING SYSTEMS, INC.
CHURCH HILL, TENNESSEE

Process Material	Amount of Process Material Used (gal/year)	Density of Process Material Used (lbs/gal)	% Solids Contained in Process Material	Emission Factor	PMs Emitted (lbs/year)	PMs Emitted (tons/year)
Acheson Part C (Emralon 8370C) or	192.36	8.92	0.0000	0.0100	0.0000	0.0000
Acheson TW-077 or equivalent	1355.20	8.67	27.0000	0.0100	31.7370	0.0159
FlockLok 852 or equivalent	1155.00	8.32	0.0000	0.0100	0.0000	0.0000
FlockLok 855 or equivalent	2002.00	8.2	0.0000	0.0100	0.0000	0.0000
Methyl Ethyl Ketone or equivalent	262.08	6.76	0.0000	0.0100	0.0000	0.0000
Acheson TW-040 or equivalent	3472.00	8.59	0.0000	0.0100	0.0000	0.0000
Unistole P-401 Toluene/HPT Blend	3326.40	7.26	0.0000	0.0100	0.0000	0.0000
Total Tons of PMs Emitted from Chemical Usage on Extrusion Line #4:						0.0159

PM Emitted from Rubber Extrusion

Amount of Rubber Processed (lbs/year) x PM Emission Factor = Amount of PM Emitted (lbs/year)

$$10646720 \times 2.67\text{E-}08 = 0.2843 \text{ lbs/year}$$

Total Tons of PM Emitted from Rubber Extrusion on Extrusion Line #4: 1.42E-04 tons/year

PM Emitted from Stack Exhausts

Combined Stack Flow Rate (dscf/min) x Particulate Matter per Volume (grains/cf) x Conversion of Pounds to grains x Conversion of Minutes to Hours
x Conversion of Hours to Year x Conversion of Pounds to Tons = Particulate Matter Emitted (tons/year)

$$11486 \text{ dscf/min} \times 0.02 \text{ grains/cf} \times 60 \text{ min/hr} \times 1.43\text{E-}04 \text{ lb/grain} \times 8760 \text{ hours/year} \times 0.0005 \text{ ton/pounds} = 8.63 \text{ tons/year}$$

PM Emitted from Natural Gas Combustion:

0.0009 tons/year (Calculations Attached)

Total Tons of PM Emitted from Extrusion Line #4:	8.64 tons/year
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Note: Emission factor obtained from AP-42, 5th Edition, Volume I, Chapter 4: Evaporation Loss Sources, Section 4.12: Manufacture of Rubber Products, U.S. Environmental Protection Agency (Compound #8).

NATURAL GAS COMBUSTION EMISSIONS FROM EXTRUSION LINE #4
(SOURCE 14)
HUTCHINSON SEALING SYSTEMS, INC.
CHURCH HILL, TENNESSEE

NATURAL GAS COMBUSTION EMISSIONS FOR GERLACH/JET AIR CURING OVEN LOCATED ON EXTRUSION LINE #4							
Pollutant	BTU Content of Natural Gas (BTU/ft3)	Oven Rating (BTU/hr)	Emission Factor (lb/ft3)	Operating Hours	Number of Burners	Amount of Pollutant Emitted from all Extrusion Lines (lbs/year)	Amount of Pollutant Emitted from all Extrusion Lines (tons/year)
Particulate Matter	100000	105000	0.0000076	8760	1	0.0699	0.0000
Sulfur Dioxide	100000	105000	0.0000006	8760	1	0.0055	0.0000
Nitrogen Oxides	100000	105000	0.00017	8760	1	1.5637	0.0008
Carbon Monoxide	100000	105000	0.000024	8760	1	0.2208	0.0001
VOCs	100000	105000	0.0000055	8760	1	0.0506	0.0000

NATURAL GAS COMBUSTION EMISSIONS FOR GERLACH/MICROWAVE CURING OVEN LOCATED ON EXTRUSION LINE #4							
Pollutant	BTU Content of Natural Gas (BTU/ft3)	Oven Rating (BTU/hr)	Emission Factor (lb/ft3)	Operating Hours	Number of Burners	Amount of Pollutant Emitted from all Extrusion Lines (lbs/year)	Amount of Pollutant Emitted from all Extrusion Lines (tons/year)
Particulate Matter	100000	87000	0.0000076	8760	4	0.2317	0.0001
Sulfur Dioxide	100000	87000	0.0000006	8760	4	0.0183	0.0000
Nitrogen Oxides	100000	87000	0.00017	8760	4	5.1824	0.0026
Carbon Monoxide	100000	87000	0.000024	8760	4	0.7316	0.0004
VOCs	100000	87000	0.0000055	8760	4	0.1677	0.0001

NATURAL GAS COMBUSTION EMISSIONS FOR INFRATROL CURING OVEN LOCATED ON EXTRUSION LINE #4							
Pollutant	BTU Content of Natural Gas (BTU/ft3)	Oven Rating (BTU/hr)	Emission Factor (lb/ft3)	Operating Hours	Number of Burners	Amount of Pollutant Emitted from all Extrusion Lines (lbs/year)	Amount of Pollutant Emitted from all Extrusion Lines (tons/year)
Particulate Matter	100000	800000	0.0000076	8760	3	1.5978	0.0008
Sulfur Dioxide	100000	800000	0.0000006	8760	3	0.1261	0.0001
Nitrogen Oxides	100000	800000	0.00017	8760	3	35.7408	0.0179
Carbon Monoxide	100000	800000	0.000024	8760	3	5.0458	0.0025
VOCs	100000	800000	0.0000055	8760	3	1.1563	0.0006

SUMMARY OF NATURAL GAS COMBUSTION EMISSIONS FOR OVENS LOCATED ON EXTRUSION LINE #4	
Pollutant	Amount of Pollutant Emitted (tons/year)
Particulate Matter	0.0009
Sulfur Dioxide	0.0001
Nitrogen Oxides	0.0212
Carbon Monoxide	0.0030
VOCs	0.0007

NOTE #1:

Calculation

Oven Rating (BTU/hr) x (1/BTU Content of Natural Gas (BTU/ft3) x Emission Factor (lb/ft3) x Operating Hours (hours/year) x Number of Ovens

= Amount of Pollutant Emitted from all Extrusion Lines (lbs/year)

NOTE #2: BTU Content of Natural Gas confirmed by natural gas supplier on November 15, 2006.

NOTE #3: Natural Gas combustion emission factors obtained from AP-42, 5th Edition, Volume I, Chapter 1: External Combustion Sources, Section 1.4: Natural Gas Combustion, U.S. Environmental Protection Agency, July 1998.

**VOC EMISSIONS FOR EXTRUSION LINE #5
HUTCHINSON SEALING SYSTEMS, INC.
CHURCH HILL, TENNESSEE**

Process Material	Density of Process Material (lbs/gal)	VOC WT% Contained in Process Material	VOCs Contained in Process Material (lbs/gal)	Amount of Process Material Used (gal/year)	VOCs Emitted (lbs/year)	VOCs Emitted (tons/year)
Acheson Part C (Emralon 8370C) or equivalent	8.9238	99.70	8.8968	192.36	1711.3851	0.8557
Acheson TW-077 or equivalent	8.6736	44.26	3.8391	1355.20	5202.7985	2.6014
FlockLok 853A or equivalent	8.1950	51.25	4.1999	847.00	3557.3471	1.7787
FlockLok 855 or equivalent	8.2000	48.10	3.9442	2002.00	7896.2884	3.9481
Methyl Ethyl Ketone or equivalent	6.7554	100.00	6.7554	262.08	1770.4552	0.8852
Acheson TW-040 or equivalent	8.5902	21.37	1.8361	3472.00	6374.9705	3.1875
Unistole P-401 Toluene/HPT Blend or equivalent	7.2558	100.00	7.2558	3326.40	24135.6931	12.0678
Total Tons of VOCs Emitted from Chemical Usage on Extrusion Line #5:						25.3245

VOCs from Rubber Extrusion

Amount of Rubber Processed (lbs/year) x VOC Emission Factor = Amount of VOCs Emitted (lbs/year)

4162524.24 x 3.52E-06 = 14.6521 lbs/year
Total Tons of VOCs Emitted from Rubber Extrusion on Extrusion Line #5: 7.33E-03 tons/year

VOCs from Rubber Curing

Amount of Rubber Processed (lbs/year) x VOC Emission Factor = Amount of VOCs Emitted (lbs/year)

4162524.24 x 8.25E-04 = 3434.0825 lbs/year
Total Tons of VOCs Emitted from Rubber Curing on Extrusion Line #5: 1.72E+00 tons/year

VOCs from Natural Gas Combustion: 0.0001 tons/year (Calculations Attached)

Total Tons of VOCs Emitted from Extrusion Line #5:	27.0488	tons/year
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NOTE #1: Rubber emission factors obtained from AP-42, 5th Edition, Volume I, Chapter 4: Evaporation Loss Sources, Section 4.12: Manufacture of Rubber Products, U.S. Environmental Protection Agency (Compound #8).

NOTE #2: No VOC emission controls installed.

HAP EMISSIONS FROM EXTRUSION LINE #5
(SOURCE 15)
HUTCHINSON SEALING SYSTEMS, INC.
CHURCH HILL, TENNESSEE

Process Material	Amount of Process Material Used (gal/year)	Density of Process Material Used (lbs/gal)	Diethylene Glycol Monobutyl Ether [112-34-5] (%Wt)	Diethylene Glycol Monobutyl Ether Emitted (tons/year)	Ethyl Benzene [100-41-4] (WT%)	Ethyl Benzene Emitted (tons/year)	Methyl Isobutyl Ketone (MIBK) [108-10-1] (WT%)	Methyl Isobutyl Ketone (MIBK) Emitted (tons/year)	Methylene Chloride (WT%)	Methylene Chloride Emitted (tons/year)	P-Xylene [106-42-3] (WT%)	P-Xylene Emitted (tons/year)	Toluene [108-88-3] (WT%)	Toluene Emitted (tons/year)	Xylene [1330-20-7] (WT%)	Xylene Emitted (tons/year)	HAP Content (lbs/gal)	Total HAPS Emitted by Material (tons/year)
Acheson Part C (Emralon 8370C) or equivalent	192.36	8.9238	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Acheson TW-077 or equivalent	1355.20	8.6736	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.0588	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0588
FlockLok 853A or equivalent	847.00	8.1950	0.0000	0.0000	5.0000	0.1735	10.0000	0.3471	0.0000	0.0000	1.0000	0.0347	10.0000	0.3471	20.0000	0.6941	3.7697	1.5965
FlockLok 855 or equivalent	2002.00	8.2000	0.0000	0.0000	5.0000	0.4104	15.0000	1.2312	0.0000	0.0000	0.0000	0.0000	10.0000	0.8208	15.0000	1.2312	3.6900	3.6937
Methyl Ethyl Ketone or equivalent	262.08	6.7554	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Acheson TW-040 or equivalent	3472.00	8.5902	5.0000	0.7456	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.1491	0.0000	0.0000	0.5154	0.8948
Unistole P-401 Toluene/HPT Blend or	3326.40	7.2558	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	95.0000	11.4645	0.0000	0.0000	6.8930	11.4645
Total HAPs Emitted from Chemical Usage (tons/year):				0.7456		0.5839		1.5783		0.0588		0.0347		12.7815		1.9253		17.7081

MDI Emitted: 3.74E-04 tons/year (Calculations Attached)

HAPs Emitted from Rubber Curing

Amount of Rubber Processed (lbs/year) x HAP Emission Factor = Amount of HAPs Emitted (lbs/year)

4162524.24 x 9.76E-04 = 4062.6237 lbs/year
Total Tons of HAPs Emitted from Rubber Extrusion on Extrusion Line #5: 2.03E+00 tons/year

Total Tons of HAPs Emitted from Extrusion Line #5: 19.7398 tons/year

NOTE #1: Rubber emission factors obtained from AP-42, 5th Edition, Volume I, Chapter 4: Evaporation Loss Sources, Section 4.12: Manufacture of Rubber Products, U.S. Environmental Protection Agency (Compound #8).

MDI Stack Emissions Calculations for Extrusion Line #5
Hutchinson Sealing Systems, Inc.
Church Hill, Tennessee

Equation: $W = 25.4 \times VP_{MDI} \times (M_W/T_{proc}) \times u^{0.76} \times S_A \times t_{TF}$
 W = the evaporation losses from the open process in grams/day
 VP_{MDI} = the vapor pressure of MDI in atmospheres @ process temperature
 T_{proc} = the process temperature in K 298 K
 M_W = the molecular weight of MDI 250.26
 u = the airflow speed in m/sec
 S_A = the exposed surface area in m²
 t_{TF} = the "tack free" time in seconds

Step I: Determine Vapor Pressure of 5% MDI at ambient temperature (25 degrees Celsius) in atmospheres

Vapor pressure of MDI at 25 degrees C: 1.02E-05 mm
Convert vapor pressure to atmospheres and for a 5% mixture of MDI

$$VP_{MDI} = 0.0000102 \text{ mm Hg} \times \frac{1 \text{ atm}}{760 \text{ mm}} \times \frac{5 \text{ lbs of MDI}}{100 \text{ lbs of Flock Loc 852}} = 5.10\text{E-}07 \text{ atm}$$

Step II: Determine Ventilation Rate in meters/second

$$\text{Ventilation rate (u)} = \frac{\text{Velocity @ STP}}{\text{Roller Surface Area}} \quad (\text{Note: STP} = \text{Standard Temperature and Pressure})$$

Roller Surface Area = 29 in² = 0.20 ft²

$$\text{Velocity @ STP} = 1700 \text{ ACFM} \times \frac{298 \text{ K}}{308 \text{ K}} = 1644.81 \text{ SCFM}$$

ACFM = Actual cubic feet per minute
SCFM = Standard cubic feet per minute

Velocity = 1644.81 SCFM

$$\text{Ventilation rate (u)} = \frac{\text{Velocity}}{\text{Roller Surface Area}}$$

$$\text{Ventilation rate (u)} = \frac{1644.81}{0.20} \frac{\text{SCFM}}{\text{ft}^2} \times \frac{1}{60} \frac{\text{min}}{\text{sec}} \times \frac{0.3048 \text{ m}}{1 \text{ ft}} = 41.49 \text{ m/sec}$$

Step III: Determine Tack Time

Tack time	=	6	sec
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Step IV: Determine the Exposed Surface Area

The exposed area is determined from the area of rubber processed.

$$\text{The roller applicator coats: } 5.83 \frac{\text{ft}^2}{\text{min}} \times \frac{60}{1} \frac{\text{min}}{\text{hr}} = 349.80 \text{ ft}^2/\text{hour}$$

Based upon 24 hour production:

$$S_A = 349.80 \frac{\text{ft}^2}{\text{hour}} \times \frac{24 \frac{\text{hours}}{\text{day}}}{1} = 8395.2 \text{ ft}^2/\text{day}$$

MDI Stack Emissions Calculations for Extrusion Line #5
Hutchinson Sealing Systems, Inc.
Church Hill, Tennessee

Converting ft^2 to m^2 :

$$S_A = 8395.2 \frac{\text{ft}^2}{\text{day}} \times \frac{1}{10.76} \frac{\text{m}^2}{\text{ft}^2} = 780.22305 \text{ m}^2/\text{day}$$

Therefore,

$$\text{MDI Stack Emissions} = W = 25.4 \times VP_{\text{MDI}} \times (M_W/T_{\text{proc}}) \times u^{0.78} \times S_A \times t_{\text{TF}}$$

$$W = 25.4 \times 5.1E-07 \text{ atm} \times \frac{250.26}{298} \times 18.28 \frac{\text{m}}{\text{sec}} \times 780.22 \frac{\text{m}^2}{\text{day}} \times 6 \text{ sec} = 0.93 \text{ grams/day}$$

Step V: Convert grams/day to pounds/year

$$W = 0.93 \frac{\text{grams}}{\text{day}} \times \frac{1}{454} \frac{\text{lb}}{\text{grams}} \times 365 \frac{\text{days}}{\text{year}} = 0.75 \text{ lbs/year}$$

Convert lbs/year to lbs/hour

W	=	0.75	$\frac{\text{lbs}}{\text{year}}$	x	$\frac{1}{8760}$	$\frac{\text{year}}{\text{hours}}$	=	Emissions 8.54E-05 lbs/hour	(1 booth)
								3.37E-03 lbs/hour	Standard Exemption

Convert lbs/year to tons/year

W =	0.75	$\frac{\text{lbs}}{\text{year}}$	x	$\frac{1}{2000}$	$\frac{\text{ton}}{\text{lbs}}$	=	3.74E-04 tons/year	(1 booth)
							7.40E-03 tons/hour	Standard Exemption

Convert tons/year to tons/month

$$W = 3.74E-04 \frac{\text{tons}}{\text{year}} \times \frac{1}{12} \frac{\text{year}}{\text{months}} = 3.12E-05 \text{ tons/month} \quad (1 \text{ booth})$$

**PM EMISSIONS FROM EXTRUSION LINE #5
(SOURCE 15)
HUTCHINSON SEALING SYSTEMS, INC.
CHURCH HILL, TENNESSEE**

Process Material	Amount of Process Material Used (gal/year)	Density of Process Material Used (lbs/gal)	% Solids Contained in Process Material	Emission Factor	PMs Emitted (lbs/year)	PMs Emitted (tons/year)
Acheson Part C (Emralon 8370C) or equivalent	192.36	8.92	0.0000	0.0100	0.0000	0.0000
Acheson TW-077 or equivalent	1355.20	8.67	27.0000	0.0100	31.7370	0.0159
FlockLok 853A or equivalent	1694.00	8.20	0.0000	0.0100	0.0000	0.0000
FlockLok 855 or equivalent	2002.00	8.20	0.0000	0.0100	0.0000	0.0000
Methyl Ethyl Ketone or equivalent	163.80	6.76	0.0000	0.0100	0.0000	0.0000
Acheson TW-040 or equivalent	3472.00	8.59	0.0000	0.0100	0.0000	0.0000
Unistole P-401 Toluene/HPT Blend or equivalent	3326.40	7.26	0.0000	0.0100	0.0000	0.0000
Total Tons of PMs Emitted from Chemical Usage on Extrusion Line #5:						0.0159

PM Emitted from Rubber Extrusion

Amount of Rubber Processed (lbs/year) x PM Emission Factor = Amount of PM Emitted (lbs/year)

4162524.24 x 2.67E-08 = 0.1111 lbs/year
Total Tons of PM Emitted from Rubber Extrusion on Extrusion Line #5: 5.56E-05 tons/year

PM Emitted from Stack Exhausts

Combined Stack Flow Rate (dscf/min) x Particulate Matter per Volume (grains/cf) x Conversion of Pounds to grains x Conversion of Minutes to Hours
x Conversion of Hours to Year x Conversion of Pounds to Tons = Particulate Matter Emitted (tons/year)

9972 dscf/min x 0.02 grains/cf x 60 min/hr x 1.43E-04 lb/grain x
8760 hours/year x 0.0005 ton/pounds = 7.49 tons/year

PM Emitted from Natural Gas Combustion: 0.0002 tons/year (Calculations Attached)

Total Tons of PM Emitted from Extrusion Line #5:	7.51 tons/year
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Note: Emission factor obtained from AP-42, 5th Edition, Volume I, Chapter 4: Evaporation Loss Sources, Section 4.12: Manufacture of Rubber Products, U.S. Environmental Protection Agency (Compound #8).

NATURAL GAS COMBUSTION EMISSIONS FROM EXTRUSION LINE #5

(SOURCE 15)

HUTCHINSON SEALING SYSTEMS, INC.

CHURCH HILL, TENNESSEE

NATURAL GAS COMBUSTION EMISSIONS FOR SHOCK OVEN LOCATED ON EXTRUSION LINE #5							
Pollutant	BTU Content of Natural Gas (BTU/ft3)	Oven Rating (BTU/hr)	Emission Factor (lb/ft3)	Operating Hours	Number of Burners	Amount of Pollutant Emitted from all Extrusion Lines (lbs/year)	Amount of Pollutant Emitted from all Extrusion Lines (tons/year)
Particulate Matter	100000	81900	0.0000076	8760	1	0.0545	0.0000
Sulfur Dioxide	100000	81900	0.0000006	8760	1	0.0043	0.0000
Nitrogen Oxides	100000	81900	0.00017	8760	1	1.2197	0.0006
Carbon Monoxide	100000	81900	0.000024	8760	1	0.1722	0.0001
VOCs	100000	81900	0.0000055	8760	1	0.0395	0.0000

NATURAL GAS COMBUSTION EMISSIONS FOR MICROWAVE AND HIGH VELOCITY CURING OVEN LOCATED ON EXTRUSION LINE #5							
Pollutant	BTU Content of Natural Gas (BTU/ft3)	Oven Rating (BTU/hr)	Emission Factor (lb/ft3)	Operating Hours	Number of Burners	Amount of Pollutant Emitted from all Extrusion Lines (lbs/year)	Amount of Pollutant Emitted from all Extrusion Lines (tons/year)
Particulate Matter	100000	81900	0.0000076	8760	4	0.2181	0.0001
Sulfur Dioxide	100000	81900	0.0000006	8760	4	0.0172	0.0000
Nitrogen Oxides	100000	81900	0.00017	8760	4	4.8786	0.0024
Carbon Monoxide	100000	81900	0.000024	8760	4	0.6887	0.0003
VOCs	100000	81900	0.0000055	8760	4	0.1578	0.0001

NATURAL GAS COMBUSTION EMISSIONS FOR LOW VELOCITY CURING OVEN LOCATED ON EXTRUSION LINE #5							
Pollutant	BTU Content of Natural Gas (BTU/ft3)	Oven Rating (BTU/hr)	Emission Factor (lb/ft3)	Operating Hours	Number of Burners	Amount of Pollutant Emitted from all Extrusion Lines (lbs/year)	Amount of Pollutant Emitted from all Extrusion Lines (tons/year)
Particulate Matter	100000	81900	0.0000076	8760	2	0.1091	0.0001
Sulfur Dioxide	100000	81900	0.0000006	8760	2	0.0086	0.0000
Nitrogen Oxides	100000	81900	0.00017	8760	2	2.4393	0.0012
Carbon Monoxide	100000	81900	0.000024	8760	2	0.3444	0.0002
VOCs	100000	81900	0.0000055	8760	2	0.0789	0.0000

SUMMARY OF NATURAL GAS COMBUSTION EMISSIONS FOR OVENS LOCATED ON EXTRUSION LINES #5	
Pollutant	Amount of Pollutant Emitted (tons/year)
Particulate Matter	0.0002
Sulfur Dioxide	0.0000
Nitrogen Oxides	0.0043
Carbon Monoxide	0.0006
VOCs	0.0001

NOTE #1:

Calculation

Oven Rating (BTU/hr) x (1/BTU Content of Natural Gas (BTU/ft3) x Emission Factor (lb/ft3) x Operating Hours (hours/year) x Number of Ovens

= Amount of Pollutant Emitted from all Extrusion Lines (lbs/year)

NOTE #2: BTU Content of Natural Gas confirmed by natural gas supplier on November 15, 2006.

NOTE #3: Natural Gas combustion emission factors obtained from AP-42, 5th Edition, Volume I, Chapter 1: External Combustion Sources, Section 1.4: Natural Gas Combustion, U.S. Environmental Protection Agency, July 1998.

VOC EMISSIONS FROM ROBOTS AND SECONDARIES
(SOURCE 02)
HUTCHINSON SEALING SYSTEMS, INC.
CHURCH HILL, TENNESSEE

Process Material	Density of Process Material (lbs/gal)	VOC WT% Contained in Process Material	VOCs Contained in Process Material (lbs/gal)	Amount of Process Material Used (gal/year)	VOCs Emitted (lbs/year)	VOCs Emitted (tons/year)
Aerkroil or equivalent	7.2558	60.0000	4.3535	160.15	697.2000	0.3486
Apollo 2077 or equivalent	8.8404	1.8881	0.1669	38.01	6.3441	0.0032
Chem Loc 459X or equivalent	7.2800	96.5000	7.0252	868.00	6097.8736	3.0489
FlockLok 6389 or equivalent	8.3000	43.0000	3.5690	88.40	315.4996	0.1577
Isopropyl Alcohol or equivalent	6.5933	100.0000	6.5933	6104.00	40245.5064	20.1228
Loctite 401 or equivalent	8.7570	2.0000	0.1751	246.40	43.1545	0.0216
Loctite 411 or equivalent	8.7570	2.0000	0.1751	160.03	28.0280	0.0140
Loctite 454 or equivalent	8.7570	2.0000	0.1751	2.99	0.5235	0.0003
Misty or equivalent	7.0890	50.0000	3.5445	214.82	761.4250	0.3807
Plasti Dip or equivalent	9.1740	5.1000	0.4679	215.40	100.7811	0.0504
Rohm and Haas Robond TR 5125 or equivalent	8.0800	11.0000	0.8888	1680.00	1493.1840	0.7466
Stahl WT-21-988 or equivalent	8.8404	14.0000	1.2377	364.00	450.5068	0.2253
Tak Pak 7452 or equivalent	6.6103	1.0200	0.0674	352.40	23.7605	0.0119
WD-40 or equivalent	6.8138	49.5000	3.3728	83.83	282.7440	0.1414
Total Tons of VOCs Emitted from Chemical Usage on Robots and Secondaries:						25.2733

HUTCHINSON SEALING SYSTEMS, INC.
CHURCH HILL, TENNESSEE

[illegible]

PM EMISSIONS FROM RUBBER-ON-GLASS LINE AND SECONDARIES
(SOURCE 02)
HUTCHINSON SEALING SYSTEMS, INC.
CHURCH HILL, TENNESSEE

Process Material	Amount of Process Material Used (gal/year)	Density of Process Material Used (lbs/gal)	% Solids Contained in Process Material	Emission Factor	PMs Emitted (lbs/year)	PMs Emitted (tons/year)
Aerkroil or equivalent	160.1477	7.2558	0	100	0.0000	0.00000
Apollo 2077 or equivalent	38.0073	8.8404	0	100	0.0000	0.00000
Chem Loc 459X or equivalent	868.0000	7.2800	0	100	0.0000	0.00000
FlockLok 6389 or equivalent	88.4000	8.3000	0	100	0.0000	0.00000
Isopropyl Alcohol or equivalent	6104.0000	6.5933	0	100	0.0000	0.00000
Loctite 401 or equivalent	246.4000	8.7570	0	100	0.0000	0.00000
Loctite 411 or equivalent	160.0320	8.7570	0	100	0.0000	0.00000
Loctite 454 or equivalent	2.9888	8.7570	0	100	0.0000	0.00000
Misty or equivalent	214.8187	7.0890	0	100	0.0000	0.00000
Plasti Dip or equivalent	215.4022	9.1740	0	100	0.0000	0.00000
Rohm and Haas Robond TR 5125 or	1680.0000	8.0800	0	100	0.0000	0.00000
Stahl WT-21-988 or equivalent	364.0000	8.8404	0	100	0.0000	0.00000
Tak Pak 7452 or equivalent	352.4000	6.6103	0	100	0.0000	0.00000
WD-40 or equivalent	83.8301	6.8138	0	100	0.0000	0.00000
Total Tons of PMs Emitted from Robots and Secondaries:						0.0000



**STATE OF TENNESSEE
AIR POLLUTION CONTROL BOARD
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE**

PERMIT TO OPERATE AIR CONTAMINANT SOURCE(S)

Permit Number: 482587

Facility (Permittee): Hutchinson Sealing Systems, Inc.

Facility ID: 37-0067

Facility Address: 309 Press Road, Church Hill
Hawkins County

Facility Classification: Conditional Major

Federal Requirements: None

Facility Description: Automotive Glass Channels and Sealing Strips Manufacturing

Conditional Major Operating Permit 482587, consisting of 23 pages is hereby issued *****, 20**, pursuant to the Tennessee Air Quality Act and by the Technical Secretary, Tennessee Air Pollution Control Board, Department of Environment and Conservation. This permit expires on *****, 20**. The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations (TAPCR).

Michelle W. Owenby
Technical Secretary
Tennessee Air Pollution Control Board

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

Section I – Sources Included in this Permit

FACILITY DESCRIPTION			
Source Number	Source Description	Status	Control Device/Equipment
01	Extrusion Line 1	Existing	Electrostatic Precipitator
02	Secondaries (Corner Flocking and Press Molding Processes)	Existing	None
11	Extrusion Line 2	Existing	Electrostatic Precipitator
13	Extrusion Line 3	Existing	Electrostatic Precipitator
14	Extrusion Line 4	Existing	Electrostatic Precipitator
15	Extrusion Line 5	Existing	Electrostatic Precipitator

Section II – Permit Record

Permit Type	Description of Permit Action	Issue Date
Initial	Initial permit taking limits to be Conditional Major from Title V status	TBD

Section III - General Permit Conditions

G1. Responsible Person

The application that was utilized in the preparation of this conditional major operating permit is dated May 29, 2025, and is signed by Jeff Batt, Plant Manager, the Responsible Person for the permittee. The Responsible Person may be the owner, president, vice-president, general partner, plant manager, environmental/health/safety coordinator, or other person that is able to represent and bind the facility in environmental permitting affairs. If this Responsible Person terminates their employment or is assigned different duties and is no longer the person to represent and bind the permittee in environmental permitting affairs, the new Responsible Person for the permittee shall notify the Technical Secretary of the change in writing. The Notification shall include the name and title of the new Responsible Person assigned by the permittee to represent and bind the permittee in environmental permitting affairs, and the date the new Responsible Person was assigned these duties.

Should a change in the Responsible Person occur, the new Responsible Person must submit the Notification provided in **Appendix 1** of this permit no later than 30 days after being assigned as the Responsible Person. A separate notification shall be submitted for each subsequent change in Responsible Person.

TAPCR 1200-03-09-.03(8)

G2. Application and Agreement Letters

This source shall operate in accordance with the terms of this permit, the information submitted in the approved permit application(s) referenced in **Condition G1**, and any documented agreements made with the Technical Secretary.

TAPCR 1200-03-09-.01(1)(d)

G3. Submittals

Unless otherwise specified within this permit, the permittee shall submit, preferably via email and in Adobe Portable Document format (PDF), all applicable plans, checklists, certifications, notifications, test protocols, reports, and applications to the attention of the following Division Programs at the email addresses indicated in the table below:

Permitting Program	Compliance Validation Program	Field Services Program
<ul style="list-style-type: none"> • Notifications • Startup certifications • Applications • NSPS reports • MACT/GACT/NESHAP reports • Emission statements 	<ul style="list-style-type: none"> • Test protocols • Emission test reports • Visible emission evaluation reports 	<ul style="list-style-type: none"> • Semiannual reports • Annual compliance certifications/status report
Division of Air Pollution Control Davy Crockett Tower, 7 th Floor 500 James Robertson Parkway Nashville, TN 37243 Air.Pollution.Control@tn.gov		Johnson City Environmental Field Office Division of Air Pollution Control 2305 Silverdale Drive Johnson City, TN 37601 APC.JCEFO@tn.gov

The permittee shall submit the information identified above as requested in this permit. In lieu of submitting this information to the email addresses above, the permittee may submit the information to the attention of the respective Division Programs at the mailing addresses listed above.

TAPCR 1200-03-09-.03(8)

G4. Notification of Changes

The permittee shall notify the Technical Secretary for any of the following changes to a permitted air contaminant source which would not be a modification requiring a new construction permit:

- change in air pollution control equipment that does not result in an increase or otherwise meet the definition of a modification
- change in stack height or diameter
- change in exit velocity of more than 25 percent or exit temperature of more than 15 percent based on absolute temperature.

The permittee must submit the Notification provided in **Appendix 2** of this permit 30 days before the change is commenced.

TAPCR 1200-03-09-.02(7)

G5. Permit Transference

- This permit is not transferable from one air contaminant source to another air contaminant source or from one location to another location. The permittee must submit a construction permit application for a new source to the Permitting Program not less than 90 days prior to the estimated starting date of these events. If the new source will be subject to major New Source Review, the application must be submitted not less than 120 days in advance of the estimated starting date of these events.

TAPCR 1200-03-09-.03(6)(b)

- B. In the event an ownership change occurs at this facility, the new owner must submit the notification provided in **Appendix 3** of this permit. The written notification must be submitted by the new owner to the Permitting Program no later than 30 days after the ownership change occurs. If the change in ownership results in a change in Responsible Person for the facility, notification of the change in Responsible Person must also be submitted, as specified in **Condition G1**.

TAPCR 1200-03-09-.03(6)(a) and (b)

G6. Operating Permit Renewal Application Submittal

- A. The permittee shall apply for renewal of this permit not less than 60 days prior to the permit's expiration date.

TAPCR 1200-03-09-.02(3)(a)

- B. Operation of each air contaminant source shall be in accordance with the provisions and stipulations set forth in this permit, all provisions of the Tennessee Division of Air Pollution Control Regulations, and all provisions of the Tennessee Air Quality Act.

TAPCR 1200-03-09-.02(6)

G7. Fees

The air contaminant source(s) identified in this permit shall comply with the requirements for payment of applicable annual emission fees and annual conditional major review fees to the Tennessee Division of Air Pollution Control based on the Administrative Fees Schedule I provided in **Appendix 4** of this permit. The fee must be paid to the Division in full by the first day of the month that the fee is due (determined from **Appendix 4**). (Note: not all facilities are required to pay annual emission fees)

TAPCR 1200-03-26-.02

G8. General Recordkeeping Requirements

- A. All recordkeeping requirements for all data required to be recorded shall follow the following schedules:

For Daily Recordkeeping	For Weekly Recordkeeping	For Monthly Recordkeeping
No later than seven days from the end of the day for which the data is required.	No later than seven days from the end of the week for which the data is required.	No later than thirty days from the end of the month for which the data is required.

- B. The information contained in logs, records, and submittals required by this permit shall be kept at the facility's address, unless otherwise noted, and provided to the Technical Secretary or a Division representative upon request. Computer-generated logs are acceptable. Compliance is assured by retaining the logs, records, and submittals specified in this permit for a period of not less than five years at the facility's address.

TAPCR 1200-03-10-.02(2)(a)

G9. Routine Maintenance Requirements

The permittee shall maintain and repair the emission source, associated air pollution control device(s), and compliance assurance monitoring equipment as required to maintain and assure compliance with the specified emission limits.

TAPCR 1200-03-09-.03(8)

Compliance Method: Records of all repair and maintenance activities required above shall be recorded in a suitable permanent form and kept available for inspection by the Division. These records must be retained for a period of not less than five years. The date each maintenance and repair activity began shall be entered in the log no later than seven days following the start of the repair or maintenance activity, and the completion date shall be entered in the log no later than seven days after activity completion.

G10. Visible and Fugitive Emissions

- A. Unless otherwise specified, visible emissions from this facility shall not exhibit greater than 20% opacity, except for one six-minute period in any one-hour period, and for no more than four six-minute periods in any 24-hour period. A stack is defined as any chimney, flue, conduit, exhaust, vent, or opening of any kind whatsoever, capable of, or used for, the emission of air contaminants.

TAPCR 1200-03-05-.01(1) and 1200-03-05-.03(6)

Compliance Method: When required to demonstrate compliance, visible emissions shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

- B. The permittee shall not cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Reasonable precautions shall include, but are not limited to, the following:
- (a) Use, where possible, of water or chemicals for control of dust in demolition of existing buildings or structures, construction operations, grading of roads, or the clearing of land;
 - (b) Application of asphalt, water, or suitable chemicals on dirt roads, material stockpiles, and other surfaces which can create airborne dusts;
 - (c) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations.

The permittee shall not cause, suffer, allow, or permit fugitive dust to be emitted in such manner to exceed five minutes per hour or 20 minutes per day as to produce a visible emission beyond the property line of the property on which the emission originates, excluding malfunction of equipment as provided in TAPCR 1200-03-20. A malfunction is defined as, any sudden and unavoidable failure of process equipment or for a process to operate in an abnormal and unusual manner. Failures that are caused by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

TAPCR 1200-03-08-.01(1) and 1200-03-08-.01(2)

Compliance Method: When required to demonstrate compliance, fugitive emissions shall be determined by Tennessee Visible Emissions Evaluation Method 4 as adopted by the Tennessee Air Pollution Control Board on April 16, 1986.

C. Fugitive emissions from roads and parking areas shall not exhibit greater than 10% opacity.

TAPCR 1200-03-08-.03

Compliance Method: When required to demonstrate compliance, fugitive emissions from roads and parking areas shall be determined by utilizing Tennessee Visible Emissions Evaluation (TVEE) Method 1, as adopted by the Tennessee Air Pollution Control Board on April 29, 1982, as amended on September 15, 1982, and August 24, 1984.

G11. NSPS/NESHAP/MACT/GACT Standards

Not applicable

G12. VOC and NO_x Emission Statement

Not applicable

G13. Facility-wide Limitations (Other Than Conditional Major)

Not applicable

G14. Permit Supersedes Statement

This permit supersedes all previously issued permits for this/these source(s).

TAPCR 1200-03-09-.03(8)

G15. Source Testing Requirements

Not applicable

Section IV – Conditional Major Conditions

C1. Major Source Opt-Out Requirements

The permittee has elected to opt-out of being issued a major source operating permit pursuant to TAPCR 1200-03-09-.02(11)(a). The permittee would be considered a major source because their potential to emit value(s) for Volatile Organic Compounds (VOCs), a single Hazardous Air Pollutant (HAP), and a combination of HAPs, was greater than 100 tons per year, 10 tons per year, and 25 tons per year, respectively, at the time of application. The permittee has agreed to be subject to limitations in order to be below the major source applicability threshold for VOCs of 100 tons per year, and the major source applicability thresholds for a single HAP and a combination of HAPs of 10 tons and 25 tons.

TAPCR 1200-03-09-.02(11)(a)

C2. Notification of Non-Compliance

Any non-compliance with any condition(s) of this permit set to restrain the potential to emit below the applicability threshold(s) of 1200-03-09-.02(11) of the Tennessee Air Pollution Control Regulations, shall be reported in writing to the Technical Secretary within 15 working days of such discovery. This notification, at a minimum, shall include the identification of the source, identification of the permit condition(s) violated, and details of the violation.

TAPCR 1200-03-09-.03(8) and 1200-03-09-.02(11)(a)

C3. Failure to Abide by Conditional Major Emission Limit(s)

The permittee is placed on notice that **Condition C4.** of this permit contain(s) limitations that allow the permittee to opt-out of the major source operating permit program requirements specified in paragraph 1200-03-09-.02(11) of the Tennessee Air Pollution Control Regulations. Failure to abide by these limits will not only subject the permittee to enforcement action by the State of Tennessee, but it may also result in the imposition of federal enforcement action by the United States Environmental Protection Agency and the loss of being federally recognized as a conditional major source.

TAPCR 1200-03-09-.02(11)(e)1(vi)(I)

C4. Conditional Major Emission Limit(s)

(A) Emissions from the entire facility shall not exceed the following federally enforceable maximum emission rate(s), including emissions from exempt and insignificant emission units:

Pollutant(s)	Maximum Emission Rate(s) (tons during any period of 12 consecutive months)
Volatile Organic Compounds (VOC)	99.9
Individual Hazardous Air Pollutants (listed pursuant to Section 112(b) of the Federal Act)	9.9
Combined Hazardous Air Pollutants	24.9

TAPCR 1200-03-09-.02(11)(a) and the permittee's agreement letter(s) dated June 19, 2025 (**Appendix 7**)

Compliance Method:

The permittee shall calculate actual emissions of VOCs and HAPs emitted during each calendar month and each period of 12-consecutive months and maintain records of the emissions in the format in **Appendix 8**, or in an alternative format, which readily provides the same information.

At the time of permit issuance, the facility has reported no insignificant or exempt activities/emissions units that emit VOC or HAP. If the facility adds insignificant or exempt activities /emission units that emit VOC or HAPs, the permittee shall provide notification to the Division of the change in facility VOC and/or HAP emissions at least 30 days prior to the installation of each insignificant activity/ emission unit [TAPCR 1200-03-09-.04(4)(a)] or at least 30 days prior to the installation of each exempt air contaminant source [TAPCR 1200-03-09-.04(4)(b), (c), or (d)].

(B) The as-supplied VOC and HAP content of all VOC and HAP-containing materials (all coatings, inks, adhesives, thinners, and solvents) to be used by this source shall be determined from Safety Data Sheets (SDS) or manufacturer or vendor formulation data which explicitly list the VOC and HAP content by weight. If new materials are used, or if material formulation is changed, logs used to calculate emissions of VOC and HAP shall be updated within 30 days from the initial date of usage of the new or altered material.

TAPCR 1200-03-09-.03(8) and TAPCR 1200-03-10-.02(2)(a)

Compliance Method: Purchase orders and/or invoices for all VOC- and HAP-containing materials, along with current SDS, must be maintained and kept available for inspection by the Technical Secretary or a Division representative. The SDS must explicitly list the VOC and HAP content by weight for all VOC- and HAP-containing materials. If SDS are not available with this information, vendor formulation data containing the required information for those materials must also be maintained. These records must be retained in accordance with **Condition G8**. Scanned documents (maintained electronically) may be used to fulfill this requirement.

TAPCR 1200-03-10-.02(2)(a)

C5. Annual Compliance Status Report

The permittee shall submit a written report stating the compliance status of this facility with permit **Condition(s) C4** by March 31 of every year. The report shall cover the preceding calendar year and shall include the records required by **Condition(s) C4**. The first report is due March 31, 2026, and shall cover the time period from the date of issuance of this permit to December 31, 2025. The report must include the compliance certification statement included in **Appendix 6**. Reports submitted with unsigned certification statements will be deemed incomplete.

TAPCR 1200-03-09-.03(8), 1200-03-09-.02(11)(a), and 1200-03-10-.02(2)(a)

C6. Final Title V Report

The permittee shall submit a final Title V semiannual report and annual compliance certification as required by **Condition E2(a) and (b)** of Permit 574643. The final reports shall cover the reporting period beginning on the date specified below and ending on the issuance date of this permit. The reports shall be submitted within 60 days of the issuance date of this permit and shall include the records specified in **Condition E2(a) and (b)** of Permit 574643. The reports shall be certified by a responsible official and submitted to the Technical Secretary at the Environmental Field Office address specified in **Condition G3**. The annual compliance certification shall also be submitted to the U.S. EPA at the address provided in **Condition E2(b)** of Permit 574643.

Report Type	Start of Reporting Period	End of Reporting Period	Date Report is Due
Semiannual Report	April 1, 2025	<issuance date of permit>	<60 days after permit issuance>
Annual Compliance Certification	October 1, 2024	<issuance date of permit>	<60 days after permit issuance>

TAPCR 1200-03-09-.02(11)(e)1(iii), 1200-03-09-.02(11)(e)3(v), and 40 CFR Part 70.6(c)(5)(iii) as amended in the Federal Register, No. 144, July 28, 2014, pages 43661 through 43667

Section V - Source Specific Permit Conditions

Source Number	Source Description
01	Extrusion Lines 1 through 5– Each rubber extrusion line is equipped with flock, primer, coating, and adhesive application equipment. Each Extrusion line is also equipped with electric/natural gas fired curing ovens. Electrostatic precipitators (ESPs) are used for control of particulate matter.
11	
13	
14	
15	

S1-1. Input Limitation(s) or Statement(s) of Design

- A. Only natural gas shall be used as fuel for each source. Should the permittee need to modify each source to allow the use of a fuel other than natural gas, a construction permit shall first be applied for and received in accordance with TAPCR 1200-03-09-.01 prior to making the change.

TAPCR 1200-03-09-.03(8) and the application dated May 29, 2025

Compliance Method: The permittee shall maintain documentation to demonstrate the type(s) of fuel used by each source. Documentation shall include, but is not limited to, manufacturer's specifications, purchase records, operating manuals, or a tag affixed to the unit by the manufacturer. These documents shall be kept readily available/accessible and made available upon request by the Technical Secretary or a Division representative.

- B. The total stated heat input rate of all the sources is 3.44 MMBTU/hr. Should the permittee need to modify the sources in a manner that increases the stated heat input rate, a construction permit shall first be applied for and received in accordance with TAPCR 1200-03-09-.01 prior to making the change.

TAPCR 1200-03-09-.03(8) and the application dated May 29, 2025

Compliance Method: The permittee shall maintain documentation to demonstrate the heat input rate for the sources. Documentation shall include, but is not limited to, manufacturer's specifications, purchase records, operating manuals, or a tag affixed to the unit by the manufacturer. These documents shall be kept readily available/accessible and made available upon request by the Technical Secretary or a Division representative.

S1-2. Production Limitation(s)

Not applicable

S1-3. Operating Hour Limitation(s)

Not applicable

S1-4. Emission Limitation(s)

- A. Particulate matter (PM) emitted from each source shall not exceed 3.43 pounds per hour (lb/hr) on a daily average basis.

TAPCR 1200-03-07-.03(1) and the application dated May 29, 2025

Compliance Method: Each extrusion line shall not operate unless each relevant ESP is in operation. The permittee shall perform daily inspections on each ESP during source operation. The inspections shall include inspection of the TR (Transformer Rectifier) sets, rappers, fans, and heater. The permittee shall initiate, as well as record, corrective action within 24 hours and complete, as well as record, corrective action as expediently as practical if the permittee finds that a problem has developed during an inspection of the ESP. Inspection records found in **Appendix 8**, or in an alternative format, which provides the same information shall be kept and shall include the initials of the person performing the inspection(s), and corrective action(s), along with the date, time, and any relevant comments. Days that the source is not in operation shall be noted. These records shall be retained in accordance with **Condition G8**.

- B. Volatile organic compounds (VOC) and Hazardous Air Pollutants (HAPs) emitted from these sources are included in the emission limit established in **Condition C4**.

TAPCR 1200-03-09-.02(11)(a)

Compliance Method: See requirements in **Condition C4**.

- C. Total Sulfur dioxide (SO₂) emitted from these sources shall not exceed 0.002 pounds per hour (lbs/hr) on a daily average basis.

TAPCR 1200-03-14-.03(5)

Compliance Method: Compliance with this emission limitation is assured by compliance with **Condition S1-1**, and the emission factor of 0.6 lbs/10⁶ scf from AP-42, Chapter 1.4, Table 1.4-2.

- D. Total Carbon monoxide (CO) emitted from these sources shall not exceed 1.24 tons during any period of 12-consecutive months.

TAPCR 1200-03-07-.07(2)

Compliance Method: Compliance with this emission limitation is assured by compliance with **Condition S1-1**, and the emission factor of 84 lbs/10⁶ scf from AP-42, Chapter 1.4, Table 1.4-1.

- E. Total Nitrogen oxides (NO_x) emitted from these sources shall not exceed 1.48 tons during any period of 12-consecutive months.

TAPCR 1200-03-07-.07(2)

Compliance Method: Compliance with this emission limitation is assured by compliance with **Condition S1-1** and the emission factor of 100 lbs/10⁶ scf from AP-42, Chapter 1.4, Table 1.4-1.

S1-5. Source-Specific Visible Emissions Limitation(s)

Not applicable

Source Number	Source Description
02	Secondaries (Corner Flocking and Press Molding Processes) – Includes molding of individual sections into different rubber profiles which involves trimming, notching, and hand-fitting activities. This source also includes a glass preparation process where primer is applied by a robotic mechanism and a flock application process.

S2-1. Input Limitation(s) or Statement(s) of Design

Not applicable

S2-2. Production Limitation(s)

Not applicable

S2-3. Operating Hour Limitation(s)

Not applicable

S2-4. Emission Limitation(s)

Volatile organic compounds (VOC) and Hazardous Air Pollutants (HAPs) emitted from this source are included in the emission limit established in **Condition C4**.

TAPCR 1200-03-09-.02(11)(a)

Compliance Method: See requirements in **Condition C4**.

S2-5. Source-Specific Visible Emissions Limitation(s)

Not applicable

(end of conditions)

The permit application gives the location of this source as 36.5032998 Latitude and -82.7691294 Longitude.

Appendix 1: Notification of Change in Responsible Person

Facility (Permittee): _____ Hutchinson Sealing Systems, Inc.

Facility ID: _____ 37-0067

Former Responsible Person: _____
Name Title

New Responsible Person: _____
Name Title

Email

Mailing Address

Phone (Office) Phone (cell)

Date New Responsible Person was assigned this duty: _____

I certify that the information contained in this Notification is accurate and true to the best of my knowledge. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Signature		Date
Signer's name (print)	Title	Phone (with area code)

Appendix 2: Notification of Changes

Facility (Permittee): Hutchinson Sealing Systems, Inc.

Facility ID: 37-0067

Source Number: _____

	Control Equipment	Stack Height (Feet)	Stack Diameter (Feet)	Exit Velocity (Feet/Second)	Exit Temperature (°F)
Current					
Proposed					
Current					
Proposed					
Current					
Proposed					

Comments:

As the Responsible Person of the above mentioned facility (permittee), I certify that the information contained in this Notification is accurate and true to the best of my knowledge. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Signature		Date
Signer's name (print)	Title	Phone (with area code)

Appendix 3: Notification of Ownership Change

Facility (Permittee): Hutchinson Sealing Systems, Inc. (Previous Owner)

Facility ID: 37-0067

Facility (Permittee): _____ (New Owner) _____
 Date of Ownership Change

Secretary of State Control Number: _____ [as registered with the TN Secretary of State (SOS)]

Responsible Person/Authorized Contact	Email Address
Mailing Address	Phone with area code
Principal Technical Contact	Email Address
Mailing Address	Phone with area code
Billing Contact	Email Address
Mailing Address	Phone with area code

As the responsible person for the new owner or operator of the above mentioned facility (permittee):

- I agree to not make any changes to the stationary source(s) that meet the definition of modification as defined in Division 1200-03 or Division 0400-30¹, and
- I agree to comply with the conditions contained in **the permits listed below**, Division 1200-03 and Division 0400-30 of the Tennessee Air Pollution Control Regulations, the Tennessee Air Quality Act, and any documented agreements made by the previous owner to the Technical Secretary.

List all active permits issued to the facility for which the owner wishes to assume ownership:

The information contained in this Notification is accurate and true to the best of my knowledge. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Signature		Date
Signer's name (print)	Title	Phone (with area code)

¹ Appropriate application forms must be submitted prior to modification of the stationary source(s).

Appendix 4: Fees

All minor and conditional major source annual emission fees are due and payable to the Division in full according to SCHEDULE I below². The county that a source is located in determines when the minor source annual emission fee is due. Fees are due the first day of the month listed. If a source is located on contiguous property in more than one county, the county appearing earliest in the calendar year shall be used to determine the due date of the annual emission fee.

SCHEDULE I Month the Annual Emissions Fee is Due (Accounting Period) Counties in the Monthly Grouping

January	Anderson, Bedford, Benton, Bledsoe, Blount, Bradley and Campbell
February	Cannon, Carroll, Carter, Cheatham, Chester, Claiborne, Clay and Cocke
March	Coffee, Crockett, Cumberland, Davidson, Decatur, DeKalb, Dickson, Dyer and Fayette
April	Fentress, Franklin, Gibson, Giles, Grainger, Greene and Grundy
May	Hamblen, Hamilton, Hancock, Hardeman, Hardin, Hawkins, Haywood and Henderson
June	Henry, Hickman, Houston, Humphreys, Jackson, Jefferson, Johnson, Knox, Lake, Lauderdale, Lawrence and Lewis
July	Lincoln, Loudon, McMinn, McNairy, Macon and Madison
August	Marion, Marshall, Maury, Meigs, Monroe, Montgomery, Moore and Morgan
September	Obion, Overton, Perry, Pickett, Polk, Putnam and Rhea
October	Roane, Robertson, Rutherford, Scott, Sequatchie, Sevier, and Shelby
November	Smith, Stewart, Sullivan, Sumner, Tipton, Trousdale, Unicoi and Union
December	Van Buren, Warren, Washington, Wayne, Weakley, White, Williamson and Wilson

² Note that some sources with allowable emissions below specific thresholds are not subject to the requirement to pay annual emission fees. Contact the Emission Inventory Program at apc.inventory@tn.gov if you have any questions.

Appendix 5: Emission Statement for VOC and NO_x

Not applicable

Appendix 6: Compliance Certification Statement

Facility (Permittee): Hutchinson Sealing Systems, Inc.

Facility Address: _____

Facility ID: 37-0067

Conditional Major Permit Number	Reporting Period	Report Deadline

This report is required pursuant to TAPCR 1200-03-09-.02(11)(a).

Responsible Person Certification

I, the undersigned, am a Responsible Person (as described in **Condition G1**) of the facility for which this report is being submitted. This document consists of _____ pages and they are numbered from page _____ to _____. As a Responsible Person of the above mentioned facility (permittee), I certify that the information contained in this Annual Compliance Status Report is accurate and true to the best of my knowledge. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Signature		Date
Signer's name (print)	Title	Phone (with area code)

Appendix 7: Agreement Letters



June 19, 2025

Tennessee Department of Environment and Conservation
Division of Air Pollution Control
Davy Crockett Tower, 7th Floor
500 James Robertson Parkway
Nashville, TN 37243

RE: Permit Agreement Letter
Hutchinson Sealing Systems, Inc
309 Press Road
Church Hill, TN 37642
Emission Source Reference No. 37-0067 / Permit No. 482587

Dear Technical Secretary:

On behalf of Hutchinson Sealing Systems, Inc., the following limitations are agreed upon for the above referenced facility: The limit is a facility-wide limit.

- Volatile Organic Compounds (VOCs) emitted by this facility shall not exceed 99.9 tons during any period of 12 consecutive months.
- Combined Hazardous Air Pollutants (HAPs) emitted by this facility shall not exceed 24.9 tons during any period of 12 consecutive months.
- Individual Hazardous Air Pollutants (HAPs) emitted by this facility shall not exceed 9.9 tons during any period of 12 consecutive months.

Hutchinson Sealing Systems, Inc., shall assure/demonstrate compliance with these limitations/requirements by recordkeeping of VOCs and HAP emissions required in permit.

Should you have any questions or require additional information, please contact Hutchinson Sealing Systems, Inc. via phone at 423-357-2043 or via e-mail at Jeffery.Batt@Hutchinson.com

On behalf of Hutchinson Sealing Systems, Inc., I agree to the above limitations. I am authorized to represent and bind the facility in environmental affairs.

Signature 

Name (Printed) Jeff Batt

Title Plant Manager

Date 19-Jun-25

Appendix 8: Example Logs

Monthly VOC and HAP Calculation Table

Month/Year:								Emissions					
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
Material ID	Material Name	Material Usage (gal/month or lb/mo)	Material Density (lb/gal)	VOC Content (wt% or lb VOC/gal)	HAP ₁ Content (wt% or lb HAP ₁ /gal)	HAP ₂ ¹ Content (wt% or lb HAP ₂ /gal)	Total HAP Content (wt% or lb HAP ₁ /gal)	VOC (lb/mo)	VOC (ton/mo)	HAP ₁ (lb/mo)	HAP ₁ (ton/mo)	Total HAP (lb/mo)	Total HAP (ton/mo)
Total													

¹ The columns for individual HAP should be repeated for each HAP contained in the materials used. Monthly emissions shall be calculated for each individual HAP. Identify each HAP by name and/or CAS# in the appropriate column headings.

[9] VOC Emissions (lb/mo) = [3] Material Usage (gal/mo) * [4] Material Density (lb/gal) * [5] VOC Content (wt%), or

[9] VOC Emissions (lb/mo) = [3] Material Usage (gal/mo) * [5] VOC Content (lb/gal)

[10] VOC Emissions (ton/mo) = [9] VOC Emissions (lb/mo) / 2,000 lb/ton

[11] HAP₁ Emissions (lb/mo) = [3] Material Usage (gal/mo) * [4] Material Density (lb/gal) * [6] HAP₁ Content (wt%), or

[11] HAP₁ Emissions (lb/mo) = [3] Material Usage (gal/mo) * [6] HAP₁ Content (lb/gal)

Annual VOC and HAP Calculation Table

Month/Year	VOC		HAP ₁		HAP ₂		Total HAP	
	[10] (ton/mo)	(ton/12 consecutive mo) ¹	[12] (ton/mo) ²	(ton/12 consecutive mo)	(ton/mo) ²	(ton/12 consecutive mo)	[14] (ton/mo)	(ton/12 consecutive mo)

- ¹ The tons per 12-consecutive month values are the sum of the emissions in the 11 months preceding the month just completed + the emissions in the month just completed. If data is not available for the 11 months preceding the initial use of this table, this value will be equal to the value for tons per month. For the second month, it will be the sum of the first month and the second month. Indicate in parentheses the number of months summed [i.e., 6 (2) represents 6 tons emitted in 2 months].
- ² The columns for individual HAP should be repeated for each HAP contained in the materials used. Monthly emissions should be calculated for each individual HAP. Identify each HAP by name and/or CAS# in the appropriate column headings

20XX DAILY <CONTROL DEVICE> <MONITORED PARAMETER> READINGS FOR SOURCE XX, <CONTROL DEVICE ID>

JAN ☐ FEB ☐ MAR ☐ APR ☐ MAY ☐ JUN ☐ JUL ☐ AUG ☐ SEP ☐ OCT ☐ NOV ☐ DEC ☐

1st Shift ☐ Shift Start Time: _____ Shift End Time: _____
 2nd Shift ☐ Shift Start Time: _____ Shift End Time: _____
 3rd Shift ☐ Shift Start Time: _____ Shift End Time: _____

Day	Time		<Process Source> operating?		<Control Device> operating?		<Monitored Parameter> <units>	Comments / Corrective Actions	Initials	
	Reading	Inspection	Yes	No	Yes	No			Reading	Inspection
1			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
2			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
3			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
4			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
5			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
6			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
7			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
8			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
9			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
10			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
11			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
12			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
13			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
14			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
15			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
16			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
17			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
18			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
19			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
20			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
21			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
22			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
23			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
24			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
25			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
26			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
27			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
28			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
29			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
30			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
31			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

OPERATING PERMIT SUMMARY REPORT

Company name: Hutchinson Sealing Systems, Inc.

File number: 37-0067

EPS initials: CLM

Permit number(s): 482587

Source point number: 00, 01, 02, 11, 13, 14, 15

Application received date: July 15, 2024

Application complete date: August 15, 2024

Air Quality Analysis Performed? Yes ☐ No ☒

Project Description:

Hutchinson Sealing Systems, Inc. is a manufacturer of rubber gasket seals for car windows. The facility was previously Title V due to VOC and HAP emissions and is accepting limitations with the issuance of this Conditional Major permit to stay under the major source limit for VOC emissions of 100 tons per year, single HAP emissions of 10 tons per year, and combined HAPs of 25 tons per year. Sources at this facility include five rubber extrusion lines with curing ovens, and one secondaries line. No physical construction or other substantive changes are being made to the process or equipment. Electrostatic precipitators are currently used for control of PM emissions. No controls are used or proposed for control of VOC or HAP emissions.

This facility does not have insignificant and/or exempt sources that emit VOC and/or HAP.

Identification Information:

Emission Sources:

01	Extrusion Line #1
02	Secondaries
11	Extrusion Line #2
13	Extrusion Line #3
14	Extrusion Line #4
15	Extrusion Line #5

Regulatory Status: Facility is Conditional Major for VOC, single HAP, and combined HAPs.

Federal Rule Applicability:

This facility produces rubber gasket seals for car windows. 40 CFR 60 Subparts AAA and BBB, and 40 CFR 63 Subparts XXXX all apply only to rubber tire manufacturing. No other rules apply to general rubber manufacturing.

Rules Analysis

Title V ☐

Conditional. Major ☒

Minor ☐

Source category listed in 1200-03-09-.01(4)(b)1.(i)? Yes ☐ No ☒

Reason for PSD: New source above ____ TPY ☐ Sig. increase in ____ emissions ☐ N/A ☒

Applicable NSPS: 40 CFR Part 60, Subpart ☐ State Rule 1200-03-16-. ☐ N/A ☒

Applicable MACT: 40 CFR Part 63, Subpart ☐ State Rule 1200-03-31- ____ ☐ N/A ☒

Other Applicable State Rules

VOC Emissions: 1200-03-09-.02(11)(a) ☒ N/A ☐

SO₂ Emissions: 1200-03-14-.03(5) ☒ N/A ☐

NO_x Emissions: 1200-03-07-.07(2) ☒ N/A ☐

PM Emissions: 1200-03-07-.03(1) ☒ N/A ☐

CO Emissions: 1200-03-07-.07(2) ☒ N/A ☐

Emissions: -__-__ ☐ N/A ☐

Visible Emissions from this facility shall not exceed 20% opacity per Method 9 Rule 1200-03-05-.01(1), 1200-03-05-.03(6)

Visible Emissions from roads/parking areas shall not exceed 10% opacity per Method 1 Rule 1200-03-08-.03

Emission Summary

Source 00

Permit Number: 482587

Source Status: New ☐ Modification ☐ Expansion ☐ Relocation ☐ Permit Status: New ☐ Renewal ☐

PSD ☐ NSPS ☐ NESHAPs ☐ Previous Permit Number: Construction _____ Operating 574643

	Pounds/Hour			Tons/Year				Date of Data	*	Applicable Standard TAPCR 1200-03-
	Actual	Potential	Allowable	Actual	Potential	Allowable	Net Change			
PM					75.10					07-.03(1)
SO ₂					0.01					14-.03(5)
CO					1.24					07-.07(2)
VOC					99.9	99.9				09-.02(11)(a)
NO _x					1.48					07-.07(2)
HAP					9.9/ 24.9 ¹	9.9/ 24.9 ¹				09-.02(11)(a)

* - Source of data: The conditional major permit application dated May 29, 2025, and agreement letter dated June 19, 2025

1. The limit for individual HAPs is 9.9 tons, and the limit for any combination of HAPs is 24.9 tons.

Combustion emissions from SO₂, CO, and NO_x are the total emissions from the curing ovens from all of the extrusion lines

Emission Summary

Sources 01,11, 13, 14, 15

Permit Number: 482587

Source Status: New ☐ Modification ☐ Expansion ☐ Relocation ☐ **Permit Status:** New ☒ Renewal ☐

PSD ☐ NSPS ☐ NESHAPs ☐ **Previous Permit Number:** Construction _____ Operating 574643

	Pounds/Hour			Tons/Year				Date of Data	*	Applicable Standard TAPCR 1200-03-
	Actual	Potential	Allowable	Actual	Potential	Allowable	Net Change			
PM Source 01	1.85	3.43	3.43	8.10	15.02	15.02		5/29/2025		07-.03(1)
PM Source 11	3.10	3.43	3.43	13.58	15.02	15.02		5/29/2025		07-.03(1)
PM Source 13	3.10	3.43	3.43	13.58	15.02	15.02		5/29/2025		07-.03(1)
PM Source 14	2.81	3.43	3.43	12.31	15.02	15.02		5/29/2025		07-.03(1)
PM Source 15	2.45	3.43	3.43	10.73	15.02	15.02		5/29/2025		07-.03(1)
SO ₂		0.002	0.002		0.01			5/29/2025		14-.03(5)
CO		0.28			1.24	1.24		5/29/2025		07-.07(2)
VOC								5/29/2025		09-.02(11)(a)
NO _x		0.34			1.48	1.48		5/29/2025		07-.07(2)
HAP								5/29/2025		09-.02(11)(a)

* - Source of data: The conditional major permit application dated May 29, 2025

VOC and HAP emissions are included in the facility-wide emission limitations

Combustion emissions from SO₂, CO, and NO_x are the total emissions from the curing ovens from all of the extrusion lines

Emission Summary

Source 02

Permit Number: 482587

Source Status: New ☐ Modification ☐ Expansion ☐ Relocation ☐ Permit Status: New ☐ Renewal ☐

PSD ☐ NSPS ☐ NESHAPs ☐ Previous Permit Number: Construction _____ Operating 574643

	Pounds/Hour			Tons/Year				Date of Data	*	Applicable Standard TAPCR 1200-03-
	Actual	Potential	Allowable	Actual	Potential	Allowable	Net Change			
PM										
SO ₂										
CO										
VOC										09-.02(11)(a)
NO _x										
HAP										09-.02(11)(a)

* - Source of data: The conditional major permit application dated May 29, 2025.

Note: VOC and HAP emissions from this source are accounted for in in the facility-wide emission table, Source 00