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:

and

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

APC 100



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, Emall: Air.Pollution.Control@TN.gov

NON-TITLE V PERMIT APPLICATION FACILITY IDENTIFICATION

Type or print and submit. Attach appropriate source description forms.									
SITE INFORMATION									
 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 No V (see instructions for appropriate fee to submit)									
4. Site address (St./Rd./Hwy.) 309 Press Road			County name Hawkins						
City Church Hill		5. NAICS or SIC cod 326291							
6. Site location Latitude 36.5032998				Longitude -82.7691294					
CONTACT INFORMATION (RESPONSIBLE PERSON)									
7. Responsible person/Authorized con Jeff Batt	tact			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 coc 37642		Email address Jeffrey.Batt@Hutchinson.com					
CON	TACT INFO	RMATION	TECHNI	ICAL)	Til Charles (1997) - 1990 Princip Branch Scholle (1997) - 1990 (1997) Shina (1997) - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990				
8. Principal technical contact Amy Nevels				Phone number with area code 432-357-2045					
Malling address (St./Rd./Hwy.) 309 Press Road				Fax number with area code					
City Church Hill	State TN	Zip coo 37642		Email address .my.Nevels@l	s Hutchinson.com				
COI	VTACT INF	ORMATION	I (BILLIN	VG)					
9. Billing contact Billy Minton		Phone number with area code 432-817-1468							
Mailing address (St./Rd./Hwy.) 309 Press Road			ſ	ax number w	vith area code				
City Church Hill	State TN	Zlp cod 37642		Email address illy.Minton@l	: Hutchinson.com				

	AIR CONTAI	MINANT SOU	RCE(S) IN	FORMATION			
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)							
onstructions for more details) 01-001 ext line 15-002. 02-001 ext. line 1 5-050. 03-001 ext line 1 40200601 evp surf coatops, Surf coat application. 04-001 ext line 1 5-067 4020071 Evap surcoat application general.							
• •	42. 01-011 ext line 2 S-04:	-			surf coatops surf coat		
application general.	03-001 ext line 2 S-456. 0	4-001 ext line	2 5-051. 0	5-001 ext line 2 S-	078 INACTIVE.		
	037 .01-13 ext line 3 S037 04-13 ext line 3 S-069. 05						
01-014 ext line 4 S-0 03-014 line 4 S-059 I S-063, 08,014 ext lin	57. 04-014 ext line 4 S-060 Plasma treat unit and prin e 4 S-064.	0. 05-014 ext ner applicatio	line 4 S-06 n booth.(1 - coating/adhesi 06-014 ext line 4 S	ve application booth. -062. 07-014 ext line 4		
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.							
11. Is the air conta addressed. Ye	minant source(s) in a no s No	onattainmer	nt area? If	"Yes", then mind	or source BACT must be		
12. Normal operation:	Hours/Day 24	Days/Week 5		Weeks/Year 51	Days/Year		
13. Percent annua throughput	Dec. – Feb. 25	March – Ma 25	У	June – August 25	Sept. – Nov. 25		
	TYPE OF PERMI	r requested	(check a	ppropriate box)			
14. Operating permit	- Date construction star		completed	Date of owners	ship change (if applicable)		
	Last permit number(s) 574642)	Emissi	on Source Referer	ce Number(s)		
Construction permit	Last permit number(s))	Emissi	on Source Referen	ce Number(s)		
If you chose Constru	iction permit above, then	choose eithe	r New Con	struction, Modific	ation, or Location Transfer		
New Construction			Completic				
Modification [Date modification started	or will start	Date com	pleted or will com	plete		
Location Transfer	ransfer date		Address o	f last location			

15. Describe changes that have been a or operating permit application:	made to this equipment or o	peration(s) since the last construction	
The facility is requesting to lower emission	ns and receive a conditional m	ajor permit,	
		•	
			l
16. Comments			
To Comments			
·			
·			
			:
		·	
Based upon Information and belief formed	SIGNATURE	as the responsible person of the about	
mentioned facility, certily that the informal	ion contained in this application	on is accurate and true to the hest 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	
25 cm . 25		05.29,2025	
Signer's name (type or print)	Title	Phone number with area code	
eff Batt	Plant Manager	423-639-3999	
	t territ minitalet	לעעכיל כטי באר	

. 17.7.



TITLE V PERMIT APPLICATION OPERATIONS AND FLOW DIAGRAMS

1. Please list, identify, and describe briefly process emission sources. Such turning installations, and incinerators that are contained in this application. Please attached
flowdiagram 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.
O-100- No. 07 0007 44
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.
application equipment, extrastorrance is equipped with electric flatural gas-filed curing overs.
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. 1.1st all insignificant activities which are exempted because of size or production rate and cite the applicable regulations.
1200-3-904(5)(f)(14) – Natural gas-fired boiler used exclusively for heating purposes – Was replace 1200-3-904(5)(f)(24) and (72) – Polyethylene reticulate (PER) extruder's
1200-3-904(5)(f)(24) and (72) – Polyethylene reticulate (PER) extruder's
1200-3-904(5)(f)(18) – Sandblasting equipment
1200-3-904(5)(f)(51) – Rubber on Glass (ROG) Units and molding presses
1200-3-904(5)(g)(31) Electric curing ovens
1200-3-904(i) – Natural gas-fired curing ovens - 400,000 BTU
1200-3-904(i) — Plasma Treat Units
1200-3-904(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. Arc there any storage piles?
YES NO
4. List the <u>states</u> that are within 50 miles of your facility.
Kentucky and Virginia
· · · · · · · · · · · · · · · · · · ·

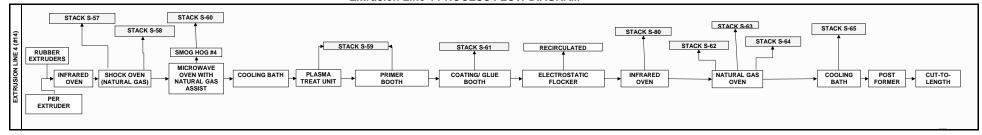
Revision Number:

2

Page number:

Date of Revision:

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 e
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		PlasmaTreat Unit and Primer	40	1.5	70	17	30	1800/1539	0	Active	4A
S-60	Extraoron Emo #-	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		Natural gas- fired curing oven	40	1	326	17	13.3	800/539	0	Active	4D
S-63		Natural gas- fired curing oven	40	1	326	17	13.3	800/539	0	Active	4E
S-64		Natural gas- fired curing oven	40	1	326	17	13.3	800/539	0	Active	4F
S-65		Cooling Bath	40	1	117	37	29			Active	
S-80		Infrared									

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

3999999

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)	Operatin g Hours	Number of Burners	Amount of Pollutant Emitted from all Extrusion Lines (lbs/year)	Amount of Pollutant Emitted from all Extrusion Lines (tons/month)		
									Two stacks
Particulate	100000	105000	0.0000076	4608	1	0.0368	0.000002	1.84E-05	9.19E-06
Sulfur Diox	100000	105000	0.0000006	4608	1	0.0029	0.000000	1.45E-06	7.26E-07
Nitrogen C	100000	105000	0.00017	4608	1	0.8225	0.000034	4.11E-04	2.06E-04
Carbon Mo	100000	105000	0.000024	4608	1	0.1161	0.000005	5.81E-05	2.90E-05
VOCs	100000	105000	0.0000055	4608	1	0.0266	0.000001	1.33E-05	6.65E-06
NATURAL	. GAS COM	IBUSTION	EMISSION	S FOR GEF	RLACH/MIC	CROWAVE CURI	NG OVEN LOCATED		
Pollutant	BTU	Oven	Emission	Operatin	Number	Amount of	Amount of		
	Content	Rating	Factor	g Hours	of	Pollutant	Pollutant Emitted		
	of	(BTU/hr)	(lb/ft3)	_	Burners	Emitted from	from all Extrusion		
	Natural					all Extrusion	Lines		
	Gas					Lines	(tons/month)		
	(RTIJ/ft3)					(lbs/year)	, ,		
Particulate		87000	0.0000076		4	0.1219	0.000005	6.09E-05	
Sulfur Diox	100000	87000	0.0000006	4608	4	0.0096	0.000000	4.81E-06	
Nitrogen C		87000	0.00017	4608	4	2.7261	0.000114	1.36E-03	
Carbon Mo			0.000024	4608	4	0.3849	0.000016	1.92E-04	
VOCs	100000	87000	0.0000055	4608	4	0.0882	0.000004	4.41E-05	

	NATURAL GA	AS COMBUSTION		FOR INFRATRO		EN LOCATED	ON EXTRUS	SION LINE			<u> </u>	
		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 Extrusio n Lines (lbs/year	Amount of Pollutant Emitted from all Extrusion Lines (tons/month)			
(S								(1207)04.			Three Stac	KS
ô]	Particulate Matter	100000	800000	0.0000076	4608	3	0.8405	0.000035	0.00042	1.40E-04	
7]	Sulfur Dioxide	100000	800000	0.0000006	4608	3	0.0664	0.000003	3.318E-05	1.11E-05	
4	1	Nitrogen Oxides	100000	800000	0.00017	4608	3	18.8006	0.000783	9.400E-03	3.13E-03	
5		Carbon Monoxide	100000	800000	0.000024	4608	3	2.6542	0.000111	1.327E-03	4.42E-04	
ò		VOCs	100000	800000	0.0000055	4608	3	0.6083	0.000025	3.041E-04	1.01E-04	



TITLE V PERMIT APPLICATION STACK IDENTIFICATION

G	ENERAL IDENTIFICATION	AND DES CRIPTION							
1. Facility name:									
Hutchinson Body Sealing System	ns .								
2. Emission source (identify):	2. Emission source (identify):								
Source No. 37-0067-01 (Extrusion	Source No. 37-0067-01 (Extrusion Line #1) and 37-0067-11 (Extrusion Line #2) - Stack S-2 vents the extrusion Line #2 - Stack S-2 vents the extrusion Line Extrusion Li								
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):	6.	Inside dimensions at outlet in feet:							
(Actual feet per second	d) 1								
7. Exhaust flowrateat exit conditions (ACFM):	8.	Flow rate at standard conditions (DSCFM):							
1000	868	3							
9. Exhaust temperature:	10.	Moisture content (data at exit conditions):							
		Grains per dry							
Degrees Fahrenheit (°	F)	5 standard cubic Percent foot (gr./dscf.)							
	11. Exhaust temperature that is equaled or exceeded during ninety (90) percent or more of the operating time (for stacks subject to diffusion equation only):								
N/A									
	/(°F)								
12 If this steel is a winned with continuous mallet		or compliance, what pollutant(s) does this equipment monitor (e.g., Opacity,							
SO ₂ , NO _x , etc.)?	int monitoring equipment required to	r compniance, what pollutant(s) does this equipment monitor (e.g., Opacity,							
N/A									
Complete the appropriate APC form(s) 4,5,7,	8,9, or 10 for each source exhaust in	g through this stack.							
	BYPASS STACK DES	SCRIPTION							
13. Do you have a bypass stack?									
	Yes No								
If yes, describe the conditions which require its	use & complete APC form 4 for the	by pass 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 ^{14.} Page number:	TO VISION INGINION.	Date of Revision.							



TITLE V PERMIT APPLICATION STACK IDENTIFICATION

G	ENERAL IDENTIFICATION	AND DES CRIPTION							
1. Facility name:									
Hutchinson Body Sealing System	ns .								
2. Emission source (identify):	2. Emission source (identify):								
Source No. 37-0067-01 (Extrusion	Source No. 37-0067-01 (Extrusion Line #1) and 37-0067-11 (Extrusion Line #2) - Stack S-2 vents the extrusion Line #2 - Stack S-2 vents the extrusion Line Extrusion Li								
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):	6.	Inside dimensions at outlet in feet:							
(Actual feet per second	d) 1								
7. Exhaust flowrateat exit conditions (ACFM):	8.	Flow rate at standard conditions (DSCFM):							
1000	868	3							
9. Exhaust temperature:	10.	Moisture content (data at exit conditions):							
		Grains per dry							
Degrees Fahrenheit (°	F)	5 standard cubic Percent foot (gr./dscf.)							
	11. Exhaust temperature that is equaled or exceeded during ninety (90) percent or more of the operating time (for stacks subject to diffusion equation only):								
N/A									
	/(°F)								
12 If this steel is a grien advith continuous mallet		or compliance, what pollutant(s) does this equipment monitor (e.g., Opacity,							
SO ₂ , NO _x , etc.)?	int monitoring equipment required to	r compniance, what pollutant(s) does this equipment monitor (e.g., Opacity,							
N/A									
Complete the appropriate APC form(s) 4,5,7,	8,9, or 10 for each source exhaust in	g through this stack.							
	BYPASS STACK DES	SCRIPTION							
13. Do you have a bypass stack?									
	Yes No								
If yes, describe the conditions which require its	use & complete APC form 4 for the	by pass 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 ^{14.} Page number:	TO VISION INGINION.	Date of Revision.							



TITLE V PERMIT APPLICATION STACK IDENTIFICATION

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



TITLE V PERMIT APPLICATION STACK IDENTIFICATION

	TION AND DESCRIPTION								
1. Facility name:									
Hutchinson Body Sealing Systems									
2. Emission source (identify):	OOCT 44 (Futurisian Line #0) Charle C 2 years the								
Source No. 37-0067-01 (Extrusion Line #1) and 37-0067-11 (Extrusion Line #2) – Stack S-2 vents the e									
3. Stack ID (or flow diagram point identification):	SCRIPTION								
S-2									
4. Stack height above grade in feet:									
35									
5. Velocity (data at exit conditions):	6. Inside dimensions at outlet in feet:								
(Actual feet per second)	1								
7. Exhaust flowrate at exit conditions (ACFM):	8. Flow rate at standard conditions (DSCFM):								
1000	868								
9. Exhaust temperature:	10. Moisture content (data at exit conditions):								
V	Grains per dry								
X Degrees Fahrenheit (°F)	5 standard cubic foot (gr./dscf.)								
11. Exhaust temperature that is equaled or exceeded during ninety (90) percent o	rmore 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 requ	uired for compliance, what pollutant(s) does this equipment monitor (e.g., Opecity								
SO ₂ , NO _x , etc.)?	ance for comphiance, what pollutanit(s) does this equipment monitor (e.g., Opacity,								
N/A									
Complete the appropriate APC form(s) 4,5,7,8,9, or 10 for each source ext	nausting through this stack.								
BYPASS STAC	K DES CRIPTION								
13. Do you have a bypass stack?									
Yes 1	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: 8 Revision Number:	Date of Revision:								
5 ^{14.} Page number: 8 Revision Number:	Date of Revision.								



TITLE V PERMIT APPLICATION STACK IDENTIFICATION

	GENERAL IDENTIFICAT	TION A	ND DES	CRIPTION					
	Facility name:								
	chinson Body Sealing Systems								
	Emission source (identify): rce No. 37-0067-01 (Extrusion Line #1) and 37	-0067	′-11 (E	xtrusion Line	#2) – Stack S-2 vents the e				
	STACK DE	SCRIP	TION						
	Stack ID (or flow diagram point identification):								
S-2									
4. 5	Stack height above grade in feet:								
35									
5.	Velocity (data at exit conditions):	6.	Inside din	nensions at outlet in fee	et:				
_	(Actual feet per second)	1							
7. I	Exhaust flowrateat exit conditions (ACFM):	8.	Flow rate	at standard conditions	(DSCFM):				
1000)	868							
9. I	Exhaust temperature:	10.	Moisture	content (data at exit co	nditions):				
_	X Degrees Fahrenheit (°F)		5	Percent	Grains per dry standard cubic foot (gr./dscf.)				
11. I	11. Exhaust temperature that is equaled or exceeded during ninety (90) percent or more of the operating time (for stacks subject to diffusion equation only):								
	N/A (°F)								
	f this stack is equipped with continuous pollutant monitoring equipment requion, NO _x , etc.)?	iired for	compliance	e, what pollutant(s) doe	es this equipment monitor (e.g., Opacity,				
	/A								
	_								
(Complete the appropriate APC form(s) 4,5,7,8,9, or 10 for each source exh	austing t	hrough thi	s stack.					
	BYPASS STACI	K DES	CRIPTIO	N					
13. I	Do you have a bypass stack?								
	Yes 1	No							
I r	f yes, describe the conditions which require its use & complete APC form 4 number(s) exhausting through this bypass stack.	for the by	/pass stack	. Please identify the sta	ack number(s) of flow diagram point				
14. I	Page number: Revision Number:			Date of Revi	ision:				



TITLE V PERMIT APPLICATION STACK IDENTIFICATION

	GENERAL IDENTIFICAT	ION A	AND DES CRIPTION	
	Facility name:			
	tchinson Body Sealing Systems			
	Emission source (identify):			
Sou	urce No. 37-0067-01 (Extrusion Line #1) and 37-	006	7-11 (Extrusion Line #2) – Stack S-2 vents the	
	STACK DE	SCRI	PTION	
3.	Stack ID (or flow diagram point identification):			
S-2	·			
4.	Stack height above grade in feet:			
35				
5.	Velocity (data at exit conditions):	6.	Inside dimensions at outlet in feet:	
٥.			inside dimensions at outlet in feet.	
	(Actual feet per second)	1		
	Exhaust flowrateat exit conditions (ACFM):	8.	Flow rate at standard conditions (DSCFM):	
100	00	868	3	
9.	Exhaust temperature:	10.	Moisture content (data at exit conditions):	
	V		_ Grains per dry	
	X Degrees Fahrenheit (°F)		5 standard cubic Percent foot (gr./dscf.)	
11	Exhaust temperature that is equaled or exceeded during ninety (90) percent or	more c		
11.		more	orthe operating time (<u>norstacks subject to arrasion equation only</u>).	
	N/A (°F)			
12.	If this stack is equipped with continuous pollutant monitoring equipment requ	ired for	or compliance, what pollut ant(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 exh	aust ing	g through this stack.	
BYPASS STACK DESCRIPTION				
13.	Do you have a bypass stack?			
	Yes N	lo		
	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.			
5 ^{14.}	Page number: Revision Number:		Date of Revision:	
١	10			

CN – 1400



TITLE V PERMIT APPLICATION STACK IDENTIFICATION

	TION AND DESCRIPTION
1. Facility name:	
Hutchinson Body Sealing Systems	
2. Emission source (identify):	OOCT 14 (Fishwarian Line #0) Charle C Oscenta the
	-0067-11 (Extrusion Line #2) – Stack S-2 vents the e
3. Stack ID (or flow diagram point identification):	SCRIPTION
S-2	
4. Stack height above grade in feet:	
35	
5. Velocity (data at exit conditions):	6. Inside dimensions at outlet in feet:
(Actual feet per second)	1
7. Exhaust flowrateat exit conditions (ACFM):	8. Flow rate at standard conditions (DSCFM):
1000	868
9. Exhaust temperature:	10. Moisture content (data at exit conditions):
V	_ Grains per dry
X Degrees Fahrenheit (°F)	5 standard cubic foot (gr./dscf.)
11. Exhaust temperature that is equaled or exceeded during ninety (90) percent o	rmore 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 requ	uirad for compliance, what pollutant(a) does this equipment monitor (a.g., Openity
SO ₂ , NO _x , etc.)?	med for comphance, what politicalit(s) does this equipment monitor (e.g., Opacity,
N/A	
Complete the appropriate APC form(s) 4,5,7,8,9, or 10 for each source exh	nausting through this stack.
BYPASS STAC	K DES CRIPTION
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.	to are of passessaum forms and statement of the statement
14 Page number: Paginian Number:	Data of Pavision
5 ¹⁴ . Page number: Revision Number:	Date of Revision:



TITLE V PERMIT APPLICATION STACK IDENTIFICATION

GENERAL IDENTIFICA	TION AND DESCRIPTION
1. Facility name:	
Hutchinson Body Sealing Systems	
2. Emission source (identify):	
Source No. 37-0067-01 (Extrusion Line #1) and 37	7-0067-11 (Extrusion Line #2) – Stack S-2 vents the e
	ES CRIPTION CONTRACTOR
3. Stack ID (or flow diagram point identification):	
S-2	
4. Stack height above grade in feet:	
35	
5. Velocity (data at exit conditions):	6. Inside dimensions at outlet in feet:
(Actual feet per second)	1
7. Exhaust flowrateat exit conditions (ACFM):	8. Flow rate at standard conditions (DSCFM):
1000	868
9. Exhaust temperature:	10. Moisture content (data at exit conditions):
	Grains per dry
X Degrees Fahrenheit (°F)	5 standard cubic Percent foot (gr./dscf.)
11. Exhaust temperature that is equaled or exceeded during ninety (90) percent	
	in the of the operating time (tot stucks subject to units ion equation only).
N/A (°F)	
 If this stack is equipped with continuous pollutant monitoring equipment rec SO₂, NO_x, etc.)? 	quired for compliance, what pollutant(s) does this equipment monitor (e.g., Opacity,
N/A	
Complete the appropriate APC form(s) 4,5,7,8,9, or 10 for each source ex	hausting through this stack
13. Do you have a bypass stack?	CK DES CRIPTION
	N.
Yes	
If yes, describe the conditions which require its use & complete APC form 4 number(s) exhausting through this bypass stack.	for the bypass stack. Please identify the stack number(s) of flow diagram point
14. Page number: Revision Number:	Date of Revision:



TITLE V PERMIT APPLICATION STACK IDENTIFICATION

	TION AND DESCRIPTION
1. Facility name:	
Hutchinson Body Sealing Systems	
2. Emission source (identify):	OOCT 44 (Futurisian Line #0) Charle C 2 wants the
	-0067-11 (Extrusion Line #2) – Stack S-2 vents the e
3. Stack ID (or flow diagram point identification):	SCRIPTION
S-2	
4. Stack height above grade in feet:	
35	
5. Velocity (data at exit conditions):	6. Inside dimensions at outlet in feet:
(Actual feet per second)	1
7. Exhaust flowrate at exit conditions (ACFM):	8. Flow rate at standard conditions (DSCFM):
1000	868
9. Exhaust temperature:	10. Moisture content (data at exit conditions):
V	Grains per dry
X Degrees Fahrenheit (°F)	5 standard cubic foot (gr./dscf.)
11. Exhaust temperature that is equaled or exceeded during ninety (90) percent o	I rmore 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 requ	ired for compliance, what pollutant(s) does this equipment monitor (e.g., Opacity
SO ₂ , NO _x , etc.)?	med for compitation, what pollutain(s) does this equipment monitor (e.g., Opacity,
N/A	
Complete the appropriate APC form(s) 4,5,7,8,9, or 10 for each source exh	austing through this stack.
BYPASS STACI	K DES CRIPTION
13. Do you have a bypass stack?	
Yes 1	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 ^{14.} Page number: Revision Number:	Date of Revision.



TITLE V PERMIT APPLICATION STACK IDENTIFICATION

	GENERAL IDENTIFICAT	ION A	AND DES	CRIPTION	
1.	Facility name:				
	chinson Body Sealing Systems				
	Emission source (identify):		- 44 /-		(IO) O. I.O
Sou	rce No. 37-0067-01 (Extrusion Line #1) and 37			:xtrusion Line #	#2) – Stack S-2 vents the e
3.	STACK DE Stack ID (or flow diagram point identification):	SCRIP	TION		
	stack 1D (of flow diagram point identification).				
S-2					
	Stack height above grade in feet:				
35					
5.	Velocity (data at exit conditions):	6.	Inside din	nensions at outlet in fee	et:
	(Actual feet per second)	1			
7.	Exhaust flowrateat exit conditions (ACFM):	8.	Flow rate	e at standard conditions	(DSCFM):
100	0	868			
9.	Exhaust temperature:	10.	Moisture	content (data at exit con	nditions):
	V		_		Grains per dry
	X Degrees Fahrenheit (°F)		5	Percent	standard cubic foot (gr./dscf.)
11.	Exhaust temperature that is equaled or exceeded during ninety (90) percent o	r more o	fthe opera	ting time (for stacks sub	oject to diffusion equation only):
	N/A				
	(°F)				
12	If this stack is equipped with continuous pollutant monitoring equipment requ	irad far	a a mm lian a	a what nallytant(a) daa	athis againment monitor (a.g. Onosity
	From Stack is equipped with continuous portulant monitoring equipment requisitions, etc.)?	iii eu ioi	сопрпанс	e, what pollutaritis) doe	s this equipment monitor (e.g., Opacity,
N	I/A				
	Complete the appropriate APC form(s) 4, 5, 7, 8, 9, or 10 for each source exh	austing	through th	is stack.	
	BYPASS STACI	K DES	CRIPTIO)N	
13.	Do you have a bypass stack?				
	Yes Y	No			
	If yes, describe the conditions which require its use & complete APC form 4	for the b	ypass stack	c. Please identify the sta	ack n umber(s) of flow diagram point
	number(s) exhausting through this bypass stack.		. 1	,	
5 ^{14.}	Page number: Revision Number:			Date of Revi	sion:



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			
	SCRIPTION			
3. Stack ID (or flow diagram point identification):				
S-2				
4. Stack height above grade in feet:				
35				
5. Velocity (data at exit conditions):	6. Inside dimensions at outlet in feet:			
(Actual feet per second)	1			
7. Exhaust flowrateat exit conditions (ACFM):	8. Flow rate at standard conditions (DSCFM):			
1000	868			
9. Exhaust temperature:	10. Moisture content (data at exit conditions):			
	Grains per dry			
X	5 standard cubic			
Degrees Fahrenheit (°F)	Percent foot(gr./dscf.)			
11. Exhaust temperature that is equaled or exceeded during ninety (90) percent of	rmore 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 req	uired 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 ext	nausting 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.	(y)			
14. Page number: 15 Revision Number:	Date of Revision:			



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	7-0067-11 (Extrusion Line #2) – Stack S-2 vents the e			
	ESCRIPTION			
3. Stack ID (or flow diagram point identification):				
S-2				
4. Stack height above grade in feet:				
35				
5. Velocity (data at exit conditions):	6. Inside dimensions at outlet in feet:			
(Actual feet per second)	1			
7. Exhaust flowrateat exit conditions (ACFM):	8. Flow rate at standard conditions (DSCFM):			
1000	868			
9. Exhaust temperature:	10. Moisture content (data at exit conditions):			
V	Grains per dry			
X Degrees Fahrenheit (°F)	5 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 rec	urized for compliance what pollutant(s) does this equipment monitor (e.g., Onacity			
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 ex	chausting 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: 16 Revision Number:	Date of Revision:			



TITLE V PERMIT APPLICATION STACK IDENTIFICATION

GENERAL IDENTIFICATION AND DESCRIPTION			
1. Facility name:			
Hutchinson Body Sealing Systems			
2. Emission source (identify):	0007.44 (5.45 - 12 - 12 - 12 - 12 - 12 - 12 - 12 - 1		
	-0067-11 (Extrusion Line #2) – Stack S-2 vents the ε		
3. Stack ID (or flow diagram point identification):	SCRIPTION		
S-2			
4. Stack height above grade in feet:			
35			
5. Velocity (data at exit conditions):	6. Inside dimensions at outlet in feet:		
(Actual feet per second)	1		
7. Exhaust flowrateat exit conditions (ACFM):	8. Flow rate at standard conditions (DSCFM):		
1000	868		
9. Exhaust temperature:	10. Moisture content (data at exit conditions):		
	_ Grains per dry		
X Degrees Fahrenheit (°F)	5 standard cubic Percent foot (gr./dscf.)		
11. Exhaust temperature that is equaled or exceeded during ninety (90) percent o	rmore of the operating time (for stacks subject to diffusion equation only):		
N/A			
(°F)			
12. If this stack is equipped with continuous pollutant monitoring equipment requ	in d for a small on a substant Nutsua(s) do eathir a minus art an aniton (s. c. On eaith		
SO ₂ , NO _x , etc.)?	ined for compliance, what pollucani(s) does this equipment monitor (e.g., Opacity,		
N/A			
Complete the appropriate APC form(s) 4,5,7,8,9, or 10 for each source ext	nausting through this stack.		
BYPASS STAC	K DES CRIPTION		
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:	Data of Davisisms		
5 ¹⁴ . Page number: Revision Number:	Date of Revision:		



TITLE V PERMIT APPLICATION STACK IDENTIFICATION

	TION AND DESCRIPTION
1. Facility name:	
Hutchinson Body Sealing Systems	
2. Emission source (identify):	0007 44 (Futurian Line #0) Charle C 2 years the
	-0067-11 (Extrusion Line #2) – Stack S-2 vents the e
3. Stack ID (or flow diagram point identification):	SCRIPTION
S-2	
4. Stack height above grade in feet:	
35	
5. Velocity (data at exit conditions):	6. Inside dimensions at outlet in feet:
(Actual feet per second)	1
7. Exhaust flowrate at exit conditions (ACFM):	8. Flow rate at standard conditions (DSCFM):
1000	868
9. Exhaust temperature:	10. Moisture content (data at exit conditions):
V	Grains per dry
X Degrees Fahrenheit (°F)	5 standard cubic foot (gr./dscf.)
11. Exhaust temperature that is equaled or exceeded during ninety (90) percent o	rmore 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 requ	uired for compliance, what pollutant(s) does this equipment monitor (e.g., Opecity
SO ₂ , NO _x , etc.)?	incutor compitance, what pollutania(s) does this equipment monitor (e.g., Opacity,
N/A	
Complete the appropriate APC form(s) 4,5,7,8,9, or 10 for each source exh	austing through this stack.
BYPASS STACI	K DES CRIPTION
13. Do you have a bypass stack?	
Yes 1	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 Revision Number:	Date of Nevision.



TITLE V PERMIT APPLICATION STACK IDENTIFICATION

	GENERAL IDENTIFICAT	ION A	AND DES	CRIPTION	
	acility name:				
	hinson Body Sealing Systems				
	mission source (identify): ce No. 37-0067-01 (Extrusion Line #1) and 37-	-0067	7-11 (E)	xtrusion Line	#2) – Stack S-2 vents the e
	STACK DE	SCRIE	TION		
	tack ID (or flow diagram point identification):				
S-2					
4. St	tack height above grade in feet:				
35					
5. V	elocity (data at exit conditions):	6.	Inside dime	ensions at outlet in fe	et:
_	(Actual feet per second)	1			
7. E	xhaust flowrateat exit conditions (ACFM):	8.	Flow rate a	at standard conditions	(DSCFM):
1000		868			
9. E	xhaust temperature:	10.	Moisture c	content (data at exit co	onditions):
,	,		_		Grains per dry
,	X Degrees Fahrenheit (°F)		5	Percent	standard cubic foot (gr./dscf.)
11. E	xhaust temperature that is equaled or exceeded during ninety (90) percent o	r more o	fthe operati	ng time (<u>for stacks sul</u>	bject to diffusion equation only):
	N/A				
	(°F)				
12 If	`this stack is equipped with continuous pollutant monitoring equipment requ	uired for	compliance	what nollutant(s) doe	es this equipment monitor (e.g. Onacity
	O_2 , NO_x , etc.)?	iii ca ioi	сопришес,	, what polluturings doc	estins equipment monitor (e.g., Opacity,
N/	'A				
C	Complete the appropriate APC form(s) 4,5,7,8,9, or 10 for each source exh	austing	through this	stack.	
	BYPASS STACK DESCRIPTION				
13. D	o you have a bypass stack?				
	Yes Y	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				
nı	umber(s) exhausting through this bypass stack.				
14. P	age number: 19 Revision Number:			Date of Revi	ision:



TITLE V PERMIT APPLICATION STACK IDENTIFICATION

	TION AND DESCRIPTION
1. Facility name:	
Hutchinson Body Sealing Systems	
2. Emission source (identify):	7 0007 44 (Futuraion Line 110) - Otenh C O conte the
·	7-0067-11 (Extrusion Line #2) – Stack S-2 vents the e
3. Stack ID (or flow diagram point identification):	ES CRIPTION
S-2	
4. Stack height above grade in feet:	
35	
5. Velocity (data at exit conditions):	6. Inside dimensions at outlet in feet:
(Actual feet per second)	1
7. Exhaust flowrateat exit conditions (ACFM):	8. Flow rate at standard conditions (DSCFM):
1000	868
9. Exhaust temperature:	10. Moisture content (data at exit conditions):
V	Grains per dry
X Degrees Fahrenheit (°F)	5 standard cubic Percent foot (gr./dscf.)
11. Exhaust temperature that is equaled or exceeded during ninety (90) percent of	or more of the operating time (for stacks subject to diffusion equation only):
N/A	
(°F)	
12. If this steak is swimmed with a satisfactory and between the size of the satisfactory and	uired for compliance, what pollutant(s) does this equipment monitor (e.g., Opacity,
SO ₂ , NO _x , etc.)?	uired for compliance, what pollutanit(s) does this equipment monitor (e.g., Opacity,
N/A	
Complete the appropriate APC form(s) 4,5,7,8,9, or 10 for each source ex	hausting through this stack.
BYPASS STAC	K DES CRIPTION
13. Do you have a bypass stack?	
Yes	No
	for the bypass stack. Please identify the stack number(s) of flow diagram point
number(s) exhausting through this bypass stack.	Tot are oppuss stack. I tease identify the stack it affect (s) of flow diagram point
14. D	D. CD.
b ¹⁴ . Page number: 20 Revision Number:	Date of Revision:



TITLE V PERMIT APPLICATION STACK IDENTIFICATION

GENERAL IDENTIFICA	ATION AND DESCRIPTION		
1. Facility name:			
Hutchinson Body Sealing Systems			
2. Emission source (identify):			
Source No. 37-0067-01 (Extrusion Line #1) and 3	7-0067-11 (Extrusion Line #2) – Stack S-2 vents the ϵ		
	PES CRIPTION		
3. Stack ID (or flow diagram point identification):			
S-2			
4. Stack height above grade in feet:			
35			
	6 Incide dimensions at outlet in fact:		
	6. Inside dimensions at outlet in feet:		
(Actual feet per second)	1		
7. Exhaust flowrateat exit conditions (ACFM):	8. Flow rate at standard conditions (DSCFM):		
1000	868		
9. Exhaust temperature:	10. Moisture content (data at exit conditions):		
	Grains per dry		
X	5 standard cubic Percent foot (gr./dscf.)		
Degrees Fahrenheit (°F)			
11. Exhaust temperature that is equaled or exceeded during ninety (90) percent	ormore 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 re	quired 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 e	xhausting through this stack.		
	CK DES CRIPTION		
13. Do you have a bypass stack?	A DESCRIPTION		
	N		
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.			
number (s) extraosing through this by pass stack.			
14. Page number: Revision Number:	Date of Revision:		
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TITLE V PERMIT APPLICATION STACK IDENTIFICATION

	GENERAL IDENTIFICAT	TION A	AND DESCRIPTION						
	Facility name:								
	tchinson Body Sealing Systems								
	Emission source (identify):	000	7 44 /5 (: //O\					
50	Source No. 37-0067-01 (Extrusion Line #1) and 37-0067-11 (Extrusion Line #2) – Stack S-2 vents the e								
	STACK DE	SCRIP	TION						
3.	Stack ID (or flow diagram point identification):								
S-2									
4.	Stack height above grade in feet:								
35									
5.	Velocity (data at exit conditions):	6.	Inside dimensions at outle	et in feet:					
	(Actual feet per second)	1							
7.	Exhaust flowrate at exit conditions (ACFM):	8.	Flow rate at standard con	ditions (DSCFM)					
100		868		anons (2 ser m).					
9.	Exhaust temperature:	10.	Moisture content (data at	exit conditions):					
	X		5	Grains per dry standard cubic					
	Degrees Fahrenheit (°F)		Percent	foot (gr./dscf.)					
11.	Exhaust temperature that is equaled or exceeded during ninety (90) percent of	r more o	fthe operating time (<u>for sta</u>	acks subject to diffusion equation only):					
	N/A								
	(°F)								
12.	If this stack is equipped with continuous pollutant monitoring equipment requ	iired for	compliance, what pollutan	t(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 exh	naust ing	through this stack.						
	BYPASS STACI	K DES	CRIPTION						
13.	Do you have a bypass stack?								
	Yes N	No							
	If yes, describe the conditions which require its use & complete APC form 4 to	for the b	vnass stack Please identify	the stack number(s) of flow diagram point					
	number(s) exhausting through this bypass stack.	ror the o	y puss stuck. I lease identify	the stack it diffeet (3) of flow diagram point					
5 ^{14.}	Page number: 22 Revision Number:		Date	of Revision:					



TITLE V PERMIT APPLICATION STACK IDENTIFICATION

GENERAL IDENTIFICAT	TION 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 ϵ
	SCRIPTION
3. Stack ID (or flow diagram point identification):	
S-2	
4. Stack height above grade in feet:	
35	
5. Velocity (data at exit conditions):	6. Inside dimensions at outlet in feet:
(Actual feet per second)	1
7. Exhaust flowrate at exit conditions (ACFM):	8. Flow rate at standard conditions (DSCFM):
1000	868
9. Exhaust temperature:	10. Moisture content (data at exit conditions):
X Degrees Fahrenheit (°F)	Grains per dry standard cubic foot (gr./dscf.)
11. Exhaust temperature that is equaled or exceeded during ninety (90) percent of	rmore of the operating time (for stacks subject to diffusion equation only):
N/A (°F)	
12. If this stack is equipped with continuous pollutant monitoring equipment req SO ₂ , NO _x , etc.)?	uired for compliance, what pollutant(s) does this equipment monitor (e.g., Opacity,
N/A	
Complete the appropriate APC form(s) 4,5,7,8,9, or 10 for each source ex	nausting through this stack.
BYPASS STAC	K DES CRIPTION
13. Do you have a bypass stack?	
Yes	No
If yes, describe the conditions which require its use & complete APC form 4 number(s) exhausting through this bypass stack.	for the bypass stack. Please identify the stack number(s) of flow diagram point
	D. CD.
14. Page number: 23 Revision Number:	Date of Revision:



TITLE V PERMIT APPLICATION STACK IDENTIFICATION

GENERAL IDENT	CIFICATION AND DESCRIPTION										
1. Facility name:											
Hutchinson Body Sealing Systems											
2. Emission source (identify):											
Source No. 37-0067-01 (Extrusion Line #1) a	Source No. 37-0067-01 (Extrusion Line #1) and 37-0067-11 (Extrusion Line #2) – Stack S-2 vents the ϵ										
	ACK DES CRIPTION										
3. Stack ID (or flow diagram point identification):											
S-2											
4. Stack height above grade in feet:											
35											
5. Velocity (data at exit conditions):	6. Inside dimensions at outlet in feet:										
(Actual feet per second)	1										
7. Exhaust flowrate at exit conditions (ACFM):	8. Flow rate at standard conditions (DSCFM):										
1000	868										
9. Exhaust temperature:	10. Moisture content (data at exit conditions):										
	_ Grains per dry										
Degrees Fahrenheit (°F)	5 standard cubic Percent foot (gr./dscf.)										
	percent or more of the operating time (<u>for stacks subject to diffusion equation only</u>):										
N/A											
	_ (°F)										
12. If this stack is again ned with continuous pollutant monitoring again	ment required for compliance, what pollutant(s) does this equipment monitor (e.g., Opacity,										
SO ₂ , NO _x , etc.)?	ment required for compniance, what pollutanit(s) does this equipment monitor (e.g., Opacity,										
N/A											
Complete the appropriate APC form(s) 4,5,7,8,9, or 10 for each s	ource exhausting through this stack.										
BYPASS	STACK DES CRIPTION										
13. Do you have a bypass stack?											
Yes	No										
If yes, describe the conditions which require its use & complete APO	C 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: 24 Revision Number	r: Date of Revision:										
b ¹⁴ . Page number: 24 Revision Number	Succession										



TITLE V PERMIT APPLICATION STACK IDENTIFICATION

GENERAL IDENTIFICAT	CION AND DESCRIPTION
1. Facility name:	
Hutchinson Body Sealing Systems	
2. Emission source (identify):	0007.44 (5.45 - 12 - 12 - 12 - 12 - 12 - 12 - 12 - 1
,	-0067-11 (Extrusion Line #2) – Stack S-2 vents the e
3. Stack ID (or flow diagram point identification):	SCRIPTION
S-2	
4. Stack height above grade in feet:	
35	
5. Velocity (data at exit conditions):	6. Inside dimensions at outlet in feet:
(Actual feet per second)	1
7. Exhaust flowrateat exit conditions (ACFM):	8. Flow rate at standard conditions (DSCFM):
1000	868
9. Exhaust temperature:	10. Moisture content (data at exit conditions):
	_ Grains per dry
X Degrees Fahrenheit (°F)	5 standard cubic Percent foot (gr./dscf.)
11. Exhaust temperature that is equaled or exceeded during ninety (90) percent o	rmore of the operating time (for stacks subject to diffusion equation only):
N/A	
(°F)	
12. If this steel is seeing admitted continuous all steet to serious actions	in d for a small on a substant Nutsuat(s) do not big a suin month on a suit of (s. o. On suit.
 If this stack is equipped with continuous pollutant monitoring equipment requestors, NOx, etc.)? 	aired for compliance, what pollutant(s) does this equipment monitor (e.g., Opacity,
N/A	
Complete the appropriate APC form(s) 4,5,7,8,9, or 10 for each source exh	nausting through this stack.
	K DES CRIPTION
13. Do you have a bypass stack?	
Yes 1	No
	for the bypass stack. Please identify the stack number(s) of flow diagram point
number(s) exhausting through this bypass stack.	to the of pass stack. I read taching the stack number (a) of now diagram point
.14. Page number: 25 Revision Number:	Data of Davisisms
14. Page number: Revision Number:	Date of Revision:



TITLE V PERMIT APPLICATION STACK IDENTIFICATION

			GENERAL IDENTIFICA	TION A	ND DESCRIPTION					
1.	Facility name:									
Hu	tchinson Body Se		ystems							
2.	Emission source (identify					0, 100 , 11				
50	Source No. 37-0067-01 (Extrusion Line #1) and 37-0067-11 (Extrusion Line #2) – Stack S-2 vents the e									
2	Stack ID (or flow diagram		STACK D	ES CRIP	ΓΙΟΝ					
3.	, c	point identii	ication).							
S-2										
4.	Stack height above grade i	n feet:								
35										
5.	Velocity (data at exit cond	litions):		6.	Inside dimensions at outlet in feet:					
	(Actual feet po	er second)	1						
7.	Exhaust flowrateat exit co	onditions (A	CFM):	8.	Flow rate at standard conditions (DSCF)	M):				
10	00			868						
9.	Exhaust temperature:			10.	Moisture content (data at exit conditions):				
						Grains per dry				
	X	egrees Fahre	onhoit (°E)		5 Percent	standard cubic foot (gr./dscf.)				
11		•	` '	or more of	The operating time (for stacks subject to					
11.	Extraust temperature that i	s equaled of v		or more or	the operating time (<u>lor stacks subject to</u>	arrusion equation only).				
			N/A (°F)							
12.	If this stack is equipped wi SO ₂ , NO _x , etc.)?	th continuou	s pollutant monitoring equipment rec	quired for c	compliance, what pollutant(s) does this ec	quipment monitor (e.g., Opacity,				
	N/A									
	14// \									
		+ P.G.C. ()	4.5.7.0.0. 10.6. 1	1						
	Complete the appropriate	APC form(s)	4,5,7,8,9, or 10 for each source ex	khausting t	hrough this stack.					
1.2	D. I. I.	1.0	BYPASS STAC	CK DES C	CRIPTION					
13.	Do you have a bypass stac	cK?								
			Yes	No						
	If yes, describe the conditi number(s) exhausting thro			for the by	pass stack. Please identify the stack num	ber(s) of flow diagram point				
	number(s) exhausting time	ugii uiis oy pe	iss stack.							
5 ^{14.}	Page number:	26	Revision Number:		Date of Revision:					
J										



TITLE V PERMIT APPLICATION STACK IDENTIFICATION

GENERAL IDENTIFIC	CATION 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 ϵ												
	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):	6. Inside dimensions at outlet in feet:											
(Actual feet per second)	1											
7. Exhaust flowrateat exit conditions (ACFM):	8. Flow rate at standard conditions (DSCFM):											
1000	868											
9. Exhaust temperature:	10. Moisture content (data at exit conditions):											
	Grains per dry											
Degrees Fahrenheit (°F)	5 standard cubic Percent foot (gr./dscf.)											
	ent or more of the operating time (for stacks subject to diffusion equation only):											
N/A	. • ,———————————————————————————————————											
(PF)											
12. Tethic steel in a mineral with continuous all steets as a firm on	required for compliance, what pollutant(s) does this equipment monitor (e.g., Opacity,											
SO ₂ , NO _x , etc.)?	required for compliance, what pollutant(s) does this equipment monitor (e.g., Opacity,											
N/A												
Complete the appropriate APC form(s) 4, 5, 7, 8, 9, or 10 for each source	e exhausting through this stack.											
BYPASS ST	ACK DES CRIPTION											
13. Do you have a bypass stack?												
Yes	No											
If yes, describe the conditions which require its use & complete APC for	m 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: 27 Revision Number:	Date of Revision:											
b ¹⁴ . Page number: 27 Revision Number:	Date of Revision.											



TITLE V PERMIT APPLICATION STACK IDENTIFICATION

	ICATION AND DESCRIPTION
1. Facility name:	
Hutchinson Body Sealing Systems	
2. Emission source (identify):	107 0007 44 (F to all a line #0) - Ota I O O - a to # a
Source No. 37-0067-01 (Extrusion Line #1) and	37-0067-11 (Extrusion Line #2) – Stack S-2 vents the ε
	K DES CRIPTION
, , , , , , , , , , , , , , , , , , ,	
S-2	
4. Stack height above grade in feet:	
35	
5. Velocity (data at exit conditions):	6. Inside dimensions at outlet in feet:
(Actual feet per second)	1
7. Exhaust flowrateat exit conditions (ACFM):	8. Flow rate at standard conditions (DSCFM):
1000	868
9. Exhaust temperature:	10. Moisture content (data at exit conditions):
X	Grains per dry standard cubic
Degrees Fahrenheit (°F)	Percent foot (gr./dscf.)
11. Exhaust temperature that is equaled or exceeded during ninety (90) perc	cent or more of the operating time (<u>for stacks subject to diffusion equation only</u>):
N/A	95.)
(°F)
12. If this stack is equipped with continuous pollutant monitoring equipmen	nt 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	ce exhausting through this stack.
BYPASS ST	FACK DES CRIPTION
13. Do you have a bypass stack?	
Yes	No
If yes, describe the conditions which require its use & complete APC fo	orm 4 for the bypass stack. Please identify the stack number(s) of flow diagram point
number(s) exhausting through this bypass stack.	This is the by pass stack. I lease identify the stack it allowing of flow diagram point
14. Page number: Revision Number:	Date of Revision:



TITLE V PERMIT APPLICATION STACK IDENTIFICATION

GEN	VERAL IDENTIFICATION	N AND DE	SCRIPTION	
1. Facility name:				
Hutchinson Body Sealing Systems				
2. Emission source (identify):	1' ((4) 107.0	007.44./	= 1t 1.t	((0)
Source No. 37-0067-01 (Extrusion	·	`	Extrusion Line	#2) - Stack S-2 vents the e
3. Stack ID (or flow diagram point identification):	STACK DESC	CRIPTION		
S-2				
4. Stack height above grade in feet:				
35				
5. Velocity (data at exit conditions):	(5. Inside di	imensions at outlet in fe	et:
(Actual feet per second)	1			
7. Exhaust flowrateat exit conditions (ACFM):	8	3. Flow rat	te at standard conditions	(DSCFM):
1000	8	868		
9. Exhaust temperature:	1	0. Moistur	e content (data at exit co	nditions):
Χ		F		Grains per dry standard cubic
Degrees Fahrenheit (°F)		5	Percent	foot (gr./dscf.)
11. Exhaust temperature that is equaled or exceeded do	uring ninety (90) percent or m	ore of the oper	rating time (<u>for stacks sul</u>	bject to diffusion equation only):
N/A_				
	(°F)			
12. If this stack is equipped with continuous pollutant	monitoring equipment require	d for complian	ice what pollutant(s) doe	es this equipment monitor (e.g. Onacity
SO ₂ , NO _x , etc.)?	monto ing equip ment equip	a ror comp na.	oe, what politicals (o) the	ovino equipment memor (e.g., opiett),
N/A				
Complete the appropriate APC form(s) 4,5,7,8,9	o, or 10 for each source exhaus	sting through t	his stack.	
	BYPASS STACK I	DES CRIPTIO	ON	
13. Do you have a bypass stack?				
	Yes No			
If yes, describe the conditions which require its use	e & complete APC form 4 for	the by pass sta	ck. Please identify the sta	ack number(s) of flow diagram point
number(s) exhausting through this by pass stack.				
5 ^{14.} Page number: 29	Revision Number:		Date of Revi	ision:



TITLE V PERMIT APPLICATION STACK IDENTIFICATION

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 ϵ									
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): 6. Inside dimensions at outlet in feet:									
(Actual feet per second)									
7. Exhaust flowrateat exit conditions (ACFM): 8. Flow rate at standard conditions (DSCFM):									
1000 868									
9. Exhaust temperature: 10. Moisture content (data at exit conditions):									
Grains per									
X 5 standard or Degrees Fahrenheit (°F) Percent foot (gr./ds									
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</u>									
	<u>omy</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 SO ₂ , NO ₃ , etc.)?	(e.g., Opacity,								
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 diag number(s) exhausting through this bypass stack.	ram point								
number(s) exhausting timough tims by pass stack.									
5 ¹⁴ . Page number: Date of Revision:									



TITLE V PERMIT APPLICATION STACK IDENTIFICATION

	TION AND DESCRIPTION
1. Facility name:	
Hutchinson Body Sealing Systems	
2. Emission source (identify): Source No. 37-0067-01 (Extrusion Line #1) and 37	7-0067-11 (Extrusion Line #2) – Stack S-2 vents the e
	ES CRIPTION CONTRACTOR OF THE PROPERTY OF THE
3. Stack ID (or flow diagram point identification):	
S-2	
4. Stack height above grade in feet:	
35	
5. Velocity (data at exit conditions):	6. Inside dimensions at outlet in feet:
(Actual feet per second)	1
7. Exhaust flowrateat exit conditions (ACFM):	8. Flow rate at standard conditions (DSCFM):
1000	868
9. Exhaust temperature:	10. Moisture content (data at exit conditions):
V	Grains per dry
X Degrees Fahrenheit (°F)	5 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 rec	quired for compliance, what pollutant(s) does this equipment monitor (e.g., Opacity,
SO ₂ , NO _x , etc.)?	panet for compinate, what polatically according equipment monitor (e.g., options),
N/A	
Complete the appropriate APC form(s) 4,5,7,8,9, or 10 for each source ex	chausting through this stack.
BYPASS STAC	CK DES CRIPTION
13. Do you have a bypass stack?	
Yes	No
	for the by pass 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 Se	ealing Systen	ns										
Process description: 37-0067-01 (Extrusion Line #1) – Primer and coating application												
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.												
. Normal operating schedule 24 Hrs./Day 7X Days/Wk. 365 NA Days/Yr.												
5. 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:												
	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).												
			Normal		Coating Co	omposition: Vo	lume and we	ight perce	nt as applie	d	Density of Solvent	
Identify coatings	Maximum Usage		Usage	So	lids	Solvents (VOCs)	Water Exemp		Exempt	Solvent	Fraction	Coating Density
	Gal./Hr.	Gal./Mo.	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	he coatings ic	dentified 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:	R	levision Numb	er:	1	1	Date of Revi	sion:	1	ı	1	1	<u> </u>

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TITLE V PERMIT APPLICATION PAINTING AND COATING OPERATIONS

GENERAL IDENTIFICATION AND DESCRIPTION												
1. Facility name: Hutchinson Body Se	ealing Systen	ns										
2. Process description:37-0067-01 (Extru	Process description: 37-0067-01 (Extrusion Line #2) – Primer and coating application											
3. Year of construction or last modificate	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.												
Normal operating schedule 24 Hrs./Day 7X Days/Wk. 365 Days/Yr.												
. Location of this operation in UTM coordinates: UTM Vertical: 4061.6 UTM Horizontal: 341.58												
. 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:												
8. Application technique and transfer eff												
COATINGS AND SOLVENTS												
9. Complete the following table – Attack	9. Complete the following table – Attach additional tables as needed – Fill in only the items necessary for determination of compliance with emission standard(s).											
			Normal		Coating Co	omposition: Vo	lume and we	ight perce	nt as applie	d	Density of Solvent	
Identify coatings	Maximum Usage		Usage	So	lids	Solvents (VOCs)	Water		Exempt	Solvent	Fraction	Coating Density
	Gal./Hr.	Gal./Mo.	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 t	he coatings ic	lentified above	e:	I			I.	I .	I.	I	J	<u> </u>
(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	R	evision Numb	er:	<u> </u>		Date of Revi	ision:	<u> </u>		<u> </u>	1	ı

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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 24	Hrs./Day 7	Day	ys/Wk. 365 N	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		Coating Co	omposition: Vo	on: Volume and weight percent as applied				Density of Solvent Fraction	Coating Density
				Solids		Solvents (VOCs)	Water		Exempt Solvent			
	Gal./Hr.	Gal./Mo.	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):												
0. Page number: Date of Revision:												

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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	ion: 1989					4. Stack	ID or flow d	iagram poi	nt identificat	ion(s): S-6	66 and S-67	
	If the emissions are controlled for con If this printing operation is monitored	npliance, attac	ch an appropria	ate Air Pollution	on Control s	system form	stration form.						
5.	Normal operating schedule 24 Hrs./Day 7X Days/Wk_365 NA Days/Yr.												
6.	Location of this operation in UTM coordinates: UTM Vertical: 4061.6 UTM Horizontal: 341.58												
7.	Oven curing (complete if applicable):	N	lumber of ove	ns: 2		Tempe	rature of air cont	acting coated	l material a	s it leaves th	e oven (°F):	>200	
	Specify oven fuels:						Total ma	ax imum heat	input to ea	ch oven:			
8.	Application technique and transfer eff	ficiency (%):							-				
	COATINGS AND SOLVENTS												
9.	Complete the following table – Attach	n additional ta	bles as needed	l– Fill in only	the items n	ecessary for	determinationo	f compliance	with emis	sion standard	(s).		
Normal Coating Composition: Volume and weight percent as applied Density of Solvent													
Identify coatings		Maximi	um Usage	Usage	Solids		Solvents (VOCs)	Water Exempt Solven		Solvent	Fraction	Coating Density	
		Gal./Hr.	Gal./Mo.	Gal./Mo.	Vol. %	Wt. %	Wt.%	Vol.	Wt.	Vol.	Wt.	Lbs./Gal.	Lbs./Gal.
Prim	er	0.38	277.2	49.5	0	0	100	0	0	0	0	7.2558	7.2558
Coat	ings	0.55	402.3	71.8		27	44.26	0	0	0	0	3.8389	8.6736
Cros	slinker	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 t	he coatings id	lentified above	e:	•		•		•	•		•	
	(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: 25	R	evision Numb	er:	l		Date of Revi	ision:	l	l	l	I	I



TITLE V PERMIT APPLICATION PAINTING AND COATING OPERATIONS

			GENEI	RAL IDE	NTIFICA	TION AND D	DES CRIPT	ION				
1. Facility name: Hutchinson Body Se	Facility name: Hutchinson Body Sealing Systems											
2. Process description:												
3. Year of construction or last modificat	ion: 1989					4. Stack	ID or flowd	iagram poi	nt identifica	tion(s): S-6	66 and S-67	
If the emissions are controlled for con If this printing operation is monitored	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	Normal operating schedule 24 Hrs./Day 2 Days/Wk. 365 MA Days/Yr.											
6. Location of this operation in UTM co	ordinates: U	TM Vertical:	4061.6	UTM H	[orizontal: _	341.58						
7. Oven curing (complete if applicable)	: N	lumber of ove	ns: 2		Tempe	rature of air cont	acting coated	l material a	s it leaves th	e oven (°F)	>200	
Specify oven fuels:						Total ma	ax imum heat	input to ea	ch oven:			
8. Application technique and transfer ef	ficiency (%):											
				COA	ATINGS A	ND SOLVEN	ITS					
9. Complete the following table – Attach additional tables as needed – Fill in only the items necessary for determination of compliance with emission standard(s).												
Normal Coating Composition: Volume and weight percent as applied Density of Solvent												
Identify coatings	Maxim	Maximum Usage		Solids		Solvents (VOCs)	Water		Exempt	Solvent	Fraction	Coating Density
	Gal./Hr.	Gal./Mo.	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 ic	dentified 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	R	levision Numb	er:	ı	1	Date of Revi	sion:	1	1	1	1	<u> </u>



Telephone: (615) 532-0554

TITLE V PERMIT APPLICATION CONTROL EQUIPMENT - MISCELLANEOUS

GENERAL	L IDENTIFICATIO	N AND DESCRIPTION
1. Facility name:	2.	Emission source (identify):
Hutchinson Body Sealing Systems	So	urce No. 37-0067-01 (Extrusion Line #1) and 37-0067-11 (Extrusio
3. Stack ID or flow diagram point identification (s): S-38	<u> </u>	
CON	TROL EQUIPMEN	NT DESCRIPTION
		eir 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 ef	ficiency for each pollutant.
Pollutant	Efficiency (%)	Source of data
Particulate matter	99	Manufacturer
Discuss how collected material is handled for reuse or disp	ocal	
Filters are disposed in local landfill per the facility's S		nit
IT liters are disposed in local landilli per the facility s	ppeciai vvaste i eili	iit.
0. If this control equipment is in socion with some of the control	ol aquinment state 1	specify the everall efficiency
9. If this control equipment is in series with some other control N/A	or equipment, state and	specify the overall efficiency.
IV/A		
10. Page number: Revision	n Number:	Date of Revision:



Telephone: (615) 532-0554

TITLE V PERMIT APPLICATION CONTROL EQUIPMENT - MISCELLANEOUS

GENERAL	IDENTIFICATION A	AND DESCRIPTION
Facility name:	2. E	mission source (identify):
Hutchinson Body Sealing Systems	Source	e No. 37-0067-01 (Extrusion Line #1) and 37-0067-11 (Extrusio
3. Stack ID or flow diagram point identification (s):	'	
S-38		
CONT	ROL EQUIPMENT	DESCRIPTION
4. Describe the device in use. List the key operating parameter	s of this device and their n	ormal 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	ne expected control efficie	ncy for each pollutant.
	ī	
Pollutant	Efficiency (%)	Source of data
Particulate matter	99	Manufacturer
Discuss how collected material is handled for reuse or dispo	sal	
Filters are disposed in local landfill per the facility's Sp		
I liters are disposed in local facility's Of	deciai waste i emili.	
9. If this control equipment is in series with some other control	equipment, state and spec	rify the overall efficiency.
N/A		
10. Page number: Revision	Number:	Date of Revision:
38		



TITLE V PERMIT APPLICATION CONTROL EQUIPMENT - MISCELLANEOUS

GENERAL	LIDENTIFICATION AN	ND DESCRIPTION
1. Facility name:	2. Em	ission source (identify):
Hutchinson Body Sealing Systems	Source	No. 37-0067-01 (Extrusion Line #1) and 37-0067-11 (Extrusio
3. Stack ID or flow diagram point identification (s):		
S-38		
	TROL EQUIPMENT DI	
	rs of this device and their noi	rmal operating range (e.g., pressure drop, gas flow rate, temperature):
Overspray filters used in primer application booth.		
5. Manufacturer and model number (if available):		
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 controlled by the controlled by this equipment and the controlled by the cont	the expected control efficient	ey for each pollutant.
7. List of political (s) to be controlled by any equipment		
Pollutant	Efficiency (%)	Source of data
Particulate matter	99	Manufacturer
	- I	
	<u> </u>	+
8. Discuss how collected material is handled for reuse or dispo		
Filters are disposed in local landfill per the facility's S	pecial Waste Permit.	
9. If this control equipment is in series with some other control	ol equipment, state and specif	y the overall efficiency.
N/A		
10. Page number: 39 Revision	Number:	Date of Revision:



Telephone: (615) 532-0554

TITLE V PERMIT APPLICATION CONTROL EQUIPMENT - MISCELLANEOUS

GENERAL	IDENTIFICATION AN	DESCRIPTION			
Facility name:	2. Emis	sion source (identify):			
Hutchinson Body Sealing Systems	Source N	Source No. 37-0067-01 (Extrusion Line #1) and 37-0067-11 (Extrusion			
3. Stack ID or flow diagram point identification (s): S-38					
CON	TROL EQUIPMENT DE	SCRIPTION			
		nal operating range (e.g., pressure drop, gas flow rate, temperature):			
Overspray filters used in primer application booth.					
everspray micro asca in primer application bootis.					
5. Manufacturer and model number (if available):					
Engineering and Industrial Services, Inc.					
2000					
7. List of pollutant (s) to be controlled by this equipment and t	he expected control efficiency	for each pollutant.			
Pollutant	Efficiency (%)	Source of data			
1 Onutant	Efficiency (70)	Source of data			
Particulate matter	99	Manufacturer			
Discuss how collected material is handled for reuse or disposate to the collected material is handled for reuse or disposate to the collected material is handled for reuse or disposate to the collected material is handled for reuse or disposate to the collected material is handled for reuse or disposate to the collected material is handled for reuse or disposate to the collected material is handled for reuse or disposate to the collected material is handled for reuse or disposate to the collected material is handled for reuse or disposate to the collected material is handled for reuse or disposate to the collected material is handled for reuse or disposate to the collected material is handled for reuse or disposate to the collected material is handled for reuse or disposate to the collected material is handled for reuse or disposate to the collected material is handled for reuse or disposate to the collected material is handled for reuse or disposate to the collected material is handled for reuse or disposate to the collected material is handled for reuse or disposate to the collected material is handled for the	 osal				
Filters are disposed in local landfill per the facility's S					
	Jedai Wasie Fermii.				
9. If this control equipment is in series with some other contro	l equipment, state and specify	the overall efficiency.			
N/A		•			
10. Page number: Revision	Number:	Date of Revision:			
40					



TITLE V PERMIT APPLICATION CONTROL EQUIPMENT - MISCELLANEOUS

GENERAL	IDENTIFICATION	AND DESCRIPTION
Facility name:	2.	Emission source (identify):
Hutchinson Body Sealing Systems	Sour	ce No. 37-0067-01 (Extrusion Line #1) and 37-0067-11 (Extrusio
3. Stack ID or flow diagram point identification (s): S-38		
CONT	TROL EQUIPMENT	DESCRIPTION
		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 t	he expected control effic	enercy for each pollutant.
Pollutant	Efficiency (%)	Source of data
Particulate matter	99	Manufacturer
8. Discuss how collected material is handled for reuse or dispose	osal.	
Filters are disposed in local landfill per the facility's S	pecial Waste Permit	
9. If this control equipment is in series with some other control	l equipment, state and sp	ecify the overall efficiency.
N/A		
10. Page number: Revision	Number:	Date of Revision:
41		



TITLE V PERMIT APPLICATION CONTROL EQUIPMENT - MISCELLANEOUS

GENERAL	IDENTIFICATION .	AND DESCRIPTION
1. Facility name:	2. E	mission source (identify):
Hutchinson Body Sealing Systems	Source	e No. 37-0067-01 (Extrusion Line #1) and 37-0067-11 (Extrusio
3. Stack ID or flow diagram point identification (s):		
S-38		
	ROL EQUIPMENT	
	s 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	ne expected control effici	ency for each pollutant
7. East of political (3) to be controlled by this equipment and the	ie expected control effici	ney for each politicant.
Pollutant	Efficiency (%)	Source of data
Particulate matter	99	Manufacturer
Discuss how collected material is handled for reuse or dispo	sal.	
Filters are disposed in local landfill per the facility's Sp		
in more and anoposed in result in a racinity of ep	ocial reactor cirini	
9. If this control equipment is in series with some other control	equipment, state and spe	cify the overall efficiency.
N/A		
10 Paga number:	Number	Data of Pavision
10. Page number: 42 Revision	number:	Date of Revision:



TITLE V PERMIT APPLICATION CONTROL EQUIPMENT - MISCELLANEOUS

GENERAL	GENERAL IDENTIFICATION AND DESCRIPTION							
1. Facility name:	2. Em	ission source (identify):						
Hutchinson Body Sealing Systems	Source	No. 37-0067-01 (Extrusion Line #1) and 37-0067-11 (Extrusio						
3. Stack ID or flow diagram point identification (s):								
S-38								
	TROL EQUIPMENT D							
	rs of this device and their noi	rmal operating range (e.g., pressure drop, gas flow rate, temperature):						
Overspray filters used in primer application booth.								
5 N C + 1 11 mm b = (G mm light)								
5. Manufacturer and model number (if available): Engineering and Industrial Services, Inc.								
6. Year of installation:								
o. Year of installation:								
7. List of pollutant (s) to be controlled by this equipment and	the expected control efficien	ov for each pallutant						
7. List of pollutalit (s) to be controlled by this equipment and	me expected control efficient	sy for each ponutant.						
Pollutant	Efficiency (%)	Source of data						
	 							
Particulate matter	99	Manufacturer						
	<u> </u>							
		+						
8. Discuss how collected material is handled for reuse or disp								
Filters are disposed in local landfill per the facility's S	pecial Waste Permit.							
9. If this control equipment is in series with some other control	ol equipment, state and specif	v the overall efficiency.						
N/A	1 r ,	y 						
10. Page number: Revision 43	Number:	Date of Revision:						



TITLE V PERMIT APPLICATION CONTROL EQUIPMENT - MISCELLANEOUS

GENERAL IDENTIFICATION AND DESCRIPTION							
1. Facility name:	2. I	Emission source (identify):					
Hutchinson Body Sealing Systems	Source	e No. 37-0067-01 (Extrusion Line #1) and 37-0067-11 (Extrusio					
3. Stack ID or flow diagram point identification (s): S-38	•						
CON	TROL EQUIPMENT	DESCRIPTION					
		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 effici	ency for each pollutant					
7. East of poliutain (8) to be controlled by this equipment and	ane expected control cities	noy for each pollutaire.					
Pollutant	Efficiency (%)	Source of data					
Particulate matter	99	Manufacturer					
8. Discuss how collected material is handled for reuse or disp	osal.						
Filters are disposed in local landfill per the facility's S	Special Waste Permit.						
If this control equipment is in series with some other control.	ol equipment state and spe	cify the overall efficiency					
N/A	or equipment, state and spe	eny die overali emelency.					
10. Page number: 44 Revision	n Number:	Date of Revision:					
1							



Telephone: (615) 532-0554

TITLE V PERMIT APPLICATION CONTROL EQUIPMENT - MISCELLANEOUS

GENERAI	L IDENTIFICATION	N AND DESCRIPTION
1. Facility name:	2.	Emission source (identify):
Hutchinson Body Sealing Systems	Sou	rce No. 37-0067-01 (Extrusion Line #1) and 37-0067-11 (Extrusio
3. Stack ID or flow diagram point identification (s):	- I	
S-38		
CON	TROL EQUIPMEN	T DESCRIPTION
4. Describe the device in use. List the key operating paramete	rs of this device and the	ir 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 effi	iciency for each pollutant.
Pollutant	Efficiency (%)	Source of data
Particulate matter	99	Manufacturer
8. Discuss how collected material is handled for reuse or disp	osal.	1
Filters are disposed in local landfill per the facility's S	pecial Waste Perm	it.
	•	
		10.4
9. If this control equipment is in series with some other control	of equipment, state and s	specify the overall efficiency.
N/A		
10 Paga numban	Nyamban	Data of Basisian
10. Page number: 45	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.

- X									
	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	w diagram poi	int identification(s): S-66, S-67, S-2, and S	50				
	METHODS OF DETERMINING COMPLIANCE								
4.	This source as co	described unde erating condit	er Item #2 of this a ions from an exist	application will use the followiing permit). Check all that app	ng method(s) for determini ly and attach the appropria	ing compliance with a te form(s)	applicable requirements		
		nuous Emissio tant(s):	on Monitoring (CI	EM) - APC 20					
		sion Monitorir tant(s):	ng Using Portable	Monitors - APC 21			-		
	Monitoring Control System Parameters or Operating Parameters of a Process - APC 22 Pollutant(s):								
	Monitoring Maintenance Procedures - APC 23 Pollutant(s):						-		
		Testing - APO tant(s):	C 24						
		Sampling & Antant(s):	nalysis (FSA) - A	PC 25					
		rdkeeping - AI tant(s):	PC26 VOCs ; HAPs				-		
							-		
		: (please descri tant(s):	ribe) - APC 27						
		.,	Visible emiss	ions, SO2, PM, and NOx	· ·		-		
5.	Compliance cer	rtification repo	orts will be submit	ted to the Division according t	o the following schedule:				
	Start date:	9/30/2018		C	-				
	Andevery	365 day	ys thereafter.						
6.	Compliance mo			ed to the Division according to	the following schedule:				
	Start date:	11/30/201	8						
	Andevery	180 day	ys 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.

	requirement of the Postment Section,				
	GENERAL IDENTIFICATION AND DESCRIPTION				
1.	Facility name:	Hutchinson	Body Sealing Systems		
2.	Process emission	on source, fuel	urning installation, or incinerator (identify): 37-00	67-01 (Extrusion Line #1)	
3.	Stack ID or flo	w diagram poi	tidentification(s): S-66, S-67, S-2, and S-50		
			METHODS OF DETERMINI	NG COMPLIANCE	
4.	This source as co	described unde erating condit	Item #2 of this application will use the following me ns from an existing permit). Check all that apply and	ethod(s) for determining compliance with dattach the appropriate form(s)	applicable requirements
		inuous Emissio tant(s):	Monitoring (CEM) - APC 20		
		sion Monitorii tant(s):	Using Portable Monitors - APC 21		-
		toring Control tant(s):	system Parameters or Operating Parameters of a Proc	ress - APC 22	-
		toring Mainte tant(s):	ance Procedures - APC 23		-
		Testing - APotant(s):	24		-
		Sampling & A tant(s):	alysis (FSA) - APC 25		-
		rdkeeping - Al tant(s):	C26 VOCs ; HAPs		-
					-
		r (please descr tant(s):	e) - APC 27		
	Tolla	tant(s).	Visible emissions, SO2, PM, and NOx		-
5.	Compliance ce	rtification repo	ts will be submitted to the Division according to the	following schedule:	
	Start date:	9/30/2018	2		
	Andevery	365 day	thereafter.		
6.	Compliance me	onitoring repor	s will be submitted to the Division according to the fo	ollowing schedule:	
	Start date:	11/30/201			
	Andevery	180 day	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.

Topinomon 52 the Toomhou sectom).					
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 diagr	am point identification(s): S-66, S-67, S-2, and S-50			
		METHODS OF DETERMINING COMPLIANCE			
4.		ed under Item #2 of this application will use the following method(s) for determining compliance veconditions from an existing permit). Check all that apply and attach the appropriate form(s)	vith applicable requirements		
	Continuous Pollutant(s):	Emission Monitoring (CEM) - APC 20			
	Emission M Pollutant(s):	onitoring Using Portable Monitors - APC 21			
	Monitoring Pollutant(s):	Control System Parameters or Operating Parameters of a Process - APC 22			
	Monitoring Pollutant(s):	Maintenance Procedures - APC 23			
	Stack Testing - APC 24 Pollutant(s):				
	Fuel Samplin Pollutant(s):	ng & Analysis (FSA) - APC 25			
Recordkeeping - APC 26					
	Pollutant(s):	VOCs ; HAPs			
		e describe) - APC 27			
	Pollutant(s):	Visible emissions, SO2, PM, and NOx			
5.	Compliance certificat	ion reports will be submitted to the Division according to the following schedule:			
	•	/2018			
	And every 365	days thereafter.			
6.	Compliance monitoria	ng reports will be submitted to the Division according to the following schedule:			
	Start date: 11/3	0/2018			
	Andevery 180	days thereafter.			
7.	Page number:	Revision number: Date of revision	on:		



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.

Toquitoment of the Teenment Section,					
	GENERAL IDENTIFICATION AND DESCRIPTION				
1.	Facility name:	Hutchinson Body Sealing Systems			
2.	Process emission	on source, fuel burning installation, or incinerator (identify): 37-0067-01 (Extrusion I	Line #1)		
3.	Stack ID or flow	wdiagram point identification(s): S-66, S-67, S-2, and S-50			
		METHODS OF DETERMINING COMPLIANO	CE		
4.		escribed under Item #2 of this application will use the following method(s) for determining conditions from an existing permit). Check all that apply and attach the appropria	ing compliance with a	applicable requirements	
		nuous Emission Monitoring (CEM) - APC 20 ant(s):			
		ion Monitoring Using Portable Monitors - APC 21 ant(s):			
		coring Control System Parameters or Operating Parameters of a Process - APC 22 ant(s):			
		oring Maintenance Procedures - APC 23 ant(s):			
		Testing - APC 24 ant(s):			
		ampling & Analysis (FSA) - APC 25 ant(s):			
		dkeeping - APC 26 ant(s):			
	1 onu	VOCs ; HAPs			
		(please describe) - APC 27			
	Pollut	ant(s): Visible emissions, SO2, PM, and NOx			
5	Compliance	tification reports will be submitted to the Division according to the following schedule:			
5.	Start date:	9/30/2018			
	Andevery	365 days thereafter.			
6.	=	onitoring reports will be submitted to the Division according to the following schedule:			
	Start date:	11/30/2018			
	Andevery	180 days thereafter.			
7.	Page number:	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 DESCRIPT	TION
1.	Facility name: Hutchins	con Body Sealing Systems	
2.	Process emission source,	fuel burning installation, or incinerator (identify): 37-0067-01 (Extrusion L	Line #1)
3.	Stack ID or flow diagram	point identification(s): S-66, S-67, S-2, and S-50	· · · · · · · · · · · · · · · · · · ·
		METHODS OF DETERMINING COMPLIANCE	CE CE
4.		under Item $\#2$ of this application will use the following method(s) for determininditions from an existing permit). Check all that apply and attach the appropriate	
	Continuous Em Pollutant(s):	ission Monitoring (CEM) - APC 20	
	Emission Monit Pollutant(s):	toring Using Portable Monitors - APC 21	
	Monitoring Con Pollutant(s):	ntrol System Parameters or Operating Parameters of a Process - APC 22	
	Monitoring Mai Pollutant(s):	intenance Procedures - APC 23	
	Stack Testing - Pollutant(s):	APC 24	
	Fuel Sampling & Pollutant(s):	& Analysis (FSA) - APC 25	
	Recordkeeping	- APC 26	
	Pollutant(s):	VOCs ; HAPs	
	✓ Other (please de	escribe) - 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: 9/30/20		
	365	days thereafter.	
6.	Compliance monitoring re	eports will be submitted to the Division according to the following schedule:	
	Start date: 11/30/2	2018	
	And every 180	days thereafter.	
7.	Page number:	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.

- cquirement of the formation of the first o					
GENERAL IDENTIFICATION AND DESCRIPTION					
1.	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	E		
4.		under Item $\#2$ of this application will use the following method(s) for determining nditions from an existing permit). Check all that apply and attach the appropriate			
	Continuous En Pollutant(s):	nission Monitoring (CEM) - APC 20			
	Emission Mon Pollut ant(s):	toring Using Portable Monitors - APC 21			
	Monitoring Co Pollut ant(s):	ntrol System Parameters or Operating Parameters of a Process - APC 22			
	Monitoring Ma Pollut ant(s):	intenance Procedures - APC 23			
	Stack Testing - Pollutant(s):	APC 24			
	Fuel Sampling Pollutant(s):	& Analysis (FSA) - APC 25			
	Recordkeeping Pollutant(s):				
		VOCs ; HAPs			
		escribe) - 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:				
٥.	9/30/2				
	365				
-	And every	days thereafter.			
6.	11/20/	eports will be submitted to the Division according to the following schedule:			
	Start date: 11/30/				
	And every	days thereafter.			
7.	Page number:	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.			
GENE	RAL IDENTIFICATION AND DESCRIP	TION	
1. Facility name:	2. Stack ID or flow d	liagram point identification(s):	
Hutchinson Body Sealing Systems	S-66 and S-67		
3. Emission source (identify):			
37-0067-01 (Extrusion Line #1)			
MONITO	ORING AND RECORDKEEPING DESCR	IPTION	
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. Mate			
		mined by Method 24 or vendor information (i.e.,	
materials safety data sheets). HAP content will	use vendor information (i.e., materials sa	itety data sneets).	
7. Compliance demonstration frequency (specify the fre	quency with which compliance will be demonstrate	ed):	
Monthly recordkeeping	quency with which compliance will be demonstrate	34).	
working recordice ping			
8. Page number: Re	vision number:	Date of revision:	
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TITLE V PERMIT APPLICATION
COMPLIANCE DEMONSTRATION BY DECORDEREDING

COMPLIANCE DEMONSTRATION BY RECORDKEEPING			
Recordkeeping shall be acceptable as a compliance demonstration merequirement is established.	thod provided that a correlation between the parameter value recorded and the applicable		
GENERAL IDENT	TIFICATION AND DESCRIPTION		
1. Facility name:	2. Stack ID or flow diagram point identification(s):		
Hutchinson Body Sealing Systems	S-66 and S-67		
3. Emission source (identify):			
37-0067-01 (Extrusion Line #1)			
	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:			
	is multiplied by the VOC and HAP content of the material to determine s. VOC content will be determined by Method 24 or vendor information (i.e., information (i.e., materials safety data sheets).		
7. Compliance demonstration frequency (specify the frequency with with Monthly recordkeeping	hich compliance will be demonstrated):		
8. Page number: Revision number:	: Date of revision:		
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TITLE V PERMIT APPLICATION
COMPLIANCE DEMONSTRATION BY RECORD KEEPING

COMPLIANCE DEMONSTRATION BY RECORDKEEPING				
	n method provided that a correlation between the parameter value recorded and the applicable			
GENERAL ID	ENTIFICATION AND DESCRIPTION			
1. Facility name:	2. Stack ID or flow diagram point identification(s):			
Hutchinson Body Sealing Systems	S-66 and S-67			
3. Emission source (identify):				
37-0067-01 (Extrusion Line #1)				
MONITORING A	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:				
compliance with the permitted VOC and HAP emission limited safety data sheets). HAP content will use venional safety data sheets.				
7. Compliance demonstration frequency (specify the frequency wi Monthly recordkeeping	th which compliance will be demonstrated):			
8. Page number: Revision num	mber: Date of revision:			



Telephone: (615) 532-0554

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: 2. Stack ID or flow diagram point identification(s): S-66 and S-67 **Hutchinson Body Sealing Systems** Emission source (identify): 37-0067-01 (Extrusion Line #1) MONITORING AND RECORDKEEPING DESCRIPTION Pollutant(s) or parameter being monitored: VOCs and HAPs Material or parameter being monitored and recorded: Usage of VOC and HAP-containing materials 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). Compliance demonstration frequency (specify the frequency with which compliance will be demonstrated): Monthly recordkeeping

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Date of revision:

Revision number:

Page number:

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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:	2. Stack ID or flow diagram point identification(s):			
Hutchinson Body Sealing Systems	S-66 and S-67			
3. Emission source (identify):				
37-0067-01 (Extrusion Line #1)				
MONITORING AND RECO	RDKEEPING 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				
Method of monitoring and recording: Monthly usage records will be maintained. Materials usage is multi				
compliance with the permitted VOC and HAP emission limits. VOC materials safety data sheets). HAP content will use vendor information of the content will use vendor information.	content will be determined by Method 24 or vendor information (i.e., tion (i.e., materials safety data sheets).			
7. Compliance demonstration frequency (specify the frequency with which com	pliance will be demonstrated):			
Monthly recordkeeping				
8. Page number: Revision number:	Date of revision:			



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

GENERAL IDENTIFICATION AND DESCRIPTION

1. Facility name:	2. Stack ID or flow diagram point identification(s):
Hutchinson Body Sealing Systems	S-2 and S-50
Tructilison Body Sealing Systems	
3. Emission source (identify):	
37-0067-01 (Extrusion Line #1)	
4. Pollutant(s) or parameter being monitored:	G DES CRIPTION
VOCs and HAPs	
VOCS and TIAFS	
5. Description of the method of monitoring:	
Visible emissions: In accordance with the Tennessee Opacity Matr	riy per memo dated 06/18/1996 from Mr. Alvin Pratt
visible emissions. In accordance with the remiessee opacity mati	nx per memo dated 60/10/1990 months. Alvin i Tatt.
SO2, PM, NOx, and VOCs: Maximum heat input shall not exceed fuel source.	0.88 MMBtu/hr and only natural gas (or electricity) shall be used as a
Compliance demonstration fragues = (if-il-fragues =	policano vill ha damo a stato da
6. Compliance demonstration frequency (specify the frequency with which composity matrix	nphance 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:	2. Stack ID or flow diagram point identification(s):		
Hutchinson Body Sealing Systems	S-2 and S-50		
3. Emission source (identify):			
37-0067-01 (Extrusion Line #1)			
MONITORING	DES CRIPTION		
4. Pollutant(s) or parameter being monitored:			
VOCs and HAPs			
 Description of the method of monitoring: Visible emissions: In accordance with the Tennessee Opacity Matrix 	v per memo dated 06/18/1996 from Mr. Alvin Pratt		
visible emissions. In accordance with the Termessee Opacity Math.	k per memo dated 00/10/1990 from Mr. Alvin Fratt.		
SO2, PM, NOx, and VOCs: Maximum heat input shall not exceed 0 fuel source.	.88 MMBtu/hr and only natural gas (or electricity) shall be used as a		
6. Compliance demonstration frequency (specify the frequency with which comp	pliance will be demonstrated):		
Opacity matrix			
7. Page number: Revision number: 58	Date of revision:		



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

GENERAL IDENTIFICATION AND DESCRIPTION		
1. Facility name:	2. Stack ID or flow diagram point identification(s):	
Hutchinson Body Sealing Systems	S-2 and S-50	
3. Emission source (identify):		
37-0067-01 (Extrusion Line #1)		
MONITORING	DES CRIPTION	
4. Pollutant(s) or parameter being monitored:		
VOCs and HAPs		
5 Description of the model of models in		
 Description of the method of monitoring: Visible emissions: In accordance with the Tennessee Opacity Matrix 	oper memo dated 06/18/1996 from Mr. Alvin Pratt	
SO2, PM, NOx, and VOCs: Maximum heat input shall not exceed 0. fuel source.	88 MMBtu/hr and only natural gas (or electricity) shall be used as a	
6. Compliance demonstration frequency (specify the frequency with which comp	pliance will be demonstrated):	
Opacity matrix		
7	Duck	
7. Page number: Revision number: 59	Date of revision:	



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

GENERAL IDENTIFICAT	ION AND DESCRIPTION
1. Facility name:	2. Stack ID or flow diagram point identification(s):
Hutchinson Body Sealing Systems	S-2 and S-50
3. Emission source (identify):	
37-0067-01 (Extrusion Line #1)	
	DES CRIPTION
Pollutant(s) or parameter being monitored: VOCa and UAR	
VOCs and HAPs	
5. Description of the method of monitoring:	
Visible emissions: In accordance with the Tennessee Opacity Matrix	x per memo dated 06/18/1996 from Mr. Alvin Pratt.
SO2, PM, NOx, and VOCs: Maximum heat input shall not exceed 0 fuel source.	.88 MMBtu/nr and only natural gas (or electricity) shall be used as a
6. Compliance demonstration frequency (specify the frequency with which comp	pliance will be demonstrated):
Opacity matrix	
7. Page number: Revision number:	Date of revision:
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TITLE V PERMIT APPLICATION COMPLIANCE DEMONSTRATION BY OTHER METHOD(S)

GENERAL IDENTIFICAT	TON AND DESCRIPTION
1. Facility name:	2. Stack ID or flow diagram point identification(s):
Hutchingen Bady Capling Cystons	S-2 and S-50
Hutchinson Body Sealing Systems	
3. Emission source (identify):	
37-0067-01 (Extrusion Line #1)	
,	
	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 Matri	x per memo dated 06/18/1996 from Mr. Alvin Pratt.
SO2, PM, NOx, and VOCs: Maximum heat input shall not exceed 0 fuel source.	.88 MMBtu/hr and only natural gas (or electricity) shall be used as a
6. Compliance demonstration frequency (specify the frequency with which com	pliance will be demonstrated):
Opacity matrix	
7. Page number: Revision number:	Date of revision:
7. Page number. 61	

37-0067-01 (Extrusion Line #1)



TITLE V PERMIT APPLICATION

EMISSIONS FROM PROCESS EMISSION SOURCE / FUEL BURNING INSTALLATION / INCINERATOR

GENERAL IDENTIFICATION AND DESCRIPTION						
1. Facility name:	2.	Stack ID or flow diagram point identification(s):				
Hutchinson Body Sealing Systems		S-2 and S-50				
3. Process emission source / Fuel burning installation / Incinerator (identify):						

EMISSIONS SUMMARY TABLE – CRITERIA AND FUGITIVE EMISSIONS

4. Complete the following emissions summary for regulated air pollutants. Fugitive emissions shall be included. Attach calculations and emission factor references

	Maximum Alle	owable Emissions	Actual Emissions	
Air Pollutant	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	
		(Continued on next page)		

		(Continued from last page)		APC 2
AIR POLLUT ANT	Maximum All	lowable 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.

	Maximum A	Allowable Emissions	Actual Emissions	
Air Pollutant & CAS	Tons per Year	Tons per Year Reserved for State use (Pounds per Hour - Item 7, APC 30)		Reserved for State use (Pounds per Hour- Item 8, APC 30)
See Attached				
6. Page number:	Revision numbe	r:	Date of revision	1

6. Page number: Revision number: Date of revision

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

	MAXIMUM A	ALLOWABLE EMISSIONS	ACT	UAL EMISSIONS
AIR POLLUTANT & CAS	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	0.7456		N/A	
monobutyl ether 112-34-5				
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	

37-0067-01 (Extrusion Line #1)



TITLE V PERMIT APPLICATION

EMISSIONS FROM PROCESS EMISSION SOURCE / FUEL BURNING INSTALLATION / INCINERATOR

GENERAL IDENTIFICATION AND DESCRIPTION						
1. Facility name:	2.	Stack ID or flow diagram point identification(s):				
Hutchinson Body Sealing Systems		S-2 and S-50				
3. Process emission source / Fuel burning installation / Incinerator (identify):						

EMISSIONS SUMMARY TABLE – CRITERIA AND FUGITIVE EMISSIONS

4. Complete the following emissions summary for regulated air pollutants. Fugitive emissions shall be included. Attach calculations and emission factor references

	Maximum Alle	owable Emissions	Actual Emissions	
Air Pollutant	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	
		(Continued on next page)		

		(Continued from last page)		APC 2
AIR POLLUT ANT	Maximum All	lowable 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.

	Maximum A	Allowable Emissions	Actual Emissions	
Air Pollutant & CAS	Tons per Year	Tons per Year Reserved for State use (Pounds per Hour - Item 7, APC 30)		Reserved for State use (Pounds per Hour- Item 8, APC 30)
See Attached				
6. Page number:	Revision numbe	r:	Date of revision	1

6. Page number: Revision number: Date of revision

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

	MAXIMUM A	ALLOWABLE EMISSIONS	ACT	UAL EMISSIONS
AIR POLLUTANT & CAS	TONS/YEAR	RESERVED FOR STATE	TONG WEAD	RESERVED FOR STATE
	TONS/YEAR	USE (POUNDS PER HOUR – ITEM 7, APC V.30)	TONS/YEAR	USE (POUNDS PER HOUR – ITEM 8, APC V.30)
Diethylene glycol	0.4514	112117,111 0 1100)	N/A	11211 0,111 0 (100)
monobutyl ether				
112-34-5				
Ethylbenzene	1.0402		N/A	
100-41-4				
Methyl isobutyl ketone	2.1152		N/A	
108-10-1				
Methylene chloride	0.0610		N/A	
75-09-2	2.747.04		77/1	
Methylene diphenyl	3.74E-04		N/A	
diisocyanate 101-68-8				
P-xylene	0.0480		N/A	
106-42-3	0.0400		IV/A	
Toluene	12.0474		N/A	
108-88-3	12.07/7		14/74	
Xylene	2.4209		N/A	
1330-20-7	2205		1 1/1 1	

37-0067-01 (Extrusion Line #1)



TITLE V PERMIT APPLICATION

EMISSIONS FROM PROCESS EMISSION SOURCE / FUEL BURNING INSTALLATION / INCINERATOR

GENERAL IDENTIFICATION AND DESCRIPTION					
1. Facility name:	2.	Stack ID or flow diagram point identification(s):			
Hutchinson Body Sealing Systems		S-2 and S-50			
3. Process emission source / Fuel burning installation / Incinerator (identify):					

EMISSIONS SUMMARY TABLE – CRITERIA AND FUGITIVE EMISSIONS

4. Complete the following emissions summary for regulated air pollutants. Fugitive emissions shall be included. Attach calculations and emission factor references

	Maximum Alle	owable Emissions	Actual	Emissions
Air Pollutant	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	
		(Continued on next page)		1

		(Continued from last page)		APC 2	
AIR POLLUTANT	Maximum All	lowable 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 A	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 numbe	r:	Date of revision	1

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

	MAXIMUM ALLOWABLE EMISSIONS		ACTUAL EMISSIONS	
AIR POLLUTANT & CAS	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	0.4514		N/A	
monobutyl ether 112-34-5				
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	

State of Tennessee
Department of Environment and Conservation
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, TN 37243
Telephone: (615) 532-0554

37-0067-01 (Extrusion Line #1)



TITLE V PERMIT APPLICATION

EMISSIONS FROM PROCESS EMISSION SOURCE / FUEL BURNING INSTALLATION / INCINERATOR

GENERAL IDENTIFICATION AND DESCRIPTION						
1. Facility name:	2.	Stack ID or flow diagram point identification(s):				
Hutchinson Body Sealing Systems		S-2 and S-50				
3. Process emission source / Fuel burning installation / Incinerator (identify):						

EMISSIONS SUMMARY TABLE – CRITERIA AND FUGITIVE EMISSIONS

4. Complete the following emissions summary for regulated air pollutants. Fugitive emissions shall be included. Attach calculations and emission factor references

	Maximum Alle	owable Emissions	Actual Emissions		
Air Pollutant	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		
		(Continued on next page)			

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		(Continued from last page)		APC 2
	Maximum All	lowable Emissions	Actual Emissions	
AIR POLLUT ANT	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.

	Maximum A	Allowable Emissions	Actual Emissions	
Air Pollutant & CAS	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 numbe	r:	Date of revision	1

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

	MAXIMUM A	ALLOWABLE EMISSIONS	ACT	UAL EMISSIONS
AIR POLLUTANT & CAS	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	

State of Tennessee
Department of Environment and Conservation
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William R. Snodgrass Tennessee Tower
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37-0067-01 (Extrusion Line #1)



TITLE V PERMIT APPLICATION

EMISSIONS FROM PROCESS EMISSION SOURCE / FUEL BURNING INSTALLATION / INCINERATOR

GENERAL IDENTIFICATION AND DESCRIPTION						
1. Facility name:	2.	Stack ID or flow diagram point identification(s):				
Hutchinson Body Sealing Systems		S-2 and S-50				
3. Process emission source / Fuel burning installation / Incinerator (identify):						

EMISSIONS SUMMARY TABLE – CRITERIA AND FUGITIVE EMISSIONS

4. Complete the following emissions summary for regulated air pollutants. Fugitive emissions shall be included. Attach calculations and emission factor references

	Maximum Alle	owable Emissions	Actual Emissions		
Air Pollutant	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		
		(Continued on next page)			

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		(Continued from last page)		APC 2
	Maximum All	lowable Emissions	Actual Emissions	
AIR POLLUT ANT	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.

	Maximum A	Allowable Emissions	Actual Emissions	
Air Pollutant & CAS	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 numbe	r:	Date of revision	1

6. Page number: Revision number: Date of revision

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

	MAXIMUM A	ALLOWABLE EMISSIONS	ACT	UAL EMISSIONS
AIR POLLUTANT & CAS	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	0.7456		N/A	
monobutyl ether 112-34-5				
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	

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37-0067-01 (Extrusion Line #1)



TITLE V PERMIT APPLICATION

EMISSIONS FROM PROCESS EMISSION SOURCE / FUEL BURNING INSTALLATION / INCINERATOR

GENERAL IDENTIFICATION AND DESCRIPTION						
1. Facility name:	2.	Stack ID or flow diagram point identification(s):				
Hutchinson Body Sealing Systems		S-2 and S-50				
3. Process emission source / Fuel burning installation / Incinerator (identify):						

EMISSIONS SUMMARY TABLE – CRITERIA AND FUGITIVE EMISSIONS

4. Complete the following emissions summary for regulated air pollutants. Fugitive emissions shall be included. Attach calculations and emission factor references

	Maximum Alle	owable Emissions	Actual Emissions		
Air Pollutant	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		
		(Continued on next page)			

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		(Continued from last page)		APC 2	
	Maximum All	lowable Emissions	Actual Emissions		
AIR POLLUT ANT	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.

	Maximum A	Allowable Emissions	Actual Emissions			
Air Pollutant & CAS	Tons per Year	Tons per Year Reserved for State use (Pounds per Hour - Item 7, APC 30)		Reserved for State use (Pounds per Hour- Item 8, APC 30)		
See Attached						
6. Page number:	Revision numbe	r:	Date of revision	1		

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

	MAXIMUM A	ALLOWABLE EMISSIONS	ACT	UAL EMISSIONS
AIR POLLUTANT & CAS	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	0.7456		N/A	
monobutyl ether				
112-34-5				
Ethylbenzene	5.3222		N/A	
100-41-4				
Methyl isobutyl ketone	20.4120		N/A	
108-10-1				
Methylene chloride	0.0610		N/A	
75-09-2				
Methylene diphenyl	3.74E-04		N/A	
diisocyanate				
101-68-8				
Toluene	26.5986		N/A	
108-88-3				
Xylene	20.4120		N/A	
1330-20-7				

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

GENERAL IDENTIFICATION AND DESCRIPTION

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.

	Summary of Maxim	um Allowable Emissions	Summary of Actual Emissions			
Air Pollutant	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			
		(Continued on next page)		l		

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(Continued from previous page)

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.

	Summary of Max	imum Allowable Emissions	Summary of Actual Emissions		
Air Pollutant & CAS	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-butoxysthexx) (tached					
2-(2-methoxyethoxy) ethanol 111-77-3					
2-ethoxyethanol					
2-methoxyethanol 109-86-4					
Carbon tetrachloride 56-23-5					
Chlorobenzene 108-90-7					
Diethylene glycol monobutyl ether					
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		
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TITLE V PERMIT APPLICATION CURRENT EMISSIONS REQUIREMENTS AND STATUS

GENERAL IDENTIFICATION AND DESCRIPTION 1. Facility name: Emission source number 37-0067-01, 37-0067-02, 37-0067-11, 37-0067-13, 37-0067-14, and 37-0067-15 **Hutchinson Body Sealing Systems** 3. Describe the process emission source / fuel burning installation / incinerator. Extrusion Lines 1-5 and Secondaries EMISSIONS AND REQUIREMENTS Identify if only a part of Pollutant Applicable requirement(s): TN Air Pollution Control 7. Limitation Compliance status Maximum actual the source is subject to Regulations, 40 CFR, permit restrictions, emissions (In/Out) this requirement air quality based standards VOCs 41.7 tons/yr IN 1200-3-7-.07(2) 217 tons/12 months 1200-3-5-.01 Total HAPs 19.4 tons/yr IN 25 tons/12 months Individual HAPs 1.942 tons/yr IN 1200-3-5-.01 10 tons/12 months 10% IN 1200-3-5-.01(1) and 1200-3-5-.03(6) 20% Opacity Visible Emissions .02 grains/dscf 1200-3-7 Particulates 0.06t ons/yr IN 41 tons/12 months 1200-3-14 .02 tons/yr SO₂ 0.0002 tons/yr IN 4.0 tons/yr 1200-3-7-.07 NOX 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: Revision number: Date of revision: 70

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TITLE V PERMIT APPLICATION

COMPLIANCE PLAN AND COMPLIANCE CERTIFICATION GENERAL IDENTIFICATION AND DESCRIPTION

	Facility name: Chinson E	Body Sealing Sys	stems		
2.	List all the pro	ocess emission source(s) or	fuel burning installation(s) or incinerator(s) t	hat are part of this application	1.
Sou	irce No. 3	37-0067-01- Extr	usion Line #1, Source No. 3	37-0067-02 - Seco	ondaries (Corner Flocking
			·		2, Source No. 37-0067-13 -
		•	•		No. 37-0067-15 - Extrusion
	e #5	,		,	, , , , , , , , , , , , , , , , , , ,
	0		COMPLIANCE PLAN AND O	CERTIFICATION	
3.	Indicate that so	ource(s) which are contained	ed in this application are presently in complia	ance with all applicable require	ements, by checking the following:
	X A.	Attached is a statement of to assure compliance with	of identification of the source(s) currently in h all the applicable requirements for the dura	compliance. We will continue ation of the permit.	e to operate and maintain the source(s)
	В	APC 30 form(s) includes requirements on a timely	s new requirements that apply or will apply t \emph{y} basis.	o the source(s) during the term	n of the permit. We will meet such
4.	Indicate that the	here are source(s) that are c	ontained in this application which are not pr	esently in full compliance, by	checking both of the following:
	<u>N/A</u> _{A.}	Attached is a statement of and the proposed solution	of identification of the source(s) not in complete.	liance, non-complying require	ment(s), brief description of the problem,
	N/A B.		nce according to the following schedule:		
			Action		Deadline
		rts will be submitted:			
	Start date: N	/A	and every 180 days thereafte	eruntil compliance is achieved	1.
5.	State the compunder section	pliance status with any appl 114(a)(3) of the Clean Air	icable compliance assurance monitoring and Act as of the date of submittal of this APC 3	compliance certification requil.	irements that have been promulgated
N/A	١				
6.	Page number:		Revision number:	Date of re	evision: Manufacturer
					Manadala

CN- 1426 RDA 1298 State of Tennessee Department of Environment and Conservation Division of Air Pollution Control William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 15th Floor Nashville, TN 37243

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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	on 1: Identification and Diagrams (APC 1 and A	PC 2)
Requirement	Complete	Incomplete
Site Information		
Contact Information (Responsible Official)		
Contact Information (Technical)		X
Contact Information (Billing)		
Type of Permit Requested	×	
Accidental Release Information	X	
Nonattainment/Additional Control Area Designation	X	
List of Valid Permits	X	
List and description of process emission sources, fuel burning installations, and incinerators	X	Γ
Flow diagram attached?	×	
List of Insignificant Activities	X	
List of Storage Piles	×	
List of States within 50 Miles	×	
	Section 2: Emission Source Description Forms	
Forms are complete as received:		
Forms are incomplete (one or more application forms in		
	X	
	APC Form 4, Fuel Burning Non-Process Equipment	X
	APC Form 5, Stationary Gas Turbines or Internal Com Engines	abustion
	APC Form 6, Storage Tanks	
Forms are incomplete (missing information on the	APC Form 7, Incinerators	
following application forms):	APC Form 8, Printing Operations	
	APC Form 9, Painting and Coating Operations	X
	APC Form 10, Miscellaneous Processes	
	APC Form 33, Stage I and Stage II Vapor Recovery Ed	quipment
	APC Form 34, Open Burning	

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	Section 3: Air Pollution C	Control System Forms						
Forms are complete as received:								
Forms are incomplete (one or more application forms in								
	APC Form 11, Control Equip	×						
	APC Form 13, Adsorbers							
Forms are incomplete (missing information on the	APC Form 14, Catalytic or T	hermal Oxidation Equipme	nt					
following application forms):	APC Form 15, Cyclones/Set							
	APC Form 17, Wet Collection	on Systems						
	APC Form 18, Baghouse/Fal	bric Filters						
	Section 4: Compliance D	emonstration Forms						
Forms are complete as received:								
Forms are incomplete (one or more application forms in	not submitted)							
	APC Form 19, Compliance C Reporting - Description of M			×				
	APC Form 20, Continuous E	missions Monitoring						
	APC Form 21, Portable Mon	itors						
	APC Form 22, Control Syste Parameters of a Process							
	APC Form 23, Monitoring M	Saintenance Procedures						
	APC Form 24, Stack Testing							
Forms are incomplete (missing information on the following application forms):	APC Form 25, Fuel Samplin							
2 11	APC Form 26, Recordkeepin		X					
	APC Form 27, Other Method		×					
	APC Form 28, Emissions fro Burning Installations / Incine	es/Fuel	×					
	APC Form 29, Emissions Sur Source Contained in This Ap	or the	×					
	APC Form 30, Current Emis	sions Requirements and Sta	tus	×				
	APC Form 32, Air Monitorin	ng Net work						
Section 5: Statement of Completeness and Certification of Compliance								
Requirement	Complete	Incomplete	Not Applicable					
Certification of Truth, Accuracy, and Completeness (1								
General Identification and Description (Form APC 31.								
Compliance Certification for Sources Currently in Cor (Form APC 31, Item 3A)								
Compliance Certification for New Applicable Require (Form APC 31, Item 3B)								
Identification of Sources Currently Not in Compliance (Form APC 31, Item 4A)								
Compliance Schedule for Sources Currently Not in Co (Form APC 31, Item 4B)	mpliance							
Compliance Certification for Enhanced Monitoring (Form APC 31, Item 5)								

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Section 6: Miscellaneous Information					
Item	Inclu	ı de d	Not Included		
For Title V modifications, is a description of the modification included?					
Request for Permit Shield	>				
Calculations on which emissions-related information are based	Σ				
Identification of alternative operating scenarios, as applicable					
Explanation of any proposed exemptions from otherwise applicable requirements					
Other information needed for completeness (explain in comments)					
	Section 7:	Comments			
Describe any missing information below or in a sepa					
	Section 8: Applica	tion Completeness			
Application is Complete	•	•			
Application is Incomplete			X		

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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 requirement, 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.
- The following information to the extent it is needed to determine or regulate emissions: fuels, fuel use, raw materials, (3) production rates, and operating schedules.
- A list of insignificant activities. Tennessee Air Pollution Control Regulations (TAPCR) 1200-03-09-.04(5)(g) includes a list of (4) 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:

- All emissions of regulated air pollutants³ from any emissions unit, except where such units are exempted. Emission rates (1) 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.
- 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.
- A citation and description of all applicable requirements. (2)

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.
- 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				
	P <mark>ermit Renewa</mark> l			
Enter Year	8/5/2018			
STEP #2				
Enter pounds of EPDM Extruded	d per month (Data acquired	from Common/E	xtusion/Daily Log/Mo	onthly 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			
	4,342 (0115/111011111			
STEP #3				
Days Extrusion Operated(Dai	lv Loa):	60	Days	Data acquired from Common/Extusion
Hours Extrusion Lines Operated D		644	hours/month	/Daily Log/Monthly Extrusion Report
	uning the mental		neara, manar	/Daily Leg
STEP #4				
Days Secondaries Operated(I	Daily Log)	60	Days/Month	
Hours Secondaries Operated Duri	,	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 usa	age tab.		
STEP #7				
Complete Cumulative Summary P	age and Individual HAPs Pag	10		
Complete Cumulative Cuminary I	age and individual LiAi 3 Lag	je		
STEP #8				
Print out all worksheets				
Compare Emissions to Permit Lim	uits			

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

0.0700 7.2000 100.00 7.2000 00 gai 1010 gai 1 1 1 1010.00 10,100.20 WILLI	Permit Renewal 43317													
3M Adhesion Promotor 0.8153 6.8000 93.00 6.3240 260 gal 260 gal 1 1 260.00 1,644.24 #REFI Acheson Part C (Emralon 8370C) 1.0700 8.8238 100.00 8.8238 301 qt 300.5 qt 4 1 75.13 670.40 #REFI Acheson TW-040 1.0300 8.8902 21.37 1.8357 735 gal 735 gal 1 1 275.00 5.020.71 #REFI Acheson TW-077 1.0400 8.6736 44.26 3.8391 750 gal 750 gal 1 1 75.00 2.679.35 #REFI Acheson TW-077 1.0400 8.6736 44.26 3.8391 750 gal 750 gal 1 1 75.00 2.679.35 #REFI Acheson TW-077 1.0500 8.8404 1.89 0.1669 1 1 4.06 0.85 0.35 1.52 0.00 Apollo Bast 6003 (Cyberbond) 0.8770 7.3142 99.90 7.3069 4 gal 1 1 14.00 102.30 0.00 Apollo Bast 6003 (Cyberbond) 8.8770 7.3142 99.90 7.3069 4 gal 1 1 14.00 102.30 0.00 Bostik Mastic 1.5311 12.7693 0.00 0.0000 3.80 b. 87.05 b. 1 12.7693 65.55 0.00 0.000 3.80 b. 87.05 b. 1 12.7693 65.55 0.00 0.000 3.80 b. 87.05 b. 1 12.7693 65.55 0.00 0.000 3.80 b. 87.05 b. 1 12.7693 65.55 0.00 0.000 4.800 5 gal 0 gal 1 1 0.00 0.00 4.805 0.6856 1 gal 0 gal 1 1 0.00 0.00 4.805 0.6856 1 gal 0 gal 1 1 0.00 0.00 4.805 0.6856 1 gal 0 gal 1 1 0.00 0.00 4.805 4.805 0.805	Process Material	Specific	Density	%VOC	VOCs	Contair	ner	Month	nly	Conversion	on Factors	Monthly Usage		
Acheson Part C (Emralon 8370C)		Gravity			(lbs/gal)	Size	,	Usag	е			(gal)	VOC	HAP
Acheson TW-040 1.0300 8.5902 21.37 1.8357 735 gal 2735 gal 1 1 2735.00 5,020.71 #REFI Acheson TW-077 1.0400 8.6736 44.26 3.8391 750 gal 1 1 750.00 2,379.35 #REFI Acheson TW-077 1.0600 8.6706 42.58 6.00 4.3535 41 oz 40.003 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 9.990 7.3069 4 gal 14 gal 1 1 14.06 0.88 0.00 Bostik Mastic 1.5311 12.7693 3.00 0.4000 5 gal 0 gal 1 1 0.00 0.00 #REFI Chemlack 459X 0.8729 7.2900 96.50 7.0252 5 gal 0 gal 1 1 <th>3M Adhesion Promotor</th> <th>0.8153</th> <th>6.8000</th> <th>93.00</th> <th>6.3240</th> <th>260</th> <th>gal</th> <th>260</th> <th>gal</th> <th>1</th> <th>1</th> <th>260.00</th> <th>1,644.24</th> <th>#REF!</th>	3M Adhesion Promotor	0.8153	6.8000	93.00	6.3240	260	gal	260	gal	1	1	260.00	1,644.24	#REF!
Acheson TW-077 1.0400 8.66736 44.26 3.6391 750 gal 7.50 gal 1 1 7.5000 2,273 #REFI Acheson TW-077 1.0400 8.66736 44.26 3.6391 750 gal 7.50 gal 1 1 7.5000 2,273 #REFI Acheroli 0.8700 7.2558 60.00 4.2555 41 gal 40.603 cz 16 7.2558 0.35 1.52 0.00 Apollo Blast 6003 (Cyberbond) 0.8770 7.3142 99.90 7.3069 4 gal 1 la 1 4.00 10.230 0.00 Apollo Blast 6003 (Cyberbond) 1.27693 0.00 0.0000 350 lb 37.05 lb 1 12,7693 65.55 0.00 0.00 Bostik Mastic 1.5311 12,7693 0.00 0.0000 350 lb 37.05 lb 1 12,7693 65.55 0.00 0.00 0.00 Bostik Mastic 1.5311 12,7693 0.00 0.0000 350 lb 37.05 lb 1 12,7693 65.55 0.00 0.00 0.00 Bostik Mastic 1.5311 12,7693 0.00 0.0000 350 lb 30 gal 1 1 1 0.00 0.00 #REFI Chemplaze 9956 0.8717 7.2700 94.30 6.8556 1 gal 0 gal 1 1 1 0.00 0.00 .#REFI Chemplaze 9956 0.8717 7.2700 94.30 6.8556 1 gal 0 gal 1 1 1 0.00 0.00 .#REFI Chemplaze 9966 0.8717 7.2700 94.30 6.8556 1 gal 0 gal 1 1 1 0.00 0.00 .#REFI FlockLok 6389 0.9952 8.3000 99.40 6.5992 1 gal 7 gal 1 1 1 0.00 0.00 0.00 #REFI FlockLok 6380 0.9908 8.2600 48.00 3.9948 5 gal 0 gal 1 1 0.00 0.00 0.00 #REFI FlockLok 855 0.9832 8.2000 46.76 3.8943 5 gal 0 gal 1 1 0.00 0.00 0.00 #REFI FlockLok 870 0.9712 8.1000 44.89 3.6500 5 gal 0 gal 1 1 0.00 0.00 0.00 #REFI Isopropyl Alcohol 0.7906 6.5933 100.00 6.5933 55 gal 0 gal 1 1 0.00 0.00 0.00 #REFI Isopropyl Alcohol 0.7906 6.5933 100.00 5.5933 55 gal 55 gal 1 1 1 0.00 0.00 0.00 0.00 MEKLube 1829T2 1.1000 9.1740 0.00 0.71724 10.00 0.71724 55 gal 156 gal 1 1 1 65.00 591.72 #REFI Misty 0.8500 7.0890 7.0890 5.00 3.5445 14 ga 540.39 c. 1 1 1 1 0.00 0.00 0.00 0.00 MEKLube 1829T2 1.1000 9.1740 5.00 7.71724 55 gal 0 gal 1 1 1 0.00 0.00 0.00 0.00 0.00 MEKLube 1829T2 1.1000 9.1740 5.00 0.71724 55 gal 168 gal 1 1 1 0.000 0.00 0.00 0.00 0.00 MEKLube 1829T2 1.1000 9.1740 5.00 0.71724 55 gal 169 gal 1 1 1 0.000 0.00 0.00 0.00 0.00 0.00 0	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!
Aerkroil 0.8700 7.2558 60.00 4.3535 41 oz 4.0603 oz 16 7.2558 0.35 1.52 0.00 Apolio Blast 6003 (Cyberbond) 0.8770 7.3142 99.90 7.3069 4 gal 14 gal 1 1 14.00 102.30 0.00 Bostik Mostic 1.5311 12.7693 3.00 0.0000 350 bl 8.705 bl 1 12.7693 6.655 0.00 0.00 0.00 350 bl 87.705 bl 1 12.7693 6.655 0.00 0.00 0.00 350 bl 87.705 bl 1 12.7693 6.655 0.00 0.00 0.00 8.655 bl 0 1 1.27693 6.655 0.00 0.00 9.00 0.00 9.00 0.00 9.00 0.00 9.00 0.00 9.00 0.00 0.00 9.00 9.00 0.00 9.00 9.00 9.00 9.00 9.00 9.00 9.00 9.00 9.00 9.00 9.00 9.00 9.0	Acheson TW-040	1.0300	8.5902	21.37	1.8357	735	gal	2735	gal	1	1	2735.00	5,020.71	#REF!
Apollo Blast 6003 (Cyberbond) 0.8770 7.3142 99.00 7.3069 1 b 35.859 b 8.8404 1 1.400 102.30 0.00	Acheson TW-077	1.0400	8.6736	44.26	3.8391	750	gal	750	gal	1	1	750.00	2,879.35	#REF!
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 Mastic	Aerkroil	0.8700	7.2558	60.00	4.3535	41	ΟZ	40.603	oz	16	7.2558	0.35	1.52	0.00
Bostik Hot Melt	Apollo 2077	1.0600	8.8404	1.89	0.1669	1	lb	35.859	lb	8.8404	1	4.06	0.68	0.00
Bostik Mastic	Apollo Blast 6003 (Cyberbond)	0.8770	7.3142	99.90	7.3069	4	gal	14	gal	1	1	14.00	102.30	0.00
ChemLok 459X 0.8729 7.2800 96.50 7.0252 5 gal 0 gal 1 1 0.00 0.00 0.664 Chemglaze 9956 0.8751 7.2700 94.30 6.85956 1 gal 0 gal 1 1 0.00 0.00 #REFI FlockLok 6389 0.9952 8.3000 43.00 3.5690 1 gal 0 gal 1 1 7.00 46.19 #REFI FlockLok 6389 0.9952 8.3000 48.00 3.9648 55 gal 0 gal 1 1 0.00 0.00 0.00 FlockLok 855 0.9900 8.2600 48.00 3.9366 55 gal 0 gal 1 1 0.00 0.00 0.00 FlockLok 855 0.9832 8.2000 46.76 3.8343 55 gal 2750 gal 1 1 0.00 0.00 1,566 FlockLok 870 0.9712 <th>Bostik Hot Melt</th> <th>1.5311</th> <th>12.7693</th> <th>0.00</th> <th>0.0000</th> <th></th> <th></th> <th>837.05</th> <th>lb</th> <th>1</th> <th>12.7693</th> <th>65.55</th> <th>0.00</th> <th>0.00</th>	Bostik Hot Melt	1.5311	12.7693	0.00	0.0000			837.05	lb	1	12.7693	65.55	0.00	0.00
Chemglaze 9956 0.8717 7.2700 94.30 6.8556 1 gal 0 gal 1 1 0.00 0.00 #REFI Chemglaze 9986 0.8753 7.3000 90.40 6.5992 1 gal 7 gal 1 1 7.00 46.19 #REFI FlockLok 6389 0.9952 8.3000 43.00 3.5690 1 gal 0 gal 1 1 0.00 0.00 0.00 FlockLok 852 0.9900 8.2600 48.00 3.9936 55 gal 0 gal 1 1 0.00 0.00 1.56 FlockLok 853A 0.9976 8.3200 46.76 3.8343 55 gal 2750 gal 1 1 0.00 0.00 1.56 FlockLok 870 0.9712 8.1000 44.89 3.6500 55 gal 440 gal 1 1 440.00 1,606.00 #REFI Isopropyl Alcohol 1.000	Bostik Mastic	1.5311								1	1		0.00	#REF!
Chemqlaze 9986 0.8753 7.3000 90.40 6.5992 1 gal 7 gal 1 1 7.00 46.19 #REFI FlockLok 6389 0.9952 8.3000 43.00 3.5690 1 gal 0 gal 1 1 1 0.00 0.00 0.00 FlockLok 852 0.9996 8.3200 48.00 3.9936 55 gal 0 gal 1 1 0.00 0.00 .00 #REFI FlockLok 853A 0.9976 8.3200 46.76 3.8343 55 gal 2750 gal 1 1 0.00 0.00 #REFI FlockLok 870 0.9712 8.1000 44.89 3.6500 55 gal 40 gal 1 1 2750.00 10,544.38 #REFI Isopropyl Alcohol 0.7906 6.5933 100.00 6.5933 55 gal 55 gal 1 1 40.00 10,66.00 #REFI <th></th> <th></th> <th></th> <th>96.50</th> <th>7.0252</th> <th>5</th> <th>gal</th> <th></th> <th>,</th> <th>1</th> <th>1</th> <th>0.00</th> <th>0.00</th> <th></th>				96.50	7.0252	5	gal		,	1	1	0.00	0.00	
FlockLok 6389 0.9952 8.3000 43.00 3.5690 1 gal 0 gal 1 1 0.00 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 1,666.00 #REF! Isopropyl Alcohol 0.7906 6.5933 100.00 6.5933 55 gal 55 gal 1 1 440.00 1,666.00 #REF! Isopropyl Alcohol 1.000 8.7570 2.00 0.1751 12.8 oz 0 0 1 1 440.00 1,666.00 #REF! Isopropyl Alcohol 1.000 8.7570 2.00 0.1751 12.8 oz 0 0							_		_					
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 #REFI FlockLok 870 0.9712 8.1000 44.89 3.6500 55 gal 440 gal 1 1 440.00 1,606.00 #REFI Isopropyl Alcohol 0.7906 6.5933 100.00 6.5933 55 gal 55 gal 1 1 440.00 1,606.00 #REFI Isopropyl Alcohol 0.7906 6.5933 100.00 6.5933 55 gal 55 gal 1 1 440.00 1,606.00 #REFI Isopropyl Alcohol 1.0500 8.7570 2.00 0.1751 12.8 oz 0 0 2 16 8.7570 0.00 0.00 0.00 McLyber 1.0000 9.1740 0.00 0.000 7.5811 5 gal		0.9952	8.3000	43.00	3.5690		J .			1	1	0.00	0.00	0.00
FlockLok 855	Focklok 852	0.9900	8.2600	48.00					9	1	1	0.00	0.00	#REF!
FlockLok 870 0.932 8.2000 44.89 3.6500 55 gal 2750 gal 1 1 2750.00 10,544.38 #REFI FlockLok 870 0.9712 8.1000 44.89 3.6500 55 gal 440 gal 1 1 440.00 1,606.00 #REFI 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 02 0 02 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 #REFI Misty 0.8500 7.0890 50.00 3.5445 14 0z 540.39 0z 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 #REFI Plasti Dip 1.1000 9.1740 5.10 0.4679 14.5 0z 0.5927 0z 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 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 32.00 376.36 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 1815 gal 1 1 1815.00 13,169.28 #REFI		0.9976	8.3200	48.00	3.9936	55	gal	0	gal	1	1	0.00	0.00	1.56
Sopropyl Alcohol 0.7906 6.5933 100.00 6.5933 55 gal 55 gal 1 1 55.00 362.63 0.00	FlockLok 855	0.9832	8.2000	46.76	3.8343	55	gal	2750	gal	1	1	2750.00	10,544.38	#REF!
Loctite 411/Frekote Aqualine R-120 1.0500 8.7570 2.00 0.1751 12.8 0z 0 oz 16 8.7570 0.00 0.	FlockLok 870	0.9712	8.1000	44.89	3.6500	55	gal	440	gal	1	1	440.00	1,606.00	#REF!
McLube 1829T2 1.0000 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 1.0000 0.00 0.00 0.00 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 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	Isopropyl Alcohol	0.7906	6.5933	100.00	6.5933	55	gal	55	gal	1	1	55.00	362.63	0.00
MEK/Acetone (50%/50%) 0.8600 7.1724 100.00 7.1724 55 gal 165 gal 1 1.500 591.72 #REFI 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 #REFI 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 0.00 Rohm and Haas Robond TR 5125 1.0900 9.0906 14.30 1.3000 5 gal 340 gal 1	Loctite 411/Frekote Aqualine R-120	1.0500	8.7570	2.00	0.1751			0	oz	16	8.7570	0.00	0.00	0.00
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 7.6396 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 0.00 42.00 302.40 Stahl WT-21-270 1.0100 8.4234 22.34 1.8818 5 gal 200 gal 1 1	McLube 1829T2	1.1000	9.1740	0.00	0.0000	55	gal	0	gal	1	1.0000	0.00	0.00	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 5 gal 1 1	MEK/Acetone (50%/50%)	0.8600	7.1724	100.00	7.1724	55	gal	165	gal	1	1	165.00	591.72	#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 5 gal	Misty	0.8500	7.0890	50.00	3.5445			540.39	ΟZ	16	7.0890	4.76	16.89	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 42.00 302.40 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 </th <th>Nulube</th> <th>1.0100</th> <th></th> <th>90.00</th> <th></th> <th></th> <th></th> <th></th> <th>gal</th> <th>1</th> <th>1.0000</th> <th></th> <th>454.86</th> <th>#REF!</th>	Nulube	1.0100		90.00					gal	1	1.0000		454.86	#REF!
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 42.00 302.40 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 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 13,169.28 #REFI		1.1000	9.1740	5.10	0.4679	14.5	ΟZ	0.5927	oz	16	9.1740	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 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 #REFI	Rohm and Haas 6008	0.9400	7.8396	42.00	3.2926	55	gal	0	gal	1	1	0.00	0.00	0.00
Stahl WT-21-270 1.0000 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 1 200.00 133.44 0.00 Tint AYD 8003 STT 1.8900 15.7626 20.00 3.1600 5 gal 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 #REFI	Rohm and Haas 6009	0.9200	7.6728	44.80	3.4374	55	gal	0	gal	1	1	0.00	0.00	0.00
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 #REFI	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
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 #REFI	Stahl WT-21-270	1.0100	8.4234	22.34	1.8818	5	gal	200	gal	1	1	200.00	376.36	0.74
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!	Stahl XR-21-498	1.0000	8.3400	50.00	4.1700	5	gal	32	gal	1	1	32.00	133.44	0.00
0.0700 7.2000 100.00 7.2000 00 gai 1010 gai 1 1 1 1010.00 10,100.20 WILLI	Tint AYD 8003 STT	1.8900	15.7626	20.00	3.1600	5	gal	5	gal	1	1	5.00	15.80	7.90
UV Dve (TA-001 Fluorescent) 1 0200 8 5068 0 00 0 0000 5 gal 9 gal 1 1 9 00 0 0 0	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 1 10.00 0.00 0.00								10	gal	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										4	1			
Xylene 0.9800 8.1732 10.00 0.8173 1 gal 0 gal 1 0.00 0.00 #REF!		0.9800	8.1732	10.00	0.8173	1	gal		_	1	1			
Rubber 4,525,055 lbs 4,525,055 3749.10 4416.45 41.832.98 #REF!	Rubber							4,525,055	lbs			4,525,055		

11,832.98	#REF!

Acheson TW-040 Acheson TW-047 Acheson TW-077 Aerkroil Apollo 2077 Apollo Blast 6003 (Cyberbond) Bostik Hot Melt Bostik Mastic ChemLok 459X Chemglaze 9956 Chemglaze 9986 FlockLok 6389 Focklok 6389 Focklok 852 FlockLok 853A FlockLok 855 FlockLok 870 Isopropyl Alcohol Loctite 411/Frekote Aqualine R-120 McLube 1829T2 MEK/Acetone (50%/50%)	Aches	son Part C (Emralon 8370C)
Aerkroil Apollo 2077 Apollo Blast 6003 (Cyberbond) Bostik Hot Melt Bostik Mastic ChemLok 459X Chemglaze 9956 Chemglaze 9986 FlockLok 6389 FlockLok 6382 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 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		
Apollo 2077 Apollo Blast 6003 (Cyberbond) Bostik Hot Melt Bostik Mastic ChemLok 459X Chemglaze 9956 Chemglaze 9986 FlockLok 6389 Focklok 852 FlockLok 855 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	Aches	son TW-077
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 6009 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	Aerkr	il
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 6009 Total WT-21-270 Stahl WT-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	Apollo	2077
Bostik Mastic ChemLok 459X Chemglaze 9956 Chemglaze 9956 Chenglaze 9986 FlockLok 6389 Focklok 852 FlockLok 855 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	Apoll	o Blast 6003 (Cyberbond)
ChemLok 459X Chemglaze 9956 Chemglaze 9956 Chemglaze 9986 FlockLok 6389 FlockLok 852 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	Bostik	: Hot Melt
Chemglaze 9956 Chemglaze 9986 FlockLok 6389 FlockLok 852 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	Bostik	Mastic
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		
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		
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		
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		
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		
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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	Flock	Lok 855
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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	McLu	be 1829T2
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	MEK/	Acetone (50%/50%)
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	Misty	
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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		
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		
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	Rohm	and Haas 6009
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	Rohm	and Haas Robond TR 5125
Tint AYD 8003 STT Unistole P-401 Toluene/HPT Blend UV Dye (TA-001 Aqueous Fluorescent) UV Dye MA 21 678 WD-40 Unlock	Stahl	WT-21-270
Unistole P-401 Toluene/HPT Blend UV Dye (TA-001 Aqueous Fluorescent) UV Dye MA 21 678 WD-40 Unlock	Stahl	XR-21-498
UV Dye (TA-001 Aqueous Fluorescent) UV Dye MA 21 678 WD-40 Unlock	Tint A	YD 8003 STT
UV Dye MA 21 678 WD-40 Unlock	Unist	ole P-401 Toluene/HPT Blend
WD-40 Unlock	UV D	ye (TA-001 Aqueous Fluorescent)
Unlock	UV D	ye MA 21 678
	WD-4	0
WDA	Unloc	:k
	WDA	
	Xylen	e

2018 Permit Renewal Emissions Church Hill 060618

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 Bostik Mastic	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
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 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 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
	Focklok 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
	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
	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
	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
	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 27	Rohm and Haas 6009 Rohm and Haas Robond TR 5125	0 gal	0 gal 35 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	340
28	Stahl WT-21-270	20 gal 20 gal	35 gai 20 gal	30 gal 20 gal	25 gal 20 gal	40 gal 0 gal	40 gal 20 gal	25 gal 5 gal	35 gal 10 gal	30 gal 10 gal	30 gal 10 gal	20 gal 15 gal	10 gal 15 gal	165
29	Stahl XR-21-498	1 gal	0 gal	5 gal	20 gal	0 gal	1 gal	1 gal	10 gal	10 gai	0 gal	15 gai 1 gal	15 gai 1 gal	13
	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
30	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
	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
	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
	WD-40	0 oz	0 oz	0 gai	0 gai	0 oz	0 gai	0 gai	0 oz	0 gai	0 gai	0 gai	0 gai	0
	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 gt	13 gt	0 qt	0 gt	13 qt	0 gt	0 qt	0 qt	0 qt	0 qt	0 qt	0 qt	25
	Xylene	0 gal	0 gal	0 gal	0 qt	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0 gal	0
	Rubber Usage	627,274 lbs	700,305 lbs	1,505,685 lbs			729,546 lbs	442,408 lbs	763,804 lbs		718,384 lbs	525,295 lbs	621,221 lbs	8,684,054
30	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	HAP Emitted	PM Emitted
	(tons/month)	(tons/month)	(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 Rer	newal	
	Usage	VOC Content	VOC Emissions	PM Content	PM Emissions	110-80-2- (Butoxyethoxy) Ethanol	110-80-4 2- (Butoxyethoxy) Ethanol	111-77-3 2-(2- Methoxyethoxy)	111-77-3 2-(2- Methoxyethoxy)	110-80-5 2- Ethoxyethanol	110-80-5 2- Ethoxyethanol	109-86-2 2- Methoxyethan	109-86-4 2- Methoxyethan	56-23-5 Carbon Techtrachlorid	56-23-5 Carbon Techtrachlo
Process Material	(gal/mo)	(lb/gal)	(tons/mo)	(lb/gal)	(tons/mo)	(lb/gal)	(tons/mon)	Ethanol Ibs/gal	Ethanol (tons/mo)	lbs/gal	tons/mo	ol Ibs/gal	ol (tons/mo)	e Ibs/gal	e tons/m
Aerkroil 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
sopropyl 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/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
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	0.000
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	0.000
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	0.000
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	0.075
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		LN 1	25.250574 29.6766		0.000000 5.667		0.182000		0.182000 0		0.182000		0.182000		0.07560
		LN 1	28.53		9.57		U		U						
		3	73.35		9.57										
		4	30.13		8.67										
		5	29.68		7.57										
		Total	216.617174 Ethyl	Ethyl	41.047										
	Chlorobenzene (108-90-7)	Chlorobenzene (108-90-7)	Benzene (100- 41-4)	Benzene (100- 41-4)	Ethylene Glycol (107-21-	Ethylene Glycol (107-21-1)	Formaldehyde	Formaldehyde (50-00-0)	Methanol (67-56-	Methanol (67-	Triethylamine	Triethylamine (121-44-8)	Toluene 108-88-3	Toluene 108-88-3	Total HA
Process Material	lbs/gal	tons/mo	lbs/gal	tons/yr	1) lbs/gal	tons/mo	(50-00-0) lbs/gal	tons/mo	1) Ibs/gal	56-1) tons/mo	(121-44-8) lbs/gal	tons/mo	(lb/gal)	(tons/mo)	(tons/mo
Aerkroil 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
Loctite 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
Loctite 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
Loctite 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	0.00000	0.0000	0.000000	0.0900	0.0756	0.1512
Appollo Blast 6300	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00000	0.0000	0.000000	0.0000	0.0000	0.0000
Stahl WT-21-988 or Equivalent	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0900	0.0164	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 12.3947	1.5782 1.5782
				0.8666 5.3222 1.0402 0.7403 8.7096		0.7456 0.7456 0.4514 0.4514 2.8454								11.7002 26.5986 12.0474 12.3947 75.211200	
							PAGE 96								
	Triethylene Glycol	Triethylene Glycol Monobutyl													
	Monobutyl	Ether (1423-													Total HA
D	Ether (1423-22-	22-6)	Xylene (1330-20-	Xylene (1330-20-	MIRK	Mihk	Methylene	Methylene					167	tons/mo	Emission
Process Material Aerkroil or equivalent	6) lbs/gal	tons/mo	7) Ib/gal	7) (tons/mo)	million	IIIIDK		Chloride	0.0	0.0	0.0000	0.0	lb/gal		(tons/mon
	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	
Chemiok 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	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	0.0000	3.1899 0.0186
Isopropyl Alcohol or equivalent Loctite 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	0.0000	3.1899 0.0180 0.0000
Isopropyl Alcohol or equivalent Loctite 411/Frekote Aqualine R-120 Loctite 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 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	0.0000 0.0000 0.0000	0.0000 0.0000 0.0000	0.0000 0.0000 0.0000	0.0000 0.0000 0.0000	3.1899 0.0180 0.0000 0.0000
Isopropyl Alcohol or equivalent Loctite 411/Frekote Aqualine R-120 Loctite 454 or Equivalent 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 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 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 0.0000 0.0000	0.0000 0.0000 0.0000 0.0000	0.0000 0.0000 0.0000 0.0000	3.1899 0.0180 0.0000 0.0000
Isopropyl Alcohol or equivalent Loctite 411/Frekote Aqualine R-120 Loctite 454 or Equivalent Misty or Equivalent 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	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 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 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 0.0000	0.0000 0.0000 0.0000 0.0000 0.0000	3.1899 0.0180 0.0000 0.0000 0.0000
Isopropyl Alcohol or equivalent Loctite 411/Frekote Aqualine R-120 Loctite 454 or Equivalent Misty or Equivalent Plasti Dip or Equivalent Loctite 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 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 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 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 0.0000	0.0000 0.0000 0.0000 0.0000 0.0000	0.0000 0.0000 0.0000 0.0000 0.0000	3.1899 0.0180 0.0000 0.0000 0.0000 0.0000
Isopropyl Alcohol or equivalent Loctite 41 f/Frekote Aqualine R-120 Loctite 454 or Equivalent Misty or Equivalent Plass ID pi or Equivalent Loctite 401 or Equivalent 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	0.0000 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 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 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 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 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	3.1899 0.0180 0.0000 0.0000 0.0000 0.0000 0.1512
Isopropyl Alcohol or equivalent Loctite 411/Frekote Aqualine R-120 Loctite 454 or Equivalent Misty or Equivalent Plasti Dip or Equivalent Loctite 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 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 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 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 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	3.1899 0.0186 0.0000 0.0000 0.0000 0.0000 0.1512
Isopropyl Alcohol or equivalent Loctite 411/Frekote Aqualine R-120 Loctite 454 or Equivalent Misty or Equivalent Plasti Dip or Equivalent Loctite 401 or Equivalent Rohm and Haas Robond TR 5125 Appollo 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 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 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 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 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 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 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 0.0000 0.0000	3.1899 0.0186 0.0000 0.0000 0.0000 0.0000 0.1512 0.0000
Isopropyl Alcohol or equivalent Locitie 411/Frekote Aqualine R-120 Locitie 454 or Equivalent Misty or Equivalent Misty or Equivalent Plassi Dip or Equivalent Locitie 401 or Equivalent Rohm and Hass Robond TR 5125 Appollo Blast 6300 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 0.0000	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	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 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 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 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 0.0000	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	3.1899 0.0186 0.0000 0.0000 0.0000 0.0000 0.1512 0.0000 0.7444
Isopropyl Alcohol or equivalent Locitie 411/Frekote Aqualine R-120 Locitie 454 or Equivalent Misty or Equivalent Misty or Equivalent Plassi Dip or Equivalent Locitie 401 or Equivalent Rohm and Hass Robond TR 5125 Appollo Blast 6300 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 0.0000 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 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 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 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 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 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 0.0000 0.0000 0.0000 0.0000	3.1899 0.0186 0.0000 0.0000 0.0000 0.0000 0.1512 0.0000 0.7444
isopropyl Alcohol or equivalent Loctite at 11/Erichota Aqualine R-120 Loctite 454 or Equivalent Masty or Equivalent Plass Dip or Equivalent Coctite 401 or Equivalent Coctite 401 or Equivalent Rothmand Hass Robond TR 5125 Appoilo Blass 6300 Stanl WT-21-388 or Equivalent WID 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 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 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 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	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 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 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 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	3.1899 0.0184 0.0000 0.0000 0.0000 0.0000 0.1512 0.0000 0.7444 0.0000
isopropyl Alcohol or equivalent Loctite at 11/Erichota Aqualine R-120 Loctite 454 or Equivalent Masty or Equivalent Plass Dip or Equivalent Coctite 401 or Equivalent Coctite 401 or Equivalent Romm and Hasia Robond TR 5125 Appoilo Blass 6300 Stanl WT-21-388 or Equivalent WID 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 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 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 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 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 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 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 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 0.0000 0.0000 0.0000 0.0000 0.0000	3.1899 0.0184 0.0000 0.0000 0.0000 0.0000 0.1512 0.0000 0.7444 0.0000
isopropyl Alcohol or equivalent Loctite at 11/Erichota Aqualine R-120 Loctite 454 or Equivalent Masty or Equivalent Plass Dip or Equivalent Coctite 401 or Equivalent Coctite 401 or Equivalent Romm and Hasia Robond TR 5125 Appoilo Blass 6300 Stanl WT-21-388 or Equivalent WID 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 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 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	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 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 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 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 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 0.0000	3.1899 0.0184 0.0000 0.0000 0.0000 0.0000 0.1512 0.0000 0.7444 0.0000
isopropyl Alcohol or equivalent Loctite at 11/Erichota Aqualine R-120 Loctite 454 or Equivalent Masty or Equivalent Plass Dip or Equivalent Coctite 401 or Equivalent Coctite 401 or Equivalent Romm and Hasia Robond TR 5125 Appoilo Blass 6300 Stanl WT-21-388 or Equivalent WID 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 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 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 1.9259 1.9258	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 0.0000 0.0000 0.0000 0.0000 1.9889 1.4207	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 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 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 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	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	3.1899 0.0184 0.0000 0.0000 0.0000 0.0000 0.1512 0.0000 0.7444 0.0000
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sopropy Alcohol or equivalent _cotte 41/Frekote Aqualine R-120 _cotte 450 r Equivalent wisty or Equivalent _mass Do or Equivalent _cotte 401 or Equivalent with a first	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 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 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 2.5259 1.9258 1.9 20.412 2.4209 1.9258	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 0.0000 1.9889 1.4207 20.412 2.1152 1.9258 27.8826 37-9067-02 St	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 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 0.0001 0.00001 0.000000	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 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 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 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	3.189 0.018 0.000 0.000 0.000 0.000 0.151 0.000 0.744

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EXTRUSION Line #1 (37-0067-01) Diethylene 100-41-4 Glycol Diethylene 100-41-4 Ethyl 108-10-1 79-09-2 79-9-2 Monobutyl VOC VOC 108-10-1 MIBK Methylene Methylene Givcol Ethvl Benzene ther Emitted Usage Content **Emissions** PM Emitted Monobutyl Benzene **Emitted** MIBK Content **Emissions** Chloride Chloride (tons/yr) **Process Material** (lb/gal) Ether (lb/gal) (gal/yr) (tons/yr) PM (lb/gal) (tons/yr) lbs/gal tons/yr (lb/gal) (tons/yr) (lb/gal) (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 2.3409 Acheson TW-077 or equivalent 1355.20 3.84 2.6020 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 0.0000 0.0000 0.4100 0.1736 0.8200 0.3473 FlockLok 855 or equivalent 2002.00 3.79 3.7938 0.0000 0.0000 0.0000 0.4104 0.0000 0.0000 0.4100 1.6400 1.6416 0.0000 0.0000 262.08 0.9435 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 MEK or equivalent 7.20 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 91-20-3 108-88-3 330-20-1330-20-91-20-3 Naphthalene 108-88-3 Total HAP Toluene Xylene Xylene Naphthalene Emitted Content Toluene Content **Emissions Emissions Process Material** (lb/gal) (tons/yr) (lb/gal) (tons/yr) (lb/gal) (tons/yr) (tons/yr) 0.0000 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 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 0.0000 17.5620 0.0000 12.3947 1.9258 0.0000 0.0000 Total

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

<u>37-0067-01</u>	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, Seection 4.12: Manufacture of Rubber Products, U.S. Environmental Protection Agency (Compound #8).

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

SECONDARIES (37-0067-	02)												Permit Rer	newal	
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 (Ib/gal)	110-80-4 2- (Butoxyethoxy) Ethanol (tons/mon)	111-77-3 2-(2- Methoxyethoxy) Ethanol ibs/gal	111-77-3 2-(2- Methoxyethoxy) Ethanol (tons/mo)	110-80-5 2- Ethoxyethanol Ibs/gal	110-80-5 2- Ethoxyethanol tons/mo	109-86-2 2- Methoxyethan ol Ibs/gal	109-86-4 2- Methoxyethan ol (tons/mo)	56-23-5 Carbon Techtrachlorid e Ibs/gal	56-23-5 Carbon Techtrachloric e tons/mo
Aerkroil 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/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
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

	Chlorobenzene (108-90-7)	Chlorobenzen e (108-90-7)	Ethyl Benzene (100- 41-4)	Ethyl Benzene (100- 41-4)	Ethylene Glycol (107-21-	Ethylene Glycol (107-21-1)	Formaldehyde	Formaldehyde (50-00-0)	Methanol (67-56-	Methanol (67-	Triethylamine	Triethylamine (121-44-8)	Toluene 108-88-3	Toluene 108-88-3	Total HAPS
Process Material	lbs/gal	tons/mo	lbs/gal	tons/yr	1) lbs/gal	tons/mo	(50-00-0) lbs/gal	tons/mo	1) lbs/gal	56-1) tons/mo	(121-44-8) lbs/gal	tons/mo	(lb/gal)	(tons/mo)	(tons/mo)
Aerkroil 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
Loctite 411/Frekote Aqualine R-	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
Loctite 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
Loctite 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	0.00000	0.0000	0.000000	0.0900	0.0756	0.1512
Appollo Blast 6300	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00000	0.0000	0.000000	0.0000	0.0000	0.0000
Stahl WT-21-988 or Equivalent	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0900	0.0164	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
															1,5782

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Process Material	Triethylene Glycol Monobutyl Ether (1423- 22-6) Ibs/gal	Triethylene Glycol Monobutyl Ether (1423- 22-6) tons/mo		Xylene (1330-20- 7) (tons/mo)									lb/gal	tons/mo	Total HAP Emissions (tons/month)
Aerkroil 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
Loctite 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
Loctite 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
Loctite 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
Appollo 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) 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
Total HAPs
1-0000000
Tons

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 Ibs/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
То	al		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

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	n 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, Seection 4.12: Manufacture of Rubber Products, U.S. Environmental Protection Agency (Compound #8).

EXTRUSION Line #3 (37-0067-13) Diethylene 100-41-4 Glycol Diethylene 100-41-4 Ethyl 108-10-1 79-09-2 79-9-2 Monobutyl VOC voc Ethyl 108-10-1 MIBK Methylene Methylene Glycol Benzene ther Emitted Usage Content Emissions PM Emitted Monobutyl Benzene Emitted IIBK Conter **Emissions** Chloride Chloride (tons/yr) **Process Material** PM (lb/gal) Ether (lb/gal) lbs/gal (gal/yr) (lb/gal) (tons/yr) (tons/yr) tons/yr (lb/gal) (tons/yr) (lb/gal) (tons/yr) Acheson Part C (Emralon 8370C) or equivalent 192.36 8.92 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.8579 0.0000 0.0000 Acheson TW-077 or equivalent 1355.20 3.84 2.6020 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0159 0.0900 0.0610 FlockLok 870 or equivalent 25200.00 49.2660 0.0000 0.0000 0.0000 0.0000 3.91 0.0000 0.4100 5.1660 1.6200 20.4120 0.0000 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 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 68.9385 0.7456 5.3222 Total 0.0666 20,4120 0.0610 330-20-91-20-3 Naphthalene Toluene 108-88-3 **Total HAP** Xylene Xylene Naphthalene Emitted Content Toluene Content **Emissions Emissions Process Material** (lb/gal) (lb/gal) (tons/yr) (tons/yr) (tons/yr) (lb/gal) (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 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 20.4120 61.3620 1.6200 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 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 11.2266 6.7500 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	10,391.20 lbs/mo	0.2843 lbs/yr	0 lbs/yr	
	4.410510 tons/mo	5.1956 tons/mo	0.000142 tons/yr	0.0009 tons/yr	9.5 tons/yr

<u>37-0067-01</u>	Emissio	n 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).

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 Ibs/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	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 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	0.8208	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

<u>37-0067</u>	-01 Emissio	n Summary	
Total VOC	s 30.13	Tons/yr	
Total HAP	s 23.33	Tons/yr	
Total PN	N 8.67	Tons/yr	

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

EXTRUSION Line #5 (37-0067-15) Diethylene 100-41-4 Glycol Diethylene 100-41-4 Ethyl 108-10-1 79-09-2 79-9-2 Monobutyl VOC voc Ethvl 108-10-1 MIBK Methylene Methylene Glycol Benzene ther Emitted Usage Content Emissions PM Emitted Monobutyl Benzene Emitted IIBK Conter **Emissions** Chloride Chloride (tons/yr) **Process Material** PM (lb/gal) Ether (lb/gal) lbs/gal (gal/yr) (lb/gal) (tons/yr) (tons/yr) tons/yr (lb/gal) (tons/yr) (lb/gal) (tons/yr) Acheson Part C (Emralon 8370C) or equivalent 192.36 8.92 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.8579 0.0000 0.0000 0.0000 0.0000 Acheson TW-077 or equivalent 1355.20 3.84 2.6020 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0159 0.0900 0.0610 FlockLok 853A or equivalent 847.00 0.0000 0.0000 0.0000 0.0000 4.25 1.7999 0.0000 0.4100 0.1736 0.8200 0.3473 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 12.0748 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 7.26 0.0000 Total 25.2661 0.0666 0.4514 0.7403 1.9889 0.0610 108-88-3 91-20-3 1330-20-1330-20-7 91-20-3 Naphthalene Toluene 108-88-3 Xylene Xylene **Total HAP** Naphthalene Emitted Content Toluene Content **Emissions Emissions Process Material** (lb/gal) (tons/yr) (lb/gal) (tons/yr) (lb/gal) (tons/yr) (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 0.0000 0.0000 0.8200 0.3473 1.6400 0.6945 0.0000 0.0000 0.0000 0.0000 1.5627 FlockLok 855 or equivalent 0.0000 0.0000 0.8208 1.2300 1.2312 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 4.1041 0.8200 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 0.0000 12.3947 1.9258 0.0000 0.0000 0.0000 17.5620 Total

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	10,391.20 lbs/mo	0.2843 lbs/yr	0.0000 lbs/yr	
	4.4105 tons/mo	5.1956 tons/mo	0.000142134 tons/yr	0.0000 tons/yr	7.5 tons/yr

37-0067-0	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).

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

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 Techtrachloride 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/r
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!
Total	50-00-0 Formaldehyde	0.18200 75-09-2 Methylene Chloride	0.18200 67-56-1	0.18200 108-10-1 MIBK Emissions	91-20-3 Naphthalene	#REF! 108-88-3 Toluene	0.07560 1423-22-6 Triethylene Glycol Monobutyl Ether	121-44-8	1330-20-7	#REF!	Total HAF
Total Process Material		75-09-2		108-10-1 MIBK	91-20-3	108-88-3	1423-22-6 Triethylene Glycol	121-44-8	1330-20-7 Xylene	#REF!	Total HAF Emissions
	Formaldehyde	75-09-2 Methylene Chloride	67-56-1	108-10-1 MIBK Emissions	91-20-3 Naphthalene	108-88-3 Toluene	1423-22-6 Triethylene Glycol Monobutyl Ether	121-44-8 Triethylamine	1330-20-7 Xylene		Total HAR Emissions
Process Material	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 HAR Emission (tons/mont
Process Material	Formaldehyde tons/mo 0.0000	75-09-2 Methylene Chloride (tons/month)	67-56-1 Methanol tons/mo 0.0000	108-10-1 MIBK Emissions (tons/month)	91-20-3 Naphthalene (tons/mo) #REF!	108-88-3 Toluene (tons/mo) 12.3947	1423-22-6 Triethylene Glycol Monobutyl Ether tons/mo	121-44-8 Triethylamine tons/mo 0.0000	1330-20-7 Xylene (tons/mo) 1.9258	Rubber HAPs 5.19560	Total HAR Emission: (tons/mont #REF!
Process Material 1 2	Formaldehyde tons/mo 0.0000 0.0164	75-09-2 Methylene Chloride (tons/month) 0.0610 0.0000	67-56-1 Methanol tons/mo 0.0000 0.0000	108-10-1 MIBK Emissions (tons/month) 1.9889 0.0000	91-20-3 Naphthalene (tons/mo) #REF! 0.0000	108-88-3 Toluene (tons/mo) 12.3947 0.0756	1423-22-6 Triethylene Glycol Monobutyl Ether tons/mo 0.0000 0.0000	121-44-8 Triethylamine tons/mo 0.0000 0.0000	1330-20-7 Xylene (tons/mo) 1.9258 2.5259	Rubber HAPs 5.19560 0.00000	Total HAR Emission: (tons/mont #REF! 4.1040
Process Material 1 2 11	Formaldehyde tons/mo 0.0000 0.0164 #REF!	75-09-2 Methylene Chloride (tons/month) 0.0610 0.0000 #REF!	67-56-1 Methanol tons/mo 0.0000 0.0000 0.0000	108-10-1 MIBK Emissions (tons/month) 1.9889 0.0000 #REF!	91-20-3 Naphthalene (tons/mo) #REF! 0.0000 #REF!	108-88-3 Toluene (tons/mo) 12.3947 0.0756 #REF!	1423-22-6 Triethylene Glycol Monobutyl Ether tons/mo 0.0000 0.0000	121-44-8 Triethylamine tons/mo 0.0000 0.0000 0.0000	1330-20-7 Xylene (tons/mo) 1.9258 2.5259 #REF!	Rubber HAPs 5.19560 0.00000 #REF!	Total HAR Emission: (tons/mont #REF! 4.1040 #REF!
Process Material 1 2 11 13	Formaldehyde tons/mo 0.0000 0.0164 #REF! #REF!	75-09-2 Methylene Chloride (tons/month) 0.0610 0.0000 #REF! #REF!	67-56-1 Methanol tons/mo 0.0000 0.0000 0.0000 0.0000	108-10-1 MIBK Emissions (tons/month) 1.9889 0.0000 #REF! #REF!	91-20-3 Naphthalene (tons/mo) #REF! 0.0000 #REF! #REF!	108-88-3 Toluene (tons/mo) 12.3947 0.0756 #REF! #REF!	1423-22-6 Triethylene Glycol Monobutyl Ether tons/mo 0.0000 0.0000 0.0000	121-44-8 Triethylamine tons/mo 0.0000 0.0000 0.0000 0.0000	1330-20-7 Xylene (tons/mo) 1.9258 2.5259 #REF! #REF!	Rubber HAPs 5.19560 0.00000 #REF! #REF!	Total HAF Emission (tons/mont #REF! 4.1040 #REF! #REF!
Process Material 1 2 11 13 14	Formaldehyde tons/mo 0.0000 0.0164 #REF! #REF! #REF!	75-09-2 Methylene Chloride (tons/month) 0.0610 0.0000 #REF! #REF!	67-56-1 Methanol tons/mo 0.0000 0.0000 0.0000 0.0000 0.0000	108-10-1 MIBK Emissions (tons/month) 1.9889 0.0000 #REF! #REF!	91-20-3 Naphthalene (tons/mo) #REF! 0.0000 #REF! #REF!	108-88-3 Toluene (tons/mo) 12.3947 0.0756 #REF! #REF!	1423-22-6 Triethylene Glycol Monobutyl Ether tons/mo 0.0000 0.0000 0.0000 0.0000	121-44-8 Triethylamine tons/mo 0.0000 0.0000 0.0000 0.0000	1330-20-7 Xylene (tons/mo) 1.9258 2.5259 #REF! #REF! #REF!	Rubber HAPs 5.19560 0.00000 #REF! #REF! #REF!	Total HAF Emissions (tons/mont #REF! 4.1040 #REF! #REF!

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

12 Month Rolling HAPs									Permit Renew	43317
								Glycol		(107-21-1)
	110-80-4 2-	111-77-3 2	110-80-5 2-	109-86-4		56-23-5 Carbon	108-90-7	Monobutyl	Ethyl	Ethylene
	(Butoxyethoxy)	(2-Methoxyethoxy)	Ethoxyethanol	2-Methoxyethanol	Benzene	Techtrachloride	Chlorobenzene		Benzene	Glycol
Date	Ethanol (tons/mo)	Ethanol (tons/mo)	tons/mo	(tons/mo)	(tons/mo)	(tons/mo)	(tons/mo)	(tons/mo)	(tons/yr)	(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
Novwmber 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
			•			•				
							1423-22-0			
	50-00-0		67-56-1		91-20-3		Triethylene	121-44-8	Xylene	
	Formaldehyde	Methylene Chloride	Methanol		Emitted	Toluene	Glycol	Triethylamine	Emissions	Rubber
Date	(tons/mo)	(tons/mo)	(tons/mo)	MIBK (tons/mo)	(tons/mo)	(tons/mo)	Monobutyl	(tons/mo)	(tons/mo)	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

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January 1895

Based on WEET dated 1872

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No. Von. Name out temporer 0.000 1000 Uned as Line Uned in Elevanti | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 | Description | Control | Secret on MIDE dated, 04 1006 Unertim Line Dand in Encounter

Products Name (State of States)

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L	Process Material Description		 Test	100		Service of	Depart D	01.00	to Ye	n 0.00	
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HUTCHINSON SEALING SYSTEMS, INC. CHURCH HILL, TENNESSEE VOC CONTAINING MATERIAL INVENTORY

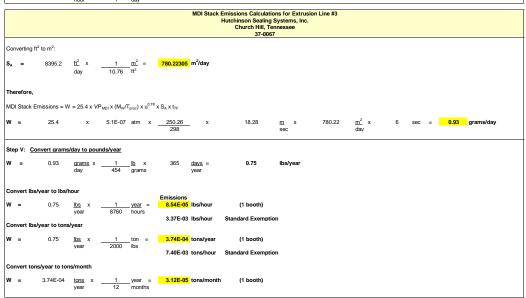
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Dragge Metarial Description	Specific	Donaity	9/3/00	VOCs	MCDC Data	Llooms Stort	Status
Process Material Description 3M Adhesion Promotor	Gravity 0.8153	Density 6.8	%VOC 93.00	(lbs/gal) 6.324	MSDS Date 12/16/2004	Usage Start 7/1/2007	
						7/1/2007	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

UPDATED: 08/01/08

MDI Stack Emissions Calculations for Extrusion Line #1 Hutchinson Sealing Systems, Inc. Church Hill, Tennessee Equation: W = 25.4 x VP_{MDI} x (M_W/T_{proc}) x $u^{0.78}$ x S_A x 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 1.5% MDI at ambient temperature (25 degrees Celsius) in atmospheres 1.02E-05 mm Vapor pressure of MDI at 25 degrees C: Convert vapor pressure to atmospheres and for a 5% mixture of MDI VP_{MOI} = 0.0000102 mm Hg x 1 atm x 1.5 lbs of MDI = 1.53E-07 atm To mm 100 lbs of FlockLok 855 Step II: Determine Ventilation Rate in meters/second Ventilation rate (u) = Velocity @ STP (Note: STP = Standard Temperature and Pressure) Roller Surface Area Roller Surface Area = 29 in² = 0.20 ft² Velocity @ STP = 1700 ACFM x 298 K E 1644.81 SCFM ACFM = Actual cubic feet per minute 308 K SCFM = Standard cubic feet per minute 1644.81 SCFM Velocity = Ventilation rate (u) = Velocity Roller Surface Area Ventilation rate (u) = 1644.81 SCFM x 1 min x 0.3048 m = 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: Based upon 24 hour production: $S_A = 349.80$ $\frac{ft^2}{hour}$ x 24 $\frac{hours}{day}$ = 8395.2 ft^2/day MDI Stack Emissions Calculations for Extrusion Line #1 Hutchinson Sealing Systems, Inc. Church Hill, Tennessee Converting ft² to m²: $S_A = 8395.2$ $\frac{ft^2}{day}$ \times $\frac{1}{10.76}$ $\frac{m^2}{ft^2}$ = $\frac{780.223048}{m^2/day}$ m²/day Therefore, MDI Stack Emissions = W = 25.4 x VP_{MDI} x (M_W/T_{proc}) x $u^{0.78}$ x S_A x t_{TF} W = 25.4 x 0.000000153 atm x 250.26 x 18.28 m x 780.22 m^2 x 6 sec = 0.28 grams/day Step V: Convert grams/day to pounds/year W = 0.28 $\frac{\text{grams}}{\text{day}} \times \frac{1}{454} \frac{\text{lb}}{\text{grams}} \times \frac{365}{\text{year}} = \frac{0.22}{\text{lbs/year}}$ Convert lbs/year to lbs/hour 0.22 <u>lbs</u> x <u>1 year</u> = Emissions 2.56E-05 lbs/hour (1 booth) 3.37E-03 lbs/hour Standard Exemption Convert lbs/year to tons/year Convert tons/year to tons/month W = 1.12E-04 tons x 1 year = 9.36E-06 tons/month (1 booth)

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_{proc}) x $u^{0.78}$ x S_A x 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 1.5% 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 mm Hg x 1 atm x 1.5 lbs of MDI = 1.58E-07 atm Step II: Determine Ventilation Rate in meters/second Ventilation rate (u) = Velocity @ STP (Note: STP = Standard Temperature and Pressure) Roller Surface Area Roller Surface Area = 29 in² = 0.20 ft² Velocity @ STP = 1700 ACFM x 298 K = 1644.81 SCFM ACFM = Actual cubic feet per minute SCFM = Standard cubic feet per minute 1644.81 SCFM Velocity = Ventilation rate (u) = Velocity Roller Surface Area Ventilation rate (u) = 1644.81 / 0.20 ft² SCFM x 1 min x 0.3048 m m 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. $\frac{\text{5.83}}{\text{min}} = \frac{\text{ft}^2}{\text{min}} \times \frac{\text{60}}{\text{1}} = \frac{\text{min}}{\text{hr}} = 349.80 \text{ ft}^2/\text{hour}$ Based upon 24 hour production: $S_{A} = 349.80 \quad \frac{ff^{'} \times }{hour} \quad \frac{24}{1} \quad \frac{hours}{day} = 8395.2 \quad ff^{'}/day$ $\frac{\text{MDI Stack Emissions Calculations for Extrusion Line #2}}{Hutchinson Sealing Systems, Inc.}$ Church Hill, Tennessee 37-0067 $S_A = 8395.2 \quad \frac{\text{ft}^2}{\text{day}} \times \frac{1}{10.76} \frac{\text{m}^2}{\text{ft}^2} = \frac{780.2230483}{\text{m}^2/\text{day}}$ Therefore. MDI Stack Emissions = W = 25.4 x VP_{MDI} x (M_W/T_{proc}) x u^{0.78} x S_A x t_{TF} W = 25.4 x 1.53E-07 atm x $\frac{250.26}{298}$ x 18.28 $\frac{m}{sec}$ x 780.22 $\frac{m^2}{day}$ x 6 sec = 0.28 grams/day Step V: Convert grams/day to pounds/year W = 0.28 <u>grams</u> x <u>1 b</u> x 365 <u>days</u> = **0.22 lbs/year** day 454 grams year 3.37E-03 lbs/hour Standard Exemption Convert lbs/year to tons/year W = 0.22 | bs x | 1 ton | = 1.12E-04 tons/vear (1 booth) | year | 2000 | lbs | 7.40E-03 tons/hour | Standard Exemption Convert tons/year to tons/month W = 1.12E-04 tons x 1 year = 9.36E-06 tons/month (1 booth)

MDI Stack Emissions Calculations for Extrusion Line #3 Hutchinson Sealing Systems, Inc. Church Hill, Tennessee Equation: W = 25.4 x VP_{MDI} x (M_W/T_{proc}) x $u^{0.78}$ x S_A x 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 S_A = the exposed surface area in m² Step I: Determine Vapor Pressure of 5% MDI at ambient temperature (25 degrees Celsius) in atmospheres Vapor pressure of MDI at 25 degrees C: Convert vapor pressure to atmospheres and for a 5% mixture of MDI VP_{MOI} = 0.0000102 mm Hg x 1 atm x 5 lbs of MDI = 5.10E-07 atm Step II: Determine Ventilation Rate in meters/second Ventilation rate (u) = Velocity @ STP (Note: STP = Standard Temperature and Pressure) Roller Surface Area Roller Surface Area = 29 in² = 0.20 ft² Velocity @ STP = 1700 ACFM x 298 K = 1644.81 SCFM ACFM = Actual cubic feet per minute SCFM = Stendard cubic feet per minute Velocity = 1644.81 SCFM Ventilation rate (u) = Velocity Roller Surface Area Ventilation rate (u) = 1644.81 \\ 0.20\) ft² SCFM x 1 \\ 0.60\) sec min x 0.3048 \\ 1 \tag{ft} m = 41.49 \\ ft 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: Based upon 24 hour production: $S_A = 349.80$ $\frac{ft^2}{\text{hour}} \times \underbrace{\frac{24}{1} \frac{\text{hours}}{\text{day}}}_{\text{figure}} = \underbrace{\frac{8395.2}{1}}_{\text{figure}} tt^2/\text{day}$ MDI Stack Emissions Calculations for Extrusion Line #3 Hutchinson Sealing Systems, Inc. Church Hill, Tennessee 37-0067



MDI Stack Emissions Calculations for Extrusion Line #4 Hutchinson Sealing Systems, Inc. Church Hill, Tennessee Equation: W = 25.4 x VP_{MDI} x (M_W/T_{proc}) x $u^{0.78}$ x S_A x 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 1.5% 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 mm Hg x
 1 atm
 x
 1.5 lbs of MDI
 =
 1.53E-07 atm

 Too
 mm
 100 lbs of Flock Loc 852

Step II: Determine Ventilation Rate in meters/second

Ventilation rate (u) = Velocity @ STP (Note: STP = Standard Temperature and Pressure)
Roller Surface Area

Roller Surface Area = $29 \text{ in}^2 = 0.20 \text{ ft}^2$

1700 ACFM x <u>298</u> K = 1644.81 SCFM 308 K ACFM = Actual cubic feet per minute Velocity @ STP = SCFM = Standard cubic feet per minute

Velocity = 1644.81 SCFM Ventilation rate (u) = Velocity

Roller Surface Area

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.

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

Based upon 24 hour production:

 $S_A = 349.80 \frac{ft^2}{2} \times \frac{24 \text{ hours}}{4 \text{ down}} = \frac{8395.2}{1000} \text{ ft}^2/\text{day}$ 1 day

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

37-0067

Converting ft2 to m2:

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

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

25.4 x 1.53E-07 atm x $\frac{250.26}{298}$ x 18.28 \underline{m} x 780.22 \underline{m}^2 x 6 sec = 0.28 grams/day

Step V: Convert grams/day to pounds/year

W = 0.28 <u>grams</u> x <u>1 |b x 365 days</u> = **0.22 lbs/year** day 454 grams year

Convert lbs/vear to lbs/hour

W = 0.22 <u>lbs</u> x <u>1 year</u> = <u>2.56E-05</u> lbs/hour (1 booth) 3.37E-03 lbs/hour Standard Exemption

Convert lbs/year to tons/year

0.22 $\underline{\text{lbs}}$ x $\underline{1}$ ton = 1.12E-04 tons/year (1 booth) 7.40E-03 tons/hour Standard Exemption

Convert tons/year to tons/month

W = 1.12E-04 <u>tons</u> x <u>1</u> year = <mark>9.36E-06 tons/month (1 booth)</mark>

Polistant No.							
	RTURAL GAS COMBUS RTU Content of Natural Gas (RTURO)	Oven Rating (BTURY)	Enission Factor (B/RCI)	Operating Hours	Number of Burners	ON EXTRUSION LIN Anount of Poliutant Entitled from all Extrusion Lines	Amount of Polius Emitted from all Extrusion Line
	(attund)					Extrusion Lines (Bulyear)	Extrusion Line (tons/month)
Particulate Matter Sulfur Dioxide	100000 100000	890000 890000	0.0000076	490		0.0021 0.0005	0.000001
Carbon Monovide VOCs	100000 100000	880000 880000	0.000024	490 490		0.1014 0.0232	0.000004 0.000001
NATU	RAL GAS COMBUSTIC BTU Corbons of	N EMISSIONS FO	OR GERLACHUET Enission Factor (B/NI)	AR CURNS	OVEN LOCA	ED ON EXTRUSION	NE 92
Pollutant	Natural Gas (BTURG)	(BTURY)	(B/RI)	Hours Hours	Number of Oven Sections	Amount of Poliutant Emitted from all Extrusion Lines (Balvear)	Amount of Poliut Emitted from a Extrusion Line (tone/month)
						(lbs/year)	(tonulmonth)
Suffur Dioxide Stropen Oxides	100000 100000	106000 106000	0.000007	438 438 438		0.0000 0.0728	0.000000
Carbon Monoxide IOCs	100000	106000 106000	0.000024	438 438	- 1	0.0109 0.0004	0.000000
Pollutant	BTU Content of	Oven Rating (BTURY)	Emission Factor (B/Hz)	Operating	Number of	ATED ON EXTRUSION Amount of Polistant	N LINE #2 Amount of Polius
	BTU Content of Natural Gas (BTURG)	(attuev)	(BATCI)	Hours	Number of Oven Sections	Area on extrausio Amount of Poliutant Entitled from all Extrusion Lines (Ibs/year)	Emitted from a Extrusion Line
Particulate Matter	100000	67000	0.0000076	438		(660year) 0.010k	0.000000
Sulfur Dioxide Nitropen Oxides	100000	87000 87000	0.0000006	439	1	0.0009 0.2414	0.000000
OCI	100000	\$7000	0.0000055	438	-	0.0078	0.000000
Pollutare	RAL GAS COMBUSTIC BTU Content of Natural Gas (BTURG)	Oven Rating (BTURY)	Emission Factor (Brits)	Operating Hours	Number of Burners	Amount of Pollutant	Amount of Polius
	(atuna)	(arcin)	parting	mount	auten.	Amount of Poliutant Entitled from all Extrusion Lines (Balyear)	Amount of Pollut Emitted from a Extrusion Line (tons/month)
Particulate Matter	100000	67000	0.0000076	438	5	0.0136	0.000001
dtropen Cuides Carbon Monovide	100000 100000	87000 87000	0.000000 0.000004	438 438 438	-	0.3017 0.0026	0.000013
001	100000	67000	0.0000065	438	5	5,0098	0.000000
Poliutant	BTU Content of	Oven Rating (BTURY)	Enission Factor (B/ICI)	Operating	Number of	Amount of Poliutant Emitted from all Extrusion Lines	Amount of Polius Emirael from al
	Natural Gas (BTURG)	,=.=,				Extrusion Lines (Bulyear)	Entitled from all Extrusion Line (tons/month)
Particulate Morey Juliur Dioxide	100000 100000	800000 800000	0.0000076	408	- 1	5.0048 5.0000	0.000001
átropen Osides Carbon Monovide	100000 100000	800000 800000	0.00017 0.000094	438 438		0.5549 0.0789	0.000023
NAME OF THE PERSON NAME OF T	RAL GAS COMBUSTION	N EMISSIONS D	O COCCOSS OR GERLACHUS	AR CURBA	OVEN LOC#	ED ON EXTRUSE**	0.000001 .NE #3
Pollutant	BTU Coreens of Natural Gas	Oven Rating (BTURY)	Emission Factor (B/RC)	Operating Hours	Number of Burners	Amount of Pollutant Emitted from all	Amount of Polius Emitted from al
	Natural Gas (BTURS)		1			Amount of Pollutant Entitled from all Extrusion Lines (Balyear)	Emitted from all Extrusion Line (tons/month)
Particulate Matter Sulfur Dioxide	100000	106000	0.0000076	490	- 1	0.0000 0.0000	0.000000
Sation Monovide	100000 100000	106000 106000	0.000024	490	٠.	0.0967 0.0121	0.000004
OC:	100000	106000	0.0000055	AND PROPERTY.	1 MANUAL M	ATEN AN EXTERIOR	0.000000
Pollutant	BTU Coreens of Natural Gas (BTURS)	Oven Rating (BTURY)	Emission Factor (B/RI)	Operating Hours	Number of Surners	Amount of Polistant Entitled from all	Amount of Polius Emitted from al
	(attund)					Amount of Pollutant Emitted from all Extrusion Lines (Balyear)	Amount of Polluts Emitted from all Extrusion Line (cons/month)
Particulate Marter Juliur Dioxide	100000	87000 87000	0.0000076	490	4	0.0127 0.0010	0.000001
átropen Oxides Carbon Monoxide	100000 100000	\$2000 \$2000	0.000024	490 490	٠,	0.2940 0.0401	0.000012
NI NI	TURAL GAS COMBUS	TION EMISSIONS	FOR INFRATRO	CURING ON	EN LOCATED	ON EXTRUSION LIN	0.00000
Pollutant	RTURAL GAS COMBUS RTU Content of Natural Gas (RTURO)	Oven Rating (BTURY)	Enission Factor (B/H2)	Operating Hours	Number of Burners	ON EXTRUSION LIN Anount of Poliutare Emitted from all Extrusion Lines (libs/year)	Amount of Pollut Entitled from all Extrusion Line (cons/month)
	(attund)					Extrusion Lines (Bulyear)	Extrusion Line (tons/month)
Particulate Marter Juliur Dioxide	100000	800000 800000	0.0000076	490	3	0.0000 0.0000	0.000004
átropen Osides Carbon Monoxide	100000 100000	800000 800000	0.00017 0.000094	490 490	2	1,9584 0,2765	0.000092
NATU	RAL GAS COMBUSTIC	IN EMISSIONS FO	OR GERLACHUST	AR CURNS	OVEN LOCA	ED ON EXTRUSION	NE M
Pollutant	BTU Content of Natural Gas (BTU/tcl)	Oven Rating (BTURr)	Emission Factor (B/fcl)	Operating Hours	Number of Burners	Amount of Pollutant Emitted from all Extrusion Lines	Amount of Polluts Emitted from all Extrusion Line
	(atuna)					Entitled from all Extrusion Lines (Balyear)	Amount of Polluts Emitted from all Extrusion Line (tons/month)
Particulate Mater Sulfur Dioxide	100000 100000	106000 106000	0.0000076 0.0000006	294 294	-1	5,0001 5,0002	0.000000
Carbon Monoxide	10000	105000	0.000024	284 284		0.0097	0.000000
NATURA Bollomer	L GAS COMBUSTION	Oven Rating (BTURY)	GERLACHIMICRO Enission Factor (B/FG)	Operating Hours	Number of Surrers	ATED ON EXTRUSIO	N LINE M
Pollutant	EL GAS COMBUSTION BTU Content of Natural Gas (BTURS)				Number of		
		(BTURY)	(B/RII)	Hours	Burners	Enitted from all	Enitted from al
	(atuna)	(atuer)	(B/NJ)	Hours	Burners	ATED ON EXTRUSIO Amount of Pollutant Entrusion Lines (Dailyear)	Amount of Polius Emitted from al Extrusion Line (tons/month)
Particulate Moter Sulfur Dioxide	(BTUR3)	(BTURY) 87000 87000	(BA13)	Hours 204 204	Burners 4	Entrad from all Extrusion Lines (Balyear)	Entrad from all Extrusion Line (tons/month)
Particular Morer Sulfur Double Wrosen Oxides Carbon Minsuide IOCs	(BTURG) 100000 100000 100000 100000	(BTURY) 87000 87000 87000 87000	0.0000076 0.0000076 0.000006 0.000077 0.0000044	204 204 204 204 204 204	Burrers	Entitud from all Extrusion Lines (blatyear) 0.0102 0.0008 0.2272 0.0007	Entrad from all Extrusion Line (sons/month) 0.000000 0.000000 0.000000 0.0000001
Particulate Matter Sulfur Disside Mitropen Oxides Carbon Manaside (OCs	10000 10000 10000 10000 10000 10000 10000	87000 87000 87000 87000 87000 87000	0.0000076 0.0000006 0.000077 0.000094 0.000096	204 204 204 204 204	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	0.0102 0.0008 0.2272 0.0921 0.0072 ON EXTRUSION LIN	0000000 0000000 0000000 0000000 0000000
Particulate Manar Souther Docation Wisconen Couldes Carbon Manaside (OCs) Pollutaire	10000 10000 10000 10000 10000 10000 10000	87000 87000 87000 87000 87000	0.0000076 0.0000006 0.000077 0.000094 0.000096	204 204 204 204 204	1	0.0102 0.0008 0.2272 0.0921 0.0072 ON EXTRUSION LIN	0000000 0000000 0000000 0000000 0000000
Parliculate Manar south Discloside discoon Discloside discoon Missouride OCs Pollutant	90000 90000 90000 90000	87000 87000 87000 87000 87000 87000	0.0000076 0.0000006 0.000077 0.000094 0.000096	204 204 204 204 204	1	0.0100 0.0000 0.2272 0.0021 0.0073	0000000 0000000 0000000 0000000 0000000
Particulate Maner roller Doorde droppen Chides Labour Minosolle OCs No Pollutant Particulate Maner roller Doorde introde Ocides	10000 10000 10000 10000 10000 10000 10000	87000 87000 87000 87000 87000 87000	0.0000076 0.0000006 0.000077 0.000094 0.000096	204 204 204 204 204	1	0.0102 0.0008 0.2272 0.0921 0.0072 ON EXTRUSION LIN	0.00000 0.00000 0.00000 0.00000 0.00000
Particulate Maner South Choose Minoso Distins Diston Minosole (DCs Pollutare Pollutare Supple Choose Signator	10000 10000 10000 10000 10000 10000 10000	87000 87000 87000 87000 87000 87000	0.0000076 0.0000006 0.000077 0.000094 0.000096	204 204 204 204 204	1	0.0102 0.0008 0.2272 0.0921 0.0072 ON EXTRUSION LIN	0000000 0000000 0000000 0000000 0000000
Particulate Manner Sulfar Double Minroten Distins Minroten Distins Control Manuside VOCI Publisher Publisher Sulfar Double Minroten Oxides Control Minrotel VOCI Publisher	100000 1000000	82000 82000 82000 82000 82000 82000 Trion Emissions: Oven Rating (8TUhr)	0.0000079 0.0000006 0.00077 0.000004 0.000006 SFOR INFRATROL Ensission Factor (Britz) 0.0000000 0.00000000 0.00000000 0.000000	204 204 204 204 204 204 204 204 204 204	4 4 4 4 4 SN LOCATED ON E	\$0102 \$0008 \$02272 \$0321 \$0009 ON EXTRUSION LIN Amoure of Polistant Entrusion Lines (Balyear) \$0006 \$1,0007 \$0006 \$1,0007 \$000	gonalmonthy GODODO
Particulate Maner Traffer Double Missons Oxides Caption Missonside MOS Pollutare Proficulate Maner Multiplication Missons Oxides Double Pollutare Pollutare Pollutare Pollutare	100000 1000000	87000 87000 87000 87000 87000 87000	0.0000076 0.0000006 0.000077 0.000094 0.000096	204 204 204 204 204	1	\$0102 \$0008 \$02272 \$0321 \$0009 ON EXTRUSION LIN Amoure of Polistant Entrusion Lines (Balyear) \$0006 \$1,0007 \$0006 \$1,0007 \$000	gonalmonthy GODODO
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Padicajan More- Solar Posite Morar Carlos Morar Carlos Morar Morar Morar Padicasan Padicasan Padicasan Padicasan Morar Charle Morar Charle Morar Charle Padicasan Morar Charle Morar Charle	1000000 1000000 10000000 10000000 1000000	#50000 #0000 #0000 #0000 #0000 #0000 #0000 #0000 #0000 #0000 #0000 #0000 #0000 #0000 #0000 #0000 #0000 #0000 #0000 #0000 #0000 #0000 #0000 #0000 #0000 #0000 #0000	0.0000005 0.0000005 0.00005 0.0005 0.00005 0.0005 0.00005 0.00005 0.00005 0.00005 0.0005 0.0005 0.00	John John John John John John John John	4 4 4 4 4 4 8 Number of Burners 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0.0110 0.0008 0.0009 0.0007	positivostigi 2 000000 3 0000000 3 00000 3 000000 3 000000 3 000000 3 000000 3 000000 3
and claim More state of the control	100000 1000000	82000 82000 82000 82000 82000 82000 Trion Emissions: Oven Rating (8TUhr)	0.0000079 0.0000006 0.000000 0.000000 0.0000000 Ensission Factor (Britis) 0.00000000 0.00000000 0.00000000 0.000000	204 204 204 204 204 204 204 204 204 204	4 4 4 4 4 SN LOCATED ON E	0.0110 0.0008 0.0009 0.0007	ponelmente de la composición del composición de la composición del composición de la composición de la composición de la composición del composición d
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NOTE 10

Committed (Study 1, 1970 Custom of Mount Gain (STUS), 1 Section for Study 1, Section

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

Process Material	Specific	Density	%VOC	VOCs	Cont	ainer	Annual L	Jsage	Conversion	Factors	Annual Usage
	Gravity			(lbs/gal)	Si	ze					(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
Aerkroil or equivalent	0.8700	7.2558	60.00	4.3535	10		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	ΟZ	22422.4		16	8.7570	160.03
Loctite 454 or equivalent	1.0500	8.7570	2.00	0.1751		gram	11872		0.0022046		2.99
Misty or equivalent	0.8500	7.0890	50.00	3.5445	12		24365.6			7.0890	214.82
Plasti Dip or equivalent	1.1000	9.1740	5.10	0.4679	14.5		31617.6	oz	16	9.1740	215.40
Rohm and Haas 6008 or equivalent	0.9400	7.8396	42.00	3.2926		gal		gal	1	1	0.00
Rohm and Haas 6009 or equivalent	0.9200	7.6728	44.60	3.4218	55	gal		gal	1	1	0.00
Rohm and Haas Robond TR 5125 or equivalent	1.0800	8.0800	11.00	0.8888		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		gal	364		1	1	364.00
Stahl XR-21-498 or equivalent	1.0000	8.3400	50.00	4.1700	5	gal	336		1	1	336.00
Tak Pak 7452 or equivalent	0.7926	6.6103	1.02	0.0674		gal	352.4		1	1	352.40
Methyl Ethyl Ketone or equivalent	0.8100	6.7554	100.00	6.7554		gal	1310.4	0	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		7.2558		gal	16632	•	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:
 26616.8

 Maximum Pounds/Year:
 53233600

 53233600
 53233600

Permit Renewal Emission Calculations 8/7/2018

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

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

Month	Year	EPDM	EPDM	EPDM	EPDM	EPDM	Total EPDM	Total EPDM
		Processed	Processed	Processed	Processed	Processed	Processed	Processed
		Extrusion Line	Extrusion	Extrusion Line	Extrusion	Extrusion	(lbs/month)	(tons/month)
		#1 (lbs/month)	Line #2	#3 (lbs/month)	Line #4	Line #5		
			(lbs/month)		(lbs/month)	(lbs/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
 16,636

 Standard Pounds/Year:
 53,233,600
 33,271,000

Permit Renewal Emission Calculations 8/7/2018

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 (Ibs/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 Emi	tted from Chemical Usage of	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

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 fr	om Chemical Us	sage (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

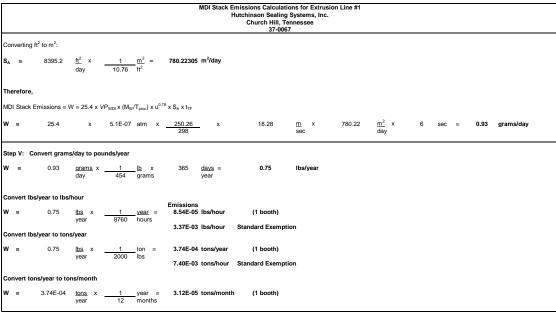
Amount of Rubber Processed (lbs/year) x HAP Emission Factor = Amount of HAPs Emitted (lbs/year) 10646720 x 9.76E-04 = 10391.1987 lbs/year

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

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 Equation: W = 25.4 x VP_{MDI} x (M_W/T_{proc}) x $u^{0.78}$ x S_A x 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 $VP_{MDI} = 0.0000102 \text{ mm Hg x} \frac{1}{760} \text{ mm}$ $x \frac{5}{100} \frac{\text{lbs of MDI}}{\text{lbs of Flock Loc 852}} = 5.10E-07 \text{ atm}$ Step II: Determine Ventilation Rate in meters/second Ventilation rate (u) = Velocity @ STP (Note: STP = Standard Temperature and Pressure) Roller Surface Area Roller Surface Area = $29 in^2 = 0.20 ft^2$ Velocity @ STP = 1700 ACFM x <u>298</u> K = 1644.81 SCFM ACFM = Actual cubic feet per minute SCFM = Standard cubic feet per minute 1644.81 SCFM Velocity = Velocity Ventilation rate (u) = Roller Surface Area Ventilation rate (u) = $\frac{1644.81}{0.20} \frac{\text{SCFM x}}{\text{ft}^2} = \frac{1}{60} \frac{\text{min x}}{\text{sec}} = \frac{0.3048}{1} \frac{\text{m}}{\text{ft}} = \frac{1}{1} \frac{\text{min x}}{\text{min x}} =$ 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. 5.83 $\frac{\text{ft}^2}{\text{min}}$ x $\frac{60}{1}$ min = 349.80 $\frac{\text{ft}^2}{\text{hour}}$ Based upon 24 hour production: $S_A = 349.80 \quad \frac{ft^2}{hour} \times \underbrace{ \frac{24}{hours} = 8395.2 \quad ft^2/day}_{1}$ Hutchinson Sealing Systems, Inc.



PM EMISSIONS FROM EXTRUSION LINE #1 (SOURCE 01)

HUTCHINSON SEALING SYSTEMS, INC. CHURCH HILL, TENNESSEE

Process Material	Material Used (gal/year) Material Used Process Material (lbs/gal)		% Solids Contained in Process Material	Emission Factor	PMs Emitted (Ibs/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 P	Ms Emitted from Chemica	I Usage on Ext	rusion 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

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

N/	ATURAL GAS COMBUS	TION EMISSIONS	S FOR INFRATROL	CURING OV	EN LOCATED	ON EXTRUSION LIN	E #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 Emit	ted 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

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	Density of	Diethylene Glycol	Diethylene Glycol	Ethyl Benzene	Ethyl	Methyl Isobutyl	Methyl	Methylene	Methylene	P-Xylene [106-	P-Xylene Emitted	Toluene	Toluene	Xylene	Xylene	HAP Content	Total HAPS
	Process	Process	Monobutyl Ether	Monobutyl Ether	[100-41-4]	Benzene	Ketone (MIBK)	Isobutyl	Chloride (WT%)	Chloride Emitted	42-3] (WT%)	(tons/year)	[108-88-3]	Emitted	[1330-20-	Emitted	(lbs/gal)	Emitted by
	Material Used	Material Used	[112-34-5] (%Wt)	Emitted (tons/year)	(WT%)	Emitted	[108-10-1]	Ketone (MIBK)		(tons/year)			(WT%)	(tons/year)	7] (WT%)	(tons/year)		Material
	(gal/year)	(lbs/gal)				(tons/year)	(WT%)	Emitted										(tons/year)
								(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	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
equivalent																		
Total HAPs Emitted fro	om Chemical Us	age (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)

10391.1987

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

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).

lbs/year

MDI Stack Emissions Calculations for Extrusion Line #2 Hutchinson Sealing Systems, Inc. Church Hill, Tennessee Equation: W = 25.4 x VP_{MDI} x (M_W/T_{proc}) x $u^{0.78}$ x S_A x 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
 mm Hg x
 1
 atm
 x
 5
 lbs of MDI
 =
 5.10E-07
 atm

Step II: Determine Ventilation Rate in meters/second

Velocity @ STP (Note: STP = Standard Temperature and Pressure)
Roller Surface Area Roller Surface Area = $29 \text{ in}^2 = 0.20 \text{ ft}^2$ 1700 ACFM x 298 K = 1644.81 SCFM ACFM = Actual cubic feet per minute SCFM = Standard cubic feet per minute Velocity @ STP = Velocity = 1644.81 SCFM Ventilation rate (u) = Velocity Roller Surface Area
 Ventilation rate (u) =
 1644.81 / 0.20 ft²
 SCFM x
 1 / 0.00 sec
 min x
 0.3048 m ft
 m =
 41.49 m/sec

Step III: Determine Tack Time

Ventilation rate (u) =

Tack time =

Step IV: Determine the Exposed Surface Area

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

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

Based upon 24 hour production:

 $S_A = 349.80 \quad \frac{ft^2}{hour} \times \underbrace{\frac{24}{1} \frac{hours}{day}} = 8395.2 \quad ft^2/day$ MDI Stack Emissions Calculations for Extrusion Line #2

Hutchinson Sealing Systems, Inc. Church Hill, Tennessee

Converting ft² to m²:

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

Therefore,

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

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

Step V: Convert grams/day to pounds/year

0.75 lbs/year

Convert lbs/year to lbs/hour

0.75 | lbs x | 1 | year | 8.54E-05 | lbs/hour | 9.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.7 (1 booth) 3.37E-03 lbs/hour Standard Exemption

Convert lbs/year to tons/year

W = 0.75 <u>bs</u> x <u>1</u> ton = **3.74E-04 tons/year** (1 booth) 7.40E-03 tons/hour Standard Exemption

Convert tons/year to tons/month

W = 3.74E-04 <u>tons</u> x <u>1</u> year = **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	Density of Process	% Solids Contained in	Emission	PMs Emitted	PMs Emitted		
	Material Used (gal/year)	Material Used	Process Material	Factor	(lbs/year)	(tons/year)		
		(lbs/gal)						
Acheson Part C (Emralon	192.36	8.92	0.0000	0.0100	0.0000	0.0000		
8370C) or equivalent								
Acheson TW-077 or	44.26	8.67	27.0000	0.0100	1.0366	0.0005		
equivalent								
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	262.08	6.76	0.0000	0.0100	0.0000	0.0000		
equivalent								
Acheson TW-040 or	3472.00	8.59	0.0000	0.0100	0.0000	0.0000		
equivalent								
Unistole P-401 Toluene/HPT	3326.40	7.26	0.0000	0.0100	0.0000	0.0000		
Blend or equivalent								
Total Tons of PMs Emitted from Chemical Usage on Extrusion Line #2:								

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 #2: 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)

12757 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 = 9.58 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

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

NATU	JRAL GAS COMBUSTIC	N EMISSIONS FO	OR GERLACH/JET	AIR CURING	OVEN LOCA	TED ON EXTRUSION L	.INE #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

NATUR	AL GAS COMBUSTION	EMISSIONS FOR	GERLACH/MICRO	WAVE CURII	NG OVEN LO	CATED ON EXTRUSIO	N 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

NATU	IRAL GAS COMBUSTIO	N EMISSIONS FO	R GERLACH/HOT	AIR CURING	OVEN LOCA	TED ON EXTRUSION I	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

N	ATURAL GAS COMBUS	TION EMISSIONS	S FOR INFRATROL	CURING OV	EN 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.

HUTCHINSON SEALING SYSTEMS, INC CHURCH HILL, TENNESSEE

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

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

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 x VP_{MDI} x (M_W/T_{proc}) x $u^{0.78}$ x S_A x 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 $VP_{MDI} = 0.0000102 \text{ mm Hg x} \frac{1}{760 \text{ mm}} \text{ atm} \qquad \text{x} \qquad \frac{5}{100} \frac{\text{lbs of MDI}}{\text{lbs of Flock Loc 852}} = 5.10E-07 \text{ atm}$ Step II: Determine Ventilation Rate in meters/second Ventilation rate (u) = Velocity @ STP (Note: STP = Standard Temperature and Pressure) Roller Surface Area Roller Surface Area = $29 in^2 = 0.20 ft^2$ Velocity @ STP = 1700 ACFM x 298 K = 1644.81 SCFM 308 K ACFM = Actual cubic feet per minute SCFM = Standard cubic feet per minute Velocity = 1644.81 SCFM Velocity Roller Surface Area Ventilation rate (u) = Ventilation rate (u) = 1644.81 / 0.20 ft² SCFM x 1 / min x 0.3048 m = 41.49 m/sec Step III: Determine Tack Time 6 sec Tack time = Step IV: Determine the Exposed Surface Area The exposed area is determined from the area of rubber processed. $\frac{\text{5.83}}{\text{min}} = \frac{\text{ft}^2}{\text{m}} \times \frac{\text{60}}{\text{1}} \text{min} = \frac{349.80}{\text{ft}^2/\text{hour}}$ The roller applicator coats: Based upon 24 hour production: $S_A = 349.80 \quad \frac{ft^2}{hour} \times \underbrace{\frac{24}{hours}}_{1} = 8395.2 \quad ft^2/day$ MDI Stack Emissions Calculations for Extrusion Line #3 Hutchinson Sealing Systems, Inc. Church Hill, Tennessee 37-0067 Converting ft² to m²: $S_A = 8395.2$ $\frac{ft^2}{day}$ $\frac{1}{10.76}$ $\frac{m^2}{ft^2}$ = 780.22305 m²/day Therefore, MDI Stack Emissions = W = 25.4 x VP_{MDI} x (M_W/T_{proc}) x $u^{0.78}$ x S_A x t_{TF} 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 $\frac{365}{\text{year}}$ = 0.75 lbs/year Convert lbs/year to lbs/hour 0.75 <u>lbs</u> x <u>1 year</u> = **Emissions** (1 booth) year 8760 hours 3.37E-03 lbs/hour Standard Exemption Convert lbs/year to tons/year W = 0.75 | lbs x | 1 ton = 3.74E-04 tons/year | 2000 | lbs | 7.40E-03 tons/hour (1 booth) 7.40E-03 tons/hour Standard Exemption Convert tons/year to tons/month W = 3.74E-04 tons x 1 year = 3.12E-05 tons/month (1 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 (Ibs/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

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

NATU	JRAL GAS COMBUSTIO	N EMISSIONS FO	OR GERLACH/JET	AIR CURING	OVEN LOCA	TED 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

NATURA	AL GAS COMBUSTION	EMISSIONS FOR	GERLACH/MICRO	WAVE CURI	NG OVEN LO	CATED ON EXTRUSIO	N 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

N.	ATURAL GAS COMBUS	TION EMISSIONS	FOR INFRATROL	CURING OV	EN LOCATED	ON EXTRUSION LINE	E #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 Pollutan						
	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:									

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

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)	Monobutyl Ether	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 Emitted (tons/year)		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	
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
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 fr	om Chemical Us	age (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 = 70tal Tons of HAPs Emitted from Rubber Extrusion on Extrusion Line #4:

10391.1987 lbs/year tons/year 5.20E+00

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

Equation: W = 25.4 x VP_{MDI} x (M_W/T_{proc}) x $u^{0.78}$ x S_A x 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 Moi =
 0.0000102
 mm Hg x
 1
 atm
 x
 5
 lbs of MDI
 =
 5.10E-07
 atm

Step II: Determine Ventilation Rate in meters/second

Velocity @ STP (Note: STP = Standard Temperature and Pressure)
Roller Surface Area Ventilation rate (u) =

29 $in^2 = 0.20$ ft^2

1700 ACFM x <u>298</u> K = 1644.81 SCFM 308 K Velocity @ STP =

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

Velocity = 1644.81 SCFM

Velocity
Roller Surface Area Ventilation rate (u) =

 Ventilation rate (u) =
 1644.81 / 0.20 ft²
 SCFM x
 1 min x
 0.3048 m =
 1 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:

Based upon 24 hour production:

 $S_A = 349.80 \quad ft^2 \times 24 \quad hours = 8395.2 \quad ft^2/day$

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

Converting ft² to m²:

 $S_A = 8395.2$ $\frac{ft^2}{day}$ x $\frac{1}{10.76}$ $\frac{m^2}{ft^2}$ = 780.22305 m²/day

Therefore,

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

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

Step V: Convert grams/day to pounds/year

W = 0.93 <u>grams</u> x <u>1 lb</u> x 365 <u>days</u> = day 454 grams year 0.75 lbs/year

Convert lbs/year to lbs/hour

0.75 <u>lbs</u> x <u>1 year</u> = **Emissions** year 8760 hours 3.37E-03 lbs/hour Standard Exemption

Convert lbs/year to tons/year

0.75 <u>bs</u> x <u>1</u> ton = **3.74E-04 tons/year (1 booth)** 7.40E-03 tons/hour Standard Exemption

Convert tons/year to tons/month

W = 3.74E-04 tons x 1 year = 3.12E-05 tons/month (1 booth)

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 (Ibs/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:									

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

hours/year x 0.0005 ton/pounds = 8.63 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

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

NATU	JRAL GAS COMBUSTIO	N EMISSIONS FO	OR GERLACH/JET	AIR CURING	OVEN LOCA	TED 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

NATURA	AL GAS COMBUSTION	EMISSIONS FOR	GERLACH/MICRO	WAVE CURI	NG OVEN LO	CATED ON EXTRUSIO	N LINE #4
Pollutant	BTU Content of Natural Gas (BTU/ft3)	Oven Rating (BTU/hr) Emission Factor (Ib/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

N/	ATURAL GAS COMBUS	TION EMISSIONS	S FOR INFRATROL	CURING OV	EN 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:

<u>Calculation</u>
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 (Ibs/gal)	Amount of Process Material Used (gal/year)	VOCs Emitted (Ibs/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 Emit	ted 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

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)	[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 f	rom Chemical Us	sage (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)

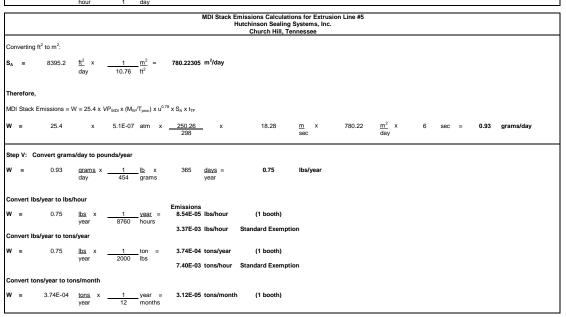
HAPs Emitted from Rubber Curing

Amount of Rubber Processed (lbs/year) x HAP Emission Factor = Amount of HAPs Emitted (lbs/year) x HAP Emission Factor = Amount of HAPs Emitted (lbs/year) 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 x VP_{MDI} x (M_W/T_{proc}) x $u^{0.78}$ x S_A x 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 tre = 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 mm Hg x 1 atm x 5 lbs of MDI = 5.10E-07 atm 760 mm 100 lbs of Flock Loc 852 Step II: Determine Ventilation Rate in meters/second Ventilation rate (u) = Velocity @ STP (Note: STP = Standard Temperature and Pressure) Roller Surface Area Roller Surface Area = $29 in^2 = 0.20 ft^2$ Velocity @ STP = 1700 ACFM x 298 K = 1644.81 SCFM ACFM = Actual cubic feet per minute SCFM = Standard cubic feet per minute SCFM = Standard cubic feet per minute Velocity = 1644.81 SCFM Velocity Roller Surface Area Ventilation rate (u) = Ventilation rate (u) = 1644.81 / 0.20 SCFM x 1 / 0.00 / 0.00 sec min x 0.3048 m / ft = 41.49 m/sec Sten 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. 5.83 $\underline{\text{ft}^2}$ x $\underline{\text{60}}$ min = 349.80 $\underline{\text{ft}^2/\text{hour}}$ The roller applicator coats: Based upon 24 hour production: $S_A = 349.80 \quad \frac{ft^2}{hour} \times \underbrace{\frac{24}{hours}}_{1} = 8395.2 \quad ft^2/day$



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 (Ibs/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 P	Ms Emitted from Chemica	I Usage on Ext	rusion 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

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

lbs/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

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).

Permit Renewal Emission Calculations 8/7/2018

NATURAL GAS COMBUSTION EMISSIONS FROM EXTRUSION LINE #5 (SOURCE 15)

HUTCHINSON SEALING SYSTEMS, INC. CHURCH HILL, TENNESSEE

	NATURAL GAS CO	MBUSTION EMIS	SSIONS FOR SHO	CK OVEN LO	CATED ON E	XTRUSION 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 GA	S COMBUSTION EMISS	SIONS FOR MICR	OWAVE AND HIGH	H VELOCITY	CURING OVE	N LOCATED ON EXTR	RUSION 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	Oven Rating	Emission Factor	Operating	Number of	Amount of Pollutant	Amount of Pollutant				
	Natural Gas (BTU/ft3)	(BTU/hr)	(lb/ft3)	Hours	Burners	Emitted from all	Emitted from all				
						Extrusion Lines	Extrusion Lines				
						(lbs/year)	(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	VOC WT%	VOCs Contained in	Amount of Process	VOCs Emitted	VOCs Emitted
	Material	Contained in	Process Material	Material Used	(lbs/year)	(tons/year)
	(lbs/gal)	Process Material	(lbs/gal)	(gal/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	8.0800	11.0000	0.8888	1680.00	1493.1840	0.7466
equivalent						
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 \	OCs Emitted from Chen	nical Usage on Robots	and Secondaries:	25.2733

HAP EMISSIONS FROM RUBBER-ON-GLASS LINE AND SECONDARIES (SQUECE 02) HUTCHRISON SEALING SYSTEMS, INC. CHURCH HILL, TENNESSEE

Process Material	Amount of Process Material Used (gal/year)	Density of Process Material Used (lbs/gal)	2-(2-Butoxyethoxy) Ethanol [112-34-5] (WT%)	2-(2-Butoxyethoxy) Ethanol Emitted (tons/year)	2-(2-Methoxyethoxy) Ethanol [111-77-3] (WT%)	2-(2-Methoxyethoxy) Ethanol Emitted (tons/year)	2-Ethoxyethanol [110-80-5] (WT%)	2-Ethoxyethanol Emitted (tons/year)	2-Methoxyethanol [109-86-4] (WT%)	2-Methoxyethanol Emitted (tons/year)	Carbon Tetrachloride [56-23-5] (WT%)	Carbon Tetrachloride Emitted (tons/year)	Chlorobenzene [108-90-7] (%Wt)	Chlorobenzene Emitted (tons/year)	Ethyl Benzene [100-41-4] (WT%)	Ethyl Benzene Emitted (tons/year)	Ethylene Glycol [107-21-1] (WT%)	Ethylene Glycol Emitted (tons/year)	Formaldehyde [50-00-0] (WT%)	Formaldehyde Emitted (tons/year)	[67-56-1]	Methanol Emitted (tons/year)	P-Xylene [106-42-3] (WT%)	P-Xylene 1 Emitted (tons/year)	Triethylamine [121-44-8] (WT%)	Triethylamine T Emitted ((tons/year)	08-88- E	luene Triethylene Glyc nitted Monobutyl Ethe s/year) [143-22-6] (WT%)	Triethylene Glycol Monobutyl Ether (tons/year)	[1330-20-7]		bs/gal)	Total HAPS Emitted by Material (tons/year)
Aerkroil or equivalent	160.15	7.2558	0.0000	0.0000	0.0000	0.0000	0.000	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	0.0000	0.0000	0.0000	0.0000	0.000 0.00	0.0000	0.0000	0.0000	0.0000	0.0000
Apollo 2077 or equivalent	38.01	8.8404	0.0000	0 0000	0.0000	0.0000	0.000	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	0.0000	0.0000	0.0000	0.0000	0.0000 0.00	0.0000	0.0000	0.0000	0.0000	0.0000
Chem Loc 459X or equivalent	868 00	7 2800	0.0000	0 0000	0.0000	0 0000	0 000	0 0000	0 0000	0 0000	0 0000	0 0000	1 0000	0 0316	20,0000	0.6319	0.0000	0.0000	0 0000	0 0000	0.0000	0 0000	1 0000	0.0316	0.0000	0.0000	0.0000	0 0000	0 0000	80,0000	2 5276	5 8968	3 2227
FlockLok 6389 or equivalent	88.40	8,3000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5,000	0.0183	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000 0.00	0.0000	20,0000	0.0734	1.6800	0.0917
Iscoropyl Alcohol or equivalent	6104.00	6,5933	0.0000	0 0000	0.0000	0.0000	0.000	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	0.0000	0.0000	0.0000	0.0000	0.0000 0.00	0.0000	0.0000	0.0000	0.0000	0.0000
Loctite 401 or equivalent	246 40	8 7570	0.0000	0 0000	0.0000	0 0000	0 000	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	0 0000	0.0000	0.0000	0.0000	0 0000	0 0000	0.0000	0 0000	0.0000	0 0000
Loctite 411 or equivalent	160.03	8,7570	0.0000	0.0000	0.0000	0.0000	0.000	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	0.0000	0.0000	0.0000	0.0000	0.0000 0.00	0.0000	0.0000	0.0000	0.0000	0.0000
Loctite 454 or equivalent	2.99	8.7570	0.0000	0.0000	0.0000	0.0000	0.000	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	0.0000	0.0000	0.0000	0.0000	0.0000 0.00	0.0000	0.0000	0.0000	0.0000	0.0000
Misty or equivalent	214 82	7 0890	0.0000	0 0000	0.0000	0 0000	0 000	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	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	9,1740	0.0000	0.0000	0.0000	0.0000	0.000	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	0.0000	0.0000	0.0000	0.0000	0.0000 0.00	0.0000	0.0000	0.0000	0.0000	0.0000
Rohm and Hass Robond TR 5125	1680.00	8.0800	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	1.0000	0.0679	1.0000	0.0679	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.0679 0.00	0.0000	0.0000	0.0000	0.2424	0.2036
Stahl WT-21-988 or equivalent	384 00	8 8404	1 0000	0.0161	1 0000	0.0161	1 000	0 0161	1 0000	0 0161	0 0000	00000	0 0000	0 0000	0 0000	0 0000	5 0000	0.0804	1 0000	0.0161	1 0000	0.0161	0 0000	0 0000	1 0000	0.0161	0 0000	0 0000 1 00	0 0161	0 0000	0 0000	1 0608	0.2092
WD-40 or equivalent	83.83	6.8138	0.0000	0.0000	0.0000	0.0000	0.000	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	0.0000	0.0000	0.0000	0.0000	0.000 0.00	0.0000	0 0000	0.0000	0.0000	0.0000
Total HAPs Emitted fr	om Chemical Us	age (tons/year):		0.0161		0.0161	J	0.0161		0.0161	Į.	0.0679		0.0195	J	0 6502		0 0804]	0 0161		0 0161	L	0 0316	Į.	0.0161		0.0679	0.0161	l L	2.6010	L	3,7272

Total Tons of HAPs Emitted from Robots and Secondaries: 3.7272 tons/year

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

Process Material	Amount of Process	Density of Process	% Solids Contained	Emission	PMs Emitted	PMs Emitted
	Material Used (gal/year)	Material Used	in Process Material	Factor	(lbs/year)	(tons/year)
		(lbs/gal)				
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 Ton	s of PMs Emitted from	n Robots an	d 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.

Rev. 02/10/2023 RDA-1298

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 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)

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Permit Number: 482587
Issuance Date: Issuance Date
Expiration Date: Expiration Date

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
 Notifications Startup certifications Applications NSPS reports MACT/GACT/NESHAP reports Emission statements 	 Test protocols Emission test reports Visible emission evaluation reports 	 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 <u>Air.Pollution.Control@tn.gov</u>		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

A. 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)

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Permit Number: 482587
Issuance Date: Issuance Date
Expiration Date: Expiration Date

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
the end of the day for which the	the end of the week for which	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)

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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.

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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)

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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)].

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(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=""></issuance>	<pre><60 days after permit issuance></pre>
Annual Compliance Certification	October 1, 2024	<issuance date="" of="" permit=""></issuance>	<pre><60 days after permit issuance></pre>

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

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Section V - Source Specific Permit Conditions

Source Number	Source Description
01	
11	Extrusion Lines 1 through 5– Each rubber extrusion line is equipped with flock, primer, coating, and adhesive
13	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.
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

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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 (NOx) 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.

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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.

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Appendix 1: Notification of Change in Responsible Person

Facility (Permittee):	Hutchinson Sealing System	ns, Inc.
Facility ID: 37-00	67	
Former Responsible Person:		
	Name	Title
New Responsible Person:		
•	Name	Title
	Email	
	M	Mailing Address
	Phone (Office)	Phone (cell)
Date New Responsible Person was	s assigned this duty:	
		e and true to the best of my knowledge. As declaration is made under penalty of perjury.
Signature		Date
Signer's name (print)	Title	Phone (with area code)

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Appendix 2: Notification of Changes

Facility (Perm	ittee):	Hutchinson Sealing Systems, Inc.			
Facility ID: Source Number	er:	37-0067			
	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	
		T			
Signer's name ((print)	Title		Phone (with area	code)

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Appendix 3: Notification of Ownership Change

Facility (Permittee): Hutch	ncility (Permittee): Hutchinson Sealing Systems, Inc. (Previous Owner)			
Facility ID: 37-0067				
Facility (Permittee):		Owner) Date of Ownership Change		
Secretary of State Control Number:	[as re	gistered with the TN Secretary of State (SOS)]		
Responsible Person/Authorized Contact	E	Email Address		
Mailing Address	F	Phone with area code		
Principal Technical Contact	E	Email Address		
Mailing Address	F	Phone with area code		
Billing Contact	F	Email Address		
Mailing Address	F	Phone with area code		
Division 1200-03 or Division 0400- I agree to comply with the condition 30 of the Tennessee Air Pollution agreements made by the previous ov List all active permits issued to the facility The information contained in this Notificatio Code Annotated Section 39-16-702(a)(4), this	the stationary source(s) that med 30 ¹ , and s contained in the permits listed Control Regulations, the Tennevner to the Technical Secretary. for which the owner wishes to a n is accurate and true to the best	the definition of modification as defined in below, Division 1200-03 and Division 0400-essee Air Quality Act, and any documented assume ownership: of my knowledge. As specified in Tennessee alty of perjury.		
Signature		Date		
Signer's name (print)	Title	Phone (with area code)		

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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

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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

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Appendix 6: Compliance Certification Statement

Facility (Permittee):	Hutchinson Sealing	g Systems, Inc.	<u></u>
Facility Address:			
Facility ID: 37-006	7		
Conditional Major Permit Number	Reporting	Period	Report Deadline
This report is required pursuant to The Responsible Person Certification I, the undersigned, am a Responsible submitted. This document consists Person of the above mentioned factors Status Report is accurate and true to 16-702(a)(4), this declaration is many	e Person (as described in Co of pages and they ar ility (permittee), I certify that the best of my knowledge.	ondition G1) of the facility e numbered from page at the information contains	to As a Responsible ed in this Annual Compliance
Signature		Date	
Signer's name (print)	Title	Phone (with area code)

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Appendix 7: Agreement Letters

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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) JAF Batt	
Title Plant Manager	
Date 19. Jun - 25	

Appendix 8: Example Logs

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Monthly VOC and HAP Calculation Table

Month/	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

	VOC			HAP ₁]	HAP_2	Total HAP		
Month/Year	[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)	

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

Permit Number: 482587
Issuance Date: Issuance Date
Expiration Date: Expiration Date

20XX	20XX DAILY <control device=""> <monitored parameter=""> READINGS FOR SOURCE XX, <control device="" id=""></control></monitored></control>											
JAN	N□ FEB	□ MAR□	APR[□ MA	.Ү□ Л	UN□	JUL□	AUG□	SEP□	OCT□	NOV□	DEC□
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Day	Reading	Inspection	Yes	No	Yes	No	<ι	ınits>	Act	ions	Reading	Inspection
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OPERATING PERMIT SUMMARY REPORT

Company name: <u>Hutchinson Sealing Systems, Inc.</u> File number: 37-0067 EPS initials: <u>CLM</u>

Permit number(s): <u>482587</u> Source point number: <u>00, 01, 02, 11, 13, 14, 15</u>

Application received date: July 15, 2024 Application complete date: <u>August 15, 2024</u>

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 1200-03-0901(4)(b)1.(i)? Yes No⊠							
Reason for PSD: New sour	ce above TPY D 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: 1200-03-0902(11)(a) N/A SO ₂ Emissions:	1200-03-1403(5) N/A					
	NO _x Emissions	: 1200-03-0707(2) × N/A					
PM Emissions: 1200-03-0703(1)	⊠ N/A□						
CO Emissions: 1200-03-0707(2)	⊠ N/A □						
	Emissions:						
Visible Emissions from this facility	shall not exceed 20% opacity per Method	od 9 Rule 1200-03-0501(1), 1200-03-0503(6)					
Visible Emissions from roads/parki	ing areas shall not exceed 10% opacity per Met	thod 1 Rule 1200-03-0803					

Emission Summary

Source 00

							Pe	ermit Nu	mber:		482587
Source Status: New Modification Expansion Relocation Permit Status: New Renewal											ewal
PSD NSPS NESHAPs Previous Permit Number: Construction Operating 574										574643	
		Pounds/Hou	r		Tons/Y	ear		Date of	*	Applicable	e Standard
	Actual	Potential	Allowable	Actual	Potential	Allowable	Net Change	Data		TAPCR	
PM					75.10					070	03(1)
SO_2					0.01					14()3(5)
СО					1.24					070	07(2)
VOC					99.9	99.9				0902	(11)(a)
NO _X					1.48					070	07(2)
HAP					9.9/ 24.9 ¹	9.9/ 24.9 ¹				0902	(11)(a)

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

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

Emission Summary

Sources 01,11, 13, 14, 15

	Permit Number:	482587
Source Status: New Modification Expansion Relocation Pe	ermit Status: New⊠ Ren	newal
Source Status: New Modification Expansion Relocation Permit Status: New Renewal PSD NSPS NESHAPs Previous Permit Number: Construction Operating 57		574643

		Pounds/Ho			Ton	ıs/Year		Date of	*	Applicable Standard
	Actual	Potential	Allowable	Actual	Potential	Allowable	Net Change	Data		TAPCR 1200-03-
PM Source 01	1.85	3.43	3.43	8.10	15.02	15.02		5/29/2025		0703(1)
PM Source 11	3.10	3.43	3.43	13.58	15.02	15.02		5/29/2025		0703(1)
PM Source 13	3.10	3.43	3.43	13.58	15.02	15.02		5/29/2025		0703(1)
PM Source 14	2.81	3.43	3.43	12.31	15.02	15.02		5/29/2025		0703(1)
PM Source 15	2.45	3.43	3.43	10.73	15.02	15.02		5/29/2025		0703(1)
SO_2		0.002	0.002		0.01			5/29/2025		1403(5)
СО		0.28			1.24	1.24		5/29/2025		0707(2)
VOC								5/29/2025		0902(11)(a)
NO_X		0.34			1.48	1.48		5/29/2025		0707(2)
HAP								5/29/2025		0902(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 Nu	mb	er:	482587
Source Status: New Modification Expansion Relocation Permit Status: New Renewal NSPS NESHAPs Previous Permit Number: Construction Operating 574											
PSD_	NSPS	NESHAF	Ps Pre	evious Per	mit Numb	er: Con	struction _		_ C	perating	574643
		Pounds/Hou	r		Tons	/Year		Date of	*	Applicabl	e Standard
	Actual	Potential	Allowable	Actual	Potential	Allowable	Net Change	Data		TAPCR	1200-03-
PM											
SO_2											
СО											
VOC										0902	(11)(a)
NO_X											
HAP										0902	(11)(a)

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

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