# Procter&Gamble

The Procter & Gamble Company Sharon Woods Innovation Center 11510 Reed Hartman Hwy, Cincinnati, OH 45241

June 19, 2017

Steven R. Pursley, PE West Virginia Department of Environmental Protection Division of Air Quality 601 57th Street, SE Charleston, WV 25304

Procter and Gamble - Tabler Station; Minor NSR Air Quality Permit R13-3316 Amendment RE:

Dear Mr. Pursley,

As you know, Procter and Gamble (P&G) is constructing a consumer products facility in Berkeley County, West Virginia near the unincorporated community of Tabler Station. The Tabler Station facility will be comprised of a surfactant-making process, liquid soap making process, dry consumer laundry and cleaning products manufacturing., plastics molding supplier, and related utilities.

P&G is making the following Class II administrative updates to the application submitted October 11, 2016.

- 1. Removal of eight tanks originally planned for the Dry Consumer Laundry and Cleaning Products A
- 2. Addition of one flexible perfume delivery system in the Dry Consumer Laundry and Cleaning Products
  - By eliminating the tanks and adding the smaller flexible perfume delivery system, P&G seeks to provide a more agile perfume operation with improved quality control.
- 3. A small (2 MM BTU/hr) increase in the size of Boiler 31;
- 4. An increase in the capacity of the site fire protection diesel fire pump engines,
- An additional 80 kW diesel engine-powered backup generator<sup>2</sup>.

The proposed minor changes result in an overall plant-wide increase in particulates of 0.16 tons per year (tpy), oxides of nitrogen 0.39 tpy, carbon monoxide 0.46 tpy, volatile organic compounds 0.24 tpy, and hazardous air pollutants 0.02 tpy. These changes do not affect the facility's classification as a minor source for Prevention of Significant Deterioration and Title V.

<sup>&</sup>lt;sup>1</sup> Boiler 3 is subject to New Source Performance Standard Subpart Dc.

<sup>&</sup>lt;sup>2</sup> The generator is subject to the recordkeeping and monitoring requirements of New Source Performance Standard Subpart IIII. Emissions standards may be found in Table 1 in 40 CFR 89.112.

We appreciate your continued support to the P&G-Tabler Station project and your review of this amendment. Please feel free to contact me at 513-765-0497 or Ms. Allison Cole of Trinity Consultants at 540-342-5945 with any questions on the proposed changes.

Sincerely,

Dear Halley J. Andrew Hadley

Environmental, Health, Safety, and Sustainability Manager

Procter & Gamble - NA Product Supply Engineering

Enclosure

cc (w/o enclosure): Mr. Russell Bailey - Trinity Consultants; Ms. Allison Cole - Trinity Consultants



## WEST VIRGINIA DEPARTMENT OF **ENVIRONMENTAL PROTECTION**

# **DIVISION OF AIR QUALITY**

601 57th Street, SE

# APPLICATION FOR NSR PERMIT AND

Charleston, N (304) 926 www.dep.wv	6-0475	T		RMIT REVISIO TIONAL)	ON .				
PLEASE CHECK ALL THAT APPLY TO NSR	(45CSR13) (IF KNOWN	): PLEASE CHECK	TYPE OF 45CS	SR30 (TITLE V) RE	VISION (IF ANY):				
☐ CONSTRUCTION ☐ MODIFICATION	RELOCATION		TIVE AMENDME		MODIFICATION				
☐ CLASS I ADMINISTRATIVE UPDATE	☐ TEMPORARY	☐ SIGNIFICANT MODIFICATION							
☐ CLASS II ADMINISTRATIVE UPDATE	AFTER-THE-FACT	IF ANY BOX ABO INFORMATION A	OVE IS CHECKED AS ATTACHMEN	D, INCLUDE TITLE V I <b>T S</b> TO THIS APPLIC	REVISION CATION				
FOR TITLE V FACILITIES ONLY: Pleas (Appendix A, "Title V Permit Revision	se refer to "Title V Revis Flowchart") and ability	sion Guidance" in or to operate with the	der to determine changes reques	e your Title V Revisi sted in this Permit A	ion options pplication.				
	Section	I. General			MAX. 872.512.20 11.534.32				
Name of applicant (as registered with The Procter and Gamble Manufact		State's Office):	2. Federal Er	mployer ID No. <i>(FE</i>	EIN):				
3. Name of facility (if different from about	/e):	-	4. The applica	ant is the:					
Tabler Station			☐ OWNER	<b>□OPERATOR</b>	⊠ вотн				
5A. Applicant's mailing address:		5B. Facility's pres	ent physical add	dress:					
The Procter & Gamble Manufacturing (	Company	Procter & Gamble – Tabler Station Site							
Sharon Woods Innovation Center A2M11-3		396 Development Drive							
11510 Reed Hartman Highway		Inwood, WV 25428							
Cincinnati, OH 45241									
<ul> <li>6. West Virginia Business Registration</li> <li>If YES, provide a copy of the Certific change amendments or other Busine</li> <li>If NO, provide a copy of the Certifica amendments or other Business Certifical</li> </ul>	ate of Incorporation/ ss Registration Certific te of Authority/Authority	Organization/Limicate as Attachmenority of L.L.C./Req	ted Partnershi It A.	i <b>p</b> (one page) inclu					
7. If applicant is a subsidiary corporation,	please provide the na	me of parent corpo	ration: N/A						
8. Does the applicant own, lease, have a	option to buy or othe	rwise have control	of the <i>proposed</i>	d site? X YES	□ NO				
- If YES, please explain: Procter	and Gamble owns t	he site.							
<ul> <li>If NO, you are not eligible for a perm</li> </ul>	it for this source.								
<ol> <li>Type of plant or facility (stationary sou administratively updated or tempor crusher, etc.):</li> </ol>	urce) to be <b>constructe</b> arily permitted (e.g.,	ed, modified, reloc coal preparation pl	ated, 1 ant, primary	10. North American Classification S (NAICS) code	System				
Facility will produce liquid consumer products.	roducts and dry cons	sumer laundry and	d cleaning 3	325612, 325613, 3	25620				
11A. DAQ Plant ID No. (for existing faciliti 003-00154	**	ist all current 45CS	R13 and 45CS process (for ex	R30 (Title V) permixisting facilities only	it numbers /):				
		R13-3316							
All of the required forms and additional info	rmation can be found u	nder the Permitting	Section of DAQ	's website, or reque	sted by phone.				

12A.		
<ul> <li>For Modifications, Administrative Updates or Tepresent location of the facility from the nearest state</li> </ul>	te road;	
<ul> <li>For Construction or Relocation permits, please road. Include a MAP as Attachment B.</li> </ul>	provide directions to the proposed new	site location from the nearest state
Exit US Route 81 at exit 8 for Tabler Station Road.	Droceed Fast on Tabler Station Road	d fan 4 4 miljan 4a Daviglammank
Drive. Turn left on Development Drive and proceed	approximately 0.2 miles to site entra	ance
12.B. New site address (if applicable):	400 N	
12.0. New Site address (ii applicable).	12C. Nearest city or town:	12D. County:
	Inwood, WV	Berkeley County, WV
12.E. UTM Northing (KM): <b>4,366</b>	12F. UTM Easting (KM): <b>757</b>	12G. UTM Zone: 17S
13. Briefly describe the proposed change(s) at the facilit	:y:	
Fire Pump engine size change, New diesel generator		or Dry Consumer Products A.
14A. Provide the date of anticipated installation or change		14B. Date of anticipated Start-Up
<ul> <li>If this is an After-The-Fact permit application, provi change did happen: / /</li> </ul>		if a permit is granted: 08/01/2017
14C. Provide a <b>Schedule</b> of the planned <b>Installation</b> of/of/of/application as <b>Attachment C</b> (if more than one unit	<b>Change</b> to and <b>Start-Up</b> of each of the tis involved).	units proposed in this permit
15. Provide maximum projected <b>Operating Schedule</b> of Hours Per Day <b>24</b> Days Per Week <b>7</b>	f activity/activities outlined in this applica Weeks Per Year <b>52</b>	ation:
16. Is demolition or physical renovation at an existing fac	cility involved?	
17. Risk Management Plans. If this facility is subject to		
changes (for applicability help see www.epa.gov/cepp	o), submit your Risk Management Plar	n (RMP) to U. S. EPA Region III.
18. Regulatory Discussion. List all Federal and State a	ir pollution control regulations that you b	believe are applicable to the
proposed process (if known). A list of possible application		
(Title V Permit Revision Information). Discuss applicab		
information as Attachment D.		' ' '
	achments and supporting do	
19. Include a check payable to WVDEP – Division of Air C		
45CSR13).		(For vocal End
45CSR13).  20. Include a <b>Table of Contents</b> as the first page of your	r application package.	
<ul> <li>45CSR13).</li> <li>20. Include a Table of Contents as the first page of your</li> <li>21. Provide a Plot Plan, e.g. scaled map(s) and/or sketcl source(s) is or is to be located as Attachment E (Ref</li> </ul>	r application package. h(es) showing the location of the proper fer to <i>Plot Plan Guidance</i> ).	rty on which the stationary
45CSR13).  20. Include a <b>Table of Contents</b> as the first page of your  21. Provide a <b>Plot Plan</b> , e.g. scaled map(s) and/or sketcl source(s) is or is to be located as <b>Attachment E</b> (Ref  Indicate the location of the nearest occupied structure)	r application package. h(es) showing the location of the proper fer to <i>Plot Plan Guidance</i> ). (e.g. church, school, business, residenc	rty on which the stationary
<ul> <li>45CSR13).</li> <li>20. Include a Table of Contents as the first page of your</li> <li>21. Provide a Plot Plan, e.g. scaled map(s) and/or sketcl source(s) is or is to be located as Attachment E (Ref Indicate the location of the nearest occupied structure of the Process Flow Diagram(s) showing device as Attachment F.</li> </ul>	r application package. h(es) showing the location of the proper fer to <i>Plot Plan Guidance</i> ). (e.g. church, school, business, residenc	rty on which the stationary
20. Include a Table of Contents as the first page of your 21. Provide a Plot Plan, e.g. scaled map(s) and/or sketcl source(s) is or is to be located as Attachment E (Ref Indicate the location of the nearest occupied structure (22. Provide a Detailed Process Flow Diagram(s) showing device as Attachment F.  23. Provide a Process Description as Attachment G.	r application package.  h(es) showing the location of the proper fer to <i>Plot Plan Guidance</i> ).  (e.g. church, school, business, residence ing each proposed or modified emissions	ce).  ns unit, emission point and control
<ul> <li>45CSR13).</li> <li>20. Include a Table of Contents as the first page of your</li> <li>21. Provide a Plot Plan, e.g. scaled map(s) and/or sketcl source(s) is or is to be located as Attachment E (Ref Indicate the location of the nearest occupied structure of the Process Flow Diagram(s) showing device as Attachment F.</li> </ul>	r application package.  h(es) showing the location of the proper fer to <i>Plot Plan Guidance</i> ).  (e.g. church, school, business, residencing each proposed or modified emissions of the proposed of the facility since the	rty on which the stationary ce).  as unit, emission point and control last permit review (if applicable).

24. Provide Material Safety Data S	heets (MSDS) for all materials	
For chemical processes, provide a	a MSDS for each compound emitted	ssed, used or produced as Attachment H.
25. Fill out the Emission Units Tab	le and provide it as Attachment I	o the air.
26. Fill out the Emission Points Da	ta Summary Sheet (Table 1 and Ta	ble 2) and provide it as Attachment J.
27. Fill out the Fugitive Emissions	Data Summary Sheet and provide it	as Attachment K
28. Check all applicable Emissions	Unit Data Sheets listed below:	ao Attaoninent N.
☐ Bulk Liquid Transfer Operations	☐ Haul Road Emissions	☐ Quarry
☐ Chemical Processes	☐ Hot Mix Asphalt Plant	☐ Solid Materials Sizing, Handling and Storage
☐ Concrete Batch Plant	☐ Incinerator	Facilities
☐ Grey Iron and Steel Foundry	☐ Indirect Heat Exchanger	☐ Storage Tanks
☐ General Emission Unit, specify - F	lexible Perfume Delivery System	
Fill out and provide the Emissions Ur	nit Data Sheet(s) as Attachment L.	
29. Check all applicable Air Pollution	n Control Device Sheets listed below	v:
Absorption Systems	☐ Baghouse	☐ Flare
Adsorption Systems	☐ Condenser	☐ Mechanical Collector
Afterburner	☐ Electrostatic Precipitat	
☐ Other Collectors, specify		<b>5</b>
<b></b>		
Fill out and provide the Air Pollution (	Control Device Sheet(s) as Attachn	ent M.
		attach the calculations directly to the forms listed in
<ol> <li>Monitoring, Recordkeeping, Reptesting plans in order to demonstrate application. Provide this information.</li> </ol>		proposed monitoring, recordkeeping, reporting and issions limits and operating parameters in this permit
	nust be practically enforceable wheth may not be able to accept all measur Q will develop such plans and include	er or not the applicant chooses to propose such es proposed by the applicant. If none of these plans et them in the permit
32. Public Notice. At the time that th	e application is submitted, place a Cl	ass I Legal Advertisement in a newspaper of general
circulation in the area where the so	ource is or will be located (See 45CSI	R§13-8.3 through 45CSR813-8.5 and Example Local
Advertisement for details). Please	e submit the Affidavit of Publication	as Attachment P immediately upon receipt.
33. Business Confidentiality Claims.	Does this application include confid	ential information (per 45CSR31)?
If YES, identify each segment of in segment claimed confidential, inclu Notice – Claims of Confidentialit	formation on each page that is submiding the criteria under 45CSR§31-4.  y" guidance found in the <b>General In</b> s	tted as confidential and provide justification for each I, and in accordance with the DAQ's "Precautionary structions as Attachment Q.
S	Section III. Certification of	Information
34. Authority/Delegation of Authority Check applicable Authority Form	<ol> <li>Only required when someone other below:</li> </ol>	r than the responsible official signs the application.
☐ Authority of Corporation or Other Bus	siness Entity	uthority of Partnership
Authority of Governmental Agency		thority of Limited Partnership
Submit completed and signed Authority	Form as Attachment R.	
		nitting Section of DAQ's website, or requested by phone.
	The state of the s	The state of the s

35A. <b>Certification of Information.</b> To certify 2.28) or Authorized Representative shall chec	/ this permit application, a Responsible Office k the appropriate box and sign below.	cial (per 45CSR§13-2.22 and 45CSR§30-
Certification of Truth, Accuracy, and Comp	oleteness	
I, the undersigned Responsible Official / application and any supporting documents ap reasonable inquiry I further agree to assume a stationary source described herein in accorda Environmental Protection, Division of Air Qual and regulations of the West Virginia Division of business or agency changes its Responsible on otified in writing within 30 days of the official	Authorized Representative, hereby cerpended hereto, is true, accurate, and complesponsibility for the construction, modificationice with this application and any amendmentity permit issued in accordance with this application and any amendmentity permit issued in accordance with this application. Code § 22-5-1 et see Official or Authorized Representative, the Di	lete based on information and belief after on and/or relocation and operation of the ents thereto, as well as the Department of plication, along with all applicable rules eq. (State Air Pollution Control Act). If the
	after reasonable inquiry, all air contaminant sufficient sufficien	DATE: (Please use blue ink)
35B. Printed name of signee: Francisco Lan	za	35C. Title: Manufacturing Capability Associate Director
35D. E-mail: Lanza.fs@pg.com	36E. Phone: 513-626-6440	36F. FAX:
36A. Printed name of contact person (if different	nt from above): Drew Hadley	36B. Title: Environmental Health and Safety Manager, NA Supply Network Design
36C. E-mail: hadley.ja@pg.com	36D. Phone: <b>513-765-0497</b>	36E. FAX:
PLEASE CHECK ALL APPLICABLE ATTACHMEN  Attachment A: Business Certificate		
☐ Attachment B: Map(s) ☐ Attachment C: Installation and Start Up Sche ☐ Attachment D: Regulatory Discussion ☐ Attachment E: Plot Plan ☐ Attachment F: Detailed Process Flow Diagram ☐ Attachment G: Process Description ☐ Attachment H: Material Safety Data Sheets (Material Safety	Attachment L: Emissions dule	ion Control Device Sheet(s) g Emissions Calculations g/Recordkeeping/Reporting/Testing Plans tice Confidential Claims Forms rmit Revision Information  ure(s) to the DAQ, Permitting Section, at the
TOTA OF YOUR ONLY IS THE 10 A TITLE IN		
<ul> <li>□ NSR permit writer should notify Title V</li> <li>□ For Title V Significant Modifications processe</li> <li>□ NSR permit writer should notify a Title</li> </ul>	e V Permitting Group and:  V permit writer of draft permit,  ropriate notification to EPA and affected states V permit writer of draft permit. ed in parallel with NSR Permit revision:	s within 5 days of receipt,
☐ EPA has 45 day review period of a dra	5CSR13 and Title V permits,	

# ATTACHMENT I

**Emission Units Table** 

### Attachment I Emission Units Table

Emission Unit	Emission	B - 1 - 11 - 12 - 12 - 12	Year	Ded C "	Type <sup>3</sup> and	Control
${ m ID}^1$	Point ID <sup>2</sup>	Emission Unit Description	Installed/ Modified	Design Capacity	date of Change	Device <sup>4</sup>
1S	1E	Surfactant Making Process	2017	3,000 gal/hr	New	1C
2S	2E	Surfactant Making Process	2017	3,000 gal/hr	New	2C
3S 4S	3E 4E	Surfactant Tanks Surfactant Tanks	2017 2017	120,762 gal 48,345 gal	New New	
5S	5E	Surfactant Tanks	2017	40,109 gal	New	
6S	6E	Surfactant Tanks	2017	40,109 gal	New	
7S	7E	Surfactant Tanks	2017	15,125 gal	New	
8S 9S	8E 9E	Surfactant Tanks Surfactant Tanks	2017 2017 2017	15,125 gal 15,125 gal 15,125 gal	New New	
10S	10E	Surfactant Tanks	2017	72,475 gal	New	
11S	11E	Surfactant Tanks	2017	72,475 gal	New	
12S	12E	Surfactant Tanks	2017	72,475 gal	New	
13S	13E	Surfactant Tanks	2017	72,475 gal	New	
14S	14E	Surfactant Tanks	2017	72,475 gal	New	
15S	15E	Surfactant Tanks	2017	72,475 gal	New	
16S	16E	Surfactant Tanks	2017	26,083 gal	New	
17S 18S	17E 18E	Surfactant Tanks Surfactant Tanks	2017 2017 2017	15,125 gal 15,125 gal	New New	
19S	19E	Surfactant Bulk Liquid Transfer	2017	17,150,000 gal/yr	New	
20S	20E	Liquid Soap A and B Tanks	2017	79,252 gal	New	
21S	21E	Liquid Soap A and B Tanks	2017	79,252 gal	New	
22S	22E	Liquid Soap A and B Tanks	2017	79,252 gal	New	
23S	23E	Liquid Soap A and B Tanks	2017	7,925 gal	New	
24S	24E	Liquid Soap A and B Tanks	2017	7,925 gal	New	
25S	25E	Liquid Soap A and B Tanks	2017	39,626 gal	New	
26S 27S	26E 27E	Liquid Soap A and B Tanks Liquid Soap A and B Tanks	2017 2017 2017	15,850 gal 39,626 gal	New New	
28S	28E	Liquid Soap A and B Tanks	2017	26,417 gal	New	
29S	29E	Liquid Soap A and B Tanks	2017	15,850 gal	New	
30S	30E	Liquid Soap A and B Tanks	2017	26,417 gal	New	
31S	31E	Liquid Soap A and B Tanks	2017	15,850 gal	New	
32S 33S 34S	32E 33E 34E	Liquid Soap A and B Tanks Liquid Soap A and B Tanks Liquid Soap A and B Tanks	2017 2017 2017	15,850 gal 7,925 gal 7,925 gal	New New New	
35S 36S	35E 36E	Liquid Soap A and B Tanks Liquid Soap A and B Tanks Liquid Soap A and B Tanks	2017 2017 2017	7,925 gal 7,925 gal 7,925 gal	New New	
37S	37E	Liquid Soap A and B Tanks	2017	7,925 gal	New	
50S	50E	Liquid Soap A and B Tanks	2017	7,925 gal	New	
56S	56E	Liquid Soap A and B Tanks	2017	7,275 gal	New	
53S	53E	Liquid Soap A and B Tanks	2017	7,925 gal	New	
38S 40S	38E 40E	Liquid Soap A and B Tanks Liquid Soap A and B Tanks Liquid Soap A and B Tanks	2017 2017	396 gal 396 gal	New New	
41S	41E	Liquid Soap A and B Tanks	2017	396 gal	New	
42S	42E	Liquid Soap A and B Tanks	2017	396 gal	New	
43S	43E	Liquid Soap A and B Tanks	2017	396 gal	New	
44S 45S	44E 45E	Liquid Soap A and B Tanks Liquid Soap A and B Tanks	2017 2017 2017	396 gal 396 gal	New New	
46S	46E	Liquid Soap A and B Tanks	2017	396 gal	New	
47S	47E	Liquid Soap A and B Tanks	2017	396 gal	New	
51S 52S	51E 52E	Liquid Soap A and B Tanks Liquid Soap A and B Tanks	2017 2017	396 gal 396 gal	New New	
54S	54E	Liquid Soap A and B Tanks	2017	660 gal	New	
55S	55E	Liquid Soap A and B Tanks	2017	396 gal	New	
57S	57E	Liquid Soap A and B Tanks	2017	1,057 gal	New	
59S 60S	59E 60E	Liquid Soap A and B Tanks Liquid Soap A and B Tanks	2017 2017 2017	396 gal 132 gal	New New	
61S	61E	Liquid Soap A and B Tanks	2017	396 gal	New	
63S	63E	Liquid Soap A and B Tanks	2017	396 gal	New	
64S	64E	Liquid Soap A and B Tanks	2017	396 gal	New	
65S	65E	Liquid Soap A and B Tanks	2017	396 gal	New	
66S	66E	Liquid Soap A and B Tanks	2017	396 gal	New	
67S	67E	Liquid Soap A and B Tanks	2017	396 gal	New	
68S	68E	Liquid Soap A and B Tanks	2017	396 gal	New	
69S 70S	69E 70E	Liquid Soap A and B Tanks Liquid Soap A and B Tanks	2017 2017 2017	396 gal 396 gal	New New	
71S	71E	Liquid Soap A and B Tanks	2017	396 gal	New	
72S	72E	Liquid Soap A and B Tanks	2017	396 gal	New	
73S	73E	Liquid Soap A and B Tanks	2017	396 gal	New	
74S	74E	Liquid Soap A and B Tanks	2017	396 gal	New	
75S	75E	Liquid Soap A and B Tanks	2017	396 gal	New	
76S	76E	Liquid Soap A and B Tanks	2017	396 gal	New	
77S	77E	Liquid Soap A and B Tanks	2017	396 gal	New	
87S 88S	87E 88E	Liquid Soap A and B Tanks Liquid Soap A and B Tanks	2017 2017 2017	1,585 gal 1,585 gal	New New	
89S	89E	Liquid Soap A and B Tanks	2017	1,585 gal	New	
90S	90E	Liquid Soap A and B Tanks	2017	1,585 gal	New	
91S	91E	Liquid Soap A and B Tanks	2017	1,585 gal	New	
92S	92E	Liquid Soap A and B Tanks	2017	1,585 gal	New	
93S	93E	Liquid Soap A and B Tanks	2017	1,585 gal	New	
94S	94E	Liquid Soap A and B Tanks	2017	1,585 gal	New	
94bS	94bE	Liquid Soap A and B Tanks	2017	1,585 gal	New	
940S 94cS 94dS	946E 94cE 94dE	Liquid Soap A and B Tanks Liquid Soap A and B Tanks Liquid Soap A and B Tanks	2017 2017 2017	1,585 gal 1,585 gal 1,585 gal	New New	
94eS 95S	94eE 95E	Liquid Soap A and B Tanks Liquid Soap A and B Tanks	2017 2017 2017	1,585 gal 1,585 gal	New New	
96S	96E	Liquid Soap A and B Tanks	2017	1,585 gal	New	
97S	97E	Liquid Soap A and B Tanks	2017	1,585 gal	New	
98S	98E	Liquid Soap A and B Tanks	2017	1,585 gal	New	
99S	99E	Liquid Soap A and B Tanks	2017	1,585 gal	New	
100S	100E	Liquid Soap A and B Tanks	2017	1,585 gal	New	
101S	101E	Liquid Soap A and B Tanks	2017	1,585 gal	New	
102S	102E	Liquid Soap A and B Tanks	2017	1,585 gal	New	
102S	102E	Liquid Soap A and B Tanks	2017	1,585 gal	New	
103S	103E	Liquid Soap A and B Tanks	2017	1,585 gal	New	
104S	104E	Liquid Soap A and B Tanks	2017	1,585 gal	New	
105S	105E	Liquid Soap A and B Tanks	2017	1,585 gal	New	
106S	106E	Liquid Soap A and B Tanks	2017	1,585 gal	New	
107S	107E	Liquid Soap A and B Tanks	2017	1,585 gal	New	
108S	108E	Liquid Soap A and B Tanks	2017	1,585 gal	New	
109S 110S 111S	109E 110E 111E	Liquid Soap A and B Tanks Liquid Soap A and B Tanks Liquid Soap A and B Tanks	2017 2017 2017	1,585 gal 1,585 gal	New New New	
111S	111E	Liquid Soap A and B Tanks	2017	1,585 gal	New	
112S	112E	Liquid Soap A and B Tanks	2017	1,585 gal	New	
113S	113E	Liquid Soap A and B Tanks	2017	1,585 gal	New	
114S 114S 115S	114E 115E	Liquid Soap A and B Tanks Liquid Soap A and B Tanks Liquid Soap A and B Tanks	2017 2017 2017	1,585 gal 1,585 gal	New New	
116S	116E	Liquid Soap A and B Tanks	2017	1,585 gal	New	
117S	117E	Liquid Soap A and B Tanks	2017	1,585 gal	New	
118S 119S	118E 119E	Liquid Soap A and B Tanks Liquid Soap A and B Packing/Filling	2017 2017	1,585 gal 139,798,617 gal/yr	New New	-
120S 121S 122S	120E	Mixer 1 for Premix Process 1 Mixer 2 for Premix Process 1 Premix Tank 1 for Premix Process 1	2017 2017 2017	1,182,600,000 scf/yr	New New New	3C
122S 123S 124S		Premix Tank 1 for Premix Process 1 Premix Tank 2 for Premix Process 1 Mixer 1 for Liquid Soap B Process 1	2017 2017 2017		New New	
125S 126S	121E	Process Tank 1 for Liquid Soap B Process 1 Process Tank 2 for Liquid Soap B Process 1	2017 2017	2,496,600,000 scf/yr	New New	4C
127S 128S		Process Tank 3 for Liquid Soap B Process 1 Mixer 1 for Liquid Soap B Process 2	2017 2017		New New	
129S 130S	122E	Process Tank 1 for Liquid Soap B Process 2 Process Tank 2 for Liquid Soap B Process 2 Process Tank 2 for Liquid Soap B Process 2	2017 2017	2,496,600,000 scf/yr	New New	5C
131S 132S 133S		Process Tank 3 for Liquid Soap B Process 2 Mixer 1 for Liquid Soap B Process 3 Process Tank 1 for Liquid Soap B Process 3	2017 2017 2017		New New New	
133S 134S 135S	123E	Process Tank 1 for Liquid Soap B Process 3 Process Tank 2 for Liquid Soap B Process 3 Process Tank 3 for Liquid Soap B Process 3	2017 2017 2017	1,655,640,000 scf/yr	New New New	6C
136S 137S	124E	Preweigh Station 1 Preweigh Station 2	2017 2017 2017	E3E 600 00051	New New	7C
138S 139S	124E	Preweigh Station 3 Preweigh Station 4	2017 2017	525,600,000 scf/yr	New New	/(
140S 141S	1055	Preweigh Station 5 Preweigh Station 6 Preweigh Station 7	2017 2017	F3F 600 000 - 57	New New	66
142S 143S	125E	Preweigh Station 7 Preweigh Station 8	2017 2017	525,600,000 scf/yr	New New	8C

### Attachment I **Emission Units Table**

### $(includes\ all\ emission\ units\ and\ air\ pollution\ control\ devices\ that\ will\ be\ part\ of\ this\ permit\ application\ review,\ regardless\ of\ permitting\ status)$

Emission Unit	Emission Point ID <sup>2</sup>	Emission Unit Description	Year Installed/ Modified	Design Capacity	Type <sup>3</sup> and date of Change	Control Device <sup>4</sup>
145S 146S	126E	Hot Mix Tank for Liquid Soap A Process 1 Mixer 1 for Liquid Soap A Process 1	2017 2017	20,611,765 cf/year	New New	14C
147S 148S	127E	Process Tank 1 for Liquid Soap A Process 1 Process Tank 2 for Liquid Soap A Process 1	2017 2017	919,800,000 scf/yr	New New	9C
149S 150S	126E	Hot Mix Tank for Liquid Soap A Process 2 Mixer 1 for Liquid Soap A Process 2	2017 2017 2017	20,611,765 cf/year	New New	14C
151S	128E	Process Tank 1 for Liquid Soap A Process 2	2017	919,800,000 scf/yr	New	10C
152S 153S	126E	Process Tank 2 for Liquid Soap A Process 2 Hot Mix Tank for Liquid Soap A Process 3	2017 2017	20,611,765 cf/year	New New	14C
154S 155S	129E	Mixer 1 for Liquid Soap A Process 3 Process Tank 1 for Liquid Soap A Process 3	2017 2017	919,800,000 scf/yr	New New	11C
156S 157S	126E	Process Tank 2 for Liquid Soap A Process 3  Hot Mix Tank for Liquid Soap A Process 4	2017 2017	20,611,765 cf/year	New New	14C
158S 159S	130E	Mixer 1 for Liquid Soap A Process 4 Process Tank 1 for Liquid Soap A Process 4	2017 2017	1,603,080,000 scf/yr	New New	12C
160S	1301	Process Tank 2 for Liquid Soap A Process 4	2017	1,003,000,000 307,91	New	120
161S 162S	131E	Process Tank 1 for Liquid Soap B Process 4 Process Tank 2 for Liquid Soap B Process 4	2017 2017	735,840,000 scf/yr	New New	13C
163S 164S	132E 133E	Dry Consumer Laundry and Cleaning Products A Tanks Dry Consumer Laundry and Cleaning Products A Tanks	2017 2017	42,879 gal 37,641 gal	New New	
165S 166S	134E 135E	Dry Consumer Laundry and Cleaning Products A Tanks Dry Consumer Laundry and Cleaning Products A Tanks	2017 2017	6,809 gal 396 gal	New New	
167S 168S	136E 137E	Dry Consumer Laundry and Cleaning Products A Tanks Dry Consumer Laundry and Cleaning Products A Tanks	2017 2017	396 gal 396 gal	New New	
169S 170S	138E 139E	Dry Consumer Laundry and Cleaning Products A Tanks Dry Consumer Laundry and Cleaning Products A Tanks	2017 2017 2017	181 gal 181 gal	New New	
171S	140E	Dry Consumer Laundry and Cleaning Products A Tanks	2017	181 gal	New	
172S 173S	141E 142E	Dry Consumer Laundry and Cleaning Products A Tanks Dry Consumer Laundry and Cleaning Products A Tanks	2017 2017	181 gal 181 gal	New New	
174S 175S	143E 144E	Dry Consumer Laundry and Cleaning Products A Tanks Dry Consumer Laundry and Cleaning Products A Tanks	2017 2017	181 gal 181 gal	New New	
176S 177S	145E 146E	Dry Consumer Laundry and Cleaning Products A Tanks Dry Consumer Laundry and Cleaning Products A Tanks	2017 2017	181 gal 181 gal	New New	
178S	147E	Dry Consumer Laundry and Cleaning Products A Tanks	2017	181 gal	New	
179S 180S	148E 149E	Dry Consumer Laundry and Cleaning Products A Tanks Dry Consumer Laundry and Cleaning Products A Tanks	2017 2017	181 gal 181 gal	New New	
181S 182S	150E 151E	Dry Consumer Laundry and Cleaning Products A Tanks Dry Consumer Laundry and Cleaning Products A Tanks	2017 2017	<del>181 gal</del> <del>181 gal</del>	New New	
<del>183S</del> <del>184S</del>	152E 153E	Dry Consumer Laundry and Cleaning Products A Tanks Dry Consumer Laundry and Cleaning Products A Tanks	2017 2017	<del>181 gal</del> <del>181 gal</del>	New New	-
185S 186S	154E 155E	Dry Consumer Laundry and Cleaning Products A Tanks Dry Consumer Laundry and Cleaning Products A Tanks	2017 2017 2017	181 gal 181 gal	New New	
<del>187S</del>	156E	Dry Consumer Laundry and Cleaning Products A Tanks	<del>2017</del>	<del>181 gal</del>	New	-
<del>188S</del> 189S	157E 158E	Dry Consumer Laundry and Cleaning Products A Tanks Dry Consumer Laundry and Cleaning Products A Particulate Control 1	2017 2017	<del>181 gal</del> 17,450 scfm	New New	15C
190S 191S	159E 160E	Dry Consumer Laundry and Cleaning Products A Particulate Control 2 Dry Consumer Laundry and Cleaning Products A Particulate Control 3	2017 2017	17,450 scfm 17,450 scfm	New New	16C 17C
192S 193S	161E 162E	Dry Consumer Laundry and Cleaning Products A Particulate Control 4 Dry Consumer Laundry and Cleaning Products A Particulate Control 5	2017 2017	17,450 scfm 17,450 scfm	New New	18C 19C
194S 195S	163E 164E	Dry Consumer Laundry and Cleaning Products A Particulate Control 6 Dry Consumer Laundry and Cleaning Products A Additive 1	2017	8,000 scfm 109 ft/s	New New	20C
196S	165E	Boiler 1	2017	62 MMBtu/hr	New	
197S 198S	166E 167E	Boiler 2 Boiler 3	2017 2017	62 MMBtu/hr <del>31 MMBtu/hr</del> 33 MMBtu/hr	New New	
199S 200S	168E 169E	Temporary Boiler Cooling Tower	2017 2017	11 MMBtu/hr 331 Mgal/hr	New New	
201S 202S	170E 171E	Cooling Tower Cooling Tower	2017 2017	792 Mgal/hr 212 Mgal/hr	New New	
203S 204S	172E 173E	Fire Pump Engine Fire Pump Engine	2017 2017	<del>311 hp</del> 399 hp <del>311 hp</del> 399 hp	New New	
205S 206S	174E 175E	Backup/Standby Power Generator Backup/Standby Power Generator	2017 2017	350 kW 350 kW	New New	
207S 208S	176E 177E	Backup/Standby Power Generator Fuel Tanks	2017 2017 2017	350 kW 350 kW 5,000 gal	New New	
210S	179E	Warehouse Heater	2017	3.05 MMBtu/hr	New	
211S 212S	180E 181E	Warehouse Heater Warehouse Heater	2017 2017	3.05 MMBtu/hr 3.05 MMBtu/hr	New New	
213S 214S	182E 183E	Warehouse Heater Warehouse Heater	2017 2017	3.05 MMBtu/hr 3.05 MMBtu/hr	New New	
215S 216S	184E 185E	Warehouse Heater Water Pretreatment Chemicals	2017 2017	3.05 MMBtu/hr 174,928 kg/yr	New New	
217S 218S	186E 187E	Railcar Unloading 1 Railcar Unloading 2	2017 2017		New New	21C 22C
219S 220S	188E 189E	Railcar Unloading 3 Railcar Unloading 4	2017 2017	100,000 tons/year	New New	23C 24C
221S	190E	Railcar Unloading 5	2017		New	25C
222S 223S	191E 192E	Storage Silo 1 Storage Silo 2	2017 2017		New New	
224S 225S	193E 194E	Storage Silo 3 Storage Silo 4	2017 2017		New New	
226S 227S	195E 196E	Storage Silo 5 Storage Silo 6	2017 2017		New New	
228S 229S	197E 198E	Storage Silo 7 Storage Silo 8	2017 2017		New New	
230S	199E	Storage Silo 9	2017		New	
231S 232S	200E 201E	Storage Silo 10 Storage Silo 11	2017 2017		New New	
233S 234S	202E 203E	Storage Silo 12 Storage Silo 13	2017 2017	100,000 tons/year	New New	
235S 236S	204E 205E	Storage Silo 14 Storage Silo 15	2017 2017		New New	
237S 238S	206E 207E	Storage Silo 16 Storage Silo 17	2017		New New	
239S 240S	208E 209E	Storage Silo 18 Storage Silo 19	2017 2017 2017		New New	
241S	210E	Storage Silo 20	2017		New	
242S 243S	211E 212E	Storage Silo 21 Storage Silo 22	2017 2017		New New	
244S 245S	213E 214E	Storage Silo 23 Storage Silo 24	2017 2017		New New	
246S 247S	215E 216E	Plastic Regrind Forming VOC	2017 2017	32,000 tons/year 100,000 tons/year	New New	26C 
248S	217E	Parts Washing/Process Cleaning	2017	6 tons/year	New	
249S 250S	218E 219E	Space Heater 1 Space Heater 2	2017	5 MMBtu/hr 5 MMBtu/hr	New New	
251S 252S	220E 221E	Space Heater 3 Space Heater 4	2017 2017	2.5 MMBtu/hr 2.5 MMBtu/hr	New New	
253S 254S	222E 223E	Space Heater 5 Space Heater 6	2017 2017	1 MMBtu/hr 1 MMBtu/hr	New New	
255S 256S	224E 225E	Cooling Tower Backup Generator	2017 2017	7,000 gpm 0.2 MMBtu/hr	New New	
257S	226E	Printing Ink	2017	3,430 lb/year	New	
258S 259S	227E 228E	Case Packing Glue Liquid Soap A and B Tanks	2017	690,080 lb/year 79,252 gal	New New	
260S 261S	229E 230E	Liquid Soap A and B Tanks Liquid Soap A and B Tanks	2017 2017	79,252 gal 79,252 gal	New New	
262S 263S	232E 233E	Dry Consumer Laundry and Cleaning Products A Flexible Perfume Delivery Backup/Standby Power Generator	2017 2017	30 gal 83 kW	New New	

<sup>263</sup>S 233E Backup/Standby Power Generator

1) For Emission Units (or Sources) use the following numbering system:15, 25, 35,... or other appropriate designation

2) For Emission Points use the following numbering system:1E, 2E, 3E, ... or other appropriate designation.

3) New, modification, removal

4) For Control Devices use the following numbering system: 1C, 2C, 3C,... or other appropriate designation.

		Attachment I
		Sources of Minor Significance Emission Units Table (<0.5 tpy)
Emission Unit ID <sup>1</sup>	Emission Point ID <sup>2</sup>	Emission Unit Description
3S-5S	3E-5E	Surfactant Tanks
7S-18S	7E-18E	Surfactant Tanks
19S	19E	Surfactant Bulk Liquid Transfer
20S-31S	20E-31E	Liquid Soap A and B Tanks
33S-37S	33E-37E	Liquid Soap A and B Tanks
38S-118S	38E-118E	Liquid Soap A and B Tanks
259S-261S	228E-230E	Liquid Soap A and B Tanks <sup>1</sup>
119S	119E	Liquid Soap A and B Packing/Filling
161S	131E	Process Tank 1 for Liquid Soap B Process 4
162S	131E	Process Tank 2 for Liquid Soap B Process 4
163S-S	163E-E	Dry Consumer Laundry and Cleaning Products A Tanks
189S	189E	Dry Consumer Laundry and Cleaning Products A Particulate Control 1
190S	190E	Dry Consumer Laundry and Cleaning Products A Particulate Control 2
191S	191E	Dry Consumer Laundry and Cleaning Products A Particulate Control 3
208S	177E	Fuel Tanks
n/a	n/a	Haul Roads
n/a	n/a	Steam Venting System for Sanitization of Equipment for Liquid Soap A and B
n/a	n/a	PM emissions from forming operations - occur inside building, no access to open air (45 CSR 7)
n/a	n/a	PM emissions from transportation operations - occur inside building, no access to open air (45 CSR 7)
n/a	n/a	Printing Ink
n/a	n/a	Case Packing Glue
n/a	n/a	Additional de minimis sources from 45 CSR 13, Table 45-13b

<sup>1)</sup> Liquid soap tanks are considered de minimis sources, per 45 CSR 13, Table 45-13b, #49.

# **ATTACHMENT J**

**Emission Points Data Summary Sheet** 

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							ttachment J INTS SUMMAF	RY SHEET							
						Table 1	1: Emissions Da	ta							
Emission Point ID No. (Must match Emission Units Table & Plot Plan)	Emission Point Type <sup>1</sup>	Emission Unit Vented Through Point (Must match Emission U Table & Plot Plan)				Vent Time for Emission Unit (Chemical Processes only)		All Regulated Pollutants - Chemical Name/CAS3 (Speciate VOCs	Maximum Potential Uncontrolled Emissions <sup>4</sup>		Maximum Potential Controlled Emissions <sup>5</sup>		Emission Form or Phase (At exit conditions, Solid, Liquid or	Est. Method Used <sup>6</sup>	Emission Concentratio n <sup>7</sup> (ppmv or
		ID No.	Source	ID No.	Device Type	Short Term <sup>2</sup>	Max (hr/yr)	and HAPS)	lb/hr	ton/yr	lb/hr	ton/yr	Gas/Vapor)		mg/m <sup>4</sup> )
1E	Upward Vertical Stack	1C	Surfactant Making Process	N/A	N/A	N/A	N/A	$\begin{array}{c} NO_X \\ CO \\ SO_2 \\ VOC \\ PM \\ PM_{10}/PM_{2.5} \\ H_2SO_4 \\ HAP \end{array}$			9.24E-01 6.86E-01 1.0 0.9 3.5 3.5 2.5 1.5E-02	2.3 1.4E-01 7.0E-01 2.1 11.9 11.9 9.8 5.3E-04	Gas	0 - Vendor and AP-42	
2E	Upward Vertical Stack	2C	Surfactant Making Process	N/A	N/A	N/A	N/A	$\begin{array}{c} \mathrm{NO_{X}} \\ \mathrm{CO} \\ \mathrm{SO_{2}} \\ \mathrm{VOC} \\ \mathrm{PM} \\ \mathrm{PM_{10}/PM_{2.5}} \\ \mathrm{H_{2}SO_{4}} \\ \mathrm{HAP} \end{array}$			0.9 6.9E-01 1.0 0.9 3.5 3.5 2.5 1.5E-02	2.3 0.1 0.7 2.1 9.8 9.8 7.8 5.33E-04	Gas	O - Vendor and AP-42	
3E-18E	Upward Vertical Stack	N/A	Surfactant Tanks	N/A	N/A	N/A	N/A	VOC  H <sub>2</sub> SO <sub>4</sub> HAP	2.8E-01 3.5E-04 2.1E-02	1.2 1.5E-03 9.1E-02	2.8E-01 3.5E-04 2.1E-02	1.2 1.5E-03 9.1E-02	Gas Gas Gas	O - EPA Tanks O - EPA Tanks EE	
19E	Upward Vertical Stack	N/A	Surfactant Bulk Liquid Transfer	N/A	N/A	N/A	N/A	VOC H <sub>2</sub> SO <sub>4</sub> PM <sub>10</sub> /PM <sub>2.5</sub>	1.2E-02 5.5E-04 5.5E-04	5.2E-02 2.4E-03 2.4E-03	1.2E-02 5.5E-04 5.5E-04	5.2E-02 2.4E-03 2.4E-03	Gas Gas Gas	0 - AP-42 0 - AP-42 0 - AP-42	
20E-118E and 228E - 230E	Upward Vertical Stack	N/A	Liquid Soap A and B Tanks	N/A	N/A	N/A	N/A	VOC	4.13E-01	2.5	4.13E-01	2.5	Gas	O - EPA Tanks	
119E	Upward Vertical Stack	N/A	Liquid Soap A and B Packing/Filling	N/A	N/A	N/A	N/A	VOC	2.5E-04	1.1E-03	2.5E-04	1.1E-03	Gas	0 - AP-42	
120E	Upward Vertical Stack	3C	Premix Process 1	N/A	N/A	N/A	N/A	PM/PM <sub>10</sub> /PM <sub>2.5</sub>			3.9E-01 2.0E-01	1.69 8.59E-01	Gas Gas	EE EE	
121E	Upward Vertical Stack	4C	Liquid Soap B Process 1	N/A	N/A	N/A	N/A	PM/PM <sub>10</sub> /PM <sub>2.5</sub>			8.1E-01 3.64E-01	3.6	Gas Gas	EE EE	
122E	Upward Vertical Stack	5C	Liquid Soap B Process	N/A	N/A	N/A	N/A	PM/PM <sub>10</sub> /PM <sub>2.5</sub>			8.1E-01	3.6	Gas	EE	
123E	Upward Vertical Stack	6C	Liquid Soap B Process	N/A	N/A	N/A	N/A	VOC  PM/PM <sub>10</sub> /PM <sub>2.5</sub> VOC			4.40E-01 5.4E-01 3.64E-01	1.9 2.4 1.6	Gas Gas Gas	EE EE EE	
124E	Upward	7C	Preweigh Group 1	N/A	N/A	N/A	N/A	PM/PM <sub>10</sub> /PM <sub>2.5</sub>			1.7E-01	7.51E-01	Gas	EE	
125E	Vertical Stack Upward	8C	Preweigh Group 2	N/A	N/A	N/A	N/A	VOC PM/PM <sub>10</sub> /PM <sub>2.5</sub>			 1.7E-01	7.51E-01	Gas Gas	EE EE	
1232 127E - 130E	Vertical Stack Upward	9C - 12C	Liquid Soap A	N/A	N/A	N/A	N/A	VOC PM/PM <sub>10</sub> /PM <sub>2.5</sub>			1.42	6.2	Gas Gas	EE EE	
127.2 1302	Vertical Stack	,5 125	Process 1-4	11/11	11/11	,11	,11	VOC			31.9	27.4	Gas	MB	

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						ttachment J INTS SUMMAF	RY SHEET							
					Table :	1: Emissions Da	ta							
Emission Point Type <sup>1</sup>	Point (Must match Emission Units		Air Pollution Control Device (Must match Emission Units Table & Plot Plan)		Vent Time for Emission Unit (Chemical Processes only)		All Regulated Pollutants - Chemical Name/CAS3	Maximum Potential Uncontrolled Emissions <sup>4</sup>		Maximum Potential Controlled Emissions <sup>5</sup>		conditions,	Est. Method Used <sup>6</sup>	Emission Concentratio n <sup>7</sup> (ppmv or
	ID No.	Source	ID No.	Device Type	Short Term <sup>2</sup>	Max (hr/yr)	and HAPS)	lb/hr	ton/yr	lb/hr	ton/yr	Gas/Vapor)		mg/m <sup>4</sup> )
Upward Vertical Stack	13C	Liquid Soap B Process	N/A	N/A	N/A	N/A	PM/PM <sub>10</sub> /PM <sub>2.5</sub>			2.4E-01	1.05	Gas	EE	
		Hot Mix Tanks for					PM <sub>10</sub> /PM <sub>2.5</sub> SO <sub>2</sub>			1.5E-02 1.4E-03	6.5E-02 6.2E-03	Gas Gas	0 - AP-42 0 - AP-42	
Upward Vertical Stack	14C	Liquid Soap A, Process 1-4	N/A	N/A	N/A	N/A	VOC CO			2.4E-01 1.24 1.33 1.2E-06	1.1 5.4 5.8 5.2E-06	Gas Gas Gas Gas	MB O - Vendor	
Upward Vertical Stack	N/A	Dry Consumer Laundry and Cleaning Products A Tanks	N/A	N/A	N/A	N/A	VOC	6.87E-01	1.06E+00	6.9E-01	1.1E+00	Gas	EE	
Upward Vertical Stack	15C	Dry Consumer Laundry and Cleaning Products A Particulate Control 1	N/A	N/A	N/A	N/A	PM/PM <sub>10</sub> /PM <sub>2.5</sub>			6.9E-02	3.0E-01	Gas	EE	
Upward Vertical Stack	16C	Products A	N/A	N/A	N/A	N/A	PM/PM <sub>10</sub> /PM <sub>2.5</sub>			4.7E-02	2.1E-01	Gas	EE	
Upward Vertical Stack	17C	Products A	N/A	N/A	N/A	N/A	PM/PM <sub>10</sub> /PM <sub>2.6</sub>			4.5E-02	2.0E-01	Gas	EE	
Upward Vertical Stack	18C	Products A	N/A	N/A	N/A	N/A	PM/PM <sub>10</sub> /PM <sub>2.7</sub>			1.54E+00	6.8	Gas	EE	
Upward Vertical Stack	19C	Products A	N/A	N/A	N/A	N/A	PM/PM <sub>10</sub> /PM <sub>2.5</sub>			1.54E+00	6.8	Gas	EE	
Upward Vertical Stack	20C	Products A	N/A	N/A	N/A	N/A	PM/PM <sub>10</sub> /PM <sub>2.5</sub>			5.57E-01	2.4	Gas	EE	
Upward Vertical Stack	N/A			N/A	N/A	N/A	VOC	3.6E-01	1.6	2.0	8.7	Gas	EE	
Upward Vertical Stack	N/A	Boiler 1	N/A	N/A	N/A	N/A	$\begin{array}{c} NO_X \\ CO \\ SO_2 \\ VOC \\ PM \\ PM_{10} \\ PM_{2.5} \end{array}$	4.5 2.3 3.7E-02 2.2E-01 2.4E-01 4.7E-01	19.8 10.0 0.2 1.0 1.0 2.0 2.0	4.5 2.3 3.7E-02 2.2E-01 2.4E-01 4.7E-01	19.8 10.0 1.6E-01 9.8E-01 1.03 2.04 2.04	Gas	0 - AP-42	
	Upward Vertical Stack  Upward Vertical Stack	Emission Point Table Type¹  ID No.  Upward Vertical Stack  Upward Vertical Stack  Upward Vertical Stack  Upward Vertical Stack  15C  Upward Vertical Stack  16C  Upward Vertical Stack  17C  Upward Vertical Stack  19C  Upward Vertical Stack  19C  Upward Vertical Stack  Upward Vertical Stack  Inc  Inc  Inc  Inc  Inc  Inc  Inc  I	Emission Point Type¹  ID No. Source  Upward Vertical Stack  ID No. Source  Id quid Soap B Process 4  Hot Mix Tanks for Liquid Soap A, Process 1-4  Products A Tanks  Dry Consumer Laundry and Cleaning Products A Tanks  ID Pry Consumer Laundry and Cleaning Products A Particulate Control 1  Products A Particulate Control 2  Upward Vertical Stack  Inc  Inc  Inc  Inc  Inc  Inc  Inc  I	Emission Point Type <sup>1</sup> ID No. Source ID No.  Upward Vertical Stack	Emission Point Type 1  ID No. Source ID No. Device Type  Upward Vertical Stack 13C Liquid Soap B Process 4 N/A N/A  Upward Vertical Stack 14C Liquid Soap A Process 1-4  Upward Vertical Stack 14C Dry Consumer Laundry and Cleaning Products A Particulate Control 2  Upward Vertical Stack 15C Laundry and Cleaning Products A Particulate Control 3  Upward Vertical Stack 17C Laundry and Cleaning Products A Particulate Control 3  Upward Vertical Stack 17C Laundry and Cleaning Products A Particulate Control 3  Upward Vertical Stack 18C Laundry and Cleaning Products A Particulate Control 3  Upward Vertical Stack 18C Laundry and Cleaning Products A Particulate Control 3  Upward Vertical Stack 18C Laundry and Cleaning Products A Particulate Control 3  Upward Vertical Stack 19C Laundry and Cleaning Products A Particulate Control 5  Upward Vertical Stack 19C Laundry and Cleaning Products A Particulate Control 5  Dry Consumer Laundry and Cleaning Products A Particulate Control 5  Upward Vertical Stack 19C Laundry and Cleaning Products A Particulate Control 5  Dry Consumer Laundry and Cleaning Products A Particulate Control 5  Dry Consumer Laundry and Cleaning Products A Particulate Control 5  Dry Consumer Laundry and Cleaning Products A Particulate Control 6  Upward Vertical Stack 20C Laundry and Cleaning Products A Particulate Control 6  Upward Vertical Stack N/A Laundry and Cleaning Products A Particulate Control 6	Emission Point Type Point (Must match Emission Units Table & Plot Plan)  Upward Vertical Stack  Particulate Control 5  Dry Consumer Laundry and Cleaning Products A Particulate Control 5  Particulate Control 5  Particulate Control 5  Particulate Control 5  Products A Particulate Control 6  Products A Particulate Control 6  Upward Vertical Stack  N/A N/A N/A  N/A  N/A  N/A  N/A  N/A	Emission Point T Submate Table 1: Emissions Da Table 2: Emission Unit Table & Plot Plan)  Emission Unit Vented Through This Point (Must match Emission Units Table & Plot Plan)  Upward Vertical Stack  Upward Vertic	Emission Point   Front   Fro	Emission Foliat	Part	Table	The color   The	Part   Part	Published Property   Publish

<u> </u>							ttachment J INTS SUMMAR	Y SHEET							
<del></del>							1: Emissions Da								
Emission Point ID No. (Must match Emission Units Table & Plot Plan)	Emission Point ${ m Type}^1$	Point (Must	Emission Unit Vented Through This Point (Must match Emission Units Table & Plot Plan)						Maximum Potential Uncontrolled Emissions <sup>4</sup>		Maximum Potential Controlled Emissions <sup>5</sup>		Emission Form or Phase (At exit conditions, Solid, Liquid or	Est. Method Used <sup>6</sup>	Emission Concentratio n <sup>7</sup> (ppmv or mg/m <sup>4</sup> )
		ID No.	Source	ID No.	Device Type	Short Term <sup>2</sup>	Max (hr/yr)	(Speciate VOCs and HAPS)	lb/hr	ton/yr	lb/hr	ton/yr	Gas/Vapor)		mg/m )
								$H_2SO_4$	4.0E-04	0.0	4.0E-04	1.8E-03			
								HAP	1.1E-01	0.5	1.1E-01	5.0E-01	1		
								NO <sub>X</sub>	4.5 2.3	19.8 10.0	4.5 2.3	19.8 10.0	-		
								SO <sub>2</sub>	3.7E-02	1.6E-01	3.7E-02	1.6E-01	-		
	Upward							VOC	2.2E-01	1.0	2.2E-01	1.0	]		
166E	Vertical Stack	N/A	Boiler 2	N/A	N/A	N/A	N/A	PM PM <sub>10</sub>	2.4E-01 4.7E-01	1.0 2.0	2.4E-01 4.7E-01	1.0 2.0	Gas	0 - AP-42	
								PM <sub>2.5</sub>	4.7E-01 4.7E-01	2.0	4.7E-01 4.7E-01	2.0	-		
								H <sub>2</sub> SO <sub>4</sub>	4.0E-04	1.8E-03	4.0E-04	1.8E-03	1		
			ļ	1				НАР	1.1E-01	5.0E-01	1.1E-01	5.0E-01	ļ		
								$NO_X$	2.3	10.0	2.3	10.0			
								CO	1.2	5.3	1.2	5.3	_		
	Upward							SO <sub>2</sub> VOC	1.9E-02 1.2E-01	8.4E-02 5.1E-01	1.9E-02 1.2E-01	8.4E-02 5.1E-01	-	0 - AP-42	
167E	Vertical Stack	N/A	Boiler 3	N/A	N/A	N/A	N/A	PM	2.4E-01	1.1	2.4E-01	1.1	Gas		
								$PM_{10}$	2.4E-01	1.1	2.4E-01	1.1			
								PM <sub>2.5</sub>	2.4E-01	1.1	2.4E-01	1.1	4		
								H <sub>2</sub> SO <sub>4</sub> HAP	2.1E-04 6.0E-02	9.3E-04 2.6E-01	2.1E-04 6.0E-02	9.3E-04 2.6E-01	-		
168E	Upward Vertical Stack	N/A	Temporary Boiler	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Gas	N/A	
	Upward							PM	1.337	5.855	1.337	5.855			
169E-171E	Vertical Stack	N/A	Cooling Tower	N/A	N/A	N/A	N/A	PM <sub>10</sub> PM <sub>2.5</sub>	6.28E-01 5.24E-04	2.750 2.30E-03	6.28E-01 5.24E-04	2.750 2.30E-03	Gas	0 - AP-42	
								NO <sub>X</sub>	4.6	1.1E+00	4.6	1.1E+00			
								СО	1.4	3.5E-01	1.4	3.5E-01	-		
	Harmand							SO <sub>2</sub>	2.5E-03	6.1E-04	2.5E-03	6.1E-04	1		
172E-173E	Upward Vertical Stack	N/A	Fire Pump Engine	N/A	N/A	N/A	N/A	VOC	1.8E-01	4.4E-02	1.8E-01	4.4E-02	Gas	0 - Vendor	
								PM PM <sub>10</sub>	1.8E-01 1.8E-01	4.4E-02 4.4E-02	1.8E-01 1.8E-01	4.4E-02 4.4E-02	-		
								PM <sub>2.5</sub>	1.8E-01	4.4E-02	1.8E-01	4.4E-02	-		
								HAP	3.6E-02	8.9E-03	3.6E-02	8.9E-03			
								$NO_X$	11.1	2.8	11.1	2.8			
								CO	1.9	4.7E-01	1.9	4.7E-01	]		
174E-176E and 233E	Upward Vertical Stack	N/A	Backup/Standby	N/A	N/A	N/A	N/A	SO <sub>2</sub> VOC	4.8E-03 1.6E-01	1.2E-03 4.0E-02	4.78E-03 1.58E-01	1.2E-03 4.0E-02	Gas	0 - Vendor	
	vertical Stack		Power Generator					PM	1.6E-01 1.8E-01	4.0E-02 4.4E-02	1.58E-01 1.75E-01	4.0E-02 4.4E-02	1		
								$PM_{10}$	1.7E-01	4.2E-02	1.69E-01	4.2E-02	]		
								PM <sub>2.5</sub>	1.7E-01	4.2E-02	1.69E-01	4.2E-02	4		
	Upward	****	n		****			HAP	7.0E-02	1.7E-02	7.00E-02	1.7E-02		O - EPA	
177E	Vertical Stack	N/A	Fuel Tanks	N/A	N/A	N/A	N/A	VOC	5.2E-04	2.3E-03	5.2E-04	2.3E-03	Gas	Tanks	
								NO <sub>X</sub>	9.0E-01	3.93	9.0E-01	3.9			
								CO SO <sub>2</sub>	1.51 1.1E-02	6.60 4.7E-02	1.51 1.1E-02	6.60 4.7E-02	-		
<b>.</b>	Upward		l ,					VOC	9.9E-02	4.7E-02 4.3E-01	9.9E-02	4.7E-02 4.3E-01	† <sub>-</sub>		
179E-184E	Vertical Stack	N/A	Warehouse Heater	N/A	N/A	N/A	N/A	PM	1.4E-01	6.0E-01	1.4E-01	6.0E-01	Gas	0 - AP-42	
								PM <sub>10</sub>	1.4E-01	6.0E-01	1.4E-01	6.0E-01	4		
								PM <sub>2.5</sub>	1.4E-01	6.0E-01	1.4E-01	6.0E-01	-		
								H <sub>2</sub> SO <sub>4</sub> HAP	1.2E-04 3.4E-02	5.1E-04 1.5E-01	1.2E-04 3.4E-02	5.1E-04 1.5E-01	-		-

							ttachment J								
							INTS SUMMAR								
						Table 1	l: Emissions Da	ta							
Emission Point ID No. (Must match Emission Units Table & Plot Plan)	Emission Point Type <sup>1</sup>	Point (Must	it Vented Through This match Emission Units le & Plot Plan)	(Must match	Control Device Emission Units Plot Plan)		Emission Unit ocesses only)	All Regulated Pollutants - Chemical Name/CAS3 (Speciate VOCs	Maximun Uncontrolle	ı Potential 1 Emissions <sup>4</sup>		n Potential Emissions <sup>5</sup>	Emission Form or Phase (At exit conditions, Solid, Liquid or	Est. Method Used <sup>6</sup>	Emission Concentratio n <sup>7</sup> (ppmv or mg/m <sup>4</sup> )
		ID No.	Source	ID No.	Device Type	Short Term <sup>2</sup>	Max (hr/yr)	and HAPS)	lb/hr	ton/yr	lb/hr	ton/yr	Gas/Vapor)		mg/m )
185E	Fugitive	N/A	Water Pretreatment Chemicals	N/A	N/A	N/A	N/A	VOC HAP	3.0 9.1E-04	13.0 4.0E-03	3.0 9.1E-04	13.0 4.0E-03	Gas	EE	
								PM	2.91	3.50	2.91E-01	3.50E-01			
186E-190E	Upward Vertical Stack	21C-25C	Railcar Unloading	N/A	N/A	N/A	N/A	$PM_{10}$	2.91	3.50	2.91E-01	3.50E-01	Gas	O - Vendor	
	vertical Stack							PM <sub>2.5</sub>	2.91	3.50	2.91E-01	3.50E-01			
	Upward							PM	2.91	3.50	2.91	3.5			
191E-214E	Vertical Stack	N/A	Storage Silo	N/A	N/A	N/A	N/A	$PM_{10}$	2.91	3.50	2.91	3.5	Gas	O - Vendor	
								PM <sub>2.5</sub>	2.91	3.50	2.91	3.5	4		
0450	Upward	37.74	DI D	27.74	N. / A	37.74	27.74	PM	7.67E-01	3.36	3.84E-02	1.68E-01		0 11 1	
215E	Vertical Stack	N/A	Plastic Regrind	N/A	N/A	N/A	N/A	PM <sub>10</sub> PM <sub>2.5</sub>	7.67E-01 7.67E-01	3.36 3.36	3.84E-02 3.84E-02	1.68E-01 1.68E-01	Gas	0 - Vendor	
216E	Upward Vertical Stack	N/A	Forming VOC	N/A	N/A	N/A	N/A	VOC	7.01E-01	3.07	7.01E-01	3.1	Gas	0 - Vendor	
217E	Upward Vertical Stack	N/A	Parts Washing/Process Cleaning	N/A	N/A	N/A	N/A	VOC	1.4E+00	6.00	1.4	6.0	Gas	0 - Vendor	
								$NO_X$	8.33E-01	3.7	8.33E-01	3.7			
								CO	1.4	6.1	1.4	6.1			
								$SO_2$	1.0E-02	4.4E-02	1.00E-02	4.38E-02			
	Upward							VOC	9.2E-02	4.0E-01	9.17E-02	4.02E-01	_		
218E-223E	Vertical Stack	N/A	Space Heater	N/A	N/A	N/A	N/A	PM PM <sub>10</sub>	1.3E-01	5.5E-01	1.27E-01	5.55E-01 5.55E-01	Gas	O - AP-42	
								PM <sub>10</sub> PM <sub>2.5</sub>	1.3E-01 1.3E-01	5.5E-01 5.5E-01	1.27E-01 1.27E-01	5.55E-01 5.55E-01	4		
								H <sub>2</sub> SO <sub>4</sub>	1.3E-01 1.1E-04	4.7E-04	1.08E-04	4.75E-04	-		
	ĺ			]	1	1		HAP	3.1E-02	1.3E-01	3.15E-02	1.30E-01	1		
			1		1	1		PM	4.2E-01	1.8E+00	4.21E-01	1.84E+00			
224E	Upward	N/A	Cooling Tower	N/A	N/A	N/A	N/A	PM <sub>10</sub>	2.0E-01	8.7E-01	1.98E-01	8.65E-01	Gas	0-AP-42	
	Vertical Stack				<u> </u>			PM <sub>2.5</sub>	1.6E-04	7.2E-04	1.65E-04	7.22E-04			
								$NO_X$	4.17E-01	1.04E-01	4.17E-01	1.04E-01			
	ĺ			]	1	1		CO	8.33E-01	2.08E-01	8.33E-01	2.08E-01			
	ĺ			]	1	1		$SO_2$	1.18E-04	2.94E-05	1.18E-04	2.94E-05	1		
225E	Upward	N/A	Backup Generator	N/A	N/A	N/A	N/A	VOC	2.01E-01	5.02E-02	2.01E-01	5.02E-02	Gas	0 - AP-42	
	Vertical Stack	,		<i>'</i>	1	,	,	PM PM <sub>10</sub>	1.90E-03	4.75E-04	1.90E-03	4.75E-04 9.71E-04	-		
								PM <sub>10</sub> PM <sub>2.5</sub>	3.88E-03 3.88E-03	9.71E-04 9.71E-04	3.88E-03 3.88E-03	9.71E-04 9.71E-04	-		
	ĺ			]	1			HAP	6.48E-03	9.71E-04 1.62E-03	6.48E-03	9.71E-04 1.62E-03	1		
		****		27.11				VOC	8.65E-02	3.79E-01	8.7E-02	3.79E-01	Gas	EE	
226E	Fugitive	N/A	Printing Ink	N/A	N/A	N/A	N/A	HAP	3.65E-02	1.60E-01	3.7E-02	1.60E-01	Gas	EE	
227E	Fugitive	N/A	Case Packing Glue	N/A	N/A	N/A	N/A	VOC	4.73E-02	2.07E-01	4.7E-02	2.07E-01	Gas	EE	
227 E	Fugitive	IV/A	case racking dide	IN/A	IN/A	IN/A	IN/A	HAP	1.58E-03	6.90E-03	1.6E-03	6.90E-03	Gas	EE	

			Attac	hment J				
		EM	IISSION POINT	'S SUMMARY S	HEET			
			Table 2: Releas	se Parameter D	ata			
	1		Exit Gas	or arameter B		oint Elevation (ft)	UTM Coord	inates (km)
	l †		Exit das		Lillission i	onit Elevation (it)	OTM COOLG	illates (Kill)
Emission Point ID No. (Must match Emission Units Table)	Inner Diameter (ft.)	Temp. (°f)	Volumetric Flow <sup>1</sup> (acfm) at operating conditions	Velocity (fps)	Ground Level (Height above mean sea level)	Stack Height <sup>2</sup> (Release height of emissions above ground level)	Northing	Easting
1E	TBD	TBD	TBD	TBD	TBD	TBD	4,366	757
2E	TBD	TBD	TBD	TBD	TBD	TBD	4,366	757
3E-18E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
20E-118E and 228E - 230E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
119E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
120E	TBD	TBD	TBD	TBD	TBD	TBD	4,366	757
121E	TBD	TBD	TBD	TBD	TBD	TBD	4,366	757
122E	TBD	TBD	TBD	TBD	TBD	TBD	4,366	757
123E	TBD	TBD	TBD	TBD	TBD	TBD	4,366	757
124E 125E	TBD	TBD	TBD	TBD	TBD	TBD	4,366	757
125E 127E - 130E	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD	4,366 4.366	757 757
131E	TBD	TBD	TBD	TBD	TBD	TBD	4,366	757
126E	TBD	TBD	TBD	TBD	TBD	TBD	4,366	757
132E-149E and 232E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
158E	TBD	TBD	TBD	TBD	TBD	TBD	4,366	757
159E	TBD	TBD	TBD	TBD	TBD	TBD	4.366	757
160E	TBD	TBD	TBD	TBD	TBD	TBD	4,366	757
161E	TBD	TBD	TBD	TBD	TBD	TBD	4,366	757
162E	TBD	TBD	TBD	TBD	TBD	TBD	4.366	757
163E	TBD	TBD	TBD	TBD	TBD	TBD	4,366	757
164E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
165E	TBD	TBD	TBD	TBD	TBD	TBD	4,366	757
166E	TBD	TBD	TBD	TBD	TBD	TBD	4,366	757
167E	TBD	TBD	TBD	TBD	TBD	TBD	4,366	757
168E	TBD	TBD	TBD	TBD	TBD	TBD	4,366	757
169E-171E	TBD	TBD	TBD	TBD	TBD	TBD	4,366	757
172E-173E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
174E-176E and 233E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
177E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
179E-184E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
185E 186E-190E	N/A TBD	N/A TBD	N/A TBD	N/A TBD	N/A TBD	N/A TBD	N/A 4,366	N/A 757
186E-190E 191E-214E	TBD	TBD	TBD	TBD	TBD	TBD	4,366	757
215E	TBD	TBD	TBD	TBD	TBD	TBD	4,366	757
216E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
217E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
218E-223E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
224E	TBD	TBD	TBD	TBD	TBD	TBD	4,366	757
225E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
226E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
227E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

# ATTACHMENT L

**Emission Unit Data Sheet** 

	THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER	Attachment L	ON A VOED		
		TA SHEET - INDIRECT HEAT EX			
Number:	Question:	Response:	Notes:		
	Sheet version:	Indirect Heat Exchanger			
0	Control Device ID No.	167E			
1	Manufacturer	Cleaver - Brooks			
2	Model Number:	TBD			
	Serial Number:				
3	Number of Units	1			
4	Use	Plant steam			
7	Date Constructed	December 2016			
9	Maximum design heat input per unit	32.63	MMBtu/hr		
10	Peak heat input per unit				
11	Steam produced at maximum design				
11	output	27,600	pph		
12	Projected Operating Schedule	24/7/365			
13	Type of Firing Equipment to be Used	Natural Gas Burners	Choose from pulverized coal, spreader stoke oil burners, natural gas burners, or other.		
	Fuel	Natural Gas			
	Quantity of Fuel Used (ft3/hr)	32,630			
25	Quantity of Fuel Used Annually				
	(MMft <sup>3</sup> /yr)	285.8			
	BTU Content (BTU/ft <sup>3</sup> )	1,000			
	Emissions after control (lb/hr)	7			
	CO	1.2			
	$NO_X$	2.3			
38	Pb	1.6E-05			
	$PM_{10}$	2.4E-01			
	SO <sub>2</sub>	1.9E-02			
	VOC	1.2E-01			

		Attachment L	
	EMISSION	IS UNIT DATA SHEET - GENERAL	
Number:	Question:	Response:	Notes:
	Sheet version:	General	
0	Identification Number	1S and 2S	as assigned on Equipment List Form
1	Name or type and model of proposed affected source	Surfactant Making Process	
4	Names and maximum amount of proposed process materials produced per hour	6,000 gal/hr	gal/hr of finished product
5	Give chemical reactions, if applicable, that will be involved in the generation of air pollutants	Combustion of liquid S to SO <sub>2</sub> '     Coxidation of SO <sub>2</sub> to SO <sub>3</sub> SO <sub>3</sub> reacted with organic fatty alcohol	
6	Combustion data		
7	Projected operating schedule	24/7/365	
	Pollutant	$NO_X$	
	Emission Rate (lb/hr)	1.8	
	Pollutant	CO	
	Emission Rate (lb/hr)	1.4	
	Pollutant	SO <sub>2</sub>	
	Emission Rate (lb/hr)	2.1	
	Pollutant	VOC	
8	Emission Rate (lb/hr)	1.0	
8	Pollutant	PM <sub>10</sub>	
	Emission Rate (lb/hr)	7.0	
	Pollutant	H <sub>2</sub> SO <sub>4</sub>	
	Emission Rate (lb/hr)	5.1	
	Pollutant	Lead	
	Emission Rate (lb/hr)	7.8E-06	
	Pollutant	HAP	
	Emission Rate (lb/hr)	3.0E-02	
9	Recordkeeping	NSPS VVa: Recordkeeping to show that facility is exempt.	

	Attachment L									
	EMISSIONS UNIT DATA SHEET - GENERAL									
Number:	Question:	Response:	Notes:							
	Sheet version:	General								
0	Identification Number	119S	as assigned on Equipment List Form							
1	Name or type and model of proposed affected source	Liquid Soap A and B Packing/Filling								
4	Names and maximum amount of proposed process materials produced per hour	15,959	gal/hour of finished product							
5	Give chemical reactions, if applicable, that will be involved in the generation of air pollutants	N/A								
7	Projected operating schedule	24/7/365								
8	Pollutant	VOC								
o	Emission Rate (lb/hr)	2.5E-04								

	Attachment L										
	EMISSIONS UNIT DATA SHEET - GENERAL										
Number:	Question:	Response:	Notes:								
	Sheet version:	General									
0	Identification Number	195S	as assigned on Equipment List Form								
1	Name or type and model of proposed	Dry Consumer Laundry and Cleaning									
1	affected source	Products A Additive 1									
	Names and maximum amount of										
4	proposed process materials produced	393,701	ft/hr of finished product								
	per hour										
	Give chemical reactions, if applicable,										
5	that will be involved in the generation										
	of air pollutants	N/A									
7	Projected operating schedule	24/7/365									
8	Pollutant	VOC									
8	Emission Rate (lb/hr)	2.0									

		Attachment L								
	EMISSIONS UNIT DATA SHEET - GENERAL									
Number:	Question:	Response:	Notes:							
	Sheet version:	General								
0	Identification Number	216S	as assigned on Equipment List Form							
1	Name or type and model of proposed affected source	Water Pretreatment Chemicals								
4	Names and maximum amount of proposed process materials produced per hour	44	lb/hr (of materials that contain VOC and/or HAP)							
5	Give chemical reactions, if applicable, that will be involved in the generation of air pollutants	N/A								
7	Projected operating schedule	24/7/365								
	Pollutant	VOC								
8	Emission Rate (lb/hr)	3.0								
ď	Pollutant	HAP								
	Emission Rate (lb/hr)	9.1E-04								

	Attachment L									
	EMISSIONS UNIT DATA SHEET - GENERAL									
Number:	Question:	Response:	Notes:							
	Sheet version:	General								
0	Identification Number	247S	as assigned on Equipment List Form							
1	Name or type and model of proposed affected source	Forming								
4	Names and maximum amount of proposed process materials produced per hour	100,000	tons/year							
5	Give chemical reactions, if applicable, that will be involved in the generation of air pollutants	N/A								
7	Projected operating schedule	24/7/365								
8	Pollutant	VOC								
	Emission Rate (lb/hr)	7.0E-01								

	Attachment L									
	EMISSIONS UNIT DATA SHEET - GENERAL									
Number:	Question:	Response:	Notes:							
	Sheet version:	General								
0	Identification Number	248S	as assigned on Equipment List Form							
1	Name or type and model of proposed affected source	Parts Washing/Process Cleaning								
4	Names and maximum amount of proposed process materials produced per hour	6	tons/year							
5	Give chemical reactions, if applicable, that will be involved in the generation of air pollutants	N/A								
7	Projected operating schedule	24/7/365								
8	Pollutant	VOC								
0	Emission Rate (lb/hr)	1.4								

		Attachment L									
	EMISSIONS UNIT DATA SHEET - GENERAL										
Number:	Question:	Response:	Notes:								
	Sheet version:	General									
0	Identification Number	257S	as assigned on Equipment List Form								
1	Name or type and model of proposed affected source	Printing Ink									
4	Names and maximum amount of proposed process materials produced per hour	0.39 lb/hr	lb/hr (of materials that contain VOC and/or HAP)								
5	Give chemical reactions, if applicable, that will be involved in the generation of air pollutants	N/A									
7	Projected operating schedule	24/7/365									
	Pollutant	VOC									
8	Emission Rate (lb/hr)	8.65E-02									
8	Pollutant	HAP									
	Emission Rate (lb/hr)	3.7E-02									

		Attachment L								
	EMISSIONS UNIT DATA SHEET - GENERAL									
Number:	Question:	Response:	Notes:							
	Sheet version:	General								
0	Identification Number	258S	as assigned on Equipment List Form							
1	Name or type and model of proposed affected source	Case Packing Glue								
4	Names and maximum amount of proposed process materials produced per hour	79 lb/hr	lb/hr (of materials that contain VOC and/or HAP)							
5	Give chemical reactions, if applicable, that will be involved in the generation of air pollutants	N/A								
7	Projected operating schedule	24/7/365								
	Pollutant	VOC								
8	Emission Rate (lb/hr)	4.73E-02								
ø	Pollutant	HAP								
	Emission Rate (lb/hr)	1.6E-03								

	Attachment L									
EMISSIONS UNIT DATA SHEET - GENERAL										
Number:	Question:	Response:	Notes:							
	Sheet version:	General								
0	Identification Number	262S	as assigned on Equipment List Form							
1	Name or type and model of proposed affected source	Dry Consumer Laundry and Cleaning Products A Flexible Perfume Delivery								
5	Give chemical reactions, if applicable, that will be involved in the generation of air pollutants	N/A								
7	Projected operating schedule	24/7/365								
	Pollutant	VOC								
8	Emission Rate (lb/hr)	5.62E-01								
0	Pollutant	HAP								
	Emission Rate (lb/hr)	2.8E-03								

# ATTACHMENT N

**Supporting Emission Calculations** 

### Table N-0a. Emissions Summary

	Potential to Emit (tpy)								
<b>Business Unit/Process</b>	PM	$PM_{10}$	PM <sub>2.5</sub>	VOC	HAPs	NO <sub>x</sub>	CO	SO <sub>2</sub>	H <sub>2</sub> SO <sub>4</sub> 17.6
Chemicals	21.7	21.7	21.7	5.4	9.2E-02	4.7	2.9E-01	1.4	
Tanks				1.2	9.1E-02				1.5E-03
Loading			2.41E-03	5.2E-02					2.4E-03
SO <sub>2</sub> Scrubber	21.7	21.7	21.7	4.1	1.1E-03	4.7	2.9E-01	1.4	17.6
Soap Making A & B	20.0	20.0	20.0	43.9	3.1E-02	1.1	5.8	6.2E-03	0.0
Tanks				2.5	3.1E-02				
RTO	6.5E-02	6.5E-02	6.5E-02	8.0	5.2E-06	1.1	5.8	6.2E-03	
Dust Control	20.0	20.0	20.0	33.4					
Packing/Filling				1.11E-03					
Dry Consumer Products A	16.7	16.7	16.7	9.7	5.3E-03	0.0	0.0	0.0	0.0
Tanks				1.1	5.3E-03				
Converting	16.7	16.7	16.7						
Additive				8.7					
Utilities	9.7	8.6	5.8	16.0	1.4	57.4	32.8	4.6E-01	5.0E-03
Boilers	3.1	5.1	5.1	2.46	1.27	49.54	25.33	4.1E-01	4.5E-03
Engines	8.8E-02	8.6E-02	8.6E-02	8.4E-02	2.6E-02	3.92	0.83	1.8E-03	
Cooling Towers	5.9	2.8	2.30E-03						
Heaters	6.0E-01	6.0E-01	6.0E-01	4.3E-01	1.5E-01	3.9	6.6	4.7E-02	5.1E-04
Fuel Tanks				2.3E-03					
Water Treatment Chemicals				13.0	4.0E-03				
Auxiliary Activities	1.1E+01	6.3E+00	4.8E+00	10.11	2.99E-01	3.8E+00	6.3E+00	4.4E-02	4.7E-04
Glue Usage				2.07E-01	6.90E-03				
Printing				3.79E-01	1.60E-01				
Paved Roads	4.25	0.85	0.21						
Plastics Molding	6.42	5.44	4.57	9.52	1.3E-01	3.75	6.34	4.4E-02	4.7E-04
Total	78.7	73.3	69.0	85.1	1.9	66.88	45.2	1.9	17.6

### Table N-0b. HAP - Emissions Summary

		Potential to Emit										
HAP Emissions	Hexane	Ethylene Oxide	Formaldehyde	Vinyl Acetate	1,4 Dioxane	Hydrogen Chloride	Acetophenone	Propylene	Chloroform	Lead	Glycol Ether	Other Combustion HAP <sup>1</sup>
Total (tpy)	1.48	4.7E-02	6.1E-02	6.9E-03	5.3E-02	1.8E-02	8.2E-05	1.1E-02	4.0E-03	4.2E-04	1.7E-01	2.2E-02

1. Includes: 2-methylnaphthalene, 3-methylchloranthrene, 7,12-Dimethylbenz(a)anthracene, acetaldehyde, acenaphthylene, acrolein, anthracene, benzo(a)anthracene, benzo(a)pyrene, bezo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, dichlorobenzene, ethylbenzene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, OCDD, PAH, phenanathrene, pyrene, toluene, 1,1,1-Trichloroethane, o-xylene, xylenes, arsenic, antimony, beryllium, cadmium, chloride, chromium, chromium VI, cobalt, fluoride, manganese, mercury, nickel, phosphorus, selenium.

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174701.0020

Table N-12. Dry Consumer Product A - Indoor Tank Emissions

	Throughput <sup>1</sup>	Vapor	Molecular	Bulk Liquid	Liquid Donaite	Touls Consider	VOC Potentia	-1 + - F:+2,4	HAP Potentia	3.4
EU ID	Throughput <sup>1</sup> (gal/yr)	Pressure (psia)	Weight (lb/lb-mol)	Temperature (°F)	Liquid Density (lb/gal)	Tank Capacity <sup>1</sup> (gal)	(lb/hr)	(tpy)	(lb/hr)	(tpy)
166	78,893	0.50	200	77	8.81	396	5.4E-03	2.4E-02	2.7E-05	1.2E-04
167	78,893	0.50	200	77	8.81	396	5.4E-03	2.4E-02	2.7E-05	1.2E-04
168	78,893	0.50	200	77	8.81	396	5.4E-03	2.4E-02	2.7E-05	1.2E-04
169	39,447	0.50	200	77	8.81	181	3.3E-03	1.4E-02	1.6E-05	7.2E-05
170	39,447	0.50	200	77	8.81	181	3.3E-03	1.4E-02	1.6E-05	7.2E-05
171	39,447	0.50	200	77	8.81	181	3.3E-03	1.4E-02	1.6E-05	7.2E-05
172	39,447	0.50	200	77	8.81	181	3.3E-03	1.4E-02	1.6E-05	7.2E-05
173	39,447	0.50	200	77	8.81	181	3.3E-03	1.4E-02	1.6E-05	7.2E-05
174	39,447	0.50	200	77	8.81	181	3.3E-03	1.4E-02	1.6E-05	7.2E-05
175	39,447	0.50	200	77	8.81	181	3.3E-03	1.4E-02	1.6E-05	7.2E-05
176	39,447	0.50	200	77	8.81	181	3.3E-03	1.4E-02	1.6E-05	7.2E-05
177	39,447	0.50	200	77	8.81	181	3.3E-03	1.4E-02	1.6E-05	7.2E-05
178	39,447	0.50	200	77	8.81	181	3.3E-03	1.4E-02	1.6E-05	7.2E-05
179	39,447	0.50	200	77	8.81	181	3.3E-03	1.4E-02	1.6E-05	7.2E-05
180	39,447	0.50	200	77	8.81	181	3.3E-03	1.4E-02	1.6E-05	7.2E-05
262	n/a	n/a	n/a	n/a	n/a	30	5.6E-01	5.1E-01	2.8E-03	2.6E-03
						Total	0.62	0.76	3.09E-03	3.78E-03

<sup>1.</sup> Tank capacities and throughputs per Procter and Gamble design data sheets. Throughputs are time averaged throughputs based on planned production lines for other similar Procter and Gamble facilities and business units, scaled according to ratio of planned production lines for the facility.

<sup>2.</sup> Emissions calculated per AP-42, Section 7.1 (Organic Liquid Storage Tanks) and Trinity calculations spreadsheets. Specifically, equations contained in Section 7.1.3.1 (Total Losses from Fixed Roof Tanks) are utilized.

<sup>3.</sup> HAP emissions from perfumes assumed to be 0.5% of VOC emissions. Based on knowledge of raw materials, HAPs are 99% glycol ether and 1% acetophenone.

<sup>4.</sup> Emissions from flexible perfume delivery system (EU ID 262) determined based on system changeover time, frequency, and venting duration. System maximizes perfume recovery via pigging, followed by limited venting through carbon adsorption filter.

Table N-15. Utilities - Overall Utility Inventory

Equipment Type	Ouantity	Design Si	ze
Equipment Type	Quantity	Value	Units
	2	50,267	pph steam
Boilers	1	27,600	pph steam
	1	8,918	pph steam
	1	331	Mgal/hr
Cooling Towers	1	792	Mgal/hr
	1	212	Mgal/hr
Fire Pump Engine	2	399	hp
Backup/Standby Power Generator	3	350	kW
Backup/Standby Power Generator	1	83	kW
Engine ULSD Tanks	5	< 500	gallon
Vehicle Refueling ULSD Tank	1	5,000	gallon
Warehouse Heaters	6	3.05	MMBtu/hr

Equipment Type	Quantity Design Size		Weighted Heat of Boiler Vaporization Efficiency		Calculated Size		
		Value	Units	(Btu/lb)	(HHV)	Value	Units
	2	50,267	pph steam	1,048.4	85%	62	MMBtu/hr
Boilers	1	27,600	pph steam	1,048.4	83%	32.63	MMBtu/hr
	1	8,918	pph steam	1,048.4	85%	11	MMBtu/hr

1. Steam parameters:

H <sub>2</sub> O heat of vaporization (non-condensate return):	1,178	Btu/lb
H <sub>2</sub> O heat of vaporization (condensate return):	1,016	Btu/lb
Condensate return:	80%	

Table N-18. Utilities - Boiler Nos. 3 - Parameters

Parameter	Value	Unit			
New Boiler Heat Input:	32.63	MMBtu/hr			
Number of New Boilers:	1				
Annual Gas Usage:	285.8	MMscf/yr			
Equivalent Gas Hours:	8,760	Hours at 100% Load			
Natural Gas Heating Value (HHV):	1,000	Btu/scf			

Pollutant	Natural Gas Emission Factor	Units	Reference	Natural Gas Hourly Emissions (lb/hr)	Natural Gas Annual Emissions (tpy)	Emissions for Boiler 3 (tpy)
$NO_X$	60	ppm	2	2.3	10.0	10.0
CO	50	ppm	2	1.2	5.3	5.3
PM	7.50E-03	lb/MMBtu	2	2.43E-01	1.1	1.1
$PM_{10}$	7.50E-03	lb/MMBtu	2	2.43E-01	1.1	1.1
PM <sub>2.5</sub>	7.50E-03	lb/MMBtu	2	2.43E-01	1.1	1.1
$SO_2$	6.00E-04	lb/MMBtu	2	1.9E-02	8.4E-02	8.4E-02
VOC	3.60E-03	lb/MMBtu	2	1.2E-01	5.1E-01	5.1E-01
$H_2SO_4$	6.50E-03	lb/MMscf	3	2.1E-04	9.3E-04	9.3E-04

<sup>1.</sup> Natural gas emission factors based on manufacturer's ppm specifications for units with LNB and converted to lb/MMBtu using an F factor of 8,710 dscf/MMBtu for natural gas.

<sup>2.</sup> Guarantees from boiler vendor.

<sup>3.</sup> Natural gas factor calculated assuming 1% of sulfur becomes H  $_2\mathrm{SO}_4$ .

Table N-19. Utilities - Boiler Nos. 3 - Parameters

Parameter	Value	Unit
New Boiler Heat Input:	33	MMBtu/hr
Number of New Boilers:	1	
Hours of Operation on Natural Gas:	8,760	hr/yr
Natural Gas Heating Value (HHV):	1,020	Btu/scf

Pollutant	Natural Gas Emission Factor <sup>1</sup>	Units	Emissio	ons
	Emission Factor		lb/hr	tpy
2-Methylnaphthalene	2.4E-05	lb/MMscf	7.7E-07	3.4E-06
3-Methylchloranthrene	1.8E-06	lb/MMscf	5.8E-08	2.5E-07
7,12-Dimethylbenz(a)anthracene	1.6E-05	lb/MMscf	5.1E-07	2.2E-06
Acenaphthene	1.8E-06	lb/MMscf	5.8E-08	2.5E-07
Acenaphthylene	1.8E-06	lb/MMscf	5.8E-08	2.5E-07
Anthracene	2.4E-06	lb/MMscf	7.7E-08	3.4E-07
Benz(a)anthracene	1.8E-06	lb/MMscf	5.8E-08	2.5E-07
Benzene	2.1E-03	lb/MMscf	6.7E-05	2.9E-04
Benzo(a)pyrene	1.2E-06	lb/MMscf	3.8E-08	1.7E-07
Benzo(b)fluoranthene	1.8E-06	lb/MMscf	5.8E-08	2.5E-07
Benzo(g,h,i)perylene	1.2E-06	lb/MMscf	3.8E-08	1.7E-07
Benzo(k)fluoranthene	1.8E-06	lb/MMscf	5.8E-08	2.5E-07
Chrysene	1.8E-06	lb/MMscf	5.8E-08	2.5E-07
Dibenzo(a,h)anthracene	1.2E-06	lb/MMscf	3.8E-08	1.7E-07
Dichlorobenzene	1.2E-03	lb/MMscf	3.8E-05	1.7E-04
Fluoranthene	3.0E-06	lb/MMscf	9.6E-08	4.2E-07
Fluorene	2.8E-06	lb/MMscf	9.0E-08	3.9E-07
Formaldehyde	7.5E-02	lb/MMscf	2.4E-03	1.1E-02
Hexane	1.8E+00	lb/MMscf	5.8E-02	2.5E-01
Indeno(1,2,3-cd)pyrene	1.8E-06	lb/MMscf	5.8E-08	2.5E-07
Naphthalene	6.1E-04	lb/MMscf	2.0E-05	8.5E-05
Phenanathrene	1.7E-05	lb/MMscf	5.4E-07	2.4E-06
Pyrene	5.0E-06	lb/MMscf	1.6E-07	7.0E-07
Toulene	3.4E-03	lb/MMscf	1.1E-04	4.8E-04
Arsenic	2.0E-04	lb/MMscf	6.4E-06	2.8E-05
Beryllium	1.2E-05	lb/MMscf	3.8E-07	1.7E-06
Cadmium	1.1E-03	lb/MMscf	3.5E-05	1.5E-04
Chromium	1.4E-03	lb/MMscf	4.5E-05	2.0E-04
Cobalt	8.4E-05	lb/MMscf	2.7E-06	1.2E-05
Lead	5.0E-04	lb/MMscf	1.6E-05	7.0E-05
Manganese	3.8E-04	lb/MMscf	1.2E-05	5.3E-05
Mercury	2.6E-04	lb/MMscf	8.3E-06	3.6E-05
Nickel	2.1E-03	lb/MMscf	6.7E-05	2.9E-04
Selenium	2.40E-05	lb/MMscf	7.7E-07	3.4E-06
Total HAP		, 	6.0E-02	2.6E-01

<sup>1.</sup> Natural gas emission factors from AP-42, Tables 1.4-3 and 1.4-4

Table N-21. Utilities - Engines - Inventory Summary

Engine Model	Type	Number	Size	Unit
Caterpillar C15	Backup/Standby Power Generator	3	350	kW
John Deere 4045HF285H	Backup/Standby Power Generator	1	83	kW
Clarke JW6H-UFADF0	Fire Pump	2	399	hp

Pollutant	Potential Emissions per Engine, Caterpillar C15 (tpy)	Potential Emissions per Engine, Clarke (tpy)	Potential Emissions per Engine, John Deere (tpy)	Total Emissions (tpy)
СО	1.4E-01	1.8E-01	5.9E-02	8.27E-01
$NO_X$	8.7E-01	5.7E-01	1.6E-01	3.92E+00
VOC	1.1E-02	2.2E-02	6.9E-03	8.36E-02
$SO_2$	3.6E-04	3.1E-04	1.0E-04	1.81E-03
PM	1.2E-02	2.2E-02	7.8E-03	8.78E-02
$PM_{10}$	1.2E-02	2.2E-02	7.8E-03	8.63E-02
PM <sub>2.5</sub>	1.2E-02	2.2E-02	7.8E-03	8.63E-02

Pollutant	Potential Emissions per Engine, Caterpillar C15 (tpy)	Potential Emissions per Engine, Clarke (tpy)	Potential Emissions per Engine, John Deere (tpy)	Total Emissions (tpy)
Benzene	7.7E-04	6.5E-04	2.2E-04	3.8E-03
Toluene	3.4E-04	2.8E-04	9.8E-05	1.7E-03
Xylenes	2.4E-04	2.0E-04	6.8E-05	1.2E-03
Propylene	2.1E-03	1.8E-03	6.2E-04	1.1E-02
Formaldehyde	9.8E-04	8.2E-04	2.8E-04	4.9E-03
Acetaldehyde	6.4E-04	5.3E-04	1.8E-04	3.2E-03
Acrolein	7.7E-05	6.4E-05	2.2E-05	3.8E-04
Polycyclic Aromatic Hydrocarbons (PAH)	1.4E-04	1.2E-04	4.0E-05	6.9E-04
Max HAP	2.1E-03	1.8E-03	6.2E-04	1.1E-02
Total HAPs	5.3E-03	4.5E-03	1.5E-03	2.6E-02

Table N-22b. Utilities - Engines - John Deere 83 kW

Source Designation	Engine	Generator
Date Manufactured	TBD	TBD
Manufacturer <sup>1</sup>	John Deere	Kohler
Model No. <sup>1</sup>	4045HF285H	80REOZJF
Stroke Cycle <sup>1</sup>	4-Stroke	
Fuel Used <sup>1</sup>	Diesel	
Fuel Sulfur Content (%) <sup>2</sup>	0.0015	
Rated Capacity (eKW) <sup>1</sup>	83.00	
Horsepower (bhp) <sup>1</sup>	133	
Generating Capacity (kW) <sup>1</sup>		83.00
Maximum Fuel Consumption at 100% Load (gal/hr) <sup>1</sup>	6.90	
Heat Input (MMBtu/hr) <sup>3</sup>	0.96	

Operational Detail	Value
Potential Annual Hours of Operation (hr/yr):	500.00
Potential Fuel Consumption (Mgal/yr):	3.45

Pollutant	<b>Emission Factors</b>	Units	Notes
СО	1.30E+00	g/kW-hr	1
$NO_X$	3.40	g/kW-hr	1
НС	1.50E-01	g/kW-hr	1, 4
$SO_2$	3.08E-06	lb/hp-hr	5
PM	1.70E-01	g/kW-hr	1,6
$PM_{10}$	1.70E-01	g/kW-hr	1, 6
PM <sub>2.5</sub>	1.70E-01	g/kW-hr	1,6

Table N-22b. Utilities - Engines - John Deere 83 kW

Pollutant	Potential Emissions (lb/hr) <sup>11</sup>	Potential Emissions (tpy)
СО	2.4E-01	5.9E-02
$NO_x$	6.2E-01	1.6E-01
VOC	2.7E-02	6.9E-03
$SO_2$	4.1E-04	1.0E-04
PM	3.1E-02	7.8E-03
$PM_{10}$	3.1E-02	7.8E-03
PM <sub>2.5</sub>	3.1E-02	7.8E-03

Pollutant	Emission Factor (lb/MMBtu) <sup>8</sup>	Potential Emissions (lb/hr) <sup>7</sup>	Potential Emissions (tpy)
Benzene	9.33E-04	8.9E-04	2.2E-04
Toluene	4.09E-04	3.9E-04	9.8E-05
Xylenes	2.85E-04	2.7E-04	6.8E-05
Propylene	2.58E-03	2.5E-03	6.2E-04
Formaldehyde	1.18E-03	1.1E-03	2.8E-04
Acetaldehyde	7.67E-04	7.4E-04	1.8E-04
Acrolein	9.25E-05	8.9E-05	2.2E-05
Polycyclic Aromatic Hydrocarbons (PAH)	1.68E-04	1.6E-04	4.0E-05
Max HAP	•	2.5E-03	6.2E-04
Total HAPs		6.2E-03	1.5E-03

- 1. Values come from the unit's spec sheet "Kohler Power Systems Model: 80REOZJF". Emissions from EPA Certificate HJDXL04.5119-004.
- 2. Per 40 CFR 80 Subpart I, maximum sulfur content of ULSD is 15 ppm (i.e. 0.0015%).
- $3. \ To \ convert \ from \ gal/hr \ to \ MMBtu/hr, an average \ heat \ content \ of \ diesel \ of \ 139,000 \ btu/gal \ was \ used \ per \ http://www.engineeringtoolbox.com/energy-content-d_868.html$
- 4. All hydrocarbon (HC) emissions are conservatively assumed to be VOC.
- 5. SO<sub>2</sub> emission factor from AP-42 Section 3.3, Table 3.3-1 "Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines," Supplement B, October 1996.
- 6. All particulates are assumed to be <1 micron in size, where PM, PM  $_{10}$ , and PM $_{2.5}$  are assumed to be equivalent, consistent with AP-42 Section 3.3, Table 3.3-1 "Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines," Supplement B, October 1996.
- 7. Emission Rate (lb/hr) = Rated Capacity (MMBtu/hr or bhp)  $\times$  Emission Factor (lb/MMBtu or lb/bhp-hr).
- $8.\ Emission\ factors\ from\ AP-42\ Section\ 3.3, Table\ 3.3-2\ "Speciated\ Organic\ Compound\ Emission\ Factors\ for\ Uncontrolled\ Diesel\ Engines."$

Table N-23. Utilities - Engines - Clarke

Source Designation	Engine
Date Manufactured	TBD
Manufacturer <sup>1</sup>	Clarke
Model No. <sup>2</sup>	JW6H-UFAD70
Stroke Cycle <sup>2</sup>	4-Stroke
Fuel Used <sup>1</sup>	Diesel
Fuel Sulfur Content (%) <sup>3</sup>	0.0015
Rated Horsepower (bhp) <sup>2</sup>	399.00
Maximum Fuel Consumption at 100% Load (gal/hr) <sup>2</sup>	20.00
Heat Input (MMBtu/hr) <sup>4</sup>	2.78

Operational Detail	Value
Potential Annual Hours of Operation (hr/yr):	500.00
Potential Fuel Consumption (Mgal/yr):	10.00

Pollutant	Emission Factors	Units	Notes
CO	8.00E-01	g/hp-hr	5
$NO_{\chi}$	2.61	g/hp-hr	5
НС	1.00E-01	g/hp-hr	5,6
$SO_2$	3.08E-06	lb/hp-hr	7
PM	1.00E-01	g/hp-hr	5, 8
PM <sub>10</sub>	1.00E-01	g/hp-hr	5, 8
PM <sub>2.5</sub>	1.00E-01	g/hp-hr	5, 8

Table N-26. Utilities - Engines - Clarke

Pollutant	Potential Emissions (lb/hr) <sup>10</sup>	Potential Emissions (tpy)
СО	7.0E-01	1.8E-01
$NO_{\chi}$	2.3	5.7E-01
VOC	8.8E-02	2.2E-02
$SO_2$	1.2E-03	3.1E-04
PM	8.8E-02	2.2E-02
$PM_{10}$	8.8E-02	2.2E-02
PM <sub>2.5</sub>	8.8E-02	2.2E-02

Pollutant	Emission Factor (lb/MMBtu) <sup>10</sup>	Potential Emissions (lb/hr) <sup>9</sup>	Potential Emissions (tpy)
Benzene	9.33E-04	2.6E-03	6.5E-04
Toluene	4.09E-04	1.1E-03	2.8E-04
Xylenes	2.85E-04	7.9E-04	2.0E-04
Propylene	2.58E-03	7.2E-03	1.8E-03
Formaldehyde	1.18E-03	3.3E-03	8.2E-04
Acetaldehyde	7.67E-04	2.1E-03	5.3E-04
Acrolein	9.25E-05	2.6E-04	6.4E-05
Polycyclic Aromatic Hydrocarbons (PAH)	1.68E-04	4.7E-04	1.2E-04
Max HAP		7.2E-03	1.8E-03
Total HAPs		1.8E-02	4.5E-03

<sup>1.</sup> Client specification.

- $2. \ \ Values come from the unit's spec sheet "Clarke JW6H-UFAD70" . \ \ Found at http://www.clarkefire.com/Libraries/PDF/Emissions\_JW6H-UFADF0\_6090HFC47A\_1760rpm\_2009.sflb.ashx$
- 3. Per 40 CFR 80 Subpart I, maximum sulfur content of ULSD is 15 ppm (i.e. 0.0015%).
- 4. To convert from gal/hr to MMBtu/hr, an average heat content of diesel of 139,000 btu/gal was used per http://www.engineeringtoolbox.com/energy-content-d\_868.html
- 5.  $NO_x$ , HC, CO, and PM emission factors from John Deere "Rating Specific Emissions Data." Found at http://www.clarkefire.com/Libraries/PDF/Emissions\_JW6H-UFADF0\_6090HFC47A\_1760rpm\_2009.sflb.ashx
- $6. \ \ To\ conservatively\ over-estimate\ emissions, all\ hydrocarbon\ (HC)\ emissions\ are\ assumed\ to\ be\ VOC.$
- 7.  $SO_2$  emission factor from AP-42 Section 3.3, Table 3.3-1 "Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines," Supplement B, October 1996.
- 8. All particulates are assumed to be <1 micron in size, where PM, PM  $_{10}$ , and PM $_{2.5}$  are assumed to be equivalent, consistent with AP-42 Section 3.3, Table 3.3-1 "Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines," Supplement B, October 1996.
- 9. Emission Rate (lb/hr) = Rated Capacity (MMBtu/hr or bhp)  $\times$  Emission Factor (lb/MMBtu or lb/bhp-hr).
- $10. \ Emission \ factors \ from \ AP-42 \ Section \ 3.3, Table \ 3.3-2 \ "Speciated \ Organic \ Compound \ Emission \ Factors \ for \ Uncontrolled \ Diesel \ Engines."$

# ATTACHMENT P

**Public Notice** 

### AIR QUALITY PERMIT NOTICE

# **Notice of Application**

Notice is given that the Procter & Gamble Manufacturing Company has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a Class II Administrative Update to Construction Permit R13-3316 for a manufacturing operation located at 396 Development Drive, near Inwood in Berkeley County, West Virginia. The latitude and longitude coordinates are:

Latitude: 39° 24' 16.93" N (39.404703) Longitude: 78° 0' 28.66" W (-78.007961)

The applicant estimates the potential to discharge the following Regulated Air Pollutants will be: Particulate matter: 0.16 tons per year, Particulate matter less than 2.5 microns: 0.16 tons per year; Particulate matter less than 10 microns: 0.16 tons per year; Sulfur Dioxide: 0 tons per year; Oxides of Nitrogen: 0.39 tons per year; Carbon Monoxide: 0.46 tons per year; Volatile Organic Compounds: 0.24 tons per year; Hazardous Air Pollutants: 0.02 tons per year, including Hexane (0.013 tons per year), Formaldehyde (0.0012 tons per year), Propylene (0.0014 tons per year), and Glycol Ether (0.002 tons per year).

Startup of operation is planned to begin on or about the twenty fourth day of July, 2017. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57th Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

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

Dated this the 22nd day of June, 2016

# By:

The Procter & Gamble Manufacturing Company Francisco Lanza Manufacturing Capability Associate Director Sharon Woods Innovation Center A2M 11-3 11510 Reed Hartman Highway Cincinnati, OH 45241

# **ATTACHMENT**

Strike-through Permit

### 1.0 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
1S	1E	Surfactant Making Process	2017	3,000 gal/hr	1C
2S	2E	Surfactant Making Process	2017	3,000 gal/hr	2C
3S	3E	Surfactant Tank	2017	120,762 gal	N
4S	4E	Surfactant Tank	2017	48,345 gal	N
5S	5E	Surfactant Tank	2017	40, 109 gal	N
6S	6E	Surfactant Tank	2017	40, 109 gal	N
7S	7E	Surfactant Tank	2017	15,125 gal	N
8S	8E	Surfactant Tank	2017	15,125 gal	N
9S	9E	Surfactant Tank	2017	15,125 gal	N
10S	10E	Surfactant Tank	2017	72,475 gal	N
11S	11E	Surfactant Tank	2017	72,475 gal	N
12S	12E	Surfactant Tank	2017	72,475 gal	N
13S	13E	Surfactant Tank	2017	72,475 gal	N
14S	14E	Surfactant Tank	2017	72,475 gal	N
15S	15E	Surfactant Tank	2017	72,475 gal	N
16S	16E	Surfactant Tank	2017	26,083 gal	N
17S	17E	Surfactant Tank	2017	15,125 gal	N
18S	18E	Surfactant Tank	2017	15,125 gal	N
19S	19E	Surfactant Bulk Liquid Transfer	2017	17,150,000 gal/yr	N
20S	20E	Liquid Soap A & B Tank	2017	79,252 gal	N
21S	21E	Liquid Soap A & B Tank	2017	79,252 gal	N

### 1.0 Emission Units

22S	22E	Liquid Soap A & B Tank	2017	79,252 gal	N
23S	23E	Liquid Soap A & B Tank	2017	7,925 gal	N
24S	24E	Liquid Soap A & B Tank	2017	7,925 gal	N
25S	25E	Liquid Soap A & B Tank	2017	39,626 gal	N
26S	26E	Liquid Soap A & B Tank	2017	15,850 gal	N
27S	27E	Liquid Soap A & B Tank	2017	39,626 gal	N
28S	28E	Liquid Soap A & B Tank	2017	26,417 gal	N
29S	29E	Liquid Soap A & B Tank	2017	15,850 gal	N
30S	30E	Liquid Soap A & B Tank	2017	26,417 gal	N
31S	31E	Liquid Soap A & B Tank	2017	15,850 gal	N
-					
32S	32E	Liquid Soap A & B Tank	2017	15,850 gal	N
33S	33E	Liquid Soap A & B Tank	2017	7,925 gal	N
34S	34E	Liquid Soap A & B Tank	2017	7,925 gal	N
35S	35E	Liquid Soap A & B Tank	2017	7,925 gal	N
36S	36E	Liquid Soap A & B Tank	2017	7,925 gal	N
37S	37E	Liquid Soap A & B Tank	2017	7,925 gal	N
38S	38E	Liquid Soap A & B Tank	2017	396 gal	N
40S	40E	Liquid Soap A & B Tank	2017	396 gal	N
41S	41E	Liquid Soap A & B Tank	2017	396 gal	N
42S	42E	Liquid Soap A & B Tank	2017	396 gal	N
43S	43E	Liquid Soap A & B Tank	2017	396 gal	N
44S	44E	Liquid Soap A & B Tank	2017	396 gal	N
45S	45E	Liquid Soap A & B Tank	2017	396 gal	N

West Virginia Department of Environmental Protection • Division of Air Quality

Procter and Gamble Manufacturing Company • Tabler Station Facility

#### **Emission Units** 1.0

		,	_	_	_
46S	46E	Liquid Soap A & B Tank	2017	396 gal	N
47S	47E	Liquid Soap A & B Tank	2017	396 gal	N
50S	50E	Liquid Soap A & B Tank	2017	7,925 gal	N
51S	51E	Liquid Soap A & B Tank	2017	396 gal	N
52S	52E	Liquid Soap A & B Tank	2017	396 gal	N
53S	53E	Liquid Soap A & B Tank	2017	7,925 gal	N
54S	54E	Liquid Soap A & B Tank	2017	660 gal	N
55S	55E	Liquid Soap A & B Tank	2017	396 gal	N
56S	56E	Liquid Soap A & B Tank	2017	7,275 gal	N
57S	57E	Liquid Soap A & B Tank	2017	1,057 gal	N
59S	59E	Liquid Soap A & B Tank	2017	396 gal	N
60S	60E	Liquid Soap A & B Tank	2017	132 gal	N
61S	61E	Liquid Soap A & B Tank	2017	396 gal	N
63S	63E	Liquid Soap A & B Tank	2017	396 gal	N
64S	64E	Liquid Soap A & B Tank	2017	396 gal	N
65S	65E	Liquid Soap A & B Tank	2017	396 gal	N
66S	66E	Liquid Soap A & B Tank	2017	396 gal	N
67S	67E	Liquid Soap A & B Tank	2017	396 gal	N
68S	68E	Liquid Soap A & B Tank	2017	396 gal	N
69S	69E	Liquid Soap A & B Tank	2017	396 gal	N
70S	70E	Liquid Soap A & B Tank	2017	396 gal	N
71S	71E	Liquid Soap A & B Tank	2017	396 gal	N

70S	70E	Liquid Soap A & B Tank	2017	396 gal	N
71S	71E	Liquid Soap A & B Tank	2017	396 gal	N
72S	72E	Liquid Soap A & B Tank	2017	396 gal	N

West Virginia Department of Environmental Protection • Division of Air Quality

	DDIOII CIII	,		_	_
73S	73E	Liquid Soap A & B Tank	2017	396 gal	N
74S	74E	Liquid Soap A & B Tank	2017	396 gal	N
75S	75E	Liquid Soap A & B Tank	2017	396 gal	N
76S	76E	Liquid Soap A & B Tank	2017	396 gal	N
77S	77E	Liquid Soap A & B Tank	2017	396 gal	N
87S	87E	Liquid Soap A & B Tank	2017	1,585 gal	N
88S	88E	Liquid Soap A & B Tank	2017	1,585 gal	N
89S	89E	Liquid Soap A & B Tank	2017	1,585 gal	N
90S	90E	Liquid Soap A & B Tank	2017	1,585 gal	N
91S	91E	Liquid Soap A & B Tank	2017	1,585 gal	N
92S	92E	Liquid Soap A & B Tank	2017	1,585 gal	N
93S	93E	Liquid Soap A & B Tank	2017	1,585 gal	N
94S	94E	Liquid Soap A & B Tank	2017	1,585 gal	N
94bS	94bE	Liquid Soap A & B Tank	2017	1,585 gal	N
94cS	94cE	Liquid Soap A & B Tank	2017	1,585 gal	N
94dS	94dE	Liquid Soap A & B Tank	2017	1,585 gal	N
94eS	94eE	Liquid Soap A & B Tank	2017	1,585 gal	N
95S	95E	Liquid Soap A & B Tank	2017	1,585 gal	N
96S	96E	Liquid Soap A & B Tank	2017	1,585 gal	N
97S	97E	Liquid Soap A & B Tank	2017	1,585 gal	N
98S	98E	Liquid Soap A & B Tank	2017	1,585 gal	N
99S	99E	Liquid Soap A & B Tank	2017	1,585 gal	N
100S	100E	Liquid Soap A & B Tank	2017	1,585 gal	N

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Procter and Gamble Manufacturing Company • Tabler Station Facility

101S	101E	Liquid Soap A & B Tank	2017	1,585 gal	N
102S	102E	Liquid Soap A & B Tank	2017	1,585 gal	N
103S	103E	Liquid Soap A & B Tank	2017	1,585 gal	N
104S	104E	Liquid Soap A & B Tank	2017	1,585 gal	N
105S	105E	Liquid Soap A & B Tank	2017	1,585 gal	N
106S	106E	Liquid Soap A & B Tank	2017	1,585 gal	N
107S	107E	Liquid Soap A & B Tank	2017	1,585 gal	N

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Procter and Gamble Manufacturing Company • Tabler Station Facility

108S	108E	Liquid Soap A & B Tank	2017	1,585 gal	N
109S	109E	Liquid Soap A & B Tank	2017	1,585 gal	N
110S	110E	Liquid Soap A & B Tank	2017	1,585 gal	N
111S	111E	Liquid Soap A & B Tank	2017	1,585 gal	N
112S	112E	Liquid Soap A & B Tank	2017	1,585 gal	N
113S	113E	Liquid Soap A & B Tank	2017	1,585 gal	N
114S	114E	Liquid Soap A & B Tank	2017	1,585 gal	N
115S	115E	Liquid Soap A & B Tank	2017	1,585 gal	N
116S	116E	Liquid Soap A & B Tank	2017	1,585 gal	N
117S	117E	Liquid Soap A & B Tank	2017	1,585 gal	N
118S	118E	Liquid Soap A & B Tank	2017	1,585 gal	N
259S	228E	Liquid Soap A & B Tank	2017	79,252 gal	N
260S	229E	Liquid Soap A & B Tank	2017	79,252 gal	N
261S	230E	Liquid Soap A & B Tank	2017	79,252 gal	N
119S	119E	Liquid Soap A & B Packing/Filling	2017	139,798,617 gal/yr	N
120S		Mixer	2017	1,182.6 mmscf/yr	3C
121S	120E	Mixer	2017		
122S		Premix Tank	2017		
123S		Premix Tank	2017		
124S	121E	Mixer	2017	2,496.6 mmscf/yr	4C
125S		Process Tank	2017		
126S		Process Tank	2017		
127S		Process Tank	2017		

Procter and Gamble Manufacturing Company • Tabler Station Facility

128S	122E	Mixer	2,496.6 mmscf/yr	5C	
129S		Process Tank	2017		
130S		Process Tank	2017	-	
131S		Process Tank	2017		
132S	123E	Mixer	2017	1,655.64 mmscf/yr	6C
133S		Process Tank	2017	-	
134S		Process Tank	2017	-	
135S		Process Tank	2017	-	
136S	124E	Preweigh Station	2017	525.6 mmscf/yr	7C
137S		Preweigh Station	2017	-	
138S		Preweigh Station	2017	-	
139S		Preweigh Station	2017		
140S	125E	Preweigh Station	2017	525.6 mmscf/yr	8C
140S 141S	125E	Preweigh Station Preweigh Station	2017	525.6 mmscf/yr	8C
	125E			525.6 mmscf/yr	8C
141S	125E	Preweigh Station	2017	525.6 mmscf/yr	8C
141S 142S	125E	Preweigh Station Preweigh Station	2017	525.6 mmscf/yr	8C
141S 142S 143S	125E	Preweigh Station Preweigh Station Preweigh Station	2017 2017 2017	525.6 mmscf/yr  20,611.765 mscf/yr	8C
141S 142S 143S 144S		Preweigh Station Preweigh Station Preweigh Station Sampling Station	2017 2017 2017 2017		
141S 142S 143S 144S 145S		Preweigh Station Preweigh Station Preweigh Station Sampling Station Hot Mix Tank	2017 2017 2017 2017 2017		
141S 142S 143S 144S 145S 146S	126E	Preweigh Station Preweigh Station Preweigh Station Sampling Station Hot Mix Tank Mixer	2017 2017 2017 2017 2017 2017	20,611.765 mscf/yr	14C
141S 142S 143S 144S 144S 145S 146S 147S		Preweigh Station Preweigh Station Preweigh Station Sampling Station Hot Mix Tank Mixer Process Tank	2017 2017 2017 2017 2017 2017 2017		
141S 142S 143S 144S 145S 146S 147S 148S	126E	Preweigh Station Preweigh Station Preweigh Station Sampling Station Hot Mix Tank Mixer Process Tank Process Tank	2017 2017 2017 2017 2017 2017 2017 2017	20,611.765 mscf/yr	14C 9C
141S 142S 143S 144S 144S 145S 146S 147S 148S 149S	126E 127E 126E	Preweigh Station Preweigh Station Preweigh Station Sampling Station Hot Mix Tank Mixer Process Tank Process Tank Hot Mix Tank	2017 2017 2017 2017 2017 2017 2017 2017	20,611.765 mscf/yr	14C 9C 14C
141S 142S 143S 144S 144S 145S 146S 147S 148S 149S 150S	126E 127E 126E	Preweigh Station Preweigh Station Preweigh Station Sampling Station Hot Mix Tank Mixer Process Tank Process Tank Hot Mix Tank Mixer	2017 2017 2017 2017 2017 2017 2017 2017 2017 2017	20,611.765 mscf/yr 918.8 mmscf/yr 20,611.765 mscf/yr	14C 9C 14C
141S 142S 143S 144S 144S 144S 145S 146S 147S 148S 149S 150S 151S	126E 127E 126E	Preweigh Station Preweigh Station Preweigh Station Sampling Station Hot Mix Tank Mixer Process Tank Process Tank Hot Mix Tank Mixer Process Tank Process Tank Process Tank	2017 2017 2017 2017 2017 2017 2017 2017 2017 2017 2017	20,611.765 mscf/yr	14C 9C 14C

155S		Process Tank	2017	]	
156S	1	Process Tank	2017	1	
157S	126E	Hot Mix Tank	2017	20,611.765 mscf/yr	14C
158S		Mixer	2017		
	130E			1	
159S	130L	Process Tank	2017	1603.08 mmscf/yr	12C
160S	1	Process Tank	2017		
161S		Process Tank	2017		
	131E			725.94	13C
162S	131E	Process Tank	2017	735.84 mmscf/yr	130
163S	132E	Dry Consumer Product Tank	2017	42,879 gal	N
164S	133E	Dry Consumer Product Tank	2017	37,641 gal	N
165S	134E	Dry Consumer Product Tank	2017	6,809 gal	N
166S	135E	Dry Consumer Product Tank	2017	396 gal	N
167S	136E	Dry Consumer Product Tank	2017	396 gal	N
168S	137E	Dry Consumer Product Tank	2017	396 gal	N
169S	138E	Dry Consumer Product Tank	2017	181 gal	N
170S	139E	Dry Consumer Product Tank	2017	181 gal	N
171S	140E	Dry Consumer Product Tank	2017	181 gal	N
172S	141E	Dry Consumer Product Tank	2017	181 gal	N
173S	142E	Dry Consumer Product Tank	2017	181 gal	N
	•		•		
174S	143E	Dry Consumer Product Tank	2017	181 gal	N
175S	144E	Dry Consumer Product Tank	2017	181 gal	N
176S	145E	Dry Consumer Product Tank	2017	181 gal	N
177S	146E	Dry Consumer Product Tank	2017	181 gal	N
178S	147E	Dry Consumer Product Tank	2017	181 gal	N
179S	148E	Dry Consumer Product Tank	2017	181 gal	N
180S	149E	Dry Consumer Product Tank	2017	181 gal	N

<del>181S</del>	150E	Dry Consumer Product Tank	<del>2017</del>	<del>181 gal</del>	N
182S	151E	Dry Consumer Product Tank	<del>2017</del>	<del>181 gal</del>	N
<del>183S</del>	152E	Dry Consumer Product Tank	<del>2017</del>	<del>181 gal</del>	N
184S	153E	Dry Consumer Product Tank	<del>2017</del>	<del>181 gal</del>	N
<del>185S</del>	154E	Dry Consumer Product Tank	<del>2017</del>	<del>181 gal</del>	N
<del>186S</del>	155E	Dry Consumer Product Tank	<del>2017</del>	<del>181 gal</del>	N
187S	156E	Dry Consumer Product Tank	<del>2017</del>	<del>181 gal</del>	N
188S	157E	Dry Consumer Product Tank	<del>2017</del>	<del>181 gal</del>	N
<u>262S</u>	232E	Dry Consumer Products Flexible Perfume Delivery System	2017	<u>30 gal</u>	<u>N</u>
189S	158E	Dry Consumer Product PM Control	2017	17, 450 scfm	15C
190S	159E	Dry Consumer Product PM Control	2017	17, 450 scfm	16C
191S	160E	Dry Consumer Product PM Control	2017	17, 450 scfm	17C
192S	161E	Dry Consumer Product PM Control	2017	17, 450 scfm	18C
193S	162E	Dry Consumer Product PM Control	2017	17, 450 scfm	19C
194S	163E	Dry Consumer Product PM Control	2017	8,000 scfm	20C
195S	164E	Dry Consumer Product Additive	2017	109 ft/s	N
196S	165E	Boiler 1	2017	62 mmbtu/hr	N
197S	166E	Boiler 2	2017	62 mmbtu/hr	N
198S	167E	Boiler 3	2017	3 <u>13</u> mmbtu/hr	N
199S	168E	Temporary Boiler	2017	11 mmbtu/hr	N
200S	169E	Cooling Tower	2017	331 mgal/hr	N
201S	170E	Cooling Tower	2017	792 mgal/hr	N
202S	171E	Cooling Tower	2017	212 mgal/hr	N
203S	172E	Fire Pump Engine	2017	3 <u>99</u> 11 hp	N

204S	173E	Fire Pump Engine	2017	3 <u>99</u> 11 hp	N
205S	174E	Emergency Generator	2017	350 kw	N
206S	175E	Emergency Generator	2017	350 kw	N
207S	176E	Emergency Generator	2017	350 kw	N
<u>263S</u>	233E	Emergency Generator	<u>2017</u>	<u>83 kw</u>	<u>N</u>

208S	177E	Fuel Tank	2017	5,162 gal	N
210S	179E	Warehouse Heaters	2017	18.3 mmbtu/hr (total)	N
216S	185E	VOC containing Water/waste-water Pretreatment Chemicals	2017	174,928 kg/yr	N
217S	186E	Plastic Pellet Unloading	2017	100,000 tons/yr	21C
218S	187E	Plastic Pellet Unloading	2017		22C
219S	188E	Plastic Pellet Unloading	2017		23C
220S	189E	Plastic Pellet Unloading	2017		24C
221S	190E	Plastic Pellet Unloading	2017		25C
222S	191E	Plastic Resin Storage Silo	2017	100,000 tons/yr	N
223S	192E	Plastic Resin Storage Silo	2017		N
224S	193E	Plastic Resin Storage Silo	2017		N
225S	194E	Plastic Resin Storage Silo	2017		N
226S	195E	Plastic Resin Storage Silo	2017		N
227S	196E	Plastic Resin Storage Silo	2017		N
228S	197E	Plastic Resin Storage Silo	2017		N
229SS	198E	Plastic Resin Storage Silo	2017		N
230S	199E	Plastic Resin Storage Silo	2017		N
231S	200E	Plastic Resin Storage Silo	2017		N

232S	201E	Plastic Resin Storage Silo 2017					
233S	202E	Plastic Resin Storage Silo	2017		N		
234S	203E	Plastic Resin Storage Silo	2017		N		
235S	204E	Plastic Resin Storage Silo	2017		N		
236S	205E	Plastic Resin Storage Silo	2017		N		
237S	206E	Plastic Resin Storage Silo	2017		N		
238S	207E	Plastic Resin Storage Silo	2017		N		
239S	208E	Plastic Resin Storage Silo	2017		N		
240S	209E	Plastic Resin Storage Silo	2017		N		
241S	210E	Plastic Resin Storage Silo	2017		N		
242S	211E	Plastic Resin Storage Silo	2017		N		
243S	212E	Plastic Resin Storage Silo	2017		N		
244S	213E	Plastic Resin Storage Silo	2017		N		
245S	214E	Plastic Resin Storage Silo	2017		N		
246S	215E	Plastic Regrind	2017	32,000 tons/yr	26C		
		ı			<u> </u>		
247S	216E	Plastic Forming	2017	100,000 tons/yr	N		
248S	217E	Plastics Molding, Cleaning Fugitives	2017	6 tons/yr	N		
249S	218E	Plastics Molding Space Heaters	2017	17 mmbtu/hr total	N		
255S	224E	Plastics Molding Cooling Tower	2017	7,000 gpm	N		
256S	225E	Plastics Mold. Emergency Gen.	2017	70 kw	N		
257S	226E	Case Printing Ink	2017	3,430 lb/yr	N		
258S	227E	Case Packing Glue	2017	690,080 lb/yr	N		

to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ: If to the USEPA:

Director Associate Director

WVDEP Office of Air Enforcement and Compliance

Division of Air Quality Assistance 601 57th Street, SE (3AP20)

Charleston, WV 25304-2345 U. S. Environmental Protection Agency

Region III 1650 Arch Street

Philadelphia, PA 19103-2029

#### 3.5.4. Operating Fee.

3.5.4.1. In accordance with 45CSR30 – Operating Permit Program, the permittee shall submit a Certified Emissions Statement (CES) and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

- 3.5.4.2. In accordance with 45CSR30 Operating Permit Program, enclosed with this permit is a Certified Emissions Statement (CES) Invoice, from the date of initial startup through the following June 30. Said invoice and the appropriate fee shall be submitted to this office no later than 30 days prior to the date of initial startup. For any startup date other than July 1, the permittee shall pay a fee or prorated fee in accordance with the Section 4.5 of 45CSR22. A copy of this schedule may be found attached to the Certified Emissions Statement (CES) Invoice.
- 3.5.5. Emission inventory. At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

#### 4.0. Source-Specific Requirements

#### 4.1. Limitations and Standards

- 4.1.1 The Procter & Gamble Manufacturing Company, Tabler Station Facility shall consist of only the pollutant-emitting equipment and processes identified under Section 1.0 of this permit and any other processes/units defined as De Minimis per 45CSR13. In accordance with the information filed in Permit Application R13-3316, the equipment shall be installed, maintained, and operated so as to minimize any fugitive escape of pollutants and the equipment/processes shall use the specified control devices.
- 4.1.2. Emissions from the facility shall not exceed the following:

	$NO_x$		SC	$O_2$	VOC		РМ		СО	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
Scrubber Stacks <sup>1</sup>	1.06	4.66	2.10	1.41	1.80	4.13	6.9	21.70	0.06	0.24

<sup>&</sup>lt;sup>1</sup> Surfactant startup preheaters vent to scrubber stacks. Emissions are additive to surfactant scrubber emissions. West Virginia Department of Environmental Protection • Division of Air Quality

п							1			
Surfactant Startup Preheater	0.78	0.03	0.01	0.01	0.09	0.01	0.12	0.01	1.30	0.05
Surfactant Manufact. Tanks					0.28	1.20				
Truck and Rail Loading <sup>1</sup>					0.02	0.06				
Liq. Soap Outdoor Tanks					0.24	1.70				
Liq. Soap Indoor Tanks					0.17	0.76				
Liq Soap Packing & Capping					0.01	0.01				
Rotoclones & Liq. Soap Fug.					33.23	33.42	4.57	20.06		
Liquid Soap RTO <sup>2</sup>	0.24	1.10	0.01	0.01	213.50	8.00	0.02	0.07	1.30	5.80
Dry Cons. Prod Manuf. Out. Tanks					0.07	0.31				
Dry Cons. Prod Manuf. In. Tanks					0. <u>62</u> <del>09</del>	0. <u>76</u> 36				
Dry Cons. Prod. Baghouses/Fab. Filters							3.81	16.71		
Dry Cons. Prod Manufact. Fugitives					2.0	8.70				
Main Facility Boilers	11.3 <del>0</del> 1	49.5 <u>4</u> 0	0.10	0.41	0.5 <u>6</u> 5	2.4 <u>6</u> 9	1.17	5. <u>14</u> 00	5.7 <u>8</u> 0	25. <u>33</u> 00
Main Facility Cooling Towers							1.35	5.90		
Main Facility Engines	<u>15.68</u> 14.10	3. <u>92</u> 51	0.05	0.02	0. <u>32</u> 29	0.087	0. <u>36</u> 29	0.0 <u>9</u> 7	3.322.75	0. <u>83</u> 70
Main Facility Process Heaters	0.90	3.90	0.02	0.05	0.10	0.44	0.14	0.60	1.51	6.60
Water/Waste water Treatment					2.99	13.04				
Case Print. Ink & Case Pack. Glue Use					0.14	0.59				
Plastics Molding Cyclones							0.29	0.35		
Plastics Moldings Silos							2.91	3.50		
Plastic Regrind							0.04	0.17		
Plastic Molding Fugitives					2.07	9.07				
Plastic Molding Space Heat.	0.83	3.65	0.01	0.04	0.10	0.41	0.13	0.56	1.40	6.13
Plastic Molding Cool. Tower							0.42	1.84		

 <sup>&</sup>lt;sup>1</sup> Less than 0.001 lb/hr potential particulate emissions from surfactant unloading.
 <sup>2</sup> Maximum hourly VOC emissions of 213.5 lb/hr (less than 24 hours per year). Maximum hourly VOC controlled emissions of 6.4 lb/hr.
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Plastic Molding Engines	0.42	0.11	0.01	0.01	0.21	0.06	0.01	0.01	0.84	0.21
Total	<del>29.63</del> <u>31.22</u>	66. <u>85</u> 46	2.31	1.96	25 <u>8.52</u> 7.95	8 <u>5.21</u> 4.83	22. <u>24</u> 17	76. <u>71</u> 55	1 <u>5.51</u> 4.86	4 <u>5.19</u> 4 <del>.73</del>

- 4.1.3 The permittee shall maintain the pH of the scrubbing liquor to a level at least as alkaline as it was during the most recent test which showed compliance with the emission levels of 4.1.1.
- 4.1.4 Each surfactant startup preheater shall not operate more than 72 hours per year.
- 4.1.5 All process tanks for Liquid Soap A and B manufacturing which incorporate dust control systems shall be equipped with rotoclones for emission control. Said rotolclones shall be designed, installed, operated and maintained so as to achieve emissions outlined in 4.1.2.
- 4.1.6 All hot mixing vessels for Liquid Soap A shall be equipped with an RTO to be operated anytime the mixing process uses the heated volatile processing aid. Said RTO shall be designed, installed, operated and maintained so as to achieve a minimum destruction efficiency of at least 97%. Operation of the hot mixing process vessels using the heated volatile processing aid without RTO shall be maintained at less than 24 hours per year.
- 4.1.7 The Dry Consumer Laundry and Cleaning Products area shall be equipped with fabric filters to control particulate emissions.
- 4.1.8 Boiler Nos. 1 and 2 shall not exceed a heat input of 62 mmbtu/hr each. Boiler No. 3 shall not exceed a heat input of 334 mmbtu/hr. All boilers shall be fired exclusively with pipeline quality natural gas.
- 4.1.9 Boiler Nos. 1 and 2 shall not consume more than 543 mmscf of fuel per year each. Boiler No.3 shall not consume more than 28672 mmscf of fuel per year.
- 4.1.10 Visible emissions from any boiler shall not exceed 10% opacity based on a six minute block average. [45CSR§2-3.1.]
- 4.1.11 The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup of the natural gas fired boilers, as provided by §60.7 of this part. [40 CFR §60.48c(a)]
- 4.1.12 The cooling towers shall be operated with a drift rate of no more than 0.002%. Additionally, the total dissolved solids (TDS) content of the cooling tower water shall not exceed 6,000 ppm.
- 4.1.13 The <u>fourthree</u> emergency generators (205S, 206S<u>, and 207S, and 263S</u>) and two fire water pump engines (203S and 204S) shall fire only ultra low sulfur diesel fuel with a sulfur content of no greater than 0.0015% by weight.
- 4.1.14 Each of the three Caterpillar C15 emergency generators (205S, 206S and 207S) shall not consume more than 28.6 gallons of fuel oil per hour.
- 4.1.1X The Kohler/John Deere emergency generator (263S) shall not consume more than 6.9 gallons of fuel oil per hour.
- 4.1.15 Each of the two Clark fire pump engines (203S and 204S) shall not consume more than  $\frac{20.016.13}{\text{gallons per hour}}$ .
- 4.1.16 The 4 stroke rich burn emergency generator (256S) shall fire only pipeline quality natural gas. Said engine shall not consume more than 196 scf per hour of natural gas.

4.1.17. Emissions from the emergency generators and fire water pump engines shall not exceed the following (all limits in g/kW-hr, unless otherwise noted): [40 CFR §60.4205]

Engine	NMHC + NO <sub>x</sub>	СО	PM
Fire Water Pump Engine (203)	4.0		0.20
Fire Water Pump Engine (204)	4.0		0.20
Emergency Generator (205)	4.0	3.5	0.20
Emergency Generator (206)	4.0	3.5	0.20
Emergency Generator (207)	4.0	3.5	0.20
Emergency Generator (256)	10 g/hp-hr	387 g/hp-hr	
Emergency Generator (263)	4.0	<u>5.0</u>	0.30

4.1.18.1 Compliance with the above limits shall be determined by purchasing certified engines. [40 CFR §60.4211(c)]

- 4.1.19 The emergency generators (205S, 206S, and 207S and 263S) and fire pump engines (203S and 204S) shall fire only nonroad diesel fuel that meets the requirements of 40 CFR 80.510(b). [40 CFR §60.4207(b)]
- 4.1.20 The emergency generators (205S, 206S, and 207S, and 263S) and fire pump engines (203S and 204S) must meet all applicable requirements of 40 CFR 60 Subpart IIII. [40 CFR §63.6590(c)(1)]
- 4.1.21 The emergency generator (256S) must meet all applicable requirements of 40 CFR 60 Subpart JJJJ. [40 CFR §63.6590(c)(1)]
- 4.1.22 Cyclones shall be used to control PM emissions from rail car unloading of pellets to the rail car unloading feeder. Said cyclones shall be designed, installed, operated and maintained so as to achieve the Plastics Molding Cyclone emission rate of 4.1.2.
- 4.1.23 The total amount of pellets unloaded into the 24 plastics molding silos combined shall not exceed 100,000 tons per year.
- 4.1.24 PM emissions from the plastic regrind process shall be controlled with a bin vent filter. Said filter shall be designed, installed, operated and maintained so as to achieve the plastic regrind emission rate of 4.1.2.
- 4.1.25 The total amount of pellets reground shall not exceed 32,000 tons per year.
- 4.1.26. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section  $1.0\,$ and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR§13-5.11.]

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