

January 6, 2012

Florida Department of Environmental Protection Cindy Zhang-Torres, PE Air Permitting Manager, Southwest District Southwest District Office 13051 North Telecom Parkway Temple Terrace, Florida 33637-0926

RE: Air Operation Permit Renewal Application

Project No. 1190030-012-AF Charlotte Pipe and Foundry Company Request for Additional Information

AEI Project No. 188-105

Dept. of Environmental
Protection

JAN 09 2012

Southwest District

Ms. Zhang-Torres:

In a letter dated December 20, 2011, the FDEP requested additional information prior to completion of Charlotte Pipe and Foundry's air permit renewal application submitted December 1, 2011.

The FDEP December 20, 2011 letter requested additional information regarding three items: A change in the number of ink jet printers; the addition of two PVC extruder lines; and, the confidentiality of Charlotte Pipes operating records.

Item 1: "During an inspection of the facility on 12/19/2011, it was brought to the notice of the Department that the facility had removed all eleven (11) Video Jet – Model EXCEL 1701 inkjet printers and added six (6) Imaje – Model JAIME 100S8 inkjet printers to make a total of 18 Imaje inkjet printers. Please (1) provide the date(s) when the Video Jet printers were removed and when the additional six (6) Imaje printers were installed; and (2) explain why the addition of six (6) inkjet printers did not constitute "modification", as defined in Rule 62-210.200, F.A.C. – Definitions..."

62-210.200 (199) "Modification" – Any physical change in, change in the method of operation of, or addition to a facility which would result in an increase in the actual emissions of any air pollutant subject to regulation under the Act, including any not previously emitted, from any emissions unit or facility.

PO Box 1339 – Monroe, NC 28111-1339 Phone: Monroe – 704-289-2531 Charlotte - 704-372-3650 • Through an investigation into our records, it was determined that the last purchase of ink/additive for the Video Jet inkjet printers located on-site occurred on December 16, 2005. The Video Jet inkjet printers were decommissioned at the facility shortly after that time. The last six (6) Imaje inkjet printers purchased by the facility were received at the facility on the following dates:

# of Imaje Printers Received	Date Facility Received Printers
One (1)	6/6/2006
Four (4)	3/1/2007
One (1)	4/16/2007

• Since Charlotte Pipe's current air permit is based on maximum material throughput and the number of inkjet printers does not necessarily have a direct impact on emissions, it is Charlotte Pipe's understanding that a reduction in the total number of inkjet printers does not meet the 62-210.200 definition of "modification". Charlotte Pipe's current air permit identifies the Inkjet Printing Process, as a whole, as Emission Unit No. 009. We request that the individual manufacturers of the inkjet printers continue to be left out of the description of Emission Unit No. 009, in case future changes in manufacturers occur. Essentially all inkjet printers perform the same function and utilize the same technology so we feel they are interchangeable and should be treated as such on the air permit.

<u>Item 2:</u> "During an inspection of the facility on 12/19/2011, it was also brought to the notice of the Department that the facility had added two (2) PVC extruder lines (Lines 10 and 11). Please confirm that there are now 12 PVC extruders and two (2) CPVC extruders at the facility."

• It is correct that there were twelve (12) PVC extruders and two (2) CPVC extruders located at the facility at the time of your inspection on 12/19/2011. With that said, the facility has decided to remove one (1) PVC extruder from the facility, effective 1/9/2012. This will give the facility a total of eleven (11) PVC extruders and two (2) CPVC extruders beginning on 1/9/2012.

<u>Item 3:</u> "The Operating Records in Attachment 5 of the application are labeled "Confidential"... We had been advised by our program attorney in the past that information used to determine emissions cannot be considered "confidential", as the public has the right to know what they are exposed to and how the emissions are estimated. Please refer to Florida Statutes, Section 403.111: Confidential Records and Section 812.081: Trade Secrets; Theft, Embezzlement; Unlawful Copying; Definitions; Penalty and explain in the light of the information stated why Attachment 5, Operating Records should be treated as "confidential" information."

• Charlotte Pipe understands the facility's Operating Records in Attachment 5 of the application cannot be held "confidential" per Florida Statutes Sections 403.111 and 812.081 and agree to discontinue labeling the Operating Records "confidential". A copy of the non-confidential operating records can be found attached to this letter.

If you have any questions or we may be of further assistance in this matter, please contact James Neubauer at (704) 226-8335.

Sincerely, Charlotte Plastics

C. Leon Salter, Jr.

Sr. Vice President – Plastics Division

CHARLOTTE PIPE AND FOUNDRY COMPANY - PLASTICS DIVISION WILDWOOD, FLORIDA

Production Rate

Date	CPVC tons	PVC tons	CPVC hrs	PVC hrs	Daily Average PVC tons/hr	Daily Average CPVC tons/hr
10/1/11			24.00			
10/1/11	5.02	37.11	_	24.00	1.55	0.21
10/2/11	5.01	37.86	24.00	24.00	1.58	0.21
10/3/11	5.00	38.83	24.00	24.00	1.62	0.21
10/4/11	5.05	44.45	22.50	24.00	1.85	0.22
10/5/11	0.00	61.25	0.00	24.00	. 2.55	0.00
10/6/11	0.00	60.17	0.00	24.00	2.51	0.00
10/7/11	0.00	59.55	0.00	24.00	2.48	0.00
10/8/11	0.00	59.58	0.00	24.00	2.48	0.00
10/9/11	0.00	63.31	. 0.00	24.00	2.64	0.00
10/10/11	2.96	49.49	20.00	24.00	2.06	0.15
10/11/11	3.91	41.27	22.50	24.00	1.72	0.17
10/12/11	4.94	40.93	24.00	24.00	1.71	0.21
10/13/11	3.98	45.18	24.00	24.00	1.88	0.17
10/14/11	4.99	28.34	24.00	24.00	1.18	0.21
10/15/11	3.96	3.96	24.00	24.00	0.17	0.17
10/16/11	5.01	23.81	24.00	24.00	0.99	0.21
10/17/11	4.53	37.72	24.00	24.00	1.57	0.19
10/18/11	4.52	48.92	24.00	24.00	2.04	0.19
10/19/11	4.54	46.53	24.00	24.00	1.94	0.19
10/20/11	4.66	46.97	20.30	24.00	1.96	0.23
10/21/11	4.97	39.29	24.00	24.00	1.64	0.21
10/22/11	5.03	48.67	24.00	24.00	2.03	0.21
10/23/11	4.99	42.30	24.00	24.00	1.76	0.21
10/24/11	4.15	45.45	19.00	24.00	1.89	0.22
10/25/11	5.45	45.43	24.00	24.00	1.89	0.23
10/26/11	5.41	42.20	24.00	24.00	1.76	0.23
10/27/11	5.36	25.74	24.00	24.00	1.07	0.22
10/28/11	5.36	14.26	24.00	24.00	0.59	0.22
10/29/11	4.96	13.18	24.00	24.00	0.55	0.21
10/30/11	5.69	15.30	24.00	24.00	0.64	0.24
10/31/11	4.98	16.89	24.00	24.00	0.70	0.21

otal	124.46	1223.93	608.30	744.00	1.65	0.20

CHARLOTTE PIPE AND FOUNDRY COMPANY - PLASTICS DIVISION WILDWOOD, FLORIDA Consecutive 12-month Totals

	Month	Produ	uction	Ink Usage								
Г								Matthews				
1	•		i	Imaje 5135	Imaje 5191	Imaje 5142	Imaje 5157E	M149 Yellow	Matthews			
	_	PVC Pipe	CPVC Pipe	Black Ink	Additive	Red Ink	Black Ink	ink	#10 Thinner	Total Ink	Total Ink	
		Production	Production	Usage	Usage	Usage	Usage	Usage	Usage	Recycled	Usage	
		(tons/month)	(tons/month)	(gal/month)								
	Nov-10	1,282	. 0	0	47.556	3.1704	0	0	0	0	50.7264	
	Dec-10	1,044	, 0	0	59.445	8.4544	0	0 -	0	0	67.8994	
	Jan-11	1,540	0	0 .	28.5336	8.4544	9.5112	0	0	55	-8.5008	
	Feb-11	961	10	0	47.556	4.2272	7.1334	0	0	0	58.9166	
	Mar-11	2,328	35	0	118.89	10.568	0	0	0	0	129.458	
	Apr-11	2,192	0	0	71.334.	14.7952	0	0	0	0	86.1292	
	May-11	2,336	52	0	47.556	0	0	0	0	0	47.556	
	Jun-11	1,882	66	0	118.89	4.2272	7.1334	0	0	55	75.2506	
	Jul-11	864	49	0	47.556	15.852	0	0	0	0	63.408	
	Aug-11	1,263	38	0	121.0036	0	0	0	0	0	121.0036	
	Sep-11	1,084	.50	0	47.556	4.2272	9.5112	3	4	0	68.2944	
	Oct-11	1,224	124	0	35.667	4.2272	0	0	0	0	39.8942	
\vdash	12 month total	17,998	414	0	792	78	33	3	4	110	800	

Month		lnk Jet Printir	g Emission	S	·	PVC and CPV	C Production	Emissions		Total Er	nissions
·.	Methanol (HAP,VOC)	Isophorone (HAP,VOC)	Printing Total VOC	Printing Total HAPs	Chloroform (HAP,VOC)	Carbon Tetrachloride (HAP,VOC)	Vinyl Chloride (HAP,VOC)	Production Total VOC		Total VOC	Total HAPs
					(****,****)	(, ,	(* * * * * * * * * * * * * * * * * * *				
	(tons/month)	(tons/month)	(tons/month)	(tons/month)	(tons/month)	(tons/month)	(tons/month)	(tons/month)	(tons/month)	(tons/month)	(tons/month)
Nov-10	0	.0	1.7E-01	0	0	0 .	4.5E-04	4.5E-04	4.5E-04	1.7E-01	4.5E-04
Dec-10	0 :	0	2.3E-01	0	0	0	3.7E-04	3.7E-04	3.7E-04	2.3E-01	3.7E-04
Jan-11	0 !	10	-3.4E-02	0	0	0	5.4E-04	5.4E-04	5.4E-04	-3.3E-02	5.4E-04
Feb-11	0	0	2.0E-01	. 0	0	0	3.4E-04	3.4E-04	3.4E-04	2.0E-01	3.4E-04
Mar-11	0	:0	4.3E-01	0	4.6E-08	1.1E-08	8.1E-04	8.1E-04	8.1E-04	4.3E-01	8.1E-04
Apr-11	0 '.	0	2.8E-01	Ó	0	0	7.7E-04	7.7E-04	7.7E-04	2.8E-01	7.7E-04
May-11	0	٠0	1.6E-01	0	6.7E-08	1.6E-08	8.2E-04	8.2E-04	8.2E-04	1.6E-01	8.2E-04
Jun-11	0 ·	.0	2.5E-01	0	8.6E-08	2.0E-08	6.6E-04	6.6E-04	6.6E-04	2.5E-01	6.6E-04
. Jul-11	0	0	2.1E-01	0	6.3E-08	1.5E-08	3.0E-04	3.0E-04	3.0E-04	2.1E-01	3.0E-04
Aug-11	0	10	4.1E-01	0	5.0E-08	1.1E-08	4.4E-04	4.4E-04	4.4E-04	4.1E-01	4.4E-04
Sep-11	0 :	6.6E-03	2.3E-01	6.6E-03	6.5E-08	1.5E-08	3.8E-04	3.8E-04	3.8E-04	2.3E-01	7.0E-03
Oct-11	0	۰0	1.3E-01	0	1.6E-07	3.7E-08	4.3E-04	4.3E-04	4.3E-04	1.3E-01	4.3E-04
12 month total	0 1	6.6E-03	2.7E+00	6.6E-03	5.4E-07	1.2E-07	6.3E-03	6.3E-03	6.3E-03	2.7E+00	1.3E-02



PIPE AND FOUNDRY COMPANY

PLASTICS

DIVISION

November 30, 2011

Florida Department of Environmental Protection Southwest District Office 13051 North Telecom Parkway Temple Terrace, Florida 33637-0926

RE: Air Operating Permit Renewal

Charlotte Pipe and Foundry Company, Wildwood, Florida

AEI Job No. N188-105

Dear Sir or Madam:

Charlotte Pipe and Foundry Company, Plastics Division (CPFC) is submitting the required four (4) copies of a completed Air Operating Permit Renewal, and a \$3,000 check to cover the required permit renewal fees for the CPFC Wildwood, Florida facility.

As required by the facility's current air permit (Permit No. 1190030-011-AF), a copy of the visible emissions test reports conducted on September 13, 2011, as well as a copy of the required operation records for October 2011 are included with the permit renewal application.

If you have any questions or concerns regarding the attached permit application, please contact me at (704) 226-8335.

Sincerely,

James Neubauer

Environmental, Health & Safety/5S Manager

Charlotte Pipe and Foundry Company

Dept. of Environmental Southwest District

ENVIRONMENTAL®

Southwest District

AIR OPERATING PERMIT RENEWAL APPLICATION CHARLOTTE PIPE AND FOUNDRY COMPANY WILDWOOD, FLORIDA

Prepared for:

CHARLOTTE PIPE AND FOUNDRY COMPANY
PLASTICS DIVISION
MONROE, NORTH CAROLINA

Prepared by:

AWARE ENVIRONMENTAL, INC. 8514 McALPINE PARK DRIVE, SUITE 100 CHARLOTTE, NORTH CAROLINA AEI Job No. N188-105 AEI Document No. 188105r001

NOVEMBER 2011

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Attachment 2	Precautions to Prevent Emissions of Unconfined Particulate Matter
Attachment 3	Compliance Test Report (Visible Emissions)
Attachment 4	Operation and Maintenance Plan
Attachment 5	Operating Records

1.0 INTRODUCTION

Charlotte Pipe and Foundry Company, Plastics Division (CPFC) is required to submit an Air Operating Permit Renewal Application for its polyvinyl chloride (PVC) and chlorinated polyvinyl chloride (CPVC) pipe manufacturing facility. The facility is located in Wildwood, Florida (Figure 1) and will submit an application for renewal of it Synthetic Minor Non-Title V Air Operating Permit (Permit No. 1190030-011-AF, expiring 02/12/2012).

2.0 APPLICATION FOR RENEWAL OF NON-TITLE V AIR PERMIT



Department of Environmental Protection

Division of Air Resources Management

APPLICATION FOR NON-TITLE V AIR PERMIT RENEWAL

See Instructions for Form No. 62-210.900(4)

I. APPLICATION INFORMATION

Identification of Facility

1.	Facility Owner/Company Name:	
	Charlotte Pipe and Foundry Company	
2.	Site Name	
	(N/A)	
3.	Facility Identification Number	4. Facility Status Code
	1190030	A

Application Contact

1.	Jennifer Garvon, PE	lication Contact:
	Senior Project Engine	er
	Schiol Project Engine	
2.	Application Contact M	ailing Address:
	Organization/Firm:	Aware Environmental, Inc.
	Street Address:	8514 McAlnine Park Dr. Suite 100

City, State, ZIP: Charlotte, North Carolina 28211

3. Application Contact Telephone Numbers
Telephone: (704) 845-1697 Fax: (704) 845-1759

Application Processing Information (DEP Use)

1.	Date of Receipt of Application:	12-1-11
2.	Permit Number:	1190030-012-AF

1

DEP Form No. 62-210.900(4) – Form

Owner/Authorized Representative

1. Name and Title of Owner/Authorized Representative:

C. Leon Salter, Jr

Senior Vice President, Plastics Division

2. Owner/Authorized Representative Mailing Address:

Organization/Firm:

Charlotte Pipe and Foundry – Plastics Division

Street Address:

4210 Old Monroe Highway

City, State, ZIP:

Monroe, North Carolina 28110

3. Owner/Authorized Representative Telephone Numbers:

Telephone: (704) 291-3216

Fax: (704) 348-9919

4. Owner/Authorized Representative Statement:

I, the undersigned, am the owner or authorized representative* of the facility addressed in this Application for Air Permit. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. Further, I agree to operate and maintain the air pollutant emissions units and air pollution control equipment described in this application so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.

Signature C.LEON SALTER, JR.

SR. VP-PLASTICS DIV.

11-30-1

Date

^{*}Attach letter of authorization if not currently on file.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type	Processing Fee
002	PVC Storage Silos (6)	AO2B	\$1000
007	CPVC Storage Silo and Associated Vacuum Unloader Railcar System	AO2B	\$1000
009	Ink Jet Printing	AO2B	\$1000 750

Application Processing Fee

Check one: $[\checkmark]$ Attached – Amount: $$3,000.00$	[] Not Applicable
Application Comment	
)
	•

II. **FACILITY INFORMATION**

Facility Contact

1.	Name and Title of Facility Contact:				
	James Neubauer				
	Environmental Health and Safety/S5 Manager				
	· C				
2.	Facility Contact Mailing Address				
	Organization/Firm: Charlotte Pipe and Foundry – Plastics Division				
	Street Address: 4210 Old Monroe Highway				
	City, State, ZIP: Monroe, North Carolina 28110				
3.	Facility Contact Telephone Numbers				
٥.	Telephone: (704) 226-8335 Fax: (704) 348-9883				
	1 u.v. (704) 220 0000				
Fac	cility Supplemental Requirements				
1 44	entry Supplementar Reduitements				
1	Area Map Showing Facility Location				
1.	[\sqrt{1} Attached, Document ID: Figure 1 Not Applicable Waiver Requested				
	[] Attached, Document ib. Figure 1 [] Not Applicable [] Walver Requested				
2	Facility Plot Plan				
۷.	[\(\) Attached, Document ID: \(\) Figure 2 \(\) Not Applicable \(\) Waiver Requested				
	[] Attached, Document ib. Figure 2 [] Not Applicable [] waiver requested				
3	Facility Flow Diagram				
٥.	[\sqrt{1} Attached, Document ID: Attachment 1 [] Not Applicable [] Waiver Requested				
	[] Attached, Document ib. Attachment i] Not Applicable [] waiver requested				
4	Precautions to Prevent Emissions of Unconfined Particulate Matter				
۲.	[] Attached, Document ID: Attachment 2 [] Not Applicable [] Waiver Requested				
:	[] Attached, Document ID. Attachment 2 [] Not Applicable [] Walver Requested				
Fa	cility Comment				
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	·				
	•				

DEP Form No. 62-210.900(4) – Form Effective: 2/11/99

Emission Unit ID 002

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section must be completed for each emissions unit addressed in this Application for Non-Title V Air Permit Renewal. If submitting the form in hard copy, indicate, in the space provided at the top of each page, the Emissions Unit ID of the emissions unit addressed on the page, as given in the unit's most current air operation permit.

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section (limit 60 characters):							
PVC Storage Silos #2-#6							
PVC Resin Storage Silo #7							
2. Emissions Unit Status Code:	3. Long-Term Reserve Shutdown Date:						
A	N/A						
4. Control Equipment Method/Description (limit 200 characters per device of method):							
Cartridge Filter	•						

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat It	nput Rate: N/A	mmBtu/hr						
2. Maximum Incine	eration Rate: N/A	lb/hr tons/day						
3. Maximum Proces	s of Throughput Rate:	See Below, EU Comments						
4. Maximum Production Rate: N/A								
5. Requested Maxim	num Operating Schedul	le: N/A						
24 Hours/day	7 days/week							
52 Weeks/year	8760 hours/yr							

DEP Form No. 62-210.900(4) - Form

Emission Unit ID <u>002</u>

Emissions Unit Supplemental Requirements

1. Fuel Analysis or Specification							
[] Attached, Document ID: [] Not Applicable [] Waiver Requested							
2. Compliance Test Report							
[] Attached, Document ID: <u>Attachment 3</u> [] Not Applicable							
[] Previously submitted, Date							
3. Procedures for Startup and Shutdown							
[] Attached, Document ID: [] Not Applicable [] Waiver Requested							
4. Operation and Maintenance Plan							
[] Attached, Document ID: <u>Attachment 4</u> [] Not Applicable [] Waiver Requested							
5. Other Information Required by Rule or Statute							
[] Attached, Document ID: [] Not Applicable [] Waiver Requested							

Emissions Unit Comment

- Attachment B is a Method 9 compliance test report for EU 002 (and EU 007). Observation data was collected 09/13/2011.
- Emissions Unit Operating Capacity and Schedule for EU 002 also includes Silo Loading Rates:

Emissions Source	Maximum Unit Loading
Description	Rate (lbs/hr)
PVC Storage Silo 2	16,000
PVC Storage Silo 3	13,000
PVC Storage Silo 4	15,000
PVC Storage Silo 5	15,000
PVC Storage Silo 6	13,000
PVC Resin Storage Silo 7	15,000

• Filters on silos 2,3,4,5 and 6 will be replaced with similar filters during the upcoming permit cycle as part of regular routine maintenance.

DEP Form No. 62-210.900(4) - Form

Emission Unit ID <u>007</u>

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section (limit 60 characters):

CPVC Storage Silo and Associated Vacuum Unloader Railcar System

2. Emissions Unit Status Code:

A

3. Long-Term Reserve Shutdown Date:

N/A

4. Control Equipment Method/Description (limit 200 characters per device of method):

Cartridge Filter (ES-36, EP-24)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate: N/A mmBtu/hr						
2. Maximum Incineration Rate: N/A lb/hr yons/day						
3. Maximum Process of Throughput Rate: See Below, EU Comments						
4. Maximum Production Rate: N/A						
5. Requested Maximum Operating Schedule: N/A						
24 Hours/day 7 days/week						
52 Weeks/year 8760 hours/yr						

DEP Form No. 62-210.900(4) - Form

Emission Unit ID <u>007</u>

Emissions Unit Supplemental Requirements

1. Fuel Analysis or Specification
[] Attached, Document ID:[] Not Applicable [] Waiver Requested
2. Compliance Test Report
[] Attached, Document ID: <u>Attachment 3</u> [] Not Applicable
[] Previously submitted, Date
3. Procedures for Startup and Shutdown
[] Attached, Document ID:[✓] Not Applicable [] Waiver Requested
4. Operation and Maintenance Plan
[] Attached, Document ID: <u>Attachment 4</u> [] Not Applicable [] Waiver Requested
5. Other Information Required by Rule or Statute
[] Attached, Document ID:[] Not Applicable [] Waiver Requested

Emissions Unit Comment

Attachment B is a Method 9 compliance test report for EU 002 (and EU 007). Observation data was collected 09/13/2011.

Emissions Unit Operating Capacity and Schedule for EU 002 also includes Silo Loading Rates:

Emissions Source Description	Maximum Unit Loading
-	Rate (lbs/hr)
CPVC Storage Silo and	3,500
Associated Vacuum Unloader	-
Railcar System	

DEP Form No. 62-210.900(4) – Form

Emission Unit ID 009

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section (limit 60 characters):

Ink Jet Printing

2. Emissions Unit Status Code:

A

N/A

4. Control Equipment Method/Description (limit 200 characters per device of method):

(Uncontrolled)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate: N/A mmBtu/hr

2. Maximum Incineration Rate: N/A lb/hr tons/day

3. Maximum Process of Throughput Rate:

12.5 tons/hr each PVC and CPVC

60,000 tons/yr PVC; 10,000 tons/yr CPVC

4. Maximum Production Rate: N/A

5. Requested Maximum Operating Schedule:

24 Hours/day 7 days/week

52 Weeks/year 8760 hours/yr

DEP Form No. 62-210.900(4) – Form

Emission Unit ID <u>009</u>

Emissions Unit Supplemental Requirements

1. Fuel Analysis or Specification
1. I del / mary sis of openineation
[] Attached, Document ID:[\(\sigma \)] Not Applicable [] Waiver Requested
2. Compliance Test Report
[] Attached, Document ID:[✓] Not Applicable
[] Previously submitted, Date
3. Procedures for Startup and Shutdown
[] Attached, Document ID:[\(\)] Not Applicable [] Waiver Requested
4. Operation and Maintenance Plan
[] Attached, Document ID:[✓] Not Applicable [] Waiver Requested
5. Other Information Required by Rule or Statute
[] Attached, Document ID:[✓] Not Applicable [] Waiver Requested
Emissions Unit Comment

FIGURES

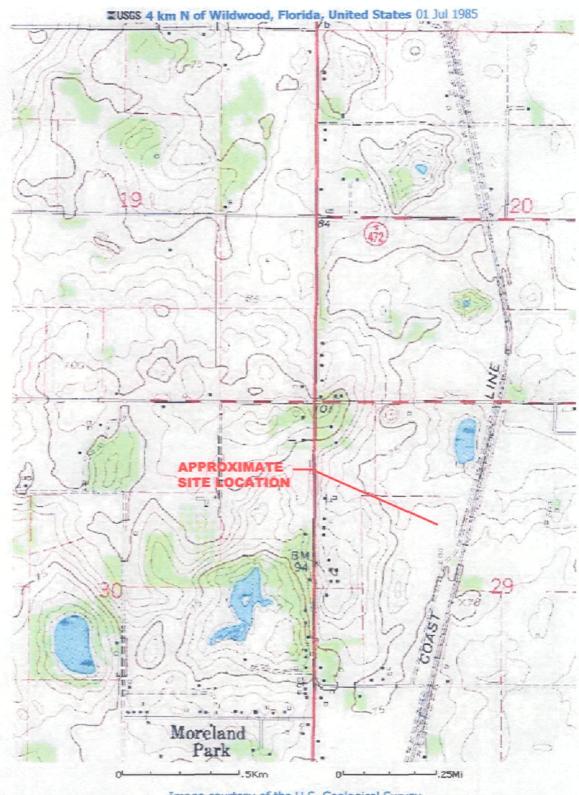


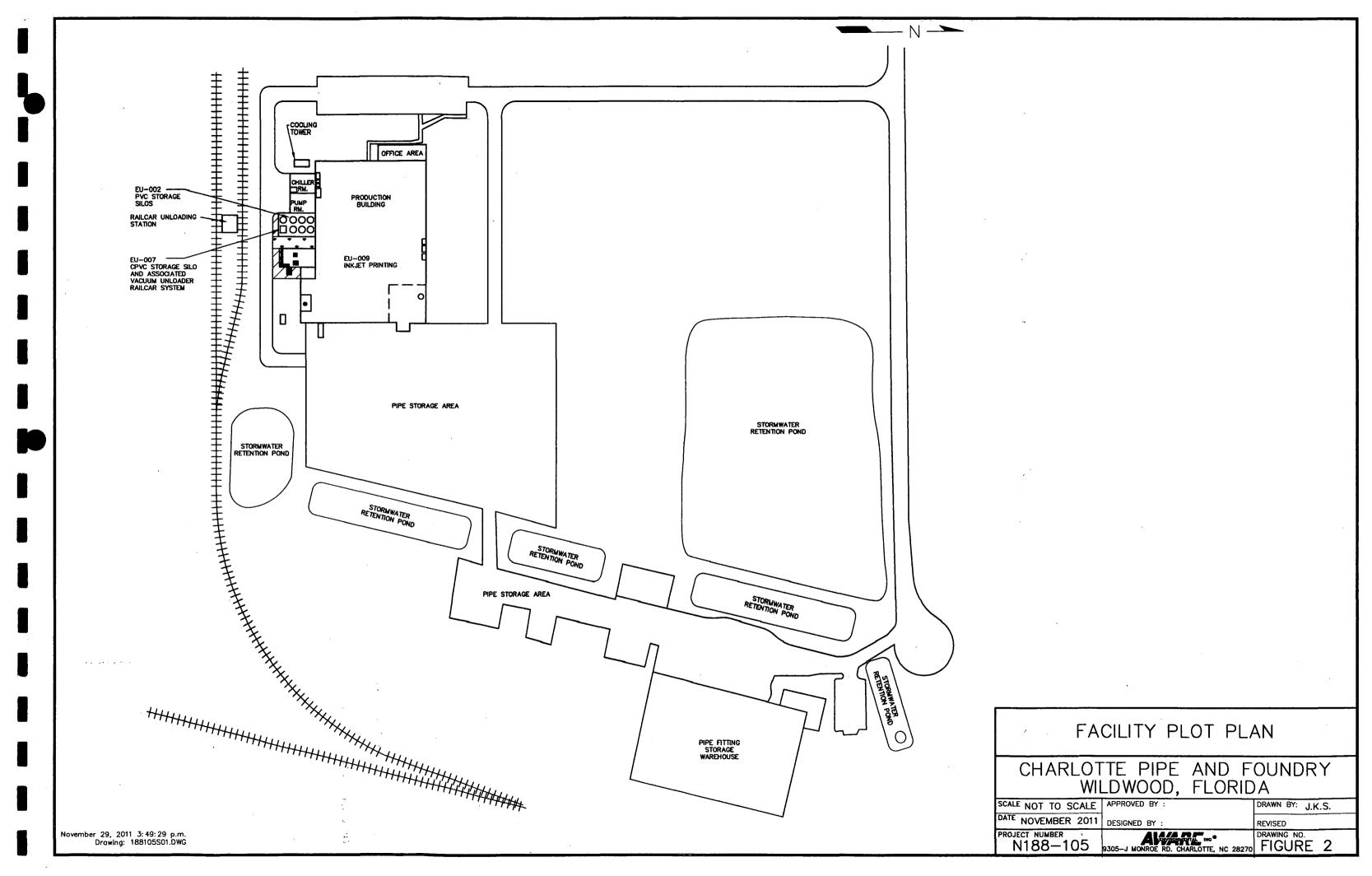
Image courtesy of the U.S. Geological Survey
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CHARLOTTE PIPE AND FOUNDRY WILDWOOD, FLORIDA

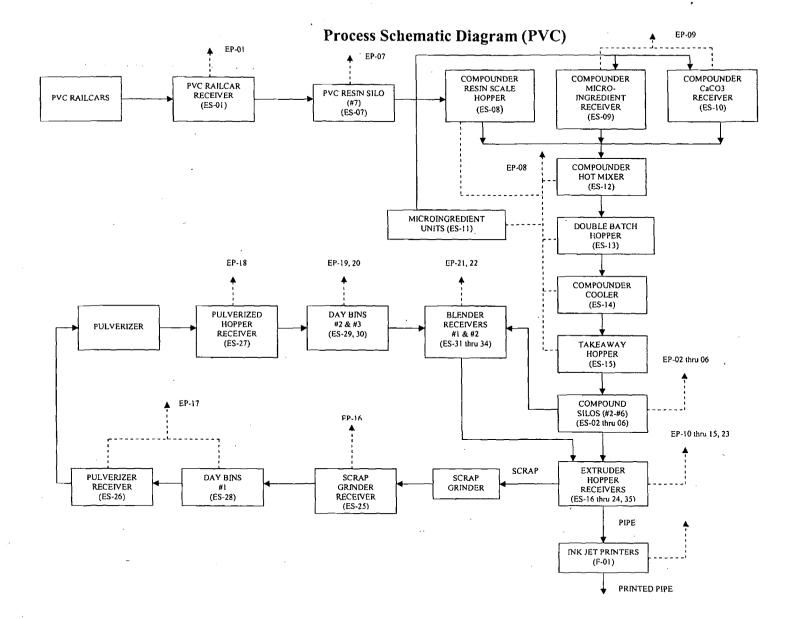
FIGURE 1 SITE LOCATION MAP



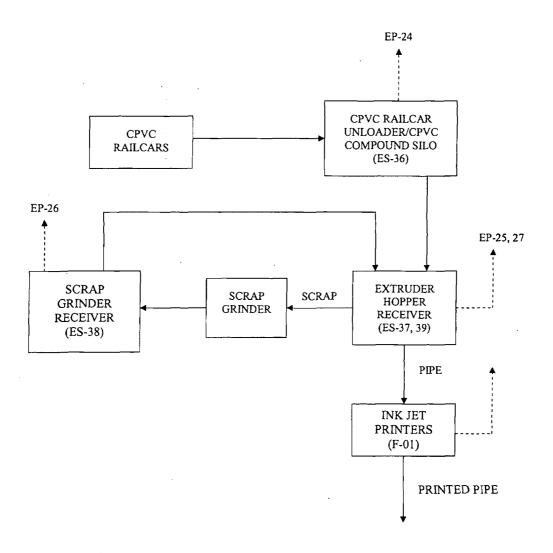




ATTACHMENT 1
PROCESS FLOW DIAGRAMS
PVC and CPVC



Process Schematic Diagram (CPVC)



ATTACHMENT 2 PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

0

PRECAUTIONS TO PREVENT EMISSIONS FROM UNCONFINED PARTICULATE MATTER

(62-296.320(4)(c)

Reasonable precautions to prevent the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling will include the following, where applicable:

- 1. Paving and maintenance of roads, parking areas and yards.
- 2. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
- 3. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
- 4. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
- 5. Landscaping or planting of vegetation.
- 6. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
- 7. Confining abrasive blasting where possible.
- 8. Enclosure or covering of conveyor systems.

ATTACHMENT 3 COMPLIANCE TEST REPORT

AIR TESTING & CONSULTING

333 FALKENBURG RD. N. B-214 • TAMPA, FLORIDA 33619 • (813) 651-0878 • FAX (813) 653-9082

September 13, 2011

Danielle Henry **Department of Environmental Protection**13051 North Telecom Parkway

Temple Terrace, FL 33637-0926

Re: Charlotte Pipe and Foundry Company 1190030-011-AF

Dear Danielle:

Enclosed are two (2) copies each of the compliance test reports for Charlotte Pipe and Foundry Company. The following testing was performed:

- ID 002 PVC Storage Silos (6) Method 9 (visible emissions)
- ID 007 CPVC Storage Silo and Vacuum Unloader Railcar System Method 9 (visible emissions)

If you have any questions, please contact me at (813) 651-0878.

Sincerely,

Kenneth Given, P.E.

President

cc: James Young, Charlotte Pipe

Facility Name CHARLOTTE PIPE	Permit Number 1190030-011-AF			Observation Date				Start	Time どろく	\mathcal{C}	Stop Time		
Source	I.D. No.			SEC.					SEC				
PVC PIPE MANUFACTURER 002		MIN	0	15	30	45	MIN	0	15	30	45		
Address 4149 COUNTY ROAD 124	Α .			1.	0	0	0	0	31.				
City	County		Zip	2.	0	0	0	0	32.				
WILDWOOD	SUMTER	75000	34785	3.	0	8	0	A	33.				
Contact JAMES YOUNG	,	^{Phone} 3 52-74 8	-8100	4.	0	\mathcal{C}		ð	34.				
				5.	X	00	S	\approx	35.				
Process Equipment PVC STORAGE SILO 2		16,000	perating Rate PPH	6.	2	9	1	\approx	36.				
Control Equipment		Operati	ng Mode	7.	8	8	X	\sim	37.				
CARTRIDGE FILTER		15,4	160	8.	1	$\frac{\mathcal{C}}{\mathcal{C}}$	\times	\searrow	38.				
Fuel Type/Rate	Material Type/	Rate		9.	X	\mathcal{Q}	\mathcal{L}	\mathcal{L}	39.				
N/A Describe Emission Point	PVC			10.	2	<u>©</u>	\mathcal{L}	\lesssim					{
Start Filter Exit				11.	S	$\frac{\mathcal{O}}{\mathcal{O}}$	\mathcal{Q}	\mathcal{O}	40.				
Height Above Ground Level	Height Relative			I	Q	$\underline{\underline{C}}$	\mathcal{C}	Q	41.				
Start ~ 40 Stop V	Start ~ 35	Stop	V	12.	Ŏ	Q	0	\bigcirc	42.				
Distance from Observer Start ~ 3 O Stop	Direction from Start	Observer Stop	V	13.	0	Q	Q	0	43.				
				14.	0	\mathcal{Q}	Q	0	44.				
Describe Emissions O Coning O Fumigating	None	Stop		15.	0	0	\odot	O	45.				
O Looping O Lofting O Fanning Emission Color	Plume Type			16.	0	0	0	0	46.				
Start NA Stop	o Continuous	NA	ζ.	17.	\bigcirc	$\overline{\mathbb{O}}$	\circ	0	47.				
Water Droplets Present	o Intermittent				O	0	0	0	48.				
o No o Yes	•	Detached	d o None	19.	0	0	0	0	49.				
	Point in the Pjurge at which Opacity was determined				0	Ŏ	0	0	50.				
Start N/A		Stop		21.	0	Ŏ	8	Ŏ	51.				
Describe Background Start Sky Stop	Ambient Temp Start 75	Stop	./	22.	Ŏ	Ŏ	0	X	52.				
Start Sky Stop Background Color	Sky Conditions			23.	0	$\widetilde{\bigcirc}$	Ö	$\widetilde{\cap}$	53.				
Start Blue Stop	Clear Scattere		en Overcast	24.	0	Ŏ	Ö	δ	54.				$\neg \neg$
Wind Speed	Wind Direction Start	Stop	./	25.	0	Ŏ	0	ñ	55.	$\neg \uparrow$			
	Start 10			26.	0	8	7		56,				
	OUT SKETCH	Draw No	orth Arrow	27.	X	Ŏ	<u></u>	<i>₹</i>	57.	\dashv			
with Plume		4	-}=	28.	8	0	方 し	$\tilde{\wedge}$	58.				
Sun A	M =	, (29.	X	\forall	<u></u>	\prec	59.				
Wind — 800	(S)	-		30.	X	万	X	abla	60.		\longrightarrow		
	Emission Poi	nt	}		<u> </u>	$\overline{\mathcal{O}}$	<u> </u>				<u>_</u>		
2	3 4			Averag Highes				1	Range Min.	ot Op:	acity R Ma		S
				Readir		0					1410		
				<u></u>								\mathcal{L}	
	Observer's Po	sition		Observe	er's Nar	ne (Prir	it) NNE	THE CESS	/EN				
▼ 400	x			Observ	A's Sigi	nature		///	1044		7	ate 3-	1
140°	140°			Ø	EM.		42	Arr	<u>cn</u>			1-/3- ate	
\swarrow				<u> </u>	Ce	rtifie	a by	/ E.T.	.A.		B/03/1	1	
Sun Locatio	on Line	 \	1	Comme	nts								
'certify the above/process rate data		est of my k	nowledge										
IGNATURE LINUS L	- Your	19			 -								
Title Plant Manager 9-93-11													

Facility Name Permit Number CHARLOTTE PIPE 1190030-07		Observation Date Start Time Stop	Stop Time		
Source	I.D. No.	SEC			
PVC PIPE MANUFACTURER Address	002	MIN 0 15 30 45 MIN 0 15	30 45		
4149 COUNTY ROAD 124A		1. OOOO 31.			
City County SUMTER	Zip 34785	2. O O O O 32.			
Contact	Phone	3. O O O O 33.			
	352-748-8100	4. O O O O 34.			
Process Equipment PVC STORAGE SILO 3	Max. Operating Rate 13,000 PPH				
Control Equipment	Operating Mode				
CARTRIDGE FILTER	12,212_	7. OOOOO37. 8. OOOOO38.			
Fuel Type/Rate Material Type/N/A PVC	Rate	9. 0 0 0 39.			
Describe Emission Point		10. 0 0 0 40.			
Start Filter Exit Height Above Ground Level Height Relative	to Observer	11. 0 0 0 41.			
Start A 40 Stop 40 Start 135	Stop	12. OOOO 42.			
Distance from Observer Start A 30 O Stop Start	Observer Stop	13. 0 0 0 0 43.			
		14. 0 0 0 0 44.			
Describe Emissions O Coning O Furnigating	Stop 🗸	15. O O O O 45.			
O Looping O Lofting O Fanning Emission Color Plume Type		16. O O O O 46.			
Start N/A Stop o Continuous o Intermittent	NA	17. OOO O O 47.			
Water Droplets Present Water Droplet I		18. O O O O 48.			
o No o Yes o Attached o Point in the Plume at which Opacity was determine	Detached o None	19. O O O O 49. 20. O O O 50.			
	Stop				
Describe Background		21. O O O O 51. 22. O O O O 52.			
Start SKY Stop Start 750 Background Color Sky Conditions	. •	23. 0 0 0 53.			
Background Color Start Blue Stop Clear Scattere		24. 0 0 0 54.			
Wind Speed Wind Direction	Stop 🗸	25. 0 0 0 55.			
	3(op D	26. 0 0 0 56.			
Stack O SOURCE LAYOUT SKETCH with	Draw North Arrow	27. 0 0 0 57.			
Plume		28. 0 0 0 58.			
Sun + 17 (2) (3)	~	29. 0 0 59.			
Wind 2 X Antission Poi		30. 0 0 0 60.			
3 Limpsion For		Average Opacity for Range of Opacity Re	eadings		
		Highest 24 Consecutive Min. Ma	×/		
			J		
Observer's Po	sition	Observer's Name (Print) KENNETH GIVEN			
1400		Observer's Signature D	ate 7-(3-//		
140		Certified by F T A	ate		
<u> </u>		Comments Comments	3/03/11		
Sun Location Line		Outmento			
	est of my knowledge. NG-				
Title Plant Manger	9-13-11				

Facility Name CHARLOTTE PIPE	Permit Number 1190030-0			Obse	rvation		Start	Time 、みC)	Stop Time			
Source	I.D. No.			SEC	1		T		SEC				
PVC PIPE MANUFACTURER 002 Address		MIN	. 0	15	30	45	MIN	0	15	30	45		
1	4149 COUNTY ROAD 124A		1.	0	0	0	0	31.					
City WILDWOOD	County SUMTER		Zip 34785	2.	0	0	0	0	32.				
Contact	Phone			3.	0	0	0	Q	33.				
JAMES YOUNG		352-748	3-8100	4.	0	0	0	0	34.				
Process Equipment PVC STORAGE SILO 4			perating Rate O TPH	5.	0	0	0	Q	35.		_	_	
Control Equipment		Operat	ing Mode	7.	O	0	0	Q	36.				
CARTRIDGE FILTER	· · · · · · · · · · · · · · · · · · ·	14,	564	8.	Q	0	0	\bigcirc	37. 38.				
Fuel Type/Rate	Material Type/	Rate		9.	0	0		\mathcal{Q}	39.	-			
N/A Describe Emission Point •	PVC			10.	0	0		\mathcal{L}	40.				
Start Filter EXIT	·			11.	0	0	0		41.				
Height Above Ground Level Start • 40 Stop	Height Relative	e to Obse Stop		12.	0	0	8	\mathcal{C}	42.				
Distance from Observer	Direction from	Observer		13.	0	8	0	X	43.				
Start A 300 Stop	Start W	Stop	V	14.	<u>ර</u>	Q	Ö	$\overset{\sim}{\sim}$	44.				
Describe Emissions O Coning O Fumigating	None	Stop	./	15.	Ö	Ŏ	Ŏ	\tilde{O}	45.				
O Looping O Lofting O Fanning			<i>V</i>	16.	0	Ö	0	$\tilde{\bigcirc}$	46.				
Emission Color Start N/A Stop	Plume Type o Continuous	N/	'Δ-	17.	0	Ŏ	0	0	47.				
Water Droplets Present	o Intermittent Water Droplet	- 1	<i>/</i> \	18.	0	Ŏ	Ŏ	Ŏ	48.				
o No o Yes		Detache	d o None	19.	0	0	0	Ŏ	49.				
Point in the Plume at which Opaci		d Stop		20.	0	0	0	0	50.				
				21.	0	0	0	0	51.				
Describe Background Start SKY Stop	Ambient Temp Start 790	Stop		22.	0	0	0	0	52،				
Background Color	Sky-Conditions Clear Scattere	d Prol	ken Overcast	23.		0	0	9	53.				
Start Blue Stop	Wind Direction		Vercast	25.	0	0	0	\otimes	54. 55.				
Start 2-5 Stop V	Start /	Stop		26.	0	\gtrsim	9	$\frac{9}{2}$	56.				
Stack O SOURCE LA	OUT SKETCH	Draw N	orth Arrow	27.	2	$\frac{9}{1}$	$\frac{2}{2}$	0	57.				
with Plume	•		29	28.	$\frac{2}{3}$	>	\geq	$\frac{9}{6}$	58.				
Sun & BOOC	\	~		29.	$\frac{\circ}{\wedge}$	$\frac{1}{2}$		\approx	59.		$\rightarrow +$		
Wind - W6)			30.	8	8	8	$\frac{2}{2}$	60.	\dashv			
(3)(3)(3)	Emission Poi	int		Averag	000	oity for		ـــــــ	Panao	ocity P	city Readings		
				Highes	t 24 C				Min.	ог Ор	acity in Ma	-	5
				Readin	igs		\mathcal{C}		\circ)	()	
				Observe	er's Nar	ne (Prìr	ıt)						
Observer's Position						K	NNE,	TH GI	VEN			\	
140	, ,			Observe	SS Sign	nel		4iv			6	ete /~/3-	(
X				·	1	Ce	rtifie	d by	E.T.	Α.	10	ate B/03/1	
Sun Location Line				Comme	nts								-
certify the above process rate da	a is true to the b												
SIGNATURE MOO	——————————————————————————————————————	ung	Date (
Title Plant Manager 9-13-11													

Facility Name CHARLOTTE PIPE	Permit Numb 1190030-0			Obser	Start	Time (······	Stop Time					
Source PVC PIPE MANUFACTUR	Source I.D. No. 002				0	15	30	45	SEC	0	15	30	45
Address 4149 COUNTY ROAD 124	Α			1.	0	0	0	0	31.				
City WILDWOOD	County SUMTER		Zip 34785	2. 3.	0	0	0	0	32.				
Contact JAMES YOUNG		Phone 352-748	·	4.	0	0	0	$\frac{0}{0}$	33. 34.				
Process Equipment		Max. O	perating Rate	5.	O	0	\bigcirc	0	35.				
Control Equipment	PVC STORAGE SILO 5 15,000 TPH Control Equipment Operating Mode				0	0	00	0	36. 37.				
CARTRIDGE FILTER Fuel Type/Rate	Material Type		564	7.	0	Q	30	8	38.				
N/A Describe Emission Point	PVC			9.	Ŏ	0	Ŏ	Q	39.			,	
Start Fiter Exit Height Above Ground Level	Height Relativ	in to Ohan		11.	9	0	0	\mathcal{O}	40. 41.		_		-
Start 140 Stop V.	Start 135	Stop	V	12.	Ŏ	Ø	Ŏ	Ŏ	42.				
Distance from Observer Start 1 300 Stop	Direction from Start	Observer Stop		13.	0	30	0	Q	43.				
Describe Emissions O Coning O Fumigating	None	Stop	/	15.	8	8	0	8	45.				
O Looping O Lofting O Fanning Emission Color	Plume Type			16. 17.	9	0	0	Q	46. 47.				
Start N/A Stop	o Continuous o Intermittent	N	$\Delta_{\underline{}}$	18.	0	0	8	\mathcal{O}	48.				
o No o Yes					Ŏ	Ŏ	Ø	Ŏ	49.				
Point in the Plume at which Opacit Start	y was determin	ed Stop		20.	0	0	0	8	50. 51.	<u> </u>			
Describe Background Start SKY Stop	Ambient Temp Start 79	Stop	V	22.	Ŏ	O	Ŏ	Ŏ	52.				
Background Color Start Bury Stop	Sky Condition Clear Scatter	s ed Brok	en Overcast	23.	8	8	00	$\frac{\circ}{\circ}$	53. 54.				
Wind Speed Start 2 Stop	Wind Direction Start	ı Stop		25.	0	Ŏ	ŏ	Ó	55.				
Stack O SOURCE LAY	OUT SKETCH	Draw N	orth Arrow	26. 27.	윘	8	\bigcirc	Q	56. 57.				
with Plume		4	\rightarrow	28.	8	8	δ	5	58.				
Sun \$)	~	29. 30.	Ö	Õ	Ŏ	Ŏ	59.				
Wind 7 3 6 8	Emission Po	int		Averag	0	<u>U</u>	0	<u>U</u>	60.	-10-	- it D		
(2) (3) (4)	,			Highes Readin	t 24 C				Min.	or Op:	аспу К Ма		S
				<u></u>) 			ر 			
	Observer's P	osition		Observe		KE	t) NNET	rh _, GI)			·		
140° ×			Observer's Signature Twen								Date 9-/3-//		
				Comme	nts	Ce	rtifie	d by	/ E.T.	А.		B/03/1	1
Sun Location		est of my	knowledge										
SIGNATURE VIMES L	- Your	19											
Title Plant May	nager	0 9	Date - 11		· · · · · · · · · · · · · · · · · · ·			·		·			

AIR TESTING & CONSULTING, INC.

(813) 651-0878

Facility Name CHARLOTTE PIPE	Permit Number 1190030-011-AF			Observation Date			Start Time			Stop Time			
Source PVC PIPE MANUFACTUR			I.D. No. 002	SEC				45	SEC			,	
Address	<u> </u>	····		MIN	0	15	30	45	MIN	0	15	30	45
4149 COUNTY ROAD 124			r <u></u>	1.	0	0	0	0	31.				
City WILDWOOD	County SUMTER		Zip 34785	2.	0	0	Q	Q.	32.				!
Contact JAMES YOUNG	J.	hone	9400	4.	0	Ŏ.	Q	Q	33. 34.				 -
		352-748		5.	0	Q	0	X	35.				
Process Equipment PVC STORAGE SILO 6			perating Rate O TPH	6.	0	$\frac{0}{0}$	8	X	36.				
Control Equipment CARTRIDGE FILTER		Operati	ng Mode 2/2	7.	0	00	0	X	37.				
	14-4			8.	Ö	$\tilde{0}$	Ŏ	7	38.				
Fuel Type/Rate N/A	Material Type/F	kate .		9.	0	O	Ŏ	Ŏ	39.				
Describe Emission Point				10.	Ö	Ö	Ó	0	40.				
Start Filter ExiT Height Above Ground Level	Height Relative			11.	0	0	Ŏ	O	41.				
Start A4 Stop	Start ~ 35			12.	0	0	0	0	42.				
Distance from Observer Start • 300 Stop	Direction from (Observer Stop		13.	Õ	0	Q	Ŏ	43.				
Describe Emissions	——		7	14.	0	Q	90	Ó	44.				
O Coning O Furnigating O Looping O Lofting O Fanning	None	Stop		16.	0	0	0	\sim	45. 46.				
Emission Color	Plume Type	- 1 -		17.	0	$\frac{\mathcal{C}}{\mathcal{C}}$	$\frac{9}{2}$	\mathcal{L}	47.				
Start N/A Stop	o Continuous o Intermittent	NI	~	18.	0	0	8	\mathcal{S}	48.				
Water Droplets Present o No o Yes	Water Droplet F o Attached o		d o None	19.	Ă	\mathcal{S}	0	0	49.		- 1		
Point in the Plume at which Opacity				20.	Ö	<u></u>	ŏ	0	50.				
Start N/A		Stop		21.	D	d	Ŏ	Ŏ	51.				
Describe Background Start Start Stop	Ambient Temp Start 77	Stop	\checkmark	22.	0	0	0	0	52.				
Background Color	Sky Conditions Clear Scattered	d Brok	en Overcast	23.	0	0	0	0	53.				
Start Blue Stop V Wind Speed	Wind Direction			24. 25.	Õ	0	0	\bigcirc	54. 55.				
Start 2-5 Stop V	Start (Stop	V	26.	\mathcal{O}	0	8	Σ	56.				
Stack O SOURCE LAY	OUT SKETCH	Draw No	orth Arrow	27.	0	8	0	\approx	57.				
with Plume		4	}	28.	0	0	5	δ	58.				
Sun 🕁 6			<u></u>	29.	Õ	ŏ	Ö	Š	59.				
Wind —	<u> </u>			30.	Ó	0	Ŏ	Ŏ	60.				
	Emission Poir	nt		Averag				1	Range	of Op	acity R	eading	s
(2) (3)	(4)	•	-	Highes Readir		onsecu	ıtive		Min.		Ma	ax.	
			1		.5-					<u> </u>		<u>リ</u>	
	Observer's Po	sition	-	Observe	er's Nar		it) ENNE	ርዘ ሌባ	/FNI				
140°	*			Observe		natur e	<i>ī</i> *	I.			Ē	ete 9-/3	11
140			}	₩	ren		ルし) rtific	# ~ ~	ren / E.T.	Δ] [Date	- 1
<i></i>				Comme	nts			. u .)	y has 1 :			8/03/1	1
Sun Locatio		··											
certify the above process rate data	is true to the be	19											
Title Plant Man	ageri	19	Date - []							(

AIR TESTING & CONSULTING, INC.

(813) 651-0878

	Permit Number 1190030-011-AF			Observation Date					Stop Time		
Source	I.D. No.	SEC			1		SEC	T			
PVC PIPE MANUFACTURER Address	002	MIN	JO	15	30	45	MIN	0	15	30	45
4149 COUNTY ROAD 124A		1.	0	0	0	0	31.				
City County SUMTER	Zip	2.	0	0	0	0	32.				
WILDWOOD SUMTER Contact	34785 Phone	3.	0	0	0	0	33.				
JAMES YOUNG	352-748-8100	4.	0	0	0	0	34.				
Process Equipment	Max. Operating Rate	5.	0	0	0	0	35.			·	
PVC STORAGE SILO 7 Control Equipment	15,000 TPH Operating Mode	6.	0	0	0	0	36.				
CARTRIDGE FILTER	14,250	7.	Q	Q	0	0	37.	L			
Fuel Type/Rate Material Typ	e/Rate	8.	0	0	0	Q	38.				
N/A PVC		9,	Ŏ	0	0	2	39.				
Describe Emission Point Start Filter Exit		10.	5	90	0	\mathcal{L}	40.				-
Height Above Ground Level Height Relat	ive to Observer	12.	Š	0	0	\mathbb{R}	41.				
Start & 40 Stop Start & 35 Distance from Observer Direction from		13.	0	X	0	2	42.				-
Start 1300 Stop Start W	Stop 🗸	14.	2	\times	X	14	44.				
Describe Emissions		15.	X	\aleph	-	X	45.				
O Coning O Furnigating DMone O Looping O Lofting O Fanning	Stop 🗸	16.	$\frac{0}{2}$	\sim		12	46.				
Emission Color \ Plume Type		17.	\mathcal{C}	$\frac{1}{8}$	\approx		47.				
NA o Intermitten	NA	18.	\approx	\approx	\approx	\approx	48.				
Water Droplets Present Water Droplets O No O Yes O Attached	et Plume o Detached o None	19.	\gtrsim	$\frac{\circ}{\circ}$	\sim	$\widetilde{\mathcal{C}}$	49.				
Point in the Plume at which Opacity was determine	ned	20.	8	$\stackrel{\smile}{\frown}$	δ	\tilde{a}	50.				
Start N/A	Stop	21.	8	$\widetilde{\mathbb{O}}$	$\widetilde{\mathcal{O}}$	\mathcal{L}	51.				
Describe Background Ambient Ten	Stop /	22.	Ŏ		0	\widetilde{O}	52.				
Start Stop Start 70 Background Color Sky Conditio	7	23.	0	0	Ö	0	53.				
Start Bue Stop Clea Scatte	red Broken Overcast	24.	0	Ŏ	Ō	0	54.				
Wind Speed Start Start Wind Direction	on Stop	25.	Ŏ	0	Ō	\bigcirc	55.				
		26.	\bigcirc	0	0	0	56.				
Stack O SOURCE LAYOUT SKETCH	Draw North Arrow	27.	Ō	0	0	0	57.				
Plume	-()	28.	0	0	0	0	58.				
Sun + 7	~	29.	0	0	0	0	59.				
Wind — (8) (8) Emissions	dont	30.	0	0	0	<u>a</u>	60.			·	
	2	Averag						of Op	acity R	eading	s
(3) (3) (4)	B	Highes Readin	t 24 C	onseci N	utive		Min.		Ma	ax.	
				<u> </u>)		\subseteq	
Observer's	Position	Observe	er's Na	ne (Pri	nt)	A.	VC1:				
•		Observe	er) s Sig	nature	 - 	THOI			Ţ	Date	
140°		1	ren	MU		400				Pate -13- Pate	
X		L'		Ce	rtitie	ea b	y E.T	.A.		8/03/1	1
Sun Location Line		Comme	nts								
I certify the above process rate data is true to the	best of my knowledge.						·				
SIGNATURE JUMBS L- 407	ing	 -									
Title Plant Manager	- (q-13te ((

Facility Name CHARLOTTE PIPE	Permit Number 1190030-011-AF				Observation Date			Start Time			Stop Time		
Source	•		i.D. No. 007	SEC					SEC				
PVC PIPE MANUFACTUR Address	EK		007	MIN	0	15	30	45	MIN	0	15	30	45
4149 COUNTY ROAD 124				1.	0	0	0	0	31.				
City WILDWOOD	County SUMTER		Zip 34785	3.	0	\bigcirc	30	\mathcal{O}	32.				
Contact JAMES YOUNG		Phone 352-748	L-8100	4.	8	0	9	\cong	34.				
Process Equipment			perating Rate	5.	8	\approx	8	7	35.				
CPVC STORAGE SILO #8		3,500	PPH	6.	0	\mathcal{O}	Ö	ð	36.				
Control Equipment CARTRIDGE FILTER		Operation 3,2	ng Mode	7.	0	0	0	0	37.				
Fuel Type/Rate	Material Type			8.	0	0	0	0	38.				
N/A	PVC			9.	0	$\overline{\mathbb{Q}}$	Q	Q	39.				
Describe Emission Point Start Filter Exit	_			10.	0	<u>Q</u>	0	\mathcal{O}	40.				
Height Above Ground Level Start A 46 Stop	Height Relation			12.	Q	0		\sim	41. 42.				
Distance from Observer	Direction from			13.	8	\aleph	8	\mathcal{C}	43.		-		
Start A 300 Stop	Start W	Stop	<u> </u>	14.	0		2	δ	44.				
Describe Emissions O Coning O Fumigating	D None	Stop	./	15.	0	O	\supset	$\tilde{\bigcirc}$	45.				
O Looping O Lofting O Fanning	Plume Type			16.	Ŏ	Ŏ	0	Ŏ	46.	- 1			
Emission Color Start Stop	o Continuous	N	<u>'</u> L	17.	0	0	0	0	47.				
Water Droplets Present	o Intermittent Water Drople			18.	0	0	0	0	48.				
o No o Yes	· ·	o Detache	d o None	19. 20.	Ó	$ \mathcal{Q} $	Q	\bigcirc	49.				
Point in the Plume at which Opacit Start	y was determin	ea Stop		20.	Q	0	0	$\frac{9}{2}$	50. 51.				
Describe Background	Ambient Tem	<u> </u>		22.	00	0	\gtrsim	$\gtrsim 1$	52.				
Start SK Stop Background Color	Start 79 Sky Condition	Otop	<i></i>	23.	> ($\frac{8}{2}$	8	β	53.				
Start Hu Stop	Clear Scatter	ed Brok	en Overcast	24.	8	δ	Ŏ	<u>a</u>	54.				
Wind Speed Start 2-5 Stop	Wind Direction	n Stop	V	25.	0	Ŏ	O	Ŏ	55.		-		
 					0	0	0	0	56.				
Stack SOURCE LAY	OUT SKETCH	Draw N	orth Arrow	27.	0	0	0	\bigcirc	57.				
Plume Sun		-{		28.	0	0	0	$Q \mid$	58.				
Y 8				29. 30.	0	0	0	0	59. 60.				
Wind	Emesico	\int)		9	0	0	O_{\perp}	1				
Ĭ	56		\	Averag Highes					Range Min.	of Op	•	eading	s
	(A)(a)	ر ک ر	'	Readir			Õ)	1410	0	
			į	Observe	er's Nar	ne (Pri	nt)						
	Observer's P	osition				KI	ENNE:	TH GI	VEN)	
140°	*			Observe		Ml	<u>W 2</u>	40.	ren			Pate 7-/3	-(1
¥					1	Ce	rtifie	d by	y E.T	.A.		Date 8/03/1	1
Sun Location	on Line	>		Comme	nts								
I certify the above process rate data	is true to the I		knowledge.										
Title Plant Man	1200	mg.	Date ()										
11001111001	12/2/	<u> </u>	لكنك	<u> </u>									

VISIBLE EMISSIONS EVALUATOR

Kenneth Given

This Is To Certify That The Above Named Observer Has Met The Specifications Of Federal Reference Method 9 And Qualifies As A Visible Emissions Evaluator. Certification Test Conducted By Eastern Technical Associates Of Raleigh, N.C.

GIV583223

Student ID Number

396463 Certificate Number

8/3/2011

2/2/2012

Certification Date

Certification Expiration Date

ORLANDO, FL

TMPS11

Location

Last Lecture

ATTACHMENT 4 OPERATION AND MAINTENANCE PLAN



Material Control Systems Group

REVERSE PULSE FILTERS

Operating Instructions

RECEIVING YOUR UNIT

Prior to accepting shipment, care must be taken to inspect all equipment received both for proper count and damage. Any and all irregularities must be noted on carrier's copy of the shipping receipt to assist in settling any claims for damage or shortages. All equipment is shipped F.O.B. Point of Origin, whether on a prepaid or collect basis.

ANY CLAIM FOR DAMAGE IN TRANSIT OR SHORTAGES MUST BE BROUGHT AGAINST THE CARRIER BY THE PURCHASER.

INSPECTION OF UNIT

Housing: Particular attention should be paid to the sheet metal housing of your collector. Unit should be inspected for dents and cracks or rips. Dented housing may seriously affect the structural integrity of the unit. Unit should be checked against the certified drawings for correctness and the manufacturer notified immediately. No corrections may be made without authority of the manufacturer.

Components: A count should be made of all pieces received, and this should be verified against the carrier's manifest. Boxes should be inspected for rough handling which may have resulted in hidden damage.

SETTING UP YOUR UNIT

Housing: Lifting lugs are normally provided for your convenience in handling the dust collector. If these cannot be used, proper care must be taken to assure safe moving and precautions taken to prevent damage to the housing or components.

Electrical: A 120 V. 60 cycle power wiring circuit must be connected to the filter's timer. The timer must be wired according to timer instruction sheet enclosed. Check solenoid wiring and program jumper. Program jumper must be installed in #3 position for (3) solenoid filters, #4 position for (4) solenoid filters and so on. Set on time at minimum setting of 50 milliseconds. Set off time at approximately 10 seconds. Refer to timer sheet attached. Then follow standard start up instructions.

REVERSE PULSE FILTERS

Compressed Air: All compressed air piping leading to the collector must be purged prior to hooking up to the distribution header located on the unit. 90 - 100 PSIG of clean, dry air is required for your unit to operate properly. It is recommended that a shut-off valve, a pressure regulator, and an inline filter should be installed immediately upstream from the distribution header.

If excessive moisture is present an after cooler and dessicant dryer is strongly recommended.

Assembling bags and cages into housing: Please refer to individual instruction sheet for filter assembly.

Doors: Hold-downs on doors should only be hand tightened. Excessive pressure can distort the door panel itself resulting in leakage.

Auxiliary Equipment: All auxiliary equipment must be installed according to manufacturer's specifications and interlocked with the entire system as needed. Direction of rotation of each items should be checked prior to start up to entire system.

START UP INSTRUCTIONS

Check air pressure available, verify 90 - 100 PSIG.

Apply current to timer and make sure the timer is cycling.

Allow unit to run under normal conveying conditions for at least 48 hours, after initial installation of bags. This will allow bags to reach their maximum operating efficiency. During initial start up there may be some minor product carry over until the bags reach maximum operating efficiency.

After 48 hours inspect the bags, bag clamps and note conveying conditions. If the product is caked on the bags or being carried through the bags or conveying rates are low, see trouble shooting section. The bags should be inspected monthly and replaced if holes or wearing are observed.

TROUBLE SHOOTING

- 1.) Low conveying rates due to excessive high pressure on pressure conveying systems or high vacuum on vacuum conveying systems.
 - A.) Check air pressure in header.
 - B.) Check timer to see if it is functioning properly. Decrease "off" time to a minimum of 3 seconds and repeat instructions described under the "Start up Instructions".
 - C.) Check solenoid valves to see if they are operating properly.
 - D.) Check for loose wiring.

- E.) Check for moisture or oil in air lines. Check to see if upper part of filter bags are damp or caked up. Install "after cooler" following the compressor and automatic moisture drains on receiver, and provide moisture traps or dessicant type dryer at collector if moisture is present.
- F.) Check dew point of dust laden air. If unit is at or below dew point it may be necessary to pre-heat collector with hot, dry gas before start-up and/or to insulate collector. If heavy moisture condenses on the bags at shut-down then the collector must be purged with hot, dry gas before final shut-down.
- G.) Check if bags are "skin" tight on cages. Bags must be free on cage for proper "flex". Bags which have been cleaned or washed may shrink and must be checked for a "loose" fit. Check hopper for overloading.
 - 1.) Check dust discharge mechanism for proper operation and capacity. Correct if necessary.
 - Check for material bridging across hopper or sticking to hopper.
 Coat hopper with Epoxy or Tellon type coating or add a sufficient size rapper or vibrator to keep hopper clear.
- 2.) High Product Carry Over.
 - A.) Allow unit to run at least 48 to 96 hours after initial installation of bags before performing checks. This running time allows bags to reach their operating efficiency and dusting may stop.
 - B.) Check filter bags for holes and wearing, replace if necessary.
 - C.) Check bag installation.
- 3.) Poor Bag Life.
 - A.) Check for moisture and dew point in unit. High moisture will cause certain filter materials to shrink and shorten bag life.
 - B.) If localized abrasion of bags is observed an impingement baffle may be required.
 - C.) Check for corrosion on cages. "Rough" surfaces will cause excess bag wear. Plastic coated or 304 Stainless Steel cages are available.

If you are experiencing any difficulties not covered by the above instructions, contact your O. A. Newton Salesman.

TIMER INSTRUCTIONS

Please refer to the individual instruction sheet for timer operation.

TIMER TROUBLE SHOOTING

- 1.) Check for mechanical damage.
- 2.) Check wiring of both power and solenoid valves.
- 3.) If indicator light is not on, check power input.
- 4.) Check fuse, replace if blown.
- 5.) Check program jumper. Program jumper should be in #3 position for 3 solenoid units and #4 position for 4 solenoid units and so on.
- 6.) Refer to timer instructions for further data.

INITIAL SETTING OF TIMER

- 1.) Set "On" time at minimum setting of 50 milliseconds.
- 2.) Set "Off" time at approximately 10 seconds. Then follow standard start up instructions.

ATTACHMENT 5 OPERATING RECORDS

CHARLOTTE PIPE AND FOUNDRY COMPANY - PLASTICS DIVISION Letter att. 01/09/2012. WILDWOOD, FLORIDA Production Rate

Date	CPVC	PVC	CPVC	PVC	Daily Average PVC	Daily Average CPVC
Date	tons	tons	hrs	hrs	tons/hr	tons/hr
10/1/11	5.02	37.11	24.00	24.00	1.55	0.21
10/2/11	5.01	37.86	24.00	24.00	1.58	0.21
10/3/11	5.00	38.83	24.00	24.00	1.62	0.21
10/4/11	5.05	44.45	22.50	24.00	1.85	0.22
10/5/11	0.00	61.25	0.00	24.00	2.55	0.00
10/6/11	0.00	60.17	0.00	24.00	2.51	0.00
10/7/11	0.00	59.55	0.00	24.00	2.48	0.00
10/7/11	0.00	59.58	0.00	24.00	2.48	0.00
10/9/11	0.00	63.31	0.00	24.00	2.46	0.00
10/9/11	2.96	49.49	20.00	24.00	2.04	0.00
10/11/11	3.91	41.27	22.50	24.00	1.72	0.17
10/11/11	4.94	40.93	24.00	24.00	1.72	0.17
10/12/11	3.98	45.18	24.00	24.00	1.88	0.17
10/13/11	4.99	28.34	24.00	24.00	1.18	0.17
10/15/11	3.96	3.96	24.00	24.00	0.17	0.21
10/16/11	5.90	23.81	24.00	24.00	0.17	0.17
10/17/11	4.53	37.72	24.00	24.00	1.57	0.19
10/17/11	4.52	48.92	24.00	24.00	2.04	0.19
10/19/11	4.54	46.53	24.00	24.00	1.94	0.19
10/19/11	4.66	46.97		24.00	1.96	0.19
10/20/11	4.97	39.29	20.30 24.00	24.00	1.64	0.21
10/21/11	5.03	48.67	24.00	24.00	2.03	0.21
10/23/11	4.99	42.30	24.00	24.00	1.76	0.21
10/23/11	4.15	45.45	19.00	24.00	1.89	0.22
10/24/11	5.45	45.43	24.00	24.00	1.89	0.23
10/25/11	5.41	42.20	24.00	24.00	1.76	0.23
10/20/11	5.36	25.74	24.00	24.00	1.76	0.22
	5.36	14.26				
10/28/11			24.00	24.00	0.59	0.22
10/29/11	4.96	13.18	24.00	24.00	0.55	0.21
10/30/11	5.69	15.30	24.00	24.00	0.64	0.24
10/31/11	4.98	16.89	24.00	24.00	0.70	0.21

Total

124.46

1223.93

608.30

744.00

1.65

0.20

CONFIDENTIAL This record is not confidential per little CHARLOTTE PIPE AND FOUNDRY COMPANY - PLASTICS DIVISION dt - 01/09/2012 (2nfil).

Consecutive 12-month Totals

QAMNON

Month	Produ	uction		Ink Usage									
							Matthews						
			Imaje 5135	Imaje 5191	lmaje 5142	Imaje 5157E	M149 Yellow	Matthews					
	PVC Pipe	CPVC Pipe	Black Ink	Additive	Red Ink	Black Ink	lnk	#10 Thinner	Total Ink	Total Ink			
	Production	Production	Usage	Usage	Usage	Usage	Usage	Usage	Recycled	Usage			
	(tons/month)	(tons/month)	(gal/month)										
Nov-10	1,282	0	0	47.556	3.1704	0	0	0	0	50.7264			
Dec-10	1,044	0	0	59.445	8.4544	0	0	0	0	67.8994			
Jan-11	1,540	0	0	28.5336	8.4544	9.5112	0	0	55	-8.5008			
Feb-11	961	0	0	47.556	4.2272	7.1334	0	0	0	58.9166			
Mar-11	2,328	35	0	118.89	10.568	0	0	0	0	129.458			
Apr-11	2,192	0	0	71.334	14.7952	0	0	0	0	86.1292			
May-11	2,336	52	0	47.556	0	0	0	0	0	47.556			
Jun-11	1,882	66	0	118.89	4.2272	7.1334	0	0	55	75.2506			
Jul-11	864	49	0	47.556	15.852	0	_ 0	0	0	63.408			
Aug-11	1,263	38	0	121.0036	0	0	0	0	0	121.0036			
Sep-11	1,084	50	0	47.556	4.2272	9.5112	3	4	0	68.2944			
Oct-11	1,224	124	0	35.667	4.2272	0	0	0	0	39.8942			
12 month total	17,998	414	0	792	78	33	3	4	110	800			

Month	Ink Jet Printing Emissions					PVC and CPV	Total Emissions				
	Methanol (HAP,VOC)	Isophorone (HAP,VOC)	Printing Total VOC	Printing Total HAPs	Chloroform (HAP,VOC)	Carbon Tetrachloride (HAP,VOC)	Vinyl Chloride (HAP,VOC)	Production Total VOC	Production Total HAPs	Total VOC	Total HAPs
	(tons/month)	(tons/month)	(tons/month)	(tons/month)	(tons/month)	(tons/month)	(tons/month)	(tons/month)	(tons/month)	(tons/month)	(tons/month)
Nov-10	0	0	1.7E-01	0	0	0	4.5E-04	4.5E-04	4.5E-04	1.7E-01	4.5E-04
Dec-10	0	0	2.3E-01	0	0	0	3.7E-04	3.7E-04	3.7E-04	2.3E-01	3.7E-04
Jan-11	0	0	-3.4E-02	0	0	0	5.4E-04	5.4E-04	5.4E-04	-3.3E-02	5.4E-04
Feb-11	0	0	2.0E-01	0	. 0	0	3.4E-04	3.4E-04	3.4E-04	2.0E-01	3.4E-04
Mar-11	0	0	4.3E-01	0	4.6E-08	1.1E-08	8.1E-04	8.1E-04	8.1E-04	4.3E-01	8.1E-04
Apr-11	0	0	2.8E-01	0	0	0	7.7E-04	7.7E-04	7.7E-04	2.8E-01	7.7E-04
May-11	0	0	1.6E-01	0	6.7E-08	1.6E-08	8.2E-04	8.2E-04	8.2E-04	1.6E-01	8.2E-04
Jun-11	0	0	2.5E-01	0	8.6E-08	2.0E-08	6.6E-04	6.6E-04	6.6E-04	2.5E-01	6.6E-04
Jul-11	0	0	2.1E-01	0	6.3E-08	1.5E-08	3.0E-04	3.0E-04	3.0E-04	2.1E-01	3.0E-04
Aug-11	0	0	4.1E-01	0	5.0E-08	1.1E-08	4.4E-04	4.4E-04	4.4E-04	4.1E-01	4.4E-04
Sep-11	0	6.6E-03	2.3E-01	6.6E-03	6.5E-08	1.5E-08	3.8E-04	3.8E-04	3.8E-04	2.3E-01	7.0E-03
Oct-11	0	0	1.3E-01	0	1.6E-07	3.7E-08	4.3E-04	4.3E-04	4.3E-04	1.3E-01	4.3E-04
12 month total	0	6.6E-03	2.7E+00	6.6E-03	5.4E-07	1.2E-07	6.3E-03	6.3E-03	6.3E-03	2.7E+00	1.3E-02