F & A RECEIPT # 703314

DATE: MAY 06 2010

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MAY 0 7 2010

PRINTING OPERATIONS AIR GENERAL PERMIT REGISTRATION FORM

Part II. Notification to Permitting Office

(Detach and submit to appropriate permitting office; keep copy onsite)

Instructions: To give notice to the Department of an eligible facility's intent to use this air general permit, the owner or operator of the facility must detach and complete this part of the Air General Permit Registration Form and submit it to the appropriate Department of Environmental Protection or local air pollution control program office which has permitting authority. Please type or print clearly all information, and enclose the appropriate air general permit registration processing fee pursuant to Rule 62-4.050, F.A.C. (\$100 as of the effective date of this form)

Registration Type 195133Z-01
Registration Type
Check one:
 INITIAL REGISTRATION - Notification of intent to: ☐ Construct and operate a proposed new facility. ☐ Operate an existing facility not currently using an air general permit (e.g., a facility proposing to go from an air operation permit to an air general permit).
RE-REGISTRATION (for facilities currently using an air general permit) - Notification of intent to: Continue operating the facility after expiration of the current term of air general permit use. Continue operating the facility after a change of ownership. Make an equipment change requiring re-registration pursuant to Rule 62-210.310(2)(e), F.A.C., or any other change not considered an administrative correction under Rule 62-210.310(2)(d), F.A.C.
Surrender of Existing Air Operation Permit(s) - For Initial Registrations Only
If the facility currently holds one or more air operation permits, such permit(s) must be surrendered by the owner or operator upon the effective date of this air general permit. In such case, check the first box, and indicate the operation permits being surrendered. If no air operation permits are held by the facility, check the second box.
All existing air operation permits for this facility are hereby surrendered upon the effective date of this air general permit; specifically permit number(s):
No air operation permits currently exist for this facility.
General Facility Information
<u>Facility Owner/Company Name</u> (Name of corporation, agency, or individual owner who or which owns, leases, operates, controls, or supervises the facility.) TIN Inc dba Temple-Inland
111 Me dou rempte mane
Site Name (Name, if any, of the facility site; e.g., Plant A, Metropolis Plant, etc. If more than one facility is owned, a registration form must be completed for each.) Same as above
Facility Location (Provide the physical location of the facility, not necessarily the mailing address.)
Street Address: 711 East Lancaster Ro
City:Orlando County:Orange Zip Code:32809 -6438

Facility Start-Up Date (Estimated start-up date of proposed **new** facility.)(N/A for existing facility) N/A (existing)

DEP Form No. 62-210.920(1)(f) Effective: January 10, 2007

Owner/Authorized Representative		
Name and Position Title (Person who, by s	igning this form b	elow, certifies that the facility is eligible to use this
air general permit.)		,
Print Name and Title: Wayne Parker, G	eneral Manage	r; e-mail: WayneParker@templeinland.com
Owner/Authorized Representative Mailing	Address	
Organization/Firm:Same as facility add		e)
Street Address:	`	,
City:	County:	Zip Code:
Owner/Authorized Representative Telepho	ne Numbers	
Telephone:(407)-855-2121		Fax:(407)-855-4812
Cell phone (optional):		
<u> </u>		
Facility Contact (If different from Owne	r/Authorized Re	presentative)
		acted regarding day-to-day operations at the facility.)
		-mail: RichardHassell@templeinland.com
Facility Contact Mailing Address		
Organization/Firm:TIN Inc dba Temple	e-Inland, Plant	#010 - Orlando
Street Address:711 East Lancaster Roa	ad	
City:Orlando	County:FL	Zip Code:32809 - 6638
Facility Contact Telephone Numbers		
Telephone: (407) 888-1664		Fax:(407) 855-4812
Cell phone (optional):		rax.(407) 633-4612
Cen phone (optional).		
<u> </u>	- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Owner/Authorized Representative State	ment	
This statement must be signed and dated by	the person name	d above as owner or authorized representative
I, the undersigned, am the owner or au	ithorized represen	tative of the owner or operator of the facility
addressed in this Air General Permit I	Registration Form.	I hereby certify, based on information and
belief formed after reasonable inquiry,	that the facility a	ddressed in this registration form is eligible for
		de in this registration form are true, accurate
		the facility described in this registration form so
		air pollutant emissions found in the statutes of
the State of Florida and rules of the Do	epartment of Envir	ronmental Protection and revisions thereof.
Lwill mounth, notify the Descriptions	of anni ahamaan ta	the information contained in this registration
I will promptly notify the Department of form.	n uny changes to l	the information contained in this registration
, , , , , , , , , , , , , , , , , , ,		

DEP Form No. 62-210.920(1)(f) Effective: January 10, 2007

Printing Process/InkType(s)		·
Check all that apply:		
Heatset Offset Lithographic	Non-Heatset Offset Lithographic	☐ Digital
☐ Screen or Letterpress ☐ Flexographic		Ultraviolet Cured
✓ riexographic	Rotogravure	
Compliance Assurance - Initial Registrat	ion (Not Required for Re-Registratio	m)
Below, or as an attachment to this form, pro		
used to demonstrate compliance with Rule	62-210.310(4)(f)2., F.A.C. Provide the	estimated amount of materials
containing hazardous air pollutants and solv	vent-containing materials expected to be	e used over a 12-month period.
See attached:		
1) PTE calculations by Emission Un	uit .	
2) Regulatory Applicability Table by		
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DEP Form No. 62-210.920(1)(f) Effective: January 10, 2007

Compliance Determination - Re-Registration (Not Required for Initial Registration)							
hazardous air pollutants ar five years to show complia	Below, or as an attachment to this form, provide the highest 12-month total quantity of materials containing hazardous air pollutants and the highest 12-month total quantity of solvent-containing materials used in the last five years to show compliance with sub-subparagraph 62-210.310(4)(f)2.b., F.A.C. (material usage rates) or provide all calculations to show compliance with sub-subparagraph 62-210.310(4)(f)2.a., F.A.C. (mass balance).						
Not required. This is a	nn initial registration.						
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DEP Form No. 62-210.920(1)(f) Effective: January 10, 2007

Description of Facility Below, or as an attachment to this form, provide a description of the printing operations at the facility in sufficient detail to demonstrate the facility's eligibility for use of this air general permit and to provide a basis for tracking any future equipment or process changes at the facility. Information should include a description of the number and types of printing processes, presses and ink systems being used at the facility. Describe all air pollutantemitting processes and equipment at the facility, and identify any air pollution control measures or equipment used. Please see attached documents: 1) General Process Description 2) General Emission Unit Descriptions 3) Process Flow diagrams 4) 2001-2009 Actual Emissions

Natural Gas Combustion -

Company Name: TIN Inc dba Temple-Inland

Address City IN Zlp: 711 E Lancaster, Orlando, FL

Plant ID: XXXXX Date: 5/4/2010

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r B-01 (Existing) - (A-129)

Heat Input Capacity

Potential Throughput

MMBtu/hr

MMCF/yr

14.65

128.3

Pollutant

			- Ollutarit			
	PM	PM10	SO2	NOx	voc	со
Emission Factor in lb/MMCF	. 7.6	7.6	0.6	100.0	5.5	84.0
<u> </u>		·		**see below		
Potential Emission in tons/yr	0.4875	0.4875	0.0385	6.4145		5.3882

^{**}Emission Factors for NOx: Uncontrolled ≈ 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

PM=PM10

METHODOLOGY

Emission Factors:

- 1) All emission factors are based on normal firing.
- a) MMBtu = 1,000,000 Btu
- b) MMCF = 1,000,000 Cubic Feet of Gas
- 2) Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Potential Throughput:

3) Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emissions:

4) Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See next page for HAPs

Natural Gas Combustion -

Company Name: TIN Inc dba Temple-Inland

Address City IN Zip: 711 E Lancaster, Orlando, FL

Plant ID: XXXXX Date: 5/4/2010

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Page 2 of 16 App A

<u> </u>	-	HAPs - Metals			Page 2
	Arsenic	Beryllium	Cadmium	Chromium	Lead .
Emission Factor in lb/MMcf	0.00020	0.00001	0.00110	0.00140	0.00000
Potential Emission in tons/yr	0.0000	0.0000	0.0001	0.0001	0.0000
·		HAPs - Metals			L
	Mercury	Manganese	Nickel	Selenium	Total HAPS
Emission Factor in Ib/MMcf	0.00026	0.00038	0.00210	0.00002	Metals
Potential Emission in tons/yr	0.0000	0.0000	0.0001	0.0000	0.0004
		HAPs - Organics			
	Methylnapthale	3-Methyl- chloranthrene	7,12- Dimethylbenz(a) anthrancene	Acenapthene	Acenapthylene
Emission Factor in lb/MMcf	2.4E-05	1.8E-06	1.6E-06	1.8E-06	1.8E-06
Potential Emission in tons/yr	0.0000	0.0000	0.0000	0.0000	0.0000
		HAPs - Organics			
	Anthracene	Benz(a) anthracene	Benzene	Benzo(a) pyrene	Benzo(b) flouranthene
mission Factor in lb/MMcf	0.00000	0.00000	0.00210	0.00000	0.00000
Potential Emission in tons/yr	0.0000	0.0000	0.0001	0.0000	0.0000
		HAPs - Organics			
	Benzo(g,h,i,) perylene	Benzo(k) flouranthene	Chysene	Dibenzo(a,h) anthracene	Dichlorobenzene
Emission Factor in lb/MMcf	0.00000	0.00000	0.00000	0.00000	0.00120

Natural Gas Combustion -

Company Name: TIN Inc dba Temple-Inland

Address City IN Zip: 711 E Lancaster, Orlando, FL

Plant ID: XXXXX Date: 5/4/2010

1	Date .	5/4/2010				
Potential Emission in tons/yr	0.0000	0.0000	0.0000	0.0000	0.0001	
Potential Emission in (ons/y)	0.0000	0.0000	0.0000	0.0000	0.0001	
		HAPs - Organics			· ·	
	Fluoranthene	Fluorene	Formaldehyde	Hexane	Indeno(1,2,30cd)p yrene	
Emission Factor in lb/MMcf	0.00000	0.00000	0.00001	1.80000	0.00000	
Potential Emission in tons/yr	0.0000	0.0000	0.0000	0.1155	0.0000	Hexane 0.1155 (single HAP)
		HAPs - Organics				_
	Naphthalene	Phenanathrene	Pyrene	Toluene	Total HAPs	
Emission Factor in lb/MMcf	0.00061	0.00002	0.00001	0.00340	Organics	
Potential Emission in tons/yr	0.0000	Ö.0000	0.0000	0.0002	0.1159	0.1163 (All totals)

Methodology is the same as previous page.

Appendix A: Emissions Calculations Commercial/institutional/Residential Combustors (< 100 mmBtu/hr)

#1 and #2 Fuel Oil

Company Name: TIN Inc dba Temple-Inland
Address City IN Zip: 711 E Lancaster, Orlando, FL

Plant ID: XXXXX Date: 5/4/2010

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Boller: B-01 (Existing) - (A-129) Back-up #2

Fuel Souce

Heat Input Capacity

Potential Throughput

S = Weight % Sulfur

MMBtu/hr

kgals/year

0.5

14.288

894.0205714

	Pollutant					
Emission Factor in lb/kgal	PM ¹ 2.0	SO2 71	NOx 20.0	VOC 0.34	CO 5.0	
Potential Emission in tons/yr	0.9	(142.0S) 31.7	8.9	0.2	2:2	

Note¹: PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

Note 2: 1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu.

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see erata file)

Methodology 1

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

HAPs Emissions

1	HAPs - Metals						
Emission Factor in lb/mmBtu	Arsenic 0.00000	Beryllium 0.00000	Cadmium 0.00000	Chromium 0.00000	Lead 0.00001		
Potential Emission In tons/yr	0.00025	0.00019	0.00019	0.00019	0.00056		

l	HAPs - Metals (continued)						
Emission Factor in lb/mmBtu	Mercury 0.00000	Manganese 0.00001	Nickel 0.00000	Selenium 0.00002			
Potential Emission in tons/yr	0.00019	0.00038	0.00019	0.00094	si		

Total HAPs 0.00307

Note: No data was available in AP-42 for organic HAPs.

Methodology

Potential Emissions (tons/year) = Throughput (MMBtu/hr)*Emission Factor (lb/MMBtu)*8,760 hrs/yr / 2,000 lb/ton

Natural Gas Combustion -

Company Name: TIN Inc dba Temple-Inland
Address City IN Zip: 711 E Lancaster, Orlando, FL

Plant ID: XXXXX Date: 5/4/2010

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Boiler B-02 (New)

Heat Input Capacity

Potential Throughput

MMBtu/hr

MMCF/yr

14.29

125.2

Pollutant

Potential Emission in tons/yr	0.4756	0.4756	0.0375		0.3442	5.2568
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0 **see below	5.5	84.0
	РМ	PM10	SO2	NOx	voc	со

^{**}Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

PM=PM10

METHODOLOGY

Emission Factors:

- 1) All emission factors are based on normal firing.
 - a) MMBtu = 1,000,000 Btu
 - b) MMCF = 1,000,000 Cubic Feet of Gas
- 2) Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Potential Throughput:

3) Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emissions:

4) Emission (tons/yr) ≈ Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton See next page for HAPs.

Natural Gas Combustion -

Company Name: TIN Inc dba Temple-Inland

Address City IN Zip: 711 E Lancaster, Orlando, FL

Plant ID: XXXXX Date: 5/4/2010

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	Date :	5/4/2010			
	HAPs - Metals	<u> </u>			Page 5 of 16 App
	Arsenic	Beryllium	Cadmium	Chromium	Lead
Emission Factor in lb/MMcf	0.00020	0.00001	0.00110	0.00140	0.00000
Potential Emission in tons/yr	0.0000	0.0000	0.0001	0.0001	0.0000
		HAPs - Metals			
	Mercury	Manganese	Nickel	Selenium	Total HAPS
Emission Factor in lb/MMcf	0.00026	0.00038	0.00210	0.00002	Metals
Potential Emission in tons/yr	0:0000	0.0000	0.0001	(i) (i) (i) (i) (ii) (ii) (ii) (ii) (ii	0:0003
		HAPs - Organics			
	Methylnapthale	3-Methyl- chloranthrene	7,12- Dimethylbenz(a) anthrancene	Acenapthene	Acenapthylene
Emission Factor in lb/MMcf	0.00002	0.00000	0.00000	0.00000	0.00000
Potential Emission in tons/yr	0.0000	0.0000	0.0000	0.0000	0.0000
		HAPs - Organics			
	Anthracene	Benz(a) anthracene	Benzene	Benzo(a) pyrene	Benzo(b) flouranthene
Emission Factor in lb/MMcf	0.00000	0.00000	0.00210	0.00000	0.00000
Potential Emission in tons/yr	0.0000	0.0000	0.0001	0.0000	0.0000

Natural Gas Combustion -

Company Name: TIN Inc dba Temple-inland

Address City IN Zip: 711 E Lancaster, Orlando, FL

Plant ID: XXXXX Date: 5/4/2010

•	HAPs - Organics			Page 6 of 16 App A			
	Benzo(g,h,i,) perylene	Benzo(k) flouranthene	Chysene	Dibenzo(a,h) anthracene	Dichlorobenzene		
Emission Factor In lb/MMcf	0.00000	0.00000	0.00000	0.00000	0.00120		
Potential Emission in tons/yr	0.0000	0.0000	0.0000	0.0000	0.0001		
		HAPs - Organics				•	
	Fluoranthene	Fluorene	Formaldehyde	Hexane	Indeno(1,2,30cd)pyrene		
Emission Factor in lb/MMcf	0.00000	0.00000	0.00001	1.80000	0.00000		
Potential Emission in tons/yr	0.0000	0.0000	0.0000	0.1126	0.0000	0.0331	(Hexane Single HAP)
		HAPs - Organics					
	Naphthalene	Phenanathrene	Pyrene	Toluene	Total HAPs		
Emission Factor in lb/MMcf	0.00061	0.00002	0.00001	0.00340	Organics		
Potential Emission in tons/yr	0.0000	0.0000	0.0000	0.0002	0.1131	0.1135	Total HAPs

Methodology is the same as previous page.

Natural Gas Combustion -Company Name: TIN Inc dba Temple-Inland

Address City in Zip: 711 E Lancaster, Orlando, FL

Plant ID: XXXXX Date : 05/04/10

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Boller: B-03 (New)

Heat Input Capacity

Potential Throughput

MMBtu/hr

MMCF/yr 36.8

4.20

Pollutant						
	PM	PM10	SO2	NOx	voc	co
Emission Factor In lb/MMCF	7.6	7.6	0.6	100.0	5.5	84.0
Ĺ		L		**see below		
Potential Emission in tons/yr	0,1398	0.1398	0.0110	1.8396	0.1012	1.5453

^{**}Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Five gas recirculation = 32

PM=PM10

METHODOLOGY

Emission Factors:

Note 1 : All emission fectors are based on normal firing.

b) MMCF = 1,000,000 Cubic Feet of Gas

Note 2: Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-008-02, 1-01-008-02, 1-03-006-02, and 1- (SUPPLEMENT D 3/98)

Potential Throughput:

3) Potential Throughput (MMCF) = Heet Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emissions:

4) Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

HAPs - Metals

Emission Factor in Ib/MMcf	Arsenic	Beryllium	Cadmlum	Chromlum	Lead
	0.00020	0.00001	0.00110	0.00140	0.00000
Potential Emission in tons/уг	0.0000	0.0000	0.0000	0,000	0.0000

HAPs - Metals

Emission Factor in lb/MMcf	Mercury	Manganese	Nickel	Selenlum	Total HAPS
	0.00026	0.00038	0.00210	0.00002	Metals
Potential Emission in tons/yr	0.000 <u>0</u>	0.0000	0.0000	0.0000	0.0001

See next page for HAPs.

Appendix A: Emissions Calculations Natural Gas Combustion -Company Name: TIN Inc dba Temple-Inland

Address City IN Zip: 711 E Lancaster, Orlando, FL

Plant ID: XXXXX Date: 05/04/10

Page 8 of 16 App A HAPs - Organics 7,12-3-Methyl-chloranthrene Dimethylbenz(e) anthrancene Acenapthene Acenepthylene Methylnapthale Emission Factor in lb/MMcf 0.00002 0.00000 0.00000 0.00000 0.00000 Potential Emission in tons/yr 0,0000 0.0000 0.0000 0.0000 0.0000 HAPs - Organics Benz(a) Велго(а) Benzo(b) Anthracene enthracene Benzene pyrene flourenthene Emission Factor in lb/MMcf 0.00000 0.00000 0.00210 0.00000 0.00000 Potential Emission in tons/yr 0.0000 0.0000 0.0000 0.0000 0.0000 HAPs - Organics Benzo(g,h,l,) peryfene Benzo(k) Dibenzo(a,h) Dichlorobenzene Chysene Emission Factor in lb/MMcf 0.00000 0.00000 0.00000 0.00000 0.00120 0.0000 Potential Emission in tons/yr 0.0000 0.0000 0.0000 0.0000 HAPs - Organics Indeno(1,2,30cd)p . Fluoranthene Formaldehyde Fluorene Hexane yrene 0.00000 0.00000 0.00001 1.80000 0.00000 Emission Factor in lb/MMcf 0.0331 (Hexane 0.0331 Single HAP) 0.0000 0.0000 0.0000 0.0000 Potential Emission In tons/yr HAPs - Organics Naphthalene Phenanethrane Pyrene Toluene Total HAPs Emission Factor in lb/MMcf 0.00061 0.00002 0.00001 0.00340 Organics 0.0332 0.0333 Total HAPs 0.0001 Potential Emission in tons/yr 0.0000 0.0000 0.0000

Methodology is the same as previous page.

Appendix A: Emissions Calculations VOCs & HAPs from Flexographic Printing Operations

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Company Name: TIN Inc dba Temple-Inland Address City IN Zip: 711 E Lancaster, Orlando, FL

> Plant ID: XXXXX Date: 5/4/2010

EVOL - 3237 (Existing)						
THROUGHPUT	<u> </u>			<u> </u>	_	
Press I.D.	MAXIMUM LINE SPEED (FEET/MIN) @ 100% Coverage	MAXIMUM PRINT WIDTH (INCHES)	MMin^2/YEAR	Potential Gallons Ink / year		
EVOL 3237, folder, gluer	1000	85	536,112	124,446		
INK VOCS	┥	<u>.</u>				
Ink Name	Maxium Coverage (lbs/MMin^2)	Weight % Votatiles*	Flash Off %	Throughput (MMin^2/Year)	Emissions (TONS/YEAR)	
Worst Case Ink				 - ` 	<u> </u>	
Color Resolutions: 7EAW498B3 - HG PROCESS CYAN BL MKBK	2.0	2.64%	100.00%	536,112	14.15	
			L			
Glue VOCs	7					
Glue Name	Maxium Coverage	Weight % Volatiles*	Flash Off %	Throughput	Emissions	
	(lbs/MMin^2)			(MMin^2/Year)	(TONS/YEAR)	
Worst Case Glue	1					
Henkle: 33-1568	1:0	0.09%	100.00%	536,112	0.24	
	<u></u>		L	<u> </u>		
	1			Total VOC Emissions =	14.39 T	lon/yr
INK HAPs	1					
Ink Name	Maxium Coverage (lbs/MMin^2)	Weight % HAPs	Flash Off %	Throughput (MMin^2/Year)	Emissions (TONS/YEAR)	
Worst Case Ink						
Calor Resolutions: 7EYW65011 - HYG-8 TRANS GCMI 10 YELL	2.0	0:14%	100.00%	536,112	0.75	
			<u> </u>	LI		
Glue HAPs	4					
Glue Name	Maxium Coverage	Weight % HAPs	Flash Off %	Throughput	Emissions	
33-1556	(lbs/MMin^2)	1	1	(MMin^2/Year)	(TONS/YEAR)	
Worst Case Glue	,					
Henkle: 33-1566	1,0	0.09%	100.00%	536,112	0.24	
(Vinyl Acetate, CAS RN # 108-05-4)]					

Note 2: THIS IS FLEXOGRAPHIC PRINTING WITH FLASH OFF AT 100%, (NO HEAT SET OFFSET PRINTING HAS BEEN USED).

Note 3: Manufacturer % content of ethylene glycol is proprietory and could not be obtained or verified by the source,

Note 4: No solvent cleaners utilized in the clean-up of this piece of equipment.

Note 5: Worst Case Ink for VOC or HAPs are used in calculations

METHODOLOGY

Throughput (MMin*2 per Year) = Maxium line speed (feet per minute) * Convert (feet to inches) * Maximum print width (inches) * 80 minutes per hour * 8760 hours per year VOC (ton/yr)= Maximum Coverage pounds per MMin^2 * Weight percentage volatiles (water minus organics) * Flash off * Throughput in MMin^2 per hr * 1 Ton per 2000 ib. HAP (ton/yr)= Maximum Coverage pounds per MMin*2 * Weight percentage HAP (water minus organics) * Flash off * Throughput In MMin*2 per hour * 1 Ton per 2000 ib.

Appendix A: Emissions Calculations VOCs & HAPs from Flexographic Printing Operations

Company Name: TiN Inc dba Temple-Inland Address City IN Zip: 711 E Lancaster, Orlando, FL

Plant ID: XXXXX

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24.38

24.38

923.374

	Date :	5/4/2010			
Martin (Bobst) DRO (New)					
THROUGHPUT	ĺ				
Press I.D.	MAXIMUM LINE SPEED (FEET/MIN) @ 100% Coverage	MAXIMUM PRINT WIDTH (INCHES)	MMin^2/YEAR	Potential Gallons Ink / year	
Martin (Maxi) DRO, 4 C, die cutter	1200	122	923,374	214,339	
INK VOCS	1				
Ink Name	Maxium Coverage	Weight % Volatiles*	Flash Off %	Throughput	Emissions
	(lbs/MMin^2)			(MMin^2/Year)	(TONS/YEAR)
Worst Case Ink					
Color Resolutions: 7EAW49683 - HG PROCESS	20	2049	400.000	000.074	24.20

Glue VOCs	<u>1</u>				
Glue Name	Maxium Coverage	Weight % Volatiles*	Flash Off %	Throughput	Emissions
	(lbs/MMin^2)			(MMin^2/Year)	(TONS/YEAR)
			·		
No Glue			100.00%	923,374	0.00

2.64%

100.00%

Total VOC Emissions = 24.38 Ton/yr

INK HAPs					
ink Name	Maxlum Coverage	Weight % HAPs	Flash Off %	Throughput	Emissions
	(lbs/MMin^2)			(MMin^2/Year)	(TONS/YEAR)
Worst Case Ink					
Color Resolutions: 7EYW65011 - HYG-8 TRANS GCMI 10 YELL	2.0	0.14%	100.00%	923,374	1.29
		-			

Glue HAPs Glue Name	Maxium Coverage	Weight % HAPs	Flash Off %	Throughput	Emissions
	(lbs/MMin^2)		(MMin^2/Year)		(TONS/YEAR)
No Glue					0.00

Note 1: Total emissions based on rated capacity at 8,760 hours/year. *Maximum hourly usage based on data from 2009 operations as provided by TIN.

2.0

Total HAP Emissions = 1.29 Ton/yr

Note 2: THIS IS FLEXOGRAPHIC PRINTING WITH FLASH OFF AT 100%. (NO HEAT SET OFFSET PRINTING HAS BEEN USED).

Note 3: Manufacturer % content of ethylene glycol is proprietory and could not be obtained or verified by the source,

Note 4: No solvent cleaners utilized in the clean-up of this piece of equipment.

Note 5: Worst Case Ink for VOC or HAPs are used in calculations

METHODOLOGY

CYAN BL MKBK

Throughput (MMin^2 per Year) = Maxium fine speed (feet per minute) * Convert (feet to inches) * Maximum print width (inches) * 60 minutes per hour * 8760 hours per year VOC (tonlyr)= Maximum Coverage pounds per MMin^2 * Wolght percentage volatios (water minus organics) * Flash off * Throughput in MMin^2 per hr * 1 Ton per 2000 lb. HAP (ton/yr)= Maximum Coverage pounds per MMin^2 * Weight percentage HAP (water minus organics) * Flash off * Throughput in MMin^2 per hour * 1 Ton per 2000 lb.

Appendix A: Emissions Calculations VOCs & HAPs from Flexographic Printing Operations

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Company Name: TiN Inc dba Temple-Inland
Address City IN Zip: 711 E Lancaster, Orlando, FL

Plant ID:

Date: 5/4/2010

Langsto	n EG-1	67 (1	أسحا
Lanusii	JII EU-I	0/ II	IEW.

THROUGHPUT]			
Press I.D.	MAXIMUM LINE SPEED (FEET/MIN) @ 100% Coverage	MAXIMUM PRINT WIDTH (INCHES)	MMin^2/YEAR	Potential Gallons Ink / year
Langston, 3C, folder, gluer w/DC	1041	110	722,237	167,650

înk Name Press Id	Maxium Coverage (lbs/MMin^2)	Weight % Volatiles*	Flash Off %	Throughput (MMin^2/Year)	Emissions (TONS/YEAR)
Worst Case Ink	· · · · · · · · · · · · · · · · · · ·				
'EAW49683 - HG PROCESS CYAN BL MKBK	2.0	2.64%	100.00%	722,237	19.07

Glue VOCs					
Glue Name	Maxium Coverage	Weight % Volatiles ⁶	Flash Off %	Throughput	Emissions
L	(ibs/MMin^2)	_		(MMin^2/Year)	(TONS/YEAR)
Worst Case Glue					
Hinkle: 29-9734 (WRA)	1:0	0.72%	100.00%	722,237	2.60
(Methanol CAS RN# 67-56-1)]		

Total VOC Emissions =	21.67 Ton/yr
10ta 100 Emissions =	27.01 101.01

INK HAPs	Maxium Coverage (lbs/MMin^2)	Weight % HAPs	Flash Off %	Throughput (MMin^2/Year)	Emissions (TONS/YEAR)
Worst Case Ink	. 0			(**************************************	(14114
EYW85011 - HYG-8 TRANS GCMI 10 YELL	2.0	0.14%	100.00%	722,237	1.01

Glue HAPs	7				
Glue Name	Maxium Coverage	Weight % HAPs	Flash Off %	Throughput	Emissions
	(lbs/MMin^2)			(MMin^2/Year)	(TONS/YEAR)
Worst Case Glue	1				
Hinkle: 29-9734 (WRA)	1.0	0.63%	100.00%	722,237	2.28
(Methanoi CAS RN# 67-56-1)					

Note 1: Total emissions based on rated capacity at 8,760 hours/year. *Maximum hourly usage based on data from 2009 operations as provided by TIN.

Note 2: THIS IS FLEXOGRAPHIC PRINTING WITH FLASH OFF AT 100%. (NO HEAT SET OFFSET PRINTING HAS BEEN USED).

Note 3: Manufacturer % content of ethylene glycol is propriatory and could not be obtained or verified by the source,

Note 4: No solvent cleaners utilized in the clean-up of this piece of equipment.

Note 5: Worst Case Ink for VOC or HAPs are used in calculations

METHODOLOGY

Throughput (MMIn^2 per Yoar) = Maximum line speed (feet per minute) * Convert (feet to inches) * Maximum print width (inches) * *80 minutes per hour * *8760 hours per year VOC (tonlyr)= Maximum Coverage pounds per MMin^2 * Weight percentage volatiles (water minus organics) * Flash off * Throughput in MMin^2 per year * 1 Ton per 2000 lb.

HAP (tonlyr)= Maximum Coverage pounds per MMin^2 * Weight percentage HAP (water minus organics) * Flash off * Throughput in MMin^2 per hour * 1 Ton per 2000 lb.

Total HAP Emissions =	3.29 Tonlyr

Appendix A: Emissions Calculations Potential PM Emissions from Cyclone Operations

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Company Name: TIN Inc dba Temple-Inland
Address City IN Zip: 711 E Lancaster, Orlando, FL

Plant ID: XXXXX Date: 5/4/2010

CY-01

THROUGHPUT	Maximum Throughput* trim waste (lbs/hr)	Emission Factor** (lbs/lb)	Emission factor (lbs/hr)	Emissions (tons/yr)
Cyclone Capacity	10,881	0.00005	.≽ 74 0.54	2.38

Note 1: Maximum Throughput (based on maximum capacity of baler) = 9.5 bales/hour x 1170 lb/bale *x 8760 hours/year.

Total PM Emissions =	2.38 Ton/yr
TOTAL T IN ETHISSIONS -	2.00 101191

Note 2: Emission Factor is based on industry standard percent of Trim that is dust (0.10% by weight) and a control efficiency of the cyclone-baler system of 95%.

Note 3: Cyclone is a pnuematic conveying device transferring trim material from printing presses to a baler where the material is collected, baled, then returned to our recycling mill and/or sold on the open market.

METHODOLOGY

Potential to Emit (Uncontrolled PM Emissions) ton/yr = Maximum Throughput (lbs/hr) x 8,760 hours/year / 1 ton / 2,000 lbs

Appendix A: Uncontrolled (PTE) Emissions Calculations Particulate Emissions

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Company Name: TIN inc dba Temple-Inland

Address City IN Zlp: 711 E Lancaster, Orlando, FL

Plant ID: XXXXX Date: 5/4/2010

				Unit Weight	Maximum Throughput		Unit Weight Maximum Throughput PM			Uncontrolled
Unit	Process	Units proc	essed	lbs / sf (174 lbs/mmsf)	lb/hr	ton/yr	Emission Factor (lb/ton)	PM Emissions (ton/yr)		
CS-01 1	Starch Silo	13,500,000	lbs/yr	1.0000	1,541.096	6,750.000	0.18	0.61		
	Cornstarch mixing tank			Negligible - Wet F	rocess			Negligible		

Note ¹: CS-01 is based upon potential at the silo in lbs/yr. Emission Factor is from AP-42, Chapter 9.9.1 Grain Elevators and Processes Table 9.9.1-1. for grain receiving from straight truck (SCC 3-02-005-5). Mixing of corn starch based glue takes place in a completely enclosed system and is wet, so any particulate emissions are negligible.

Methodology

Uncontrolled PM Emissions (ton/yr) = Maximum Throughput (ton/yr) * PM Emission Factor (lb/ton) / 2000 (lb/ton)

Appendix A: Emission Calculations Small Parts Washer

Company Name: TIN Inc dba Temple-Inland
Address City IN Zip: 711 E Lancaster, Orlando, FL

Plant ID: XXXXX Date: 5/4/2010

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PW-01

				Petroleu	m Naptha
Parts Washer from Heritage-Crystal Clean	Size (gallons)	Max Potential Quantity Loss/ yr		Percent	lbs
- Crystal Clean 142+	45	360	6.54 lbs / gal	100%	2,354.40
		_			

 Total VOC
 Run days in 2009
 PTE VOC (Tons)

 2,354.400
 365
 1,177
 Total VOC

Methodology

Potential to Emit (PTE) VOC lbs/yr = Maximum usage per year in size x quantity (gal/yr) x density (lb/gallon) / 128 oz/gallon x % VOC content Potential to Emit (PTE) VOC ton/yr = PTE VOC (lbs/yr) / run days/yr x 1 day/24 hours x 8,760 hours/yr x 1 ton / 2,000 lbs

Appendix A: Emissions Calculations Potential Adhesive VOCs & HAPs Emissions

Company Name: TIN Inc dba Temple-Inland
Address City IN Zip: 711 E Lancaster, Orlando, FL

Plant ID: xxxxx Date: 5/4/2010

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 Units:
 Adhesives Product
 PTE - Pounds of Each Glue

 Martin
 NA

 EVOL
 33-1556
 536,112

 Langston
 29-9734
 722,237

Martin EVOL Langston

Adhesives Product	PTE- Pounds of Each Glue	VOC Content Weight % ¹	VOC Weight (tons) 4
NA	0		0.00
33-1556	536,112	0.0900%	0.24
29-9734	722,237	0.7200%	2.60

List Individual HAPs PTE by Name with Weight % **Total HAP** Content **Adhesives** Methanol Formaldehyde Vinyl Acetate Weight % 2 **Product** CAS RN 67-56-1 CAS RN 50-00-0 CAS RN 108-05-4 NA 33-1556 0.0900% 0.0900% 29-9734 0.7200% 0.6300% 0.0900%

Martin EVOL Langston

				List Individual HAPs PTE - by Name with Calculated Total Weight				
	Adhesives Product	Total HAP Content Weight %	PTE - Pounds of Each Glue	Total HAP Weight (tons)	Methanol CAS RN 67-56-1	Formaldehyde CAS RN 50-00-0	Vinyl Acetate CAS RN 108-05-4	
ı	NA							
-	33-1556	0.0900%	536,112	0.2413			0.2413	
1	29-9734	0.7200%	722,237	2.6001	2.2750	0.3250		

Martin EVOL Langston

Totals ³ 2.841 2.275 0.325 0.241

Note 1: VOC Content Weight % is from supplier data.

Note 2: HAP Content Weight % is from supplier data.

Note 3: No individual HAP above 10 tpy, sum total of all HAPs below 25 tpy.

Note 4: This number is the sum of each number reported individually for each emission unit.

Appendix A: Emission Calculations FACILITY-WIDE

Company Name: TIN Inc dba Temple-Inland
Address City IN Zip: 711 E Lancaster, Orlando, FL

Plant ID: xxxxx Date: 5/4/2010

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Uncontrolled - Potential Emissions

Emissions Generating Activities (tons/yr)

Pollutant	Equipment	Combustion Ops		Starch Unioading Ops	Converting (Flexographic) Ops		Maintenance Ops	TOTAL (tons/yr)	TOTAL (lbs/hr)
		Boilers - NG	Boller - Worse Case #2 Fuel	Starch Silo	Printing Ops	Cyclone	Parts Washer	(tons/yr)	(100)111)
PM≂PM10		0.62	0.89	0.61		2.38		4.50	1.03
SO2		0.05	31.74				 	31.79	7.26
NOx	<u> </u>	8.10	8.94				 	17.04	3.89
СО		6.80	2.24					9.04	2.06
voc		0.45	0.15				1.177	1.77	0.41
voc	Martin (Bobst) DRO (N	lew)			24.38				
VOC	EVOL - 3237 (Existing)				14.39				
VOC	Langston EG-167 (Nev	N)			21.67				
Total VOC								62.06	14.17
HAPs		0.15	0.003			<u> </u>			
HAPs	Martin (Bobst) DRO (N	lew)			1.29				
HAPs	EVOL - 3237 (Existing)				0.99				
HAPs	Langston EG-167 (Nev	v)			3.29				
Total Combined HAPs		0.15	0.003		5.57			5.72	1.31
Worst case Single HAP		0.07	0.0009		2.28				
		Hexane	Selenium		Methanol				

Total emissions based on 8,760 hours/year.

2009 ACTUALS											
		Solvent		General Permit Threshold							
Facility-wide ink usage (lbs)	Facility-wide adhesives	Cleaners	Totals (lbs)	(lbs)							
	usage (lbs)	used (lbs).		(105)							
269,635	57,450	0	327,085	400,000							

#010 Regulatory Applicability Table by Emission Units

Company Name: TIN Inc dba Temple-Inland
Address City IN Zip: 711 E Lancaster, Orlando, FL
Plant ID: XXXXXX
Date: 05/03/10

	Size of Unit			Applica	ble Regulations	
Air Emission Units	Size of Unit	Type of Unit	Existing Regulatory Approvals	State Regulations		Federal Regulations
Boller(s): Existing	. 14.2	NG & #2 Fuel Oil	1) Letter from FDEP dated 1-15-99 - Categorical exemption for boiler less than 100 MMBtu/hr (includes dual fuel). 2) Letter from FDEP dated 12-20-01 for 350 hp boiler providing a categorical exemption under FAC 62-210,300(3)(1)2. 3) Letter from TIN on 11/9/01 asking for an exemption determination on installation of a 350 hp boiler and taking out the 600 Hp boiler. 4) Letter from TIN on 4/5/2002 in regards to start-up & installation of 350 hp boiler notification letter from TIN on with VE testing attached.	Categorical & Conditional Exemption under FAC 62-210(3)(a)34 heat input less than 100 MMBtu/hr (includes a alternative fuel provision).	FAC 62-296.406 (1) less than 250 MMBlu/hr - Visible Emissions (VE) less than 20% opacity	NSPS, 40 CFR 60 Subpart Dc (10 - 100 MMBtu/hr)
New	14.6 4.2	NG NG				Exempt from NSPS, 40 CFR 60 Subpart Dc based
New	4.2	ING				on its size.
Flexographic Printing Existing Existing New	Langston (replace) EVOL 3237 Langston (EG-167)		Letter from FDEP dated 1-15-99 - Categorical exemption under surface coaling FAC 62-210.300(3)(a)23 and not subject to RACT under 62-296.	Categorical & Conditional Exemption under FAC 62-210(3)(a) 37 (Printing operations) (a) not subject to any unit-specific app.requirement - (b) regarding the usage of less than 667 gal of HAPs / year - apply - (c) (V) does not apply (have more than 80,000 lbs comined of water based inks, coatings, and adhesives per year (have less than 400,000 lbs/year).	FAC 62-296.515 (1) - RACT for Graphic Arts System - does not	
New Silo (unloading) & Mixing Existing	Martin DRO 225,000 lbs		Letter dated 1-15-99 - Generic facility exemption under FAC 62-210.300(3)(b)2	Generic Emissions Unit/Activity Exemption under FAC 62- 210.300 (3) b.(IV) if not subject to unit specific app. requirement.	FAC 62-296.711(1)(a) Materials Handling & storage (grain products)	
Cyclone Existing	Pneumatic device - air separator			FAC 62-210.300(3)(b) Generic and Temporary Exemptions		
Parts Cleaner	45 gallon			Categorical and Conditional Exempt under FAC 62- 210(3)(a)23, if the degreasing unit uses heavier than air vapors exclusively without HAPs.	FAC 62-296.511(2)(a)and (b) - Solvent Metal Cleaning: Cold Cleaning	
Maintenance Activities				Categorical & Conditional Exemption under FAC 62- 210(3)(a)13 Brazing, soldering or welding equipment.		

Process Overview Background:

The operation at Temple-Inland's corrugating plant at Orlando, Florida produces sheets of corrugated board manufactured on a corrugator that is then converted to your typical brown kraft boxes. PTE calculations for all the processes are being attached separately. A general overview of the different processes at the plant are as described below:

- 1) Combustion Ops: 1 dual fired (natural gas and #2 fuel oil) boiler produce steam for the manufacturing processes at the plant. Small amounts of emissions are generated.
- Starch Silo Ops: An outside corn starch silo is present and is equipped with a Bin Vent filter, but no control such as a baghouse is present. Small amounts of particulate matter are generated at the silo during unloading.
- Starch Mixing Operations: The corn starch from the outside silo is further mixed with borax, caustic soda and water inside the plant to create a starch mixture in the starch operation area. This starch mixture or <u>adhesive</u> that is manufactured, is utilized further at the end of the 1st step (manufacture of medium/liner board) of the manufacturing process stated below. Trace amounts of particulate matter emissions if any are generated from this process since this is an enclosed and wet process.
- Manufacturing process: 1st step: Manufacture of Medium/Liner board. Steam from the boiler(s) is applied to brown/white draft paper rolls ("medium" or "liner board) to create corrugated board on a Corrugator (machine/piece of equipment). The adhesive manufactured in the starch operations is then applied to the corrugated tips of the medium and then the first layer of the liner is added. Another layer of liner is added following the same procedure. The corrugated board then is "cured" as the board and adhesive are dried as it goes over steam-heated plates. This first step generates small amounts of air emissions of particulate matter from trimming, cutting, slitting, and from vacuums stacking the newly created corrugated board.
- <u>Manufacturing process:</u> 2nd step: FINISHING PROCESS: The finishing process consists of several pieces of equipment which perform different functions, such as cutting, folding (through Laminator, Die cutters, Folder machines), and <u>flexographic printing presses</u> which utilize water based inks, to print on the liner container board (or finished box when formed at end of process). Then the liner board is cut (goes through the Die cutters) to customer's specifications, and folded if liner board is made into a box. In regards to air emissions, the die cutters generate small amounts of particulate matter; and flexographic printing and gluing equipment generates VOC and small amounts of HAP.
- 6) Manufacturing process: 3rd step: Recycling Corrugated Materials Area Operations.

 This process receives excess corrugated material from steps 1 and 2 after the container board is cut and folded and made into a box. This process utilizes an pneumatic cyclone to separate the bigger container particle size pieces from the other particulate matter. All bigger pieces are sprayed down with water and baled at the Baler. Then they are shipped off site to paper mills for recycling.
- Maintenance Ops: Insignificant amounts of air emissions of VOC/HAP are generated by a small parts cold washer (for degreasing operations—e.g. cleaning maintenance equipment).

The brown or white boxes are thus formed by the 1st and 2nd step in an assembly line fashion.

#010 Orlando - Air Emission Units:

Boiler(s): Drive all the box manufacturing processes.

14.2 MMBtu/hr (Existing), < 350 Hp –Dual fuel NG and #2 Fuel Oil;

14.2 MMBtu/hr (new) - NG fired

4.2 MMBtu/hr (new) - NG fired

<u>Starch Silo with bin vent filter & Mixing</u>: Starch drives the adhesive manufacturing making process.

Truck deliveries of food grade starch every month are unloaded to an outdoor silo. The unloaded starch is pneumatically conveyed inside the silo. (Particulate matter control through the bin vent filter.) Starch is then piped to an indoor self-contained starch mixing area, and then utilized to make adhesive.

Corrugator (existing) that uses paper rolls to make the corrugated material from sheets or rolls driven by steam from the boiler. Particulate matter emissions are counted through the roof cyclone and are based on Baler (existing equipment) throughput. Once the big enough particles of corrugated material come down from the cyclone to the baler, they are bundled and sent to our recycling paper mill or sold.

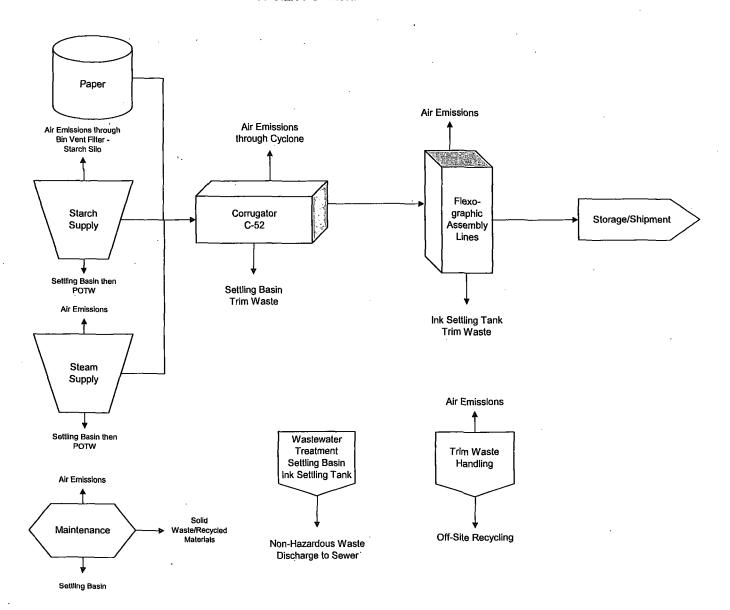
<u>Converting</u> – Flexographic printing, folding, gluing, cutting, scoring, etc.

(EG-167) Langston (New) 3-Color, folder gluer with die cutter capabilities EVOL 3237(Existing) – folder, gluer Martin (Maxi) DRO, 4 Color, die cutter (New) – no glue

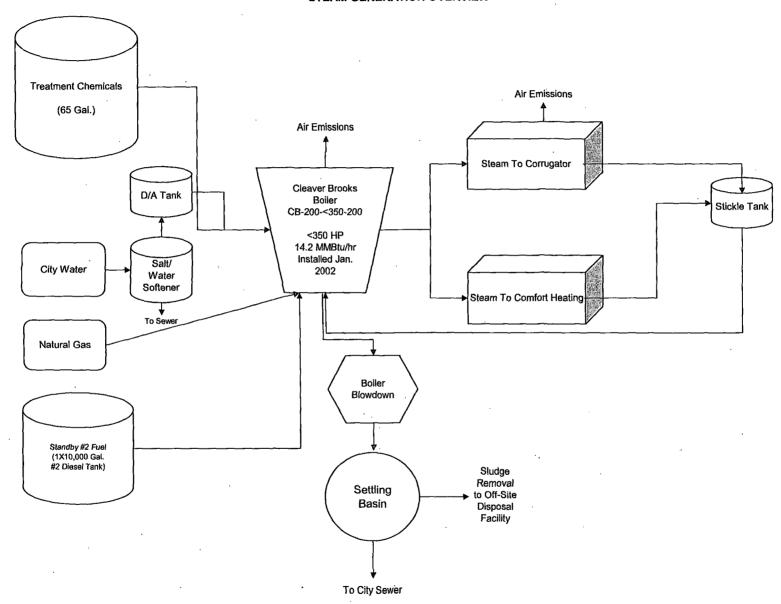
Utilizing Water-based inks Adhesives (Hinkle 29-9734; Hinkle 33-1556) Solvent cleaning (None) - Simple Green

Parts Cleaner (existing) in maintenance shop. Insignificant air emissions.

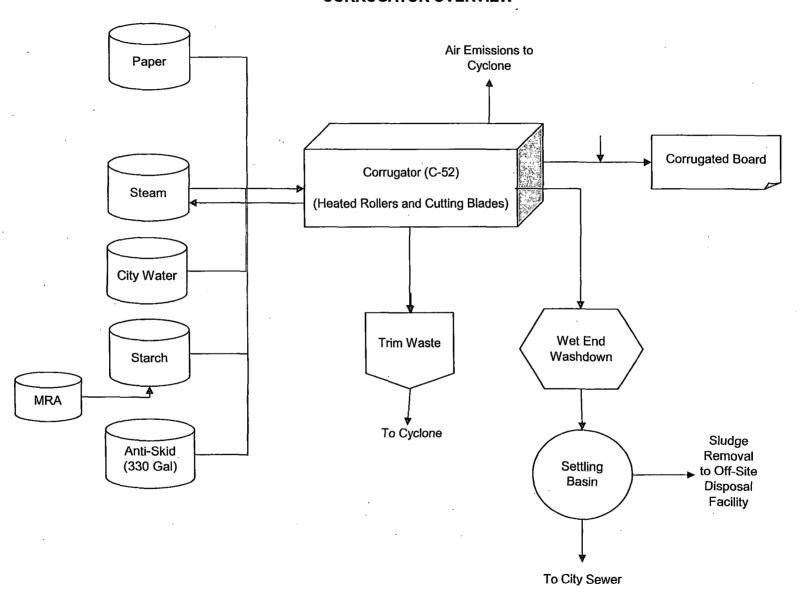
TEMPLE-INLAND OLANDO, FL (Plant #010) ENVIRONMENTAL MANAGEMENT SYSTEM FACILITY OVERVIEW



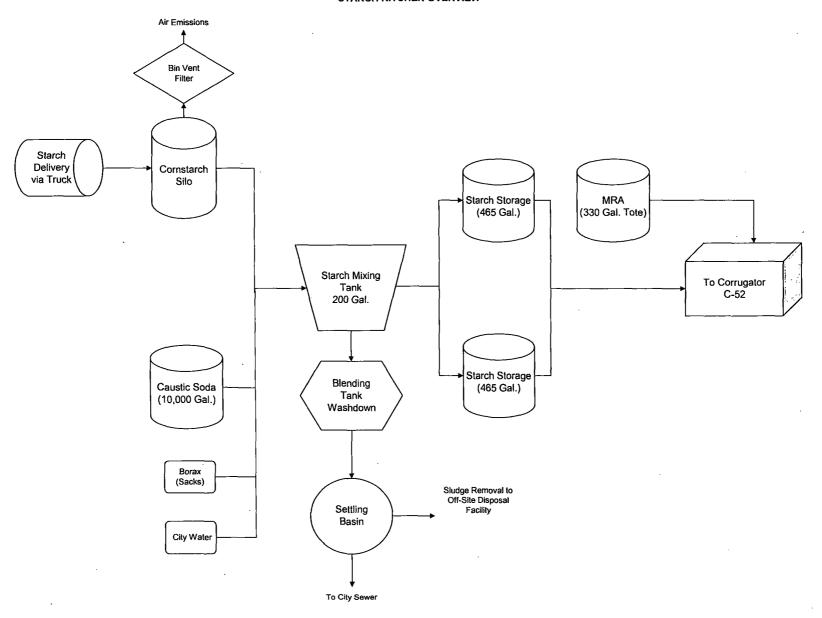
TEMPLE-INLAND ORLANDO, FL (Plant #010) ENVIRONMENTAL MANAGEMENT SYSYTEM STEAM GENERATION OVERVIEW



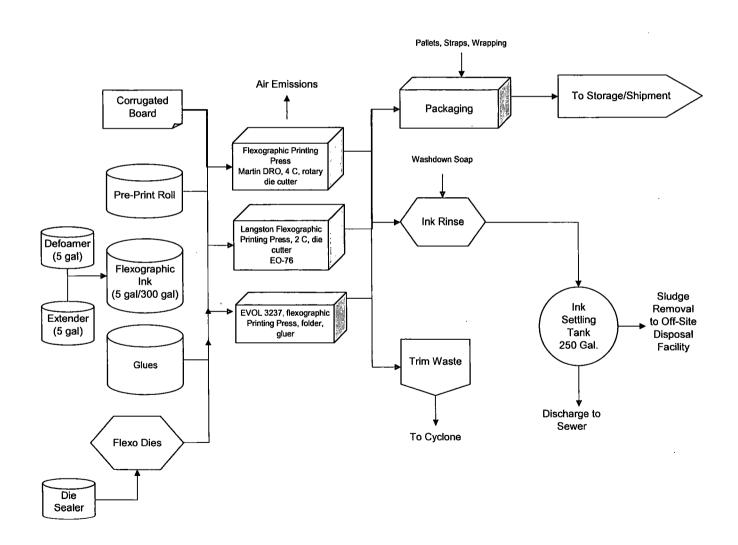
TEMPLE-INLAND ORLANDO, FL (Plant #010) ENVIRONMENTAL MANAGEMENT SYSTEM CORRUGATOR OVERVIEW



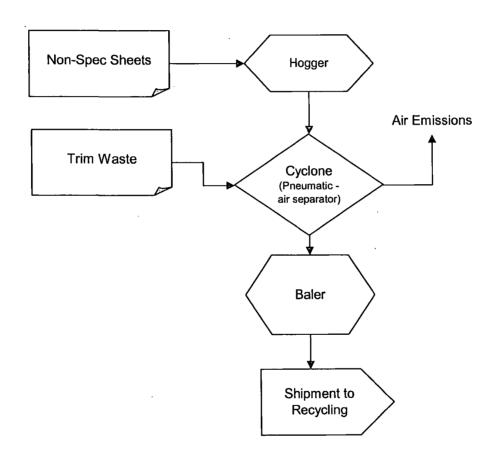
TEMPLE-INLAND ORLANDO, FL (Plant #010) ENVIRONMENTAL MANAGEMENT SYSTEM STARCH KITCHEN OVERVIEW



TEMPLE-INLAND ORLANDO, FL (Plant #010) ENVIRONMENTAL MANAGEMENT SYSTEM FLEXOGRAPHIC/CONVERTING OVERVIEW



TEMPLE-INLAND ORLANDO, FL (Plant #010) ENVIRONMENTAL MANAGEMENT SYSTEM TRIM WASTE HANDLING OVERVIEW



Actual or Potential: Actual

Time Period: 2001

Plant Name: Orlando

Plant Number: 10

Wking Days in Period: 365

Days per Week: 7

Hours per Day: 24 Weeks per Year: 52

Annualized Emissions Reported in Pounds per Year (lbs/yr)

Total Emissions	NOx	SOx	CO	PM	VOC	HAP
Natural Gas Combustion	5,586.38	33.52	4,692.56	424.56	307.25	105.58
Fuel Oil Combustion	0.00	0.00	0.00	0.00	0.00	0.00
Scrap Paper Handling - Cyclo	14e////////			0.00		
Starch Handling - Silo				0.00		
Color Resolutions					3,036.02	99.05
HB Fuller					135.30	40.20
Vinings					0.00	0.00
Misc 1					0.00	0.00
Misc 2					0.00	0.00
Corrugated Chemicals					0.00	0.00
Waste Credits					327.00	
Total	5,586.38	33.52	4,692.56	424.56	3,478.57	244.83

Tons / Year 2.793 0.017 2.346 0.212 1.739 0.122

Emissions Reported in Pounds per Operating Day (lbs/day)

Total Emissions	NOx	SOx	СО	PM	VOC	HAP
Natural Gas Combustion	15.3051	0.0918	12.8563	1.1632	0.8418	0.2893
Fuel Oil Combustion	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Scrap Paper Handling - Cyclor	3 <u>4</u> ////////			0.0000		
Starch Handling - Silo				0.0000		
Color Resolutions					8.3179	0.2714
HB Fuller					0.3707	0.1101
Vinings					0.0000	0.0000
Misc 1					0.0000	0.0000
Misc 2					0.0000	0.0000
Corrugated Chemicals					0.0000	0.0000
Waste Credits					0.8959	
Total	15.31	0.09	12.86	1.16	10.43	0.67

Emissions Reported in Pounds per Operating Day (lbs/hour)

Total Emissions	NOx	SOx	CO	PM	VOC	HAP
Natural Gas Combustion	0.6395	0.0038	0.5372	0.0486	0.0352	0.0121
Fuel Oil Combustion	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Scrap Paper Handling - Cyclor	% ////////////////////////////////////			0.0000		
Starch Handling - Silo				0.0000		
Color Resolutions					0.3475	0.0113
HB Fuller					0.0155	0.0046
Vinings					0.0000	0.0000
Misc 1					0.0000	0.0000
Misc 2					0.0000	0.0000
Corrugated Chemicals					0.0000	0.0000
Waste Credits					0.0374	
Total	0.64	0.00	0.54	0.05	0.44	0.03

Actual or Potential: Actual

Time Period: 2002

Plant Name: Orlando

Plant Number: 10

Wking Days in Period: 365

Days per Week: 7

Hours per Day: 24 Weeks per Year: 52

Annualized Emissions Reported in Pounds per Year (lbs/vr)

Total Emissions	NOx	SOx	CO	PM	VOC	HAP
Natural Gas Combustion	4,294.31	25.77	3,607.22	326.37	236.19	81.16
Fuel Oil Combustion	0.14	0.97	0.03	0.00	0.02	0.00
Scrap Paper Handling - Cyclo	<i>%</i> ////////////////////////////////////			21.36		
Starch Handling - Silo				116.90		
Color Resolutions					3,175.62	110.84
HB Fuller					0.00	0.00
Vinings					0.00	0.00
Misc 1					0.00	0.00_
Misc 2					0.00	0.00
Corrugated Chemicals					0.00	0.00_
Parts Washer					163.50	
Total	4,294.45	26.74	3,607.26	464.63	3,411.83	192.01

Tons / Year	2.147	0.013	1.804	0.232	1.706	0.096					
Emissions Reported in Pounds per Operating Day (lbs/day)											
Total Emissions	NOx	SOx	CO	PM	VOC	HAP					
Natural Gas Combustion	11.7652	0.0706	9.8828	0.8942	0.6471	0.2224					
Fuel Oil Combustion	0.0004	0.0027	0.0001	0.0000	0.0001	0.0000					
Scrap Paper Handling - Cyclor	\$ \$ ///////			0.0585							
Starch Handling - Silo				0.3203							
Color Resolutions					8.7003	0.3037					
HB Fuller					0.0000	0.0000					
Vinings					0.0000	0.0000					
Misc 1					0.0000	0.0000					
Misc 2					0.0000	0.0000					
Corrugated Chemicals					0.0000	0.0000					
Parts Washer					0.4479						
Total	11.77	0.07	9.88	1.27	9.80	0.53					

Emissions Reported in Pounds per Operating Day (lbs/hour)

Total Emissions	NOx	SOx	СО	PM	VOC	HAP
Natural Gas Combustion	0.4916	0.0029	0.4129	0.0374	0.0270	0.0093
Fuel Oil Combustion	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000
Scrap Paper Handling - Cyclo	K\$///////			0.0024		
Starch Handling - Silo				0.0134		
Color Resolutions					0.3635	0.0127
HB Fuller					0.0000	0.0000
Vinings					0.0000	0.0000
Misc 1					0.0000	0.0000
Misc 2					0.0000	0.0000
Corrugated Chemicals					0.0000	0.0000
Parts Washer					0.0187	
Total	0.49	0.00	0.41	0.05	0.41	0.02

Actual or Potential: Actual

Time Period: 2003

Plant Name: Orlando

Plant Number: 10

Wking Days in Period: 365 Days per Week: 7

Hours per Day: 24 Weeks per Year: 52

Annualized Emissions Reported in Pounds per Year (lbs/vr)

Total Emissions	NOx	SOx	CO	PM	VOC	HAP
Natural Gas Combustion	2,980.36	17.88	2,503.50	226.51	163.92	56.33
Fuel Oil Combustion	1.50	10.82	0.38	0.00	0.25	0.03
Scrap Paper Handling - Cycl	or/s///////////////////////////////////			0.00		
Starch Handling - Silo				0.00		
Color Resolutions					2,258.89	128.46
HB Fuller					353.70	78.60
Vinings					0.00	0.00
Misc 1					0.00	0.00
Misc 2					0.00	0.00
Corrugated Chemicals					0.00	0.00
Parts Washer					130.80	
Total	2,981.86	28.70	2,503.88	226.51	2,776.76	263.41

Tons / Year 1.491 0.014 1.252 0.113 1.388 0.132

Emissions Reported in Pounds per Operating Day (lbs/day)

Total Emissions	NOx	SOx	CO	PM	VOC	HAP
Natural Gas Combustion	8.1654	0.0490	6.8589	0.6206	0.4491	0.1543
Fuel Oil Combustion	0.0041	0.0296	0.0010	0.0000	0.0007	0.0001
Scrap Paper Handling - Cyclo	16////////			0.0000		
Starch Handling - Silo				0.0000		
Color Resolutions					6.1887	0.3519
HB Fuller					0.9690	0.2153
Vinings					0.0000	0.0000
Misc 1					0.0000	0.0000
Misc 2					0.0000	0.0000
Corrugated Chemicals					0.0000	0.0000
Parts Washer					0.3584	
Total	8.17	0.08	6.86	0.62	7.97	0.72

Emissions Reported in Pounds per Operating Day (Ibs/hour)

Total Emissions	NOx	SOx	СО	PM	VOC	HAP
Natural Gas Combustion	0.3412	0.0020	0.2866	0.0259	0.0188	0.0064
Fuel Oil Combustion	0.0002	0.0012	0.0000	0.0000	0.0000	0.0000
Scrap Paper Handling - Cyclo	66///////			0.0000		
Starch Handling - Silo				0.0000		
Color Resolutions					0.2586	0.0147
HB Fuller					0.0405	0.0090
Vinings					0.0000	0.0000
Misc 1					0.0000	0.0000
Misc 2					0.0000	0.0000
Corrugated Chemicals					0.0000	0.0000
Parts Washer					0.0150	
Total	0.34	0.00	0.29	0.03	0.33	0.03

Actual or Potential: Actual

Plant Name: Orlando

Time Period: 2004

Plant Number: 10

Wking Days in Period: 365

Hours per Day: 24

Days per Week: 7

Weeks per Year: 52

Annualized Emissions Reported in Pounds per Year (lbs/yr)

Total Emissions	NOx	SOx	CO	PM	VOC	HAP
Natural Gas Combustion	4,492.75	26.96	3,773.91	341.45	247.10	84.91
Fuel Oil Combustion	0.60	4.28	0.15	0.00	0.10	0.01
Scrap Paper Handling - Cyclone				598.75		
Starch Handling - Silo				92.36		
Color Resolutions & HB Fuller					1,527.40	104.53
					805.20	563.70
Vinings					0.00	0.00
Misc 1					0.00	0.00
Misc 2					0.00	0.00
Corrugated Chemicals					0.00	0.00
Parts Washer					65.40	
Total	4,493.34	31.24	3,774.05	1,032.56	2,579.80	753.15

Tons / Year 2.247 0.016 1.887 0.516 1.290 0.377

Emissions Reported in Pounds per Operating Day (lbs/day)

Total Emissions	NOx	SOx	co	PM	VOC	HAP
Natural Gas Combustion	12.3089	0.0739	10.3395	0.9355	0.6770	0.2326
Fuel Oil Combustion	0.0016	0.0117	0.0004	0.0000	0.0003	0.0000
Scrap Paper Handling - Cyclone				1.6404		
Starch Handling - Silo				0.2530		
Color Resolutions					4.1847	0.2864
HB Fuller					2.2060	1.5444
Vinings					0.0000	0.0000
Misc 1					0.0000	0.0000
Misc 2					0.0000	0.0000
Corrugated Chemicals					0.0000	0.0000
Parts Washer					0.1792	
Total	12.31	0.09	10.34	2.83	7.25	2.06

Emissions Reported in Pounds per Operating Day (lbs/hour)

Total Emissions	NOx	SOx	СО	PM	VOC	HAP
Natural Gas Combustion	0.5143	0.0031	0.4320	0.0391	0.0283	0.0097
Fuel Oil Combustion	0.0001	0.0005	0.0000	0.0000	0.0000	0.0000
Scrap Paper Handling - Cyclone				0.0685		
Starch Handling - Silo				0.0106		
Color Resolutions					0.1748	0.0120
HB Fuller					0.0922	0.0645
Vinings					0.0000	0.0000
Misc 1					0.0000	0.0000
Misc 2					0.0000	0.0000
Corrugated Chemicals					0.0000	0.0000
Parts Washer					0.0075	
Total	0.51	0.00	0.43	0.12	0.30	0.09

Actual or Potential: Actual

Plant Name: Orlando

Time Period: 2005

Plant Number: 10

Wking Days in Period: 365

Hours per Day: 24

Days per Week: 7

Weeks per Year: 52

Annualized Emissions Reported in Pounds per Year (lbs/yr)

Total Emissions	NOx	SOx	CO	PM	VOC	HAP	
Natural Gas Combustion	4,284.16	25.70	3,598.69	325.60	235.63	80.97	
Fuel Oil Combustion	0.95	6.84	0.24	0.00	0.16	0.02	
Scrap Paper Handling - Cyclo	S\$////////////////////////////////////			633.17			
Starch Handling - Silo				276.06			
Color Resolutions					1,839.35	135.45	
HB Fuller					312.90	81.60	
Vinings			////////		0.00	0.00	
Misc 1					0.00	0.00	
Misc 2					0.00	0.00	
Corrugated Chemicals					31.32	15.69	
Parts Washer					0.00		
Total	4,285.11	32.54	3,598.93	1,234.82	2,419.36	313.73	
			•				
Tons / Year	2.143	0.016	1.799	0.617	1.210	0.157	

Emission	s Reported	in Pounds	per Operat	ing Day (It	os/day)	
Total Emissions	NOx	SOx	CO	PM	VOC	HAP
Natural Gas Combustion	11.7374	0.0704	9.8594	0.8920	0.6456	0.2218
Fuel Oil Combustion	0.0026	0.0187	0.0007	0.0000	0.0004	0.0000
Scrap Paper Handling - Cycle	orie//////////			1.7347		
Starch Handling - Silo				0.7563		
Color Resolutions					5.0393	0.3711
HB Fuller					0.8573	0.2236
Vinings					0.0000	0.0000
Misc 1					0.0000	0.0000
Misc 2					0.0000	0.0000
Corrugated Chemicals					0.0858	0.0430
Parts Washer					0.0000	
Total	11.74	0.09	9.86	3.38	6.63	0.86

Total Emissions	NOx	SOx	CO	PM	VOC	HAP
Natural Gas Combustion	0.4904	0.0029	0.4119	0.0373	0.0270	0.0093
Fuel Oil Combustion	0.0001	0.0008	0.0000	0.0000	0.0000	0.0000
Scrap Paper Handling - Cyclo	9\$/////////			0.0725		
Starch Handling - Silo				0.0316		
Color Resolutions					0.2105	0.0155
HB Fuller					0.0358	0.0093
Vinings					0.0000	0.0000
Misc 1					0.0000	0.0000
Misc 2					0.0000	0.0000
Corrugated Chemicals					0.0036	0.0018
Parts Washer					0.0000	
Total	0.49	0.00	0.41	0.14	0.28	0.04

Actual or Potential: Actual

Time Period: 2006

Plant Name: Orlando

Plant Number: 10

Wking Days in Period: 365

Days per Week: 7

Hours per Day: 24 Weeks per Year: 52

Annualized Emissions Reported in Pounds per Year (lbs/vr)

Total Emissions	NOx	SOx	co	PM	VOC	HAP
Natural Gas Combustion	4,164.49	24.99	3,498.17	316.50	229.05	78.71
Fuel Oil Combustion	0.00	0.00	0.00	0.00	0.00	0.00
Scrap Paper Handling - Cyc	lors#////////			659.70		
Starch Handling - Silo				231.93		
Color Resolutions					2,326.30	162.58
HB Fuller					588.19	153.28
Vinings					0.00	0.00
Misc 1					0.00	0.00
Misc 2					0.00	0.00
Corrugated Chemicals					51.86	16.23
Parts Washer					0.00	
Total	4,164.49	24.99	3,498.17	1,208.14	3,195.40	410.80

Tons / Year	2.082	0.012	1.749	0.604	1.598	0.205

Emissions Reported in Pounds per Operating Day (lbs/day)

Total Emissions	NOx	SOx	СО	PM	VOC	HAP
Natural Gas Combustion	11.4096	0.0685	9.5840	0.8671	0.6275	0.2156
Fuel Oil Combustion	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Scrap Paper Handling - Cyclo	ŋ e /////////			1.8074		
Starch Handling - Silo				0.6354		
Color Resolutions					6.3734	0.4454
HB Fuller					1.6115	0.4199
Vinings					0.0000	0.0000
Misc 1					0.0000	0.0000
Misc 2					0.0000	0.0000
Corrugated Chemicals					0.1421	0.0445
Parts Washer					0.0000	
Total	11.41	0.07	9.58	3.31	8.75	1.13

Total Emissions	NOx	SOx	CO	PM	VOC	HAP
Natural Gas Combustion	0.4767	0.0029	0.4004	0.0362	0.0262	0.0090
Fuel Oil Combustion	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Scrap Paper Handling - Cyclo	6\$////////			0.0755		
Starch Handling - Silo				0.0265		
Color Resolutions					0,2663	0.0186
HB Fuller					0.0673	0.0175
Vinings					0.0000	0.0000
Misc 1					0.0000	0.0000
Misc 2					0.0000	0.0000
Corrugated Chemicals					0.0059	0.0019
Parts Washer					0.0000	
Total	0.48	0.00	0.40	0.14	0.37	0.05

Actual or Potential: Actual

Time Period: 2007

Plant Name: Orlando

Plant Number: 10

Wking Days in Period: 365

Days per Week: 7

Hours per Day: 24 Weeks per Year: 50

Annualized Emissions Reported in Pounds per Year (lbs/yr)

Total Emissions	NOx	SOx	CO	PM	VOC	HAP	Ammonia	Lead
Natural Gas Combustion	4,369.60	26.22	3,670.46	332.09	240.33	82.59	139.83	22.28
Fuel Oil Combustion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Scrap Paper Handling - Cyclo	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			1,116.24				
Starch Handling - Silo				329.39				
Color Resolutions					2,550.37	190.29		
HB Fuller					108.08	0.00		
Vinings					0.00	0.00		
Misc 1					0.00	0.00		
Misc 2					0.00	0.00		
Corrugated Chemicals					73.50	73.50		
Parts Washer					0.00			
Total	4,369.60	26.22	3,670.46	1,777.72	2,972.27	346.37	139.83	22.28
T(V	0.405	0.040					. 0.070	

Tons / Year 2.185 0.013 1.835 0.889 1.486 0.173 0.070 0.011

Emissions Reported in Pounds per Operating Day (lbs/day)

Total Emissions	NOx	SOx	СО	PM	VOC	HAP	Ammonia	Lead
Natural Gas Combustion	11.97	0.07	10.06	0.91	0.66	0.23	0.38	0.06
Fuel Oil Combustion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Scrap Paper Handling - Cyclo	(e////////			3.06				
Starch Handling - Silo				0.90				
Color Resolutions					6.99	0.52		
HB Fuller					0.30	0.00		
Vinings					0.00	0.00		
Misc 1					0.00	0.00		
Misc 2					0.00	0.00		
Corrugated Chemicals					0.20	0.20		
Parts Washer					0.00			
Total	11.97	0.07	10.06	4.87	8.14	0.95		

Total Emissions	NOx	SOx	CO	PM	VOC	HAP	Ammonia	Lead
Natural Gas Combustion	0.52	0.00	0.44	0.04	0.03	0.01	0.02	0.00
Fuel Oil Combustion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Scrap Paper Handling - Cyclo	K\$///////			0.13				
Starch Handling - Silo				0.04				
Color Resolutions					0.30	0.02		
HB Fuller					0.01	0.00		
Vinings					0.00	0.00		
Misc 1					0.00	0.00		
Misc 2					0.00	0.00		
Corrugated Chemicals					0.01	0.01		
Parts Washer					0.00			
Total	0.52	0.00	0.44	0.21	0.35	0.04		

Actual or Potential: Actual

Time Period: 2008

Plant Name: Orlando

Plant Number: 10

Wking Days in Period: 365

Hours per Day: 24 Weeks per Year: 50 Days per Week: 7

Annualized Emissions Reported in Pounds per Year (lbs/vr)

Total Emissions	NOx	SOx	CO	PM	VOC	HĀP	Ammonia	Lead
Natural Gas Combustion	5,030.40	30.18	4,225.54	382.31	276.67	95.07	160.97	25.66
Fuel Oil Combustion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Scrap Paper Handling - Cyclo	34////////			1,154.97				
Starch Handling - Silo				279.06				
Color Resolutions					3,266.12	191.82		
HB Fuller					14.10	0.00		
Michelman					0.00	0.00		
Henkel National Adhesives					111.80	13.73		
Western Technology					0.00	0.00		
Corrugated Chemicals					0.00	0.00		
Parts Washer					163.50			
Total	5,030.40	30.18	4,225.54	1,816.34	3,668.69	300.62	160.97	25.66

Tons / Year 2.515 0.015 2.113 0.908 1.834 0.150 0.080 0.013

Emissions Reported in Pounds per Operating Day (lbs/day)

Total Emissions	NOx	SOx	CO	PM	VOC	HĀP	Ammonia	Lead
Natural Gas Combustion	13.78	0.08	11.58	1.05	0.76	0.26	0.44	0.07
Fuel Oil Combustion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Scrap Paper Handling - Cyclor	74/////////			3.16				
Starch Handling - Silo				0.76				
Color Resolutions					8.95	0.53		
HB Fuller					0.04	0.00		
Michelman					0.00	0.00		
Henkel National Adhesives					0.31	0.04		
Western Technology					0.00	0.00		
Corrugated Chemicals					0.00	0.00		
Parts Washer					0.45			
Total	13.78	0.08	11.58	4.98	10.05	0.82		

Emissions	vehouren i	ii roulius į	sei Opeiai	ilig Day (ib	onioui j			
Total Emissions	NOx	SOx	CO	PM	VOC	HAP	Ammonia	Lead
Natural Gas Combustion	0.60	0.00	0.50	0.05	0.03	0.01	0.02	0.00
Fuel Oil Combustion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Scrap Paper Handling - Cyclor	86/////////			0.14				
Starch Handling - Silo				0.03				
Color Resolutions					0.39	0.02		
HB Fuller					0.00	0.00		
Michelman					0.00	0.00		
Henkel National Adhesives					0.01	0.00		
Western Technology					0.00	0.00		
Corrugated Chemicals					0.00	0.00		
Parts Washer					0.02			
Total	0.60	0.00	0.50	0.22	0.44	0.04		

Actual or Potential: Actual

Time Period: 2009

Plant Name: Orlando

Plant Number: 10

Wking Days in Period: 365

Days per Week: 7

Hours per Day: 24

Weeks per Year: 52

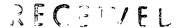
Annualized Emissions Reported in Pounds per Year (lbs/yr)

Total Emissions	NOx	SOx	CO	PM	VOC	HAP	Ammonia	Lead
Natural Gas Combustion	4,967.62	29.81	4,172.80	377.54	273.22	93.89	158.96	25.33
Fuel Oil Combustion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Scrap Paper Handling - Cyclo	34////////			1,421.79				
Starch Handling - Silo				283.98				
Color Resolutions					1,912.98	184.67		
HB Fuller					7.05	0.00		
Michelman					0.00	0.00		
Henkel National Adhesives					29.67	18.27		
Western Technology					0.00	0.00		
Corrugated Chemicals					11.70	0.00		
Parts Washer					130.80			
Total	4,967.62	29.81	4,172.80	2,083.32	2,234.62	296.83	158.96	25.33
Tons / Year	2.484	0.015	2.086	1.042	1,117	0.148	0.079	0.013

Emissions Reported in Pounds per Operating Day (lbs/day)

	reported	III F Ourius	per opera	ting Day (ii	55/445/			
Total Emissions	NOx	SOx	CO	PM	VOC	HAP	Ammonia	Lead
Natural Gas Combustion	13.61	0.08	11.43	1.03	0.75	0.26	0.44	0.07
Fuel Oil Combustion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Scrap Paper Handling - Cyclo	7¢////////			3.90				
Starch Handling - Silo				0.78				
Color Resolutions					5.24	0.51		
HB Fuller					0.02	0.00		
Michelman					0.00	0.00		
Henkel National Adhesives					0.08	0.05		
Western Technology					0.00	0.00		
Corrugated Chemicals					0.03	0.00		
Parts Washer					0.36			
Total	13.61	0.08	11.43	5.71	6.12	0.81		

Total Emissions	NOx	SOx	СО	PM	VOC	HAP	Ammonia	Lead
Natural Gas Combustion	0.57	0.00	0.48	0.04	0.03	0.01	0.02	0.00
Fuel Oil Combustion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Scrap Paper Handling - Cyclo	34///////			0.16				
Starch Handling - Silo				0.03				
Color Resolutions					0.22	0.02		
HB Fuller					0.00	0.00		
Michelman					0.00	0.00		
Henkel National Adhesives					0.00	0.00		
Western Technology					0.00	0.00		
Corrugated Chemicals					0.00	0.00		
Parts Washer					0.01			
Total	0.57	0.00	0.48	0.24	0.26	0.03		



Temple-Inland

MAY 0 7 2010

Bureau of Air Workering & Mobile Sources

Applied Technology Center 5461 W. 79th Street Indianapolis, Indiana 46268

May 5, 2010

Mr. Dick Dibble Florida Department of Environmental Protection 3800 Commonwealth Blvd, MS-77 Tallahassee, Florida 32399

RE: Application for an Air General Permit

- Registration, Printing Operations

Dear Mr. Dibble:

Per our conversations, please find enclosed the air general permit – registration form and attachments for our Orlando facility.

If you have any additional questions or need additional information, please don't hesitate to call or e-mail me directly at (317) 715-9083, <u>carmenbugay@templeinland.com</u>.

Sincerely,

Carmen Bugay

Corporate Env. Mgr.

Corrugated Packaging

cc: Wayne Parker, General Manager, #010 Orlando

EMS file # 1170

Dibble, Dickson

From:

Bugay, Carmen [CarmenBugay@templeinland.com]

Sent:

Tuesday, May 11, 2010 12:54 PM

To:

Dibble, Dickson

Cc: Subject: Parker, Wayne; Hassell, Richard RE: Temple-Inland's gen.permit app.

Attachments:

#010 Air Exemption letters.pdf; #010 Air Exemption letters-2.pdf; ATT00001..txt

Hi Dick:

Per our prior phone conversations, I am enclosing the exemptions letters that our Orlando facility has been operating under since the late 1990's; and which should have been included with our general permit application. Additionally, I will be forward you documentation (in a separate e-mail) detailing the parts washer switch-out to an aqueous one.

If you have any questions, please e-mail or call me directly. Appreciate your time and consideration.

Regards,

Carmen Bugay, Corp. Env. Mgr. Corrugated Packaging Temple-Inland Applied Technology Center 5461 W. 79th Street Indianapolis, IN 46268

(317) 715-9083 (office); (317) 715-9106 (fax) (317) 341-5295 (cell); carmenbugay@templeinland.com

April 5, 2002

Florida Department of Environmental Protection Air Resources Management Attn. Mr. Allen Zahm 3319 Maguire Blvd., Suite 232 Orlando, FL 32803

RE: Boiler Start-up Notification

Inland Paperboard and Packaging, Inc.

Dear Mr. Zahm:

This letter will serve as notification of the start-up of the boiler at the Inland Paperboard and Packaging facility located at 711 East Lancaster Road in Orlando, Florida. We are in receipt of the December 20, 2001 letter from your department that granted our requested permit exemption for this boiler.

BOILER START DATE OF CONSTRUCTION: Jan192002 BOILER START-UP DATE: February 10, 2002

A copy of the performance test that was done during the boiler start-up is attached to this letter.

If you have any questions or comments, please do not hesitate to call me at 407-888-1668

Respectfully

cc:

Richard J. Rossiter PLANT MANGER

Attachment: Boiler Performance Test

Bob Cappiello - GO w/att Ed Mealey - 10 w/att Keith Stanley - 10 w/att

350 HP CLEAVER BROOKS NG FIRED BOILER AIR COMPLIANCE CERTIFICATION REPORT FOR

INLAND PAPER BOARD & PACKAGING

711 East Lancaster Road Orlando, FL32809

Prepared by: ECMS 14718 Burntwood Circle Orlando, FL 32826

March 2002



Visible Emissions Observation Form

Source/Process Information	Opacity Readings									
Paperboard & Packaging	OBSERV	3Î13	/oə		70			570° m	30	
Cleaver Brooks 350HP Boiler PERMINA NOT Applicable	MIN	0	15	30	45	SEC MIN	0	15	20	15
711 E. Lancas Ver Rd, Orlando (exempt)	1.	0	0	೦	0	31	0	0	0	0
Steve White 7-888-1662	2	0	ð	0	0	12	0	0	0	0
PROCESSIPRODUCTION RATE Make Steam < 150 m 5CF	3	ပ	0	0	.6	B	0	Q	0	0
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VISIBLE EMISSIONS EVALUATOR

This is to certify that

Dart Morales

met the specifications of Federal Reference Method 9 and qualified as a visible emissions evaluator.

Maximum deviation on white and black smoke did not exceed 7.5% opacity and no single error exceeding 15% opacity was incurred during the certification test conducted by Eastern Technical Associates of Raleigh, North Carolina. This certificate is valid for six months from date of issue.

292279

Certificate Number

<u>Orlando, Florida</u>

Location

February 14, 2002

Date of Issue

President

Director of Training





Visible Emis Evaluation

This certifies that...

Dart Morales

...successfully completed a course in the methods of measurement of visible emissions from sources as specified by Federal Reference Methods 9 and 22 conducted by Eastern Technical Associates of Raleigh, North Carolina.

Orlandos Florida	•	August 14, 2001
Course Location		Date
Thomas Itore	Director of Training	Evan Wainright
President	Director of Training	Instructor





FLORIDA PROFESSIONAL ENGINEERS CERTIFICATION

This is to certify that the subject boiler at Inland Paperboard & Packaging facility in Orlando, Florida, has demonstrated compliance with the applicable regulations of Department of Environmental Protection (DEP) on March 13, 2002. The boiler is exempt from the permitting requirements per DEP rule 62-210.300 (3) (a) 2 F.A.C., as long as it operates within the parameters stipulated in the exemption. This boiler is ready for normal operation since there is a reasonable assurance that it is in full compliance with all the applicable air regulations of the DEP.

Suresh Chandnani, P.E. CHMM

Firm name: ECMS

Address: 14718 Burntwood Circle

Orlando, FL 32826 Date: 03/24/02

PROFESSIONAL ENGINEERS SIGNATURE & SEAL

INTRODUCTION

On March 12, 2002, Mr. Suresh Chandnani of ECMS conducted an inspection of the new 350 HP boiler at the Inland Paperboard & Packaging facility in Orlando, Florida, to assess its compliance with the current state and federal air regulations. The installation of the boiler was completed (by Cleaver Brooks) on March 11, 2002. The objective of the inspection was to certify the compliance of the new boiler prior to commencement of normal startup and operations.

INSPECTION DETAILS

The following boiler operation & design features were reviewed:

- Boiler Capacity: 350 HP (14.68 MM Btu/hr Max. Heat Input)
- Boiler Model# CB 200 350-250
- Boiler fuel (Natural Gas) usage rate: 14,280 Cubic Feet per Hour (CFH)
- Emergency fuel: #2 fuel oil (<0.05% sulfur content)
- Fuel Flowmeter: (measures in cubic feet)
- Inlet NG pressure gauge (reads in psig)
- Boiler Pressure Gauge (measures in psig)
- Stack Gas Temperature Gauge & Safety Interlock (high temp. trip set at 460 ° F)
- Boiler stack diameter: 20 inches

The inspection of the boiler indicated that it was operating within the design limitations with minimal impact to air quality. A visible emission test was performed on March 13, 2002 by a certified visible emissions evaluator using FDEP method 9. The boiler was being operated in the 90 to 100% capacity range during the emission test. The emission results indicate that during the 60-minute test run, the boiler emissions were at 0% average opacity. The general standard (per FDEP rule 62-296 F.AC.) for boiler opacity is 20%.

BOILER AIR PERMITTING EXEMPTION COMMENT

The subject boiler is exempt per Rule 62-210.300 (3) (a) 2 F.A.C, as its capacity (Rated Heat Input) is less than 100 MM Btu/hr, it burns natural gas & fuel oil with less than 0.05% sulfur, and is not subject to the Federal Acid Rain Program or any standard or requirement under 42 U.S.C. section 7411 or 7412.

To comply with this exemption, the boiler must burn less than 150 million cubic feet of natural gas or one million gallons of fuel with no more than 0.05% sulfur content. Exceeding these parameters will void this exemption. Written records of the fuel usage must be kept on a daily basis, and reviewed to ensure the usage limits are not going to be exceeded. The boiler must also be operated and maintained such that it will not cause any excess emissions, except as allowed by DEP regulations. Fuel analysis records must also be kept and tracked so that the sulfur limits are not exceeded.

OCD-AP-01-177

407-897-5963

Ø001 P⋅1

Dec 21 01 12:12p

Rir Resources





Central District 3319 Maguire Boulevard, Suite 232 Orlando, Florida 32803-3767

David B. Struhs Secretary

Inland Paperboard and Packaging, Inc. 4030 Vincennes Road Indianapolis. Indiana 46268-0937

Attention: Robert J. Cappiello, Environmental Engineer, Environmental Affairs

Orange County - AP Facility located at 711 East Lancaster Road, Orlando, FL Permit Exemption for 350 horsepower boiler (14.6 MNBTU/HR)

Dear Mr. Cappiello:

In response to your letter dated November 9, 2001 regarding the boiler installation (replacement) at the above mentioned facility located in Orlando, the Department confirms that Rule 62-210.300(3)(a)1., F.A.C. provides an air pollution categorical exemption for a facility, emissions unit or pollutant emitting activity that meet the following criteria:

One or more fossil fuel steam generators and hot water generating units located within a single facility; collectively having a total rated heat input equaling 100 million BTU per hour or less; and collectively burning annually no more than 145,000 gallons of fuel oil containing no more than 1.0 percent sulfur, or no more than 290,000 gallons of fuel oil containing no more than 0.5 percent sulfur, or an equivalent prorated amount of fuel oil if multiple fuels are used, provided none of the generators or hot water generating units is subject to the Federal Acid Rain Program or any standard or requirement under 42 U.S.C. section 7411 or 7412.

Sased on information provided in your recent letter, the new 350 horsepower boiler appears to qualify for this categorical exemption. In the future, please be aware these sources may be required to obtain a permit if the Department establishes an air permitting rule for any of the sources or if the sources are the subject of complaints. This office should be notified prior to any significant increase in the source emissions.

If you have questions, please call Alan Zahm at 407-893-3334.

L.T. Kozlov, P.B./ Program Administrator Air Resources Management

17 20

Date:

LTK/jar

Copy provided to: Ms. Marie Driscoll, Air Section Manager, OCEPD "More Protection, Less Process"

Printed on recycled paper.

Inland Paperboard and Packaging, Inc. 4030 Vincomes Road Indianapolis, Indiana 46268-0937 Phone 317.879.4227 Fax 317.337.8803 e-mail reappie@iconet.com

Robert J. Cappiello Environmental Engineer Environmental Affairs

November 9, 2001

Florida Department of Environmental Protection Air Resources Management Attn. Mr. Allen Zahm 3319 Maguire Blvd., Suite 232 Orlando, FL 32803

RE: Exemption Determination Letter Boiler Installation

Inland Paperboard and Packaging, Inc.

Dear Mr. Zahm:



→ ORLANDO

12/16 - Jest Ruston - No Perint Keeled = will check with boss to see it they will write lotter to us.

This exemption determination letter is for the Inland Paperboard and Packaging facility located at 711 East Lancaster Road in Orlando, Florida. The plant was operating a 600 horsepower boiler and is now replacing this boiler with a smaller 350 horsepower boiler. Inland has determined that this boiler is exempt from all permitting requirements within the State of Florida.

Inland bases this determination on the following information. Attached is a previous permit exemption letter from your department dated January 15, 1999, where the boilers then at the plant were exempted. Also, a recent review of the categorical exemptions regulations, Florida's Stationary Sources - General Requirements, Chapter 62-210.300(3)(a)(1), show that this new boiler will also be exempt from any construction permit or operating permit requirements within the State of Florida. Our 350 horsepower boiler will have a total rated heat input of 14.6 MM BTUs which is below the 100 MM BTU limit. We seldom burn fuel oil at this facility and can stay below the lowest fuel oil annual usage limit of 145,000 gallons/year.

I originally checked with your staff on October 18th to see if a construction permit was needed. A Mr. Jeff Rustin explained that he did not believe a permit was needed. As a follow-up I talked to a Ms. Debra Laisure on November 9th to confirm this determination and she suggested that I write an exemption determination letter to your office to verify your concurrence with our exemption determination.

Please review Inland's exemption determination and let me know if you agree with our determination for the Orlando facility. Inland intends to begin installation on the new boiler by December 15th and to start operation of the new boiler by January 4th of 2002. Your quick response to this determination request would be most appreciated.

If you have any questions or comments, please do not hesitate to call me at 317/879-4227.

Respectfully

Robert J. Cappiello Environmental Engineer

Attachment:

1/15/99 Letter

cc: Dick Rossister - 10 w/att

Keith Stanley – 10 w/att

Ed Mealey – 10 w/att ENV Files 10/AIR

Marvin Stackhouse - 10 w/att



Department of Environmental Protection

jeb Bush Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

David B. Struhs Secretary

DARM-PER-19

SUBJECT: Guidance on the Replacement or Addition of Air Pollution Control Equipment on

Existing Sources

DATE: March 1, 2000

This memo is to provide guidance to district, local program, and headquarters staff on the permitting action required when a source owner replaces or adds an air pollution control device to an existing source. It has been determined that replacement or addition of air pollution control equipment is not in and of itself a source that will be a source of air pollution, and consequently, does not need a construction permit.

If the pollution control equipment is for a unit with uncontrolled emissions of less than 100 tons per year, and the equipment is "off the shelf", then no permitting action is required.

If the pollution control equipment is custom designed for any source, or is "off the shelf' to control a unit with uncontrolled emissions greater than or equal to 100 tons per year, the source owner will need to apply for an amendment to the operating permit. The request would need to be signed and sealed by a P.E. as required in Rule 62-4.050(3). The Department or local program, if it finds the replacement air pollution equipment to be satisfactory, shall issue a letter amendment to the operation permit. No public notice shall be required for such an action.

Howard L. Rhodes, Director

Division of Air Resources Management



Department of Environmental Protection

Lawton Chiles Governor Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Virginia B. Wetherell Secretary

OCD-AP-99-005

Inland Paperboard and Packaging, Inc. 4030 Vincennes Road Indianapolis, IN 46268-0937



Attention: Robert J. Cappiello

Orange County - AP
Starch Silo, Boiler, and Surface Coating Operations
Facility located at 711 East Lancaster Road, Orlando, Florida
Permit Exemption

Dear Mr. Cappiello:

In response to your letters received September 8 and November 15, 1998, regarding the starch silo, the Department confirms that Rule 62-210.300(3)(b)2., F.A.C. provides a generic facility exemption for facilities that meet the following criteria:



- a. No emissions unit or pollutant-emitting activity within the facility would be subject to any unitspecific regulatory requirement.
- b. The facility would not emit or have the potential to emit:
 - (i) 1,000 pounds per year or more of lead and lead compounds expressed as lead;
 - (ii) 1.0 ton per year or more of any hazardous air pollutant;
 - (iii) 2.5 tons per year or more of total hazardous air pollutants;
 - (iv) 25 tons per year or more of carbon monoxide, nitrogen oxides and sulfur dioxide; and
 - (v) 10 tons per year or more of any other regulated pollutant.
- c. The facility would not emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source, nor would the facility be a Title V source for any other reason.

and provided such operations are not subject to a Particulate Matter Reasonably Available Control Technology (RACT) requirement of Chapter 62-296, F.A.C.

In addition, in response to your letter received September 8, 1998, regarding the steam boilers, the Department confirms that Rule 62-210.300(3)(a)1., F.A.C. provides an air pollution permit categorical exemption for facilities that meet the following criteria:

1. One or more fossil fuel steam generators and hot water generating units located within a single facility; collectively having a total rated heat input equaling 100 million BTU per hour or less; and collectively burning annually no more than 145,000 gallons of fuel oil containing no more than 1.0 percent sulfur, or no more than 290,000 gallons of fuel oil containing no more than 0.5 percent sulfur, or an equivalent prorated amount if multiple fuels are used, provided:

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

- a. Construction was commenced on the generators and hot water generating units on or before June 9, 1989;
- b. The generators and hot water generating units have not been modified or reconstructed since June 9, 1989; and
- c. None of the generators or hot water generating units is subject to the Federal Acid Rain Program.

Further, in response to your letter received February 17, 1997, regarding the surface coating operations, the Department confirms that Rule-210.300(3)(a)23. and 24., F.A.C. provides an air pollution permit categorical exemption for facilities that operate:

- 23. Surface coating operations within a single facility if the total quantity of coatings containing greater than 5.0 percent volatile organic compounds (VOCs), by volume, used is 6.0 gallons per day or less, averaged monthly, provided:
 - a. Such operations are not subject to a VOC Reasonably Available Control Technology (RACT) requirement of Chapter 62-296, F.A.C.; and
 - b. The amount of coatings used shall include any solvents and thinners used in the process including those used for cleanup.
- 24. Surface coating operations utilizing only coatings containing 5.0 percent or less VOCs, by volume.

Based on information provided in your above referenced letters, the referenced facility located at Inland Paperboard and Packaging, Inc., 711 East Lancaster Road, Orlando, Orange County, appears to qualify for these air permit exemptions. Therefore, no air permit is required at this time.

In the future, please be aware these sources may be required to obtain a permit if the Department establishes an air permitting rule for any of the sources or if the sources are the subject of complaints. This office should be notified prior to any significant increase in the source emissions. The sources will be subject to all applicable sections of the Department's air pollution rule.

If you have questions, please call Alan Zahm at 407-893-3334 or write to the above address.

Sincerely.

L.T. Kozloy, P.E.

Program Administrator
Air Resources Management

1 15 61

LTK/glm///

copies furnished to: Anna Hacha-Long, OCEPD

Inland Paperboard and Packaging, Inc. 4030 Vincennes Road Indianapolis, Indiana 46268-0937 Phone 317.879.4227 Fax 317.337.8803 e-mail rcappie@iccnet.com

Robert J. Cappiello Environmental Engineer Environmental Affairs

February 17, 1998



Florida Department of Environmental Protection Air Resources Management Attn. Mr. Allen Zahm 3319 Maguire Blvd., Suite 232 Orlando, FL 32803

RE: Exemption Determination Letter

Inland Paperboard and Packaging, Inc.

Dear Mr. Zahm:

This exemption determination letter is for the Inland Paperboard and Packaging facility located at 711 East Lancaster Road in Orlando, Florida.

BOILERS: The Orlando facility has two boilers on the plant property. The specifications for both boilers are listed on the attached sheet. Please note that the smaller boiler (200 HP) has not been in use since May of 1997. This boiler will be sent to a different Inland facility when it is needed. A replacement boiler is not planned for this facility. The present boiler (600 HP) is below the 50 MMBTU/hr natural gas threshold and when operating on the back-up diesel fuel it operates less than the 400 hours/year fuel oil threshold. Inland has determined that according to Florida's Stationary Sources - General Requirements, Chapter 62-210.300(3)(a)(1), the lone operating boiler is exempt from permitting.

SURFACE COATING OPERATIONS: The primary coatings used at the plant are water-based inks used for printing on our corrugated boards. Attached are 1997 ink usage sheets from the plants two ink suppliers. These sheets show all the inks purchased in 1997 at the Orlando plant, each inks VOC and HAP weight percentage and each inks total pounds of VOC and HAP. Based on the information on the attached information sheet, Inland has determined that according to Chapter 62-210-300(23) and (24) of the above referenced regulation, Inland's surface coating operations are exempt from permitting. Please note that the average percentage of VOC per pound of Heritage Ink is approximately 4.5%. By mid-year, newer Heritage inks at the Orlando plant will reduce VOC percentage to 2% VOC per pound of ink.

CYCLONES: The plant operates two cyclonic waste paper trim collection units. Both units sit on the roof and are used to collect trim waste from the cutting / trimming of our corrugated boards. The trim waste can be several inches in size. The trim waste is collected off of the floors and from the machines by air from these cyclonic units located on the roof of the building. From these units the trim waste falls into balers located directly under the cyclones. The trim waste is then baled and sold to off-site recycling operations that recycle the waste into new paper. In 1995 and 1996 we baled and sold 59,200 and 80,000 tons, respectively, of trim waste. Inland has determined that these cyclones are part of our manufacturing process and are not air pollution control equipment and are therefore exempt from permitting regulations.

Please review Inland's exemption determinations and the attached information and let me know if you agree with our determinations for the Orlando facility. If you have any questions or comments, please do not hesitate to call me at 317/879-4227.

Respectfully

Robert J. Cappiello

Attachments: Information Sheet and 1997 Ink Usage Data

cc: Jim Schlegler – 10 w/atts

Steve White - 10 w/atts

Tom Linder - GO

Nick Walton - GO

Harold King - GO

Linda Syler - Diboll

ENV Files 10/EFF

Gary Campbell - 10 w/atts

ą

Rick Shields - 10 w/atts

Mike Huber - GO

Henry Peterson - GO

Bill White - GO

Mike Franklin - GO

John Orynawka - Diboll

INFORMATION SHEET

BOILER SPECIFICATIONS

600 HP BOILER

HEAT INPUT:

25.1 MMBTU/hr

FUEL SOURCE #1: Natural Gas primary fuel

Operating Hours:

On Natural Gas 24 hrs/day & 5 days/week

FUEL SOURCE #2: #2 Diesel Fuel back-up fuel from on-site 10,000 gal. above ground tank

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Operating Hours:

Not used since 1995. In 1995 used for 5 days or 120 total hours

200 HP BOILER

HEAT INPUT:

8.4 MMBTU/hr

FUEL SOURCE #1: Natural Gas primary fuel

Operating Hours:

Disconnected since May of 1997. Will be moved and will not be replaced.

FUEL SOURCE #2: #2 Diesel – disconnected

Operating Hours:

Disconnected. Will be removed from site. No replacement planned.

SURFACE COATING OPERATIONS

INK PRODUCTS

- Review attachments from Heritage Inks and Borden Chemical Company. All Borden Inks and most Heritage Inks are below 5% VOC. These inks are exempted according to 62-210-300(24).
- One Heritage Ink Series 991H555 is at 8.0% VOC. The plant purchased 360 lbs. of this ink in 1997.

operating hours are 24 hrs/day at 5 days/wk = 6,240 hrs/ year or 260 days/yr. 360 lbs./yr. / 260 days/yr. = 1.4 lbs./day

Ink Series 991H555 is exempted according to 62-210-300(23).



The Mirachem® Corporation Research & Development PO Box 14059 Phoenix, AZ 85063 Phone: (602) 415-9262 #3012 Fax: (602) 442-7034 Email: pd012@mlrachem.com

May 11, 2010

Carmen M. Bugay, CEM Corrugated Packaging Temple-Inland Applied Technology Center 5461 W. 79th Street Indianapolis, IN46268 Phone: (317) 715-9083

Email: carmenbugay@templeinland.com

Reference:

Mirachem 500 Cleaner/Degreaser

Dear Carmen;

In reference to your request for documentation that Mirachem 500 in a non-halogen based degreaser, Mirachem Corporation certifies that Mirachem 500 does not meet the halogenated solvent definition under Federal Regulation 40 CFR 63.460(a), Subpart T nor Florida FAC 62-296.511, Solvent Metal Cleaning.

Mirachem certifies as indicated in our literature that Mirachem 500 is an aqueous cleaner with greater than 60% water by volume. The flash point of this product as indicated on the MSDS is greater than 212°F (100°C).

Mirachem 500 is a detergent concentrate. In your application, this product is diluted 4 parts water to 1 part product by your Crystal Clean service technician when servicing your equipment.

If you have any questions, please send an email or give me a call.

Sincerely,

Peter F. Davy

Peter F. Davy

Vice President Research & Development/Technical Director





Material Safety Data Sheet

Mirachem® 500 Cleaner/Degreaser

(Formulation No. 2500)

Section I - Chemical Product and Company Identification

Manufacturer Name:

The Mirachem Corporation

P.O. Box 14059

Phoenix, Arlzona 85063-4059

Emergency Phone:

1-(800) 847-3527

Section II - Composition/Information on Ingredients

Hazardous Component (CAS #)

OSHA PEL

ACGIH TLV

Other Limits

Date Prepared:

Revision Date:

% (Optional)

9/24/93

08/30/06

Section III - Hazards Identification

Emergency Overview:

Clear, non-flammable, water based cleaner with a light citrus odor.

Potential Health Effects:

Eye Contact: Skin Contact:

None

May cause mild temporary irritation. Prolonged or repeated exposure may cause mild irritation.

Inhalation:

No adverse effects expected. Ingestion:

Carcinogenicity:

No adverse health effects are anticipated to occur as a result of acute ingestion.

Chronic effects are not known. None of the components in this material are listed by IARC, NTP, OSHA, or ACGIH as

a carcinogen.

Signs/Symptoms of Overexposure: Medical Conditions Generally

Aggravated by Exposure:

Prolonged contact may cause mild irritation or dryness to sensitive skin.

None known.

Section IV - First Aid Measures

Eyes:

Immediately flush with clean water. Consult physician if necessary.

Skin:

Rinse with water. Ingestion:

If swallowed, treat symptomatically and supportively. Do not induce vomiting. If victim

conscious and alert, give two glasses of water or milk to drink. If vomiting occurs, keep

head below hips to prevent aspiration. Contact Physician.

Inhalation: No adverse effects anticipated.

Section V - Fire and Explosion Hazard

Flash Point (Method Used):

>212°F (PMCC, nonflammable)

Explosive Limits:

N/A

Extinguishing Media: Special Fire Fighting Procedures: N/A N/A

Unusual Fire Fighting and Explosion Hazards:

N/A

Section VI - Accidental Release

Small Spills:

Flush with water into containing area or to sewer where applicable within Federal, State or Local

disposal requirements.

Large Spills:

Dike and pump into suitable containers, clean up residual with absorbent material and wash with

water. Dispose of in accordance with Federal, State or Local disposal requirements.

Section VII - Handling & Storage

Handling & Storage

Wear protective goggles or face shield if splashing or spraying liquid. Protect from freezing.

Precautions:

Other Precautions: Keep container tightly closed. Keep out of reach of children.

Section VIII - Exposure Controls, Personal Protection

Respiratory Protection: Ventilation:

No respiratory protection is necessary. Good general ventilation is sufficient.

Protective Clothing:

When prolonged skin contact is expected, wear protective gloves.

Eye Protection:

Wear safety glasses.

Work/Hygienic Practices:

Use good personal hygiene practices, wash hands before eating, drinking, smoking, or using

toilet facilities

Section IX - Physical/Chemical Characteristics

Boiling Point:

>210°F

Specific Gravity (H₂O = 1):

0.997

Vapor Pressure (mm Hg.) @ 20°C

Composite = 0.006 > 1

Evaporation Rate (Butyl Acetate = 1):

8.7-9.5

Vapor Density (AIR =1): Solubility in Water:

N/A

Appearance and Odor:

Complete

Melting Point: VOC undiluted

80 g/l (0.67 lbs/gal)

Clear liquid with a mild citrus odor

2:1 dilution

25 g/l (0.21 lbs/gal)

N/A = Not Applicable

N.E. = Not Established

Section X - Stability & Reactivity

Stability:

Unstable Stable

Incompatibility (Materials to Avoid):

Strong Acids and Alkalies

demulsify product.

Hazardous Decomposition or By-products:

Thermal decomposition may produce CO₂

Hazardous Polymerization:

May Occur

Will Not Occur X

Section XI - Toxicological Information

Acute Oral:

 $LD_{50} > 13.0 g/kg$

Acute Dermal:

 $LD_{50} > 5.0 \text{ g/kg}$

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Primary Eye Irritation Primary Skin Irritation No evidence of corrosion. All corneal involvement or irritation cleared within 72 hours. Primary Irritation Index (PII) = 2.6 based on erythema and edema. No corrosion was found.

Section XII - Ecological Information

Aerobic Aquatic Biodegradation (EPA Method 796,3100)

The percentage biodegradation in 28 days was 85.8%.

Section XIII - Disposal Considerations

Waste Disposal:

(Unused Material)

Flush uncontaminated material to sewer where applicable within Federal, State or Local disposal

requirements.

Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, State and local waste disposal requirements may be more restrictive or otherwise different from

Federal laws and regulations.

Section XIV - Transportation Information

D.O.T Shipping Name:

MiraChem 500 Cleaner/Degreaser

Not Regulated

D.O.T Hazard Class:

None N/A

UN Shipping Name:

N/A

UN/NA Number:

Revision Date: 08/30/06

Formulation No. 2500

Page 2 of 4

UN Class or Division NMFC Freight Class

N/A UN Packing Group:

Compound, Cleaning Fluid, NOI 48580 Sub 3

None

Section XV - US Regulatory Information

Notice: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warrantee, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state, and local laws. The following specific information is made for the purpose of complying with numerous federal, state, and local laws and regulations.

Federal Regulations:

Workplace Classification		This product is considered non-hazardous under the OSHA Hazard Communication Standard (29CFR 1910.1200)							
SARA Title III									
Section 311/312		This product is not a hazardous chemical under 29CFR 1910.1200, and therefore is not covered by Title III of SARA.							
Section 313	This product does not contain a chemical, which is listed in Section 313 at or <u>above de minimis</u> concentrations.								
CERCLA Information (40CFR 302.4)	under the Cor or to state ar	Releases of this product to air, land, or water are not reportable to the National Response Center under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or to state and local emergency planning committees under the Superfund Amendments and Reauthorization Act (SARA) Title III Section 304.							
Waste Classification	characteristic this product a evaluated by t Note: Chemic waste manage State and loca	definition of ignitability, re listed in 40 CFR 261 the Toxicity Characteristal additions to, processement information incorr	corrosivity, or reacti .33. The toxicity chatic Leaching Procedu sing of, or otherwise mplete, inaccurate, or	this product, it does not meet RCRA's vity, and none of the materials used in racteristic (TC), however, has not been re (TCLP). e altering this material may make this otherwise inappropriate. Furthermore, e restrictive or otherwise different from					
TSCA			n compliance with th	e inventory listing requirements of the					
TSCA NFPA Ratings		ts of this product are i	n compliance with the						

Under the definitions of Rule 331, this product is considered a Low-VOC Cleaner.

Arizona

Maricopa County

California

California Sa Water and To Enforcement	oxic	This product does not contain any materials currently listed by California as chemicals known to cause cancer or known to have reproductive toxicity under Proposition 65.	
		The VOC content of this product is 80 grams/Liter (0.67 pounds/gallon) with a composite partial pressure at 20°C of less than 1 mm Hg.	
BAAQMD	when us	duct meets the requirements of the Bay Area Air Quality Management District Regulation 8, Rule 16 sed at a 1:1 dilution with water. The VOC content at this dilution is 40 grams/Liter (0.33 gallon) with a composite partial pressure at 20°C of less than 1 mm Hg.	
pounds/gallon) with a composite partial pressure at 20°C of less than 1 mm Hg. SCAQMD This product, when used at normal use dilutions of 2:1 or greater is certified by the South Coast A Management District as a Clean Air Solvent (CAS). The VOC content at a 2:1 dilution as deter SCAQMD is 25 g/L (0.21 lbs./gal.) with a composite partial pressure at 20°C of less than 1 mm Hg.			

Section XVI - International Regulatory Information

Notice: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warrantee, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with their federal, state/province, and local laws. The following specific Information is made for the purpose of complying with numerous specific foreign regulations.

Australia	This product is not classified as hazardous according to criteria of Worksafe Australia. MiraChem has reviewed Australia's List of Hazardous Substances and Australia's Standard of the Uniform Scheduling of Drugs and Poisons and determined that no ingredient in this product is listed in either listing. We have also verified with NICNAS at the Australian National Occupational Health & Safety Commission (NOHSC) that all of the components in this formulation are listed in the Australian Inventory of Chemical Substances (AICS) and that no notification will be necessary under the Industrial Chemicals (Notification and Assessment) Act 1989.
Canada	Non-controlled under WHMIS. All of the components in this product are listed in the Canadian "Domestic Substances List" (DSL).
European Union	All materials in this formulation are listed in the "European Inventory of Existing Commercial Chemical Substances" (EINECS). This product is not a hazardous preparation according to the EC-Directive 88/379/EEC.
Korea	All materials in this formulation are listed in the Korean "Existing Chemicals List" (ECL). No material in this product is made from animal by-products.
Philippines	All materials in this formulation are listed in the "Philippines Inventory of Chemicals and Chemical Substances" (PICCS).
Japan	All materials in this formulation are listed in Japan's Inventory of "Existing and New Chemical Substances" (ENCS).

Origin ID: OTNA (317) 715-9083 From: Carmen Bugay Temple Inland 5461 W. 79th Street

Indianapolis, IN 46268

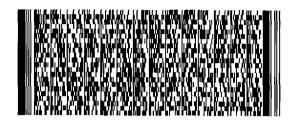


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BILL SENDER

Dick Dibble Florida DEP Receipts 3800 Commonwealth Blvd, MS-77

Tallahassee, FL 32399



Ship Date: 05MAY10 ActWgt. 1.0 LB CAD: 4352142/INET3010

Delivery Address Bar Code



Ref# Invoice # PO# Dept#

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