FACILITY PERMIT REVIEW SHEET

DATE: 9/28/2012 **APPLICATION NUMBER:** 0310374-003-AF

FACILITY NAME: American Technical Ceramics (FL), Inc.

FACILITY DESCRIPTION: Electronic Component Manufacturing

PERMIT PROCESSOR: C. Blane Johnson

MAJOR FOR CRITERIA POLLUTANTS AND/OR HAP's (Circle)

PM SO_2 NO_X CO PB O_3 HAP

SUBJECT TO: (Circle)

NSR(PSD) PERMIT NUMBER: _____

NSR(NAA) PERMIT NUMBER: _____

BACT EU NUMBER: _____

MACT EU NUMBER: _____

RACT EU NUMBER: _____

NSPS EU NUMBER: _____

FACILITY EMISSION SUMMARY

	ACTUAL EMISSIONS	ALLOWABLE EMISSIONS	
	TPY	LBS/HR	TPY
PM			
SO_2			
NO_X			
CO			
CO_2			
O_3			
PB			
VOC	20.4		100
TOTAL HAP	7.0		25
SINGLE HAP (highest)	2.5		10

COMMENTS: _____

Effective 2/27/97

EMISSIONS CALCULATIONS

APPLICATION NUMBER: 0310374-003-AF **EU NUMBER:** 001

REFERENCES: Operation permit renewal application received 07/13/2012

POLLUTANT: Volatile Organic Compounds (VOC)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER
	100			

POTENTIAL EMISSION CALCULATIONS

See attached report.

Total VOC's PTE = 20.4 TPY

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL
		62-4.070(3)	2.1401

COMMENTS: Allowable emission limit per applicant request to escape Title V.

POLLUTANT: Hazardous Air Pollutants (HAP)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER
	10/25			

POTENTIAL EMISSION CALCULATIONS

See attached report.

Total HAP's PTE = 7.0 TPY
Highest Single HAP [Hydrogen Chloride (HCl)] PTE = 2.5 TPY

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL
		62-4.070(3)	2.1401

COMMENTS: Allowable emission limit per applicant request to escape Title V.

PERMIT PROCESSOR: _____ **DATE:** _____

Effective 2/27/97

EMISSIONS INVENTORY
American Technical Ceramics (FL) Inc.
0310374-003-AF

ATC Part No.	Compound Name	Ingredients	HAP	CAS No.	% by wt.	% VOC	Spec. Gravity	Density (lbs/gal)	Emission Factor (lbs/gal)	Avg. Usage (gal)	Avg. Usage (lbs)	HAP Emissions (tons)	VOC Emissions (tons)
F06-002	Muratic Acid	Hydrogen chloride	H106	7647-01-0	36.0%		1.12	9.34	3.362	865.0	8079.8	1.454	
F06-018	Isopropyl Alcohol, 90-100%					100%	0.79	6.59	6.590	3666.0	24153.8		12.0795
F06-021	VM&P Naptha Klean Strip					100%	0.74	6.20	6.200	294.0	1824.3		0.9114
F06-023	Xylene					100%	0.87	7.26	7.260	55.0	399.1		0.1997
		Xylene	H186	1330-20-7	83.0%		0.87	7.26	6.026	55.0	399.1	0.166	
		Ethyl benzene	H085	100-41-4	17.0%		0.87	7.26	1.234	55.0	399.1	0.034	
F06-024	Methyl Alcohol					100%	0.80	6.67	6.670	1188.0	7926.3		3.9620
		Methyl alcohol	H115	67-56-1	100.0%		0.80	6.67	6.670	1188.0	7926.3	3.962	
F06-026	n-Propyl Bromide Mixture (Ensolv)					100%	1.31	10.93	10.930	55.0	600.9		0.3006
F06-029	Surface Strip 446-1	Comment: MSDS reports VOC content 59 g/L							0.492	200.0	98.2		0.0492
F06-035	Nickel Sulfamate	Nickel sulfamate	H133	13770-89-3	52.3%		1.55	12.90	6.747	75.0	967.6	0.253	
F06-048	Triethylene Glycol Dimethyl Ether					100%	0.99	8.22	8.220	6.0	49.3		0.0247
F06-053	Copper Etchant Type 100/200					96%	1.19	9.92	9.523	15.0	148.9		0.0714
		Hydrogen chloride	H106	7647-01-0	4.0%		1.19	9.92	0.397	15.0	148.9	0.003	
	Bermodol Pur2102					60%	1.06	8.84	5.304	50.6	447.0		0.1342
F17-050	Solder On Lg Replenisher					30%	1.00	8.34	2.502	6.0	50.0		0.0075
		Methyl alcohol	H115	67-56-1	30.0%		1.00	8.34	2.502	6.0	50.0	0.008	
F17-059	Gold Electroplating Solution					16%	1.11	9.26	1.482	273.0	2527.3		0.2022
F17-060	WB4101 Binder Concentrate	Comment: MSDS reports VOC content <10g/L							0.083	214.0	178.2		0.0089
F17-064	Darvan 821A					60%	1.16	9.67	5.802	53.8	520.0		0.1561
F17-066	Rhoplex HA-8 Emulsion					55%	1.20	10.01	5.506	177.8	1779.0		0.4894
		Formaldehyde	H095	50-00-0	0.1%		1.20	10.01	0.006	177.8	1779.0	0.001	
F17-067	Duramax HA-12					56%	1.20	10.01	5.606	368.5	3688.0		1.0328
		Formaldehyde	H095	50-00-0	0.1%		1.20	10.01	0.006	368.5	3688.0	0.001	
F17-070	Hycar 26349 Emulsion					0.02%	1.06	8.84	0.002	325.1	2874.0		0.0003
		Formaldehyde	H095	50-00-0	0.02%		1.06	8.84	0.002	325.1	2874.0	0.0003	
F17-071	Hycar 2679 Emulsion Binder					0.05%	1.10	9.17	0.005	76.6	703.0		0.0002
		Formaldehyde	H095	50-00-0	0.05%		1.10	9.17	0.005	76.6	703.0	0.0002	
F17-073	Silver Ink ET1263-01					98%	1.00	8.34	8.173	19.5	163.0		0.0797
	Comment: from MSDS Lead content 2% by wt	Lead	H110	65997-18-4	2.0%		1.00	8.34	0.167	19.5	163.0	0.002	
F17-285	Exxsol D40 Solvent					100%	0.78	6.51	6.510	60.0	390.3		0.1953
F19-337	Hydrochloric Acid 0.1N	Hydrogen chloride	H106	7647-01-0	0.4%		1.02	8.51	0.031	36.0	354.3	0.001	
F19-341	Microposit Remover 1165	Comment: MSDS reports VOC content 1,030 g/l							8.587	64.0	548.9		0.2748
F19-343	Microposit S1818 Positive Photoresist	Comment: MSDS reports VOC content 950 g/l				89.6%	1.06	8.84	7.920	39.0	344.8		0.1544
		Cresol	H049	1319-77-3	1.0%		1.06	8.84	0.088	39.0	344.8	0.002	
F19-346	AZ P4620 Photoresist	Comment: MSDS reports VOC content 620 g/l							5.169	3.0	15.5		0.0078
F19-358	Acetic Acid					100%	0.88	7.36	7.360	7.0	51.5		0.0258
S16-196	WB40B-38 Binder Concentrate	Comment: Mfr literature reported VOC content below 10 g/L				0.9%	1.10	9.17	0.083	8.0	0.7		0.0003
	135 Soldering Flux					100%	0.88	7.34	7.340	4.0	29.4		0.0147

EMISSIONS INVENTORY
American Technical Ceramics (FL) Inc.
0310374-003-AF

ATC Part No.	Compound Name	Ingredients	HAP	CAS No.	% by wt.	% VOC	Spec. Gravity	Density (lbs/gal)	Emission Factor (lbs/gal)	Avg. Usage (gal)	Avg. Usage (lbs)	HAP Emissions (tons)	VOC Emissions (tons)
	n-Butyl Alcohol					100%	0.81	6.76	6.760	6.0	40.5		0.0203
	Hydrochloric Acid 33%-38% solution electronics grade	Hydrogen chloride	H106	7647-01-0	38.0%		1.18	9.84	3.739	8.0	78.7	0.015	
	Lectro-Nic Addition Agent					4.3%	1.05	8.72	0.375	33.0	68.7		0.0062
		Nickel sulfamate	H133	13770-89-3	5.0%		1.05	8.72	0.436	33.0	287.6	0.007	
	PC 6407 Metal Precipitant*	Hydrogen chloride	H106	7647-01-0	20.0%		1.37	11.43	2.286	112.0	1279.7	0.128	
	PC-6408 Metal Precipitant & Coagulating Agent*	Hydrogen chloride	H106	7647-01-0	20.0%		1.31	10.93	2.186	503.0	5495.5	0.550	
	PC-6417-Coagulating Agent*	Hydrogen chloride	H106	7647-01-0	20.0%		1.29	10.76	2.152	335.0	3604.1	0.360	
	PC-6456 Metal Precipitant & Coagulant*	Hydrogen chloride	H106	7647-01-0	6.0%		1.30	10.84	0.650	112.0	1214.3	0.036	

Total VOC's	**20.4**
Total HAP's	**7.0**
Highest Single HAP [Hydrogen Chloride (HCl)]	**2.5**

EMISSIONS CALCULATIONS

APPLICATION NUMBER: 0310374-003-AF **EU NUMBER:** N/A

REFERENCES: Operation permit renewal application received 07/13/2012

POLLUTANT: Diesel Generators (3) - Fuel Usage

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

maximum fuel usage rate (gal/hr) x average run time (min/week) x (weeks/yr) / (min/hr) x (# of units) = PTE

8.07	30	52	60	3	=	629.5	gal/yr

RULE APPLICABILITY:

FEDERAL	STATE	LOCAL
	62-210.300(3)(a)35.d	2.301

COMMENTS: A maximum of 64,000 gallons (total for all three engines) of diesel fuel burned per year is allowed.

POLLUTANT: Dust Collectors (3) - Particulate Matter (PM)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER
	5.0			

POTENTIAL EMISSION CALCULATIONS

maximum air flow (ft^3/min) x maximum allowed emission rate (gr/ft^3) / (gr/lb) x (min/hr) x (hr/yr) x (# of units) = PTE

4720	0.03	7000	60	2000	3	=	7282	lb/yr
							3.64	tons/yr

RULE APPLICABILITY:

FEDERAL	STATE	LOCAL
	62-210.300(3)(b)1.c	2.301

COMMENTS:

PERMIT PROCESSOR: **DATE:**

Effective 2/27/97