

POLLUTION PREVENTION/WASTE MINIMIZATION

EXECUTIVE SUMMARY

TT ELECTRONICS IRC  
CORPUS CHRISTI, TEXAS

2005-2009

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## INTRODUCTION

The Pollution Prevention/Hazardous Waste Minimization Plan at TT Electronics IRC, was developed to comply with current regulatory requirements, help protect our environment, and reduce costs associated with waste generation disposal. IRC, Corpus Christi, has always been concerned with waste minimization as seen in past efforts. Although the absolute amount of hazardous waste generated is increasing in our plant, we are producing significantly more product with a relatively smaller amount of waste generation.

This plan was prepared to fulfill the requirements of Senate Bill 1099 of the 72nd Texas Legislature, The Solid Waste Disposal Act, and 31 TAC Section 335.471-335.480.

In addition to legislative requirements, reducing hazardous waste generation will not only result in a safer workplace and cleaner environment, but economic benefits will also be realized.

## DESCRIPTION OF THE FACILITY

TT Electronics IRC (International Resistive Company)  
4222 South Staples Street  
Corpus Christi, Texas 78411-2702

EPA ID# TXD089602684  
TCEC Registration #34546  
TRI #78411NTRNT4222S  
Air Permit #29673  
SIC CODE #3675

Contact: Janice Johnson, Safety Officer  
361-985-3129

TT Electronics IRC is a member of TT Electronics, a multinational company based in the United Kingdom.

The IRC Advanced Film Division, Corpus Christi, manufactures resistive devices utilizing unique proprietary resistor film systems. These resistors take the form of surface mount and through-hole discrete resistors, resistor network products, temperature sensing resistors, and high power substrates.

The products are sold primarily in the automotive, test and process control, instrumentation, military, and computer markets.

IRC occupies a 100,000 square foot plant in Corpus Christi that has been designed to support their special processes. The facility includes both Class 100 and Class 1000 clean rooms; thin film sputtering; thick film print/fire equipment, and plating lines.

The plant presently employs approximately 300 people. The plant continues to grow as a result of new product lines as well as present product line growth objectives.

HAZARDOUS WASTE INFORMATION

WASTE STREAM	DESCRIPTION	POINT OF GENERATION	POUNDS 2004 (APPROXIMATE)
0005	ETCHING SOLUTION	100 CLEAN ROOM	2400
0007	SPENT Cu PLATING SOLUTION	PLATING AREAS	5000
0007	SPENT Ni PLATING SOLUTION	PLATING AREAS	5000
0008MT	PLAT SOLTN, HEAVY METAL	100 CLEAN ROOM	546
0009MT	KCN SOLID(PLATING BATH)	100 CLEAN ROOM	159
0021	WASTE SOLVENT WIPES	PLANT WIDE	4000
0024	PAINT RELATED WASTE	PLANT WIDE	4000
0029	Sn/Pb PLATING SOLUTION	PLATING AREAS	12000
0033MT	SPENT KCN STRIP SOLUTION	100 CLEAN ROOM	382
0034	FILTERS/WIPES(Cu &Ni)	PLATING AREAS	300
0037	RAGS/FILT CONTAINING Pb	PLANT WIDE	2000
0038	LAB PACKS	PLANT WIDE	800
0043	MICROPURE CDF	THICK FILM GET	400
0050	PHOTORESIST STRIPPER	100 CLEAN ROOM	1600
0051	FLUORESCENT LIGHT BULBS	PLANT WIDE	1000
0053	PLATING FILTER BED	THICK FILM GET	6000
0056	NON-HAZARDOUS LAB PACKS	PLANT WIDE	800
	<b>TRI REPORTING CHEMICALS</b>		
	LEAD	PLANT WIDE	

PRIORITIES

Our largest waste stream is our photo resist stripper waste stream. We are replacing this material with NaOH (Sodium Hydroxide), which can be neutralized. This waste stream was initially changed from the flammable acetone to the corrosive stripper. We will now actually be;

1. Causing less hazardous material to enter the plant.
2. Decreasing cost of the material needed.
3. Generating less hazardous waste as sodium hydroxide can be neutralized.

Our other concern is in decreasing the lead content of product in both the Tan Film and Thick Film areas. The decreasing of lead will:

1. Cause less hazardous materials to enter the plant.
2. Possible cost decrease.
3. Generation of less hazardous waste – cost savings.

### REDUCTION GOALS

Ongoing plant wide:

- Auto Sensors reusing reels.
- Thick Film reusing boxes.
- Plant wide cardboard recycling.
- Continued Facilities energy reduction program.

2005	Thick Film implement 70% Lead free process for 70% of customers Tan Film Reduce NMP usage to about 50% of current levels Tan Film implement 5% lead free of all devices built
2006	Tan Film implement 15% lead free of all devices built
2007	Tan Film implement 20% lead free of all devices built Additional reduction of NMP of 10%
2008	Tan Film implement 40% lead free of all devices built
2009	Tan Film implement 60% lead free of all devices built
2010	Tan Film implement 80% lead free of all devices built

### ENVIRONMENTAL AND HEALTH CONSIDERATIONS

The projects we propose will reduce hazardous waste generation and/or the severity of hazards present at our facility. This results in a decrease of materials entering the atmosphere through normal usage, evaporation, transportation, and disposal of materials. The decrease can only have a positive impact on environmental as well as health issues.

### FUTURE REDUCTION GOALS

We will continue to periodically review all of our waste streams for potential reductions. We continue to add new products, and although our absolute amount of hazardous waste is growing,

CERTIFICATE OF COMPLIANCE

CERTIFICATE OF COMPLIANCE

This document certifies that the pollution prevention plan has been completed and meets the specific requirements of Senate Bill 1099 of the 72nd Texas Legislature, the Solid Waste Disposal Act, and 31 TAC 335.471-335.480, and that the information provided herein is true, correct, and complete.

This document also certifies that the person whose signature appears below has the authority to commit the corporate resources necessary to implement this plan.

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John Nelson, Vice-President and General Manager

Date