

Environmental & Safety Report 2004



ENVIRONMENTAL & SAFETY REPORT 2004 CONTENT

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MESSAGE FROM THE PRESIDENT

“Oki (Thailand) Co.,Ltd. is a manufacturing plant with a environmental awareness. We integrate Oki Environmental vision into our management tasks. As we recognized that our earth is irreplaceable wealth for all human being, Oki (Thailand) Co.,Ltd. shall continuously improve our operation and behavior to preserve environment.

Oki (Thailand) Co.,Ltd. aims to create a sustainable society through our waste minimization, energy and water conservation and hazardous substances elimination. We also optimize use of nature resources, promoting recycling, reuse of materials by adapting green procurement for supplier requirement.

Regarding our continuous Environmental Management System with a very well support from EMS committee and Team leader, I believe that Oki (Thailand) Co.,Ltd.will continuously reduce environmental impact while offering best products and services which satisfy customer’s requirement.

This site report 2003FY is representing our environmental activities and our effort to contribute to society. I hope that this site report will raise environmental awareness in our society and we look forward to the feedback for the continuous improvement of our environmental management.

Katsumi Onaru

President

April, 2004.

นโยบายสิ่งแวดล้อม

คำขวัญสิ่งแวดล้อม

ส่งเสริมการอนุรักษ์ทรัพยากร
ใช้ทรัพยากรอย่างคุ้มค่า อนุรักษ์สิ่งแวดล้อม

1.นโยบายพื้นฐาน

บริษัท โอที (ประเทศไทย) จำกัด ต่อไปนี้จะใช้คำว่า “บริษัท” ได้ตระหนักถึงเรื่องการอนุรักษ์สิ่งแวดล้อมต่าง ๆ ในโลก และถือว่าเป็นสิ่งสำคัญในการแข่งขันการดำเนินงานด้านธุรกิจ โดยการอนุรักษ์สิ่งแวดล้อมอย่างจริงจัง

2.วัตถุประสงค์

บริเวณโดยรอบสวนอุตสาหกรรมโรงงานที่มีความอุดมสมบูรณ์ของธรรมชาติ บริษัทได้เผยแพร่ นโยบายสิ่งแวดล้อมของบริษัทให้สาธารณชนได้ทราบถึงกิจกรรมที่บริษัทกระทำการเกี่ยวกับการอนุรักษ์สิ่งแวดล้อมให้ดีขึ้นอย่างต่อเนื่องโดยนโยบายพื้นฐานของบริษัท และการทำให้เป็นรูปธรรมมากขึ้น

1. เข้าใจถึงผลกระทบทางธุรกิจการผลิตและการบริการของบริษัท

เช่น ผลิตภัณฑ์เกี่ยวกับการผลิต IC, Printer, Facsimiles, LED ว่ามีเป้าหมายที่ไม่ทำลายสิ่งแวดล้อมอย่างชัดเจน

2. การทำให้บรรลุวัตถุประสงค์และเป้าหมาย ด้านสิ่งแวดล้อมและรายงานผลถึงระบบการดูแลการจัดการสิ่งแวดล้อมอย่างต่อเนื่อง

3. ดำเนินตามข้อบังคับของกฎหมายและปฏิบัติตามมาตรฐานที่ตั้งขึ้นมาด้วยความสมัครใจเพื่อการอนุรักษ์สิ่งแวดล้อม

4. ดำเนินการประหยัดพลังงานอย่างจริงจัง โดยการใช้พลังงานอย่างมีประสิทธิภาพ ลดปริมาณของเสีย ป้องกันการเกิดมลภาวะ และปรับปรุงสิ่งแวดล้อมให้ดีขึ้นอย่างต่อเนื่อง

- ก. การลดปริมาณการใช้พลังงานไฟฟ้าและการใช้พลังงานในการผลิต อย่างคุ้มค่า
- ข. ลดการใช้สารเคมีที่ส่งผลต่อสิ่งแวดล้อม
- ค. จัดระบบควบคุมกากอุตสาหกรรมและน้ำเสีย
- ง. เพิ่มพื้นที่สีเขียวที่เป็นพืชเพื่อส่งเสริมสิ่งแวดล้อมที่ดี
- จ. ใช้ทรัพยากรน้ำอย่างคุ้มค่า

5. การสร้างจิตสำนึกที่ดี เช่น ให้ความรู้เกี่ยวกับสิ่งแวดล้อมแก่พนักงานและได้ทราบถึงการดำเนินงานด้านสิ่งแวดล้อมของบริษัท และเผยแพร่ นโยบายให้ลูกค้าได้เข้าใจถึงกิจกรรมที่บริษัทกำลังดำเนินการ อยู่นโยบายสิ่งแวดล้อมของบริษัท ประกาศอย่างเป็นทางการเพื่อให้สาธารณชนรับรู้



นายคัทซีมิ โอนารุ

ประธานบริษัท โอที (ประเทศไทย) จำกัด

1 ธันวาคม 2546 (Version 2)

Environmental policy

Environmental slogan

'Let's conserve and maintain the environment, by getting developing knowledge and worthy use of resources'

1. Basic principle

Oki (Thailand) Co.,Ltd. (hereinafter referred to as this company) recognized that the conservation of the Environmental on earth is one of the most important themes for human race, and operates business activities taking the conservation of environmental into consideration in every respects.

2. Guideline for activities

Around Rojana Industrial Park where the riches of nature still abound, the residents of the area understand the real characteristics of the company with many interested parties, take environmental control activity based on the basic principle and continue the activity on the personal level.

- (1) To understand the effect of the business activities and the production and the services operated by the company, such as the production of various kind of Integrated Circuit Packages, Printers, Facsimiles and Light Emitting Diode against the environmental. To specify the environmental objective and the Environmental target by the whole company and each factory.
- (2) To specify the program or achieving the environmental objective and the environmental target and to prepare the necessary organization in order to improve the environmental management system and the environmental performance continuously.
- (3) To obey the related laws and regulations and to specify the voluntary standard in order to strive to conserve the environment.
- (4) To emphasize on the resource-saving, the energy-saving, the reduction of waste and the prevention of the pollution of environment and improve continuously.
 - (a) To try to reduce the electric energy related to the incidental facilities, the production facilities, etc.
 - (b) To try to reduce the consumption of the chemicals, etc.
 - (c) To try to reduce and give appropriate treatment to the industrial waste, the drainage, etc.
 - (d) To try to increase planed area in order to contribute to environment.
 - (e) To try to reduce the water consumption at related to the incidental machine and facilities.
- (5) To perform the activities such as the environmental education and the publicity activities in the company in order to promote the understanding of the environmental policy in order to request them for understanding and cooperation.

This environmental policy is to be announced officially inside and outside of the company.



The President

Oki (Thailand) Co.,Ltd.

1st December 2003

Environmental Policy

環境方針

資源に関する知識を深め、その資源を有効に使いきることによって環境を保護し維持していきます。

1) 基本原則

沖タイランド(今後は、「わが社」と呼ぶ)は、人類にとってもっとも畏敬するべく事のひとつとして地球環境保護があると認識し、わが社の業務活動が、すべての面において環境保護の配慮が取られているように致します。

2) 活動指針

わが社の所在するロジャナ工業団地は、豊かな自然と人々が生活している環境に面している事を理解し、基本原則に則って、わが社の業務活動に関与するすべての会社、グループの個人レベルまでに下記の事を十分に理解してもらい、地球環境保護を徹底いたします。

A) 環境を保護する為に、わが社の業務活動、生産活動、その他の活動がどのように作用するか確理解する。
例えば種々の半導体製品製造、同じ敷地で行われているプリンター製造、FAX製造、LEDヘッド製造、そしてそれらの生産活動を補佐する為に行われる活動を含み、環境管理項目を定め、環境管理目標を達成するべく活動いたします。

B) 環境を保護する為に、環境管理項目、環境管理目標を達成する為のアクションプランを構築し、環境管理システムを維持向上させる為の組織を創設し、継続して活動を行います。

C) 環境を保護する為に、環境を保護する目的で施行されている関連法令、条例、そして自主的に定めた環境関連ルールに従います。

D) 環境を保護する為に、資源の有効利用、電力使用削減、エネルギー省力、廃棄物削減、環境汚染の削減を継続的に行います。

- I) 生産活動、工場操業ユーティリティーに関連する電力使用量を相対的に低減することに努めます
- II) 化学薬品の使用量を相対的に低減することに努めます
- III) 産業廃棄物、排水等々の相対的削減に努めます
- VI) 工場敷地ないにおいて「環境にやさしい面積」の増大に努めます
- V) 生産活動、工場操業ユーティリティーに関連する水使用量を相対的に削減することに努めます

5) 環境を保護する活動の効果を高める為に、全従業員とわが社の活動に関係する人々へ、わが社の環境管理システムの教育と、広報活動をおこないます。

この環境方針は、公式に社外的、又は社内的に発表されている事をここに宣言します。

沖タイランド 代表取締役
大成 克己

COMPANY PROFILE



Company name : Oki (Thailand) Co.,Ltd.

Establishment	:	January 31st , 1990
President	:	Mr.Katsumi Onaru
Type of Business	:	Assembly, Test and Final Inspection of IC
Capital	:	500,000,000 Baht. (OTH)
No. of Employee	:	1,332 persons (April, 2004)
Location	:	1/39 M.5 Tambol Kanham ,Amphur U-thai : Ayutthaya 13210 , Thailand.
Land Area	:	124,320 m ²
Building	:	32,898 m ²

CERTIFICATION OF ISO 14001

Company has acquired the environmental management system from Thailand Environment Institute (TEI) and Japan Audit and Certification

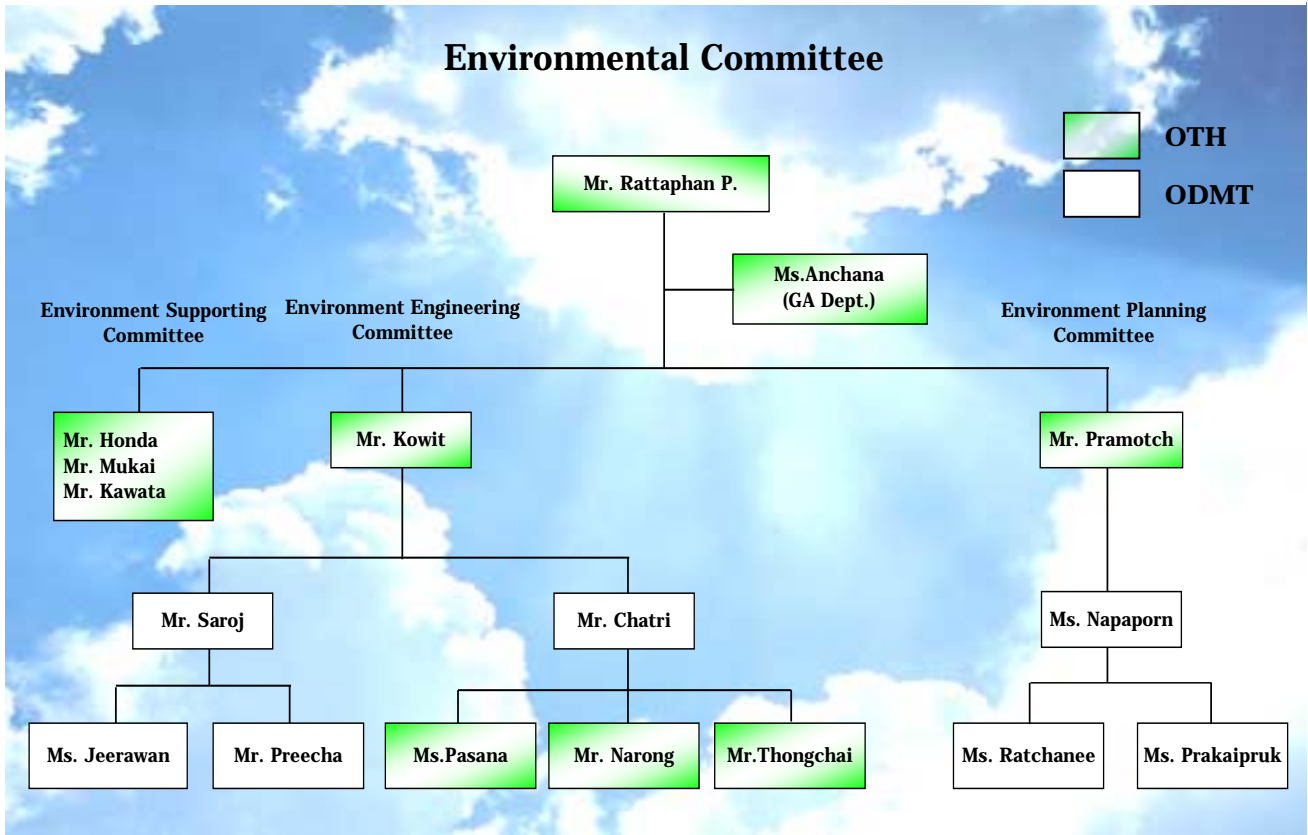
Organization for Environment and Quality (JACO) Now TEI changed to Management System Certification Institute (MASCI)

August 5, 1998 :
(OTH & ODMT)

ISO 14001 Certify



ENVIRONMENTAL MANAGEMENT SYSTEM STRUCTURE

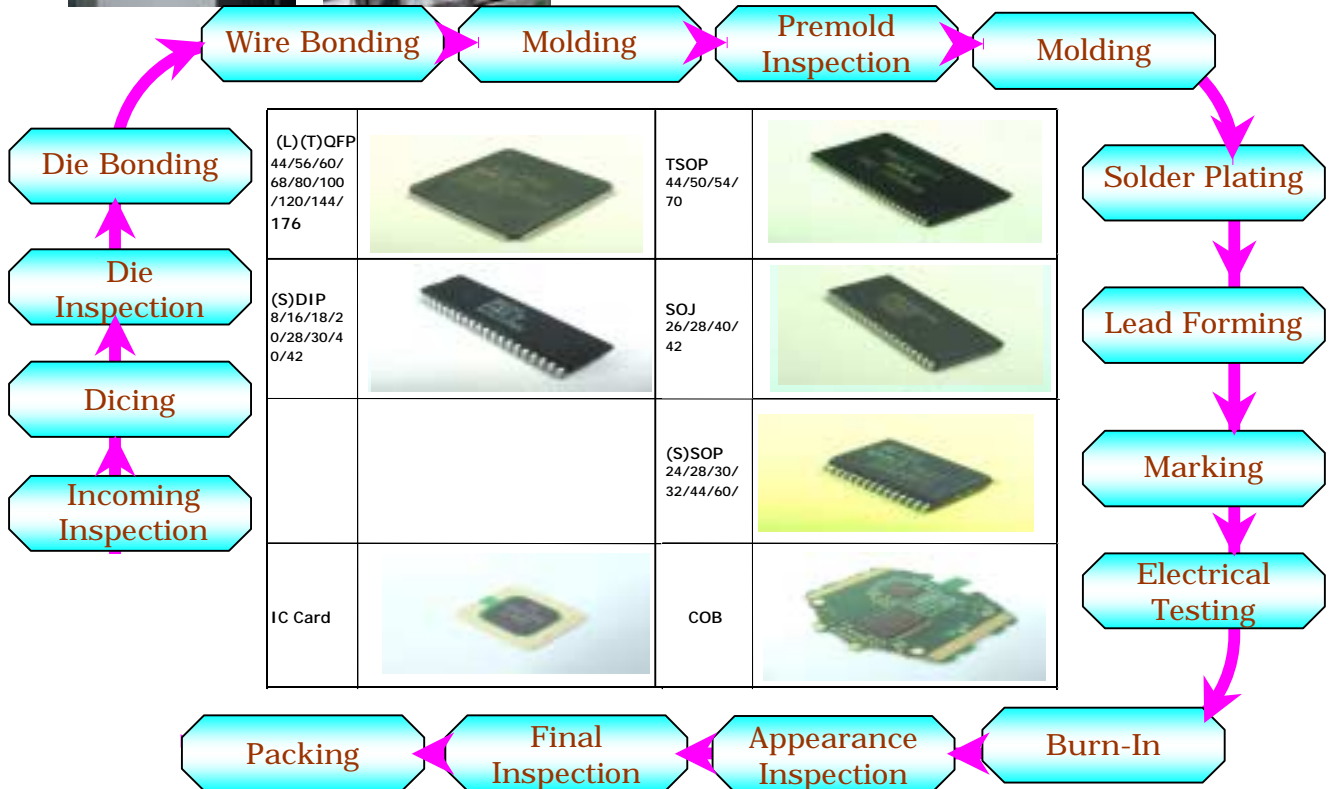
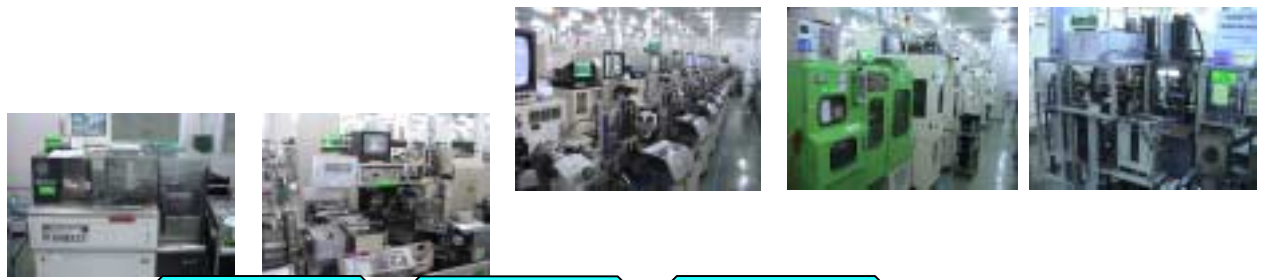


ISO 14001 Sub-Committee Member

Factory	Sub-committee	Chairman	Member			
IC	Chemical	Ms. Pasana (GA)	Ms. Lawan (AE3) Mr. Seaksarn P. (AE3)	Ms. Rtree (AP 3)	Ms. Patumpit (QC 2)	Mr. Pramote (QC 1)
	Electric	Mr. Narong B. (EV1)	Mr. Anucha H. (TE.2) Mr. Chockchai (AP.1) Mr. Wanchai P. (AE.3)	Mr. Seaksarn P. (AE.3) Mr. Surachai (TE.1) Mr. Pichit S. (TE.3)	Ms. Chonticha (EV.1)	Ms. Kongkaew (Logic) Mr. Chalernporn (EV1) Mr. Kowit EV1
	Waste	Ms. Kanjana (GA)	Mr. Thongchai (EV2) Ms. Wilailak (Pur)	Ms. Mathurot (GA)	Mr. Porn (DC)	Ms. Wanwilai (Pur)
	Safety	Mr. Thanachart (GA)	Mr. Pairoj S. (EV) Mr. Koson (AE 3)	Mr. Somchai (AP 2) Ms. Nungnuch (TE 3)	Ms. Pattanee (Ins) Ms. Kannika (MP)	Mr. Anuwat (DC) Ms. Sopa (AE 2)
	Water Consumption	Mr. Thongchai (EV.2)	Ms. Montathip (EV) Mr. Kosol (AE.3)	Mr. Sommai (EV)	Mr. Ronnachai (GA)	Mr. Nurut (AP.3)
	Paper	Ms. Yaowares (AP<DCT>)	Ms. Kajana (MP) Ms. Supaporn (AC)	Ms. Jantira (AP 1) Ms. Natthiya (QC3)	Ms. Somkid (QC 1) Ms. Mathurot (GA)	Ms. Supattra (PD)

MANUFACTURING PROCESS OUTLINE : OTH

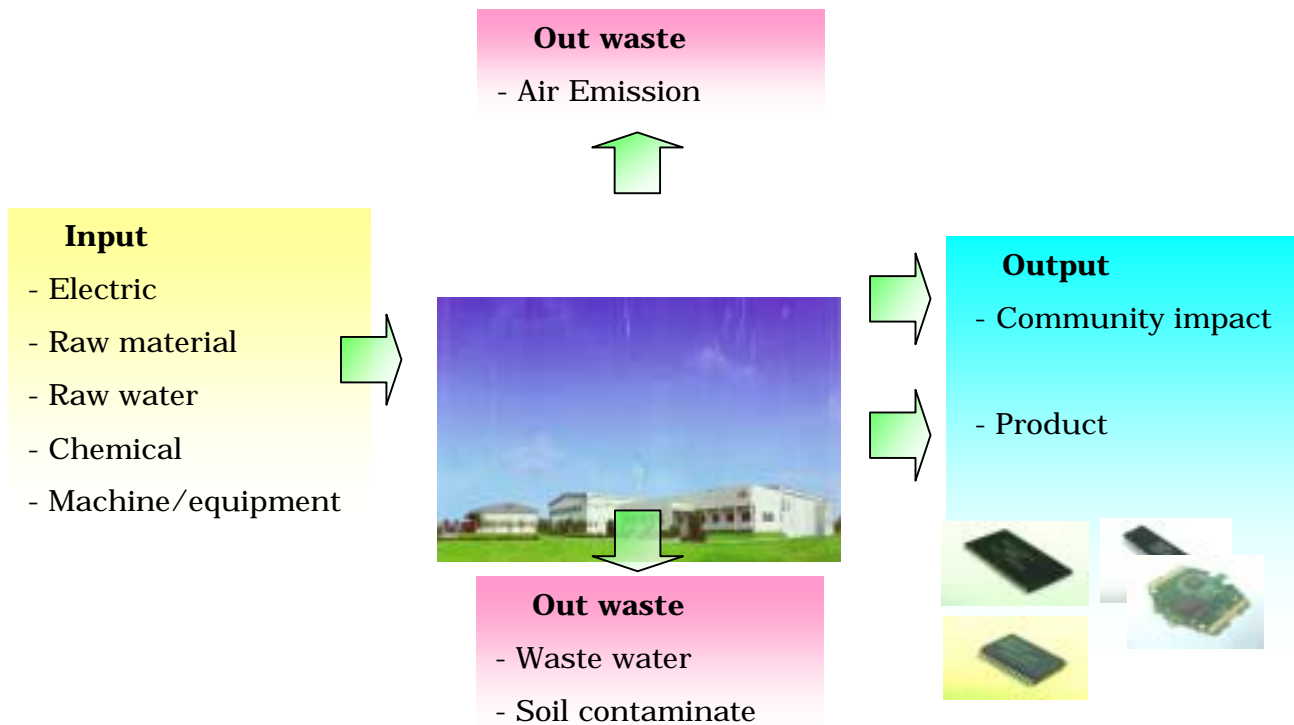
Receiving integrated circuits in form of wafer sheet from Japan and Taiwan, OTH starts its assembling and test operations, Wafer sheet is sawed into pieces-chips. The chips is attached on lead frame with 42 alloy, Copper paste. Mold resin is injected to cover chips. Forming IC's pins, solder plating, and marking product name are done before testing its function. Flow chart shows our manufacturing process.



ENVIRONMENTAL ASPECT EVALUATION

Environmental aspect evaluation has help us to know the environmental situation of the company such as law and other requirement compliance and aspect of activity that impact to efficiency of environmental management system.

Environmental aspect consideration



Utilize national resources

Minimize natural resource

Release properly according to the law

Significant environmental aspects are first priority for improvement. They are analyzed to fine out the appropriate treatment and improvement from Safety and Environmental committee with the team leader according to the following information ;

- ♪ The existing management system of its own.
- ♪ The present available technology.
- ♪ View of interested parties.
- ♪ Operation and business requirement.
- ♪ Financial requirement.
- ♪ Opportunity for improvement.

OKI ENVIRONMENTAL ACTION PROGRAMS 2003 FY

Environmental action programs were implemented to respond to significant aspect and continuously as follow;

- ❖ Energy reduction
- ❖ Chemicals reduction
- ❖ Paper reduction
- ❖ Waste reduction
- ❖ Water supply reduction
- ❖ Increase plant area

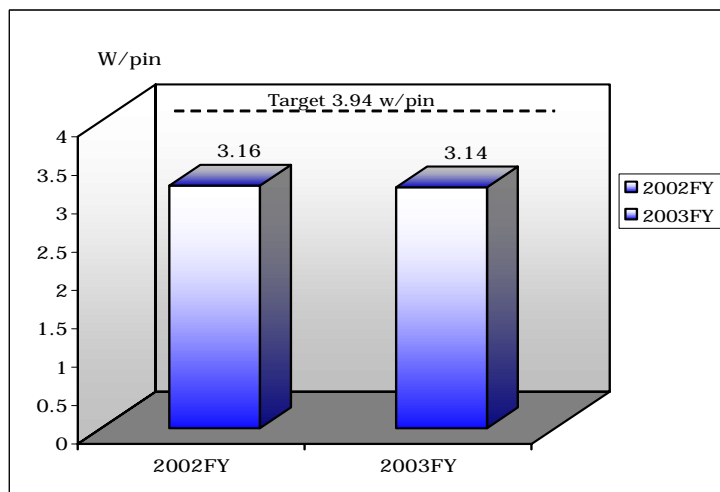
❖ Summary of ISO 14001 Activity Progress IC Factory 2003FY

Item	Electric	Chemical Solder Plating	Chemicals WWT	Chemical Pure water	Water supply condition	% Recycle of Industrial waste	Paper Reduction	Waste Separate	Wet waste
Target	3.94 w/pin	0.28 g/unit	2.35 g/litre	0.02 g/litre	1.230 l/P	16.63%	0.16 pcs./K(pin)	Separate activity	4.5 kg/person
2003 FY	✓	✓	✓	✓	✓	✓	✓	✓	✓
Result	3.14 w/pin	0.18 g/unit	1.38 g/litre	0.01 g/litre	1.059 l/pcs	44.63%	0.16 pcs./K(pin)	Separate activity	2.88 kg/person

Remark : ✓ : Achieve target

✗ : Not achieve target

1. Energy Reduction



Year	2002FY	2003FY
W/pin	3.16	3.14
Target	3.94	3.94
% Reduction	0.00	0.63

OKI ENVIRONMENTAL ACTION PROGRAMS 2003 FY

Target 2003FY : To reduce energy consumption 5% compare with 2002FY by w/pin (3.94 w/pin).

Indicator : Energy consumption of 2003 was 3.14 w/pin.

Result : We can achieve target by reduce 20.30% of energy consumption compare with 2002FY.

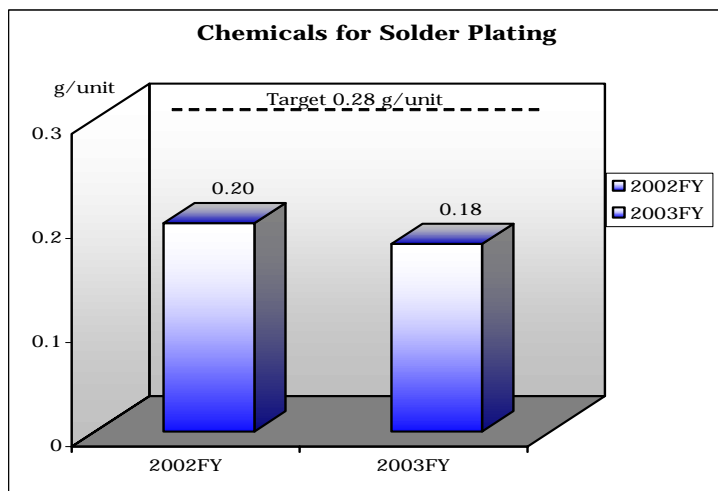
2. Chemical Reduction

2.1 Chemical for Solder Plating

2.2 Chemical for Waste water

2.3 Chemical for Pure water

2.1 Chemical for Solder Plating



Year	2002FY	2003FY
g/unit	0.20	0.18
Target	0.28	0.28
% Reduction	0.00	10.00

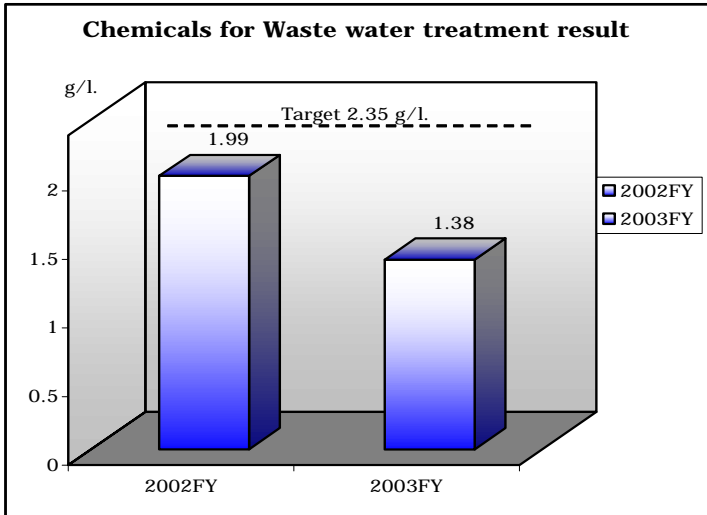
Target 2003FY : To reduce chemical consumption < 0.28 g/unit compare with 2002FY

Indicator : Chemical consumption of 2003 was 0.18 g/unit.

Result : We can achieve target by reduce 35.71% of chemical consumption compare with 2002FY.

OKI ENVIRONMENTAL ACTION PROGRAMS 2003 FY

2.2 Chemical for Waste water treatment



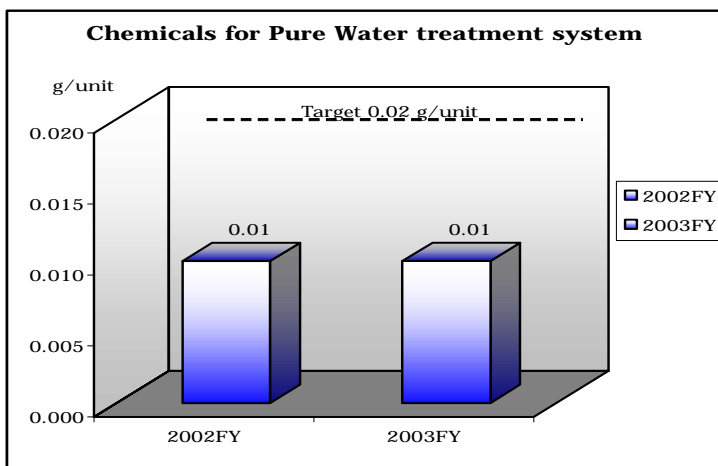
Year	2002FY	2003FY
g/l.	1.99	1.38
Target	2.35	2.35
% Reduction	0.00	30.65

Target 2003FY : To reduce chemical consumption < 2.35 g/l compare with 2002FY

Indicator : Chemical consumption of 2003 was 1.38 g/l.

Result : We can achieve target by reduce 41.28% of chemical consumption compare with 2002FY.

2.3 Chemical for Pure water



Year	2002FY	2003FY
g/unit	0.01	0.01
Target	0.02	0.02
% Reduction	0.00	50.00

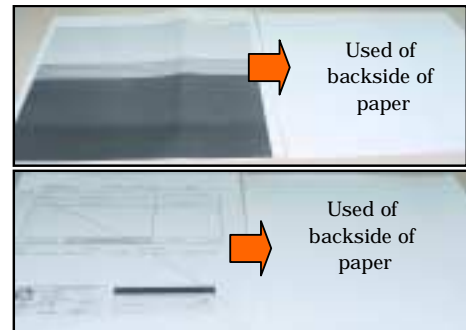
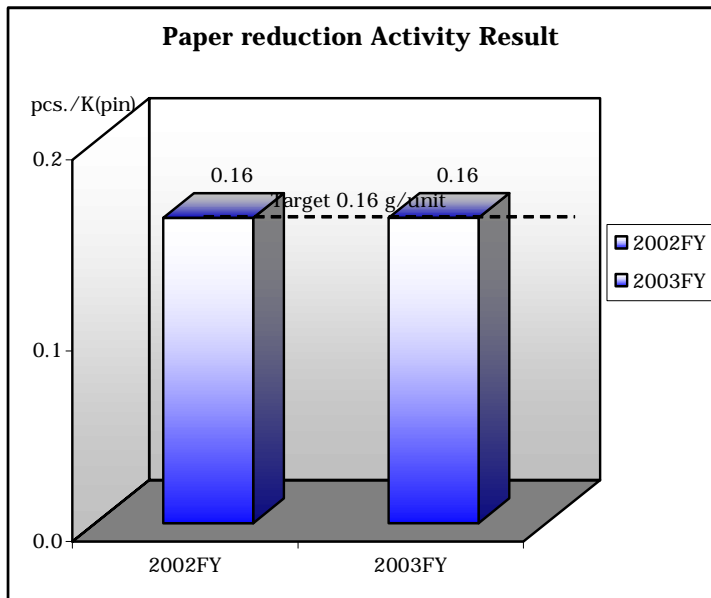
OKI ENVIRONMENTAL ACTION PROGRAMS 2003 FY

Target 2003FY : To reduce chemical consumption ≤ 0.02 g/l compare with 2002FY

Indicator : Chemical consumption of 2003 was 0.01 g/l.

Result : We can achieve target by reduce 50% of chemical consumption compare with 2002FY.

3. Paper Reduction



Year	2002FY	2003FY
pcs./K(pin)	0.16	0.16
Target	0.16	0.16
% Reduction	0.00	0.00

Target 2003FY : To reduce paper consumption ≤ 0.16 pcs/Kpin compare with 2002FY

Indicator : Paper consumption of 2003 was 0.16 pcs/Kpin.

Result : We can achieve target but do not reduce because of we used Clean room paper increase form Assembly process flow chart manufacturing attach run sheet every lot of product.

OKI ENVIRONMENTAL ACTION PROGRAMS 2003 FY

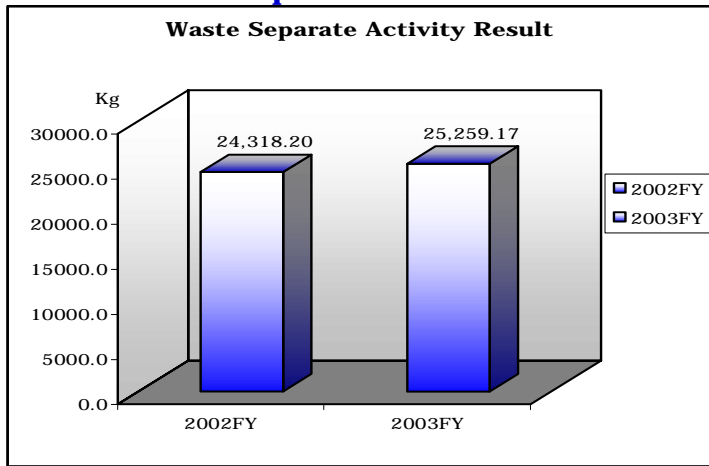
4. Waste Reduction

4.1 Waste separate

4.2 Wet waste reduction

4.3 %Recycle of Industrial waste

4.1 Waste separate

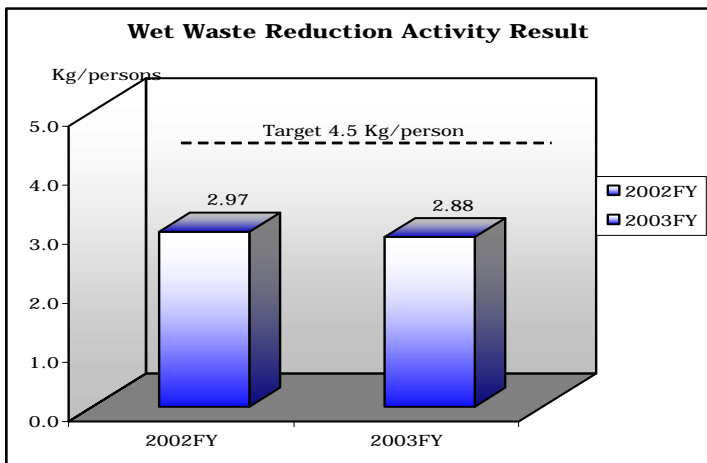


Year	2002FY	2003FY
Kg	24,318.20	25,259.17
Target	-	-
% Reduction	-	-

Target 2003FY : Waste separate do not set the target, the purpose of activities used for separate waste in Oki (Thailand) Co., and awareness for waste management.

Indicator : Can separated before to drop in a bucket.

4.2 Wet waste reduction



Year	2002FY	2003FY
Kg/persons	2.97	2.88
Target	4.5	4.5
% Reduction	-	3.03

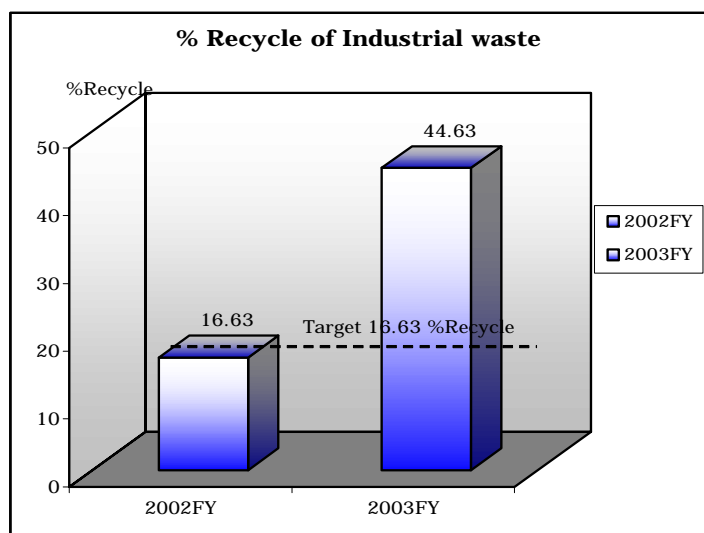
OKI ENVIRONMENTAL ACTION PROGRAMS 2003 FY

Target 2003FY : To reduce Wet waste \leq 4.5 Kg/person compare with 2002FY

Indicator : Wet waste reduction of 2003 was 4.50 Kg/person

Result : We can achieve target by reduce 13.56% of wet waste compare with 2002FY.

4.3 %Recycle of Industrial waste



Year	2002FY	2003FY
%Recycle	16.63	44.63
Target	16.63	16.63
% Recycle	-	43.48

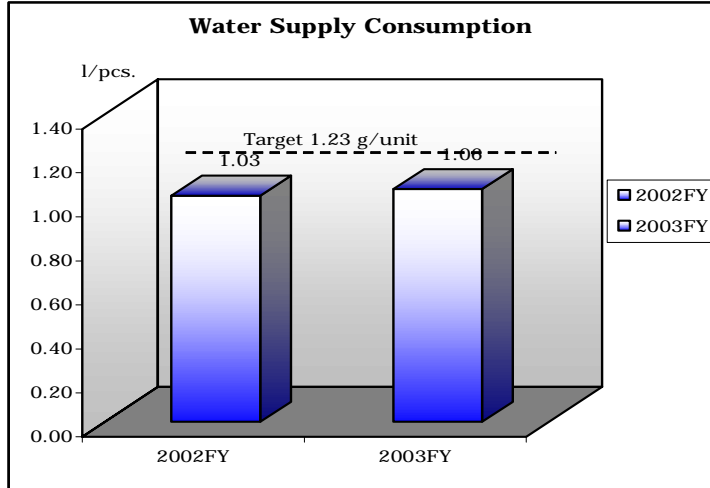
Target 2003FY : To increase %Recycle of Industrial waste \geq 16.63 % compare with 2002FY

Indicator : %Recycle of Industrial waste of 2003 was 44.63%

Result : We can achieve target by increase 43.48% of total Industrial waste compare with 2002FY.

OKI ENVIRONMENTAL ACTION PROGRAMS 2003 FY

5. Water Supply Reduction



Year	2002FY	2003FY
l/pcs.	1.03	1.06
Target	1.23	1.23
% Reduction	-	13.90

Target 2003FY : To reduce Water supply consumption ≤ 1.230 l/pcs. compare with 2002FY

Indicator : Water supply consumption of 2003 was 1.059 l/pcs.

Result : We can achieve target by decrease 13.90% of total Water supply consumption compare with 2002FY.

6. Increase Plant Area



OKI ENVIRONMENTAL ACTION PROGRAMS 2003 FY

7. Action Items for Each Program

Action for Energy Reduction

- Cut off power for unnecessary equipment.
- Stop unnecessary air condition
- Room temperature up 1 °C
- Save electricity for lighting and O/A
- Maximization space & machine utilization by lay-out change
- Cut off unnecessary lighting and O/A

Action for Chemicals Reduction

- Review usage of chemicals
- SP-04 Introduction
- Review thickness of plating
- Plating Lead free process
- Production quantity increase per chemical consumption

Action for Paper Reduction

- Used backside of paper
- Review necessary
- Reduction of distribution
- Used electric media

Action for Waste Reduction

- Reduce defective production
- Recycle & reuse of Industrial waste (Electronic scrap, Resin, Sludge, General waste)
- Waste Separate activities.
- Wet waste reduction

OKI ENVIRONMENTAL ACTION PROGRAMS 2003 FY

Action for Increase planted area

- Promotion of planting tree

Action for Water supply Reduction

- Survey used point
- Make standard for water supply controlling
- Used point controlling
- Promotion water consumption awareness
- Reuse water brine to toilet canteen and to sprinkle grass

Action for ISO 14001 & Safety



OKI ENVIRONMENTAL ACTION PROGRAMS 2003 FY

Activities for ISO 14001 & Safety



EMERGENCY PREPAREDNESS AND RESPONSE

Fire emergency drill and Emergency Response Practice were conducted to minimize the severe environmental and health impact including property damaged. The practice included :

- ❑ Emergency Response Team Communication
- ❑ Fire prevention and fire fighting
- ❑ Evacuation practice day on December, 2003



EMERGENCY PREPAREDNESS AND RESPONSE

An abnormal chemical handling or spill that may leak to the environment can cause severe environment impact. We also prepare the ;

- ❑ Chemicals spillage Practice
- ❑ Stop chemical leakage within area
- ❑ Recovered chemical plan

Chemicals Leakage Training



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ENVIRONMENTAL EDUCATION AND TRAINING

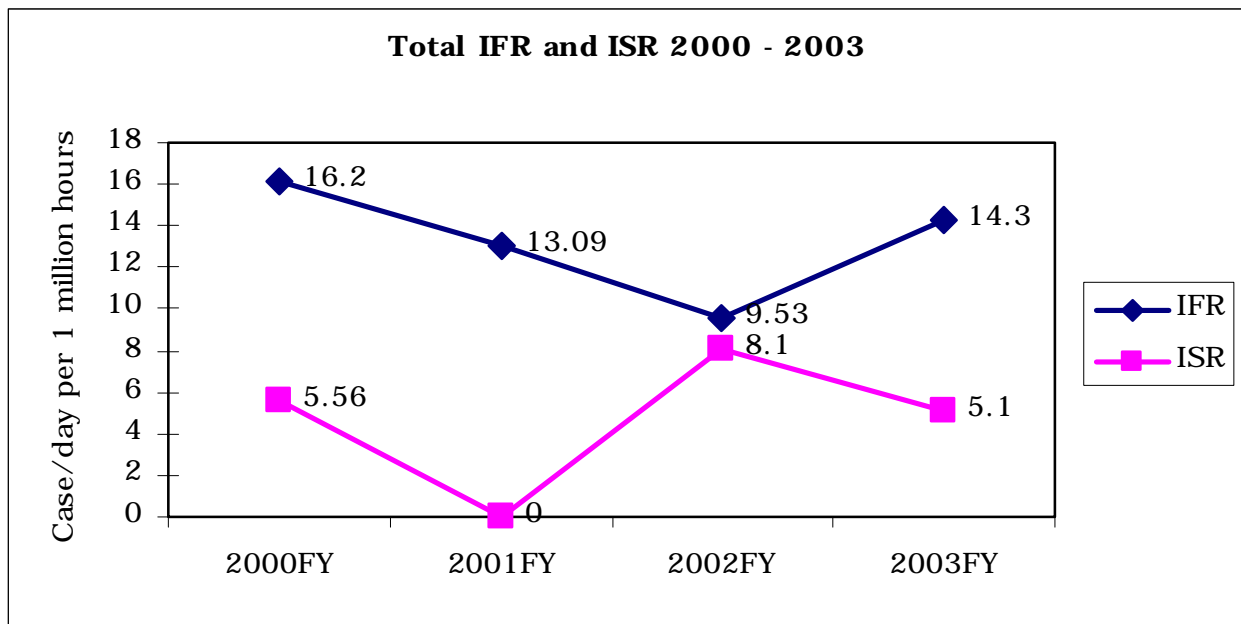
Education and training is a key factor to the environmental improvement. Environmental education and training are place as needed.

Education/Training	Purpose	Topic	Target group
Orientation of new employee	To understand general environment management	<ul style="list-style-type: none"> - ISO 14001 Requirements - Environment policy - Environmental conservation activity 	All new employees
Environmental awareness	To encourage awareness	<ul style="list-style-type: none"> - Environmental and safety exhibition - Monthly meeting 	All employees Top management and Environment Committee
General environmental training	To educate employees in environmental subject	<ul style="list-style-type: none"> - Operation of Waste controlling, Emergency case - Common standard of Environment and Safety - Chemicals controlling 	Specific employee and contractors
Significant Environment Aspect & Impact training	To qualify ones who work on environment impact	<ul style="list-style-type: none"> - Chemicals spillage practice - Chemical handling - Control of Boiler - Pollution controller 	A person who works which concern to intolerable risk or significant impact

OCCUPATIONAL HEALTH & SAFETY RISK MANAGEMENT

Company's Occupational Health & Safety risk management is conducted according to summary of Accidents report 2003 year. The progressive of safety to continuously reduce incident rate for 4 year consecutively and achieve zero lost time accident in 2001FY. For 2003FY IFR = 14.2 case/day per 1 million hours and ISR = 5.4 case/day per 1 million hours.

Incident Statistic from 2000 - 2003FY



IFR (Injury Frequency Rate) means number of accidents per one million working hour

ISR (Injury Severity Rate) means Number of lost working day per one million working hour

ENVIRONMENTAL AUDIT

The environmental audit of Oki (Thailand) consists of the following ;

Internal Environmental Audit (IEA)

Means the method to verify that the EMS satisfies the ISO 14001 Standard requirements and to ensure the effectiveness of EMS. Total number of internal environmental auditors is 13 auditors.

Certification audit

Means the audit conducted by certified body. This includes surveillance and re-certification audit.

- ☐ Follow up surveillance audit once a year
- ☐ Re-certification audit every three years

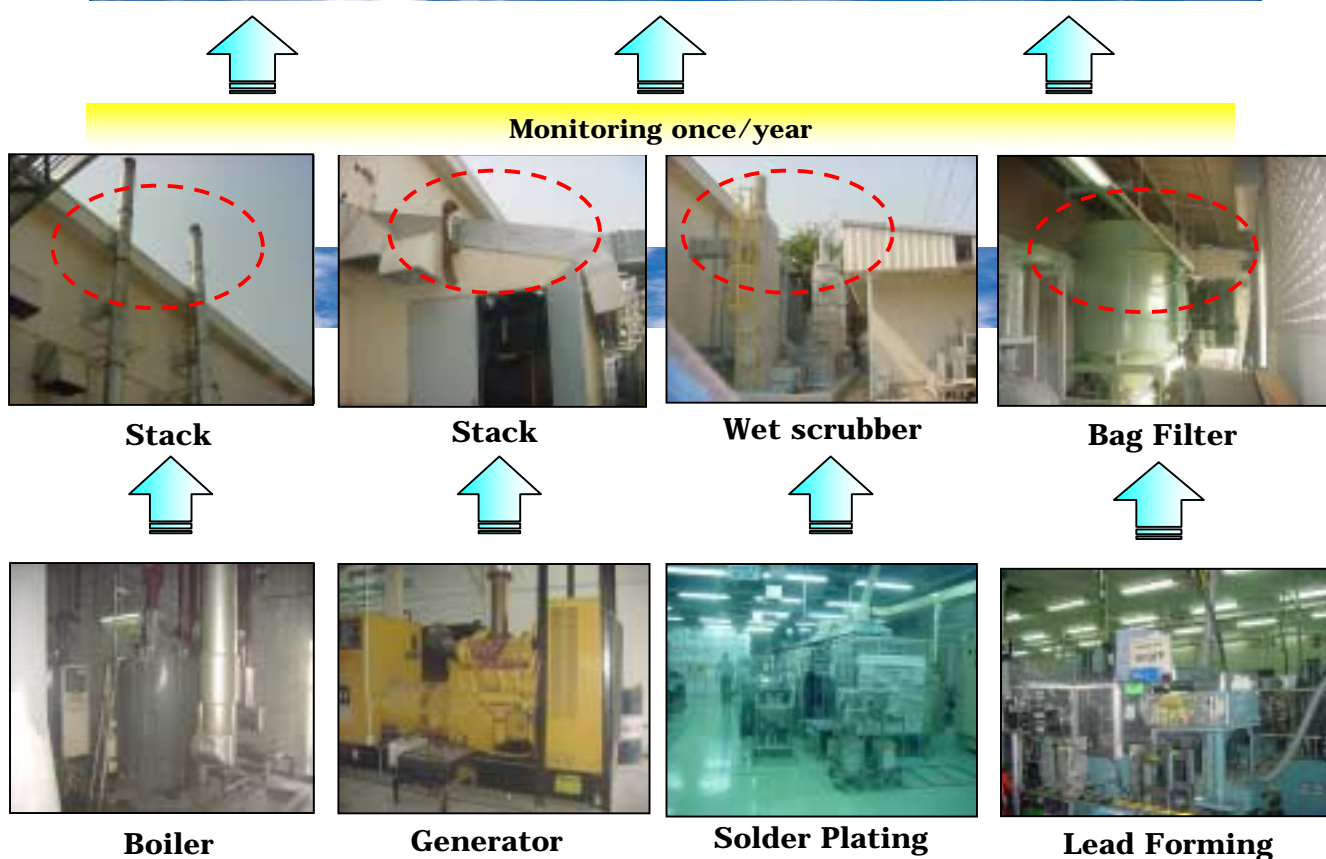
LEGAL AND OTHER REQUIREMENT COMPLIANCE

Air Emission

The monitoring follow the standard method of US Environmental Protection Agency (US.EPA) and National Institute of Occupational Safety Health (NIOHS). The standard method applied for air sampling is accepted by Industrial Environmental Department and Ministry of Science, Technology and Environment.

The below describes the air emission control legal compliance.

Atmosphere



Air Emission monitoring

Parameter	Unit	Legal Std.	Value
TSP	mg/m ³	400	26.95
SO ₂	ppm	1250	56
NO _x	ppm	250	218
CO	ppm	870	612

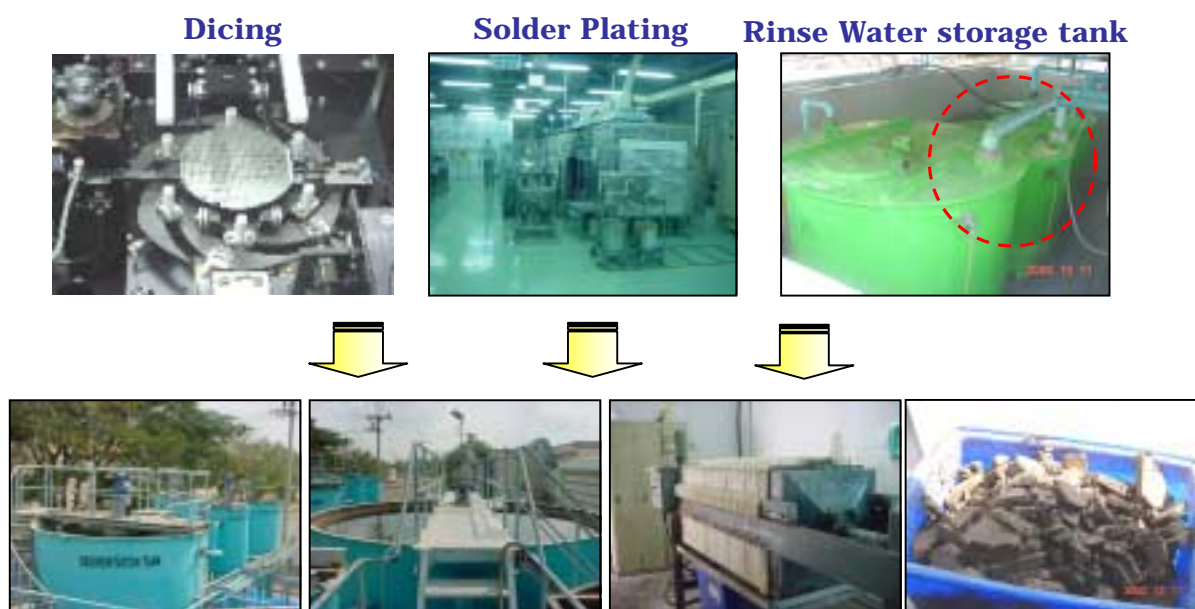
LEGAL AND OTHER REQUIREMENT COMPLIANCE

Waste Water Treatment

The monitoring follow the standard method of US Environmental Protection Agency (US.EPA) and National Institute of Occupational Safety Health (NIOHS). The standard method applied for air sampling is accepted by Industrial Environmental Department and Ministry of Science, Technology and Environment.

The below describes the waste water treatment facility legal compliance.

Waste Water Treatment System



Waste water treatment system

Waste water treatment facility

Efficiency of WWT 2003 Year

Parameter	pH	SS	COD	BOD	Zn	Cr	Pb	Sn	F
	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
Standard	5.5 - 9.0	200	1,250	1,000	5.00	0.75	0.20	1.00	5.00
Raw waste water	10.10	<10.0	21.00	8.70	0.79	0.06	8.50	6.48	3.99
Check tank	7.10	<10.0	22.00	10.00	<0.10	<0.03	0.07	0.52	5.57
Drain pit	7.60	25.00	60.00	54.00	<0.10	<0.03	0.04	0.13	2.32

LEGAL AND OTHER REQUIREMENT COMPLIANCE

Waste Management

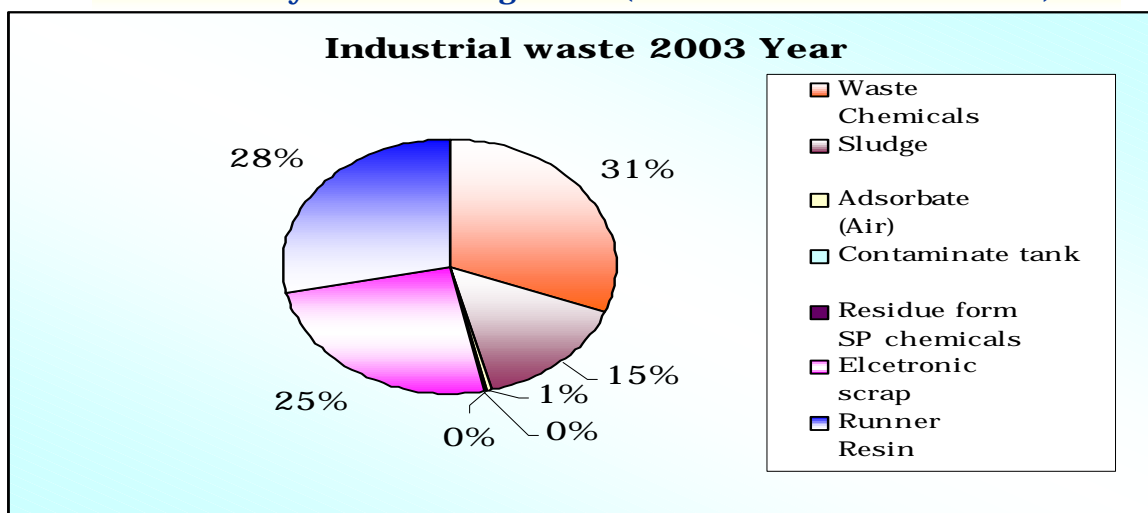
The waste management follow standard method of Department Industrial Works of Ministry of Industry. And used principle management of Waste minimization and 3R principle as “Reuse, Recycle and Recovery”.

The below describes the waste management legal compliance.

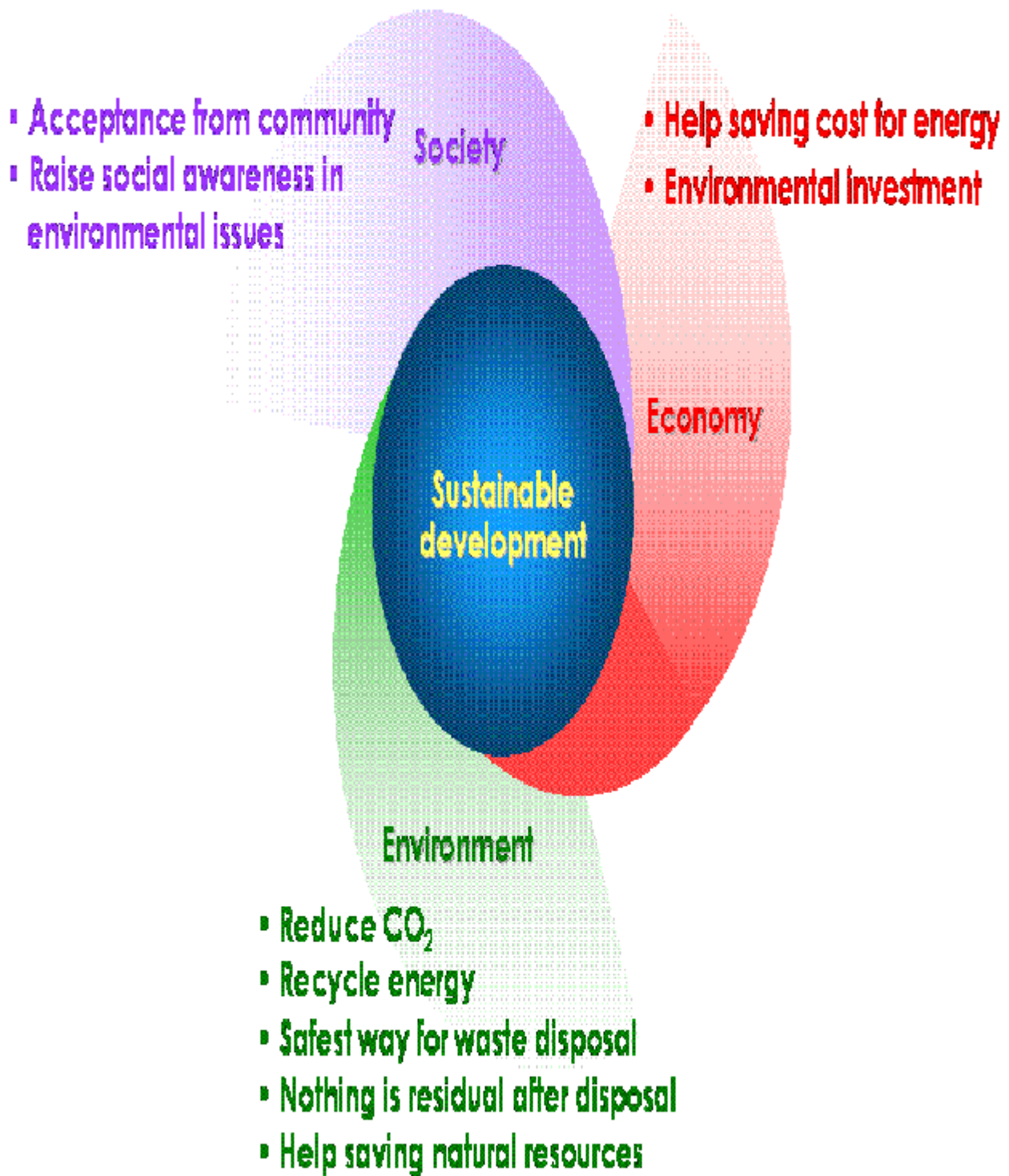
Kind of Waste	Method of Disposal	Waste Processing
Plastic waste	Recycle	SKJ Enterprise
Paper waste	Recycle	SKJ Enterprise
Runner Resin	Landfill ==> Incineration	BWG ==> SCCC
OA equipment expired	Recycle	SKJ Enterprise
Electronic scrap	Recycle	Ohgitani Kogyo (Thailand) Matsuda Sangyo (Thailand)
Sludge	Landfill ==> Incineration	ECO/TPI
Waste chemicals	Treatment	GENCO

Kind of waste	Waste Chemicals	Sludge	Adsorbate (Air)	Contaminate tank	Residue form SP chemicals	Elcetronic scrap	Runner Resin
Weight (Ton)	143.4	70.67	2.47	0.69	0.63	116.59	132.38

Summary Waste Management (Industrial waste 2003 Year)



ENVIRONMENTAL BENEFIT



PUBLICATION INFORMATION

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