No.

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
OF THE GOVERNMENT OF THE PHILIPPINES

THE STUDY
ON
HAZARDOUS WASTE MANAGEMENT
IN
THE REPUBLIC OF THE PHILIPPINES
(PHASE 1)

FINAL REPORT

JUNE 2001

EX CORPORATION
KOKUSAI KOGYO Co.,Ltd.

MPI
JR
01-091

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
OF THE GOVERNMENT OF THE PHILIPPINES

THE STUDY
ON
HAZARDOUS WASTE MANAGEMENT
IN
THE REPUBLIC OF THE PHILIPPINES
(PHASE 1)

FINAL REPORT

JUNE 2001

EX CORPORATION
KOKUSAI KOGYO Co.,Ltd.

PREFACE

In response to a request from the Government of Republic of the Philippines, the Government of Japan decided to conduct the Study on Industrial Hazardous Waste Management in Republic of the Philippines (Phase1) and the study was implemented by the Japan International Cooperation Agency (JICA).

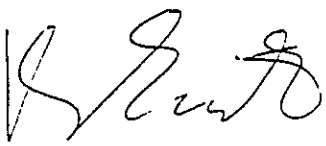
JICA sent a study team, led by Mr. Masato Ohno of EX CORPORATION and organized by EX CORPORATION and KOKUSAI KOGYO Co., Ltd. to Republic of the Philippines 4 times from August 2000 to March 2001.

The team held discussion with the officials concerned of the Government of the Philippines, and conducted related field surveys. After returning to Japan, the team conducted further studies and compiled the final results in this report.

I hope this report will contribute to the promotion of the plan and to the enhancement of friendly relations between our two countries.

I wish to express my sincere appreciation to the officials concerned of the Government of the Philippines for their close cooperation throughout the study.

June 2001

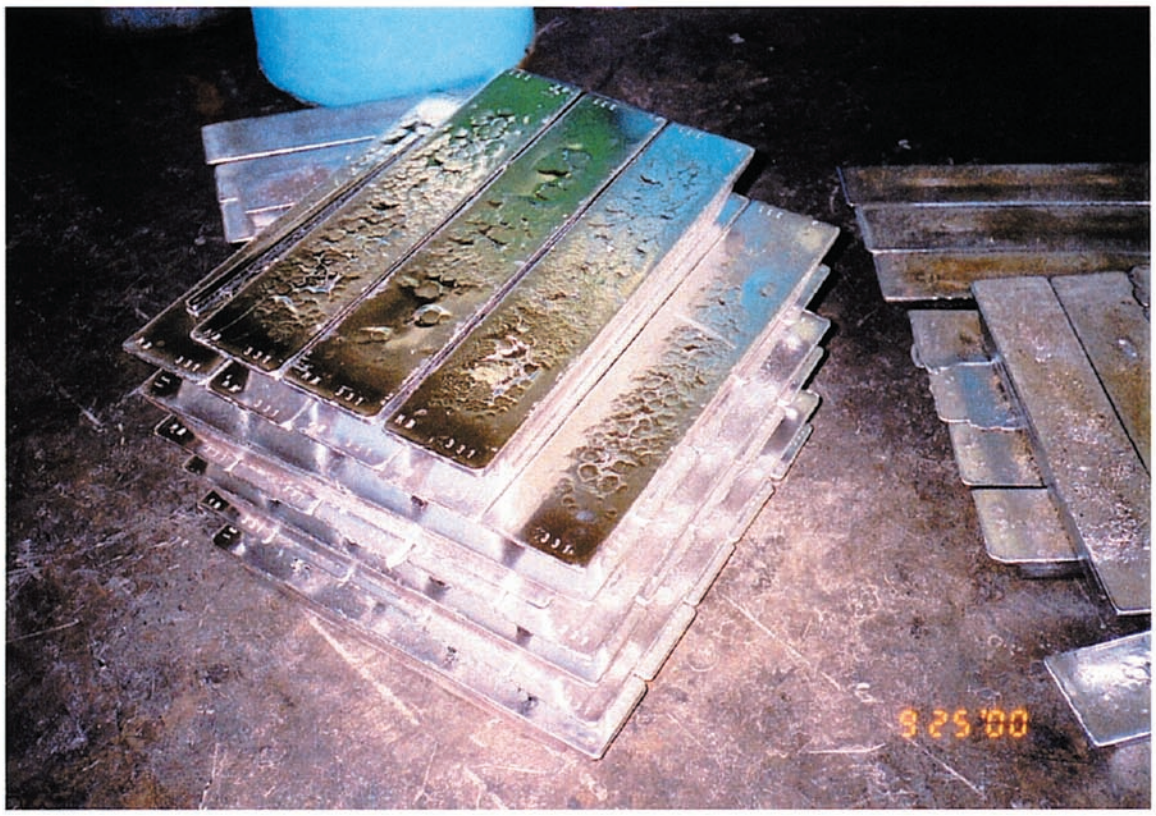


Kunihiko Saito
President
Japan International Cooperation Agency

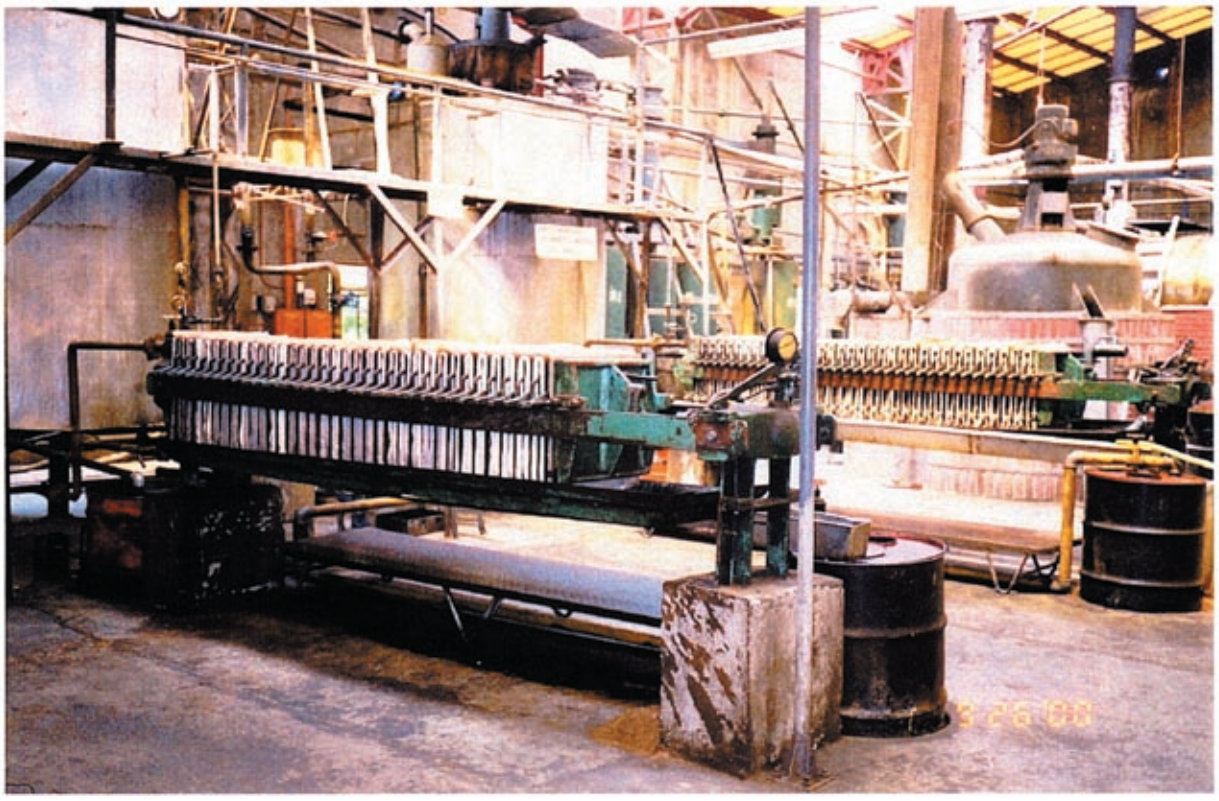
CURRENT STATUS OF HAZARDOUS WASTE TREATMENT IN PHILIPPINES

Collected Waste Solder Dross

Recycled Solder from the Collected Waste Solder Dross



Waste Oil Treatment Process (Filter Press)



Neutralization Process of CCTF

CURRENT STATUS OF

HAZARDOUS WASTE TREATMENT IN NEIBORING COUNTRIES

Collected Wastes being stored at ECO Corp. in Singapore

Thermal Treatment Plant at KA Corp. in Malaysia

TABLE OF CONTENTS

List of Tables

List of Figures

10. STRENGTHENING OF LAW ENFORCEMENT AND ADMINISTRATION ON HWM

11. DEVELOPMENT PLAN OF THE MODEL HW TREATMENT FACILITY

13. SHORT-TERM ACTION PLAN

14. CONCLUSIONS AND RECOMMENDATIONS

ABBREVIATIONS

A	A/C	Authority to Construct
	ADB	Asian Development Bank
	APCD	Air Pollution Control Device
B	BOI	Board of Investments
	BOO	Build-operate-own Scheme
	BOT	Build-operate-transfer Scheme
	BPS	Bureau of Product Standards
C	CALABARZON	CAvite, LAguna, BAtangas, Rizal, QueZON
	CAA	Clean Air Act
	CCI	Chamber of Commerce & Industry
	CCPSP	Coordinating Council for Private Sector Participation, Office of the President
	CP	Cleaner Production
	CY	Calendar Year
D	DANIDA	Danish International Development Agency
	DAO	Department Administration Order
	DBP	Development Bank of the Philippines
	DBM	Department of Budget and Management
	DENR	Department of Environment and Natural Resources
	DILG	Department of Interior and Local Government
	DOE	Department of Energy
	DOH	Department of Health
	DOST	Department of Science and Technology
	DOTC	Department of Transport and Communications
	DPWH	Department of Public Works and Highways
	DTI	Department of Trade and Industry
E	EAP	Environmental Action Plan
	EC	European Commission
	ECC	Environment Compliance Certificate
	EIA	Environmental Impact Assessment
	EIS	Environmental Impact Statement (System)
	EMB	Environmental Management Bureau
	EMB-EQD	EMB Environmental Quality Division
	EMB-HWMS	EMB Hazardous Waste Management Section
	EMPAS	Environment Management & Protected Areas Services
	EMS	Environment Management System
	ENROs	Environment and Natural Resources Offices
	EO	Executive Order

ABBREVIATIONS

	EPMD	Environmental Protection and Monitoring Division
	EPO	Environmental Protection Officers
	EPZ	Export Processing Zones
	EPZA	Export Processing Zones Authority (now PEZA)
	ERF	Environmental Revolving Fund
F	FC	Presidential Committee on Flagship Programs and Projects
	FIS	Filipino Inventors Society
G	GCMCC	Government Corporations Monitoring and Coordinating Council, Office of the President
	GEF	Global Environment Fund
	GTZ	German Agency for Technical Assistance
H	HWM	Hazardous Waste Management
	HWMS-EQD	Hazardous Waste Management Section - Environmental Quality Division
	HWTS	Hazardous Waste Tracking System
I	IATAC	Inter-Agency Technical Advisory Council
	IDRC	International Development Research Center
	IEC	Information, Education & Communication
	IEMP	Industrial Environmental Management Project
	IFC	International Finance Corporation
	IISE	International Initiatives for a Sustainable Environment
	IPP	Investment Priorities Plan
	IRR	Implementing Rules and Regulations
	ITDI	Industrial Technology Development Institute
J	JBIC	Japan Bank for International Cooperation
K	KfW	German Development Bank
	KRA	Key Result Area
L	LGU	Local Government Unit
	LLDA	Laguna Lake Development Authority
M	MBIs	Market Based Instruments
	MEIP	Metropolitan Environmental Improvement Program
	MIF	Model Integrated Hazardous Waste Treatment Facility
	MMDA	Metropolitan Manila Development Authority
	MOOE	Maintenance and Other Operating Expenses
	MWSS	The Metropolitan Waterworks and Sewerage System
N	NCR	National Capital Region
	NEDA	National Economic and Development Authority
	NEDA-PIS	NEDA Public Investment Staff
	NEDO	New Energy Development Organization

ABBREVIATIONS

	NIMBY	Not-in-my-backyard (syndrome)
	NIMTOO	Not-in-my-term-of-office (syndrome)
	NPC	National Power Corporation
	NRDC	National Resources Development Corporation
	NSO	National Statistics Office
O	OJT	On-the-Job-Training
P	PAB	Pollution Adjudication Board
	PBE	Philippine Business for the Environment
	PCAPI	The Pollution Control Association for the Philippines Industry
	PCO	Pollution Control Officer
	PD	Presidential Decree
	PEPP	Philippine Environmental Partnership Programs
	PEZA	Philippines Economic Zone Authority
	PHP	Philippine Pesos
	PIC	Prior-Informed-Consent
	PMO- PTFWM	Project Management Office-Presidential Task Force on Waste management
	PNB	Philippine National Bank
	PNP	Philippine National Police
	PO	People's Organization
	P/O	Permit to Operate
	POPs	Persistent Organic Pollutants
	PPP	Polluters Pays Principle
	PRIME	Private Sector Partnership in Managing Environment
R	RA	Republic Act
	REDs	Regional Executive Directors
S	SMEs	Small and Medium Enterprises
	SS	Suspended Substances
	SWM	Solid Waste Management
T	THW	Toxic and Hazardous Waste
	THWMS	Toxic and Hazardous Waste Management System
	TOC	Total of Organically bound Carbon
	TSD	Treatment, Storage, and Disposal
	TWG-HWM	Technical Working Group on Hazardous Waste Management
U	UNCTAD	United Nations Conference on Trade and Development
	UNDP	United Nations Development Programme
	UNEP	United Nations Environment Programme
	UNIDO	United Nations Industrial Development Organization

ABBREVIATIONS

	USAEP	US Asia Environmental Partnership
	USAID	United States Agency for International Development
W	WTF	Wastewater Treatment Facility
	WTS	Waste Tracking System

Exchange Rate: PHP1 2.5yen