

No.22

This Newsletter is published four times a year, printed on recycled paper.

November 1997

THE JAPAN SOCIETY OF WASTE MANAGEMENT EXPERTS

Dear Waste Management Experts:

Recently, crucial changes were made in the regulatory legislation and other aspects of waste management in Japan. As reported in the top news of this issue, the Waste Disposal and Public Cleansing Law was revised. The general public's concern about waste disposal especially about that of dioxins-has been remarkably growing, as evidenced by frequent press coverage of the subject in recent years. The Ministry of Health and Welfare revised the execution order (cabinet order) and execution rule (ministerial order) based on the law and promulgated the revised versions on Aug. 29, 1997. To control the generation of dioxins more rigidly in Japan according to the revised law, reference limit levels were fixed in respect of municipal solid waste incineration plants, which are considered a major dioxin generation source, industrial waste incineration furnaces, electric furnaces for steel manufacturing, etc.

Provisions about penalty for violations were introduced in respect for industrial waste generation plants in particular. They will be put in force on Dec. 1, 1997. The major action guidelines for 1998 and subsequent years feature ① more powerful environment conservation measures including stricter action against dioxins, ② construction of more circulation-type waste disposal facilities and ③ establishment of a new recycling system based on the Packaging Waste Recycling Law and further reduction of the volume of waste.

(by Hisayuki Futami)

Another Revision of Waste Disposal and Public Cleansing Law

Japan's Waste Disposal and Public Cleansing Law (enacted in 1970) is a basic and comprehensive waste disposal law defining all solid wastes which are not limited to municipal wastes but include industrial wastes and prescribing the responsibilities for their disposal, disposal standards for them, penalties, etc. A bill for partial revision of the above was passed at the House of Representatives in May, 1997 and promulgated on June

18 in that year. The law had been revised a number of times previously to reflect socioeconomic advances or changes in the manner of waste discharge. In 1995, a drastic revision was made with the aim of enhancing the hazardous waste management and promoting the re-use of such waste.

Major purposes of the recent revision are to enhance the reliability and safety of waste disposal facilities and take comprehensive deterrent action against illegal dumping and others. In the background of this revision were a worsening shortage of final disposal sites for industrial wastes in particular, frequent disputes concerning the construction of a new disposal facility with local residents, large-scale illegal dumping and other problems, etc. Consequently the general public now has some doubt about the present waste disposal practice, and this may adversely affect the living environment or industrial activities later.

The Ministry of Health and Welfare organized the Industrial Waste Committee within the Living

Environment Council in February, 1996 to work out an appropriate measure.

Major features of the recently revised law are summarized below:

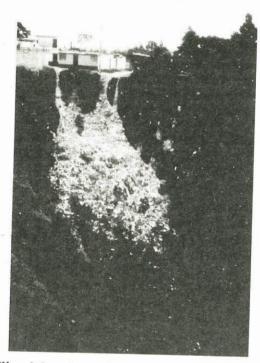
- (1) A measure for waste volume reduction and a measure to promote the re-use of wastes.
- (2) Tighten-up of the requirements concerning the permission of construction of a new waste disposal facility.
- (3) Tighten-up of the regulations concerning the upkeep and management of waste disposal facilities. An upkeep and management record, which is to be made accessible, the obligation to put aside a fund for upkeep and management after the completion of the landfill site.
- (4) Addition of a disqualification clause to the permit for a waste disposal agent. Exclusion of groups of gangsters and others
- (5) Expansion of the scope of application of the industrial waste management manifesto.
- (6) Imposing of severer penalties and strengthening of the power to issue an order for action. Imposing of much severer penalties. Ex. a maximum fine of ¥10 million per year (¥100 million in the case of a legal person). Violations were punishable with a fine/ imprisonment Strengthening of prefectural governors' and municipal

heads' power to issue an order for action, to prevent improper disposal.

(7) Establishment of the Center for Promotion of Proper Industrial Waste Disposal.

The revised law will be put in force within I year and 6 months from the day of its promulgation. As a measure to tighten up the upkeep and management standard for disposal facilities for strict control of the dioxin emission from waste incineration furnaces, an enforcement order (cabinet order) and an enforcement rule (Ministry of Health and Welfare's order) were promulgated on August 29 this year and will be put in force on December 1.

(by Hideo Azuma)



Illegal dumping is observed in many countries. (Photo: Guatemala)

Serious Obstacle to Local Residents' Paper Recycling

Waste paper discharged from households is collected by volunteer groups of children's clubs, neighborhood self-governing bodies, PTA's, etc. in some areas.

Many municipalities support such voluntary group collection activities by giving those groups a subsidy to promote their paper recycling.

Some ward, city, town and village self-governing authorities in Tokyo give those groups a subsidy of ¥4 to ¥12 per kilogram of waste paper collected by them, and 216 thousand tons of waste paper, which accounts for about 4% of the total quantity of waste in Tokyo, is recycled through such voluntary systems.

The voluntary collection groups expend their proceeds from the sale of used paper and the subsidy to meet part of their expenses.

But these groups have recently encountered a serious obstacle - sharp drops in the prices of various kinds of waste paper.

The price of scrapped magazines as delivered to a processing plant, for example, has dropped from ¥9 to ¥5 per kilogram in the past one year. Their recent price quoted by wholesalers was a negative price (that is, a charge was made for waste paper brought to them).

.Those collection groups cannot throw away waste paper picked up by their members with toil. They commit it to waste paper collecting agents, paying a charge for it. In fact, many groups have to discontinue their collection activity since the waste paper they pick up fetches no price

Some resident groups ask for an increase of the municipal subsidy, but many municipalities, in a tough spot financially recently, can hardly afford to comply with this request.

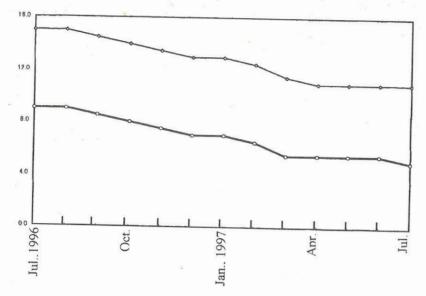
The sharp drops in the prices of various kinds of waste paper are partly due to the step-up of waste paper recycling at offices and stores because many municipalities started picking up used paper as a recyclable item and collecting the waste substances from business concerns for a charge in principle.

If the price decline continues, a far greater quantity of used paper may be thrown away as worthless waste.

Presorting before collection of the paper forming waste containers and packages, compulsory under the Packaging Waste Recycling Law, will be started about two years from now.

Further promotion of waste paper recycling will cause a further price decline. Thus there is a strong call for more extensive use of recycled paper and an increase of the demand for waste paper through technical developments.

(by Hisakazu Hirai)



Corrugated cardboard paper
Magazines

Note:

- Price of waste paper as delivered to a factory in the suburbs of Tokyo.
- Source: Data based on an investigation by the Waste Paper Recycling Promotion Center.
- 3. IFW=¥121(Sept. 13,1997)

The Bekasi Training Institute for Water Supply and Environmental Sanitation, Ministry of Pubic Works, Indonesia

- A Project Type Technical Cooperation by JICA-

One of the biggest problems of waste management in developing countries is a lack of trained personnel at every level, such as administrators, planners, engineers, operators, supervisors, etc. To develop these human resources Japan has been providing various aids and technical cooperation as ODA (Official Development Aid).

Project type technical cooperation (PTTC) is an integrated technical cooperation program by Japan International Cooperation Agency (JICA), consisted of three elementary programs; (1) invitation of trainees to Japan, (2) dispatch of experts to developing countries, and (3) equipment provision. Training program for "the Public works Training Institute for Water Supply and Environmental Sanitation in Bekasi (BTI), Indonesia", established in 1990, is a typical example of PTTC in this field.

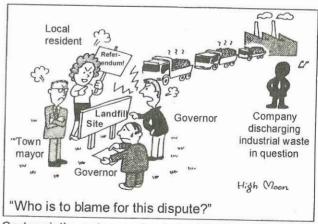
The building was constructed in 1989/90 by Japanese grant, at a cost of about 1.1 billion yen. Subsequently, PTTC assigned 24 Japanese long-term experts in total, including 6 waste management experts commenced from April 1, 1991 until September 30, 1997.

For waste management two courses were prepared by the PTTC, i.e. "Domestic Solid Waste Disposal" and "Waste Management and Planning". The former course, aiming at enabling the trainees to design, operate and maintain municipal solid waste disposal facilities by offering

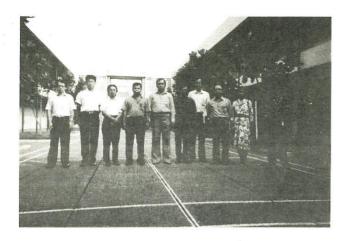
specialized and advanced knowledge/technology, started up in January 1992. The latter course, the goal of which is to enable the senior class trainees to formulate waste management master plans and to supervise planning work, started in January 1994. Both courses were held 13 and 6 times each other and the number of graduated trainees reached 138 and 62 by the end of March 1997.

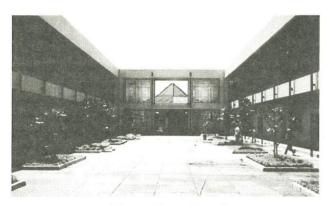
Both courses include lectures, practices, presentations and discussion on not only advanced technology but more applicable technology for the conversion of existing systems. Materials were developed in line with the proposed future strategy of waste management in Indonesia.

BTI is now operated by Indonesian itself. The second phase PTTC now has proposed to the Government of Japan from the Government of Indonesia.



Cartoonist's note: An industrial waste dispute cannot be settled without the participation of the company discharging the waste I question.





(Photo: Upper, lower)
The Bekasi Training Institute for Water Supply and
Environmental Sanitation,
Ministry of Pubic Works, Indonesia

Journal of the Japan Society of Waste Management Experts Vol.8 No.5 (July '97) & No.6 (Sep. '97)

The volumes contain the following technical papers. (written in Japanese with English abstract)

Vol.8, No. 5 (July '97)

Control of Ilousefly Population in Landfill Sites with Foam Covering in Place of Soil

by Takayuki Shimaoka, Masataka Hanashima, Minoru Mihara, Satoshi Ebisui, Hideki Tsuji and Hiroyuki Itou

Characteristics of Solid Waste Processing Residues from Municipal Resource Recovery Facilities

by Tomoo Sekito, Nobutoshi Tanaka, Toshihiko Matsuto and Takayuki Matsuo

Determining Biodegradability of Poly-β-Propiolactone Under Thermophilic Composting

by Akihito Ohtaki, Nobuyuki Uehara, Haruo Nishida and Kiyohiko Nakasaki The Material Balance and Heal Balance During Composting Process of Sludge Generated by Night-Soil Treatment

by Takahiko Ogawa, Shigeru Ohno and Hideki Tatsumoto

The Emission Behaviors of Nitrogen Oxide Caused by Municipal Solid Waste Incineration — A Basic Research Using an Experimental Incinerator by Kenji Yasuda and Yukio Ootsuka

Decomposition Techniques of CFCs/HCFC By Rotary Kiln in Industrial Waste Incineration Facilities by Kohei Urano, Mika Kato, Tomohiro Tasaki and Chizuno Kimura

Vol.8, No. 6 (September '97)

Adsorption and Denitrification Characteristics of Activated Coke for Advanced Flue Gas Treatment by Katsuya Kawamoto, Tetsuo Kimura and Makoto Sato

Study of an Environmental Performance Evaluation and Its Environmental Audit for Paper Flow in Eight Offices by Hoan Do Jong, Hiroshi Akai, Yoshinobu Iyama and Kohji Hayase

Emitted and Removed Levels of HCl and SO₂ from Municipal Waste Incinerators by Noboru Tanikawa and Kohei Urano

A Study on Reutilization of Waste Plastics Mixed with Sludge Ash

by Sang Sook Park and Hiroyuki Araki

Study on the Chemical Composition of Coal Fly Ash as a Raw Material for Artificial Zeolite by Masaru Meguro, Junsuke Haruna, Tamio Noda and Tatuya Kanamaru

Environmental Impact Assessment of Recycling Systems Using the SLCA Method

by Kazuko Nakano, Hiroyuki Miura and Yasuhiko Wada

NEWSLETTER NO.22

Published by
Prof. Kenji Fujita, President,
The Japan Society of Waste Management Experts

Edited by
Dr. Masaru Tanaka, Chairman,
International Relations Committee

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