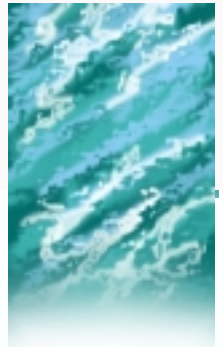


INDUSTRY ENVIRONNEWS

Vol. 7 No.2 Environmental Management Bureau-DENR April-June 2003



Two Billion People are Dying for It!

Water Matters

by Cohney Movido-Aquino

June 5 was a red-letter day for the country and the rest of the world as we celebrated the World Environment Day (WED) once again. A global event held annually, the WED is one of the principal vehicles of the United Nations to stimulate worldwide awareness of the environment and enhance political attention and action.

This year's celebration of WED revolved around another life's basic necessity - water, under the theme, "Water ... Two Billion People are Dying for It!" No doubt, the theme was drawn to complement the declaration of 2003 as the "International Year of Freshwater" and the "World Water Day" which is celebrated every year on March 22.

But, one may ask, why water? Why the global interest?

For some of us who are lucky enough to live in areas with readily available water supply, there is not much to worry about except the monthly bills. But in areas where the water supply is scarce or where the water is not fit for human consumption, the problem turns into a crisis, especially if public health is already at risk. And this is so, right now, in some parts of the globe. Thus, unless all governments of the world unite to address the water crisis today, there is a slim chance this will ever be resolved in the future as the demand for water increases three times as fast as the world's population rate.

Photos Courtesy of:

Dr. Corazon PB. Claudio



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Philippine Environment Partnership Program (PEPP) : Towards Improved Industrial Environmental Performance

Consistent with the DENR's thrust of promoting partnerships with stakeholders in environment and natural resources management, Secretary Elisea Gozun signed last June 2, 2003, DENR Administrative Order (DAO) 2003-14 creating the Philippine Environment Partnership Program (also known as PEPP). DAO 2003-14 promotes among institutional partners, self-monitoring and compliance, including voluntary self-regulation, in industries for an improved environmental performance.

DAO 2003-14 or the PEPP DAO, as it is more popularly known, is a product of multi-sectoral policy dialogues, as a response to the need and demand of industry for government assistance and incentives that will encourage them to implement and sustain a proactive environmental management tool and improve their environmental performance.

A salient feature of the DAO authorizes the Environmental Management Bureau (EMB) of the DENR to provide appropriate forms of regulatory and financial assistance, through the Air Quality Management Fund (RA 8749) and Special Fund (RA 6969). The PEPP was envisioned to be a partnership of the DENR not only with the private sector but also with other agencies and institutions to help industry protect the environment while gaining business advantage. DENR's PEPP implementing partners are the Department of Trade and Industry for fiscal incentives, Department of Science and Technology for

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For Earth Day 2003

Service stations, car dealers join “Let’s tune up to clean up the air” campaign

A promotional campaign that enabled vehicle owners and drivers to avail of discounts on tune-up and other services was launched by the Environmental Management Bureau of the Department of Environment and Natural Resources, in its central and regional offices, in partnership with other government agencies, Federation of Petroleum Dealers and other companies. Dubbed as “Let’s tune up to clean up the air,” it was launched as part of the government’s celebration of Earth Day 2003 and run from the third to the last week of April 2003.

DENR Secretary Elisea Gozun reported that about 50 service stations, car dealers and an emission testing center in various parts of the country were mobilized by the EMB and its regional offices to give special discounts under the campaign. The discounts offered ranged from 10% to 20% or a fixed amount of P100 off the regular fees for tune-up and other services.

Gozun said the “Let’s tune up to clean the air” is the latest environmental campaign of her agency which seeks to encourage vehicle owners, particularly those in the public transport sector, to have their units properly maintained as an added solution to address the worsening air pollution problem facing key urban centers in the country.

According to Gozun, vehicle emissions contribute 70% of the total pollution load in Metro Manila. Industries and other area-based sources of pollution share the remaining 30%.

EMB Director Julian Amador said the participation of the various car dealers, service stations and private emission testing centers in the “Let’s tune up to clean up the air” was very encouraging. He said that while the campaign has benefited the drivers and operators because of the price cut-off as well as the participating organizations in terms of increased clients, the general public is the ultimate beneficiary of the campaign due to reduced vehicle emissions.

Participating Regions, Companies

In Metro Manila, Director Amador said that Petron and 26 Caltex Xpress Lube service stations participated in the campaign. The Xpress Lube stations offered a price cut-off of P100 for tune up and change oil. Meanwhile, EMB-NCR Director Sixto Tolentino said a number of Seoil and Unioil outlets also participated in the campaign.

In Region 5, four car dealers, Caleb, Lisam, and Legazpi Tire World in the cities of Naga and Legazpi joined the campaign, while in Regions 8 and 10, at least three service centers each came out with up to 20% discounts on tune-up and other services. Three leading automotive service centers in Davao City also took part in the campaign, with Toyota offering the highest discount at 20%, and Kar Asia and Ford Davao, 10%.

“Let’s tune up to clean up the air” was likewise launched in Baguio City, with three companies participating, namely, Petron Harrison, J & E Petron Service Station and Toyota Baguio City.

In Region 12, the local EMB office succeeded in getting the Digos Emission Testing Center to give discounts on all government vehicles and vehicles of government employees that will be tuned-up during the campaign period.



First National Confab on Ecological Solid Waste Management Act Held at the PICC

More than 1,600 barangay officials from all over the country attended the 1st National Conference on Ecological Solid Waste Management held last April 14-15, 2003 at the Philippine International Convention Center Plenary Hall in Pasay City as part of efforts to fasttrack the implementation of Republic Act 9003 of the Ecological Solid Waste Management Act of 2000.

Among the guests present during the first day of the conference were DENR Secretary Elisea Gozun, Congressman Nereus Acosta, former Senate President Jovito Salonga, and DILG Asst. Secretary Benito Catindig.

"We are doing this as part of government's campaign to address the problem of waste generation by tapping the barangays as mandated by R.A. 9003. We already have the law, the key now is to implement the law effectively and forcefully. We are optimistic that we can achieve this with the full support of our local leaders," DENR Secretary Gozun stressed.

The speakers during the first day of the conference were Dr. Angelina Galang, executive director of the Miriam College-Environmental Studies Institute who discussed about the "Difference between Waste Management and Garbage Disposal (Solid Waste Management: Pagbabago ng Pananaw)"; Atty. Jun Quicho of Tanggol Kalikasan who presented his paper on "R.A. 9003: Making the Law Understandable (RA 9003- Idol Ko si Kap, Simpleng-simple, Kayang-kaya)"; Mr. Francis dela Cruz of Greenpeace who talked about the "Present Situation of Centralized Garbage Disposal (Hakot-Tambak-Lipat-Kalat, A Never Ending Story); Mr. Jose Concepcion, barangay captain of Brgy. Forbes who discussed, in simplified terms, "The Economic Benefits of Waste Segregation, Composting and Recycling; and Mr. Bert Guevarra, barangay captain of Brgy. Sun Valley, Paranaque who tackled the "Economic Advantages of Doing it Right".

Among those that presented their experiences on solid waste management were Mr. Ramon Uy on "Composting"; Ms. Pamela Henares who presented her paper on "Vermicomposting: The Buro-Buro Experience"; Ms. Narda Camacho of Linis Ganda who talked about "Linis-Ganda: 19 Years After (Looking Ahead); Dr. Metodio Palaypay who discussed about "Residuals"; Engr. Reynaldo Esguerra of the Department of Science and Technology (DOST) who presented about "ITDI-DOST Technologies in Managing Solid Wastes"; Councilor Andy Santiago and Ms. Len Berroya who both talked about "Budget for Solid Waste Management".

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EMPOWER Study Going On

The Board of Investment (BOI) of the Department of Trade and Industry (DTI), in association with Japan International Cooperation Agency, is undertaking a study on Environmental Management with Public and Private Sector or EMPOWER leading to the formulation of a National Plan on Industrial Environmental Management (IEM). The plan intends to encourage the practice of IEM by private enterprises and to strengthen capacities of the government agencies and private industrial associations.

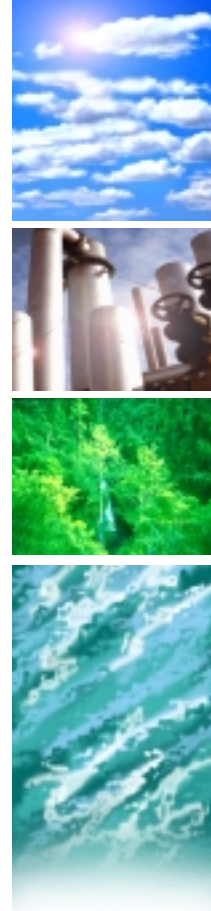
The National Action Plan has three implementing mechanisms in the form of the pilot projects on Waste Minimization, Integrated IEM Information System, and Ecolabeling and Green Procurement projects.

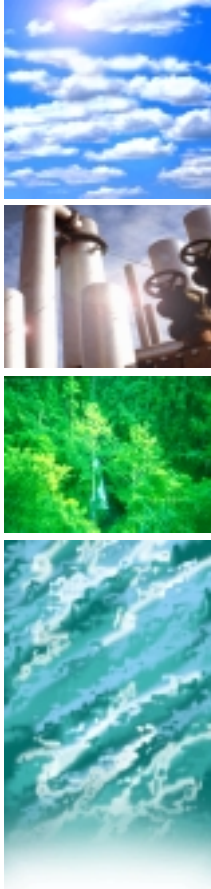
The Waste Minimization Pilot Project (WMPP) aims to establish a framework to integrate productivity improvement and waste minimization through waste reduction and identification of feasible measures. WMPP is to be implemented by the Philippine Business for the Environment (PBE), Industrial Technology Development Institute—Department of Science and Technology (ITDI-DOST), DTI-BOI, Environmental Management Bureau of the Department of Environment and Natural Resources (EMB-DENR), Laguna Lake Development Authority (LLDA), Philippine Economic Zone (PEZA) and other related industry associations.

Integrated IEM Information System Pilot Project aims (1) to create opportunities for suppliers and users of information useful to promote IEM and (2) to increase accessibility to information through the establishment of an integrated IEM information system such as an IEM information clearinghouse. The said activity is being implemented by PBE and DTI-BOI with EMB-DENR, ITDI-DOST, LLDA and PEZA.

Eco-labeling and Green Procurement Pilot project is directed to (1) empower relevant organizations to accredit the first eco-labeled products, establish the organizational and methodological framework and details for eco-labeling programs as well as increase consumer awareness towards these branded products; and (2) empower BOI to promote green procurement policies through ISO 14001 Certification and green procurement policy development. The Clean and Green Foundation takes the lead in the implementation of the Eco-labeling programs with the Bureau of Product Standards-DTI, EMB-DENR, ITDI-DOST LLDA and PEZA.

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Water Matters...

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The Global Call

Interest on water as a world resource to conserve and develop started gaining grounds in 1987 when the Brundtland Commission, in its report, *Our Common Future*, introduced the concept of sustainable development to the world and identified water as a key issue among global environmental concerns. This was followed by Water and Environment Conference held in Dublin, Ireland in 1992 where discussions of water and environmental issues were reportedly extensive. Then, at the Earth Summit in Rio de Janeiro, Brazil, the importance of securing freshwater resources was underscored.

The latest international gathering of world experts on water-related fields is the 3rd World Water Forum conducted March 2003 in the neighboring Japanese cities of Kyoto, Shiga and Osaka. It was during this forum that statistics on the world's water situation and issues were gathered, to cite:

- 1.4 billion people do not have access to safe water.
- Seven million die yearly due to water-borne diseases, 2.2 million of which are under five years of age.
- Daily water use per inhabitant is 600 liters in residential areas in North America and Japan, 250-350 liters in Europe, and 10-20 liters for sub-Saharan Africa.
- Of the 110,000 billion cubic meters of rainwater that falls on earth, only 40,000 billion cubic meters remain since most of it evaporates before it can be used.
- Water scarcity today badly affects 250 million people in 26 countries, with each person having access to a yearly volume of less than 1,000 cubic meters.

Looking at the above statistics, one wonders where has the world's water gone. As written in the books, 70% of the earth is composed of water. But, unfortunately, of this volume, only 2.5% is freshwater; the rest is saltwater. Three-quarters of this freshwater is trapped in the form of ice and snow, and the measly one-fourth is what we use in our industries, agriculture, households, etc.

But, what aggravates the water situation now is that through the years, the quality of the world's water has increasingly deteriorated as a consequence of modernization, uncontrolled population growth and urbanization.

Water Quality Management in the Philippines

In her Earth Day message on April 22, 2003, President Gloria Macapagal-Arroyo revealed that almost 10 million Filipinos are yet to have a sustainable source of potable drinking water and 13 million do not have access to any sanitation facilities. Further, of the country's total water demand, only 72% is being met. For this reason, she called on the citizenry to use wisely and conserve the country's water resource, and at the same time, emphasized the need to take care of the forests.

President Arroyo said, "we need to take care of the very source of our water resources - - our forests that act as watersheds." She also admonished the public not to throw rubbish into rivers, even as she encouraged them to plant more trees, for forests also serve as natural filters.

At the forefront in the country's war against water pollution is the Environmental Management Bureau (EMB) of the Department of Environment and Natural Resources (DENR). Upgraded into a line agency by virtue of Republic Act 8749, otherwise known as the Philippine Clean Air Act, the bureau is in the thick of things, from formulating policies and implementing water-related programs, to monitoring wastewater from industries, and classification of the country's water bodies to ensure their proper management and utilization, among others.

Based on EMB reports, the major sources of water pollution in the country are industries, households, commercial establishments, tourism sites and farms. Industries, considered a major source of water pollutants, use a wide range of chemicals and chemical substances, many of which are highly toxic. These toxic substances find their way to our natural water systems when discharged as industrial effluents. Others are emitted in the atmosphere, where they mix with rain or settle down by themselves and are carried by runoff to natural water channels.

The wastewater from households, commercial establishments and tourism sites are generally similar in nature (they contain soap, detergent and black water from septic tanks, etc.) but differ in

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Water Matters...

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volume. The primary contribution of farms to water pollution is the runoff of agricultural chemicals, which includes synthetic fertilizers and pesticides.

On the classification of water bodies, the EMB has reportedly classified 379 rivers, lakes and bays in the country. Unfortunately, however, out of the total, only three remained in Class AA, the cleanest category; 153 were Class A; 65 were Class B, 118 were Class C and 15 were Class D; two were Class SA; nine were Class SB; 11 were Class SC and three were Class SD. This means that water in Class AA becomes potable through simple disinfection procedure. Water from Class A rivers, on the other hand, requires complete treatment involving coagulation, sedimentation, filtration and disinfection to make it safe for drinking.

Water in Class B, C and D rivers cannot be used at all for household purposes. Specifically, Class B rivers are primarily classified for contact recreation like bathing, swimming, skin diving, etc. Class C waters, also called fishery waters, are intended for the propagation and growth of fish and other aquatic resources, while Class D waters are for agriculture, irrigation, livestock watering, etc. Bathing, washing and other forms of activities that involve skin contact are no-no in Class C and D rivers.

Class SA waters are classified as coral reef parks and reserves. These are suitable for the commercial propagation of shellfish. Class SB waters are considered tourist zones, thus, their use is primarily for recreational activities such as bathing, swimming, skin diving, etc. Class SC waters are for commercial and sustenance fishing and Class SD, for industrial purposes like cooling.

First National Confab...

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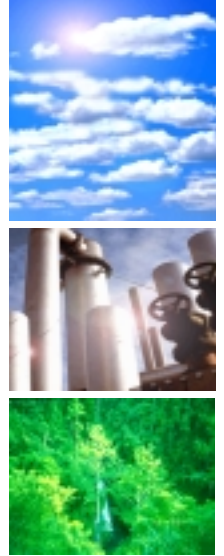
The following day of the conference was devoted for the workshops. Trained facilitators moderated the simultaneous waste management workshops on Education (How to Teach It); Engineering (How to Set it Up); Enforcement (How to Implement It); Sustainability (How to Institutionalize it) and Livelihood (How to Make it Work). The outputs were later presented in plenary. In the afternoon of the second day, Mr. Howard Belton of Unilever talked about "Solid Waste Management – the Issues for Society and the Contribution of Manufacturers". The closing remarks were given by Mr. Albert Magalang, executive director of the National Solid Waste Management Commission Secretariat and Ms. Luz Sabas, founder of the Zero Waste Recycling Movement of the Philippines.

EMPOWER Study...

(continued from page 3)

Since March 2002, three seminars have been conducted which were participated in by representatives from various manufacturing industries, environmental service providers and the government.

During the World Environment Day celebration last June 5, 2003, the fourth EMPOWER seminar-cum exhibit was held at the Ayala Center, Glorietta, Makati City.



Environmental Highlights



DENR Secretary Elisea Gozun, together with various mall owners/representatives, signed last April 8, 2003, the Memorandum of Agreement on Redemption Center for Recyclables at the different malls in Metro Manila.



Bukidnon representative, J.R. Nereus Acosta, Ms. Nita Abaquin, president of the Zero Waste Recycling Movement of the Philippines (ZWRMP), DENR Secretary Elisea Gozun, Former Senate President Jovito Salonga, Ms. Elsie de Veyra, adviser of ZWRMP, DILG Asst. Secretary Benito Catindig, and Atty. Toby Tanada, executive director of the Earth Day Network of the Philippines show solidarity during the First National Ecological Solid Waste Management Conference.



Participants numbering close to 1,600 coming from the different regions of the country attended the 1st National Conference on Ecological Solid Waste Management last April 14-15, 2003 at the PICC.



DENR Accredits 10 Environmental Laboratories



Ten laboratories were issued certificates of recognition as environmental laboratories by the Department of Environment and Natural Resources during the awarding ceremony held June 11, 2003 at the Sulo Hotel in Quezon City, bringing to 28 the total number of recognized environmental laboratories nationwide.



DENR Secretary Elisea Gozun identified the newly recognized environmental laboratories as the University of San Carlos Water Laboratory in Cebu City, Science Resource Center of the University of Immaculate Concepcion in Davao City, Research and Analytical Services Laboratory of the Natural Sciences Research Institute in Quezon City, Intertek Testing Services Philippines, Inc. – Labtest in Makati City.



Central Wastewater Laboratory of Universal Robina Corporation in Pasig City, Ostrea Mineral Laboratories in Binan, Laguna, Chemical Testing Laboratory of the Department of Science and Technology in Cagayan de Oro City, Optimal Laboratories in Lipa City, Batangas, and the Regional Standards and Testing Laboratory of DOST in Los Banos, Laguna.

The addendum to the certificate of recognition was issued to the SGS Philippines Laboratory in Makati City authorizing new parameters and signatories.

Environmental laboratories are laboratories authorized by the DENR to generate environmental data in connection with the environmental impact assessment system, environmental monitoring, and research activities in support of the formulation and implementation of policies, criteria, and rules and regulations of the government.

In a speech read by DENR Undersecretary Rolando Metin, Gozun underscored that the environmental laboratories are “strategic partners of the government in data generation for environmental planning, monitoring and decision-making.”

Gozun said the department’s expectations as regards environmental data have been radically transformed over the years, adding that the concern now is no longer limited to data per se but in the quality of data being generated by the laboratories.

She said, “we do not simply consider the data per se but we look for other aspects related to the way the data have been generated.” In the case of environmental data, Gozun stressed there is a need to look deeper into how sampling activities are being conducted by trained personnel, the



Two of the ten environmental laboratories accredited by the DENR: the Science Resource Center of the University of Immaculate Concepcion in



Davao City (top photo), and, the University of San Carlos Water Laboratory in Cebu City (right)

New EMB Video Features Law on Toxic Chemicals and Hazardous Substances

The Environmental Management Bureau (EMB) of the Department of Environment and Natural Resources recently released a 15-minute video regarding Republic Act R.A. No. 6969, otherwise known as the Toxic Chemicals, Hazardous and Nuclear Waste Control Act of 1990, to facilitate easy understanding of this law.

The first segment discusses events and environmental conditions that led to the enactment of R.A. 6969 of 1990. The second part, meanwhile, explains the Pre-Manufacturing and Pre-Importation Notification or PMPIN, the Philippine Inventory of Chemicals and Chemical Substances, the Chemical Control Orders, and who and what are covered under this section. This was followed by a discussion of requirements for hazardous waste generators, transporters, treaters and storage facilities. The next portion, meanwhile, discusses fines and penalties imposed on individuals and firms violating the law. The last portion of the video emphasizes that development is worthless if the environment to which humankind is depending on for their survival is irrevocably destroyed.

The EMB maintains a video library which contains around 70 titles covering a wide range of topics which include sustainable development initiatives, environmental management, water quality management, air pollution, solid waste management, technologies, greenhouse effect, climate change, state of the Philippine environment, women concerns, among others.

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DENR Accredits...

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procedures and techniques observed in the analysis of samples, including the proper calibration of laboratory equipment, machines and materials, to cite a few.

The DENR chief also explained that her agency is equally concerned with the traceability of data to international norms and thus, worldwide comparability, as well as the harmonization of methods and techniques used in data generation to minimize conflicts particularly in regulatory enforcement aspects.

According to Environmental Management Bureau Director Julian Amador, the recognition of environmental laboratories by the DENR started way back in 1998 with the issuance of DENR Administrative Order No. 63. He said the scheme was instituted to encourage public sector participation in environmental analytical services while complementing the department's analytical facilities for environmental characterization and monitoring, environmental impact assessment, pollution control and management, and research and development.

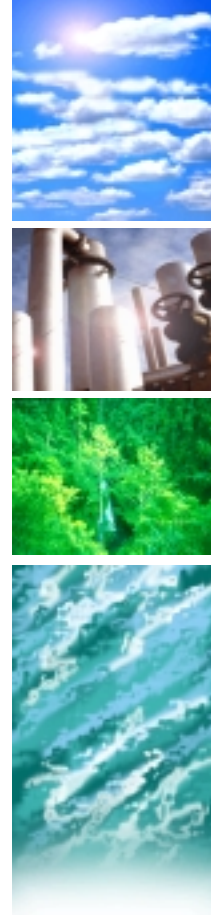
Amador also said the recognition scheme covers 27 parameters for water and wastewater, 19 for ambient air and stationary source emissions, and six groups of parameters for sediments and biota.

EMB records indicate the analytical capabilities of the environmental laboratories vary. However, all 28 environmental laboratories are capable of analyzing pH or acidity/basicity level of water and wastewater. Twenty-four laboratories can analyze dissolved oxygen; 22, biochemical oxygen demand (BOD); 18, chloride; 17, fecal coliform; and 12, mercury. Unfortunately, only one laboratory is capable of analyzing polychlorinated biphenyls (PCBs).

On ambient air quality, there are now five private laboratories capable of monitoring sulfur dioxide, four laboratories for nitrogen dioxide; three for particulate matter of 10 microns or less, three for total suspended particulate while only one each for lead and hydrogen sulfide.

On stationary source emissions, three laboratories are capable of monitoring sulfur dioxide, two for particulate and one each for arsenic, cadmium, lead and mercury.

Also on hand to grace the awarding ceremony included EMB Director Amador, Assistant Director Cirila Botor of the Bureau of Product Standards and Fabian Dayrit, president of the Integrated Chemists of the Philippines.



Philippine Environment Partnership Program...

(continued from page 1)

technical and technology information assistance, Development Bank of the Philippines and Land Bank of the Philippines for financial assistance, and PEPP itself for education and training concerns.

Under DAO 2003-14, Self-Regulation Management and Coordinating Units will be formed in all of the DENR-EMB Regional Offices that would evaluate, coordinate and provide assistance to industries in setting up their Environmental Management Plan (EMP).

The first track of the program is essentially a program of rewards for companies who have demonstrated superior environmental performance by addressing both their regulated and unregulated aspects through an Environmental Management System and Pollution Prevention program. The second track is a program especially beneficial for companies desiring to improve environmentally but are not yet in full compliance with environmental laws, rules and regulations. Participation of industries covered in Track 2 must enter into an Environmental Consent Agreement (ECONA) with DENR-EMB. The ECONA states the environmental plans and commitments of the participating organization based on the prescribed EMP.

Through the PEPP DAO, DENR hopes to pursue and strengthen three state policies now enunciated in RA 8749, or the Clean Air Act, and included in the proposed Clean Water Act. These are the promotion of self-regulation, cooperation or partnership with industry and the community in industrial environmental management and emphasis on pollution prevention rather than pollution control.

IEE Checklists for Priority Projects Reviewed



Mr. Reynaldo Alcances, Chief of EMB's Environmental Impact Assessment Division, discusses the purposes and mechanics of the workshop to review Initial Environmental Examination checklists for priority projects under the Sustainable Logistics Development Program.

The Development Bank of the Philippines (DBP) and the Environmental Management Bureau (EMB) of the Department of Environment and Natural Resources (DENR) conducted a Workshop last April 22 to 23, 2003, for the review of the Initial Environmental Examination (IEE) Checklists prepared by the DBP, through its Environmental Infrastructure Support Credit Program in cooperation with the priority projects of President Gloria Macapagal-Arroyo, the Sustainable Logistics Development Program (SLDP). The SLDP is a collaboration effort between the government and the private sector to bring about cost-effective ways of moving perishable farm products such as vegetables, meat, fishes, etc. from the farmlands to people or the consumers.

In line with the government's thrust to streamline the Environmental Impact Statement System as provided for in the DENR Administrative Order No. 96-37 and DBP's vision on environmental protection and assisting industry in facilitating the re-

lease of the Environmental Compliance Certificate of the DENR for DBP's prospect client industry, DBP prepared the IEE Checklists for the following projects: Grains Highway Facility; Cold Chain Facility; Road Roll On- Roll Over Terminal System; and Port Facility.

Held at the Protected Areas and Wildlife Bureau of the DENR at North Avenue, Diliman, Quezon City, those who attended the workshop included the representatives from the EMB-DENR National Capital Region, Region IV-A and IV-B, Region V, Region VI, Region IX and the DBP.

The first day opening program included the Welcome Remarks by Assistant Director Fernandino Concepcion of EMB, the presentation of the DBP's Environmental Programs by Assistant Vice President Aurora Maghirang, the Head of the Environmental Management Unit and the SLDP presentation by Assistant Vice-President Fausto Aragonés of the DBP. Mr. Rey Alcances, Head of the Environmental Impact Assessment Division of the EMB, provided the purpose and mechanics of the workshop. The participants were divided into groups and reviewed each of the above cited projects.

During the second day, each group presented their output. The EMB is set to finalize the revised IEE Checklists to conform to EMB format. A Memorandum Circular drafted for the implementation of said checklists by the EMB and its regional offices is also being readied for final signature.

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