

Philippine Clean Water Act Implementing Rules and Regulations (RA 9275)



Nicanor E. Mendoza
Environmental Management Bureau

Outline

- CWA Framework
- Coverage of the Act
- Wastewater Charge System
- The Model
- Discharge Permits
- Requirements
- Prohibited Acts

Philippine Clean Water Act

- **Philippine Clean Water Act (RA 9275)** was enacted on March , 2004 and published on April 21 ,2004 and subsequently took effect on May 6, 2004
- **Implementing Rules and Regulations of the PCWA of 2004** was approved the Secretary on May 16, 2005 and published last May 26, 2005 under DAO 2005-10 series of 2005 (Manila Times and Manila Standard Today)

CONCEPTUAL FRAMEWORK



- NAA
- Natl. Septage/Sewerage Mgt.
- Classification/ Reclassification
- Groundwater Vulnerability Mapping
- WQ Guidelines
- Effluent Standards
- Categorization of Industry
- Wastewater Charge System
- Discharge Permits
- Financial Liability
- Programmatic EIA
- Incentives
- Prohibitions/Sanctions/Actions

Coverage of the Act

→ *All water bodies (natural and man-made) bodies of fresh, brackish, and saline waters, and includes but not limited to aquifers, groundwater, springs, creeks, streams, rivers, ponds, lagoons, water reservoirs, lakes, bays, estuarine, coastal and marine waters*



→ *Primarily applies to abatement and control of pollution from land-based sources*

Wastewater Charge System

- *Established on the basis of payment to government for discharging wastewater into the water bodies*
- *Based on net waste load (diff. Of initial load of abstracted water to waste load of discharged effluent),*
- *Complying industries to be charged minimal reasonable amount*

Attributes

- strong economic inducement
- cost of administering water quality management or improvement programs
- damages caused by water pollution on the surrounding environment
- Type of pollutant
- Water body classification



Wastewater Charge System

- The Wastewater Discharge Fee Formula

$$\text{WDF} = L_n \times R$$



Where: R is the rate per kilogram (PhP/kg) which is initially fixed at P5.00 per kilogram for priority pollutant parameter (e.g. BOD or TSS)



L_n refers to the net waste load (kg/year), computed further as follows:

$$L_n \text{ (BOD5/TSS)} = [(C_f - C_a) (Q_f \times N_f)] \times 0.001$$

- Where: C_f is the average daily effluent concentration limit (mg/l) for priority pollutant parameter (BOD or TSS); Q_f is the average daily volumetric flow rate measurement or final discharge effluent (m³/day) and N_f is the total number of discharge days in a year (days/ year). C_a is the average water quality concentration limit for priority pollutant parameter (BOD or TSS) of abstracted or intake water (mg/l).



Sample Computation for WWC:

$C_f = 50$ mg/l (Ave. effluent concentration)

$C_a = 1$ mg/l (Ave. water qua.conc.)

$Q_f = 100$ m³/d (Ave. wastewater volume discharged)

$N_f = 200$ days

$$L_N = (50-1) (100) (200)(.001) (P5)$$

$$LN = P 4,900/YR.$$

R13.2 Fees for Discharge of Effluents for agricultural purposes

- Fees for discharge of effluents for agricultural purposes shall be assessed fixed (Permit) fee, provided that the wastewater shall not drain into water bodies



- Provided further that the conditions under Rule 14.6 are met.
- Once the Standards for land discharge have been developed ,the wastewater discharge fee shall be applied .
- Discharge on land other than for agricultural purposes shall be outright charged a wastewater discharge fee based on the above formula. Applicable conditions under rule 14.6 shall apply



R13.3 Wastewater Reuse for Irrigation and other agricultural purposes

- The DA ,through its implementing agencies and bureaus shall provide guidelines for the safe re-use of waste water for irrigation and other agricultural purposes.
- Such guidelines shall form the basis for the department to set standards for disposal on land and computation of waste water discharge fee.



R13.4 Schedule of Implementation

- Unless otherwise stated herein, the wastewater charge system shall be implemented immediately in all areas upon the effectivity of this IRR.



R13.5 Discharge for surcharge

- New sources of pollution subject to the non-attainment provisions will be assessed a 20% surcharge on the annual discharge fee for the pollutant for which the area is designated non-attainment



Wastewater Charge System

- Expansion of Coverage
- Wastewater Recycled with Zero Discharge
- Wastewater Charges in ECOZONE
- Sewerage Treatment Plant
- Fees Collected from LLDA Area



Discharge Permits

→ *Legal authorization to discharge wastewater, as granted by DENR*



Discharge Permits

- For : owners/operators of facilities that discharge regulated water pollutants
- Required Permit Info, among others:
 1. quantity and quality of effluent
 2. compliance schedule
 3. monitoring requirement



...Permits

- Industries w/o permit, 12 months after IRR effectivity to secure permit
- Effluent trading - allowed per WQMA



R14.1 Who May Apply for a Wastewater Discharge Permit

- Any person that shall discharge in any manner wastewater into Philippine waters and/or land shall secure a wastewater discharge permit from the Regional Office of the Bureau.



R14.2 Requirements for First Time Application

Engineer's Report prepared by a registered chemical engineer, sanitary engineer or pollution control officer containing the ff:

- a) Vicinity map identifying the street address , location or plant premises
- b) The nature of project or business
- c) Production capacity, quantity or volume of and the generic name (s) of products

- d) the nature & character of the applicant's waste water and its physical and chemical composition;
- e) total daily volume of discharge of raw waste water;
- f) treatment process and its treatment efficiency;
- g) the total daily volume of of water consumption and discharge of final treated waste water or effluent;

- h) the name of receiving body of water and its official water classification and in case of land discharge, the nearest receiving body of water and its official water classification;
- i) information on flow measurement equipment and procedure;
- j) Pollution prevention/Environmental Management System;
- k) DENR ID Number as hazardous wastes generator

- l) Statement of the cost incurred in the installations and maintenance of waste water treatment facility ,if any,
- m) quality and quantity of abstracted water
- n) copy of the Environmental Compliance Certificate(ECC) from the Department or Certificate of Non-Coverage (CNC) as applicable

R14.3 Renewal Of Discharge Permit

- Existing Permittees shall submit the ff: in the application for renewal of discharge permit:
 - a) copies of the quarterly SMR for the immediately preceding year;
 - b) A copy of the the Certificate of Accreditation of the PCO duly issued by the DENR or appointment/designations as such by the Managing Head;

- c) Official Receipt for the payment of the applicable Permit Fee and the Wastewater Discharge Fee
- d) Other Documents that may be required related to Land Application.

R14.4 Processing of the Application for a Waste Water Discharge Permit

- The RO shall act on the application for a waste water Discharge Permit within thirty (30) working days from receipt of all the requirements.

14.5 Permit Fee

The applicant shall pay an annual permit fee following the schedule below:

<i>Volumetric Rate of Discharge</i>	<i>Amount Annual Fee (Pesos)</i>	
<i>Zero Discharge</i>	<i>2,000.00</i>	
	<i>Without Heavy Metals</i>	<i>With Heavy Metals</i>
<i>Below 10 m³/day</i>	<i>2,000.00</i>	<i>2,600.00</i>
<i>> 10 m³/day – 30 m³/day</i>	<i>2,200.00</i>	<i>2,800.00</i>
<i>> 30 m³/day – 100 m³/day</i>	<i>2,500.00</i>	<i>3,100.00</i>
<i>> 100 m³/day – 150 m³/day</i>	<i>2,700.00</i>	<i>3,300.00</i>
<i>> 150 m³/day</i>	<i>3,300.00</i>	<i>3,900.00</i>

Requirements for the Approval and Issuance of a Wastewater Discharge Permit for Discharge of Effluents for Agricultural Purposes

- a) Certified true copy of land ownership or notarized copy of agreement between the owner of the land where the effluent is to be applied and the discharger /permitee
- b) The waste water that shall be used for land application shall not contain toxic or hazardous substances (as defined in RA 6969)

- c) No waste water applied for agricultural purposes shall directly or indirectly seep or drain into groundwater or nearby surface waters which will affect the quality of such ground and/or surface water.
- d) A certification from the D.A. stating that the “quantity, quality and distribution methodology of application are suited for agricultural purposes” shall be submitted

- e) Land application shall be used only during periods of low surface flow to enhance loading limit compliance .
- f) Submission of a baseline groundwater quality data and self-monitoring report within the discharge areas, and installation of at least one groundwater monitoring well which shall be drilled in each dominant direction of groundwater movement

- g) Submission of an emergency plan- which shall respond to emergencies that can prevent or minimize damage to equipment, land, groundwater, etc., and or public health.
- h) The plan shall highlight the design consideration, system operation, treatment/monitoring of soil, crops, effluent and groundwater before/after irrigation. Such requirements shall be in addition to Section 14.2

14.9 Effectivity of the Discharge Permit

The Discharge Permit shall be valid for a maximum period of five (5) years from the date of its issuance, renewable for 5-years period.

14.9 Effectivity of the Discharge Permit

The Department may, however, renew the discharge permit valid for a longer period if the applicant has adopted waste minimization and waste treatment technologies, consistent with incentives currently provided has been paying the permit fees on time.

Discharge Permit

- Posting of Permit
- Transfer of Permits
- Plant Operational Problems
- Self-Monitoring Reports
- Procurement of Effluent Quota Allocation
- Pollution sources connected to sewerage systems
- Effluent Trading



14.11 Ground for Suspension or Revocation of Permits

After due notice and hearing, the Department thru the Bureau may suspend or revoke any existing and valid permit on any of the following grounds:

- a. Non-compliance with or gross violation of any provision of the Act, these rules and regulations and/or permit conditions;*
- b. Deliberate or negligent submission of false information in the application for permit that lead to the issuance of the permit.*

c. Deliberate or negligent submission of false monitoring data or report required in the discharge permit;

d. Refusal to allow lawful inspection conducted by the Department thru the Bureau of duly authorized personnel;

e. Non-payment of appropriate wastewater discharge fees within a 30-day cure period from the date such payment is due;

f. Other grounds provide by law.

14.15 Plant Operational Problems

14.15.1 In the event that the permittee is temporarily unable to comply with any of the conditions of the Wastewater Discharge Permit due to a breakdown of the any installation covered by the permit, for any cause, he or his pollution control officer shall immediately notify the Regional Office of such breakdown within 24 hours from occurrence for such breakdown.

While the necessary installation is not operational, the facility shall temporarily cease to discharge if the breakdown will result in a discharge of more than 10% of the prescribed standard, or pose an

imminent danger to the environment or public health. Failure to do so shall result in maximum penalty imposed by law and liability for damages.

14.15.2 Within seven (7) working days from such notification, the permittee shall submit a report to the Regional Office detailing the cause(s) of such breakdown, and the steps being taken to solve the problem and/or to prevent its recurrence.

The report shall include the estimated duration of the breakdown, the intent toward reconstruction or repair of such installation and such other relevant information or data as may be required by the Bureau.

14.15.3 Within five (5) working days of the receipt of the report, the Regional Office shall evaluate the proposed measures that will be undertaken by the permittee. The assessment shall determine if the proposed measures is sufficient to prevent significant harm to the environment. The assessment, including the circumstances surrounding the breakdown, shall serve as the basis of the imposition of additional requirements, corrective and/or rehabilitative measures as well as fines, penalties and other enforcement actions on the part of the Bureau.

14.15.4 Upon Completion of the necessary repair or rehabilitation works, the Regional Office shall be notified within three (3) working days. Within seven (7) days of the receipt of such notification, the regional office concerned shall determine whether the facility would be allowed to discharge and assess the fine, if applicable.

14.18 Pollution Sources Connected to Sewerage Systems

Pollution sources currently discharging to existing sewerage systems with operational wastewater treatment facilities shall be exempt from the permit requirement. Provided that, in the absence of, or pending the establishment of a sewerage system, pollution sources shall be covered by the permit requirement.

14.19 Effluent Trading

Effluent trading may be allowed among water pollution sources within a WQMA subject to regulations to be issued by the Department.

Prohibited Acts

- Depositing material of any kind which could cause water pollution
- Discharging, injecting or allowing to seep into the earth any substance that would pollute groundwater
- Operating facilities that discharge regulated water pollutants without the valid required permits



Prohibited Acts

- Operating Facilities that discharge regulated water pollutants without the valid required permits or after the permit was revoked for any violation of any condition therein



Prohibited Acts

- Refusal to allow entry, inspection and monitoring by the Department in accordance with this Act
- Refusal to allow access by the Department to relevant reports and records in accordance with this Act



Prohibited Acts

- Refusal or failure to submit reports whenever required by the Department
- Refusal or failure to designate pollution control officers whenever required by the Department



Prohibited Acts

- Non-compliance of LGU with the WQM Action Plan
- Direct use of booster pumps in the distribution system or tampering with the water supply



Fines, Damages and Penalties

- *Fines of 10,000 – 200,000 PhP for every day of violation; upon PAB recommendation (rates to be increased 10% every 2 years);*
- *Closure, suspension of development or construction or cessation of operations, upon PAB recommendation;*
- *2 to 4 yr imprisonment for failure to clean up & 50,000 – 100,000 for every day of violation;*



Fines, Damages and Penalties

- *6 to 12 yrs imprisonment & 500,000 PhP for every day of violation for such refusal resulting in serious injury or death and/or irreversible contamination;*



- **Gross Violation** - Imprisonment - 6 to 10 years
- - Fine P 0.5-3M / day
- + Criminal Charge
- deliberate discharge of pollutants per RA 6969
- 5 or more violations of any of the prohibited acts within 2 years
- blatant disregard of PAB order



**Thank You
for Your Attention**