CHAPTER XIII: "SOLID WASTE COLLECTION AND DISPOSAL, EXCRETA DISPOSAL AND DRAINAGE"

OF THE

CODE ON SANITATION OF THE PHILIPPINES
(P.D. 856)
IMPLEMENTING RULES AND REGULATIONS OF CHAPTER XVII - "SEWAGE COLLECTION AND DISPOSAL, EXCRETA DISPOSAL AND DRAINAGE" OF THE CODE ON SANITATION OF THE PHILIPPINES (P.D. 856)

TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Scope</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Definition of Terms</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Individual Excreta and Sewage Disposal System</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>Design and Construction of Septic Tanks,</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Leaching Tile Field and House Sewers</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Public Sewerage System</td>
<td>16</td>
</tr>
<tr>
<td>6</td>
<td>Damage to Public Sewer of Sewage Disposal Facilities</td>
<td>18</td>
</tr>
<tr>
<td>7</td>
<td>Abandoned Sewer and Sewage Disposal Facilities</td>
<td>18</td>
</tr>
<tr>
<td>8</td>
<td>Drainage</td>
<td>19</td>
</tr>
<tr>
<td>9</td>
<td>Special Establishment</td>
<td>19</td>
</tr>
<tr>
<td>10</td>
<td>Special Precaution for Radioactive Excreta and Urine of Hospitalized Patient</td>
<td>19</td>
</tr>
<tr>
<td>11</td>
<td>Penal Provision</td>
<td>19</td>
</tr>
<tr>
<td>12</td>
<td>Separability Clause</td>
<td>20</td>
</tr>
<tr>
<td>13</td>
<td>Repealing Clause</td>
<td>20</td>
</tr>
<tr>
<td>14</td>
<td>Effectivity</td>
<td>20</td>
</tr>
<tr>
<td>Table I</td>
<td>Quantities of Sewage Flow</td>
<td>21</td>
</tr>
</tbody>
</table>
IMPLEMENTING RULES AND REGULATIONS OF CHAPTER XVII - "SEWAGE COLLECTION AND DISPOSAL, EXCRETA DISPOSAL AND DRAINAGE" OF THE CODE ON SANITATION OF THE PHILIPPINES (P.D. 856)

To carry out the provisions of Chapter XVII - "Sewage Collection and Disposal, Excreta Disposal and Drainage", these rules and regulations are hereby formulated for implementation and strict compliance of all concerned.

SECTION 1: SCOPE

These implementing rules and regulations shall apply to all public and private sewage and excreta collection and disposal system project planned by any government agency or instrumentality including government-owned or controlled corporations, private organizations, firms, individuals or other entities.

SECTION 2: DEFINITION OF TERMS

As used in these rules and regulations, the terms below shall be defined as follows:

1. Approved excreta disposal facilities shall mean any of the following:

1.1. Any approved type of privy such as:

   a. Flush toilet connected to:

      a.1 community sewer
      a.2 imhoff tank
      a.3 septic tank
      a.4 digester tank
1.5 chemical tank
b. Pit privy such as:
   b.1 Ventilated Improved Pit (VIP) Latrine
   b.2 Pit type
   b.3 "Antipolo" toilet
1.2 Any disposal device approved by the Secretary of Health or his duly authorized representative.

2. Communal Excreta Disposal System - an excreta disposal system serving a group of dwelling unit.

3. Chemical Privy - a privy where fecal matter is deposited into a tank containing a caustic chemical solution to prevent septic action while the organic matter is decomposed.


5. Digestive Cesspool - a pit for the reception or detention of sewage.

6. Distribution Box - a small concrete receptacle between the septic tank and the drain field from which lines of drain tiles extend and which acts as surge tank to distribute the flow of sewage equally to each line of drain tiles.

7. Distribution line of a leaching tile system - the pipe from within the distribution box to the drainfield.

8. Domestic Sewage - the sewage containing human excrement and liquid household waste. Also called sanitary sewage.

9. Drainage System - the drainage pipes of a plumbing system taking the waste water from the plumbing fixtures and delivering it to the sewer or some other outlet.

10. Freeboard or Airspace of a Septic Tank - the distance as measured from the liquid level line to the inside top of the septic tank.

11. House Sewer - the pipeline conveying sewage from the house or building to the septic tank or to any point of discharge.

12. Individual Excreta Disposal System - an excreta disposal system serving a dwelling unit.

13. Individual Sewage Disposal System - a sewage disposal system serving a dwelling unit/building.

14. Local Health Officer - Provincial, City or Municipal Health Officer.

15. Local Health Authority - an official or employee responsible for the application of a prescribed health measure in a local political subdivision. For the provincial level, the Local Health Authority is the Governor, and the Mayor for a city or municipality as the case maybe.

16. Operational Permit - the permit to discharge effluent from sewage disposal system.

17. Privy - a structure which is not connected to a sewerage system and is used for the reception, disposition and storage of feces or other excreta from the human body.

18. Public Sanitary Sewer - is a common sewer to which all abutters have equal rights of connections.

19. Public Toilet - a toilet facility located at public places like markets, bus stations, buildings, etc. intended for public use.

20. Sanitary Engineer - a person duly registered with the Board of Examiners for Sanitary Engineers (R.A. 1364) and who heads the sanitation division or section or unit of the provincial/city/municipal health office or employed with the Department of Health or its regional field health units.

21. Sanitation Inspector - a government official or personnel employed by the national, provincial, city or municipal government, who enforces sanitary rules, laws and regulations and implements environmental sanitation activities under the supervision of the provincial/city/municipal health officer/sanitary engineer.

22. Secretary - the Secretary of Health.
23. Septic Tank - a water tight receptacle which receives the discharge of a plumbing system or part thereof, and is designed to accomplish the partial removal and digestion of the suspended solid matter in the sewage through a period of detention.

24. Septic Tank Absorption Bed or Drain Field - an underground system of pipes leading from the outlet of the septic tank, consisting of open jointed or perforated pipes so distributed that the effluent from a septic tank is oxidized and absorbed by the soil.

25. Sewage Disposal System - a system of collection, transportation, treatment and disposal of sewage.

26. Sewer pipe, conduit or channel intended to convey sewage.

27. Sewerage or Sewerage Works - system of pipes, pumps, devices and other appurtenant structures for the collection, transportation and final disposal of waste water.

SECTION 3: INDIVIDUAL EXCRETA AND SEWAGE DISPOSAL SYSTEM

3.1 Individual Excreta Disposal System

3.1.1 Every new house/building to be constructed shall be provided with plan and specifications for excreta disposal system approved by the local health authority prior to construction. The city or municipal Building Official shall refer all applications for Sanitary (Plumbing) Permit to the local health authority for checking of sanitary facilities, prior to the issuance of the building permit.

3.1.2 All houses/buildings without an approved excreta disposal system shall be required to construct such facilities under the supervision of the local health officer.

3.1.3 The privy recommended for use is the sanitary privy. It shall conform with the following minimum requirements.

a. It shall consist of an earthen pit, a floor covering the pit, and a water-sealed bowl. It shall be so constructed in order that fecal matter and urine be deposited into the earthen pit

b. The pit shall be at least one meter square.

c. The floor should cover the pit tightly to prevent the entrance of flies. It shall be constructed of concrete or other imperious material.

d. The water-sealed bowl shall be joined to the floor so as to form a water-tight and insect proof joint.

e. A suitable enclosure, shall be constructed to provide comfort and privacy for the users of the privy.

f. Wooden floors and seat risers shall not be used.

3.2 Individual Sewage Disposal System

3.2.1 Installation requirements

a. When a public sanitary sewer is not available in any street abutting such a lot or premises, waste water piping from any building or works shall be provided with individual sewage disposal system of approved type and design.

b. The public sanitary sewer may be considered as not being available when such public sanitary sewer is located more than 100 meters from any proposed building on any lot or premises.

c. Individual sewage disposal system shall not be installed, maintained or operated on property accessible to public sanitary sewer system.

d. Sanitary (Plumbing) Permit shall not be issued for installation, alteration or repair of any private sewage disposal system or part thereof, on any lot for which a connection with public sanitary sewer is available.

e. Each individual sewage disposal system shall serve a dwelling on an individual lot and shall be properly maintained in good working condition by the owner. Any failure to provide and properly maintain such a system or to discharge all the sewage from the premises into the disposal system may be declared a public health hazard by the local health authority.
f. Whenever an approved public sanitary sewerage system is accessible to the property, any individual sewage disposal system shall be abandoned and the house sewer shall be directly connected to the public sewer.

3.2.2 Approval

a. The property owner or his authorized representative agent shall file an application for a Sanitary (Plumbing) Permit with the local health authority for construction, installation, alteration, or extension of an individual sewage disposal system and the sub-surface absorption system or other treatment device prior to start of work.

b. The application shall be made in writing on a form prescribed by the Department of Health and shall contain all pertinent information relative to the location, construction, installation, alteration or extension of an individual sewage disposal system.

c. Drawings and specifications

The Local Health Authority having jurisdiction may require any or all of the following information before Sanitary (Plumbing) Permit is issued for a house or building sewer or an individual sewage disposal system:

i. Plot plan drawn to scale completely dimensioned, showing direction and approximate slope of surface, location of all present or proposed retaining walls, drainage channels, water supply lines or wells, paved areas and structures on the plan, number of bedrooms or plumbing fixtures in each structure and location of the building sanitary sewer and individual sewage disposal system with relation to lot lines and structures.

ii. Necessary plans and specifications shall be prepared, signed and sealed by a Registered Sanitary Engineer or a Registered Master Plumber, as the case may require.

iii. A log of soil formations and ground water levels as determined by test holes dug in close proximity to any proposed seepage pit or disposal field, together with a statement of water absorption characteristics of the soil at proposed site as determined by approved percolation tests.

d. Location of any toilet or sewage disposal system shall be in accordance with the plans and specifications prescribed by the Department of Health.

3.2.3 Disposal of Sewage

a. Untreated sewage and effluent of septic tank or other putrescible or offensive wastes shall not be discharged onto the surface of the ground or into any street, road, alley, open excavation, storm water sewer, land drain ditch, adjoining property, watercourse or body of water.

b. Sewage and effluent of a septic tank or other putrescible, impure or offensive wastes shall not be discharged into an abandoned water supply well, spring, or cistern or into a natural or artificial well, sink hole, crevices or other opening extending into limestone, sandstones or other rock or shale formation.

c. Individual sewage disposal system utilizing leaching fields, leaching beds, or leaching wells shall not be permitted where the depth to normal ground water or rock strata is less than 1.20 meters.

d. A leaching system shall not be installed in an area where the texture, structure and porosity of the soil are not suitable as determined by a percolation test performed by a registered civil/sanitary engineer. The local health authority may require as many percolation tests as may be necessary to determine the acceptability of the site.

e. No leaching tile field or bed shall be installed where percolation rate is less than 2.54 cm. (1 in.) fall in water level in the test holes in 60 minutes.

f. No seepage pit or leaching well shall be installed where the percolation rate is less than 2.54 cm (1 in.) fall in water into the test holes in 30 minutes.
g. No person shall install individual household sewage disposal system in a new subdivision, unless site is considered to be impracticable and inadvisable to install a public sewage collection system with the required treatment.

3.2.4 Operational Permit

a. No person shall discharge or permit or cause to be discharged the effluent from an individual sewage disposal system or other putrescible or offensive wastes from his premises unless an application for an operational permit has been approved by the local health authority.

b. Only a person or dwelling owner who complies with the requirements of these rules and regulations shall be entitled to receive and retain an operational permit.

c. The local health authority at any reasonable time may inspect the sewage disposal system, sample the effluent, or take any other step which he deems necessary to ensure compliance with these rules and regulations. The local health authority may utilize inspection and reports submitted by local health officer, sanitary engineer or other qualified national or local government personnel to determine operational compliance.

3.2.5 Lot Dimensions and Areas

a. Individual sewage disposal systems shall be installed on sufficient area and suitable topography to permit compliance with these rules and regulations.

b. The design, construction, installation, location, maintenance, and operation of individual sewage disposal systems including septic tanks, leaching tile fields, leaching beds, leaching wells, house sewers, privies and any other treatment system or part thereof shall comply with the minimum standards and engineering practices which are acceptable to the Department of Health.

SECTION 4: DESIGN AND CONSTRUCTION OF SEPTIC TANKS, LEACHING TILE FIELD AND HOUSE SEWERS

4.1 Septic Tank

4.1.1 Design Capacity

The septic tank capacity may be determined from the quantities of sewage flow contained in Table 1 Chapter XVII of the Code on Sanitation of the Philippines (see Annex), based on adequate detention time interval resulting in efficient sedimentation. Daily flow from metered water consumption may be used to estimate flow when available. For buildings with occupants, the number of persons to be served shall be computed based on the number of rooms and considering each room as occupied by two persons or on the basis of the actual number of persons served by the tank, whichever is the greater.

Tanks constructed in series may be used to accomplish the required capacity provided the first tank will furnish at least half of the required capacity. This capacity requirement allows for the use of all household appliances including garbage grinders and automatic washers.

4.1.2 Inlet and outlet

a. The invert level of the inlet shall not be less than 5 centimeters (2 inches) above the liquid level of the tank.

b. A vented inlet baffle or sanitary tee shall be provide to divert the incoming sewage downward. The baffles or tee shall penetrate at least 15 cm. (6 inches) below the liquid level, but the penetration shall not be greater than that allowed for the outlets baffle or sanitary tee.

c. The outlet shall be fitted with a sanitary tee or baffle.

d. The outlet baffle or sanitary tee device shall extend through the scum layer above the liquid level of the tank to approximately 2.5 cm. (1 inch) from the inside top from the tank.

e. The invert of the inlet pipe shall be at a level not less than 5 cm. (2 in.) above the invert of the outlet pipe.
f. Inlet and outlet pipe fittings or baffles, through compartment partitions shall have a free vent area equal to the required cross-sectional area of the house sewer discharging therein.

4.1.3 Tank Proportions

a. The septic tank may have various shapes provided the capacity, inlet, outlet and depth requirements are met. Generally the septic tank is rectangular in shape. If 2 or more compartments are used, the first compartment shall have the capacity from one half to two thirds of the total volume of the tank.

b. The septic tank shall have a liquid drawing depth not less than 1.20 meters (4 feet)

c. The vertical distance from the liquid level to the inside top of the tank shall be at least 20 cm. (8 in.).

4.1.4 Inspection Manholes

The septic tank shall be provided with an inspection manhole 0.36m² (4ft²) in minimum area or by an equivalent removable cover slab to provide access to the inlet and outlet devices and to the compartment of the tank for inspection and cleaning. One access manhole shall be located over each compartment. Septic tanks installed under concrete or block top paving shall have the required manholes accessible by extending the manhole openings to grade.

4.1.5 Construction of Septic Tank

a. Plans and specifications for all septic tanks shall be submitted to the local health authority for approval. Such plans and specifications shall show all dimensions, reinforcement, structural calculations and such other pertinent data as may be required. Independent laboratory tests and calibrations shall be provided on pre-fabricated septic tanks as may be required by the local health authority.

b. Septic tanks shall be constructed of sound durable materials, not subject to excessive corrosion or decay and shall be watertight. Each such tank shall be structurally designed to withstand all anticipated earth or other loads and shall be installed level on a solid bed. Structural and hydraulic design shall be in accordance with good engineering practice.

c. Approved pre-fabricated septic tanks may be used. After installation, the tank shall be filled with sufficient amount of water to prevent floating.

d. Roof drains, foundation drains, area drains or cistern overflows shall not be made to enter the septic tank or any part of the treatment system.

4.1.6 Location

a. The septic tank shall be located not less than 25 meters from any well, spring, cistern, or other sources of drinking water supply; not less than 1.5 m. (5 ft.) from any water service line; and not less than 3.0 m. (10 ft.) away from water main.

b. Septic tanks shall be located such that desludging equipment can have access to the opening manholes conveniently.

c. Septic tanks shall not be located under the building.

4.1.7 Maintenance

a. Septic tanks shall be cleaned before excessive sludge or scum is allowed to accumulate and seriously reduce the settling efficiency.

b. Septic tanks shall be inspected at least once a year and be cleaned when the bottom of the scum mat is within 7.50 (3 inches) of the bottom of the outlet device or the sludge and scum has reduced the liquid capacity by 50%.

c. Tanks shall not be washed or disinfected after cleaning. A small residual of sludge shall be left in the tank for seeding purposes.

d. Sludge from septic tanks shall be disposed of by burial or by any other method approved by the Secretary or his duly authorized representative and not by being emptied into open field, ditches or bodies of water.
4.2 Leaching Tile Field

4.2.1 Design

a. A leaching tile system utilizing trenches 0.45 m. - 0.90 m. wide is considered to be a leaching tile field.

b. A leaching tile system utilizing trenches more than 0.90 meter (36 inches) wide is considered to be a leaching bed.

c. Leaching tile fields and leaching beds, based on percolation tests, shall have a minimum absorption area equivalent to that required for a small dwelling unit having sewage flow of 50 gal/cap/day. Only the trench bottom area is to be calculated as the absorption area.

d. Absorption area requirements for residences shall conform to the following:

<table>
<thead>
<tr>
<th>Average time required for water to fall 2.54 cm. (1&quot;) is indicated by percolation test</th>
<th>Suitability of leaching soil</th>
<th>Square meters of trench bottom of leach bed base required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 minute or less</td>
<td>good</td>
<td>6.5 (70 ft.2)</td>
</tr>
<tr>
<td>5 minutes</td>
<td>good</td>
<td>11.61 (125 ft.2)</td>
</tr>
<tr>
<td>10 minutes</td>
<td>good</td>
<td>15.33 (165 ft.2)</td>
</tr>
<tr>
<td>15 minutes</td>
<td>fair</td>
<td>17.65 (190 ft.2)</td>
</tr>
<tr>
<td>30 minutes</td>
<td>fair</td>
<td>23.22 (250 ft.2)</td>
</tr>
<tr>
<td>45 minutes</td>
<td>poor</td>
<td>27.87 (300 ft.2)</td>
</tr>
<tr>
<td>60 minutes</td>
<td>poor</td>
<td>30.66 (330 ft.2)</td>
</tr>
</tbody>
</table>

e. Leaching tile field or leaching bed or leaching well or chamber shall not be installed in any of the following:

i. In swampy area or where ponding or flooding is likely to occur.

ii. Where the percolation rate exceeds 60 mins. per 2.5 cm. (1 in.) of water fall.

iii. Where the depth to normal ground water or rock strata is less than 1.2 m (4 ft.) below the bottom of the device.

4.2.2 Construction

a. Drain lines shall be constructed of materials not subject to excessive deterioration and shall be laid with open joints, except that perforated clay tile, perforated bituminous fiber pipe, or other approved materials may be used, provided that sufficient openings are available for distribution of the effluent into the trench areas. (Total area of perforations shall be at least 150% of the cross-sectional area of the pipe.)

b. The drain lines shall have a minimum diameter of 100mm. (4 in.) and shall have a relative level grade, but in no instance shall have a fall greater than 1 cm. in 60 minutes.

c. In leaching tile fields the minimum distance between centerline of trenches shall be at least 1.80 m. (6 ft.).

d. In leaching beds, lines for distributing effluent shall be spaced 0.90 m. (3 ft.) from side to side of trench walls.

e. Final grading shall be completed prior to installing a leaching field or leaching bed.

f. The leaching tile field or leaching bed shall have a minimum depth of 30.0 cm. (12 in.) of clean gravel, stone or slag fill, extending at least 5.0 cm. (2 in.) above and 15 cm. (6 in.) below the drain lines. The filter material shall be 2 cm. to 6.5 cm. (0.80 to 2.5 in.) in size.

g. The absorption trenches shall have a minimum depth of 45 cm. (18 in.) but not more than 75 cm. (30 in.)

h. Before placing filter material and drain lines in a prepared excavation, all smeared or compacted surfaces shall be removed from trenches by raking to a depth of 2.5 cm. and the loose material is removed. Clean stone, gravel, slag or similar filter material varying in size from 2.0 cm. to 6.5 cm. shall be placed in the trench to the depth and grade required by this section. Drain pipe shall be placed on filter material in an approved manner. The drain lines shall then be covered with pervious material to the minimum depth.
of 5 cm. as required by this section, and this covered with untreated building paper, straw or similar porous material to prevent closure of voids with earth backfill.

i. Where two or more drain lines are installed, an approved distribution box of sufficient size to receive lateral lines shall be constructed at the head of each disposal field. The inverts of all outlets shall be level and the invert of the inlet shall be at least 2.5 cm. above the outlets. Suitable baffles shall be provided to insure equal flow. Distribution boxes shall be built on a level concrete slab installed in natural or compacted soil.

j. All laterals from an approved distribution box to the disposal field where the grade exceeds 1:2000 (0.0005%) shall be bell and spigot vitrified clay or other approved pipe with water tight joints. Multiple disposal field laterals, whenever practicable, shall be of uniform length.

k. Connections between a septic tank and a distribution box, or between a distribution box and drainfield, shall be laid with approved watertight joints on natural ground or compacted fill.

l. Heavy equipment shall not be used over the tile field or bed after the tile and gravel are in place.

m. Disposal fields shall be constructed as follows:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum number of drain lines per field</td>
<td>1</td>
</tr>
<tr>
<td>Maximum length of each line</td>
<td>30.0 m</td>
</tr>
<tr>
<td>Minimum bottom width of trench</td>
<td>0.45 m</td>
</tr>
<tr>
<td>Minimum spacing side wall to side wall</td>
<td>0.90 m</td>
</tr>
<tr>
<td>plus 0.6 m for the additional</td>
<td>0.3 m of depth</td>
</tr>
<tr>
<td>Minimum depth of earth cover over lines</td>
<td>0.30 m</td>
</tr>
<tr>
<td>Maximum grade of lines</td>
<td>0.5%</td>
</tr>
<tr>
<td>Minimum grade of lines</td>
<td>0.25%</td>
</tr>
<tr>
<td>Minimum filter material over drain line</td>
<td>5.0 cm.</td>
</tr>
</tbody>
</table>

4.2.3 Location

The leaching tile field or leaching bed shall be located not less than twenty five (25) meters (80 ft.) from any well, spring, cistern, or other source of drinking water supply; not less than 3 m. (10 ft.) from an occupied building; and not less than 1.5 m. (5 ft.) from any lot line.

4.3 House Sewers

4.3.1 Design

The size of any house sewer shall be determined on the basis of the total number of fixture units drained by such sewer. Minimum size shall not be less than 100 mm. (4 in.) in diameter.

4.3.2 Materials

a. Vitrified clay sewer pipe
b. Asbestos cement pipe
c. Cast iron pipe
d. Bituminized fiber pipe
e. Glass pipe
f. Any other pipe approved by the Bureau of Standards, Department of Trade and Industry

4.3.3 Installation

a. The house sewer shall be laid in good alignment and at a uniform slope of not less than 1:50 (0.02%) toward the point of disposal; provided that, where it is impracticable, due to the depth of the street sewer or to the structural features or to the arrangement of any building or structure, to obtain a slope of 1:50 (0.02%), any such pipe or piping 100 mm diameter or larger may have a slope of not less than 1:100 (0.01%).

b. Whenever the house sewer is located within 25 meters of a well or spring or any drinking water source, the house sewer shall meet the ten (10) foot head of water test for fifteen minutes. When water is not available or when there is a danger of freezing, the air or smoke test may be used.

c. House or building sewer piping shall be laid on a firm bed throughout its entire length, and any such piping laid in ground shall be laid on a bed of approved materials and shall be adequately supported.
d. House sewer of other drainage piping or part thereof, which is made of materials other than those approved for use under or within a building, shall not be installed under or within 0.60 m. (2 ft.) of any building, or structure or parts thereof, nor less than 0.30 m. (1 ft.) below the surface of the ground. The provisions of this paragraph include structures such as porches and steps, whether covered or uncovered, roof patios, carports, covered walls, covered driveways and similar structures or appurtenances.

e. Non-metallic house sewer piping shall not be run or laid in the same trench with water service pipes or any underground water pipes unless both of the following requirements are met:

i. The bottom of the water piping at all points shall be at least 30 cm. (1 ft.) above the top of the sewer pipeline.

ii. The water piping shall rest on a solid shelf at one side of the common trench.

SECTION 5: PUBLIC SEWERAGE SYSTEM

5.1 Any person, government or private entity, firm and/or agency, corporation, institution or local government unit which intends to construct a public sewerage system or sewage treatment plant shall be required to submit plans, design and the necessary data and specifications to the Secretary of Health or his duly authorized representative, for approval thereof prior to start of work. In case there is an existing one, its as-built plan and specifications shall be submitted for review and approval.

5.2 Provision of Sewerage System

5.2.1 Subdivision

a. Approval

i. Plans of subdivisions indicating all lots therein shall be submitted to the Department of Health for approval of the sewage disposal system before any construction is started or before any of the lots in the subdivision are sold or offered for sale whether or not each sale entails transfer of title or deed.

ii. If individual sewage disposal systems or individual water supply systems or both are proposed, the plot shall contain all pertinent information relative to the installation of these systems.

b. Provision of Sewerage

Whenever feasible, the proposed subdivision shall be served by extension of the existing public sanitary sewerage system of by a community sewerage and sewage treatment system.

c. Proper Disposal of Sewage

The proper disposal of sewage in subdivisions shall conform with the provision of Section 3 of these rules and regulations.

5.2.2 Operation of Sewage Treatment Plants

a. The sewage treatment plant shall be capable of treating the flow of sewage discharged by the community in the area.

b. The type of sewage treatment plant shall be approved by the Secretary or his duly authorized representative and the effluent from such treatment plants shall meet the standards formulated by the Department of Environment and Natural Resources.

c. The sewage treatment plant shall provide laboratory facilities for control tests and other examinations needed.

d. Operating data, control tests and such other records as may be required shall be forwarded to the local health authority.
e. The local health authority shall be informed in case of breakdown or improper functioning of the treatment works.

f. Where sewage treatment plant is provided, no sewage shall be allowed to by-pass the plant.

g. The sewage treatment plant shall be managed by a registered sanitary engineer.

SECTION 6: DAMAGE TO PUBLIC SEWER OF SEWAGE DISPOSAL SYSTEM

6.1 It shall be unlawful for any person to discharge, by any means whatsoever, into any plumbing fixtures, such as floor drain, sump, receptacle or device which is connected to any drainage system, public sewer, septic tank or cesspool any ashes, cinders, solids, rags, flammable, poisonous or explosive liquids or gases, oils, grease and any other thing whatsoever which would or could cause damage to the public sewage disposal system, whether the system is government or privately-owned.

SECTION 7: ABANDONED SEWER AND SEWAGE DISPOSAL FACILITIES

7.1 Every abandoned building or house sewer or part thereof, shall be plugged or capped within 1.5 meter of the property line.

7.2 Every cesspool, septic tank and seepage pit which has been abandoned or has been discontinued otherwise from further use or to which no waste or soil pipe from a plumbing fixture is connected, shall have the sewage removed therefrom and be completely filled with earth, gravel, concrete or other approved material.

7.3 Every top cover of the cesspool, septic tank or seepage pit shall be removed before filling and the filling shall not extend above the top of the vertical portions of the sidewalls or above the level of any outlet pipe until inspection has been called. After an inspection by the local health office, the cesspool, septic tank or seepage pit shall be filled to the level of the top of the ground.

7.4 It is unlawful for a person owning or controlling any cesspool, septic tank, or seepage pit on his premises or in that portion of any public street, alley or other public property abutting such premises to refuse or neglect to comply with the provision of this section or upon receipt of notice from the local health authority.

7.5 Where disposal facilities are abandoned, consequent to connecting any premises with the public sewer, the person making the connection shall fill all abandoned facilities within 30 days from the time of connecting to the public.

SECTION 8: DRAINAGE

8.1 It shall be the responsibility of every local government unit to provide and maintain in a sanitary state and in good repair a satisfactory system of drainage in all inhabited areas where waste water from buildings and premises could empty without causing nuisance to the community and danger to the public health.

8.2 Buildings or premises producing waste water shall be connected to the municipal drainage system in all areas where it exists.

SECTION 9: SPECIAL ESTABLISHMENT

9.0 Establishments such as industrial, laundry, slaughter houses, dairies, poultries, piggeries, mining, hospitals, clinics, funeral parlors, laboratories and other similar establishments discharging waste water into receiving river or other water bodies which create pollution problems shall be required to obtain approval from the Department of Environment and Natural Resources before construction and issuance of sanitary permit by the local health office.

SECTION 10: SPECIAL PRECAUTION FOR RADIOACTIVE EXCRETA AND URINE OF HOSPITALIZED PATIENT

10.1 Patient given high doses or radioactive isotope for therapy shall be given toilet facilities separate from those used by “non-radioactive” patients.

10.2 Radioactive patients shall be instructed to use the same toilet bowl at all times and flush it at least three times after its use.

SECTION 11: PENAL PROVISION
11.1 Any person who shall violate, disobey, refuse, omit or neglect to comply with any of the provisions of these rules and regulations, shall be guilty of misdemeanor and upon conviction shall be punished by imprisonment for a period not exceeding six (6) months or by a fine not exceeding P1,000.00 or both, depending upon the discretion of the court.

11.2 Any person who shall interfere or hinder, oppose any officer, agent or member of the Department of Health or of the bureaus and offices under it, provincial, city or municipal health officers, sanitary engineers and sanitary inspectors in the performance of his duty as provided for under these rules and regulations, or shall tear down, mutilate, deface or alter any placard, or notice, affixed to the premises in the enforcement of these rules and regulations shall be guilty of misdemeanor and punishable upon conviction by imprisonment for a period not exceeding six (6) months or by a fine not exceeding P1,000.00 or both depending on the discretion of the court.

SECTION 12: SEPARABILITY CLAUSE

In the event that any rule, section, paragraph, sentence, clause or words of these rules and regulations is declared invalid for any reason, the other provisions thereof shall not be affected thereby.

SECTION 13: REPEALING CLAUSE

All pertinent rules and regulations which are inconsistent with the provisions of these implementing rules and regulations are hereby repealed or amended accordingly.

SECTION 14: EFFECTIVITY

These rules and regulations shall take effect after fifteen (15) days from date of publication in the official gazette or a newspaper of general circulation.

Approved on this 21st day of December nineteen hundred ninety five.

HILARION J. RAMIRO, J.B., M.D., M.H.A.
Secretary of Health

Date of Publication:
February 22, 1996

20

* Subsurface drain fields not recommended for secondary treatment

---

**Table 1: Quantities of Sewage Flow**

<table>
<thead>
<tr>
<th>Type of Establishment</th>
<th>ANNEX Gals. Day/Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small dwellings and cottages</td>
<td>50</td>
</tr>
<tr>
<td>Large dwellings with numerous fixtures</td>
<td>75-100</td>
</tr>
<tr>
<td>Multiple family residence</td>
<td>50</td>
</tr>
<tr>
<td>Rooming houses</td>
<td>40</td>
</tr>
<tr>
<td>Boarding houses</td>
<td>50</td>
</tr>
<tr>
<td>Hotels and motels</td>
<td>50</td>
</tr>
<tr>
<td>Restaurants (kitchen wastes per meal served)</td>
<td>1-2/2-3</td>
</tr>
<tr>
<td>Kitchen wastes at hotels, camps, boarding houses, etc., serving 3 meals/day</td>
<td>7-10</td>
</tr>
<tr>
<td>Tourist camps or trailer parks</td>
<td>35-50</td>
</tr>
<tr>
<td>Resort camps (night and day) with limited plumbing</td>
<td>50</td>
</tr>
<tr>
<td>Luxury camps</td>
<td>75-100</td>
</tr>
<tr>
<td>Work or construction camps (semi-permanent)</td>
<td>50</td>
</tr>
<tr>
<td>Day school without cafeterias, gymnasium or showers*</td>
<td>8</td>
</tr>
<tr>
<td>Day school with cafeterias but no gyms or showers*</td>
<td>12</td>
</tr>
<tr>
<td>(Quantity estimated from no. of meals served or 80% of enrolment)</td>
<td>20</td>
</tr>
<tr>
<td>Day school with cafeterias but no gyms and showers* (Quantity estimated from maximum no. expected to use gyms and showers in one day)</td>
<td>20</td>
</tr>
<tr>
<td>Boarding schools</td>
<td>75-100</td>
</tr>
<tr>
<td>Day workers at schools and offices</td>
<td>15</td>
</tr>
<tr>
<td>Hospitals* (Gallons per bed)</td>
<td>150-250</td>
</tr>
<tr>
<td>Public institutions other than hospitals</td>
<td>75-125</td>
</tr>
<tr>
<td>Factories (Gal./person/shift, exclusive of industrial wastes)</td>
<td>15-35</td>
</tr>
<tr>
<td>Public picnic parks (toilet wastes only)</td>
<td>5</td>
</tr>
<tr>
<td>Picnic parks, with bathhouse, showers and flush toilets</td>
<td>10</td>
</tr>
<tr>
<td>Swimming pools and bathing places*</td>
<td>10</td>
</tr>
<tr>
<td>Luxury residences and estates</td>
<td>100-150</td>
</tr>
<tr>
<td>Country clubs per resident members*</td>
<td>25-50</td>
</tr>
<tr>
<td>Country clubs per member present*</td>
<td>25-50</td>
</tr>
</tbody>
</table>
ACKNOWLEDGMENTS

The Department of Health is deeply indebted and express sincere appreciation to Dr. Mario C. Villaverde, Director of the Environmental Health Service for his role in bringing this implementing rules & regulations and the last from concept to reality.

The Policy, Standards and Regulation Section headed by Engr. Antonino A. Hormillosa and his technical staff for their enduring commitment in constantly nurturing this implementing rules & regulation from the beginning and perceptiveness along the way and Engr. Danilo de Guzman for his patience in developing the first draft.

Grateful thanks is express to the agencies, associations and organizations who shared their insights and experiences during the consultative-dialogue and series of public hearings nationwide. Their struggles, debates and even their temporary setbacks have greatly influenced this implementing rules & regulations in our quest to formulate, implement & enforce a doable sanitation laws. The following agencies, associations & organizations pursued their ongoing interest and valuable comments & contribution to this writing efforts;

1. Metropolitan Waterworks & Sewerage System
2. Local Water Utilities Administration
3. Philippine Waterworks Association of the Philippines
4. Philippine Association of Water Districts
5. National Association of Master Plumbers of the Philippines
6. Environmental Management Bureau, DENR
7. Davao City Water District
8. Metro Iloilo Water District
9. Housing Land Use & Regulatory Board
10. Department of Public Works and Highways
11. Philippine National Police-DILG, Baguio City
12. Philippine National Police-DILG, Iloilo City
13. Commission on Human Rights, Baguio City
14. Urban Sewerage Excavators of Baguio City
15. University of Baguio
16. University of San Agustin, Iloilo City
17. Ateneo de Davao
18. Philippine Society of Sanitary Engineers, Inc.
19. DOH Integrated Regional Field Officers
21. City Health Offices of Baguio City, Davao City, Iloilo City, Manila, Mandaluyong City, Quezon City, Makati City, Pasig City, Roxas City, Bacolod City, General Santos City, Dapakan City, Cavite City, and Caloocan City.
22. Municipal Health Offices of La Trinidad, Benguet, San Fernando, La Union, Medina, Misamis Oriental, Digos, Davao del Sur, and Malay, Aklan.
24. Plan International Philippines
25. Public Utilities Services Office (PUSO), Baguio City
26. Metro Manila Development Authority

Recognition is hereby express to the following DOH personnel who compassionately nurtured the spirit of collaborative effort in the final editing of this manuscript;

1. Dr. Manuel G. Roxas
   Undersecretary & Chief of Staff
2. Dr. Carmencita Noriega-Reodica
   Office for Public Health Services
3. Atty. Nocolas Lutero III
   Office for Legal Affairs
4. Mrs. Melahi Pons
   Health Policy Development Office
5. Engr. Victor V. Sabandeja
   Environmental Health Service

The Department of Health enjoins all agencies especially the Local Government Executives in meeting the demands & challenges for a healthful living environment as we enter our journey for economic development under our President's vision for Philippines 2000.