

Pambansang Pangasiwaan ng Tubig at Alkantariya
(NATIONAL WATERWORKS AND SEWERAGE AUTHORITY)

REPUBLIC OF THE PHILIPPINES
NATIONAL WATERWORKS AND SEWERAGE AUTHORITY
ARRÓCEROS STREET, MANILA

"RESOLUTION No. 75-71

RESOLVED, That Resolution No. 51-71 be and is hereby confirmed as corrected, to read as follows:

Resolution No. 51-71

SEWER USE REGULATIONS

WHEREAS, Manila Metropolitan Area has grown considerably since the end of World War II, both in population, housing, and industrialization, with the result that the present sewerage system serving the area is now grossly inadequate and serves only about twelve percent of the population;

WHEREAS, a Project Master Plan for a Sewerage System for Manila Metropolitan Area has been prepared and its implementation has for its purpose the prevention of pollution and unhealthful and unsanitary conditions resulting from im-

proved waste water disposal and the construction of individual waste water disposal facilities;

WHEREAS, for the efficient and successful operation not only of the presently existing sewerage system but also of the completed works after its expansion in accordance with the Master Plan, it is desirable that regulations be established to control its use and to generate funds for its operation, maintenance, and improvement;

Now, THEREFORE, pursuant to the authority granted under Section 2(k) of R.A. No. 1383 creating the NWSA, to wit:

2(k) To issue such regulations as may be necessary for the sanitary protection of watersheds, reservoirs, water mains, springs, and other water sources for the proper operation of sanitary sewers, and for the protection of the water and sewer service, as soon as established, any violation of which shall be punished by a fine of not more than five hundred pesos or by imprisonment for not more than six months, or both such fine and imprisonment in the discretion of the court;

be it resolved that the following Sewer Use Regulations be, and are hereby, adopted for the connection to, and the use of, sanitary sewers under the control and administration of NWSA:

SECTION 1.01. Definitions: Unless the context specifically indicates otherwise, the meaning of terms used in these regulations shall be as follows:

1. 'Metropolitan Area' shall mean the Manila and Suburbs Area which includes the cities of Manila, Pasay, Quezon and Caloocan; the municipalities of Cainta, Las Piñas, Makati, Malabon, Mandaluyong, Marikina, Montalban, Navotas, Parañaque, Pasig, Pateros, San Juan, San Mateo, Taguig and Taytay in the province of Rizal; and the Municipality of Valenzuela in the province of Bulacan;

2. 'General Manager' shall mean the General Manager of NWSA, or his authorized deputy, agent or representative.

3. 'Sewerage System' shall mean all facilities for collecting, transporting, pumping, treating and disposing of waste-water.

4. 'Sewage' shall mean the foul matter carried off by a sewer.

5. 'Wastewater' shall mean a combination of the water-carried wastes from residences, business buildings, institutions and commercial and industrial establishments, together with such ground, surface and storm waters which may have entered the sewerage system.

6. 'Domestic Wastewater' shall mean those wastes which are similar or comparable to wastes which originate from dwellings and contain only human excrement and wastes from kitchen, laundry, bathing and other household facilities.

7. 'Sewer' shall mean a pipe or conduit for carrying wastewater.

8. 'Public Sewer' shall mean sewer which is controlled by NWSA.

9. 'Sanitary Sewer' shall mean sewer which carries wastewater and to which storm, surface and ground waters are not intentionally admitted.

10. 'Storm Sewer' or 'Storm Drain' shall mean sewer which carries storm and surface waters and drainage, but excludes wastewater and polluted industrial wastes.

11. 'Wastewater Treatment Plant' shall mean any arrangement of services and structures used for treatment wastewater.

12. 'Commercial and Industrial Waste' shall mean the water carried wastes from commercial and industrial establishment as distinct from domestic wastewater.

13. 'Garbage' shall mean solid food wastes resulting from preparing, cooking and disposing of food and from the handling, storing and selling of produce.

14. 'Properly Shredded Garbage' shall mean garbage that has been shredded to such degree that all particles will be carried freely under the flow

conditions normally prevailing in the sewers, with no particles greater than one centimeter in any dimension.

15. 'Building Sewer' shall mean the extension from the building drain to the public sewer or other place of disposal.

16. 'Standard Laboratory Methods' shall mean methods of analyses and testing as outlined in the latest edition of 'Standard Method for the Examination of Water and Sewerage' published jointly by the American Public Health Association, the American Water Works Association and the Water Pollution Control Federation.

17. 'BOD₅' (denoting biochemical oxygen demand) shall mean the quantity of oxygen utilized per unit volume of sample in the biochemical oxidation of organic matter under standard laboratory conditions in five days at 20°C.

18. 'pH' shall mean the logarithm to the base 10 of the reciprocal of the number of gram ionic hydrogen equivalents per liter of solution.

19. 'Suspended Solids' shall mean the non-filtrable residue (NFR), or solids that either float on the surface of, or are suspended in water, waste water, or other liquids, and which are removable by standard laboratory methods.

20. 'Natural Outlet' shall mean any outlet into a watercourse, pond, ditch, lake or any other body of surface or ground water.

21. 'Watercourse' shall mean a channel or location in which a flow of water occurs, either continuously or intermittently.

22. 'Receiving Water' or 'Water Body' shall mean any natural watercourse or body of water into which waste water is discharged.

23. 'Person' shall mean any natural or juridical person, which includes any individual, municipality, city or other political subdivision, corporation institution, firm, company, partnership, association, entity, society, or group thereof.

24. 'Shall' is mandatory; 'May' is permissive, subject to approval by the General Manager.

25. 'Normal Waste Water' shall mean waste water which contains not over 500 mg./l of suspended solids and not over 500 mg./l BOD₅, and which does not contain any of the materials or substance listed in Section 1.08 of this Regulation in excess of allowable amounts specified in said section.

SEC. 1.02. Industrial Sewer: The owner of any commercial or industrial establishment situated within the Manila Metropolitan Area and where a sanitary sewer is available shall install at his own expense suitable facilities for the conveying of all domestic waste water and industrial wastes from said establishment into the sewer in accordance with the rules and regulations set forth by NWSA, unless authorized to discharge directly into a storm drain, natural watercourse, or water body, under a valid permit from the National

Water and Air Pollution Control Commission (NWAPCC) specifically authorizing such discharge.

SEC. 1.03. Permit Required. No person shall discharge wastes, except normal waste water as defined in Section 1.01, Item 25, from any commercial or industrial establishment into the sanitary sewer without a permit from the General Manager. Any person wishing to discharge wastes into sanitary sewers shall file an application for a connection permit with the General Manager. The application shall contain the following information: the name, address and telephone number of applicant and name of the officer of the company making the application; the type of products handled or manufactured; the quantity of wastes including seasonal, weekly, daily or hourly variations; and the chemical, physical and other characteristic of the wastes and any other pertinent and necessary information—all as required on forms provided by the General Manager for this purpose.

On the basis of the application and provided that the characteristics of the proposed discharge are such that they are allowable under the provisions of these Regulations, the General Manager shall issue a permit allowing the discharge of such wastes into sanitary sewers.

If the characteristics of the wastes are such that they are not allowable under these Regulations, the application shall be denied by the General Manager and the applicant shall be advised by the General Manager of steps to be taken before said permit can be granted.

Such permit may be revoked for cause at any time upon giving the holder thirty (30) days written notice stating therein the reasons for revocation, including non-payment of charges and surcharges for public sewer use.

SEC. 1.04. Disposal of Uncontaminated Wastes. Storm waters, surface water, ground waters, roof runoff, subsurface drainage, cooling waters or other uncontaminated waters shall not be admitted into any sanitary sewer but shall be discharged into such sewers as are specifically designated as storm sewers, or to a natural outlet,

SEC. 1.05. Charges. Any person using sanitary sewers shall pay a normal sewer service charge based on the total volume of wastewater discharge to said sewers. This charge per cubic meter shall be based on the appropriate sewer service charge of NWSA. When the suspended solids (NFR) content or the BOD₅ of waste exceeds the maximum concentration of these components in normal wastewater, a surcharge in addition to the normal sewer service charge, shall be levied as established by each of the formulae hereinafter set forth. The surcharges on BOD₅ and suspended solids herein provided for shall be collected only when wastewater treatment shall have been provided. The daily surcharge per

excess metric ton of suspended solids shall be P En for wastes discharge to sewers tributary to a wastewater treatment plant.

The formulae for calculating the rate of the daily surcharge for excessive pollution are:

$$E_b = WX(B - A_b)XP_b$$

$$E_n = WX(N - A_n)XP_n$$

Where:

E_b—daily charge to industry in Pesos for excess BOD₅

E_n—daily charge to industry in Pesos for excess NFR

W—average wastewater flow in m³/day

B—daily weighted average BOD₅ concentration in mg/l of wastewater

N—daily weighted average NFR concentration in mg/l of wastewater

A_b—allowable maximum BOD₅ concentration in mg/l (500 mg/l)

A_n—allowable maximum NFR concentration in mg/l (500 mg/l)

P_b—average daily cost to remove a metric ton of BOD₅

P_n—average daily cost to remove a metric ton of NFR

The owner of any commercial or industrial establishment may, if so desired, treat the waste from such establishment so as to reduce either the excess suspended solids or BOD₅ or both, to normal wastewater levels before discharging such wastes into the sanitary sewers. In cases where it is believed such wastes may be poisonous to any part of the sewerage system or have an adverse effect upon the wastewater treatment process or the receiving water, the General Manager may require treatment to reduce either the suspended solids or BOD₅ or both to levels more closely approaching those of normal wastewater before discharging said waste into the sanitary sewers. Other prohibited substances may also be discharged into the sanitary sewer at the discretion of the General Manager, provided they can be treated or diluted to values below the maximum stipulated in Section 1.08 of this Regulation.

SEC. 1.06. Payment of Surcharge. Any surcharge resulting from the preceding section shall be placed on the water bill as separate item with the amount of such surcharge properly indicated; it shall be payable to NWSA at the same time that the water bill and the normal sewer service charge are paid. The surcharge provided for by these Regulations shall assume effective on a date to be announced thereafter.

All surcharge revenues collected in accordance with the provisions of this section and all revenue collected for the normal sewer service charge shall

constitute a separate fund which shall be used solely to pay the cost of constructing, operating, maintaining, and enlarging the existing or future sewerage works, and to pay the principal and interests on sewer loans contracted in connection therewith.

Where, in the judgment of the General Manager, special conditions affecting a commercial or industrial establishment exist to the extent that the surcharge levied will result in inequitable or unfair charges for either NWSA or the establishment concerned, all pertinent facts and circumstances therefor shall be referred to the Board of Directors of NWSA with appropriate recommendations for an equitable change.

SEC. 1.07. Grease, Oil and Grit Traps. Suitable traps shall be installed when, in the opinion of the General Manager, they are necessary for the removal of excessive amounts of grease, oil and grit from waste before the same is discharged into the sanitary sewer. The type, capacity and construction of all traps shall be approved by the General Manager and their location shall be such as to be readily and easily accessible for cleaning and inspection.

Such traps shall be installed and efficiently operated by the owner at his own expense.

Trapped material shall be returned to the industrial process, be discharged to a public refuse dump, or disposed of in another suitable manner not inimical to public health.

SEC. 1.08. Waste Prohibited. The following materials, substances and wastes, unless otherwise authorized by the General Manager shall not be discharged into the sewers:

1. Any liquid or vapor having a temperature higher than 65 deg. C except that where the volume of discharge represents a significant portion of the flow through a particular sewer, a lower limit may be prescribed to prevent odor nuisance;
2. Wastes having a pH less than 6.0 or greater than 10.0 or otherwise having chemical properties which are hazardous or are capable of causing damage to the sewerage works or injury to personnel;
3. Garbage that has not been properly shredded;
4. Insoluble oils, fats, and greases. So-called soluble oils may be admitted to the extent of 100 mg/l, provided subsequent dilution in the sewers or treatment plant does not result in separation;
5. Any solid, liquid, or gas which by reason of its nature and/or quantity can cause fire or explosion;
6. Any solid or viscous material which can cause an obstruction to the flow in sewers or in any way interfere with the treatment process. These materials included but are not limited to ashes, wax, paraffin, cinders, sand,

mud, straw, shavings, metals, glass, rags, lint, feathers, tars, plastics, wood and sawdust, paunch manure, hair and fleshings, entrails, lime slurrys, beer and distillery slops, grain processing wastes, grinding compounds, acetylene generation sludge, chemical residues, acid residues, and food processing bulk solids;

7. Wastes containing phenolic compounds over 10 mg/l expressed as phenol;
8. Wastes containing cyanides or compounds capable of liberating hydrocyanic acid gas over 2 mg/l expressed as hydrogen cyanide;
9. Wastes containing sulfides, over 10 mg/l expressed as hydrogen sulfide;
10. Wastes containing solutions of metals of such a concentration as to have an adverse effect upon the sewerage works, treatment process, or receiving water;
11. Chlorinated solvents;
12. Septic tank sludge, except that such sludge may be discharged into selected treatment plants at locations designated for this purpose by the General Manager;
13. Any corrosive, noxious or odorous material or substance which, either singly or by reaction with other wastes, is capable of causing damage to the sewerage works, or creating a public nuisance or hazard, or preventing entry into the sewers for maintenance and repair;
14. Concentrated dye wastes or other wastes which are either highly colored or can become highly colored by creating with other wastes; and
15. Any material or substance not specifically mentioned in this section which is in itself corrosive, irritating to human beings and animals, toxic or noxious, or which by interaction with other wastes can produce undesirable effects, including deleterious action on the sewerage works or adversely affects any treatment process, constitutes hazard to human or animals, or have an adverse effect upon the receiving water.

SEC. 1.09. Radioactive Wastes: The discharge of radioactive wastes into the sanitary sewers shall be permitted only if a special permit is obtained prior to the discharge thereof. While each case will be decided on its own merits, in general, decisions will be in accordance with the principles laid down in Republic Act No. 3589 (1963) creating the Philippine Atomic Energy Commission (PAEC) and following the rules and regulations of that Commission.

SEC. 1.10. Unusual Wastes: In case of Wastes which are unusual in composition, or which contain an extraordinary large amount of

suspended solids or BOD₅ are high in dissolved solids such as sodium chloride, calcium chloride, or sodium sulfate; contain substances conducive to creating tastes or odors in drinking water supplies or otherwise making such waters unpalatable even after conventional water purification treatment, or are in any other way unusual, the General Manager shall determine whether such wastes shall be prohibited from or may be discharged to the sanitary sewers or shall be modified or treated before being discharge thereto.

Wastes, which in the opinion of the General Manager are unusual or highly variable in volume, shall be subject to flow equalization or other forms of regulation as deemed necessary.

SEC. 1.11. *Storage of Dangerous Materials:* The storage of any material in sewerage areas or in areas draining into a sanitary sewer which, because of discharge or leakage from such storage, may create an explosion hazard in sewerage works or in any other way have deleterious effect upon these works, treatment processes, or is hazardous to human beings or animals, or to the receiving stream, shall be subject to review by the General Manager who at his discretion may require reasonable safeguards to prevent discharge or leakage of large quantities of such materials in the sewers.

SEC. 1.12. *Control Structure:* When deemed necessary by the General Manager, the owner of any property served by a building sewer carrying commercial or industrial wastes other than normal wastewater shall be required to install and shall maintain at his own expense, a suitable control structure in the building sewer to facilitate observation, sampling and measurement of the wastes. Such structure shall be easily accessible and safely located and shall be constructed in accordance with plans previously approved by the General Manager, and shall be located so as to permit the gauging of flow and the collection of samples truly representing the wastes leaving the property. If deemed necessary by the General Manager, automatic gauging and sampling equipment shall be installed.

SEC. 1.13. *Reports:* The owner of any establishment discharging commercial and industrial wastes to the sanitary sewers shall submit to the General Manager at such intervals as he may prescribe a regular report accurately describing the character and quantity of all such wastes other than domestic waste water discharged to the sewers during the period covered by the report. In order to insure compliance with these Regulations, the General Manager may at any time take such measurements, collect such samples, and run such laboratory analyses on representative samples of any wastes as may be deemed necessary.

All tests performed by the owner or by the General Manager shall be in accordance with standard laboratory methods.

SEC. 1.14. *Inspection Authority:* Any duly authorized representative of the General Manager possessing proper credentials and identification shall be permitted to enter at reasonable hours the property concerned for the purpose of inspecting, observing, measuring, sampling and testing, in accordance with the provisions of these Regulations.

SEC. 1.15. *Penalties:* Owners of property, including but not limited to commercial or industrial establishments, found to be violating any provision of these Regulations shall be notified in writing by the General Manager, stating the nature of the violation and providing a reasonable time limit for the correction thereof. Said owners shall stop all violations within the period of time stated in the notice, and shall certify to the General Manager that the corrections thereto have been accomplished.

The owner of any Property found to be violating any provision of these Regulations who shall continue such violation beyond the time limit provided for in the above paragraph, shall be liable to the penalty prescribed in Section 19 of NWSA Resolution No. 202, Series 1968; namely, a fine of not more than five hundred pesos (P500.00) or by imprisonment for not more than six (6) months, or both such fine and imprisonment in the discretion of the court.

In cases of repeated violations the General Manager moreover may revoke the permit for the discharge of wastes into the sewerage system and effect the discontinuation of water or sewer services, or both.

SEC. 1.16. *Validity:* These Regulations modify or repeal as the case may be, existing rules and regulations which are inconsistent herewith, and shall, upon approval by the Board of Directors of NWSA, take effect fifteen (15) days following the completion of its publication in the *Official Gazette*.

If any section, sentence, or clause of these Regulations or the application of such provision to any person and circumstance is declared invalid or unconstitutional, the remainder of these Regulations or the application of such provision to other persons and circumstances shall not be affected by such declarations."

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I, the undersigned, hereby certify that the foregoing is a true copy of the resolution adopted by the Board of Directors of the National Waterworks and Sewerage Authority, and spread in the minutes of a duly constituted meeting of said Board held on March 25, 1971.

(Sgd.) ABELARDO BARROZO
Corporate Board Secretary