ORDINANCE NO. 2014-076

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AN ORDINANCE ESTABLISHING A WASTEWATER MANAGEMENT SYSTEM IN THE CITY OF NAGA AND PROVIDING PENALTIES FOR VIOLATIONS THEREOF:-

Sponsors: **Hon. Joaquin F. Perez, Jr., M.D.**
Chairman, SP Committee on Environment
Hon. Mila S.D. Raquid-Arroyo
Co-Chairman, SP Committee on Environment

EXPLANATORY NOTE

Naga City's economic performance for the past two decades and its soaring population growth, bring enormous challenges especially with regard to protecting its water resources from pollution. If ignored, pollution will seriously affect the good health of its increasing population and thus detrimentally affect the economic gains the city has achieved. Indeed, there is a clear connection between sanitation (or cleanliness) and health, more specifically with untreated household sewage and water-borne diseases which make water concessionaires vulnerable to diarrhea, typhoid fever, cholera, hepatitis and dysentery, among others.

According to a health study, at least 55 Filipinos die every day because of water- borne diseases. Worst, many people miss work and school, or are hospitalized because of poor sanitation, affecting the productivity of thousands of Filipinos, resulting to billions of economic losses annually.

The 2010 citywide data of the City Health Office on toilet facilities reveals that 544 households or about 2.0% of Naga's total households uses "unsanitary toilet", while 714 households or about 2.50% of households are "without toilet", at all. These figures are alarming to say the least, as most of these households 'without toilet" and/or "with unsanitary toilet" are located in the upper barangays where the source of our drinking water comes from.

While almost 95.50% of the households are found to have "sanitary toilet", we cannot be sure of whether they were constructed according to specifications, as toilet construction design in the past many years and up to the present have adopted the "open bottom" leaching chambers (popularly called "septic tanks"), that have then proven to contaminate water resources. There is no septage treatment facility in the Metro Naga area with an Environmental Sanitation Clearance (ESC), hence, it is

safe to say that most, if not all, of these septic tanks are not desludged regularly and if ever desludged, the septage that is removed is just illegally dumped elsewhere without proper treatment, further spreading and abetting the contamination of water resources. It must be emphasized enough that: untreated wastewater affects health by spreading diseases and is unfit for human consumption and for other uses, as it threatens biodiversity and reduces the quality of life of our people.

There is urgency therefore to institute effective measures to protect our water resources, as they have direct bearing on the vitality of our people, the life of our vibrant City.

It must be stressed that, local governments are mandated by the Clean Water Act of 2004(RA 9275) and other existing laws to share with Local Water Utilities in the management and improvement of water quality within their territorial jurisdictions. While the City Government of Naga, at this time, is not in a financial position to construct and operate a sewerage system, it can readily act now, by way of creating the necessary environment in which the Clean Water Act is to be observed and implemented in the City of Naga where 93% of MNWD water concessionaires reside.

Thus, this proposed legislation establishing a Wastewater Management System.

BE IT ORDAINED BY THE CITY COUNCIL OF Naga that:

SECTION 1. Title. This ordinance shall be known as "The Wastewater Management Ordinance of Naga City"

SECTION 2. Declaration of Policy. Pursuant to Section 2 of the Republic Act No. 9275, otherwise known as the Clean Water Act of 2004, the city shall pursue a policy of economic growth in a manner consistent with the protection, preservation and revival of the quality of its fresh, brackish and marine waters.

As such, it will strive to operationalize an integrated water quality management system through partnerships and effective coordination of functions and activities between the City Government of Naga, the Metro Naga Water District and other local stakeholders.

Finally, pursuant to Section 8 of R.A. 9275, the city shall pursue a combined sewerage-septage management system as its goal, given Naga's fast growing population that will qualify it for highly urbanized city (HUC) status by 2020.

SECTION 3. Institutional Arrangement

3.1 Role of the City Government. Pursuant to Section 20 of R.A. 9275, the City Government of Naga shall share the responsibility in the management and improvement of water quality within its territorial jurisdiction in cooperation with the Metro Naga Water District and other stakeholders.

As such, it will strive to work for the establishment of the Naga River Watershed as a Water Quality Management Area in coordination with the Department of Environment and Natural Resources and the National Water Resources Board.

Through its City Environment and Natural Resources Office (ENRO), the city government shall have the following powers and functions:

a) Monitoring of water quality;
b) Emergency response;
c) Compliance with the framework of the Water Quality Management Action Plan; and
d) Take active participation in all efforts concerning water quality protection and rehabilitation; and
e) To coordinate with other government agencies and civil society and the concerned sectors in the implementation of measures to prevent and control water pollution.

The city government shall appropriate the necessary land, including the required rights-of-way/road access to the land for the construction of the sewage and/or septage treatment facilities.

It may also raise funds to subsidize necessary expenses for the operation and maintenance of sewerage treatment or septage facility serving Naga City through local property taxes and enforcement of a service fee system.

3.1.2. The City Government of Naga shall share the responsibility in the management and improvement of water quality within its territorial jurisdiction.

3.2. The Metro Naga Water District, as the duly constituted water supply utility provider in Naga City and its neighboring towns, EXISTS FOR THE PURPOSE of (i) acquiring, installing, improving, maintaining and operating water supply and distribution systems for domestic, industrial, municipal and agricultural uses for residents and lands within the boundaries of such districts, (ii) providing, maintaining and operating wastewater

collection, treatment and disposal facilities, INCLUDING A SEWERAGE SYSTEM IF IT SO DESIRES, and (iii) conducting such other functions and operations incidental to water resource development, utilization and disposal within such districts, as are necessary or incidental to said purpose.

3.3. The private sector shall be tapped to assist the MNWD and the City Government of Naga in mobilizing technical and financial resources through appropriate partnership arrangements to realize the policy enunciated under Section 1.

SECTION 4. Scope. The Ordinance shall apply to all buildings and structures whether public or private, residential or commercial, proposed/planned or existing. However, buildings, structures or businesses that have on-site wastewater treatment facilities approved by the City Government and the Environmental Management Bureau (EMB) of the Department of Environment and Natural Resources (DENR) shall be exempted from this Ordinance. However, they must still comply with DENR discharge standards and fees.

SECTION 5. Purpose and Legal Basis. This ordinance is enacted to supplement the provisions and specifications of existing laws related to septage management and to complement existing laws on clean water and building and plumbing regulations. These include requirements on proper septic tank design (sealed bottom, accessible for desluding), that septage must be removed from septic tanks once every five (5) years or when solids fill 50% of the tank volume, and that septage must be properly treated before disposal.

Specifically, this ordinance is the enabling act for the implementation of the provisions and specifications of the following laws:

1) The Philippine Clean Water Act of 2004 (RA 9275)
2) The Sanitation Code of the Philippines (PD 856)
3) The Local Government Code of the Philippines of 1991 (RA 7160)
4) The Provincial Water Utilities Act of 1973 (PD 198)
5) The National Building Code of the Philippines (PD 1096)
6) The Revised National Plumbing Code of the Philippines (RA 1378)

SECTION 6. Definitions. The words and phrases used in this ordinance shall mean as follows:

ANAEROBIC BAFFLED REACTOR – A multi-chambered tank that performs primary treatment of sewage or septage without the presence of oxygen and with no energy or chemical inputs. It provides a higher level of treatment than a septic tank.

BAFFLE – A device (as a wall or screen) to deflect, check or regulate the flow of sewage and septage. It promotes preliminary and primary treatment of the incoming sewage by allowing the physical separation of solid and liquid components in the sewage.

BIOSOLIDS - are the nutrient-rich organic materials resulting from the treatment of sewage sludge (the name for the solid, semisolid or liquid untreated residue generated during the treatment of domestic sewage in a treatment facility). When treated and processed, sewage sludge becomes biosolids which can be safely recycled and applied as fertilizer to sustainably improve and maintain productive soils and stimulate plant growth. **(**http:// water.epa.gov/ polwaste /wastewater/treatment/biosolids/)

City ENRO – City Environment and Natural Resource Officer

CHAMBER – An enclosed space, cavity or compartment of a septic tank

COMMUNAL SEPTIC TANK – An excreta disposal system serving a group of dwelling units.

DESLUDGING – The process of removing the accumulated sludge or septage from the septic tank.

DIGESTION – A microbiological process that converts the chemically complex organic sludge to methane, carbon dioxide and inoffensive humus-like material.

DOMESTIC SEWAGE – Sewage containing human excrement and liquid household waste. Also called sanitary sewage.

EFFLUENT – A general term denoting any wastewater partially or completely treated, or in its natural state, flowing out of a drainage canal, septic tank, building, manufacturing plant, industrial plant, treatment plant, etc.

PRIMARY TREATMENT – The first stage of the sewage treatment process that generally refers

to the removal of solids in wastewater by settling and floatation. This employs mechanical and physical unit processes to separate and remove floatables and suspended solids and to prepare wastewater to biological treatment. Read more: http:// www.answers. com/topic/sewage- treatment#ixzz1JCZ7RWek

'P' TRAPS - Traps used on plumbing fixtures, such as toilets and drains, to prevent sewage gases from entering the plumbing system or the atmosphere.

SCUM – a slimy or filmy covering on the surface of the liquid in the septic tank.

SECONDARY TREATMENT – The second stage of the sewage treatment process that generally refers to biological treatment that uses bacteria to remove organic matter from the wastewater.

SEPTAGE – Thickened and partially treated sewage that is removed from a septic tank.

SEPTIC TANK –A watertight receptacle, which receives the discharge of a sanitary plumbing system or part thereof, and is designed and constructed to accomplish the sedimentation and digestion of the organic matter in the sewage within the period of detention/ retention and to allow the liquid to discharge to a leaching field, sewer line, combined sewerage network or directly to a secondary wastewater treatment facility in accordance with the standards set forth by the Revised National Plumbing Code of the Philippines.

SEWAGE –Any wastewater containing human, animal or vegetable waste matter in suspension or solution, including human excreta and urine and may possibly contain liquids consisting of chemicals in solution.

SEWER – An artificial pipe of conduit for carrying sewage and wastewater.

SLUDGE - Precipitated solid matter with a highly mineralized content produced by water and sewage treatment processes.

WASTEWATER- Is any water that has been adversely affected in quality by anthropogenic influence. It comprises liquid waste discharged by domestic residences, commercial properties, industry, and/or agriculture and can encompass

a wide range of potential contaminants and concentrations.

SECTION 7. Excreta Disposal System. All houses/ buildings shall have an approved excreta disposal system for the treatment of domestic sewage.

SECTION 8. WASTEWATER MANAGEMENT SYSTEM DESIGN AND IMPLEMENTATION

8.1 The City Government of Naga shall ensure the development of a Wastewater Management System in partnership with other public or private entities. The system will include the collection, transport, treatment and disposal of septage in compliance with existing regulations. Septic tanks will be desludged on a regular basis, approximately once every five (5) years. Desludger/s will collect septage from septic tanks using vacuum trucks, and transport it to a treatment facility. After the septage is treated, clean water will be discharged into the existing bodies of water and the biosolids will be disposed properly.

The enactment of this ordinance will facilitate the smooth implementation or enforcement of the program. This includes developing and implementing an effective promotion campaign to encourage cooperation with the desludging and payment of user fees, and enlist the help of barangay officials to ensure that all septic tanks are desludged regularly. The LGU of Naga City will ensure that new buildings either install full sewage treatment systems, anaerobic baffled reactors instead of septic tanks, or properly designed septic tanks with onsite effluent treatment.

SECTION 9. Desludging. Septic tanks require desludging when the solids fill 50% of the tank volume, or approximately once every five (5) years. Desludging contractor(s) shall be required to secure an Environmental Sanitation Certificate from the Department of Health and prepare an operations and maintenance plan to ensure that proper health and safety procedures are followed. They shall also prepare a desludging schedule and distribute it to the barangays for proper coordination. Each time a septic tank is desludged, a manifest form shall be filled out and signed by the desludger and septic tank owner.

Section 10. Septage Treatment. The City Government of Naga in partnership with other public or private entities, as the latter may so decide, shall be responsible for the construction and operation of a

Septage Treatment Facility in accordance with existing national standards. The facility shall have an operations and maintenance plan that includes provisions for reducing system upset, including immediate actions to prevent the occurrence of foul smells and release of partially treated effluent from the system. All septage delivered to the facility must be accompanied by a signed manifest form.

SECTION 11. Disposal of Biosolids. Following proper treatment, proper disposal of biosolids produced by the septage treatment process shall be in compliance with the requirements stated in the DOH's Operations Manual on the Rules and Regulations Governing Domestic Sludge and Septage. Details of the biosolids disposal shall be included in the operations and maintenance plan of the septage treatment facility.

SECTION 12. Pre-treatment for Commercial Facilities. Septage from a commercial or other non-residential facility may be accepted, provided that the septic tank only receives wastewater typical of a household (i.e., from toilets and sinks). If the wastewater contains substances of a commercial nature such as oil or fuel residue, metals or high volumes of fats and grease, the owner must develop an appropriate pre- treatment program approved by the City ENRO.

SECTION 13. GENERAL DESIGN AND CONSTRUCTION REQUIREMENTS OF SEPTIC TANKS

13.1 BUILDINGS OR STRUCTURES PROPOSED FOR CONSTRUCTION

a.) No building plan for residential dwelling units or commercial and institutional structures shall be approved unless the design of the sanitary plumbing and septic tank conforms to the specifications set by the National Building Code of the Philippines and other pertinent regulations.

b.) It shall be the duty of the owner, administrator or contractor to inform the concerned agency that the newly constructed septic tank, sewage treatment facility or alternative treatment system with prior plan approval, is ready for inspection. The new system shall not be covered or used until inspected and approved by the City Engineer's Office and the City ENRO.

13.2 EXISTING BUILDINGS OR STRUCTURES

a.) Owners of existing septic tanks that are not accessible for desludging are required to

repair or upgrade their tank, so it can be desludged. If repairs are not possible, such owners must be required to build a new septic tank that will comply with the provisions set herein.

b.) The cost of repair and upgrading of septic tanks shall be borne by the owners.

c.) Communal or shared septic tanks can be used whenever feasible, particularly for existing clustered structures that are highly dense and characterized by inadequate land space. The design and the manifest of ownership and joint maintenance shall go through an approval process as determined by the City Government. Those planning to construct new communal septic tanks should consider constructing an anaerobic baffled reactor instead because it provides more treatment than a septic tank. Secondary treatment systems should be installed to treat the wastewater coming out of the septic tank or anaerobic baffled reactor. The City ENRO can provide information on low-cost options for secondary treatment.

SECTION 14.Specifications. Septic tanks shall be designed and constructed in compliance with the mandate set forth in the Implementing Rules and Regulations of Chapter XVII of the Sanitation Code of the Philippines (PD 856), including proper sizing and layout, and the criteria set forth below.

a.) It shall be designed to produce an effluent consistent with approved engineering and environmental standards.

b.) It shall be built of solid durable materials and shall be watertight. Materials shall conform to applicable Philippine Material Standards.

c.) It shall be divided into three (3) compartments, and the volume of the first compartment shall be between one half (1/2) to two thirds (2/3) of the total tank volume.

d.) Where more than one (1) tank is used to accommodate the required liquid volume in a given minimum retention time of two (2) days, the tanks shall be conjoined. The first tank shall be equal to or larger than any subsequent tank in the series.

e.) Baffles or similar devices shall be installed at each inlet and outlet of the tank

and at each compartment. Materials shall conform to approved applicable standards. It must be integrally cast with the tank, affixed with a permanent waterproofing material, or attached at the top and bottom with connectors that are not subject to corrosion or decay. Sanitary tees used on baffles shall have a minimum diameter of 100mm (4 inches).

f.) The baffles between the compartments shall extend at least 200 mm above the maximum liquid surface or all the way to the underside of the top cover.

g.) The centerline of the inlet pipe shall at least 50 mm above the centerline of the outlet pipe. Both inlet and outlet pipes shall be similar in diameter with each other and shall have a minimum diameter of 100 mm.

h.) Adequate venting shall be provided in each compartment with the use of ventilating pipes not less than 50 mm in diameter. For buildings where plumbing fixtures have appropriate “P” traps, venting shall occur through the plumbing stack in the building, not from the septic tank. For buildings where toilets and sinks are not protected with “P” traps, traps should be installed, or vent directly from the septic tank.

i.) Access to the septic tank- There shall be at least one maintenance hole (access port) for each compartment, with a minimum side dimension of 500 mm. All maintenance holes shall extend through the tank cover and shall extend to finished grade. Manhole covers shall be designed with durable and fully coated or non-corrosive handles for easy lifting. Septic tank access covers should be secured from unauthorized entry, either through safety screws, locks or a tank lid that weighs 15 kg or more.

j.) Outlet from the septic tank- The design, construction and location of structures receiving efflent from septic tanks shall conform to the National Plumbing Code of the Philippines.

k.) For clustered structures or houses that are highly dense and characterized by inadequate land area, there shall be designed a communal septic tank or anaerobic baffled reactor consistent with approved engineering and environmental standards.

SECTION 15. Administration and Enforcement. The administration and enforcement of this ordinance for new buildings is hereby vested in the Building Official of the City Government of Naga.

15.1 There shall be created a Wastewater Management Board (WMB) composed of representatives from the City ENRO, City Health Office, City Treasurer's Office, Metropolitan Naga Water District (MNWD), City Legal Office, City Engineer's Office and City Planning and Development Office (CPDO).

15.2 The WMB shall have the following functions and powers:

a.) Participate in the promotional campaigns with regards to the planning and implementing of Septage Treatment Project.

b.) Convene a public hearing and endorse to any appropriate government agency a reasonable environmental fee that will enable to recover its capital and operating costs and ensure the sustainable operation of its septage facility.

c.) Receive and respond to complaints and suggestions from stakeholders.

d.) Upon prior written notice, the City Building Official shall be permitted to enter all properties which has connection to wastewater management for the purpose of inspection, observation, measurement, sampling and testing. Prior notice shall be given to property owners to facilitate inspection and provide assistance to the SMB representatives.

e.) For those property owners, administrators or occupants served with notices of non-conformance, a compliance period shall be set by the property owners, administrators or occupants and the City Building Officials. Once the issue is resolved, the City Building Official shall issue a Certificate of Compliance.

f.) Perform other functions and exercise inherent powers as provided under the Clean Water Act of 2004.

SECTION 16. Funding. The City Government shall allocate the fund necessary for the implementation of this ordinance based on a budget that shall be submitted by the City Mayor for the purpose, utilizing any of the

funding arrangement authorized by the existing laws such as schemes promoting public-private sector or Government to government partnerships, in case a private or government entity undertaken a component of the ordinance such as but not limited to Septage Treatment Facility.

SECTION 17 Fees. An environmental fee for treatment and desludging shall be collected by the private or government operator as provided by law (Clean Water Act of 2004 – R.A.9275) and as duly authorized by LWUA or any appropriate government agency after a public hearing for said purpose. This fee shall be paid monthly and shall cover expenses for the once every five year desludging of septic tanks and operation of Septage Treatment Facility or any other scheme as provided by law.

15.1 For requests of unscheduled treatment and desludging, a special fee will be collected by the private or government operator from the requesting concessionaire.

SECTION 18. Prohibited Acts. - The following acts are hereby prohibited:

a) Discharging, depositing or causing to be deposited material of any kind directly or indirectly into the water bodies or along the margins of any surface water, where, the same shall be liable to be washed into such surface water, either by tide action or by storm, floods or otherwise, which could cause water pollution or impede natural flow in the water body;

b) Discharging, injecting or allowing to seep into the soil or sub-soil any substance in any form that would pollute groundwater. In the case of geothermal projects, and subject to the approval of the Department, regulated discharge for short- term activities (e.g. well testing, flushing, commissioning, venting) and deep re-injection of geothermal liquids may be allowed: *Provided*, That safety measures are adopted to prevent the contamination of the groundwater;

c) 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;

d) Disposal of potentially infectious medical waste into sea water by vessels unless the health or safety of individuals on board the vessel is threatened by a great and imminent peril;

e) Unauthorized transport or dumping into sea waters of sewage sludge or solid waste as defined under Republic Act No.9003;

f) Transport, dumping or discharge of prohibited chemicals, substances or pollutants listed under Republic Act No.6969;

g) Operate facilities that discharge or allow to seep, willfully or through gross negligence, prohibited chemicals, substances or pollutants listed under R. A. No. 6969 into water bodies or wherein the same shall be liable to be washed into such surface, ground, coastal, and marine water;

h) Undertaking activities or development and expansion of projects, or operating wastewater/sewerage facilities in violation of Presidential Decree. No.1586 and its implementing rules, and regulations;

i) Discharging regulated water pollutants without the valid required discharge permit pursuant to this Act or after the permit was revoked for any violation of condition therein;

j) Non-compliance of the LGU with the Water Quality Framework and Management Area Action Plan. In such a case, sanctions shall be imposed on the local government officials concerned;

k) Refusal to allow entry, inspection and monitoring by the Department in accordance with this Act;

l) Refusal to allow access by the Department to relevant reports and records in accordance with this Act;

m) Refusal or failure to submit reports whenever required by the Department in accordance with this Act;

n) Refusal or failure to designate pollution control officers whenever required by, the Department in accordance with this Act; and

o) Directly using booster pumps in the distribution system or tampering with the water supply in such a way as to alter or impair the water quality.

SECTION 19. Penalties.

19.1 The owner of a residential or commercial building, who fails to comply with the provisions of this ordinance within five (5)

years from its effectivity and as provided by the Local Government Code, shall pay the following fine per violation viz:

a.) For Private Residential Buildings- Php 1,000.00
b.) For Hotels, Apartments, Banks Offices, Shops, Lodging Houses,Malls, Restaurants and other Commercial Establishments - 5,000.00
c.) For Hospitals, Funeral Parlors and Similar Operation - 5,000.00

Or by imprisonment of not less than one (1) month nor more than one (1) year or both fine and imprisonment at the discretion of the Court. In addition, non-compliance with the provisions herein may result in the cancellation of business permits for commercial establishments upon recommendation by the WMB to be implemented by the authority issuing the business permit which in this instance is the City Mayor

19.2 Penalties for Improper Disposal of Septage and other prohibited acts defined under Section 18 hereof, or anyone who failes to perform his obligation under this Ordinance .

Any person or entity found to have violated any of the provisions of this ordinance on proper disposal of septage and the prohibited acts defined under Section 18 hereof, or who fails to perform his duties/obligations under this Ordinance, of this Ordinance shall suffer the following penalties:

1st Offense - - - Fine of P 5,000 and warning
2nd Offense - - - Fine of P 5,000, revocation of Mayor's Permit and imprisonment of not less than one (1) month but not more than one (1) year.

SECTION 20. Penalties imposed for non-compliance shall be allocated to a Wastewater Management Trust Fund which is herein established and intended for the enforcement of this ordinance.

SECTION 21. Enrollment in the National Septage and Sewerage Management Program (NSSMP). The City Government shall apply for inclusion under the National Septage and Sewerage Management Program (NSSMP) of the DPWH to access grants and other incentive schemes provided for under Section 26(C) of R.A. 9275 that will enable the eventual establishment of a sewerage system in Naga City.

The City Government shall invite the water district or other entities to partner with the City for the above purpose.

SECTION 22. Repealing Clause. All Ordinances, Executive Orders or other issuances which are inconsistent with this ordinance are hereby deemed amended or repealed accordingly.

SECTION 23. Separability. Any provisions of this ordinance which is declared as in violation of a national law or the Constitution are therefore of no force or effect except those not declared otherwise which shall continue to have full force and effect.

SECTION 24. Effectivity. This ordinance shall take effect upon publication in a local newspaper.

ENACTED: December 2, 2014.

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WE HEREBY CERTIFY to the correctness of the above quoted ordinance.

GIL A. DE LA TORRE
Secretary to the
Sangguniang Panlungsod

GABRIEL H. BORDADO JR.
Acting Vice Mayor
& Presiding Officer

APPROVED:

JOHN G. BONGAT
City Mayor