REPUBLIC OF THE PHILIPPINES
PROVINCE OF ILOILO
MUNICIPALITY OF PAVIA
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OFFICE OF THE SANGGUNIANG BAYAN

EXCERPT FROM THE MINUTES OF THE REGULAR SESSION OF THE SANGGUNIANG BAYAN HELD ON OCTOBER 2, 2017 IN THE SESSION HALL, MUNICIPAL BUILDING, PAVIA, ILOILO.

PRESENT:

1. Hon. Raymund V. Gumban	-Municipal Vice-Mayor Presiding Officer
2. Hon. Laurence Anthony G. Gorriceta	-Municipal Councilor
3. Hon.Mark Anthony H. Sotomil	-Municipal Councilor
4. Hon. Gyzzyn G. Gumban	--do-
5. Hon. Edsel G. Gerochi	--do-
6. Hon. Jose Maria D. Trimañez	--do-
7. Hon. Jenny Sayat – Servidad	--do-
8. Hon. Danilo G. Hubag	--do-
9. Hon. Rolando A. de la Rosa	--do-

ABSENT:

1. Hon. Dino H. Gorriceta	-Liga President Ex-Officio Member (On Official Leave)

ORDINANCE 2017 -09

REVISED REGULATION ON THE SURFACE WATER EXTRACTION FROM THE CREEKS AND RIVERS, AND THE UNDERGROUND WATER OF THE MUNICIPALITY OF PAVIA, ILOILO FOR SUSTAINABLE WITHDRAWALS AND PROTECTING THE SAME FROM OVER EXTRACTION AND POLLUTION.

WHEREAS, Section 16 "General Welfare" of RA 7160 otherwise known as the Local Government Code of 1991, provides that every LGU, among others, shall promote health and safety and enhance the right of the people to a balanced ecology;

WHEREAS, the Sangguniang Bayan is vested with the power to enact ordinances as provided under Book III of RA 7160 particularly of the promotion towards sustainable development, management and maintenance of ecological balance and protection of public health and environment within their territorial jurisdiction;

WHEREAS, the Municipality of Pavia, Iloilo approved Ordinance 2015-07 dated June 22, 2015 entitled "Ordinance regulating the extraction of surface waters from the creeks and rivers, and underground water of the Municipality of Pavia, Iloilo for sustainable withdrawals and protecting the same from over extraction and pollution;

NOW THEREFORE, BE IT ORDAINED BY THE SANGGUNIANG BAYAN OF PAVIA, ILOILO, BY VIRTUE OF THE POWERS VESTED IN IT BY LAW, IN SESSION ASSEMBLED, THAT:

Section 1.TITLE. Revised regulation on the surface water extraction from the creeks and rivers, and the underground water of the Municipality of Pavia, Iloilo for sustainable withdrawals and protecting the same from over extraction and pollution.

Section 2. POLICY STATEMENT. The Municipality shall pursue a sustainable economic growth which will preserve and protect both the surface and underground water resources of the Municipality and at the same time provide the adequate support for the water needs of a fast growing community.

Section 3. OBJECTIVES. This ordinance aims to:

0 define the surface and underground water resources of the Municipality its location, potential quantities or reserves, its limitations and its water quality;

0 define the shallow or perch water table resource of the Municipality, seeing to it that this is exclusively for the use of the ordinary citizen who can afford only a shallow open-well or a shallow "tasok" system;

0 determine the areas in the municipality where confined aquifers are located in order to effectively manage and coordinate deep well water drilling activities of companies and individuals for the attainment of sustainable water resource extraction;

0 provide extraction regulations for surface water extraction from Tigum and Aganan rivers and Mali-ao creek;

0 provide the general guidelines and regulatory measures for bulk water companies which will set up bulk water extraction and processing plants in Pavia for commercial purposes;

0 provide a general guidelines for utilization of surface and underground water for agriculture use;

0 support National Water Resource Board (NWRB) in the implementation of its national rules and regulations on water.

Section 4. GOVERNING LAWS. The effective implementation and imposition of the provisions of this Ordinance is governed by the following:

1. Republic Act 7160- The Local Government Code of 1991
2. Republic Act 9275- The Philippine Clean Water Act of 2004
3. P.D. 984 - Pollution Control Law
4. P.D. 1067 - Water Code of the Philippines of 1997
5. Mun. Ord. 2006-05 - 2006 Environmental Code of the Municipality of Pavia

Section 5. DEFINITIONS OF TERMS. As used in this ordinance, the following terms are hereby defined as:

1. **Adsorption** - adhesion of solutes from a solution to aquifer solids.
2. **Aquifers** -a portion of the earth that holds underground water and supply water to a well; a layer of water-bearing formation located underground that transmits water in sufficient quantity to supply pumping wells or natural springs.
3. **Brackish water**– water whose total dissolved solids (TDS) is above 1000 TDS. DOH standard for drinking water is below 500 TDS. Brackish water is from 1,000 to 10,000 TDS.
4. **Bulk water facility**- an extraction and processing plant of water from creeks, rivers and underground to produce the desired water in excess of 100 cubic meters (100,000 liters) per day.
5. **Centrifugal pump** - a device to direct a way for fluids or water to move outward from the center of rotation.
6. **Confined aquifer** - a confining impermeable layer such as compacted shale or clay is present on top and under an aquifer layer.
7. **Constant-head boundary** - an aquifer boundary where the hydraulic head is constant.
8. **Darcy's Law** - the volume discharge of groundwater is equal to the product of hydraulic conductivity, hydraulic gradient, and cross-sectional area of aquifer perpendicular to flow.
9. **Diffusion**-movement of solutes in groundwater from areas of high concentration to low concentration.
10. **Discharge area** - an area from which groundwater is leaving an aquifer.

11. **Dispersivity** - a measure of the ability of an aquifer to spread solutes by mechanical means.

12. **Distribution coefficient** -a measure of the tendency of a solute to attach to aquifer solids.

13. **Drawdown** - the amount the hydraulic head drops in an aquifer or the lowering of water level inside a pumping well.

14. **Dual-wall reverse-circulation**- a drilling method that circulates fluids down the annulus of a hole and up the drill stem.

15. **Effective porosity** -the volume of inter connected pore space in an aquifer sample divided by the total volume of the sample.

16. **Effluent river**- a river that is supplied by groundwater like Aganan River.

17. **Electrical conductance** - the ability of rock, soil or water to conduct an electric current.

18. **Elevation head** - the higher source of water which causes the flow in an aquifer or the elevation of a piezometer where it is open to an aquifer.

19. **Equipotential line** - the line along which the hydraulic head is constant.

20. **Evaporation** - transfer of water from the liquid phase to the vapour phase.

21. **Extraction wells** - wells used to extract water from an aquifer.

22. **Filter pack** - coarse sand or small pebbles pack around the screen of a well.

23. **Flow line** -a line depicting the path of flowing groundwater.

24. **Flow net** - a two-dimensional illustration consisting of equipotential lines and groundwater flow lines.

25. **Geology** - a science which deals with the history of the earth and its life especially as recorded in rocks.

26. **Grouting** - a mixture of cement and sand used to fill up spaces as in the upper voids between the drill hole and the well casing.

27. **Geographic Information System (GIS)** -a computer based software package capable of storing, displaying and querying location and attribute information for points, lines and polygons.

28. **Ghyben-Herzberg principle** - the distance from sea level to the fresh water/saltwater interface is approximately 40 times the distance from sea level to the water table.

29. **Groundwater velocity** - the rate at which ground water travels; usually at about 1 km. in seven years.

30. **Hydraulic conductivity** -the product of intrinsic permeability, fluid density and the acceleration of gravity, divided by the fluid viscosity.

31. **Hydraulic gradient** - the difference in hydraulic head between two points along a flow line, divided by the distance between the points.

32. **Hydraulic head** - the elevation of water in a piezometer, pertaining to the point at which the piezometer is open to an aquifer.

33. **Hydrology** - a science dealing with the properties, distribution and circulation of water on or below the earth's surface and in the atmosphere.

34. **Hydrogeology** -the study of groundwater.

35. **Hydrodynamic dispersion** - spreading of groundwater and its dissolved constituents by mechanical mixing and chemical diffusion.

36. **Hydrologic budget** - volumetric inputs minus outputs from a hydrologic system are equal to the change in storage in the system.

37. **Hydrologic cycle** - continuous circulation of the earth's water.

38. **Infiltration**- movement of water from the earth's surface towards the underground.

39. **Intrusion** - to thrust a force, the act of intruding.

40. **Influent river** - a river that losses water to the subsurface.

41. **In-situ remediation** - cleaning contaminants in place.

42. **Intrinsic permeability** - a measure of the natural ability of an aquifer to transmit fluids.

43. **Inverse approach** - an approach to aquifer testing in which draw down observation are used to estimate aquifer properties.

44. **Isotropic** - the magnitude of an aquifer property is uniform in all direction about a point.

45. **Leachate** - chemicals dissolve from solid waste.

46. **Maximum contaminant level** - the concentration above which a contaminant poses a health concern.

47. **Monitoring well** - a cylindrical pipe open at the bottom used to measure water levels and collect groundwater samples.

48. **Multilevel sampling** - a sampling device open to an aquifer at different elevations.

49. **Nitrate** -a common groundwater contaminant, often derived from decaying vegetation, fertilizer and animal wastes.

50. **Perch water table** - local water table, the first unconfined underground water encountered.

51. **Permeable** - penetrable, having pores or openings that permits liquids or gases to pass through.

52. **Pollutants** - shall refer to any substance, whether solid, liquid or radioactive which directly or indirectly alters the quality of any segment of the receiving water body so as to affect or tend to affect adversely any beneficial use thereof; hazardous or potentially hazardous to health; imparts objectionable odour, temperature or change in the physical, chemical and biological segment of the water body; and in excess of the allowable limits or concentrations or quality standards specified, or in contravention of the condition, limitation or restriction as prescribed.

53. **Pollution** -the action of polluting, especially by environmental contamination by man-made waste; the condition of being polluted (dirty, unclean).

54. **Piezometer** - a pipe inserted into a saturated zone to measure the hydraulic head.

55. **Potentiometric surface** - the level to which water rises in piezometer tapping a confined aquifer.

56. **Potentiometric surface map** - an illustration in map view, consisting of equipotential lines and flow lines, depicting the movement of groundwater at some depth interval.

57. **Precipitation** - falling products in condensation of earth's atmosphere, in layman's term; rain.

58. **Pressure head** - the height of the water column in a piezometer , pertaining to the point at which the piezometer is open to an aquifer.

59. **Pumping test** - a test in which a well connected to an aquifer ispumped for at least 48 hours, discharge rate is measured in cubic meters per minute at hourly interval at the same time measuring the water pumping level comparing it with static pumping level which is the draw down.

60. **Pumping well** - a well from which groundwater is pumped.

61. **Radius of Influence** – the safe distance from an existing pumping well where the water level of the aquifer is not affected, hence another well can be located to pump from the same aquifer.

62. **Resistivity** - when electric current is passed down a bore hole, it is the resistance of different ground layer encountered as electric current is passed thru it measured in ohms. The reading is a function of the ease of passage of water in a given strata or layer.

63. **Reactive solute** - a solute that tends to adsorb to aquifer solids or react chemically.

64. **Recharge area** - an area in which rainfall or surface water enters the aquifer to be part of the underground water regime.

65. **Runoff** - water flowing over the earth's surface.

66. **Saltwater intrusion** - underground saline water seeping into a fresh water aquifer.

67. **Saturated zone** - a layer underground where all the pores or openings are filled with water. It is the interval beneath the vadose zone.

68. **Screen** - the slotted, open part of a well casing where water from the aquifer will enter.

69. **Solute** - anything that dissolves in water.

70. **Source monitoring**-monitoring groundwater near a potential source of pollution.

71. **Steady flow** - groundwater flow in which the hydraulic head does not change over time.

72. **Storage coefficient** - the volume of water an aquifer sample releases, per unit surface area, per unit decline in hydraulic head.

73. **Stream discharge** - the volume of water flowing past a stream's cross- section, per unit time.

74. **Sludge** - any solid or semi-solid or liquid waste or residue generated from a waste water treatment plant or water control pollution facility or any other such waste having similar characteristics and effects.

75. **Stratigraphic** - relating to or determined by strata or layer of ground, in geology it deals with origin, composition, distribution and succession of strata.

76. **Submersible water pump**- an electric driven water pump that is installed down hole of a water well to suck the water from the aquifer and push it to the surface. Usually used when the suction lift exceeds 60 ft.

77. **Suction lift** - the depth down the well that a surface pump can suck the water out of the well.

78. **Surface water pump** - electric or engine driven pump whether

centrifugalor piston installed above ground surface to suck water from a deep well. Suction lift is usually limited to 80ft. There are now modern surface pump with suction lift up to 130 ft. Piston type are use for high suction and high discharge application.

79. **TDS** - total dissolve solids, a measure of salinity of fresh water. Allowable TDS for drinking water per Dept. of Health standard is below 500 TDS.
80. **Total porosity** - the volume of pores in an aquifer sample, divided by the Total.

81. **Transient flow** - ground water flow in which the hydraulic head changes over time.

82. **Transitivity**- the product of hydraulic conductivity and saturated thickness

83. **Transpiration** – release of water vapor from plants to atmosphere.

84. **Underground Water -**water beneath the earth surface that supplies wells and springs; a subsurface water that occurs beneath a water table is soils and rocks or in a geological formation.

Section 6. ACRONYMS

1. **DENR** - Department of Environment and Natural Resources
2. **DepEd**- Department of Education
3. **DILG** - Department of Interior and Local Government
4. **gpm**- Gallons per minute
5. **cmd**- Cubic meters per day
6. **Hp**- Horsepower
7. **LPS** - Liters per second
8. **MAO -** Municipal Agriculture Office
9. **MENRO** – Municipal Environment and Natural Resources Office
10. **MEO** - Municipal Engineering Office
11. **MIWD** - Metro Iloilo Water District
12. **NGO/PO** – Non-government Organization/People's Organization
13. **NWRB** - National Water Resources Board
14. **PNP** - Philippine National Police
15. **ppm** - Parts per million
16. **RHU** - Rural Health Unit
17. **MWRMC** - Municipal Water Resource Management Council

Section 7. MUNICIPAL WATER RESOURCES MANAGEMENT COUNCIL (MWRMC)

The Municipal Water Resources Management Council (MWRMC) shall be composed of the following:

1. Chairperson- Municipal Mayor
2. Vice Chairperson– SB Chair of the Committee on Environmental Protection
3. Members
    - MENRO

- Hydrology Consultant
- NGO Representative

They shall be appointed by the Municipal Mayor through an Executive Order and shall have the following duties and functions:

- Assessment of all business applications and renewals where water is a major component of the business, such as in a water refilling station, boarding and commercial building, restaurants, schools and other similar entities where water is major concern.

- Assessment of all business applications and renewals where water is a major component of the business (residential, commercial, industrial and institutional)

- Collation and piling up of a data bank on the hydro-geology of the Municipality of Pavia so that the body can be technically guided when appraising deep wells installations, river water exploitation and development projects, water needs for agriculture, bulk water project for commercial supply and other major water developments in the Municipality;

- Maintain a stratigraphic correlation for all wells drilled in Pavia based on each well stratigraphy as submitted by the drill contractor after drilling. Such correlation will serve as guide in spacing and approval of future deep well applications;

- Survey, mapping with a numbering system and keep a data bank on all existing and future deep wells installations which will be used as a basis for approval of additional and future deep well applications. Such data and information for each well shall include but not limited to the following: location coordinates with well no. assignment and well bottom; date well was placed in service; owner and drill contractor; sizes of drill hole, casing and drop pipe; horsepower rating, gpm capacity and type of pump use in service; stratigraphic sequence from surface to bottom showing aquifer horizon/s; casing slot design; copy of electric logging if performed by owner; and copy of standard pump well test report;

- Maintain records and data for each Bulk Water Project Processing Plant located in Pavia, such information and data shall include but not limited to the following: Plant location coordinates and area; Owner and business line; Plant capacity in cubic meters per day (cmd) of finish product; Process flow chart and Organizational chart; Computer generated 3D Layout of the plant; Copies of approved permits from NWRB, DENR and other agencies.

- Assess all applications for deep wells and bulk water installation application in coordination with the national guidelines established by NWRB so that a sustainable exploitation of the water resource of Pavia is maintained.

- Conduct a regular and periodic field inspections of all deep wells and other bulk water exploitation facilities seeing to it that none violates established environmental laws and that the water resource of Pavia is exploited at a sustainable rate.

- Periodic inspection and determination of areas where pollution is a clear and present danger to the water resource of Pavia. The same shall be reported with recommendation to the Municipal Mayor.

- Serves as the local and legal implementing arm of the LGU in the implementation of all national laws on water.

Section 8. PERMIT . No person, company or any entity can construct a bulk water facility or drill/construct a deep well without a **permit.**

These permits will include the following:

A. National Agencies

- Approval from NWRB
- ECC from DENR, and
- Certificate of Public Conveyance (CPC) as the case maybe

B. The Municipal Government along with the component barangays shall enforce strict compliance to the Municipal Ordinance No. 2017-09 for the aforementioned water projects.

Before the issuance of Mayor's Permit, a bulk water company will have to secure a Certificate of Public Conveyance (CPC) before it can sell/deliver its water product to the public in general. The construction and operation of deep wells shall be based on a design submitted and approved by the Municipal Water Resources Management Council (MWRMC) such that the proposed well will not have an influence on nearby existing shallow and deep wells.

The construction and operation of a bulk water extraction and processing plant from Tigum and Aganan Rivers, Maliao creek and underground shall be based on a design submitted to the Municipal Water Resources Management Council. The design must incorporate natural sand filtration that is getting water from under the river bed and not direct pumping of river surface waters if the water is intended for potable water supply.

Section 9. EXEMPTION. Shallow wells, whether open or "tasok" type using a hand operated pitcher pump or a surface pump whose suction line does not exceed 1 inch diameter and not exceeding 1-1/2 Hp pump capacity shall be exempted from securing the said permit.

Section 10. GUIDELINES FOR ASSESSING DEEP WELL DRILLING APPLICATIONS

Before issuance of Mayor's Permit, the following guidelines for assessing deep well drilling applications shall be strictly observed:

1. Determine the proposed volume requirement of the applicant. If requirement is more than 0.50 LPS (liters per second) or 40 CMD (1 cubic meter is 1,000 liters), then applicant should look for underground source beyond 60 ft. deep. All deep well applicants should drill a minimum of 250 ft. If the requirement exceeds 500 CMD, the purpose of which is to maximize exploration of the deeper aquifers.

2. A water requirement of less than 0.50 LPS or 40,000 liters per day need not resort to deep well drilling and will be allowed to exploit underground water within 60 ft. deep using a surface pump, hence does not fall into the deep well category provided that the water exploited is for personal use and not for sale or further processing with the ultimate purpose of selling it.

3. Basing on the data bank on water wells it has compiled, the MWRMC will then estimate if the well location applied for will have a radius of influence on an existing deep water well considering its general guidelines on well spacing.

4. The applicant will then inform the MWRMC once the drilling commences so that it can monitor drilling operation as required.

5. The MWRMC is setting a maximum TOTAL deep well underground water extraction for the entire town of Pavia at 10,000 cubic meters per day.

6. Deep well production intended for supply in a bulk water utility should only constitute 20 percent of the supply requirement of the BWP and the balance of 80 percent is source from surface water of the rivers.

Section 11. GUIDELINES IN ASSESSING BULK WATER PROCESSING FOR POTABLE WATER APPLICATIONS

Before issuance of Mayor's Permit, the following guidelines in assessing bulk water processing application shall be strictly observed:

1. All Bulk Water Processing Plant producing potable water for sale or for industrial use should be located along either Tigum or Aganan river since it is required that at least 80 percent of its water source should come from surface waters of the rivers. All Bulk Water processing plant will be allowed a maximum of twenty (20)percent ONLY to source its water from underground through deep wells. If it intend to sell to the public then it should possess a CPC (Certificate of Public Conveyance).

2. Only two Bulk Water Processing Plant will be allowed each for Tigum and Aganan Rivers and NONE for Maliao Creek. The two processing plants for each river should be a minimum of 2 kilometers away from each other. When surface waters of the rivers is BELOW 8 inches deep, the bulk water plant extraction rate from the river should NOT be more than 10,000 cmd. Above 10 inches deep of river water, there is NO LIMIT on extraction rate.

3. Augmentation from deep well source for the bulk water processing plant is not included in the limits set in (2), provided deep well source does not exceed 2,000 cmd that "All Bulk /water Processing Plant should

commit to FIRST sell, provide, serve water to the constituency of the Municipality as it requires before serving the needs of those outside the Municipality.

4. Direct suction of river running water is not allowed. The processor make use of naturals and filtration for its raw water supply for sanitation and health reason.

5.No Loading of a water tanker while parked on a national , provincial or municipal road (with reference to LOI 43);

6. If shallow well source is within 50 feet deep, limit withdrawals to 30,000 liters per day per loading station.

7. Require all tankers to load from a deep well source (beyond 100 feet) or from a bulk water processing plants which gets its supply from river.

Section 12. REGULATORY PROVISIONS

A. Classification of Surface Water Users from creek and rivers

1. **Household Use** - water used for home consumption only such as for washing, watering of household plants and cleaning/washing of homes and domestic animals. There is no limit and regulations for withdrawals from creeks and rivers for this specific use.

2. **Agriculture Use** - If surface water depth in creeks and rivers is below 6 inches from river bed, withdrawals per pumping station is limited to 100 cmd for each river per pumping station and 50 cmd for Maliao creek per pumping station. There is no limit when surface water level is above 10 inches from river bed.

3. **Commercial and Industrial Water User** - Only Tigum and Aganan rivers will be the source for commercial and industrial water user. No water will be pumped out of Mali-ao Creek for this purpose.

4. **Bulk Water Supply Processor** - These bulk water plants should be located along the river banks of either Aganan or Tigum river. For the two mentioned rivers, only two plants will be allowed per river and they should be at least 2 kilometers apart along the river bank of the two rivers. Surface water extraction per bulk plant is limited to 10,000 cmd when river surface waters depth is below 8 inches. No extraction limit when river surface waters exceed 10 inches in depth. During extreme long spell of dry season when river surface waters is only 2 inches, only 4,000 cmd extraction will be allowed per plant.

B. Classification of Underground Water Users

1. For individual household using the tasok system up to 60 ft. with a surface centrifugal pump whose suction does not exceed 1 inch diameter with a maximum 2 hp. pump drive motor, there is no restriction on extraction rate.

2. For those in the commercial water extraction and or processing for resale of water as in water re-filling within Pavia stations, supplying tankers for delivery to city customers or outside the Municipality, they

should source their underground water supply beyond 40 feet depth. Extraction rate should not exceed 50,000 liters per day per pumping location.

3. For Industrial and Housing Subdivision water users whose consumption exceeds 100 cubic meters per day, the following are the regulations:

> a. Source its water from deep wells whose location and depth will have prior approval by the LGU. Those whose consumption is below 100 cmd can drill from 100 ft. – 150 ft. only.
>
> b. Preferably they should drill up to 250 ft. to maximize location of water aquifer.
>
> c. Standard well drilling procedure is followed such as cement grouting outside casing from ground level up to 60 ft., physical and electric logging of bore holes, well cleaning and pump test with all information copy furnished the MWRMC.

4. For those engaged in potable Bulk Water Supply to Water Utilities, water source from underground is limited to only 2,000 cmd per processing plant, the rest will be taken from surface waters of rivers. The same restrictions and regulations as in (3) above will be applied.

5. For Farm and Agricultural Water Use. These are users where at least 80 percent of water used is returned to the underground as infiltration. There is no limit of extraction from underground source for as long as the water is pumped within the land area of the Municipality. Source the water beyond 80 ft. deep so that the perch water table reserved for the common man will not be depleted.

Section 13. MONITORING AND CONTROL ACTIVITIES OF MWRMC AND MENRO

The MWRMC and MENRO shall be implementing arm of the LGU that will have overall authority and jurisdiction as far as exploitation, use and protection of the surface and underground water resources of the Municipality is concerned. It shall perform the following:

1. Design application forms for all types of applicants related to water related projects;

2. Every April and August, conduct a measurement of the standing and pumping level for all deep wells in the Municipality. Maintain a data bank record for such measurements. Assess potential/existing problems on water resource depletion and/or contamination
associated with the deep wells in the Municipality.

3. Conduct an e coli count on shallow wells every 6 months at 6 random wells per barangay and maintain a data bank record for this activity. Coordinate this activity with the Municipal Health Officer, (MHO).

4. Inspect all open wells and "tasok" system for the Municipality once a year to check drainage system, improper installation and spot check possible water contamination.

5. In coordination with the MHO, conduct annual inspection of residents with open-type toilet or no toilet at all and submit report to the Punong Barangay and the Mayor's office for proper action.

6. Inspect Bulk Water Supply Processing Plants in Pavia every 6 months. Design an inspection form that will reflect processing conditions, water sources, resulting product quality and sustainability of the Municipality water resources. Provide a recommendation to the Municipal Mayor if there is a need for major changes in the set up and process.

7. Provide technical advice for industries and other entities which will invest in Pavia and will require bulk water in excess of 50 cubic meters (50,000 liters) per day as to the method and where to secure its water requirements.

8. Coordinate with the NWRB on matters that pertains to the surface and underground resource of the Municipality that is of national significance.

9. For all deep well drilling, see to it that the following are implemented:

a. physical logging of sludges every one meter advance and a sample is preserve in a plastic bag properly labeled as to Drill Hole No. and depth;

b. monitor shallow and deep wells in the vicinity within the 100 meters radius if they are affected by the drilling operations;

c. check that the well casing slots is properly synchronized to the aquifer horizon intercepted. See to it that there is no casing slots in the first 50 ft. so as not to affect the perch water table. Require an electrical logging of the drill hole for resistivity and self potential. Compare result with the physical logging of the sludge samples. The MWRMC will have a copy for its file of both the physical and electric log report.

d. check that conversion to a production well is properly adhered to such as: cement grouting up to 20 ft. deep, pebble packing from 20 ft. down to well bottom, compressed air cleaning of the drill hole;

e. implement a 48-hours constant volume standard well test patterned after the method used by the University of East Anglia, Norwich, UK. The MWRMC will have a file of the report on the pump well test including the hydro-geology analysis and the draw down response curve.

10. See to it that no person or entity will drain, run or otherwise dispose waste of any kind or form into any body of water, canals or pump such waste underground that may cause pollution.

11. Prevent the discharge, injection or seepage into the soil or sub soil

any substance of any form that would pollute groundwater. Regulate discharge for short term activities such as well testing, flushing, commissioning, venting provided safety measures are adapted that will not pollute surface and underground water.

12. See to it that there is no pollution of surface and underground water from the production, utilization, storage and distribution of hazardous and toxic substances such as radioactive materials, heavy metals, pesticides, fertilizers, and oil discharge. That there is no dumping of untreated waste water, domestic sewage, industrial waste, garbage, mine tailings and other toxic substances that may pollute rivers and creeks. That these regulations shall apply to all industries, commercial establishments, private individuals including government entities.

Section 14. PROHIBITED ACTS. Acts that are against or contrary to the provisions of this ordinance are deemed prohibited and may be subject to penalties stated in said ordinance.

Section 15. PENALTIES. Unless otherwise provided herein, any person, entity, natural or juridical who commits any of the prohibited acts provided in the immediately preceding sections or violates any provisions of the ordinance shall be fined not exceeding two thousand five hundred pesos (P2,500.00) or imprisonment of not more than six (6) months or both at the discretion of the court.

The Mayor upon the recommendation of the Municipal Water Resource Management Council (MWRMC), may order closure, suspension of development/construction, or cessation of operation, or where appropriate stoppage of water flow in any form, until such time that proper environmental safeguards are put in place and/or compliance with the Ordinance or its rules and regulations are undertaken.

Section 16. IMPLEMENTING CLAUSE. This Ordinance shall be implemented by the Municipal Water Resource Management Council (MWRMC) and the Municipal Environment and Natural Resources Office (MENRO).

The Implementing Rules and Regulations (IRR) shall be formulated by the MWRMC, recommended by the MENRO and approved by the Sangguniang Bayan not later than 180 days from the date of the approval of this ordinance.

Section 17. REPEALING CLAUSE. This ordinance hereby repeals Municipal Ordinance 2015-07, and other previous Municipal Ordinances which are inconsistent with this ordinance.

Section 18. SEPARABILITY CLAUSE. The Provision of this ordinance is hereby declared separable. Should any provisions herewith be declared unconstitutional and unlawful, the invalidity of one or more provisions shall not affect the validity of the provisions thereof.

Section 19. EFFECTIVITY CLAUSE. This ordinance shall take effect after complying all the necessary requirements for the enactment of an ordinance as provided in the Local Government Code of 1991.

BE IT ORDAINED FURTHER, to furnish copies of this Ordinance to all Sangguniang Barangays for posting; Sangguniang Panlalawigan of the Province of Iloilo for review and other agencies for information and appropriate action.

ENACTED this 2nd day of October, 2017 at Pavia, Iloilo, Philippines.

I HEREBY CERTIFY to the correctness of the above-quoted Ordinance.

GYNNYN G. GUMBAN
Secretary to the Sangguniang Bayan

ATTESTED:

HON. RAYMUND V. GUMBAN
Municipal Vice Mayor
Presiding Officer

APPROVED:

HON. MICHAEL B. GORRICETA
Municipal Mayor