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OGUNSTATE WATER SUPPLY (GROUND WATER QUALITY CONTROL REGULATIONS) 2017

Date of Commencement: 23rd October, 2017

In exercise of the powers conferred by the combined effect of Sections 62 (1) (b) and (d), 110 (1) and (4) of the Ogun State Water Sector Law, 2014 as well as sections 21(b),40,41,42,43,44 and 45 of the Environmental Management Miscellaneous Provisions Laws of Ogun State 2004 and other powers enabling him in that behalf; the following Regulations are hereby made by the Commissioner for Special Duties and Intergovernmental Affairs with the approval of the Executive Council.

PART 1

1. **Short Title**

These Regulations may be cited as the Ogun State Water Supply (Ground Water Quality Control Regulations) 2017.

2. Application

These regulations shall apply to:

- Owners or occupiers of any premises who own or intend to drill a Borehole/Wells for water abstraction.
- Individuals and corporate bodies in the business of drilling Borehole/Wells. **(b)**

3. Interpretation

In these Regulations:-

"Abandoned Borehole" means a Borehole that is not functional or not used;

"Abstraction" in relation to water contained in any source of supply, means the doing of anything whereby any of that water is removed from that source of supply whether temporarily or permanent, including anything whereby the water is so removed for the purpose of being transferred to another source of supply and

"abstract" shall be drilled accordingly;

"Activity" means water Borehole drilling and drilling;

"Annular Space" means the space two (2) concentric cylindrical objects, one of which surrounds the other, such as the space between the walls of a drilled hole (Borehole) and a casing or between a temporary surface casing and a permanent casing;

"Aquifer" means any geological formation from which ground water can be withdrawn in

"Artesian Borehole" means any Borehole that derives its water from a confined aquifer under pressure so that the water will rise in the Borehole casing or drilled hole above the elevation where it was first encountered. This term include flowing Boreholes and Boreholes with water that does not flow freely;

"Borehole" means any hole that is driven, drilled, dug, or bored, either cased or uncased by any method into the ground, for the purpose of obtaining water or knowledge of water, "Borehole Completion Report" means a certified report on a completed Borehole specifying location, name of Borehole owner, static water level, yield, total depth, Borehole size, casing

size, screen interval and other hydraulic properties, bearing or soil formations, or for the

"Borehole Cover" means a device or method used to protect a Borehole casing or water system from the entrance of any external pollutant at the point of entrance into the casing; "Borehole Development" means the act of bailing, jetting, pumping, or surging water in a Borehole to remove drilling fluids, fines and suspended materials from within the Borehole, screen, filter pack, and aquifer to establish the optimal hydraulic connection between the

"Borehole Head" means a permanent closure of the top of a Borehole, either by a pump or other top which is specified for the casing diameter and which cannot be removed easily; "Borehole Head Protection Area" means the surface and the subsurface area surrounding a water Borehole or Borehole field supplying a public water system through which contaminant are likely to move toward and reach such water Borehole or Borehole field; "Borehole Casing" means an impervious durable pipe placed in a Borehole to prevent the walls from caving and to help seal off surface drainage or undesirable water, gas or other

fluids from entering the Borehole; "Borehole Driller Licence" means an authorization issued by the Ministry of Special Duties and Intergovernmental Affairs and Ministry of Environment, authorizing any person or corporate body to undertake Borehole drilling within Ogun State;

"Borehole Vent" means an outlet at the upper terminal of a Borehole casing to allow equalization of air pressure in the Borehole and to measure water level inside;

"Certification" a recognition given by approved authorities under this code to professional individuals or corporate bodies. Certification is a testament of a consultant's proven competence and selfdiscipline expected of a professional to pursue a broad competence base both technically and ethically;

"Corporation" means the Ogun Water Corporation;

"Consumers of Water" means person who abstract water for use, supply or sales to secondary consumers of water;

"Contamination" the presence of any foreign substance or contaminant (organic, inorganic or radiological) in water which tends to degrade its quality so as to constitute hazard or impair the usefulness of the water;

"Cuttings" the geological material displaced from the drill hole during drilling;

"Domestic Purposes" means household and sanitary purposes, the watering of stock, the spraying of crops, the watering of non-commercial lawns and gardens adjoining private residences, but do not include the sale or barter of water for such purposes;

"Decommissioned Borehole" means a Borehole which has been permanently removed from service by filling and/or plugging professionally in accordance with this code;

"Defective Borehole" means a Borehole where the abstraction of groundwater has stopped due to reasons that include water quality problems, decline in yield or Borehole collapse;

"Driller's Certificate" means an official document issued by NWRI to any person after successfully undergoing a prescribed course of study in Borehole drilling at NWRI or else where;

"Driller" means the licensed operator of a drilling rig as authorized under this code;

"Drilling" means the act of drilling or modifying a Borehole;

"Drilling Licence" means a permit to undertake water Borehole drilling activity as provided for in this regulation;

"Drilling Rig" means any power driven percussion, rotary, boring, digging, jetting, or auguring machine used in the drilling or modification of a Borehole;

"Examination" means an assessment of professional competency administered to

"Fill" means placing of suitable materials in the Borehole bore of an abandoned Borehole for the effective and permanent prevention of the vertical movement of water within the Borehole, including vertical movement of water within the annular space surrounding Bore hole casing;

"Groundwater" means water found in the subsurface in the saturated zone below the water table. Or water found beneath the ground surface which can be abstracted and accessed by digging, mechanized or manual drilling, or by any other method;

"Groundwater Investigation" means any program of drilling, sampling and logging to determine the quantity and quality of ground water in a specified area for purposes other

"Grout" means a mixture cement or bentonite and potable water; "Grouting" means the sealing off of an opening beneath ground surface using cement,

concrete or other impervious material capable of preventing the flow of water across it; "Illegal Service Providers" means Service Providers that are not licensed to operate by the

"Industrial Purposes" means any purpose for which water is used in the production of

goods and services and including the use of water for cooling purposes;

"Irrigation Purposes" means the controlled application of water to soil for the purpose of

supplying moisture essential to plant growth; "Landholder" means a person who owns or occupies a piece of land;

"Mineral Recovery" means mineral recovery as may be defined in the Water Right Act from time to time;

"Mineral Water" means mineral water as may be defined in the Water Right Act from time to time:

"Ministry" means Ogun State Ministry of Special Duties and Intergovernmental Affairs;

"Monitoring Borehole" means Borehole used for the purpose of observing subsurface hydrological conditions and collecting hydrologic or water quality data and for the purpose of measuring water level or for measuring the abstraction, monitoring or conduct of research on groundwater. It is usually not for use in extracting water from an aquifer for consumption or other beneficial use;

"Municipal Purposes" means household and sanitary purposes, the watering of streets, walk- paths, boulevards, lawns and gardens, fire protection and the flushing of sewers, and including the drilling of buildings and of civil works, and other purposes usually served by water within a city, town, or village and such other purposes as are approved by the Ministry:

"Non-domestic Water Supply" means any water from any Borehole of waterworks used for the purpose of, or in carrying on, any trade, business, manufacture or for watering fields or gardens Cultivated or occupied as a means of pecuniary profit, or for private fountains, or for any Ornamental purpose, or for the supply of ponds or tanks or for laundries or public wash houses or public baths, vessel ships, both or machinery, and includes the water used or consumed by any person resident in or occupying any premises where a nondomestic supply is given as Borehole as any water taken or used from any waterworks for the use of any Local Government Council or Government Establishment or Department; "Other Purposes" means other purposes as may be defined in the regulations from time to time;

"Owner" means the owner of the land on which the Borehole is located unless a deed, covenant, contract, easement, or other documentation demonstrates that the Borehole is the responsibility of another party;

"Permit" means a Borehole drilling authorization or Borehole operating permit issued by the Ministry of Special Duties and Intergovernmental Affairs and Ministry of Environment; "Person" means an individual or a company;

"Plastic Pipe" means thermoplastic pipe or casing material composed of either polyvinyl chloride (PVC) or acrylonitrile-butadiene-styrene (ABS);

"Plug" means placing of sealing materials (lead wool, steel shavings or large stones of not more than 1/3 of the diameter of the hole) in the bore of an abandoned Borehole;

"Pump and Pumping Equipment" means machines used or intended for use in with drawing or obtaining groundwater for any use;

"Relevant Authority" means any governmental ministry or agency, or any other body, which is competent to address matters within its powers; "Screen" means a pipe with perforations or slots that allows water to enter into a Borehole

and at the same time prevent undesirable particles from entering the Borehole;

"Secondary Consumers of Water" means buyers / customers to or end users of Primary Consumer of Water;

"Septic Tank" means a watertight tank of durable materials through which sewage flows very slowly and in which solids separate from liquid to be decomposed or broken down by bacterial action;

"Service Provider" means a person or company that is engaged in the business of provision/supply of water or those that consume/process water for sale in other liquid products form or services in the water sector;

"Sewage" means spent water carried from residences, commercial and industrial buildings; "Site" means a location on which a Borehole is drilled or to be drilled;

"State" means Ogun State of Nigeria;

"Sugary Beverages" means sugar sweetened beverages such as soda, fruit drinks, energy and vitamin water drinks, sweetened ice tea and lemonade. It can also be in the form of sucrose, high fructose corn or millet syrup, caloric sweeteners, carbonated and uncarbonated energy / alcoholic/ sport / soft drinks;

"Tariff" means the rate / amount at which water is sold per volume to consumers by the corporation, water service providers or all other person that consume and process water for sale in other liquid forms or services in the water sector;

"Approved Tariff" means tariff that has been approved by the Ministry;

"Test Hole" means any opening in the ground, made by drilling, boring, or in any other manner, for the purpose of obtaining geological, geo-hydrological or structural information related to ground water resources, and shall be limited to a depth of one thousand feet or the base of the Second White Shale where such base lies below one thousand feet;

"Works" means works as may be defined in The Water Right Act from time to time;

"Yield" means the quantity of water per unit of the time that may flow or pumped from a Borehole under specified conditions;

"Yield" means potential discharge from a Borehole.

PART II DOMESTIC USE OF GROUND WATER

Permit to Drill Water Borehole

- No person shall drill or cause to be drilled a Borehole for domestic use of ground water in . (1) Ogun State without obtaining a Permit to drill the Borehole from the Ministry.
 - A drilling permit shall authorize the drilling of one or multiple Boreholes in specified location(s) (2) in compliance with the conditions of approval specified for that purpose.

An application for a permit to drill a Borehole shall be made using the form specified in (3) Schedule A.

Every application for a permit to drill a borehole shall be accompanied by the application fees (4) approved by the Ministry for that purpose.

Control of Ground Water 5.

Every Borehole shall be sited in a hygienically conducive environment and protected from (1) pollution.

Any Borehole water certified to be hazardous to health or serving as a source of Ground **(2)** water contamination shall be prohibited temporarily or permanently from being supplied for consumption or use and/or be decommissioned.

Domestic Borehole Test (Water Quality Report - WQTR) 6.

Upon completion of a Borehole for domestic purposes, the driller shall test the yield of the (1)

Borehole by means of a bailer pump or other device or methods approved by the Ministry and determine the standing water level at the beginning and at the end of the test period.

- (2) Water sample shall be collected at the instance of the Ministry for Water Quality Test at the Ministry laboratories or other laboratories as the Ministry may approve and a Water Quality Test Report (WQTR) issued,
- 7. Identification and Numbering All Borehole drilled shall have an Identification Plate with inscription on the Borehole provided by the Ministry.
- 8, Duty to Report Change in Water Quality A Permit Holder shall report to the Ministry any change in the Quality of Water from the Borehole within 30days of first noticing such change.
- 9. Periodic Check The Ministry shall carry out periodic check of Boreholes to ensure the supply of safe water.

10. Payment of Surcharge by Consumers of Water

- There shall be no payment of Surcharge by Domestic Consumers (single tenement for the (1) family) provided daily water consumption does not exceed 10m3 (Ten Cubic Meters) or 50 Drums of 200 Liters. Where Daily Consumption exceeds 10m3, Water Consumption Charge of 0.065/Liter shall apply on the excess. **(2)**
- Ground water abstraction for commercials, industrial, recreational, hospitality or other nondomestic consumption purposes shall attract annual surcharges as may be prescribed by the Ministry and published in Government Gazette from time to time.
- Demand notice for payment of the annual ground water abstraction surcharge shall be made (3) by the Ministry and sent to concerned persons (individual or corporate)a as prescribed in Schedule F to these Regulations.
- 11. Metering

All Boreholes shall be metered for the purpose of data collection for the Water Sustainability Plan (WSP) and for the purpose of determining the daily 10m3 volume allowed for domestic

Refusal to Grant Permit to Drill Borehole 12.

The Ministry may refuse to grant a permit to an applicant for any of the following reasons:

- When there is false or misleading information contained in the application form; **(b)**
- Failure of the applicant to submit the application with the appropriate fee; (c)
- Non-compliance with other requirements of this regulation; (d)
- Any other lawful grounds including technical reasons stated by the Ministry.

PART III

NON-DOMESTIC USE OF GROUND WATER

Permit to Drill Borehole 13.

- No person shall drill or cause to drill a Borehole for non-domestic use of ground water in (1)Ogun State without first obtaining a Permit from the Ministry for that Borehole.
- A drilling permit shall authorize the drilling of one or multiple Boreholes in specified location(s) **(2)** in compliance with the conditions of approval specified for that purpose.
- An application for a permit to drill a Borehole shall be made using the form specified in (3)

- (4) Non-Domestic Drilling Permit shall be renewable annually upon Water Quality Test clearance during the periodic check by the Ministry.
- Procedure for obtaining Permit to Drill Borehole for purposes other than Domestic use. 14. An applicant requesting a permit to drill a Borehole for municipal, industrial, irrigation, mineral water, mineral recovery or for any other purpose other than domestic shall file with the Ministry:

The application for a permit to drill a Borehole as specified in regulation 4 (3) (a) together with the processing fee prescribed by the Ministry;

General plans showing the location of the proposed and existing works including (b) any production, abandoned, or observation Boreholes, pump houses, pipelines, treatment plants, storage reservoirs and other similar works;

A plan showing the location of existing Borehole not owned by the applicant, which (c) may be affected by the proposed Boreholes;

Final engineering or groundwater investigation report as provided in these (d) regulations if such report has not previously been filed with the Ministry;

Evidence of ownership, title of premises or custody of premises. (e)

Evidence of the use to which water from the Borehole will be applied or used. **(f)**

Metering and Monitoring of Water Consumption 15.

Unless otherwise approved by the Ministry, each licensee or owner of a Borehole for the use of ground water other than domestic use shall:

- Equip and maintain each producing Borehole or battery of production Boreholes (a) with a volume meter or other volumetric measuring devices acceptable to the
- Equip each production Borehole so that the non-pumping and pumping water level **(b)** can be measured.

Municipal, Industrial /Commercial Boreholes Pumping and Yield Tests 16.

- Upon completion of a Borehole for municipal, industrial, mineral water, mineral recovery, (1) irrigation or other purposes except domestic, the drilling Contractor shall take the yield of the Borehole by means of a step-draw-down test and a constant rate pump test for a period of not less than six (6) hours.
- The data obtained from such test shall be forwarded to the Ministry **(2)**

Records of Drilling Activities 17.

- Drilling contractors shall keep records of progress of drilling activities using the template (1) provided in Schedule D and applying information on Schedule E as a guide.
- A drilling contractor shall collect samples of drilling cuttings at three (3) meters intervals and (2) in the event of a sudden change in rate of penetration or lithology during drilling, additional.
- For Boreholes with depth greater 100m, Geophysical logging shall be undertaken to aid the (3) Borehole design, and this shall be done preferably through gamma ray and resistivity logs.
- Where a Geophysical log or other logs is run on a test hole or Borehole, the driller shall (4) forward a copy of such log to the Ministry along with the Borehole completion report and all pertinent information shall be recorded on the log submitted.

Access Port 18.

- Every Borehole shall be equipped with a usable access port or air-line securely covered by a (1) threaded plug.
- The access port shall be at least 12mm inside diameter opening so that the position of the **(2)** water level can be determined at any time.

(3) Such port shall be installed and maintained in such manner as to prevent entrance of water or foreign material.

19.

From the date of coming into force of these regulations, drilling contractors shall ensure that all Borehole drilled are duly identified with a Driller's Identification Plate. The identification plate shall be of durable weatherproof and rustproof material and shall be (1)

firmly secured to the Borehole drilled where it is readily visible. (2)

The Identification plate shall contain the following information: Driller's name, registration number, Borehole drilling permit number. (3)

Stamped or imprinted permanent legible markings showing the: (a) (b)

Total depth of Borehole (m); Yield, in Liter per second (L/s) and date measured; Ĺ

ï Static water level in meters, date measured; iii

Date Borehole completed;

- Date the pump was installed; the depth of the pump intake; and iv. V.
- the kilowatt rating of the pump. vi.

20.

A person who drills a Borehole shall ensure that a water sample is taken, preserved and transported to a laboratory approved by the Ministry for Water Quality Test. 1

Water Quality Test Report (WQTR) 2

- The report on water quality to be submitted to the Ministry shall include but not limited to (1) the information specified in Schedule D.
- The report shall be prepared and authenticated by a registered member of the Institute of (2) Public Analyst of Nigeria (IPAN) who is a water analyst or a consultant certified by the Ministry.

Submission of Borehole Completion Report 21.

- Within 30 days following the completion of a Borehole, the driller shall forward to the (1) Ministry the Borehole completion report.
- The Borehole completion report shall be in relation to all boreholes so drilled inclusive of **(2)** those Boreholes which are:
 - Successfully drilled; (a)
 - Non-yielding (dry Boreholes), and (b)

Defective. (c)

- The Borehole completion report shall be submitted together with: (3)
 - All records taken and schedules of this regulation completed during the drilling activities as noted in regulation 17 including the Borehole identification number.
 - Information on the development of the Boreholes; (b)
 - All field test results including the pumping tests conducted; (c)

Results of water quality analysis conducted as provided in regulation 20.

- Borehole completion reports for Boreholes other than domestic shall be authenticated by a (4) Hydro-geologist registered with the Council of Nigerian Mining Engineers and Geologists (COMEG)
- Each page of the Borehole Completion Report shall be duly signed and stamped by the (5) Certified Hydro-geologist in charge.
- The Borehole completion report shall be deemed incomplete if any of the forms is missing. (6)
- A copy of the Borehole completion report shall also be submitted to the client/owner of the **(7)** Borehole drilled.
 - Successfully drilled: (a)

Non-yielding (dry Borehole), and (b)

Defective. (c)

PART IV

BOREHOLE DRILLING AND DEVELOPMENT

Requirement for Borehole Drilling and Development For the purpose of drilling Boreholes in Ogun State, the following requirements shall apply:

Possession of a permit for each Borehole drilled granted by the Ministry of Environment to the owner of each borehole

Possession of a licence to operate as a borehole driller by a corporate body or an (b) individual granted by the Ministry.

Fulfillment of other requirements stated in these Regulations. (c)

23. Conditions for Drilling of Borehole

- A Borehole shall not be drilled in a manner that it leads to contamination or pollution of the (1) groundwater or the aquifer.
- The Borehole shall be drilled only in such a manner that is: (2)
 - in accordance with the terms and conditions attached to the grant of permit to drill the Borehole and in accordance with the provisions of the Federal Code for Borehole Drillers and the Ministry of Special Duties and Intergovernmental Affairs Borehole Drilling Guidance Document;

based on the geologic and groundwater conditions known to exist at the location as (b) specified in the hydro-geological/geophysical report submitted by the driller; and

is capable of producing, where obtainable, the quantity of water to support the (c) desire uses of the Borehole owner.

Borehole Siting and Location 24.

A Borehole to be drilled shall be located such that it is up gradient (uphill) of any nearby (1) potential sources of pollution (i.e. the land shall not slope from nearby potential pollution sources towards the Borehole(s).

The Borehole shall be sited in a manner that complies with the siting distance requirements (2)

specified by the Ministry.

Compliance with the siting distance requirements specified by the Ministry does not exempt (3) from compliance with requirements established by Local Government health Department, National Environmental Standards and Regulation Enforcement Agency (NESREA), and hydro-geological peculiarity of the terrain.

Borehole Drilling Materials 25.

- In the process of drilling, drilling contractors shall ensure that materials used in the process (1) of drilling:
 - are clean, (a)
 - will not contaminate or pollute the aquifer or the groundwater

Meet with the requirements of the Nigerian industrial Standards. (2)

- Contractors shall ensure the quality of drilling materials is maintained in such a manner that (3) assures;
 - protection of water bearing and potential water bearing formations exposed in the (a) Borehole; and
 - good representative samples of the formation material. (b)

Borehole development 26.

Drilling contractors shall ensure the drilled borehole is developed to remove natural silts and (1)

clays, drill cuttings and or other foreign materials that may render the Borehole useless for its intended purpose.

(2) The Borehole development shall be done:

- in accordance with methods or provisions of the Federal code for Borehole Drillers and the Ministry of Environment Water Borehole Drilling Guidance Document;
- (b) in a manner which will not cause damage to the Borehole or its casing or cause adverse sub-surface conditions that may destroy barriers to the vertical movement of water between aquifers.
- (3) The drilling contractors shall ensure the Borehole development is continued until the water from the Borehole is clean and silt-free.

27. Borehole Grouting

- (1) Grouting shall be placed at annulus of the drilled Borehole up to a minimum depth of 10m in the sedimentary formations below ground surface and as necessary to seal off from the producing zone(s), all aquifers or zones with water containing organic or other contaminants of such type and quantity which may render water from those aquifers or zones unsafe, harmful and or unsuitable for human consumption and general use.
- (2) Grout shall be placed around the casing by using any one or combinations of methods as in the Federal Code for Borehole Drillers.

28. Borehole Head Drilling

- (1) Immediately after the drilling of the Borehole, the Borehole contractor shall ensure:
 - (a) The top of the Borehole casing is closed with a tight closing or top head; and
 - (b) The Borehole is properly sealed with a Borehole head in accordance with the provisions of the Federal Codes for Borehole Drilling and the implementing Ministry's Water Borehole Drilling Guidance Document.
- (2) Underground installations leading from the Borehole shall employ a pit less adapter which does not require welding at the casing.
- (3) Pit-less unit or adapters shall be drilled and installed so as to prevent the entrance of contaminants into the Borehole.
- (4) For all Borehole drilled, the casing shall be sealed to prevent the dropping of any object that may block the casing hole pending the time of pump installation.
- (5) Surface drainage shall be diverted away from the Borehole so that the water is not allowed to stand around the casing.

29. Flowing Artesian Boreholes

Where a Borehole is to be drilled in an area where flowing artesian conditions are known to exist, the driller shall set and cement in sufficient surface casing so that the flow of water from such borehole can be controlled.

30. Disinfection and Decontamination

- (1) After a Borehole has been completely drilled and prior to its use, the driller shall thoroughly clean to eliminate all foreign substances from the Borehole.
- (2) The Borehole shall then be disinfected, and in accordance with procedures provided in the Federal Code for Borehole Drillers and implementing Ministry's Borehole Drilling Guidance Document or any other effective method capable of producing the desire result.

31. Inspection of a Borehole Site

Any officer authorized by the Ministry shall at any reasonable time be given access to any Borehole site to:

(a) inspect and examine the material excavated from the site;

- take drilling cuttings and samples of water abstracted from the Borehole; and (b)
- inspect and make copies of extracts of the record required to be kept by the drilling (c) contractor under these regulation.

General Protection of Groundwater Source and Quality 32.

A person who undertakes drilling activity in the nature of: (1)

manual digging of a pit, or (a)

an activity that may result in contact with or access to groundwater: (b) shall ensure that the activity is carried out in a manner that contamination or pollution of the groundwater aquifer is avoided.

Water used for cooling parts of engine, air compressors or other equipment shall not be **(2)** returned to any part of the groundwater system.

A Borehole shall not be used for disposal or injection of any substance, including surface (3) water, groundwater or any liquid, gas or chemical.

Protection from Contamination Source 33.

Borehole owners and drillers shall ensure the protection of water Boreholes from all sources (i) of contamination in line with the provisions of the implementing Ministry's Water Borehole Drilling Guidance Document and Federal Code for borehole Drilling.

The duty to protect shall be on the driller from the commencement of drilling onto the point **(2)** the Borehole has been certified completed, after which duty to protect from contamination shall be transferred to the Owner.

Cross connections between Boreholes and other systems or equipment containing water or (3) other substances of unknown or questionable safety including pesticides and fertilizers are prohibited.

Fuel pump pits shall be encased in a water tight reinforced concrete structure to prevent (4) contamination of water Boreholes due to leakages from underground storage tanks.

Maintenance and Repair of Boreholes 34.

Every Borehole shall be maintained by the owner in such a condition that swill conserve and (1) protect the groundwater resources and will not be a source or channel of contamination or pollution to the water supply of that Borehole or any aquifer.

All materials used in maintenance of any Borehole shall meet the requirements of this **(2)** regulation and the Federal Code for Borehole Drilling.

Broken, punctured or otherwise defective or unserviceable casing, screens, fixtures, seals or (3) any part of the Borehole head shall be repaired or replaced regularly.

The Borehole shall be decommissioned in accordance with the requirements of the Federal (4) Code and the implementing Ministry's Water Borehole Drilling Guidance Document if that repair or replacement is not performed.

Repairs to Borehole originally completed with the Borehole head terminating below ground (5) (buried seal) should include extending the Borehole casing 1 meter above the finished surface.

The casing extension material shall be of similar material to the original casing; that is, steel (6) to steel and plastic to plastic.

In the case of steel casings, the joint must be welded, coupled or threaded. (a)

On the plastic casing, the joint must be glued or fused. (b)

All joints and extensions shall be sealed to prevent contamination from entering the (7) (a) groundwater.

Sealing shall not be a contaminant. (b)

PART V

BOREHOLE DRILLER'S LICENCE

Drilling License Application, Fees and Renewals

35. Water Drilling Licence

- No individual or corporate body shall drill a borehole for the abstraction, or monitoring of (1) groundwater or for research if that person or body corporate does not have a Borehole driller's licence granted in accordance with these Regulations.
- The Driller's license shall be obtained from the Ministry in accordance with the forms (2) provided. (Schedule A)
- 36. Form of Application for Driller's Licence Application for a drilling licence by an individual and a body corporate shall be made with the forms respectively specified in Schedule B.

37. Application for Driller's Licence by an Individual

- (1) A person applying for a Borehole driller's licence shall:
 - (a) be a person of at least 21 years of age;
 - **(b)** possess a minimum qualification of the senior secondary school leaving certificate and shall have passed the prescribed examination conducted by NWRI; and
 - provide evidence of at least three (3) years post qualification experience of working (c) under the direct supervision of a licensed Driller.
- (2) A person may be exempted from the requirement to undertake the NWRI Certification Examination upon proof of a minimum of 5 years cognate experience of working in a Licensed Drilling company as authenticated by a Principal Officer of such a company or verifiable experience of jobs undertaken within the specified period.

38. Application for Driller's Licence by Corporate Bodies

- A Corporate body applying for a Driller's licence shall: (1)
 - be duly incorporated in Nigeria under the Company and Allied Matters Act (CAMA), to carry on the business of water Borehole drilling;
 - show evidence of at least one licensed driller, one registered hydro-geologist and (b) one registered water resources engineer in its employment; and show evidence of available functional drilling rig and other equipment, indicating: (c)
 - the description; (i)
 - (ii) the trade mark:
 - (iii) age of the drilling rig; and
 - (iv) operational Status
 - show evidence of drilling activities conducted during the five years immediately (d) preceding the application, indicating:
 - client Name, address and phone number; (i)
 - the year the activities were undertaken; and (ii)
 - the location(s) where the activities took place. (iii)
- In the case of a new company, it shall show evidence that the staff required under provisions (2) of regulation 38 (1) (b) are available in the company.
- The application shall be accompanied with the appropriate administrative and processing (3)

Application for drilling Licence Procedure 39.

- The Ministry shall: (1)
 - acknowledge receipt of the application within seven (7) days of receipt of the (a)

application for a drilling licence; and

- inform the applicant in writing of the decision of the Ministry within thirty (30) days (b) after the receipt of the application.
- (2) Where:

an applicant fails to pay the prescribed processing fee; or (i)

there is error in the application; (ii) the Ministry shall notify the applicant in writing within fourteen (14) days after receipt of the application to rectify the situation.

If the applicant fails to rectify the situation as described in subsection (2) of this section, the Ministry shall not process the application and shall give notice to the applicant of its inability to process the application.

Refusal to Grant Driller's Licence 40.

The Ministry shall refuse to grant a license to an applicant for any of the following reasons: (1)

false or misleading information contained in the application form; (a)

(b) failure of the applicant to submit the application with the appropriate processing

(c) non-compliance with other requirements of this Regulation.

(2) A license granted by the Ministry is subject to conditions specified in the licence.

41. Withdrawal of Drilling Licence

The Ministry may withdraw a drilling licence after an investigation has been conducted into the unprofessional conduct of a holder of a drilling licence and the holder of the drilling licence has been given a fair hearing and there is evidence:

- that the holder has conducted drilling operations in an unprofessional manner:
- that the holder intentionally provide false information in a report required from him (b) under these Regulations; or
- (c) the holder fails to comply with the provisions of these Regulations or conditions specified in the licence.

42. Licence Fees

An applicant who qualifies for a license shall pay a prescribed licence fee as specified by the Ministry.

43. Licence Renewal

- A drilling licence shall remain valid for a period of five (5) years and must thereafter be (1) renewed.
- An application for the renewal of the license shall be made to the Ministry not later than **(2)** thirty (30) days before the expiration of the licence.

The renewal shall attract the fee specified by the Ministry. (3)

- A holder of an expired drilling licence shall request that the expired licence be renewed by (4) submitting to the Ministry the required renewal form and paying the appropriate fee.
- Late renewal shall attract additional fee as specified by the Ministry. (5)

Notice of Renewal of Licence 44.

The Ministry shall notify a registered holder of a drilling licence of the expiration date of his licence three (3) months prior to the date of such expiration.

Penalties for Non-renewal 45.

A person who fails to renew a drilling license issued by the Ministry within six (6) months (1) after expiration of the licence, shall be deemed to have forfeited his or her option to renew. Ogun State Water Supply (Ground Water Quality Control Regulations) 2017

(2) Such person in subsection (1) above shall not drill or begin to drill a Borehole for:

the abstraction of groundwater

the monitoring of, or research into groundwater.

(3) Any request for licence renewal submitted thereafter shall require submission of a new application.

46. Appeal against Refusal to grant or renew a licence

- An individual or a body corporate aggrieved by the refusal of the Ministry to grant or renew a licence may lodge a complaint in writing to the Commissioner of the Ministry within fourteen days after he is notified of the decision of the Ministry.
- (2) The complaint shall:
 - (a) state the nature of the objection or complaint;

(b) attach a copy of the decision objected to; and

(c) attach the relevant documents for the determination of the complaint.

- (3) The Commissioner shall take a decision on the complaint within thirty days after receipt of the complaint.
- (4) A person may appeal to the High Court by Judicial Review against the decision of the Commissioner where:

(a) he is dissatisfied with the decision; or

(b) the Commissioner fails to act within a period of the thirty (30) days after the receipt of the complaint stated in sub-section (1) of this Section.

47. Register of Licensed Drillers

The Ministry shall maintain a register containing the particulars of licensed drillers, licences (1)granted and the register shall be accessible to the public.

Extracts from the register may be obtained from the Ministry on request and on payment of (2) a fee as may be prescribed.

PART VI

50.

WATER SUPPLY AND CONSUMPTION

Service Provider Licence, Application, Fees and Renewals

48. Prohibition

A person who is the provider of prescribed water services shall not provide such services any where in Ogun State unless such person-

is the holder of a licence from the Ministry authorizing the provision of the relevant service. (1)

is exempted from the requirement to obtain a licence in respect of the provision of the (2) relevant prescribed services.

49. Service Provider Licence

The Service Provider Licences shall be obtained from the Ministry for:

1. The provision of water services.

Processing of water into liquid products, beverages, juice and drinks. 2 3.

Provision of consultancy services.

Provision of water in bottles, sachets, drums or any other form of package. 4. 5. Mineral water, etc.

Form of Application for Service Provider's Licence

Application for a Service Provider's Licence by an individual or a body corporate shall be (1)made with the format specified by the Ministry.

The format shall require information on: (2)

- the directors / promoters. (b)
- business address and locations (c)
- details of equipment such as water treatment plants, waste water/effluents (d) treatment plants, recycling plants, water storage and such other equipment as the Ministry may from time to time specify.
- details of the production process (e)
- details of products and prices tariffs (f)

Water Service Provider Licensing fees 51.

The Ministry shall issue water service provider license as applicable upon payment of relevant fees as specified by the Ministry.

Refusal to Grant Service provider's Licence *52.*

- The Ministry shall refuse to grant a licence to an applicant for any of the following reasons: (1)
 - Any false or misleading information contained in the application form;
 - failure of the applicant to submit the application with the appropriate processing (b) fee; and
 - non-compliance with any other requirements specified by these regulations. (c)
- A licence granted by the Ministry is subject to conditions specified in the licence. (2)

53. Withdrawal of Service Provider's Licence

The Ministry may withdraw a Service Provider's licence after an investigation has been conducted into the unprofessional conduct of a holder of a Service Provider's licence and the holder of the drilling licence has been given a fair hearing and there is evidence:

- that the holder has conducted drilling operations in an unprofessional manner: (a)
- that the holder of a Service Provider's licence intentionally provides false (b) information in a report required from him under these Regulations; or
- the holder of the Service Provider's licence fails to comply with the provisions of (c) these Regulations or conditions specified in the licence.

54. Renewal of Water Service Provider Licence

- A Water Service Provider Licence shall be renewable at such periods as may be specified by (1) the Ministry which shall not be less than two (2) years validity.
- An application for the renewal of the Water Service Provider Licence shall be made to the **(2)** Ministry not later than thirty (30) days before the expiration of the licence.
- The renewal of the Water Service Provider Licence shall attract the fee specified by the (3)
- Late renewal shall attract additional fee as specified by the Ministry. (4)
- A holder of an expired water service provider licence shall request that the expired licence be (5) renewed by submitting to the Ministry the required renewal form and paying the appropriate fee.

Notice of Renewal of Licence 55.

The Ministry shall notify a registered holder of water service provider licence of the date of expiration of his licence, three (3) months prior to the date of such expiration.

Penalties for Non-renewal 56.

A person who fails to renew a Water Service Provider Licence issued by the Ministry after (1) expiration of the licence within one (1) year shall be deemed to have forfeited his or her option to renew.

- (2) Such person in subsection (1) of this section shall not be eligible to provide water service.
- (3) Any request for licence renewal submitted thereafter shall require submission of a new application.

57. Appeal against Refusal to grant or renew a Water Service Provider Licence.

- (1) An individual or a body corporate aggrieved by the refusal of the Ministry to grant or renew a licence may lodge a comcomplaint in writing to the Commissioner of the Ministry within thirty days after the decision of the Ministry complained of.
- (2) The complainant shall:
 - (a) state the nature of the objection or complaint;
 - (b) attach a copy of the decision objected to; and
 - (c) attach the relevant documents for the determination of the complaint.
- (3) The Commissioner shall take a decision on the lodged complaint within fourteen (14) days after receipt of the complaint.
- (4) A holder of a water service provider licence may by Judicial Review appeal to the High Court against the decision of the Commissioner where:
 - (a) he is dissatisfied with the decision; or
 - (b) the Commissioner fails to act on the lodged complaint within the thirty days after the receipt of the complaint.

58. Register of Licensed Water Service Providers

- (1) The Ministry shall maintain a register containing the particulars of licensed Water Service Providers, licences granted; and the register shall be accessible to the public or published in a National Newspaper periodically.
- (2) Extracts from the register may be obtained from the Ministry on request and on payment of a fee.

59. Payment of Surcharge

- Payment of Surcharge on Tariff by Consumers of Water and Wastewater shall apply to all water and wastewater service providers.
- 2. A surcharge of 5% on Tariff shall be paid by all consumers of Water and for Waste water services.
- 3. A surcharge of between 10% 20% shall apply to all sugary beverages as the Ministry may prescribe.
- 4. The Ministry shall determine the surcharges.

60. Water Sustainability Plan

- A comprehensive water sustainability plan shall be developed and managed by the Ministry.
- 2. The Ministry may involve stakeholders in the water sector in this plan as it may deem necessary.
- 3. The plan shall involve scientific method in data collection, analysis and implementation.
- 4. Volumes of water consumption shall be determined relatively to the aquifers of groundwater to ensure sustainable use.
- 5. Comprehensive Water Audit Assessment shall be conducted for facilities with daily water consumption exceeding 50,000 Litres.
- 6. A Water Audit Assessment (WAA) shall be prepared by the Ministry or by its certified consultants for facilities referred to in sub section (5) of this section.
- 7. The Water Audit Assessment shall be paid for by the Service Provider at 10% of

their Annual Demand Certificate or as the Ministry may determine. The Ministry shall prescribe the implementation of the Sustainability Plan on all 8.

PART VII MISCELLANEOUS

Site Restoration and Clean-up 61.

Upon completion of all works in respect of a Borehole, the driller shall return the site to its original or better condition.

- Reporting Abandoned, Disused and Defective Borehole 62.
 - (1)
- The existence of abandoned, disused or defective Borehole shall be reported to the Ministry. The report shall state the precise location of the abandoned, disused or defective water (2)
- In the case of defective Boreholes, the Ministry may issue instructions to the owner to (3) abandon and decommission the Borehole.
- Where the owner of a defective Borehole fails to comply with the order given by the (4) Ministry;
 - the Ministry may take the necessary steps to execute the order; and (a)
 - the expenses incurred shall be surcharged to the owner of the Borehole and may be (b) recovered by any simple claim in a Magistrate or High Court in Ogun State.
- **Decommissioning of Borehole** 63.
 - Where a Borehole is no longer in use and is abandoned, the owner shall cause the Borehole (1) to be properly closed in a manner sufficient to prevent vertical movement of water in it.
- Any Borehole which has to be temporarily put out of service shall be sealed with a water tight **(2)** cap or seal compatible with the casing and shall be installed so that it cannot be removed easily by hand.
- Any Borehole which has to be permanently put out of use shall be decommissioned in (3) accordance with the procedures set out in the Federal Code for Borehole Drilling and Ogun State Water Borehole Drilling Guidance Document.
- The owner of the Borehole drilled shall be responsible for its permanent decommissioning (4) and abandonment.

PART VIII **OFFENCES AND PENALTIES**

Offences

- 64. Failure to obtain a licence
- A person who carries out or allows the carrying out of Borehole drilling activity for the (1) abstraction of water without a licence from the Ministry commits an offence and is liable on summary conviction to a fine of not more than N200,000 (Two hundred Thousand Naira) for individuals and N500,000 (Five Hundred Thousand Naira) for companies or imprisonment for a term of not more than twelve months or to both.
- A licence holder who conducts drilling activities contrary to the conditions of the licence **(2)** commits an offence and is liable on summary conviction to a fine of not more than N200,000 (Two Hundred Thousand Naira) for individuals and N500,000 (Five Hundred Thousand Naira) for companies or imprisonment for a term of not more than two years or to both such fine and imprisonment.

Failure to obtain a Borehole drilling permit 65.

Any person who conducts borehole drilling activities on his or her premise within the Ogun State Territory without obtaining a permit from the Ministry shall be guilty of an offence and (1) liable on summary conviction to a fine not exceeding N500,000 (Five Hundred Thousand Naira) for domestic Boreholes and N1,000,000 (One Million Naira) for Industrial Boreholes.

Any person who, having been granted a borehole drilling permit by the Ministry, conducts drilling activities contrary to the terms and conditions of the permit, commits an offence and (2) is liable on summary conviction to a fine of not more than N100, 000 (One Hundred Thousand Naira) for domestic Boreholes and N500,000 (Five Hundred Thousand Naira) for Industrial Boreholes or imprisonment for a term not more than One year or to both such fine and imprisonment.

Offences of groundwater contamination and water wastage

Failure to Conserve and Protect Groundwater Sources 66.

Any person who intentionally or negligently causes the wastage of water from a Borehole (1) over a period of time whether or not the Borehole or water system is out of order or in need of repair, except for the purpose of extinguishing a fire, shall be guilty of an offence and liable upon summary conviction to a fine not exceeding N100,000(One hundred Thousand Naira).

For the purpose of the provisions of sub-section (1) of this section, the land owner or (2) occupier of any premises having the control of the borehole shall be regarded as being

responsible for such wastage.

- Any person or organization guilty of the offence of contamination of groundwater sources, (3) shall be liable on summary conviction to a fine not more than N1,000,000 (One Million Naira) or to a term of imprisonment not exceeding 2 years, and where the offence continues, to a further fine not exceeding N200,000 (Two Hundred Thousand Naira) for everyday during which the offence is continued after conviction.
- (4) The obligation in sub-section (3) of this section, rest on the owner of the Borehole water supply system, responsible for the operation and maintenance of the Borehole water facilities, whether or not such water supply system is within a closed or open network.

67. Penalty and Appeals

- Any person who violates any of the provisions of this regulation shall be penalized in (1) accordance with the provisions of this regulation or any other regulation made pursuant to the provisions of the Ogun State Water Sector Law, 2014 and Environmental Management (Miscellaneous) Provisions Law, Laws of Ogun State 2004.
- Any order or decision of the Ministry shall be appealable as provided by this Regulation. (2)

68. Review of Penalties and fines

The Ministry, subject to the approval of the Executive council may, review the prescribed fines and penalties under these Regulations from time to time.

69. Implementing Ministry

The Ministry of Environment shall implement these Regulations. (1)

Notwithstanding the provision of sub-section (1) of this section, the Governor may from time **(2)** to time designate any Ministry, Department or Agency as implementing Ministry, Department or Agency.

PART IX SCHEDULEA REGULATIONS 4(3), 13(3), 35(2) AND 36(6)

OGUN STATE MINISTRY OF SPECIAL DUTIES AND INTERGOVERNMENTAL AFFAIRS/ MINISTRY OF ENVIRONMENT.

Application for Well Construction Permit

Al	BACKGROUNDINFORMATION
Date	of Application:
Name	Of Owner
Addr	555

Locat	hone Number(s):
Latitu	de:Longitude
Addre	ess (if different from owners address):
	WELL INFORMATION
Type	of Water Well (Indicate One)
1 14	Public Water Supply [] Individual Domestic Water Well [] Industrial Water Well Agricultural Water Well [] Monitoring Water Well [] Others (Specify)
1.3	WELLPLAN AND CONSTRUCTION DETAILS
	Attach duly endorsed hydrogeological / geophysical report.
i)	The Water Well pump will be of the (submersible or hand pump)
ii)	
1.4	DECLARATION
	and Title) state that I have knowledge of the fact herein set and that the same are true and
orrect	and Title) state that I have knowledge of the later never have and Title) state that I have knowledge of the later never have and the later never have a later never have
construction of	Date:

A.5 AUTHORIZEDAGENCYCLEARANCE [134	Ogun State Water Supply (Ground Water Quality Control Regulations) 2017 43-
Remarks		5 AUTHORIZEDAGENCY CLEARANCE
Name (Authorized Representative) Signature: Date: (FOR MINISTRY USE ONLY) Inspection of the water well site was conducted on objection of the water was conducted on objection		Approved [Hold for further evaluation Disapproved
Name (Authorized Representative) Signature: Date: (FOR MINISTRY USE ONLY) Inspection of the water well site was conducted on objection of the water was conducted on objection		Antonio de recessora de la companya
Name (Authorized Representative) Signature: Date: (FOR MINISTRY USE ONLY) Inspection of the water well site was conducted on one opy		· · · · · · · · · · · · · · · · · · ·
Name		marks
Name		
(Authorized Representative) Signature: Date: (FOR MINISTRY USE ONLY) Inspection of the water well site was conducted on		
Signature: Date: (FOR MINISTRY USE ONLY) Inspection of the water well site was conducted on		
Inspection of the water well site was conducted on. Day		(Authorized Representative)
Inspection of the water well site was conducted on. Day		
Inspection of the water well site was conducted on	••••	
Review of Water Resource Engineer / Hydro-geologist Date: Approved		
Review of Water Resource Engineer / Hydro-geologist Date: Approved		
Review of Water Resource Engineer / Hydro-geologist Date:] Approved Reasons for Disapproval: Date: Administrator Well Construction Permit Pate Issued: Expiration Date:		
Pate:		idings
Reasons for Disapproval: Date: Administrator Well Construction Permit Date Issued: Expiration Date:		te;
ignature: Date:		
ignature: Date:		asons for Disapproval:
Date: Administrator Well Construction Permit Date Issued: Expiration Date:		
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Administrator Well Construction Permit lo: Date Issued: Expiration Date:		nature; Date:
ate Issued: Expiration Date:		
Pate Issued: Expiration Date:		
		e Issued: Expiration Date:
ompleted application form should be submitted with evidence of payment of	c	npleted application form should be submitted with evidence of payment of prescribed fe

well.

SCHEDULE B REGULATIONS 35, 36, 37 AND 38 OGUN STATE MINISTRY OF SPECIAL DUTIES AND INTERGOVERNMENTAL AFFAIRS/ MINISTRY OF ENVIRONMENT.

(Application for Well Driller's Licence	
(i)	Date of Application Type of Application	
(ii)	Type of Application	
{	} New	
{	Renewal (If renewal, indicate precious Well Driller's Licence No	
	Varietie Wal, indicate precious Well Driller's Licence No	
	(For Individual Application Only)	
(i)	Name of Applicant:	
(ii)	Residential / Postal Address	
	Residential / Postal Address	••••
(iii)		
(iv)		
(v)	The following documents statements and the	
	The following documents, statements and certifications shall be attached to this Application and submitted herewith:	
(a)	Evidence of applicant's 3 years post qualification arms:	
(b)	The contract of the contract o	
(c)	Qualifications and experience statements	
(d)	Recommendation from a license driller or registered practicing professional	
	(11) at obcorogist of Eligilicer)	
(e) (vi)	Evidence of Tax Clearance Certificate.	
	the foregoing information provided by the above applicant is to the best of my knowled correct and that he/she has the required experience and skills to operate as a profession	dg
	driller.	
Date:		
	(FOR CORPORATE APPLICATION ONLY)	
(i)		
(ii)		
(iii)		
(iv)	Authorized representative for the Corporate Entity	
	Name:	
	Designation: Telephone No	
(v)	The following documents shall be attached to this application and herewith	
	(a) Certificate of Incorporation	
	(b) Company Profile	
	(c) Evidence of Tax Clearance Certificate	
5-1	(e) Evidence of payment of VAT	
(vi)	Signature of Authorized representative / Date	

SCHEDULEC **REGULATIONS 4(4), 42 AND 43(3)** PRESCRIBED TARIFFFOR DRILLERS

	TREAS		LICENCE	RENEWAL	DEDMIT DATE
S/N	CATEGORY OF LICENCE	LICENCE RATE	RATE		PERMIT RATE
1	Industrial Driller	N150,000	N100,00		N250,000
2	Semi Motorized (Machine) Drillers	N20,000	N15,000		N25,000

SCHEDULED (REGULATION 20(2)

PRESCRIBED HYDROCHEMICAL DATA TO BE ANALYSED

Date of sampling: Day/Month/Year			
	() Air-lifting	sampling	() Bucket
Sampling preservation:	() None	()Acid	() Other

PARAMETER	RESULT
PHYSICO / ORGANOLEPTIC TEST	
Visual appearance	
Temperature of water/air	Agent and the second
Colour	
Odour	
Taste	
Filling volume, cl	
Ph	
Residual chlorine, Mg/I	
The second secon	KI PAN TERMINA
Total hardness, Mg/I	
	PHYSICO / ORGANOLEPTIC TEST Visual appearance Temperature of water/air Colour Odour Taste Filling volume, cl Turbidity, NTU Conductivity, ms / cm Total dissolved solid, ppm CHEMICAL TEST Ph Residual chlorine, Mg/I Total alkalinity, Mg/I Total acidity, Mg/I

8	Total iron Mg/l	
9	Chlorine, Mg/l	
10	Nitrate, Mg/I	
11	Nitrile, Mg/l	
12	Sulphate, Mg/l	
13	Arsenic, Mg/I	
14	Lead, Mg/l	
15	Manganese, Mg/l	
16	Fluoride	
17	Sodium	
18	Ammonia	
19	Free Carbon dioxide	
20	Feacal coliform	

60	48	36	30	24	5	3 6	16	12	10	8	6		C	asing Diameter (in.)	T	Ç		
1500	1200	900	750	600	200	500	400	300	250	200	150	100	0	ausing Diameter		Chlorine Co		
14690.00	9400.00	5287.00	36/2.00	230.00	2350 00	1632.00	1044.00	587.50	408.00	261.10	146.20	65.28	1.	olume of water in casing per 30m (100ft) of water depth (gallons)		Compound Required	,	
55601.65	35579.00	20011.30	13030.32	12800 62	8894.75	6177.12	3951.54	2223.69	1544.28	988.26	553.37	247.08	1	Volume of water in casing per 30m (100ft) of water dep th (litres)		to Dose	G	
9lbs 7oz		SIDS OUT	200 001	7lhe 607	1lbs 8oz	1lb 1oz	10.7oz	6.0oz	4.202	2./02			2020	Calcium Hypochlorite 1 (65% available)	Amount of Ci		Guidelines for Chlorine Dosage Preparation	SCI REGULATIO
4110.98	2/19.90	2740 00	1530 87	1077.28	680.39	481.94	303.34	1/0.10	113.07	110.07	76 54	42 52	19.84	Calcium Hypochlorite 1 (65% available C12) (grams)		Of Water	lorine Dosage P	SCHEDULE E REGULATIONS 5, 17(2) AND 32
oragai	6 103	3 972	2.2gal	1.5gal	1.0gal	0.7gal	3.5pt	איטטר	2 2	1 4nt	13.9oz	7.8oz	3.50z	Sodium Hypochlorite 2 (12 trade %)		ound needed	50	D 32
23.03	23 00	14.76	8.33	5.68	3.79	2.65	1.00	1 66	0.95	0.66	0.49	0.28	0.12	Sodium Hypochlorite 2 (12 trade %) litres		for each	mg/L	
0.20	6 13	3.92	2.21	1.53	86.0	0.00	0.69	0.44	0.25	0.17	0.11	0.06		Liquid Chloride 3 (100% available C12) (pounds)		30m (10012)	Choose of V	
-, 00.0.	2780.57	1778.11	1002.46	694.01	444.00	200	308.45	199.58	113.40	77.11	49.90	27.77		Liquid Chloride 3 (100% available C12) (grams) O AJIJIPNO JOJNA PUNOJO)	Ajd	1	of Water	olois augo
L		ja v		1 10		<u>J</u>	(SL	10!1	pjr	180	1 K)]]1	10	J Williams				
38	V					-01		1				1 113						

necesse (Track potent is a term by chlarite mentilature). Track potents 10 - grass of realistic Now 3: Quantity of Equation of Educate is based on 100 percent available charactery weight. SCHEDULE F Regulation 18 (3) Tear St Marian. DEMAND NOTICE FOR WATER CONSUMPTION SURCHARGE The Manistry of Emvironment is charged with the responsibility of regulating and controlling the water sector, facilitating efficiency, infrastructure development, investment and financial viability of the water secur, in Opan State and for other nations incidental thereto. In line with all the laws and regulations enabling the Ministry, particularly Regulation 10(3) of the Opin State Water Supply (Ground Ring Quality Control Regulations) 2017: Omen Year-Acres -Ton Probe Promens are to be made payable to the Ministry. KINDLY ENSURE THAT THE CHARGES ARE PROMPTLY REMITTED ACCORDINGLY Yours faithfully, Han Commissioner for Environment.

Open State Water Supply (Ground Water Quality Control Regulations) M17 A34

chlorine in IL of solution.)

Note 1: The quantity of Calcium Hypochicain is insection to person available children by dry weight. Net: The quartity of Scotian Byrochlorite is based on 12-trade-pottent resolutive children by US liquid Made with the approval of the Executive Council of Ogun State this 23rd day of October, 2017.

Honourable Adeleke Adewolu Esq Honourable Commissioner for Special Duties and Inter-Governmental Affairs. Honourable Bolaji Oyeleye Honourable Commissioner for Environment.



OGUN STATE OF NIGERIA GAZETTE

Published by Authority

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A42

PURSUANT TO REGULATION 10 SUB (2) OF THE OGUN STATE WATER SUPPLY (GROUND WATER QUALITY CONTROL REGULATIONS) 2017

The payment of surcharge by consumers of Ground Water Abstraction for commercial, industrial, recreational, hospitality or other non - domestic consumption purposes shall attract annual surcharge rate of N0.25 per litre (i.e N250 per cubic metre) consumption.

Honourable Bolaji Oyeleye Honourable Commissioner for Environment.

Dated 31st October, 2017.