# GROUNDWATER (EXTRACTION, CONSUMPTION AND MANAGEMENT), REGULATIONS - 2024

In exercise of powers conferred under section 47 of the Karachi Water and Sewerage Corporation (KW&SC) Act 2023, the Board of Karachi Water & Sewerage Corporation is pleased to make the following Regulations:

#### 1. Short Title, Extent, and Commencement

- i. These Regulations shall be titled as Groundwater (Extraction, Consumption, and Management), Regulations 2024.
- ii. They shall apply to the entire Karachi Division and such additional areas as may be notified by the Government.
- iii. They shall come into force at once.

## 2. <u>Definitions</u>

In these Regulations, unless context dictates otherwise:

- i. "Act" means The Karachi Water and Sewerage Corporation Act, 2023.
- ii. "Board" means the Board of Directors of the Corporation as defined under section 2(ii) of the Act.
- iii. "CEO" means the Chief Executive Officer of the Corporation as defined under section 2(iv) of the Act and shall be referred as the management of Corporation.
- iv. "Commercial Use" means extraction of groundwater which is processed by any filtration process and supplied on commercial basis or used for bottling/ packaging water and beverages, however not through water tankers.
- v. "Committee" means the Groundwater Committee constituted under Section 3 of these Regulations.
- vi. "Corporation" means the Karachi Water and Sewerage Corporation as defined under section 2(vi) of the Act.
- vii. "Educational Institutions" means organizations and establishments that are dedicated to providing learning, training opportunities, and facilities such as schools, colleges, universities, vocational and technical institutions and *Madaris* etc.
- viii. "Government" means the Government of Sindh.

- ix. "Groundwater" means the water extracted from the subsoil within the Karachi Division and from such additional areas as may be notified by the Government.
- x. "Groundwater network" means network of pipes and other installations etc laid by the licensee for the supply of groundwater to consumers, excluding any vehicles or tankers.
- xi. "Groundwater operators" means a person extracting and supplying groundwater without any filtration process through network of pipes and other installation etc.
- xii. "Healthcare Sector" means organizations, and establishments directly involved in the patient healthcare, such as hospitals and clinics etc.
- xiii. "Hospitality businesses" means organizations and establishment engaged in the hotels, restaurants and tourism industry.
- xiv. "Industry" means economic activities involved in the processing, production and manufacturing of goods and providing services to consumers.
- xv. "Industrial Use" means extraction and consumption of groundwater by any one industry itself for exclusive usage of the said industry to the exclusion of supply through operator.
- xvi. "Institutional Complexes" means institutes responsible for foreign official work.
- xvii. "KMC" means the Karachi Metropolitan Corporation constituted under the Sindh Local Government Act,2013(Sindh Act No.XLII of 2013)
- xviii. "KW&SB" means the then Karachi Water & Sewerage Board.
- xix. "Licensee" means the person who obtains license from the Corporation for extraction of groundwater and supply through his laid network of pipes and other installations etc.
- xx. "NDC" means No Dues Certificate.
- xxi. "Person" means a person, company, industry, association, partnership, society, group, Corporation, authority, autonomous or constituent body, cooperative society, Government Agency, NGO, CBO or a Local body / council.
- xxii. "Recreational parks" means area developed for recreational activities.
- xxiii. "Residential complex" means a group of apartments, flats and Highrise structures but not individual residential houses.
- xxiv. "RO Plant" means a commercial business for treating Groundwater into potable consumption.
- xxv. "Small containers" means a water container with a size not above 700litre only and includes water supplied in bottles.

- xxvi. "Tanker" designates a tank mounted water trolley / vehicle intended for transporting bulk water for any purposes, but not including bottled or small container.
- xxvii. "TDS" means total dissolved solids in groundwater.
- xxviii. "Water Supply" means the system for producing, transmitting and distributing treated or purified water to meet the requirements of consumers within the service delivery area.
- xxix. "Service Delivery Area" means the area where services are provided by the Corporation as defined under section 2(xxxi) of the Act.

#### 3. Constitution of the Committee

- i. There shall be a Groundwater Committee comprising 05 members headed by an officer of the Corporation not below BS-19 and 04 other officers /officials of the Corporation for the purposes of grant of licenses and matters ancillary thereto.
- ii. The constitution and the Term of Reference of such a Committee shall be reduced into writing in the notification to be issued by the CEO.

# 4. Consideration of Applications for Grant of License

- i. The Person seeking license shall submit its application to the Corporation on prescribed format.
- ii. The person shall declare the existing source of water supply i.e from (KW&SC network, bores, tube wells or wells, tankers or any other provision) with respect to its demand and the intended quantity required through the application for consideration of the Committee on the prescribed application form. Misleading or wrong information shall cause rejection of the application.
- iii. For the purpose of determining the existing sources and proposed withdrawal extraction connections (bore, tube wells)/ points / supplier, KW&SC field staff or authorized agent may enter the premises and record the flows including inspection of the tanks and inflow points.
- iv. The applications, so received, shall be posted publicly on the Corporation's website for inviting objections within fourteen (14) days from the date of posting. If no objection is received, the license shall be issued within a period of 30 days subject to fulfilment of all the requirements from the Person.

- v. The Committee shall proceed with the process of scrutiny of documents submitted with the application.
- vi. The Groundwater Committee shall keep following factors before recommending grant of license to any applicant;
  - a. Groundwater extraction shall be allowed by means of bores / tube wells not more than 24 inches in diameter and in accordance with design and specifications for the said purposes on the prescribed format issued by the Committee.
  - b. Each license shall have a maximum set of 04 bores / tube wells situated nearby and following the guidelines mentioned in these Regulations. If a Person is interested to have more than 04 bores / tube wells, he has to seek additional license for the same.
  - c. The Person intends to extract groundwater for industrial use, shall submit written request to the Corporation forwarded by the President/Chairman of the concerned Industrial Estate Association on their official letter head.
  - d. For commercial use of groundwater, there shall be a written request addressed to the CEO by the person interested for the grant of License.
  - vii. The Committee shall further consider factors such as groundwater demand, objections filed, previous licenses, existing groundwater networks, water yield reliability, applicant's eligibility, and land use implications for the grant of license. Any objection or unsatisfactory report, after providing an opportunity of hearing, shall render the application rejected.
  - viii. A Person having criminal record regarding theft of water from the pipelines or infrastructure of (the then KW&SB) and Corporation, or involved in illegal sale of water, or had its license revoked under Subsoil water (Extraction and Consumption) Regulations 2018, or in these Regulations on account of water theft or has been declared insolvent by any court of law shall be ineligible for the grant of license.
- ix. For laying of conveyance system through a particular right of way, a fresh NOC from the Land-owning agency, if applicable, must be obtained and appended with the application for grant of license.

- x. All licenses shall be granted by the management of the Corporation on the recommendations of the Committee.
- xi. The licensee shall provide a summary of consolidated billing made to all its recipient / consumers to the Corporation by 15<sup>th</sup> of each month in case of groundwater operators mentioned in tariff structure in Section -10, of the Regulations.

## 5. Validity of License

- i. Subject to availability of groundwater and satisfactory fulfilment of the Terms and conditions, the license for the extraction of groundwater shall be valid for a period of 02 Years only. However, the licenses issued shall cease to exist, by notification from the Corporation, on supply of recycled water from wastewater recycling plant at designated industrial areas.
- ii. Failure to comply with the Terms and Conditions of the license will result in its immediate revocation by the Corporation.
- iii. Subletting of licenses under these Regulations is strictly prohibited and will render the license revoked with immediate effect and shall attract penalties under these Regulations.
- iv. The person applying for the industrial use as an individual unit is bound to consume the water extraction for itself and further sharing or supplying of extracted water to nearby or other industrial units is not allowed. For individual industrial extraction, the person has to apply separate license for individual industrial unit.

# 6. <u>Distance from the Corporation's Water Supply Network</u>

No Bore or Tube well within 330 feet of Corporation-owned Conduit Lines, Syphons, Pumping Mains, or Reservoirs shall be permitted. Wells, i.e., bores or tube wells exceeding 24-inch diameter<sup>θ</sup> are strictly prohibited and shall render immediate revocation of the license by the Corporation on the recommendation by the Committee.

## 7. Hydrological Study and Test Report

- i. The Committee shall request from the licensee reports such as Hydrological Survey, Geological Survey, or Environmental Impact Assessment etc. from any designated technical consultants before the grant of license.
- ii. Subsequently, the Corporation may request from the licensee periodic reports as defined in Section 7, subsection (i) as deemed necessary throughout the duration of license.

#### 8. Standards of Design and Construction

Licensee shall adhere to the specified designs, specifications, construction standards, and other terms with regards to groundwater network to be determined and issued by the Corporation.

## 9. Quantification and Monitoring of Sub-soil Water

- i. Licensees extracting groundwater in all categories mentioned in Section 10, subsection-(i), exceeding one (01) million gallons per day, through all extraction points /source, subject to submission of monthly progress report to the Corporation, within Ninety days (90) days of receiving the license shall install the following for the quantification and monitoring of the groundwater;
  - (a) State-of-the-art system for supervising, controlling data acquisition,
  - (b) Required gadgets and instruments including flow meters, stand posts (for TDS readings) or such any other instruments so required for regular monitoring and testing of groundwater quality,
  - (c) Geographical Information System (GIS) mapping of the entire groundwater network so laid by the licensee and connected with the monitoring and control room of KW&SC as prescribed by the Corporation.
- ii. Licensees extracting groundwater in all categories mentioned in Section 10, sub-section-(i), up to one (01) million gallons per day, through all extraction points / sources, subject to submission of fortnightly progress report to the Corporation, within Thirty (30) days of receiving the license shall install the following for the quantification and monitoring of the groundwater;

- (a) Flow Meters and Stand Posts for regular quantity and quality testing at each extraction location (bore/tubewell) which shall be easily accessible to KW&SC Officials during the course of the license.
- (b) Flow meters and stand posts for regular quantity and quality testing at each interconnection of Groundwater lines, as specified by the Corporation.
- (c) Flow meters on the conveyance networks, and stand posts for regular quantity and quality testing outside the consumers' premises, at locations specified by the Corporation.
- iii. The licensee must submit the following within fifteen (15) days
  - (a) Map/Drawings displaying GPS coordinates of extraction points.
  - (b) For conveyance networks, GPS coordinates every 200 meters length for each pipe and GPS coordinates of interconnections of Groundwater lines marked and printed on the Maps/Drawings.
  - (c) List of consumers with their GPS coordinates and their Groundwater demand.
  - (d) Clearly marked pipes of the conveyance network with color and number assignments provided by the Corporation on the license.
- iv. The Corporation may allow the calculation of discharge and extraction of groundwater through prescribed discharge flow rate till such time the information is received as mentioned under Section 09 (i, ii and iii) above.
- v. Licensees must report within 15 days any alterations, changes etc. in already submitted maps, drawings, or information to the Corporation.
- vi. Failure to comply with any of the provisions of these Regulations shall result in revocation of the license subject to an opportunity to the licensee of being heard by the Committee.
- vii. All flow meters shall be provided and installed by the Corporation at the expense of the licensee. In case of flow meters found faulty in generating volumetric flow for quantification the same shall be replace within 48hours with intimation to the Corporation at the expense of the licensee.

# 10. Sub Soil Water Charges & License Fee

i. Each licensee shall be invoiced by the Corporation for the total quantity of extracted groundwater by the fifth working day of each month. The payment for the invoiced amount shall be deposited by the licensee no later than the 10<sup>th</sup> working day of the same month, as per the prescribed tariff:

					TARIFF S	TRUCTURE				
A	Category Industrial	TDS Limits in PPM	Rates in	In Rupees per 1000 Gallon					*Security Deposit (Rs.)	**Licensing Fee (Rs.)
		upto 750 750 - 3000	Rupees per 1000 gallon	441 140						
		More than 3000		120					1,000,000	200,000
В	Ground Water Operators	TDS Limits in PPM	Rates in Rupees per 1000 gallon	Extraction Limit upto 2999 GPD	From 3000 GPD upto 11999 GPD	From 12,000 GPD upto 24,999 GPD	From 25,000 GPD upto 74999 GPD	Any Quantity more than 75000 GPD	*Security Deposit (Rs.)	**Licensing Fee (Rs.)
		upto 750		441	441	441	441	441	2,000,000	1,000,000
		750 – 3000		140	150	160	170	180		
		More than 3000		120	125	130	135	140		
C	Commercial Including Hospitality Industries and Businesses	TDS Limits in PPM	Rates in Rupees per 1000 gallon	Extraction Limit upto 2999 GPD	From 3000 GPD upto 11999 GPD	From 12,000 GPD upto 24,999 GPD	From 25000 GPD upto 74999 GPD	Any Quantity more than 75000 GPD	*Security Deposit (Rs.)	**Licensing Fee (Rs.)
		upto 750		441	441	441	441	441	1,000,000	
		750 - 3000		210	220	230	240	260		200,000
		More than 3000		170	180	190	200	210		
D	Healthcare Sector and Educational Institutions	TDS Limits in PPM	Rates in Rupees per 1000 gallon	Extraction Limit upto 2999 GPD	From 3000 GPD upto 11999 GPD	From 12,000 GPD upto 24,999 GPD	From 25000 GPD upto 74999 GPD	Any Quantity more than 75000 GPD	*Security Deposit (Rs.)	**Licensing Fee (Rs.)
		upto 750		441	441	441	441	441	200,000	
		750 - 3000		110	120	150	170	180		100,000
		More than 3000		90	95	100	105	110		
E	Residential complex	TDS Limits in PPM	Rates in Rupees per 1000 gallon	Extraction Limit upto 2999 GPD	From 3000 GPD upto 11999 GPD	From 12,000 GPD upto 24,999 GPD	From 25000 GPD upto 74999 GPD	Any Quantity more than 75000 GPD	*Security Deposit (Rs.)	**Licensing Fee (Rs.)
		upto 750		441	441	441	441	441	200,000	100,000
		750 – 3000		100	110	130	150	200		
		More than 3000		75	80	100	120	170		

\* Security deposit shall be made along with the application. The security deposit of successful applicants shall be retained with KW&SC till the duration of the license and may be returned after the expiry of the license subject to NDC by the Committee. However, violation of these Regulations, by the successful applicants/license holders, shall lead to the forfeiture of the security deposit by the Corporation.

Security Deposit of unsuccessful applicants shall be returned within 60 days subject to the submission of an application to the Corporation in this regard.

- \*\* Person, along with their applications, shall deposit with KW&SC the one-time License Fee in advance as mentioned above. The license fee of successful applicants shall be non-refundable. However, the license fee of unsuccessful applicants shall be returned within 60 days subject to the submission of an application to the Corporation in this regard.
- ii. In case of failure to deposit the invoiced monthly amount with the Corporation for the consecutive two (02) months, the matter will be referred to the Committee with the recommendation to immediately revoke the license by the CEO and forfeit the security deposit in full.
- iii. The receipt of revenue obtained from licenses issued under Section-10 of the Regulations shall be apportioned between KW&SC and KMC at the ratio of 75:25. From the 25% of the receipt share, the KMC shall undertake development projects including but not limited to recharge of groundwater table and its maintenance across Karachi Division.
- iv. The tariff structure in all the categories shall be subject to annual increase as per Cumulative Price Index (CPI) on July 1<sup>st</sup> of each year or as recommended by the Corporation.

# 11. Theft of Water

i. In case of reported theft of water by Antiwater theft department of the Corporation or any other designated office or Law enforcement agency where by it is reported that theft has been caused by obstructing, diverting, breaking, damaging, destroying, tampering, injuring, puncturing any of the Corporation's trunk main or distribution network may lead to criminal proceedings under the Code of Criminal Procedure, 1898, and KW&SC Act-2023.

ii. The Corporation shall impose Penalty of Rupees up to 50lac in case of illegal connection, theft of water, misdeclaration of TDS report made to the water trunk main or distribution network of KW&SC.

# 12. Transportation of Groundwater

- i. Under no circumstances whatsoever transportation of groundwater (processed or otherwise) shall be allowed through bulk water tankers / bowsers but shall not be applicable to the bottled or water under small containers.
- ii. In case of violation of subsection-(i) of Section-12 of this Regulations by the licensee leads immediate revocation of the licenses and confiscation of the tanker / vehicles shall be carried out by the Corporation.

### 13. <u>Due Treatment of Groundwater</u>

The licensees shall be solely responsible for ensuring supply and due treatment of the extracted water for potable use meeting National Environmental Quality Standards (NEQS).

# 14. Regulatory Oversight by the Corporation

- i. The Corporation shall itself or through a designated third party at the expense of the licensee in all the categories enlisted at Section-10, Sub-section(i), perform unannounced monthly inspections, assessing licensees' groundwater extraction facilities, any laid conveyance network and flow meters installed in the premises of the water supply recipient from the licensee. The reports in this regard shall determine fulfilment of or otherwise the Terms and Conditions as per these Regulations by the licensee under which continuation of the license shall be decided.
- ii. The water supply licensee and recipient of water supply both shall be bound to facilitate access of KW&SC staff to the facility. In case of non-compliance immediate disconnection of water supply to the beneficiary shall be executed by the Corporation. For corroboration, the Corporation may obtain data of industries from the Industrial Department Government of Sindh, accordingly.
- iii. In case of revocation of license, any laid network of pipes and other installations etc. shall be confiscated by the Corporation in the public interest.

iv. Upon expiry of the term of the license, the laid network of pipes and other installations etc. shall automatically vest with the Corporation and shall become part of its network in the public interest.

#### 15. Overriding effect

The provisions of these Regulations shall have over riding effect not withstanding anything contrary contained in any other Regulations for time being in force.

#### **16. Remedy**

Any action taken by the management of the Corporation with regard to revocation of license in imposition of penalty shall be appealable to the board of KW&SC. The aggrieved person may file an appeal before the board within a period of 30days from the date of imposition of penalty or revocation of licenses. The decision of the board shall be final.

#### 17. Removal of Difficulties

In case of any difficulty arising in the implementation of these Regulations, the Board may on the recommendation of the CEO or otherwise give appropriate directions for the removal of such difficulties.

# 18. Repeal

- i. The Subsoil Water (Extraction & Consumption) Regulations, 2018 are hereby repealed.
- ii. All the licensees issued under subsoil water (Extraction and Consumption) Regulations, 2018 are hereby stand revoked. The transition period, for dismantling of water connections from the bores given in the licenses under repealed Subsoil water (Extraction and Consumption) Regulations 2018, shall be of 30 days from enforcement of these Regulations.

By the order of Board of KARACHI WATER AND SEWERAGE CORPORATION

Syed Salahudin Ahmed, PAS Managing Director / CEO KW&SC