

NO OBJECTION CERTIFICATE (NOC) FOR GROUND WATER EXTRACTION UNDER TSWALTA

(FOR DIGGING ANEW WELLFOR COMMERCIAL/PACKAGED/DRINKING WATERUNITS/ INFRASTRUCTURES / BULK WATER SUPPLY / RESIDENTIAL APARTMENTS / OTHER USE)

Project Name :	BIOPOLIS GV LLP Rep.by Sri.Gaurang Mody.		
Project Address :	Sy.No: 193 and 188 of Turkapally(V), Shamirpet (M), Medchal-Malkajgiri District.		
Village	Turkapally	Mandal :	Shamirpet
District	Medchal-Malkajgiri		
Pin Code	500078		
Communication : Address	# 5-4-187/3 & 4, II Floor, Soham Mansion, M.G.Road, Secunderabad-500003.		

1)	Noc No.:	30/TSGWER-23/GWD/MDCL/2023-24/Shamirpet			
2)	Application No.:	2023/12	3)	Category of watershed as per latest GEC (Year: 2021-2022)	Safe.
4)	Project Status:	New	5)	NOC Type:	New
6)	Valid from:	23-03-2024	7)	Valid up to:	22-03-2027
8)	Ground Water Abstraction Permitted:				

Fresh Water		Dewatering		Total	
m3/day	m3/year	m3/day	m3/year	m3/day	m3/year
5	1825	Nil	Nil	5	1825

9) Details of ground wter Extraction / Dewatering structures

Total Existing No. _____						Total Proposed / Recommended No. <u>2</u>					
	DW	BW	TW	FP	Year of Drilling	DW	DCB	BW	TW	FP	purpose of use
No. of Extraction Structures	Nil	Nil	Nil	Nil	Nil	Nil	Nil	2	Nil	Nil	
Dia/Depth of well/HP	Nil	Nil	Nil	Nil	Nil	Nil	Nil	165 mm/120 m 165 mm/120 m	Nil	Nil	

.DCB - Dug cum bore, DW - Dug Well;; BW-Bore Well ; TW-Tube Well; FP-Filter Point ;

10) Details of Rain Waer Harvesing Structure / Artifical Recharge Structure

Recharge Structures	Existing Structures						Recommended Structures					
	RTRWH	CD	PT	SP	RS	Others	RTRWH(2) 27 Cu.m (3mx3mx3m)	CD	PT	SP	RS	Others

RTRWH; Roof Top Rain Water Harvesting, CD; Check dam; PT; Percolaton tank, SP; Storage pond
RS; Recharge Shaft.

11)	Ground water extraction Charges paid	Demand Draft No: 051622, Rs.32,000 (Registration Charges), Dt: 16/03/2024,			
12)	Number of Piezometers (Observaton wells) to be Constructed / Monitored & Monitoring mechanism.	No. of Piezometers	Monitoring Mechanism		
	** DWLR - Digital Water Level Recorder	Nil	Manual	DWLR	DWLR With Telemetry

(Compliance Conditions given overleaf)

Designated Officer

Place: Shamirpet

Date: 23-03-2024

K. Revathi 23/03/2024
Water, Land and Tree Authority
(With Seal)
Ground Water Department
Medchal-Malkajgiri District

Annexure-II**(See Rule 3)****Other General Conditions**

- 1) Installation of tamper proof digital water flow meter (BIS/IS Standard) on all the abstraction structure(s) shall be mandatory and intimation regarding their installation shall be communicated to the Ground Water Department within **30 days** of grant of NOC and shall be required to submit online annual water audit report from authorized firms/individuals registered with CGWA/SGWD.
- 2) Proponents shall mandatorily get water flow meter calibrated from an authorized agency once in a year.
- 3) Construction of purpose-built observation wells (piezometers) for water level monitoring shall be mandatory and construction of wells shall be constructed within 90 days of grant of NOC. Water level data shall be made available to respective office of the District Ground Water Officer, GWD _____ district. (For construction of piezometers, the proponent may consult, District Ground Water Officer, Ground Water Department for technical advice).
- 4) Proponents shall monitor quality of ground water from the abstraction structure(s) twice in a year. Water samples from abstraction structure(s) shall be collected during May & November every year and analyzed in NABL accredited laboratories for basic parameters. Additionally, heavy metals, organic compounds in case of potential polluting industries. Water quality data shall be submitted to respective office of the District Ground Water Officer, GWD of respective district.
- 5) Construction of Artificial Recharge/Rain Water Harvesting Structures (Rule-16, TSWALTA) shall be mandatory.
- 6) In case of mining projects, additional key wells shall be established in consultation with the District Ground Water Officer, GWD, _____ district for ground water level monitoring once in a month in core zone of the mine.
- 7) The firm shall report compliance of the NOC conditions to respective office of the District Ground Water Officer, GWD of _____ district within one year from the date of issue of this NOC.
- 8) Application for renewal can be submitted to respective office of the District Ground Water Officer, GW, _____ district from 90days before the expiry of NOC. Groundwater withdrawal, if any, after expiry of NOC shall be illegal & liable for legal action as per provisions of TSWALTA & Environment (Protection) Act, 1986.
- 9) This NOC is subject to prevailing Central/State Government rules/laws/norms or Court orders related to construction of tube well/ground water abstraction structure / recharge or conservation structure/discharge of effluents or any such matter as applicable.

Mandatory Conditions:

- a) No additional ground water abstraction and/or de-watering structures shall be constructed for this purpose without prior approval of the Ground Water Department.
- b) The proponent shall seek prior permission from Ground Water Department for any increase in quantum of groundwater abstraction (more than that permitted in NOC for specific period).
- c) The project proponent shall take all necessary measures to prevent contamination of ground water in the premises failing which the firm shall be responsible for any consequences arising there upon.
- d) In case of industries that are likely to contaminate the ground water, no recharge measures shall be taken up by the firm inside the plant premises. The runoff generated from the rooftop shall be stored and put to beneficial use by the firm.
- e) Wherever feasible, requirement of water for greenbelt (horticulture) shall be met from recycled / treated waste water.
- f) In case of violation of any NOC conditions, the applicant shall be liable to pay the penalties as per Rule- 26, TSWALTA.
- g) This NOC does not absolve the proponents of their obligation / requirement to obtain other statutory and administrative clearances from appropriate authorities.
- h) In case of change of ownership, new owner of the industry will have to apply for incorporation of necessary changes in the **No Objection Certificate** with documentary proof within 60days of taking over possession of the premises.
- i) Proponents, who have installed/constructed artificial recharge structures, shall continue to regularly maintain artificial recharge structures.
- j) This NOC is being issued without any prejudice to the directions of the Hon'ble NGT/court orders in cases related to ground water or any other related matters.

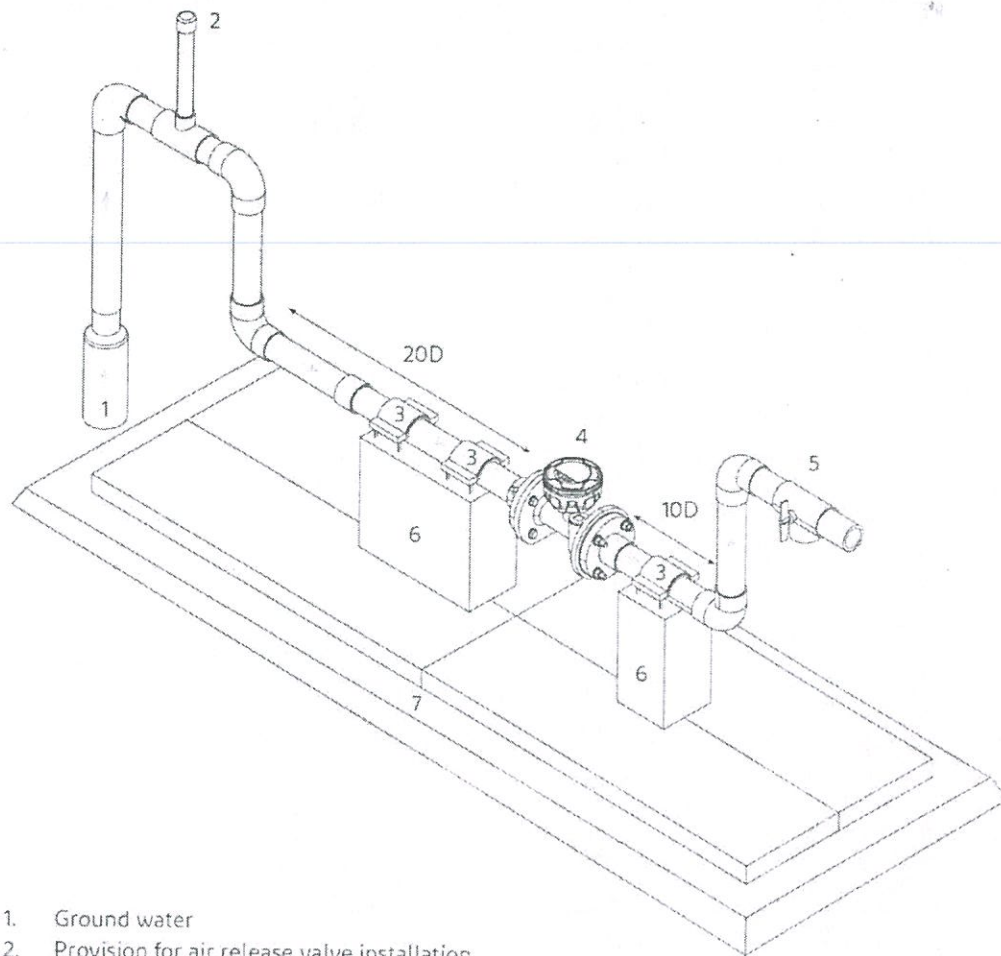
**GOVERNMENT OF TELANGANA
GROUND WATER DEPARTMENT**

**Specifications of Tamper-proof Digital Water Flow Meters with Telemetry for
Monitoring Groundwater Abstraction, Recommended by IIT Kanpur.**

Tamper-proof digital water flow meter with telemetry specifications	
Metering Technology	Ultrasonic or Electromagnetic
Communication type	Wireless Cellular - GPRS/3G/4G/5G/NB-IoT
Tamper proof	
a) Power source	Both the flow meter and telemetry components shall be battery-operated, eliminating the need for any external power sources or renewable energy. The entire system, including the battery, must be enclosed in an IP68 rated box for protection against water and dust. Battery should have a minimum lifespan of 3 years. The battery shall be replaceable without any data loss.
b) Sealing	The flow meter and telemetry system shall feature both mechanical and electronic seals to identify any tampering attempts. Any unauthorised attempt to open the meter or system enclosure shall physically damage the mechanical seal and trigger an automatic alert to the online server.
c) Tampering	Tampering with flow meter data is strictly prohibited
Accuracy	The flow meter shall meet the accuracy standards of ISO 4064:2014, class 2.
Ingress Protection	Both the Flow Meter and Telemetry Unit shall comply with IP68 standards for protection against water and dust ingress.
Certifications	ISO 4064: 2014, IP68
Device Approval	The manufacturer shall provide a meter performance certificate from any of the Govt. NABL accredited laboratories (like Fluid Control Research Institute (FCRI) or National Physical Laboratory (NPL) or others)

Parameters to monitor	The flow meter shall transmit the following parameters as per the scheduled frequency ● Timestamp ● Instantaneous flow rate ● Cumulative forward flow volume ● Cumulative reverse flow volume ● Cumulative hours of pump operation ● Meter serial number ● Device last calibration date ● Borewell id (Provided by TSGWD)
Communication security	The communication between the flow meter and cloud servers shall be secured with a minimum TLS1.2 standard to ensure data integrity and privacy.
Data storage in cloud	The Communication/telemetry data should be directly captured in a secure cloud. The cloud service provider should be empaneled with The Ministry of Electronics and Information Technology (MeitY).
Logging and transmission frequency	Data shall be logged three times a day at 8 AM, 4 PM, and 12 AM. Data transmission to cloud servers shall occur once a day. In case of weak cellular signals, the meter should store data and transmit it to the cloud once communication is restored, with storage capacity for at least 2 years.
Material of construction	Brass/Bronze/MS/CI/SS/Engineering Plastic
Calibration	The flow meters shall be calibrated from a laboratory accredited by NABL as per ISO 17025: 2017 standard.
Data sharing with TSGWD	The un-tampered data shall be sent to the state groundwater department portal through APIs. Direct data transfer from flow meters to the department server may be implemented in the future to enhance security and prevent data tampering at the server level.
Installation of tamper proof flow meter	
Location	Water meters shall be installed within the premises, with

	sturdy support and above the ground level to avoid immersion in water. The meter shall not be embedded in concrete or full metal chambers and must be easily accessible for maintenance and inspection.
Position	The meter shall be installed at the very beginning of the borewell outlet before any offtake.
Bypassing	Bypassing of the pipe at the flow meter is strictly prohibited.
Installation	The installation of the meter shall be in compliance with ISO 4064-5. To ensure a consistent full flow of water without any air bubbles in the installation line, it is mandatory to install the piping in a 'U' shape configuration, accompanied by an appropriate air release valve positioned before the meter. Sufficient upstream and downstream unobstructed straight lengths shall be provided for the meter according to the sensitivity class (ISO 4064-5) as prescribed by the manufacturer. Refer to Figure 1. for installation guidelines.
Yearly Calibration	The flow meters shall undergo yearly calibration from an NABL accredited laboratory, either on-site or in the lab. Issuing a calibration certificate without actual calibration is strictly prohibited.



1. Ground water
 2. Provision for air release valve installation
 3. Clamps
 4. Tamper proof digital water flow meter
 5. Potable opening
 6. Support structure
 7. Ground level
- Flow direction

Figure. 1 Installation position of tamper proof flow meter with telemetry at groundwater abstraction structures