

# Bangalore Baptist Hospital

Quality with Compassion Since 1973



Date: 26.05.2021

To,

Chief Conservator of Forests (CCF),  
Ministry of Environment & Forests,  
Regional Office (Southern Zone), Kendriya Sadhan,  
4th Floor, E & F Wings, 17th Main Road, 2nd Block, Koramangala,  
Bangalore - 560 034.

Sir,

Sub: Half yearly compliance report on the conditions of EC in respect of Expansion of Hospital and Allied Health Science Project at PID No. 1/B, 1/1, 1/2 and 1/3, Bellary Road, Hebbal, Bengaluru.

Adverting to the above subject, it is to be informed that Environmental Clearance is obtained for the above referred project from SEIAA, Karnataka vide letter no. SEIAA: 48: CON: 2019 dated 11.06.2019. The half yearly compliance report on the conditions of EC for the period October 2020 to March 2021 is herewith submitted for kind perusal.

An additional copy of the covering letter is enclosed and kindly requested to acknowledge the receipt of the report.

Thanking you,  
for M/s. Bangalore Baptist Hospital,

Authorized Signatory.

Director (CEO)  
Bangalore Baptist Hospital  
Hebbal, Bangalore-560 024

Copy to:

The Member Secretary,  
State Level Environmental Impact Assessment Authority Karnataka,  
Department of Forest, Ecology and Environment,  
7<sup>th</sup> Floor, Multi Storied Building,  
Bangalore – 560 001.

Authorized Signatory



**HALF YEARLY COMPLIANCE REPORT**

**For the period 01.10.2020 to 31.03.2021 in respect of  
EXPANSION OF HOSPITAL AND ALLIED  
HEALTH SCIENCE PROJECT**

**At**

**PID No. 1/B, 1/1, 1/2 and 1/3,  
Bellary Road, Hebbal,  
Bengaluru.**

**Submitted by**

**M/s. Bangalore Baptist Hospital,  
PID No. 1/B, 1/1, 1/2 and 1/3,  
Bellary Road, Hebbal,  
Bengaluru.**

**Compliance to the Conditions of Environment Clearance**

**Ref: EC Letter No. SEIAA: 48: CON: 2019 dated 11<sup>th</sup> June 2019.**

Environmental clearance is accorded by SEIAA, Karnataka in the above referred letter for Expansion of Hospital and Allied Health Science Project of total built-up area 54,831.57 square meters with 342 Nos. of car and 4 Nos. of Ambulance parking spaces in an area of 53,406.60 square meters at PID No. 1/B, 1/1, 1/2 and 1/3, Bellary Road, Hebbal, Bengaluru. Now the project is under construction stage.

<b>I. Statutory Compliance:</b>		
<b>Sl. No.</b>	<b>EC Condition</b>	<b>Compliance</b>
1.	The project proponent shall obtain all necessary clearances / permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.	All necessary clearances / permissions are obtained from concerned departments and the construction of proposed building is being carried out in accordance with the local building byelaws.
2.	The approval of the Competent Authority shall be obtained for structural safety of the constructions due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightening etc.	Designs are carried out by BBMP registered engineers as per NBC.
3.	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of diversion of forest land for non-forest purpose involved in the project.	No forest land is involved in the project site.
4	The proponent shall obtain clearance from the National Board for Wildlife, if applicable.	Not applicable as the project site does not falls in wildlife area.
5	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board / Committee.	The project has obtained the Consent to operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from Karnataka State Pollution Control Board, copy of the same is enclosed as <b>Annexure-1</b>
6	The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent	Permission for drawl of groundwater from borewells is obtained from State Ground Water Authority; copy of the same is enclosed as <b>Annexure -2.</b>

	authority.	
7	A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.	Power is supplied through BESCOM. Total power requirement is 5,145 kW. Certificate issued by BESCOM is enclosed as <b>Annexure -3</b> .
8	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department and Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.	Has been obtained.
9	The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastic Waste Management Rules, 2016 shall be followed.	The provisions of Solid Waste Management Rules 2016, e-Waste (Management) Rules 2016, and the Plastic Waste Management Rules 2016 are being complied with.
10	The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.	Agreed.
11	Orders of Honourable NGT in O.A. No. 222 of 2014 dated 04.05.2016 and in O.A. No. 125/2017 and connected matters dated 06.12.2018 with regard to maintenance of buffer zone from the water bodies shall be complied with.	There is no water body / sources present within the immediate vicinity of project site.
<b>II. Air Quality Monitoring and Preservation:</b>		
1	Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.	Construction is carried out by providing adequate dust mitigation measures like barricading, sprinkling of water on unpaved area, paved roads etc.,
2	A management plan shall be drawn up and implemented to contain the current exceedance if any in ambient air quality at the site.	A management plan for air quality is being implemented at the project site.
3	The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters	Ambient air quality at the site is monitored regularly by the external agency. The latest monitoring report is enclosed as <b>Annexure- 4</b>



	relevant to main pollutants released (e.g. PM10 and PM2.5) covering upwind and downwind directions during the construction period.	
4	Diesel power generation sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board	DG sets are provided with chimneys of adequate height as stipulated by KSPCB and are placed in a closed shed with acoustic enclosures.
5	Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic / tarpaulin sheet covers shall be provided for vehicles bringing in sand/ cement, murram and other construction materials prone to causing dust pollution at sites as well as taking out debris from the site.	Preventive measures such as barricading around the project site with GI sheets, sprinkling of water to suppress dust, using emission tested sound vehicles to bring construction materials etc., are carried out in the project site.
6	Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.	Construction materials like sand, murram, cement etc., are stored on site and are covered properly to prevent dust pollution.
7	Wet jet shall be provided for grinding and stone cutting.	Being followed.
8	Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.	Water is sprinkled frequently on unpaved surfaces and loose soil area to suppress dust and prevent dust pollution.
9	All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste	Construction and demolition debris generated of about 50 cum are used for preparation of sub grades for roads and pathways. Remaining are managed & disposed according to the Construction and Demolition Waste Rules, 2016.

	Rules 2016.	
10	The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to standards prescribed under Environmental (Protection) Rules for air and noise emission standards.	DG sets are of low sulphur diesel type and conforms to the standards stipulated under Environmental (Protection) Rules for air and noise emission standards.
11	The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.	DG sets are provided with stacks of adequate height as per the stipulation of KSPCB and acoustic enclosures to mitigate air and noise pollution. Low sulphur content diesel is used as fuel.
<b>III. Water Quality Monitoring and Preservation:</b>		
1	The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.	Natural hydrology and pattern of drain system is not altered and is maintained as such for flow of storm water.
2	Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.	Noted and is followed.
3	Total fresh water use shall not exceed the proposed requirement as provided in project details.	The total fresh water usage shall not exceed more than 391 KLD.
4	The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.	Necessary water meters are provided.
5	A certificate shall be obtained from local body supplying water specifying the total annual water availability with	Permission is obtained from BWSSB for supply of water.

	local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available, this should be specified separately for ground water and surface water sources, ensuring that there is no impact on the other users.	
6	At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers' blocks with at least 50% opening, landscape etc. would be considered as pervious surface.	Followed.
7	Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc. and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.	Dual plumbing system is provided for separating the supply of fresh water and recycled water for flushing.
8	Use of water saving devices / fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc.) for water conservation shall be incorporated in the project area.	Water efficient plumbing fixtures are used to reduce water consumption.
9	Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system are done.	Dual plumbing system is provided for separation of grey and black water.
10	The project proponent shall identify a suitable source of treated water for construction and submit an MOU/ Agreement with such suppliers. If so, the supplier identified shall be responsible for treatment of water with appropriate technology to the standards required for construction purpose.	Tertiary treated water from STP is utilized for construction work.
11	The local bye-law provision on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Department Model Building Byelaws, 2016.	Provisions are made for rain water harvesting by providing tank of 70 KLD capacity for collection of roof top water and sufficient number of recharge pits for infiltration of storm water and recharge groundwater.
12	A rain water harvesting plan needs to	Provisions are made for rain water

	be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.	harvesting by providing tank of 70 KLD capacity for collection of roof top water. Sufficient number of recharge pits for infiltration of storm water and recharge groundwater. Permission is obtained from the State Ground Water Authority (SGWA) to draw underground water.
13	All recharge should be limited to shallow aquifer.	Agreed.
14	No ground water shall be used during construction phase of the project	Noted and followed.
15	Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.	Approval is obtained from State Ground Water Authority, copy is enclosed as <b>Annexure - 2</b>
16	The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports	Necessary water meters are provided.
17	Sewage shall be treated in the STP based on MBBR/SBR Technology with tertiary treatment i.e. Ultra Filtration. The treated effluent from SP shall be recycled/re-used for flushing, landscaping and HVAC cooling. No treated water shall be discharged to municipal drain.	At present sewage is treated in STP of 200 KLD with SBR technology and tertiary treatment. The treated effluent is reused for construction along with flushing, landscaping and HVAC cooling within the site with no discharge of treated or untreated sewage into municipal drain. Additional STP of 125 KLD is proposed in the project.
18	. No sewage or untreated effluent water would be discharged through storm water drains	Sewage is treated in STP and reused for flushing, landscaping etc., inside the premises and not discharged directly in to storm water drain.
19	The Existing water body, canals and rajakaluve and other drainage and water bound structures shall be retained unaltered with due buffer zone as applicable and maintained	No water body/ canals/ rajakaluve/ or any other water bound structures are present within the immediate vicinity of project site.

	under tree cover.	
20	Onsite sewage treatment of capacity of treating 100% wastewater to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated wastewater shall be reused on site for landscape flushing, cooling tower and other end uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment Forest and Climate Change Natural treatment systems shall be promoted.	At present Sewage is treated in STP of 200 KLD and tertiary treatment. The treated effluent is reused for construction activity along with flushing, landscaping and gardening. An additional STP of 125 KLD is proposed in the project.
21	Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.	Periodical monitoring of treated sewage is carried out in the project.
22	Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.	Sludge is used as manure for gardening within the project premises.
<b>IV. Noise Monitoring and Prevention:</b>		
1	Ambient noise levels shall conform to residential area both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/SPCB.	Adequate measures like barricading around the site, DG sets with acoustic enclosures and adequate stack height, vehicles carrying construction materials are being covered, water sprinkling on unpaved roads etc., are followed to reduce air and noise pollution.
2	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be	Noise level survey is carried out and the monitored result report is appended as <b>Annexure -4.</b>

	submitted to the Regional Officer of the Ministry as a part of six-monthly compliance report.	
3	Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.	Acoustic enclosures are provided to DG sets and personal protective equipment is provided for labourers operating under high noise levels during construction.
4	The project proponent shall ensure the time specification prescribed by the Honourable High Court of Karnataka in WP. No. 1958/2011 (LB – RES – PIL) ON 04.12.2012 for different activities involved in construction work.	Agreed.
<b>V. Energy Conservation Measures:</b>		
1	Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.	ECBC guidelines are being followed with.
2	Outdoor and common area lighting shall be LED.	Outdoor and common area is provided with LED lighting.
3	Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window and roof u-values shall be as per ECBC specifications.	ECBC specifications are followed.
4	Energy conservation measures like installation of LED for lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.	Agreed.
5	Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building byelaws requirement, whichever is higher.	Solar energy is being utilized in the project.
6	Solar power shall be used for lighting	Solar energy and power is utilized in

	in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.	the project.
<b>VI. Waste Management:</b>		
1	A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.	Municipal solid waste is handed over to BBMP for transportation, treatment and disposal.
2	Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.	Debris & mucks generated of about 50 cum is used for preparation of sub grades for roads and pathways. Remaining wastes are disposed carefully without causing any adverse effect on surrounding human health & environment.
3	Separate wet and dry bins must be provided and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.	Separate coloured bins are provided to segregate the waste into wet and dry wastes. Separate colour coded plastic covers are used to collect bio-medical waste and disposed it to a CBWTF.
4	Organic waste compost/ vermin culture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg/ person/ day must be installed.	Organic waste generated is treated in bio gas plant installed at the project site. Garden waste is shredded and the manure is used for landscape.
5	All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.	All non-biodegradable wastes are sent for recycling by handing over to authorized recyclers.
6	Any hazardous waste generated during construction phase, shall be disposed of as per applicable rules and norms with necessary approvals of the State Pollution Control Board.	There is no generation of Hazardous waste during construction.
7	Use of environment friendly materials	Agreed and followed.



	in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.	
8	Fly ash should be used as construction material as per the provision of Fly Ash Notification of September, 1999 and amended as on 27 <sup>th</sup> August, 2003 and 25 <sup>th</sup> January, 2016. Ready mixed concrete must be used in construction.	No generation of Fly Ash in the project.
9	Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.	Construction and demolition wastes generated are managed according to the norms conforming to the Construction and Demolition Waste Management Rules, 2016.
10	Used CFLs/ TFLs/ LED should be properly collected and disposed of / sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination	Agreed.
<b>VII. Green Cover:</b>		
1	No tree cutting/ transplantation should be carried out unless exigencies demand. Where absolutely necessary tree transplantation shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).	No trees are cut down in the project.
2	A minimum of 1 tree for every 80 square meter of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are	There are 362 trees of different species existing. Addition plantation of 75 trees of different species will be made as per the EMP.

	desirable. Water intensive and / or invasive species should not be used for landscaping.	
3	Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted).	No trees are cut down in the project.
4	Topsoil should be stripped to a depth of 20 cm from the area proposed for buildings, roads, paved areas and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.	Topsoil excavated is properly stored & used for landscape, horticulture development and other formation & backfilling activities within the project site.
<b>VIII. Transport:</b>		
1	A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria. a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic. b. Traffic calming measures. c. Proper design of entry and exit points. d. Parking norms as per local regulation.	Internal roads are designed properly for safety use of commuters. Proper bell entry and exit points are provided. Adequate internal parking facility is provided for vehicles.
2	Vehicles hired for bringing construction material to the site should be in a good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during nonpeak hours.	The construction vehicles are usually operated during non-peak hours. The emission tests of vehicles are conducted and only well-maintained vehicles conforming to air emission standards are utilized.
3	A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of roads within a 5 km radius of the project is maintained	The traffic load contributed from the project to the existing traffic load is not significant.

	and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 5 km radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.	
4	Provide at the main entrances bell gates, which are located at least 12' inside the boundary of the project to enable smooth flow of traffic on the main road leading to the entrance	Bell gate entry and exit is maintained in the project to prevent congestion and allow smooth flow of traffic.
<b>IX. Human Health Issues:</b>		
1	All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.	Workers involved in loading, unloading of construction materials and debris are provided with dust masks.
2	All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase. Sufficient number of toilets/bathrooms shall be provided with required mobile toilets, mobile STP for construction workforce	Necessary sanitary & hygienic measures such as toilets/ bathrooms are provided for the construction workers at the site. The sewage is treated in the existing STP.
3	For indoor air quality the ventilation provisions as per National Building Code of India.	Ventilation provision as per NBC is provided.
4	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented	Emergency preparedness plan is prepared and is implemented.
5	Provisions shall be made for housing	Temporary housing facilities such as

	of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	number of sheds, toilets/ bathrooms, STP, drinking water, medical health etc., are provided to the labourers.
6	Occupational health surveillance of the workers shall be done on a regular basis.	Occupational health surveillance of the construction workers is done on a regular basis.
7	A First Aid Room shall be provided in the project both during construction and operations of the project.	Project is expansion of hospital. Thus, all health care facilities are present at the site.
<b>X. Corporate Environment Responsibility:</b>		
1	The project proponent shall comply with provision contained in OM vide F. No. 22-65/2017-IA.III dated 1 <sup>st</sup> May 2018, of the Ministry of Environment, Forest and Climate Change as applicable, regarding Corporate Environment Responsibility and shall extend the action plan around the project site.	Agreed.
2	The company shall have a well laid down environment policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions. The company shall have defined system of reporting infringements/ deviation/ violation of the environmental / forest / wildlife norms / conditions and / or stakeholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as part of six-monthly report.	The environment policy is in place.
3	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to	Environment Cell is constituted and is in operation by taking care of all environment concerns.

	the head of the organization. The project proponent enters into an agreement with the prospective buyers/ tenants to ensure that they maintain the cell and take care of all environment concerns during the operation phase of the project. In addition, sufficient fees should be levied so as to raise a corpus fund to maintain the Environment cell	
4	Action plan for implementing EMP and environmental conditions along, with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry of Environment, Forest and Climate Change/ Regional Office along with the Six Monthly Compliance Report.	Action plan has already briefed in the EMP and it will be implemented during operation phase.
<b>XI. Miscellaneous:</b>		
1	The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/ SEIAA website where it is displayed.	Advertisement is given on issue of EC along with the details of SEIAA.
2	The copies of environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	Copy of the EC is given to BBMP.
3	The Project Proponent shall obtain the construction material such as stones and aggregates etc. only from the approved quarries and other	All construction materials such as stones, aggregates etc., are obtained from nearby approved quarries and authorized agencies / traders.

	construction material shall also be procured from the authorized agencies / traders	
4	The project proponent shall not use Kharab land if any for any purpose and keep available to the general public duly by playing a board as public property. No structure of any kind be put up in Kharab land and shall be afforested and maintained as green belt only.	No kharab land is present in the project.
5	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	Agreed.
6	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	Agreed, compliance report is herewith submitted
7	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	Agreed.
8	The project proponent shall inform the Regional Office as well as the Ministry of Environment, Forest and Climate Change, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project	The construction works of expansion project is under progress. The commissioning date will be intimated.
9	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	All the stipulations made by the State Pollution Control Board and the State Government are complied with.
10	The project proponent shall abide by all the commitments and recommendations made in the EIA / EMP report and also that during their	All commitment made will be followed with true spirit.

	presentation to the Expert Appraisal Committee.	
11	No further expansion or modifications in the plan shall be carried out without prior Environmental Clearance from the competent authority.	Prior Environmental Clearance will be taken in case of further expansion or modification of the project.
12	Concealing factual data or submission of false/ fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	All the data submitted is true.
13	The State Level Environment Impact Assessment Authority, Karnataka may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Agreed.
14	The SEIAA, Karnataka reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions	Agreed.
15	The Regional Office of MoEF&CC shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.	Full cooperation will be extended by providing all necessary data / information to the Regional Office Officials of MoEF, Bangalore.
16	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Honourable Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.	Agreed.
17	Any appeal against this EC shall lie with the National Green Tribunal, if	Noted.



	preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010	
18	Copies of six monthly compliance on the conditions of the Environmental Clearance shall be submitted to SEIAA, Karnataka.	Six monthly compliance to the EC conditions will be submitted to SEIAA Karnataka.
19	The solid waste generated should be properly collected and segregated in situ. The Biodegradable organic waste be composted by installing bio-converter in site and used. The non-biodegradable waste is disposed to the authorized recyclers.	Solid waste generated at the site is collected and segregated on site in separate bins. The biodegradable waste is treated in the biogas plant and the non-biodegradable is handed over to authorized recyclers.
20	Any hazardous waste including biomedical waste should be disposed-off as per the applicable Rules and norms with necessary approvals of the Karnataka State Pollution Control Board.	Hazardous waste is generated in the form of used/waste oil from DG Sets and the same is disposed to KSPCB approved waste oil re-processors. Biomedical wastes are segregated as per colour coding and disposed through M/s. Medicare Environmental Management Private Limited for transportation treatment and disposal. Authorization under Hazardous waste Rules and Bio Medical Wastes Management and Handling Rules have been obtained from KSPCB.
<b>XII. Specific Conditions:</b>		
1	The data on quantification of solar energy proposed to be tapped is to be submitted to the Authority.	Solar energy and power are utilized in the project to an extent of 60 kW.



# State Level Environment Impact Assessment Authority-Karnataka

(Constituted by MoEF, Government of India, under section 3(3) of E(P) Act, 1986)

No. SEIAA 48 CON 2019

Date: 11-06-2019

To,

Mrs. Nirupama Patil,  
Legal Officer,  
M/s. Bangalore Baptist Hospital,  
PID No. 1/B, 1/1, 1/2 and 1/3,  
Bellary Road,  
Hebbal,  
Bengaluru - 560 024.

Sir,

Sub: Proposed Expansion of Hospital and Allied Health Science Project at PID No. 1/B, 1/1, 1/2 and 1/3, Bellary Road, Hebbal, Bengaluru by M/s. Bangalore Baptist Hospital - Issue of Environmental Clearance - Reg.

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This has reference to your online application dated 26<sup>th</sup> March 2019 bearing proposal No. SIA/KA/NCP/33672/2019 addressed to SEIAA, Karnataka and subsequent letters addressed to SEIAA/SEAC Karnataka furnishing further information/seeking prior Environmental Clearance for the above project under the EIA Notification, 2006. The proposal has been appraised as per the prescribed procedure in light of the provisions under the EIA Notification, 2006 on the basis of the mandatory documents enclosed with the application viz., the Form 1, Form 1A, conceptual plans and the additional clarifications furnished in response to the observations of the SEAC, Karnataka. SEAC has recommended for issue of Environmental Clearance in their meeting held on 10<sup>th</sup> May 2019.

2. It is, inter-alia, noted that M/s. Bangalore Baptist Hospital have proposed for Expansion of Hospital and Allied Health Science Project on a plot area of 53,406.60 sqm. The total built up area is 54,831.56 sqm. Details of existing and proposed construction are as follows.

Sl. No	Blocks	Built up Area (sqm)
1	Existing Blocks(16 Blocks)	2,23.51
2	Proposed addition to Existing SERC, CT and RT block	4,534.57
3	Proposed New Blocks (2 Blocks)	20,573.49
Total		54,831.57



The project is comprising of 16 Existing blocks and 2 Proposed New blocks. Building configuration of New blocks is Basement + Ground Floor + 4 Upper Floors. Total parking space proposed is for 342 No's of Cars and 4 No's of Ambulance (inclusive of Existing parking for 252 No's of Cars and 3 No's of Ambulance) Total water consumption is 391 KLD (Fresh water + Recycled water). The total wastewater discharge is 314 KLD. It is proposed to have Two Sewage Treatment Plant with total capacity of 325 KLD (200 KLD Existing Sewage Treatment Plant and 125 KLD of Proposed Sewage Treatment Plant) . The project cost is Rs. 121 Crores.

3. The SEIAA Karnataka after due consideration of the relevant documents submitted by the project proponent, additional clarifications furnished in response to its observations and the recommendation of the SEAC have in their meeting held on 18<sup>th</sup> May 2019 and decided to accord Environmental Clearance in accordance with the provisions of Environmental Impact Assessment Notification-2006 and its subsequent amendments, subject to strict compliance of the following terms and conditions: -

**I. Statutory Compliance.**

- i) The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- ii) The approval of the Competent Authority shall be obtained for structural safety of the constructions due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightning etc.
- iii) The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of diversion of forest land for non forest purpose involved in the project.
- iv) The proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- v) The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- vi) The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.
- vii) A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.





- viii) All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
- ix) The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste Management Rules, 2016 shall be followed.
- x) The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.
- xi) Orders of Hon'ble NGT in O.A. No. 222 of 2014 dated 04.05.2016 and in O.A. No. 125/2017 and connected matters dated 06.12.2018 with regard to maintenance of buffer zone from the water bodies shall be complied with.

## II. Air quality monitoring and preservation

- i) Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- ii) A management plan shall be drawn up and implemented to contain the current exceedance if any in ambient air quality at the site.
- iii) The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM<sub>10</sub> and PM<sub>2.5</sub>) covering upwind and downwind directions during the construction period.
- iv) Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- v) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpon sheet covers shall be provided for vehicles bringing in sand, cement, murram, and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.





- vi) Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii) Wet jet shall be provided for grinding and stone cutting.
- viii) Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- ix) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
- x) The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to standards prescribed under Environmental (Protection) Rules for air and noise emission standards.
- xi) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

### III. Water quality monitoring and preservation

- i) The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.
- ii) Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
- iii) Total fresh water use shall not exceed the proposed requirement as provided in project details.
- iv) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with the monthly Monitoring reports.
- v) A certificate shall be obtained from local body supplying water, specifying the total annual water availability with local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available, this should be specified separately for ground water and





surface water sources, ensuring that there is no impact on the other users.

- vi) At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- vii) Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
- viii) Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the project area.
- ix) Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- x) The project proponent shall identify a suitable source of treated water for construction and submit an MOU/ Agreement with such suppliers. If so the supplier identified shall be responsible for treatment of water with appropriate technology to the standards required for construction purpose.
- xi) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016.
- xii) A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.
- xiii) All recharge should be limited to shallow aquifer.
- xiv) No ground water shall be used during construction phase of the project.
- xv) Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.
- xvi) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water





balance. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.

- xvii) Sewage shall be treated in the STP based on MBBR/SBR Technology with tertiary treatment i.e. Ultra Filtration. The treated effluent from STP shall be recycled/re-used for flushing, landscaping and HVAC cooling. No treated water shall be discharged to municipal drain.
- xviii) No sewage or untreated effluent water would be discharged through storm water drains.
- xix) The existing water body, canals and rajakaluve and other drainage and water bound structures shall be retained unaltered with due buffer zone as applicable and maintained under tree cover.
- xx) Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.
- xxi) Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
- xxii) Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

#### IV. Noise monitoring and prevention

- i) Ambient noise levels shall conform to residential area both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.
- ii) Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.





- iii) Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.
- iv) The project proponent shall ensure the time specification prescribed by the Honourable High Court of Karnataka in WP. No. 1958/2011 (LB - RES - PIL) on 04.12.2012 for different activities involved in construction work

**V. Energy Conservation measures**

- i) Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.
- ii) Outdoor and common area lighting shall be LED.
- iii) Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
- iv) Energy conservation measures like installation of LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.
- v) Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.
- vi) Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

**VI. Waste Management**

- i) A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.





- ii) Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- iii) Separate wet and dry bins must be provided and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
- iv) Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.
- v) All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
- vi) Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- vii) Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
- viii) Fly ash should be used as construction material as per the provision of Fly Ash Notification of September, 1999 and amended as on 27<sup>th</sup> August, 2003 and 25<sup>th</sup> January, 2016. Ready mixed concrete must be used in construction.
- ix) Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
- x) Used CFLs/TFLs/LED should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

## VII. Green Cover

- i) No tree cutting/transplantation should be carried out unless exigencies demand. Where absolutely necessary, use transplantation shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (out) to species (planted).
- ii) A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this.





purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.

- iii) Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted).
- iv) Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

#### VIII. Transport

- i) A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
  - a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
  - b. Traffic calming measures.
  - c. Proper design of entry and exit points.
  - d. Parking norms as per local regulation.
- ii) Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during nonpeak hours.
- iii) A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of roads within a 5 km radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 5 km radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.





- iv) Provide at the main entrances bell gates, which are located at least 12' inside the boundary of the project to enable smooth flow of traffic on the main road leading to the entrance

**IX. Human health issues**

- i) All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
- ii) All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase. Sufficient number of toilets/bathrooms shall be provided with required mobile toilets, mobile STP for construction workforce
- iii) For indoor air quality the ventilation provisions as per National Building Code of India.
- iv) Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented
- v) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- vi) Occupational health surveillance of the workers shall be done on a regular basis.
- vii) A First Aid Room shall be provided in the project both during construction and operations of the project.

**X. Corporate Environment Responsibility**

- i) The project proponent shall comply with provision contained in OM vide F.No. 22-65/2017-IA.III dated 1<sup>st</sup> May 2018, of the Ministry of Environment, Forest and Climate Change as applicable, regarding Corporate Environment Responsibility and shall extend the action plan around the project site.
- ii) The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or





stakeholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

- iii) A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization. The project proponent enter into an agreement with the prospective buyers/ tenants to ensure that they maintain the cell and take care of all environment concerns during the operation phase of the project. In addition, sufficient fees should be levied so as to raise a corpus fund to maintain the Environment cell.
- iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry of Environment, Forest and Climate Change/Regional Office along with the Six Monthly Compliance Report.

#### XI. Miscellaneous

- i) The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
- ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii) The Project Proponent shall obtain the construction material such as stones and aggregates etc. only from the approved quarries and other construction material shall also be procured from the authorized agencies/traders.
- iv) The project proponent shall not use Kharab land if any for any purpose and keep available to the general public duly displaying a board as public property. No structure of any kind be put up in the Kharab land and shall be afforested and maintained as green belt only.
- v) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of





State Level Environment Impact Assessment Authority-Karnataka

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monitored data on their website and update the same on half-yearly basis.

- vi) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vii) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- viii) The project proponent shall inform the Regional Office as well as the Ministry of Environment, Forest and Climate Change, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- ix) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- x) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during their presentation to the Expert Appraisal Committee.
- xi) No further expansion or modifications in the plan shall be carried out without prior Environmental Clearance from the competent authority.
- xii) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiii) The State Level Environment Impact Assessment Authority, Karnataka may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiv) The SEIAA, Karnataka reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xv) The Regional Office of MoEF&CC shall monitor compliance of the stipulated conditions. The project authorities shall extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xvi) The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the





State Level Environment Impact Assessment Authority-Karnataka

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Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

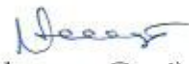
- xvii) Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
- xviii) Copies of six monthly compliance on the conditions of the Environmental Clearance shall be submitted to SEIAA, Karnataka.
- xix) The solid waste generated should be properly collected and segregated insitu. The Biodegradable organic waste be composted by installing bio-converter in site and used. The non-biodegradable waste is disposed to the authorized recyclers.
- xx) Any hazardous waste including biomedical waste should be disposed-off as per the applicable Rules and norms with necessary approvals of the Karnataka State Pollution Control Board.

**XII. Specific Conditions**

- i) The data on quantification of solar energy proposed to be tapped is to be submitted to the Authority.



Yours faithfully,

  
(Vijayakumar Gogi)  
Member Secretary,  
SEIAA, Karnataka.

**Copy to:**

1. The Secretary, Ministry of Environment, Forests and Climate Change, Indira Paryavaran Bhavan, Jor Bagh Road, Aliganj, New Delhi - 110 003.
2. The Commissioner, Bruhat Bengaluru Mahanagara Palike (BBMP), N.R. Square, Bangalore - 560 002.
3. The Member Secretary, Karnataka State Pollution Control Board, Bengaluru.
4. The APCCF, Regional Office, Ministry of Environment & Forests (SZ), Kendriya Sadan, IV Floor, E & F wings, 17<sup>th</sup> Main Road, Koramangala II Block, Bengaluru - 560 034.
5. Guard File.



## ANNEXURE 1



**Consent For Operation  
(CFO-Air,Water)**

Consent No. AW-301477  
Valid upto: 30/06/2021

Industry Colour: RED Industry Scale: LARGE

Karnataka State Pollution Control Board  
Parisara Bhavana, No.49, Church  
Street, Bengaluru-560001  
Tele : 080-2558911/3, 25581383  
Fax: 080-25586321  
email id: ho@kspcb.gov.in

(This document contains 5 pages including annexure & excluding additional conditions)

Combined Consent Order No. AW-301477 PCB ID: 11371 Date: 26/11/2016

Combined consent for discharge of effluents under the Water (Prevention and Control of Pollution) Act, 1974 and emission under the Air (Prevention and Control of Pollution) Act, 1981

- Ref: 1. Application filed by the applicant/organization on 24/09/2016  
2. Inspection of the Industry/organization by RO, on 24/09/2016  
3. Proceedings of the CCM dated 24/10/2016, held on 19/10/2016

Consent is hereby granted to the Occupier under Section 25(4) of the Water (Prevention & Control of Pollution) Act, 1974 (herein referred to as the Water Act) & Section 21 of Air (Prevention & Control of Pollution) Act, 1981, (herein referred to as the Air Act) and the Rules and Orders made there under and authorized the Occupier to operate /carryout industry/activity & to make discharge of the effluents & emissions conforming to the stipulated standards from the premises mentioned below and subject to the terms and conditions as detailed in the Schedule Annexed to this order.

**Location:**

Name of the Industry: Bangalore Baptist Hospital  
Address: , Bellary Road, Hebbal  
Industrial Area: Not In I.A, Bellary Road,  
Taluk: BBMP- W-34, District: Bangalore Urban

**Conditions:**

**a) Discharge of effluents under the Water Act:**

Sr	Water Code	WC(KLD)	WWG(KLD)	Remark
1	Boiler Feed	0.500	0.000	
2	Cooling Water	0.500	0.000	
3	D.M Water Plant	5.500	5.500	gardening and secondary purpose after treatment in the STP
4	Domestic Purpose	233.000	186.000	gardening and secondary purpose after treatment in the STP
5	Others .....	0.500	0.500	gardening and secondary purpose after treatment in the STP

**b) Discharge of Air emissions under the Air Act from the following stacks etc.**

Sl. No.	Description of chimney/outlet	Limits specified refer schedule
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The details of Sources, control equipments and its specification, type of fuel, constituents to be controlled in emissions etc. are detailed in Annexure-II.

The consent for operation is granted considering the following activities/Products;

Sr	Product Name	Applied Qty/Month	Unit
1	340 bedded Health care Establishment	0.000	NOS
2	Health Care Establishment	0.000	NOS

This consent is valid for the period from 24/09/2016 to 30/06/2021

For and on behalf of the  
Karnataka State Pollution Control Board



RAMESH A

To,  
Bangalore Baptist Hospital  
Bellary Road, Hebbal,  
Bangalore-560024





**Consent For Operation  
(CFO-Air,Water)**

Consent No. AW-301477  
Valid upto: 30/06/2021

Industry Colour: RED

Industry Scale: LARGE

Karnataka State Pollution Control Board  
Parisara Bhavana, No.49, Church  
Street, Bengaluru-560001  
Tele : 080-25589112/3, 25581383  
Fax: 080-25586321  
email id: ho@kspcb.gov.in

(This document contains 5 pages including annexure & excluding additional conditions)

**COPY TO:**

The Environmental Officer, KSPCB, Regional Office Bangalore City West for information and necessary action.

2. Master Register.
3. Case file.

1. Consent Fee paid : Rs. 750000

**SCHEDULE**

**TERMS AND CONDITIONS**

**A. TREATMENT AND DISPOSAL OF EFFLUENTS UNDER THE WATER ACT.**

1. The discharge from the premises of the occupier shall pass through the terminal manhole/manholes where from the Board shall be free to collect samples in accordance with the provisions of the Act/Rules made there under.
- 2(a). The sewage/domestic effluent shall be treated in septic tank and with soak pit. No overflow from the soak pit is allowed. The septic tank and soak pit shall be as per IS 2470 Part-I & Part-II.
- 2(b). The treated sewage effluent discharged shall conform to the standards specified in Annexure-I.
- 3(a). The trade effluent generated in the industry shall be treated in the ETP and treated effluent shall conform to the standards stipulated by the Board in Annexure-1
- 3(b). The trade effluent shall be handed over to CETP and maintain logbook of effluent generated & sent every day.
4. The applicant shall install flow measuring/recording devices to record the discharge quantity and maintain the record.
5. The applicant shall not change or alter either the quality or the quantity or the place of discharge or temperature or the point of discharge without the previous consent/ permission of the Board.
6. The applicant shall not allow the discharge from the other premises to mix with the discharge from his premises. Storm water shall not be allowed to mix with the effluents on the upstream of the terminal manhole where the flow measuring devices are installed.
7. The daily quantity of domestic effluent and trade effluent from the industry shall not exceed the limits as indicated in this consent order:
8. The applicant shall discharge the effluents only to the place mentioned in the Consent order and discharge of treated/untreated outside the premises is not permitted.

**B. EMISSIONS:**

1. The discharge of emissions from the premises of the applicant shall pass through the air pollution control equipment and discharged through stacks/chimneys mentioned in **Annexure-II** where from the Board shall be free to collect the samples at any time in accordance with the provisions of the Act and Rules made there under. The tolerance limits of the constituents forming the emissions in each of the stacks shall not exceed the limits laid down in Annexure-II.
2. The applicant shall provide port holes for sampling of emission, access platforms for carrying out stack sampling, electrical points and all other necessary arrangements including ladder as indicated in Annexure-II.
3. The applicant shall upgrade/modify/replace the control equipment with prior permission of the Board.

**C. WATER CESS:**

1. The applicant shall provide water meter at all the intake points as specified under Section (5) of the Water Cess Act, 1977 and shall file the Water Cess returns regularly before fifth of every month and also pay the Cess assessed with the time stipulated.





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**D. MONITORING & REPORTING:**

1. The applicant shall get the samples of effluents & emissions collected and get them analyzed once a month/either by in house monitoring laboratory or through EP approved laboratories for the parameters as Indicated in Annexure I & II.
2. The applicant shall maintain log books to reflect the working condition of pollution control systems and also self monitoring results and keep it open for inspection.

**E. SOLID WASTE (OTHER THAN HAZARDOUS WASTE) DISPOSAL:**

1. The applicant shall segregate solid waste from Hazardous Waste, Municipal Solid Waste and store it properly till treatment/disposal without causing pollution to the surrounding Environment.
2. The solid waste generated shall be handled & disposed by scientific method without causing eye sore to the general public and to the surrounding environment.

**F. NOISE POLLUTION CONTROL:**

1. The industry shall ensure that the ambient noise levels within its premises shall not exceed the limits i.e 75 dB(A) Leq during day time and 70 dB(A) Leq during night time as specified in under the Air (Prevention and Control of Pollution) Act, 1981.

**G. HAZARDOUS WASTES (MANAGEMENT, HANDLING & TRANSBOUNDARY MOVEMENT) 2008:**

The applicant shall comply with the provisions of the Hazardous Wastes (Management, Handling & Transboundary Movement) Rules 2008.

**H. GENERAL CONDITIONS:**

1. The applicant shall not allow the discharge from the other premises to mix with the discharge from his premises.
2. The applicant shall promptly comply with all orders and instructions issued by the Board from time to time or any other officers of the Board duly authorized in this behalf.
3. The applicant shall set-up Environmental Cell comprising of qualified and competent personnel for complying with the conditions specified.
4. The Board reserves the right to review, impose additional conditions, revoke, change or alter terms and conditions of this consent.
5. The applicant shall forthwith keep the Board informed of any accidental discharge of emissions/effluents into the atmosphere in excess of the standards laid down by the Board. The applicant shall also take corrective steps to mitigate the impact.
6. The applicant shall provide alternative power supply sufficient to operate all Pollution control equipments.
7. The entire premises shall always be kept clean. The effluent holding area, inspection chambers, outlets, flow measuring points should made easily approachable.
8. The applicant shall display the consent granted in a prominent place for perusal of the inspecting officers of the Board.
9. The applicant his heirs, legal representatives or assignee shall have no claims what so ever to the continuation or renewal of this consent after expiry of the validity of consent.





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10. The applicant shall make an application for consent for subsequent period at least 45 days before expiry of this consent.
11. The applicant shall develop and maintain adequate green belt all around the periphery.
12. The applicant shall provide rain water harvesting system and shall provide proper storm water management system.
13. This consent is issued without prejudice to any Court Cases pending in any Hon'ble Court
14. The applicant shall furnish the Environmental statement for every financial year ending with 31st March in Form-V as per Environment (Protection) Rules, 1986. The statement shall be furnished before the end of September.
15. The applicant shall display flow diagram of the pollution control system near the pollution control system/s.

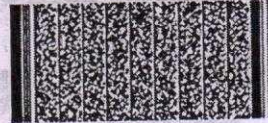
**NOTE:**

The following Conditions A[2(a) & 3(b)] mentioned in the schedule are not applicable.

**Additional Conditions:**

1. Applicant take all necessary steps to ensure that bio-medical waste is handled without any adverse effect BMW rules, 2016. 2. Make a provision within the premises for a safe, ventilated and secured location for storage of segregated biomedical waste in colored bags or containers in the manner as specified in Schedule I of the Bio-Medical Waste Management Rules, 2016. 3. Applicant shall establish a Bar- Code System for bags or containers containing bio-medical waste to be sent out of the premises

For and on behalf of the  
Karnataka State Pollution Control Board



RAMESH A

Note: All efforts should be made to remove colour and unpleasant odour as far as practicable.

Chimney No.	Chimney attached to	Capacity/ KVA Rating	Minimum chimney height to be provided above ground level (in Mts)	Constituents to be controlled in the emission	Tolerance limits mg/NM3	Fuel	Air pollution Control equipment to be installed, in addition to chimney height as per col.(3)	Date of which air pollution control equipments shall be provided to achieve the stipulated tolerance limits and chimney heights conforming to stipulated heights.
1	Boiler	400 Kg/Hr	30	PM(mg/NM3), SO2 (PPM), NOx(PPM)	0,0,0	DIE	N.A	Before commissioning.
2	D.G. Sets	180 KVA	10	PM(mg/NM3), SO2 (PPM), NOx(PPM)	0,0,0	DIE	AEC	Before commissioning.
3	D.G. Sets	725 KVA	24	PM(mg/NM3), SO2 (PPM), NOx(PPM)	0,0,0	DIE	AEC	Before commissioning.
4	D.G. Sets	500 KVA	24	PM(mg/NM3), SO2 (PPM), NOx(PPM)	0,0,0	DIE	AEC	Before commissioning.

Note:

N.A : Not Applicable

AEC : Acoustic Enclosures





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**Note:**

1. The Noise levels within the premises shall not exceed 75 dB (A) leq during day time and 70 dB(A) leq during night time respectively.
2. The DG set shall be provided with acoustic measures as per SI.No.94 in Schedule-I of Environment (Protection) Rules.
3. There shall be no smell or odour nuisance from the industry.

**LOCATION OF SAMPLING PORTHOLES, PLATFORMS, ELECTRICAL OUTLET.**

1. Location of Portholes and approach platform:

Portholes shall be provided for all chimneys, stacks and other sources of emission. These shall serve as the sampling points. The sampling point should be located at a distance equal to atleast eight times the stack or duct diameters downstream and two diameters upstream from source of low disturbance such as a Bend, Expansion, Construction Valve, Fitting or Visible Flame for rectangular stacks, the equivalent diameter can be calculated from the following equation.

$$\text{Equivalent Diameter} = \frac{2 (\text{Length} \times \text{Width})}{(\text{Length} + \text{Width})}$$

2. The diameter of the sampling port should not be less than 100 mm dia". Arrangements should be made so that the porthole is closed firmly during the non sampling period
3. An easily accessible platform to accommodate 3 to 4 persons to conveniently monitor the stack emission from the portholes shall be provided. Arrangements for an Electric Outlet Point of 230 V 15 A with suitable switch control and 3 Pin Point shall be provided at the Porthole location.
4. The ladder shall be provided with adequate safety features so as to approach the monitoring location with ease.

## ANNEXURE 2



16541



ಬೆಂಗಳೂರು ನೀರು ಸರಬರಾಜು ಮತ್ತು ಒಳಚರಂಡಿ ಮಂಡಲಿ.  
BANGALORE WATER SUPPLY AND SEWERAGE BOARD

3ಎ ನಮೂನೆ

ಸಂ: ಬೆಂ.ಜ.ಮಂ/ಪ್ರಲ/ಉಮುಲ(ನಿ)/ಕೊಬಾ/ 198

ದಿನಾಂಕ: 24/06/201

ಕ್ರ. ಸಂ ಶ್ರೀಮತಿ/ಶ್ರೀ Director, CEO, ವಿಳಾಸ ಸಂ. Bangalore Baptist Hospital, #1/B, Bellary Road, Hebbal, Bangalore-560024. ಇವರಿಗೆ ಬೆಂಗಳೂರು ನಗರದ ಖಾತಾ/ಪಿ.ಐ.ಡಿ. ಸಂ. 021-W0187-1 ರಲ್ಲಿ ಈ ಮುಂದಿನ ಷರತ್ತುಗಳಿಗೊಳಪಟ್ಟು ಗೃಹ ಬಳಕೆಗಾಗಿ ಮತ್ತು ಕುಡಿಯುವ ನೀರಿಗಾಗಿ ಮಾತ್ರ ನೀರನ್ನು ಪಡೆಯುವುದಕ್ಕಾಗಿ 590 feet/ ಅಡಿ ಆಳದವರೆಗೆ ಕೊಳವೆಬಾವಿಯನ್ನು ಕೊರೆಯುವುದಕ್ಕಾಗಿ ಅನುಮತಿ ನೀಡಲಾಗಿದೆ.

1. ಬಾವಿ/ಕೊಳವೆ ಬಾವಿಯನ್ನು ಯಾವ ಉದ್ದೇಶಕ್ಕಾಗಿ ಕೊರೆಯಲಾಗಿದೆಯೋ ಅದನ್ನು ಹೊರತುಪಡಿಸಿ ಯಾವುದೇ ಉಪಯೋಗಕ್ಕಾಗಿ ನೀರನ್ನು ಪಡೆಯಲು ಅವುಗಳನ್ನು ಬಳಸತಕ್ಕದ್ದಲ್ಲ.
2. ನೀರು ವೃಥಾವಾಗುವುದನ್ನು ತಪ್ಪಿಸಲು ನೀರು ತೆಗೆಯುವುದನ್ನು ಉತ್ತಮವಾಗಿ ನಿರ್ವಹಿಸತಕ್ಕದ್ದು.
3. ಬಳಸಿದ ನೀರನ್ನು ಪುನಃ ಶುದ್ಧೀಕರಿಸತಕ್ಕದ್ದು ಮತ್ತು ಅಗತ್ಯ ಶುದ್ಧೀಕರಣದ ನಂತರ ಮರು ಬಳಕೆ ಮಾಡತಕ್ಕದ್ದು.
4. ಬಾವಿಯ ಹತ್ತಿರದಲ್ಲಿ ಮಳೆ ನೀರು ಸಂಗ್ರಹಣೆಗಾಗಿ ನಿರ್ಮಿತಗಳನ್ನು ನಿರ್ಮಾಣ ಮಾಡತಕ್ಕದ್ದು.
5. ಬಾವಿ/ಕೊಳವೆ ಬಾವಿಯಿಂದ ನೀರನ್ನು ಹೊರತೆಗೆಯುವ ಆಧಾರದ ಮೇಲೆ ನೀರಿನ ಬಳಕೆಯು ಕಾಲಕಾಲಕ್ಕೆ ಜಾರಿಗೊಳಿಸಬಹುದಾದ ವಿನಿಮಯಕ್ಕೆ ಒಳಪಟ್ಟಿರುತ್ತದೆ.
6. ಅಂತರ್ಜಲ ಸಂಪನ್ಮೂಲದ ಮಾಲಿನ್ಯವನ್ನು ತಡೆಗಟ್ಟತಕ್ಕದ್ದು.
7. ಜಲಮಾಪಕ ಅಳವಡಿಸಿಕೊಳ್ಳಬೇಕು ಮತ್ತು ಅಂತರ್ಜಲ ಹೊರತೆಗೆದ ಮೇಲೆ ದತ್ತಾಂಶಗಳನ್ನು ನಿರ್ವಹಿಸಬೇಕು.
8. ನಮೂನೆ-1ಸಿ (ನಿಯಮ 9) ರಲ್ಲಿ ಕೊಳವೆ ಬಾವಿ ಕೊರೆದ ಮಾಹಿತಿಯನ್ನು ತಪ್ಪದೇ ಹಿರಿಯ ಭೂವಿಜ್ಞಾನಿ, ಗಣಿ ಮತ್ತು ಭೂ ವಿಜ್ಞಾನ ಇಲಾಖೆಗೆ ಕಡ್ಡಾಯವಾಗಿ ಸಲ್ಲಿಸುವುದು.
9. ಕೊಳವೆ ಬಾವಿ ಕೊರೆಯುವ ಸಮಯದಲ್ಲಿ ಪರಿಸರ ಮಾಲಿನ್ಯ ತಡೆಯಲು ಧೂಳು ಬಾರದಂತೆ ತುಂತುರು ನೀರು ಹನಿ ವ್ಯವಸ್ಥೆ ಮಾಡತಕ್ಕದ್ದು. (Water Sprinkling System).
10. ನೀರಿನ ಹಾಗೂ ಒಳಚರಂಡಿ ಸಂಪರ್ಕಕ್ಕೆ ಅರ್ಜಿ ಸಲ್ಲಿಸುವಾಗ ಈ ಅನುಮತಿ ಪತ್ರದ ನಕಲನ್ನು ಲಗತ್ತಿಸತಕ್ಕದ್ದು.
11. ಕೊಳವೆ ಬಾವಿ ಕೊರೆಯುವಾಗ ಉತ್ಪತ್ತಿಯಾಗುವ ಸಿಲ್ಟ್ ಮತ್ತು ಸ್ಲರ್ರಿ (silt & slurry) ಯನ್ನು ಚರಂಡಿಗಳಿಗೆ ಬಿಡಬಾರದು ಹಾಗೂ ಅದನ್ನು ತಕ್ಷಣ ಸ್ಥಳದಿಂದ ಕೊಳವೆ ಬಾವಿ ಕೊರೆಯುವ ಮಾಲೀಕರು ತೆರವುಗೊಳಿಸಬೇಕು. ಯಾವುದೇ ಉಪಯೋಗಕ್ಕಾಗಿ ನೀರನ್ನು ಪಡೆಯಲು ಅವುಗಳನ್ನು ಬಳಸತಕ್ಕದ್ದಲ್ಲ.
12. ಕೊಳವೆ ಬಾವಿ ವಿಫಲವಾದ ಪಕ್ಷದಲ್ಲಿ ಅದನ್ನು ಸುರಕ್ಷಿತವಾಗಿ ಮುಚ್ಚುವುದು. ಅನಾಹುತ ಉಂಟಾದ ಪಕ್ಷದಲ್ಲಿ ಮಾಲಿಕರೇ ಹೊಣೆಗಾರರಾಗಿರುತ್ತಾರೆ.
13. ಉತ್ತಮ ನೀರಿನ ಸಾಂದ್ರತೆ ಉಳ್ಳ ಕೊಳವೆಬಾವಿಯನ್ನು ಅಗತ್ಯವಿದ್ದಲ್ಲಿ ಸಾರ್ವಜನಿಕರಿಗೆ ನೀರು ಸರಬರಾಜು ಮಾಡಲು ಉಪಯೋಗಿಸಿಕೊಳ್ಳಲಾಗುವುದು.
14. ಕೊಳವೆ ಬಾವಿ ಕೊರೆಯುವ ಸಮಯದಲ್ಲಿ / ಇನ್ಯಾವುದೇ ಸಮಯದಲ್ಲಿ ಸಾರ್ವಜನಿಕರಿಂದ ಪ್ರತಿರೋಧ ಬಂದಲ್ಲಿ ಕೊಳವೆ ಬಾವಿ ಕೊರೆಯಲು ನೀಡಿದ ಅನುಮತಿ ತಾನಾಗಿ ರದ್ದಾಗು

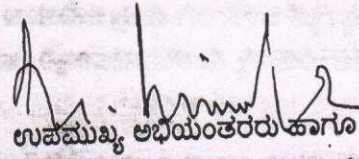


15. ಕೊಳವೆಬಾವಿಯನ್ನು ಕೊರೆಯಲು ಅನುಮತಿ ನೀಡಿರುವ ಅನುಮೋದನೆ ಕರ್ನಾಟಕ ಅಂತರ್ಜಲ ಕಾಯ್ದೆ 2011 ಸೆಕ್ಷನ್ 13 ರ ನಿಬಂಧನೆಗೆ ಒಳಪಟ್ಟಿರುತ್ತದೆ.

16. ಹಾಲಿ ಇರುವ ಸಾರ್ವಜನಿಕರ ಕೊಳವೆಬಾವಿಯಿಂದ ಹೊರತೆಗೆಯುವ ನೀರಿನ ಪರಿಮಾಣಕ್ಕೆ ತೊಂದರೆ ಉಂಟಾದ ಪಕ್ಷದಲ್ಲಿ ಈ ಪತ್ರದಲ್ಲಿ ನೀಡಿರುವ ಅನುಮತಿ ತಾನಾಗಿ ರದ್ದಾಗುತ್ತದೆ ಹಾಗೂ ಕೊಳವೆಬಾವಿಯನ್ನು ಸಾರ್ವಜನಿಕರ ಉಪಯೋಗಕ್ಕಾಗಿ ಸರ್ಕಾರದ ವಶಕ್ಕೆ ತೆಗೆದುಕೊಳ್ಳಲಾಗುತ್ತದೆ.

17. ಅನಧಿಕೃತವಾಗಿ ಕೊರೆಯುವ ಕೊಳವೆಬಾವಿಗಳನ್ನು ನಿಯಂತ್ರಿಸುವ ಅಧಿಕಾರ ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ, ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ, ಬೆಂಗಳೂರು ಜಲಮಂಡಳಿ, ಕರ್ನಾಟಕ ಅಂತರ್ಜಲ ಇಲಾಖೆ, ಬೆಸ್ಕಾಂ ಮತ್ತು ಪೊಲೀಸ್ ಇಲಾಖೆಗಳಿಗೆ ಇರುತ್ತದೆ.

ಈ ಬಾವಿ / ಕೊಳವೆ ಬಾವಿಯನ್ನು ಯುನಿಕ್ ಸಂಖ್ಯೆ : NE3W021BW6784 ನಿಂದ ಗುರುತಿಸಲ್ಪಡುತ್ತದೆ

  
ಉಪಮುಖ್ಯ ಅಭಿಯಂತರರು ಹಾಗೂ ಸದಸ್ಯ ಕಾರ್ಯದರ್ಶಿ  
ಕರ್ನಾಟಕ ಅಂತರ್ಜಲ ಪ್ರಾಧಿಕಾರ ಬೆಂಗಳೂರು ಉಪಸಮಿತಿ  
24.6.2017

ಸೂಚನೆ: ದಿ:12.06.2017 ರಂದು ನಡೆದ ಕರ್ನಾಟಕ ಅಂತರ್ಜಲ ಅಭಿವೃದ್ಧಿ ಪ್ರಾಧಿಕಾರದ ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ ವ್ಯಾಪ್ತಿಯ ಉಪಸಮಿತಿಯಲ್ಲಿ ಕೊಳವೆಬಾವಿ ಕೊರೆಯಲು ಅನುಮತಿಯನ್ನು ನೀಡಲಾಗಿದೆ. ನಡವಳಿ ಸಂಖ್ಯೆ ಬೆಂಜಮಂ/ಪ್ರ.ಅ/ಉಮುಅ(ನಿ)-1/1798/17-18 ದಿ:20.06.2017.





ಬೆಂಗಳೂರು ನೀರು ಸರಬರಾಜು ಮತ್ತು ಒಳಚರಂಡಿ ಮಂಡಳಿ

1 Partial non-synthetic and Domestic  
Water supply Connection  
Form No. 13/25, 486-0

೧. ವಿಭಾಗದ ಸಂಖ್ಯೆ ಸ.ಕಾ.ನಿ.ಅ. (ಆಯ್ಕೆ) - 3 2. ಗ್ರಾಹಕರ ಹೆಸರು RANGONE BAPTIST  
3. ಆರ್. ಆರ್. ನಂ. 13 613/41-20 4. ವಿಳಾಸ ಹೆಬ್ಬಾಳೆ ರಸ್ತೆ, ಬಿ.ಬಿ.ಎ. ಹೆಬ್ಬಾಳೆ ರಸ್ತೆ, NO. 13, B.B.E.  
5. ಗ್ರಾಹಕರ ಗುರುತಿನ ಸಂಖ್ಯೆ 13866-9C-105 6. ಹೆಬ್ಬಾಳೆ ರಸ್ತೆ, HEBBAL ROAD.  
7. ಬಳಕೆಯ ಉದ್ದೇಶ: ಗೃಹ ಬಳಕೆ 8. ನೀರಿನ ಸಂಪರ್ಕ ರಂಧ್ರದ ಗಾತ್ರ 1  
9. ಜಲಮಾಪಕ ವಾಚನ ದಿನಾಂಕ 10. ಕೊಳವೆ ಬಾವಿ Bore well  
11. ಜಲಮಾಪಕ ತಯಾರಿ ಸಂಖ್ಯೆ 155006780 12. ನೀರಿನ ಇಳುವರಿ 10 ltr.

ತಿಂಗಳು ವರ್ಷ	ಜಲಮಾಪಕ ವಾಚನ (ಬಲದಿಂದ ಎಡಕ್ಕೆ ಪೂರ್ಣವಾಗಿ ತುಂಬಿ)	ಬಳಕೆಯ ಪ್ರಮಾಣ (ಲೀಟರುಗಳಲ್ಲಿ)	ಜ.ವಾ. ಸಹಿ	ಪರಿಶೀಲನೆ ಪ್ರಕಾರ ವಾಚನ	ಷರಾ
3/F					
6/					
7/					
8/					
9/					
10/					
11/					
12/					
1/					
2/					

ಜಲಮಾಪಕರ ವರದಿ

ಸ. ಕಾ. ನಿ. ಅ. ಸಹಿ


ಉಪವಿಭಾಗ ಸಂ.....

ಗ್ರಾಹಕರ ಸಹಿ.....



ತೆಂಗಳು	ಜಲಮಾಪಕ ವಾಚನೆ (ಬಲದಿಂದ ಎಡಕ್ಕೆ ಪೂರ್ಣವಾಗಿ ತುಂಬಿಸಿ)							ಬಳಕೆಯ ಪ್ರಮಾಣ (ಲೀಟರುಗಳಲ್ಲಿ)	ಜ.ವಾ. ಸಹಿ	ಪರಿಶೀಲನೆ ಪ್ರಕಾರ ವಾಚನೆ	ಷರಾ
B/F											
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ಪರಿಶೀಲನಾಧಿಕಾರಿಗಳ ಷರಾ

.....  
  
 ಜ.ಕಾ.ನಿ.ಅ.ಸಹಿ-3  
 ಸಹಾಯಕ ಸಂ.....

ಗ್ರಾಹಕರ ಸಹಿ.....

೧೦/೦೪೯೯೬೭/೧೯-೭-೨೦೧೭ Commence Bank  
ಬೆಂಗಳೂರು ನೀರು ಸರಬರಾಜು ಮತ್ತು ಒಳಚರಂಡಿ ಮಂಡಳಿ

ಕ.ಆ.ಸ. ಪ್ರಪತ್ರ ೧ (ಅನುಚ್ಛೇದ ೬) ಹಣ ಸ್ವೀಕರಿಸಿದ ಬಗ್ಗೆ ಸ್ವೀಕೃತಿ ಪತ್ರ



46321

Office of the Assistant Controller (Accounts)  
Bangalore Water Supply and Sewerage Board  
1st Floor, Cauvery Bldg  
Bangalore - 560 004.

AC No.

Bangalore Baptist Hospital,  
No.1, B Baptist Hospital,  
Hebbal Bellary Road, Hebbal,  
Bangalore

ದಿನಾಂಕ 31/7/2017  
Online payment portal  
& other charges (NEFT)

ರೂಪಾಯಿಗಳನ್ನು 31/7/2017 ರಂದು  
Thirty six lakhs Seventeen thousand Four Hundred & Eighty  
ಇವರಿಂದ ಸ್ವೀಕರಿಸಲಾಗಿದೆ ಮತ್ತು ನಗದು ಪುಸ್ತಕದ ಸಂಖ್ಯೆಯ ಪುಟದಲ್ಲಿ Six only ನೇ

ಈ ಪತ್ರವು \_\_\_\_\_ ರಂದು ಜಮಾ ಮಾಡಲಾಗಿದೆ.

ಇವರಿಂದ  
ಸಹಿ ಮತ್ತು ಗುರುತು

ಇವರಿಂದ  
ಸಹಿ ಮತ್ತು ಗುರುತು



**ACKNOWLEDGEMENT**

An application for digging / drilling a new well / borewell for Residential, Industrial, Commercial, Domestic or other use purpose is received in this office along with an application of Rs.500/- paid at Hebbal branch, Canara Bank Dated: 22/2/19 from Sri/Smt--Dilip K

Place:  
Date:

Signature of Designated Officer  
Karnataka Ground Water Authority



**ACKNOWLEDGEMENT**

An application for digging / drilling a new well / borewell for Residential, Industrial, Commercial, Domestic or other use purpose is received in this office along with an application of Rs.500/- paid at Hebbal branch, Canara Bank Dated: 22/2/19 from Sri/Smt--Dilip K, Blue Baptist Hospital

Place:  
Date:

Signature of Designated Officer  
Karnataka Ground Water Authority



# ANNEXURE 3





# BANGALORE ELECTRICITY SUPPLY COMPANY LIMITED

No:- EEE/HD/AEE(O)/AE-1/2014-15/

3811-12

Date : 28/8/14

To,

The Director,  
Baptist Hospital,  
Bellary main road,  
Bangalore.

Sir,

SUB:- Arranging Addl. H.T. Power supply to an extent of **400 KVA** on R.R. No. C4HT 4 ( Existing 600KVA + Addl 400 KVA Total **1000 KVA**) to your installation at above address.

Ref: Assistant Executive Engineer. Ele. C4 sub division, Bangalore letter No. 1611 dt 21.8.2014.

With reference to the above, additional power supply to an extent of **400 KVA** on 11 KV basis to your premises is hereby sanctioned on **HT2 (c)(i)** tariff, subject to the following conditions and observance of BESCO norms in force:

1. The Power supply shall be arranged on 11 KV basis.
2. The Power tariff applicable to your installation is **HT 2(c)(i)** as in force from time to time.
3. You have to pay the following charges at the office of the Asst Executive Engineer(EI), C4 Sub Division within a period of 30days from the date of this letter.
4. You shall pay **Initial Security Deposit (ISD) for 400KVA =5,84,000/- ( Five lakh eighty four thousand only )** ( by Demand Draft)
- 4A You shall Pay **Supervision Charges of Rs. 26,202/- (Rs. Twenty six thousand two hundred and two only)** at 10% on the total self-execution estimate cost **Rs. 2,62,019/-** in the subject matter.
5. Electrical Inspectorate charges as applicable shall be paid by you.
6. If you fail to pay the above charges within the stipulated time, power sanction will stand cancelled.
7. You should carry out the 11 KV Line Extension work by using appropriate size of H.T XLPE UG cable, from tapping point upto HT metering cubicle at your cost under self execution as per the estimate prepared by the BESCO under the supervision of Asst. Executive Engineer (Elect.) of C4 S/d after issue of Work Order from this Office.
  - A The above said work should be carried out as per the estimate prepared by the BESCO
  - B through a Licensed electrical contractor holding "**valid Class - I License**"  
The material used shall confirm to BESCO's specification and should be from an approved vendor.
  - C Guarantee shall be furnished for a period of not less than one year for the materials used in the works as well as for the quality of the work carried out from the date of taking over of the lines and equipments by BESCO.
  - D Proof of having purchased the materials used for executing the works from the reputed firm will be verified & you should produce necessary documents before service
  - E HT UG Cable has to be provided from proposed D.P. Structure (out side) to the Metering Cubicle without breaking the Cable.

O/o. The Executive Engineer. Ele. (Coml. O & M).  
Additional central Division, UAS campus, Hebbal , Bangalore. Ph. 5600024





## BANGALORE ELECTRICITY SUPPLY COMPANY LIMITED

6. HT Metering cubicle & switch Gear drawing should be got approved from this office
7. As per ES&D Code 2004-2005 regulation – 8, you must produce all the relevant documents such as sanctioned and architect Plan, Katha, tax paid and General/Trade License at time of registration of application.
- a. You have to submit NOC, Wiring Diagram, CR and other documents in the time of work order.
8. power supply will be arranged subject to approval from the Electrical Inspectorate Govt. of Karnataka.
9. Power supply will be arranged subject to verification of ownership and other documents.
10. Power supply will be arranged subject to verification of permanent long disconnected Installations in the premises if any.
11. Power supply will be arranged subject to verification of temporary power supply availed for Building Construction purpose.
12. 5 m x 6m Space should be marked in line drawing for metering Cubicle, accessory and fence.
13. You have to comply to the BESCOM conditions in force from time to time.

The applicant should invariably facilitate to provide with 3Phase 4 wire HT Metering cubical by using 3PT's and 3CT's of 0.2Class accuracy and 0.2 class HT ETV meter with DLMS features as per circular No. BESCOM/CGM(CA)/GM(M&C)/BC-24/F-1013/2012-13/CYS-43/17.11.2012..

Yours faithfully,

( K. Shivanna )

Executive Engineer (Elect.)(C, O&M)  
Hebbal Division, BESCOM.

Copy to AEE, E(C, O&M), C4 Sub-division, for information and to collect the above said charges and send the payment certificate to this office.

R&R to A(E)-1/ M.F.

O/o. The Executive Engineer. Ele. (Coml. O & M).

Additional central Division, UAS campus, Hebbal , Bangalore. Ph. 5600024

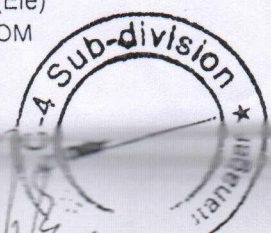


BANGALORE ELECTRICITY SUPPLY COMPANY LIMITED						O&M 15(2) H
(Wholly owned Government of Karnataka Undertaking)						
Assistant Executive Engineer (Ele.), (Commercial, Operation & Maintenance)						
C4 Sub-Division, Bellary Rd, Hebbal Bangalore-560 024.						
RR No.	Tariff	Sub Division	Billing Month	Reading Date	Pay by Date	Bill No.
C4HT4	HT2(C)(I)	C4	Mar-20	01-Apr-20	15-Apr-20	2
A/C ID No.0190694111			PF			
Name & Address			Contract Demand (KVA)			1000
The Director,			85% of CD (KVA)			850
Baptist Hospital,			Recorded Demand (KVA)	5000	0.1471	736
Bellary Road, Hebbal,			Billing Demand (KVA)			850
Bangalore.			Wheeling Units(KWH)			0
			DG Units (KWH)			0
			Spl Energy Units (KWH)			0
Description	MD Meter	KWH Meter	KVAH Meter	PF	0.95	
Pres.Rdg	0.1471	3961.21	4143.38			
Prev.Rdg		3890.23	4069.82			
Diffrence		70.9800	73.5600			
Mtr constant	5000	5000	5000			
Net Consumption	736	✓ 354900	367800			
Bill Details		Units	Rate (Rs.)	Amount(Rs.)		
Demand Charges		850	210	178500.00		
Energy charges		100000	6.85	685000.00		
		254900	7.25	1848025.00		
Time Of Day	Present Reading	Previous Reading	Diffrence	Meter Constant	Net Consumption	Incentive/ Penalty
22.00Hrs to 6.00Hrs(Off) B4	587.06	567.67	19.39	5000	96950	-1
6.00Hrs to 10.00Hrs(ON) B1	878.07	865.36	12.71	5000	63550	1
18.00Hrs to 22.00Hrs(On) B3	678.31	665.94	12.37	5000	61850	1
10.00Hrs to 18.00Hrs(Normal) B2	1817.77	1791.26	26.51	5000	132550	0
	3961.21	3890.23	70.98	5000	354900	
Fuel cost adjustment charges kwh at						
				Tax @9%	239258.25	
Excess Load/MD Penaltykva at Rs. per kva						
TDS on Interest						
Interest on MSD						
Interest on ISD/ASD						
Late Payment charges						
AMOUNT PAYABLE					2979233	

Checked by  
7/4/2020  
Checked by  
7/4/2020

8/4/2020  
checked by HT nk

Asst.Executive Engineer (Ele)  
C-4, Sub-Division, BESCOM  
Hebbal, Bangalore



Handwritten signature/initials.

Handwritten signature/initials.



# ANNEXURE 4

**TEST REPORT****Issued To:**

**M/s. Bangalore Baptist Hospital,**  
PID No. 1/B, 1/1, 1/2 and 1/3,  
Bellary Road, Hebbal, Bangalore.

**Report No. : RG/21030035**

Report Date : 20/03/2021

**Sample Code No. : VG/21030035**

Date of Receipt : 16/03/2021

Party Ref. No. : Data Sheet

Date : 16/03/2021

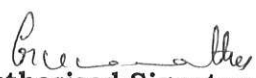
Page No. : 1 of 1

**Sample Particulars:**

Name of the sample	: <b>Ambient Air Quality Monitoring</b> Proposed Expansion of Hospital and Allied Health Science
Sampling Location	: Project at PID No. 1/B, 1/1, 1/2 and 1/3, Bellary Road, Hebbal, Bengaluru.
Analysed by	: A.S.C & M.K.H
Analysis Start Date	: 16/03/2021
Analysis Completion Date	: 20/03/2021
Sample Received By	: S.S
Reference for Sampling and Handling of Samples	: VMP-01/26
Note	: The sample was collected by our representative

Sl. No	Test Parameters	Results	Limits (As per NAAQ standard)	Protocol
1	Particulate Matter (PM <sub>10</sub> ), µg/m <sup>3</sup>	53	100	IS:5182(Part-23) (Reaffirmed 2017)
2	Particulate Matter (PM <sub>2.5</sub> ), µg/m <sup>3</sup>	29	60	EA/0001
3	Sulphur dioxide as SO <sub>2</sub> , µg/m <sup>3</sup>	18	80	IS:5182(Part-2) (Reaffirmed 2017)
4	Oxides of Nitrogen as NO <sub>2</sub> , µg/m <sup>3</sup>	21	80	IS:5182(Part-6) (Reaffirmed 2017)
5	Carbon monoxide (CO), ppm	0.1	2.0	EA/0001
6	Ozone (O <sub>3</sub> ), ppm	Nil	100	EA/0001
7	Lead as (Pb), µg/m <sup>3</sup>	0.4	1.0	EA/0002

**Remarks:**The given sample is tested for above specified Chemical parameters only as per customer's requirement.

  
**Authorised Signatory**  
**Gunavathy M.K**  
**Quality Manager**

- END OF TEST REPORT -



## TEST REPORT

**Issued To:**

**M/s. Bangalore Baptist Hospital,**

PID No. 1/B, 1/1, 1/2 and 1/3,

Bellary Road, Hebbal, Bangalore.

**Report No. : RG/21030036**

Report Date : 20/03/2021

**Sample Code No. : VG/21030036**

Date of Receipt : 16/03/2021

Party Ref. No. : Data Sheet

Date : 16/03/2021

Page No. : 1 of 1

**Sample Particulars:**

Name of the sample	: <b>Noise level Monitoring</b>
Sampling Location	: Proposed Expansion of Hospital and Allied Health Science Project at PID No. 1/B, 1/1, 1/2 and 1/3, Bellary Road, Hebbal, Bengaluru.
Analysed by	: A.S.C
Analysis Start Date	: 16/03/2021
Analysis Completion Date	: 20/03/2021
Sample Received By	: S.S
Reference for Sampling and Handling of Samples	: VMP-01/26
Note	: The sample was collected by our representative

Sl. No	Test Parameters	Results in dB	Limits in dB	Protocol
1	Day Time			
	Noise in dB (A)	56	65	EA/0001

**Note: dB:** Decibel

**Remarks:** The given sample is tested for above specified Chemical parameters only as per customer's requirement.

  
**Authorised Signatory**  
**Gunavathy M.K**  
**Quality Manager**

- END OF TEST REPORT -





## TEST REPORT

### Issued To:

M/s. Bangalore Baptist Hospital,

PID No. 1/B, 1/1, 1/2 and 1/3,

Bellary Road, Hebbal, Bangalore.

Report No. : RG/21030037

Report Date : 23/03/2021

Sample Code No. : VG/21030037

Date : 16/03/2021

Party Ref. No. : Data Sheet

Date : 16/03/2021

Page No : 1 of 3

### Sample Particulars:

Name of the sample	: Ground Water
Sampling Location	: Proposed Expansion of Hospital and Allied Health Science Project at PID No. 1/B, 1/1, 1/2 and 1/3, Bellary Road, Hebbal, Bengaluru.
Analysed by	: V.D M.K.H & M.M
Analysis Start Date	: 16/03/2021
Analysis Completion Date	: 23/03/2021
Sample Received By	: S.S
Sample Quantity	: 2 L + 250 ml
Reference for Sampling and Handling of Samples	: VMP-01/26

Note : The sample was collected by our Representative

Sl. No.	Test Parameters	Result		Standards IS:10500:2012		Protocol
	Chemical Test:		Detection limits	Acceptable Limits	Permissible Limits	
	Description	Colourless liquid				
	Table 1 Organoleptic and physical Parameters					
1	Colour, Hazen units,Max	<5.0	-	5	15	IS:3025(Part 4)
2	Odour	Agreeable	-	Agreeable	--	IS:3025(Part 5)
3	Taste	Agreeable	-	Agreeable	Agreeable	IS:3025(Part 7 & 8)
4	Turbidity,NTU,Max	0.2	-	1	5	IS:3025(Part 10)
5	Total dissolved solids,mg/l,Max	426	-	500	2000	IS:3025(Part 16)
6	pH @ 25° C	6.38	-	6.5 to 8.5	No relaxation	IS:3025(Part 11)
	Table 2 General Parameters concerning substances Undesirable in Excessive Amounts					
7	Aluminium(as Al),mg/l,Max	BDL	0.02	0.03	0.2	IS:3025(Part 55)
8	Ammonia (as total ammonia-N), mg/ l, Max	<0.05	-	0.5	No relaxation	IS:3025(Part 34)
9	Anionic Detergents(as MBAS),mg/l,Max	<0.05	-	0.2	1.0	Annex K of IS 13428
10	Barium (as Ba), mg/ l, Max	BDL	0.02	0.7	No relaxation	IS:15302
11	Boron (as B),mg/l,Max	<0.1	-	0.5	2.4	IS:3025(Part 57)
12	Calcium (as Ca),mg/l,Max	44.5	-	75	200	IS:3025(Part 40)
13	Chloramines(as C12), mg/ l, Max	NIL	-	4.0	No relaxation	IS:3025(Part 26)
14	Chloride(as Cl),mg/l,Max	28	-	250	1000	IS:3025(Part 32)
15	Copper(as Cu),mg/l,Max	BDL	0.002	0.05	1.5	IS:3025(Part 42)
16	Fluoride(as F),mg/l,Max	<0.1	-	1.0	1.5	IS:3025(Part 60)





## TEST REPORT

### Issued To:

**M/s. Bangalore Baptist Hospital,**

PID No. 1/B, 1/1, 1/2 and 1/3,

Bellary Road, Hebbal, Bangalore.

**Report No. : RG/21030037**

Report Date : 23/03/2021

**Sample Code No. : VG/21030037**

Date : 16/03/2021

Party Ref. No. : Data Sheet

Date : 16/03/2021

Page No : 2 of 3

17	Free Residual chlorine,mg/l,Max	<0.05	-	0.2	1.0	IS:3025(Part 26)
18	Iron (as Fe),mg/l,Max	<0.05	-	1.0	No relaxation	IS:3025(Part 53)
19	Magnesium(as Mg),mg/l,Max	27.5	-	30	100	IS:3025(Part 46)
20	Manganese(as Mn),mg/l,Max	BDL	0.002	0.1	0.3	IS:3025(Part 59)
21	Nitrates(as NO <sub>3</sub> ),mg/l,Max	24	-	45	No relaxation	IS:3025(Part 34)
22	Phenolic Compounds(as C <sub>6</sub> H <sub>5</sub> OH),mg/l,Max	<0.001	-	0.001	0.002	IS:3025(Part 43)
23	Selenium(as Se),mg/l,Max	BDL	0.002	0.01	No relaxation	IS:3025(Part 56)
24	Silver (as Ag), mg/1, Max	BDL	0.002	0.1	No relaxation	Annex J of IS:13428
25	Sulphate(as SO <sub>4</sub> ),mg/l,Max	<0.1	-	200	400	IS:3025(Part 24)
26	Sulphide (as H <sub>2</sub> S), mg/1, Max	<0.05	-	0.05	No relaxation	IS:3025(Part 29)
27	Total Alkalinity(as CaCO <sub>3</sub> ),mg/l,Max	235	-	200	600	IS:3025(Part 23)
28	Total Hardness (as CaCO <sub>3</sub> ),mg/l,Max	271	-	200	600	IS:3025(Part 21)
29	Zinc(as Zn),mg/l,Max	<0.1	-	5	15	IS:3025(Part 49)
<b>Table 3 Parameters Concerning Toxic substances</b>						
30	Cadmium (as Cd),mg/l,Max	BDL	0.002	0.003	No relaxation	IS:3025(Part 41)
31	Cyanide (as CN),mg/l,Max	Absent	-	0.05	No relaxation	APHA
32	Lead (as Pb),Mg/l,max	BDL	0.002	0.01	No relaxation	IS:3025(Part 47)
33	Mercury (as Hg),mg/l,Max	BDL	0.0002	0.001	No relaxation	IS:3025(Part 48)
34	Molybdneum, as Mo,mg/1, Max	BDL	0.02	0.07	No relaxation	By GFAAS
35	Nickel (as Ni), mg/1, Max	BDL	0.002	0.02	No relaxation	IS:3025(Part 54)
36	Total Arsenic (as As),mg/l,Max	BDL	0.0002	0.01	No relaxation	IS:3025(Part 37)
37	Total Chromium (as Cr),mg/l,Max	BDL	0.02	0.05	No relaxation	IS:3025(Part 52)

**Note: BDL:-** Below Detection Limit

**Remarks:** The given sample conforms to permissible limits of IS:10500:2012 "Drinking water specification" for the above tested Physico-chemical parameters only.

*Gunavathy*  
**Authorised Signatory**  
**Gunavathy M.K**  
**Quality Manager**

- END OF TEST REPORT -



## TEST REPORT

**Issued To:**

**M/s. Bangalore Baptist Hospital,**

PID No. 1/B, 1/1, 1/2 and 1/3,

Bellary Road, Hebbal, Bangalore.

**Report No. : RG/21030037**

**Report Date : 23/03/2021**

**Sample Code No. : VG/21030037**

**Date : 16/03/2021**

**Party Ref. No. : Data Sheet**

**Date : 16/03/2021**

**Page No : 3 of 3**

Table 6 Bacterial Quality of Drinking water					
38	Total Coli form/100 ml	Not detected	-	Shall not be detectable in any 100 ml sample	IS 15185:2016
39	Escherichia Coli/100ml	Not detected	-	Shall not be detectable in any 100 ml sample	IS 15185:2016

**Note:MPN:-** Most Probable Number

**Remarks:** The above given sample conforms to the limits of IS:10500:2012 "Drinking water specification" for the above tested Microbiological parameters only

  
**Authorised Signatory**  
**Nagalakshmi N.S**  
**Director**

- END OF TEST REPORT -

**TEST REPORT****Issued To:****M/s. Bangalore Baptist Hospital,**

PID No. 1/B, 1/1, 1/2 and 1/3,

Bellary Road, Hebbal, Bangalore.

**Report No. : RG/21030038**

Report Date : 20/03/2021

**Sample Code No. : VG/21030038**

Date : 16/03/2021

Party Ref. No. : Data Sheet

Date : 16/03/2021


Page No : 1 of 1

**Sample Particulars:**

Name of the sample	: <b>Soil</b>
Sampling Location	: Proposed Expansion of Hospital and Allied Health Science Project at PID No. 1/B, 1/1, 1/2 and 1/3, Bellary Road, Hebbal, Bengaluru.
Analysed by	: S.H.R & M.K.H
Analysis Start Date	: 16/03/2021
Analysis Completion Date	: 20/03/2021
Sample Received By	: S.S
Sample Quantity	: 2 Kg
Reference for Sampling and Handling of Samples	: VMP-01/26
Note	: The sample was collected by our representative

Sl. No.	Test Parameters	Results	Protocol
	<b>Description</b>	Red coloured soil	
1	Conductivity in micromhos/cm,	382	IS 14767
2	pH at 25°C	6.23	IS 2720(P-26)
3	Nitrogen as N in Kg/hectare	238	IS 14684
4	Phosphorous as P in Kg/hectare	54	WC/0042
5	Potassium as K in Kg/hectare	106	ES/0001
6	Copper as Cu in mg/Kg	2.55	ES/0004
7	Iron as Fe in mg/Kg	6.16	ES/0001
8	Zinc as Zn in mg/Kg	0.12	ES/0001
9	Colour	Red	ES/0001
10	Textural classification	Clay	ES/0001
11	Bulk Density in gm/cc	39.82	ES/0001
12	Porosity in %	41.5	ES/0001
13	Sodium absorption ratio	4.16	ES/0001
14	Boron in mg/Kg	1.31	ES/0001
15	Organic carbon in %	0.78	ES/0001

**Remarks:** The given sample tested for above specified Chemical analysis only as per customer's requirement.

  
**Authorised Signatory**  
**Gunavathy M.K**  
**Quality Manager**

END OF TEST REPORT