



**MAHATMA GANDHI MISSION DENTAL COLLEGE & HOSPITAL**  
**Accredited by NAAC with "A" Grade,**  
Plot No. 1 & 2 Sector-01 (Old 18 & 19),  
Kamothe, Navi Mumbai- 410209  
E-Mail ID: mgmdchiqac@gmail.com



### **CONTENTS**

| <b>Sr. No</b> | <b>Standards</b>                                                                                                             |
|---------------|------------------------------------------------------------------------------------------------------------------------------|
| <b>1.</b>     | <b>The organisation's environment and facilities operate in a planned manner and promotes environment friendly measures.</b> |

**The organisation's environment and facilities operate in a planned manner and promotes environment friendly measures.**

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>PURPOSE</b>        | <ul style="list-style-type: none"><li>• Using processes in use of facilities and space</li><li>• Organization has policy for using the resources water, electricity etc. which are energy efficient, responsibly, and environmentally friendly with use of Natural resources for health and wellbeing of patients and staff and having alternative backup for any shortage or failure.</li><li>• Sign postings in internal and external areas which are understood by patients, families and community.</li></ul> |
| <b>SCOPE</b>          | This policy is applicable to provide a healthy energy saving environment in the Dental hospital with provision for use of natural resources and scope for maintenance and repair of engineering services and equipment.                                                                                                                                                                                                                                                                                           |
| <b>RESPONSIBILITY</b> | Administrative Officer (Stores & Services), Site Engineer, Maintenance In-Charge, Biomedical Engineer under guidance of management.                                                                                                                                                                                                                                                                                                                                                                               |

### **I. POLICY:**

- Utilization of space and focus will be on national/international guidelines with green hospital concept for better indoor and outdoor quality of air and ventilation.
- The hospital shall ensure that the layout and drawing of the hospital is updated for upkeep of the hospital building.
- Appropriate internal & external sign postings in the organization in a manner understood by patients, families, and community to meet statutory requirements.
- Adequate water and electricity will be available round the clock which is tested.
- Alternate sources of water and electricity will be always available in case of shortages as per a backup plan.



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- Strategies for optimizing energy saving and usage will be considered in planning of facilities.

## **I. ABBREVIATION:**

Abbreviations are as follows:

- Lts. – Liters
- DG – Diesel Generator
- UPS – Uninterruptible Power Supply
- PH – Power of Hydrogen
- TDS – Tax Deducted at Source
- GM – General Manager
- KB – Kilobyte
- AMC – Annual Maintenance Contract
- OT – Operation Theatre
- HDU – High Dependency Unit
- HVAC - Heating, Ventilation, and Air conditioning

## **II. PROCESS DETAILS:**

### **1. Up – to – date drawings**

- Up to date drawings of the hospital are maintained by the Site Engineer.
- In case there are any future changes then they too are maintained by the Site Engineer.

### **2. Signage**

There shall be internal and external sign postings in the organization in a language understood by patients, family and community or bilingual. This signage shall guide patients and visitors. Fire signage shall follow the norms laid down by the National Building Code or respective statutory board.

### **3. Provision of space**

The provision of space shall be in accordance with the available literature on good practices and directives from government agencies. Including landscaping, gardening and waste management treatment.

### **4. Sources of electricity and water**

- Natural sources of water and electricity will be used efficiently like use of daylight, green interior building materials, water harvesting rainwater, water level controllers in pumping system, and consumption monitoring, and provision of ventilation ducts.
- Energy efficiency in handling of HVAC, lighting, electrical power and water heating
- Use of solar plants installed on the terrace of the hospital for at least 20 % hot water generation.
- Availability of alternate sources of electricity and water



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The hospital shall make arrangements for supply of adequate potable water and electricity, provided as backup for any failure / shortage. The hospital shall ensure that there is sufficient water supply to meet the requirements of the hospital. In case of a shortfall in water or electricity, alternate sources shall be required. Alternate electric supply could be DG sets, UPS and any other suitable sources. The organization can have multiple alternate sources depending on the criticality of the activity.

### a. Domestic water policy

- 1) The hospital shall supply safe and potable water across the hospitals
- 2) The hospital shall have more than one source of water at all part of time  
Primary source: BMC  
Secondary source: Water Tankers  
Tertiary source: Bore Well
- 3) The hospital shall have additional water source in case of failure of the all internal source(bore well)
- 4) The hospital shall ensure round the clock water supply.
- 5) The facility department shall be responsible for the water supply system.
- 6) The facility technician shall do a proper check on the source of water supply system and the storage area and pumping mechanism every shift. He checks the water level and proper operation of motor etc and enters into the shift technician Logbook.
- 7) The water will be properly chlorinated to proper dose prior to the supply, the dosing pump is connected in the same circuit of the motor operation so that it automatically gets dosed as per the pre-set pulse
- 8) The water from the source (bore well) will be pumped into the **Fire** tanks
- 9) A number of alternative arrangements exist in the system; if one fails water can be supplied through other alternative pumps/pipelines.
- 10) In case any failure of the Water sources and corresponding circuitry it is to be immediately informed to the Administration Department.
- 11) All the possible steps are to be taken for the water conservation.

### b. Electrical Safety-Preventing Overload

- 1) The hospital receives power supply. In case of any breakdown in the power supply, the hospital has three generators for alternate source of power.
- 2) Trip switches are located to prevent any form of short circuit. The electrician maintains consumption record of electricity which is updated on a regular basis by the electrician of the hospital.
- 3) A record register of the response time of generators is maintained by the maintenance staff of the hospital.
- 4) The electrician checks the wiring system regularly to locate any fault such as short circuit etc. and immediately rectifies the same.
- 5) The generators are regularly tested by the electrician to locate any fault in the same. This is being done to ensure that there is **no** interruption in power supply. The generators are also under AMC record of the same is maintained by the clerk in-charge.
- 6) When adding a receptacle:
  - Ascertain what is to be used on the circuit and check to see how many amps the item will be using. Find out what is already on the circuit and if you may tap into the circuit. Add the new circuit only if the amperage is available.



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c. Power Supply Shutdown

- 1) If there is a power failure, the generators automatically come on the mains.
- 2) On every 20 minutes of the DG running the facility technician check the load current and diesel level noise level etc.
- 3) If the anticipated time for restoration is more than 2 hours at stretch the DG operator immediately, inform to the Facility executive to arrange for the additional Diesel supply.

d. Diesel Procurement

- 1) The Diesel is always procured only from the Approved vendor decided Company as per an annual contract.
- 2) When the stock falls below our safe stock limit the facility technician request for the Diesel indent voucher from the authorities.
- 3) The diesel indent form duly filled by the authorized signatory and signed is handed over to the technician.
- 4) The technician arranges for the transport through the approved transport provider and the payment for the transport through the petty cash.
- 5) The facility technician or the security supervisor is sent with the transport to the Gasoline station and ensure the quantity and quality.
- 6) The diesel is brought in the barrels to the hospital and then unloaded and pumped into the existing diesel storage tanks
- 7) The Acknowledgement receipt from the gasoline station is given the stores or the next working day for further action
- 8) The payment for the diesel is done on a monthly basis by the accounts department
- 9) The stock above the stipulated storage level is decided by the facility – executive/ supervisor depending on the nature of the contingency.

e. Shut Down Protocol

- 1) Shut down schedule for maintenance will be prepared for above mentioned areas.
- 2) Time for shut down will be identified according to least activity/usage time of that service.
- 3) All the concerned departments will be intimated in written 48 hours prior to the shutdown.
- 4) Check list will be prepared for critical areas which require constant supply for above mentioned areas.
- 5) Those critical areas will be fed by back up supply.
- 6) Time will be calculated beforehand and maintenance will be tried to get accomplished in that given time frame.
- 7) Logbook for shut downs will be maintained.

**Electricity:** Main supply will be taken for shut down and maintenance only when DG supply is there for back up for critical areas already identified. In this HT panel, Transformer, Lt Panels will be taken for shut down. DGs will be taken on shut down only when supply is via mains and Other DG is ready for back up.

**HVAC:** Chillers will be taken on shut down one by one, not all together. Critical areas [OT and HDU] will be fed by another working chiller.



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**Water Tanks:** All tanks are taken for maintenance.

Backup server will be provided for shut down hours. Re switching to the main server will be done once maintenance is over.

**f. Air-Conditioning and Refrigeration**

**1. Testing of alternate sources**

The organization shall regularly test these alternate sources. The results of these tests shall be documented. In the case of water, the testing includes bio – chemical and microbiological analysis.

**2. Designated Individuals for Maintenance of facility**

There are designated individuals responsible for the maintenance of all the facilities. Individuals who are qualified and available to do preventive maintenance must be identified. A person in the organization shall be designated to be in – charge of maintenance facilities. The organization shall have supervisors to manage the facilities. The necessary infrastructure and tools shall be provided by the organization. A list should be drawn up of personnel who are readily available. Once the personnel have been listed, specific responsibilities should be assigned, perhaps in the form of a work order, giving clear instructions for the task. Each person should have a clear knowledge of his or her responsibilities. Job assignments must correspond to the training, experience, and aptitude of the individual. Maintenance staff shall be contactable round the clock for emergency repairs. If emergency repair is not possible by staff on duty, more qualified / experienced staff shall be available. Response time shall be monitored from reporting to inspection and implementation of corrective actions.

**h. Energy saving strategies.**

- Schedule for switching off and on of lights
- Schedule for operation of exhaust fans
- Flow restriction of water taps and chillers
- Operational control on hot water generation, lifts etc.
- Audit of power and water consumption on regular basis
- Waste generation indicators e.g. biohazardous waste audits

**I. STAFF STRUCTURE**

**RECORDS AND FORMATS:**

1. List of Drawing / Layout
2. Annual Maintenance Schedule
3. List of Major equipment
4. Work order request Form

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