## **Point Wise Reply**

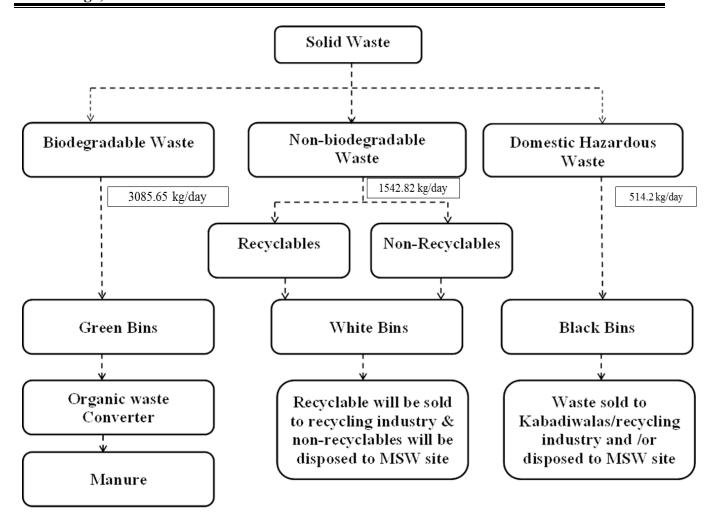
## Point 1:- Detailed Management plan for Solid Waste/Hazardous Waste/Bio Medical Waste be submitted.

**Reply:** - The project will adopt a systematic approach for solid waste collection and disposal. Solid waste generated from the project will be collected properly and will be managed as per Solid waste Management Rules, 2016.

The domestic solid waste will be generated by the occupants of the Hostel, Visitors, Patients, and Staff; pertains to the two categories, Bio-degradable and Non-biodegradable. These solid wastes will be collected separately by putting different types of separate bins at the source of generation. It is estimated that maximum solid waste generation would be about 5,142.75 kg/day and 946.4 kg of sludge (wet basis).

SOLID WASTE CALCULATION				
S. No.	Category of Solid Waste	Waste Generation Rate	Total Population	Waste Generated
1	Residential Refuse	0.3 to 0.6 kg/cap/day	3,130	1,408.5
2	Institutional Refuse	0.05 to 0.2 kg/cap/day	1,260	157.5
	Auditorium other miscellaneous faculty	0.1 to 0.2 kg/cap/day	3,745	561.75
3	Bed	1.5 kg/bed	2,010	3,015
	Total			5,142.75kg/day
Bio medical Waste generated is 25 % of the waste generated from the total waste from beds				502.5 kg/day

Source: Manual on Municipal Solid Waste Management, published by Central Public Health and Environmental Engineering Organization (CPHEEO), Ministry of Urban Development, Government of India.





**BIO-MEDICAL WASTE MANAGEMENT:** Biomedical waste is waste that is either putrescible or potentially infectious. Biomedical waste is generated from biological and medical sources and activities, such as the diagnosis, prevention, or treatment of diseases. Biomedical waste may be solid or liquid. Examples of infectious waste include discarded blood, sharps, unwanted microbiological cultures and stocks, identifiable body parts, other human or animal tissue, used bandages and dressings, discarded gloves, other medical supplies that may have been in contact with blood and body fluids, and laboratory waste.

Biomedical waste is properly collected in the separate container and will be disposed by authorized processor for Biomedical Waste.

Biomedical waste is properly collected in the separate container and will be disposed by authorized processor for Biomedical Waste.

The Biomedical waste generated will be managed as per Bio-Medical Waste Management Rules, 2016. The following provisions would apply to the project:

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Sign an agreement with the biomedical waste management facilitator for collecting bio medical wastes generated from the premise in a three bag system.

Every day collection of biomedical wastes from the institution by the authorized collector.

Organize awareness programmes for segregation of wastes, storage and protection.

The storage facilities are aesthetically acceptable and user-friendly and designed in a way that wastes stored are not exposed. The storage facilities or 'bins' should also be of 'easy to operate' design for handling, transfer and transportation of waste.

For the management of Bio Medical waste in existing phase Hospital has agreement with SembRamky which is attached as *Annexure-I*. For expansion phase hospital will continue this agreement.

Location of Storage of solid and Bio Medical Waste management are shown in Master plan which is attached as *Annexure-II*.

#### HAZARDOUS WASTE/E-WASTE DISPOSAL

## **Type of Hazardous Waste**

The proposed project is expected to generate following categories of hazardous wastes: Used Oil (Category 5.1, as per Schedule-1 of the Rules) - from DG sets Oil Contaminated Wastes (Category 5.2, Schedule-1) - from cleaning of DG sets, maintenance operations, etc. There would not be very high amount of hazardous waste from the proposed project.

### **Management of Hazardous Waste**

The Hazardous waste generated will be managed as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.

# **USED/WASTE OIL RE-PROCESSORS Authorized recycler for Used oil:**

- 1.) M/s Essell Lubricants & Chemicals Pvt. Ltd. Eyari Road, Farm, Aurangabad-824 101 Bihar (Used Oil 1155 KLA, Waste oil 2310 KLA)
- 2.) M/s Srishti Lube (India)Ltd. NH-28, Bagraha-Deeh Barauni, Begusarai, Bihar

# Point 2:- Compliance of CTE/CTO obtained from Bihar State Pollution Control Board shall be submitted.

**Reply:-** Bihar Medical Services & Infrastructure Corporation (BMSICL) has proposed expansion of the Darbhanga Medical College and Hospital (DMCH) in terms of construction of Academic Block, Hospital Block, Class IV Accommodation, Surgical Block and Students Hostel.

However, the existing complex is being under operation since 1925 i.e. before the issuance of The Air (Prevention and Control of Pollution) Act, 1981 and The Water (Prevention and Control of Pollution) Act 1974 under which we have to take necessary prior Consent before commencement of any industry/project (CTE) and prior Consent before operation of such industry/project (CTO).

Undertaking regarding establishment of Darbhanga hospital is attached as Annexure-III

## Point 3:- A detailed report on compliance to ECBC norms.

**Reply:** - A detailed report on ECBC and Energy Conservation Report is attached as *Annexure-IV*.

Point 4:- Details energy conservation measures to be taken. All points mentioned in the proposal such as orientation to support reduced heat gain, use of ASHRAE 90.1, use of ECBC compliant envelope measures to be supported through drawings and details in the proposal.

**Reply:-** A detailed report on compliance to ECBC is already attached as *Annexure-IV*.

Point 5:- An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be submitted with the EIA. The Plan to be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.

**Reply:-** Traffic Analysis report is attached as *Annexure V*.

Point 6:- The EIA should also give a compliance plan to conditions stipulated in Annexure XIV of the amended EIA Notification vide S.O. 3999 (E) dated 09.12.2016.

**Reply:-** Bihar Medical Services & Infrastructure Corporation (BMSICL) has proposed expansion of the Darbhanga Medical College and Hospital (DMCH) and the project is being

developed on the total plot area of 8,18,070.73 sq. m. The Project Built-up area is 3,41,655.52 Sq. m. (Existing+ Expansion). Therefore, this Project is designated under Category "A" and falls under Item 8(b) (Township & Area Development) of the Environmental Impact Assessment (EIA) Notification of September 14, 2006 and its amendments.

Compliance plan to conditions stipulated in Annexure XIV of the amended EIA Notification vide S.O. 3999 (E) dated 09.12.2016 is attached as *Annexure-VI*.

### Point 7:- The nature of the 03 ponds in the area and the plans for their development.

**Reply: -** DMCH Pond, Bhatba Pokhar and One more pond already exist at site. These three are natural ponds and full with water for whole year. We will conserve these ponds for beautification/recreational purpose will follow by proper management.

- Aquatic weed control by using a combination of several weed control strategies, such as:
  - group work days to pull out nuisance plants
  - limited and selective herbicide applications
  - by weed removal tools that make pond workdays easier Examples: grabbers, gloves, loppers, heavy-duty trash bags
- ➤ Algae control by following methods:
  - Will establish fertilizer -free zones around the pond, along the street, and around storm drains; this will reduce direct runoff of fertilizer granules into the pond.
  - Will plant shade trees along the pond; shade can reduce algae growth.
  - Will plant native aquatic plants in and around pond; they will beautify pond, provide food and shelter for wildlife, and will help reduce algae growth. They will also improve overall water quality in pond
- ➤ Water quality monitoring: Regular water testing will give an idea of water quality trends in pond.
- > Drainage structure maintenance
- > Storm water pollution prevention program
  - Pollution prevention is one of the most important elements of pond management plan.
  - Pond will be more successful if neighborhood can implement some basic pollution prevention practices such as general practice of maintenance of fertilizer free zone all around the pond, by not discharging untreated water into pond.

Point 8:- A certified report on the sources and availability of water from the local body supplying water along with the permission received by them for the same should be obtained and submitted with the first compliance report.

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**Reply:-** Water requirement during the operational phase will be met through either by Public health Engineering Department (PHED) or by abstracting ground water after taking prior permission from CGWA.

The total water requirement for the project has been estimated to be 2,473 KLD. This includes domestic water requirement, flushing, landscaping and HVAC. The total fresh water requirement for the expansion project is 1,042 KLD. The water requirement for Flushing and landscaping and DG cooling will be met through treated water from STP/ETP and HVAC Condensate directly use for HVAC cooling.

When project will become operational before that project will obtain permission from concerned authority for municipal supply or Ground water NOC from CGWA and will submit in first compliance report.