**7.1.3 - Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words)**

 Solid waste management

 Liquid waste management

 Biomedical waste management

 E-waste management

 Waste recycling system

 Hazardous chemicals and radioactive waste management

HBNI and all its CIs/OCC rigorously follow the effective waste management strategy i.e., reduce, reuse and recycle.

Municipal solid waste generated from all the buildings, road and open areas in the campuses is segregated, collected and disposed off suitably to the concerned local body. Biogas plants have been set up in some of the CIs (BARC, RRCAT) to manage bioorganic waste. The bio-gas so produced is used in the hostel kitchen as fuel. IGCAR has set up a biological waste water treatment technology plant and a Nisargruna Biogas plant at its township.

Sewage water treatment plants have been set up in the campuses of CIs/OCC, and the waste water, after treatment, is used for watering gardens. Chemical waste, in liquid form, is collected and disposed after suitable treatment and dilution as necessary. Sewage treatment plants at IGCAR and BARC are aimed to manage the waste water discharged from quarters and Public Office Buildings. The treatment plants reduce the threat of water pollution and makes the best use of the sewage treated water for Gardening and thereby maintaining the green atmosphere in the Township.

**Bio-medical Waste:** The biomedical waste at TMC is treated in-house using a Hydroclave before sending it for disposal.

**Hazardous waste:** At BARC, solid as well as liquid chemical wastes with hazard potential are incinerated in a chemical incinerator. Radioactive liquid waste generated during experiments is collected and disposed by following stringent regulations of safety committees/AERB.

**E-waste management:** Computers to be disposed are sold/auctioned to a Certified E-Waste Recycler. The computer center of NISER, Bhubaneshwar has taken a proactive approach towards the environmental sustainability by constituting a committee with representatives from almost every school/section of NISER to oversee an E-waste collection and disposal program in accordance with the E-waste management rule 2016 of the Ministry of Environment, Forest and Climate Change. They also floated an E-waste tender which only authorized recyclers or collection centres by the central or state pollution control board could participate in so that it can be assured that the selected recycler possessed the necessary expertise and technology required for the proper disposal of E-waste. By following the E-waste management rule 2016, the committee has successfully collected all E-waste materials from various schools and departments.