NAAC

Criterion-VII

Institutional Values and Best Practices

Management of the various types of
Degradable and Non-Degradable
Waste

Bharat Shikshan Sanstha's Arts, Science and Commerce College, Makni.

Tq-Lohara, Dist-Osmanabad – 413 606 (MS), INDIA.

(Affiliated to Dr. Babasaheb Ambedkar Marathwada University, Aurangabad)

Degradable Waste and Non-Degradable Waste:

A degradable material or substance can be defined as a material that can be decomposed easily by bacteria or any other natural organisms and not become part of pollution. Degradable wastes are the waste materials that are and can be easily degraded by natural factors like microbes (e.g., bacteria, fungi and a few others), abiotic components like temperature, UV, oxygen, etc. few examples of such wastes are kitchen wastes, food materials, and other natural wastes. Microorganisms and other abiotic elements work together to break down complex substances into simple organic matters which finally suspend and disappear into the soil. The whole process is natural which can be fast or slow. So, the environmental issues and risks caused by degradable wastes are very low.

A Non-degradable material can be defined as a type of material that cannot be broken down by natural organisms and serve as a source of pollution. Unlike degradable wastes, non-degradable wastes cannot be easily taken care of. Non-degradable wastes are those which cannot be decomposed or degraded by natural agents. They remain on earth for thousands of years without any degradation or decomposition. Therefore, the threat caused by them is also more dangerous. An example is a plastic which is usually used in almost every area. To give these plastics a long-lasting outcome, better quality plastics are being used. This made them more temperature resilient and tougher even after the use. Other cases are

cans, metals, and chemicals for agricultural and industrial uses. They are the chief causes of air, water and soil pollution and diseases like cancer.

Since non-degradable wastes are not at all Eco-friendly, they need to be replaced or substituted. As a part of the growth of alternatives, scientists have brought forward many innovative ideas like degradable plastics, etc. They combined some degradable materials with plastics and made them easily and speedily degradable. But this is quite a costly procedure. Non-degradable wastes which can be recycled and can be used again are known as "Recyclable waste" and those which cannot be used again are known as "Non-recyclable waste". Degradable waste can be of two types. These are Solid waste and Liquid waste.

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1. Solid waste management:

Pollution from waste is aesthetically unpleasing and results in large amounts of litter in our communities which can cause health problems. Solid waste can be categorized into three types: biodegradable, non-biodegradable and hazardous waste. Bio-degradable wastes include food wastes, canteen waste, wastes from toilets etc. Non-biodegradable wastes include plastic, tins and glass bottles etc. Hazardous waste is waste that is likely to be a threat to health or the environment like cleaning chemicals, acids and laboratory chemicals. Each and every department of Bharat Shikshan Sanstha's Arts, Science and Commerce College, Makani as well as administrative offices create some waste and dumped in small waste bin located in the department. Each building several dust-bins are placed from where Peon take the wastes. From the small bin wastes are dumped in big bin by the Peon regularly. Collect the big waste bins from Gram-panchayat or Village Panchayat, Makani took the solid wastes. Bio-degradable wastes are effectively converted to fertilizer and use in farm. College produces lot of paper waste. Paper

wastes from Academic Blocks, Library, Exam, Administrative offices, are disposed through vendors. The wastes are properly stacked in designated place and later disposed through vendors for proper waste management.

2. Liquid waste management:

Liquid waste management: Liquid waste is generated from science laboratories and canteen. Liquid wastes generated by the Bharat Shikshan Sanstha's Arts, Science and Commerce College; Makni are of two types:

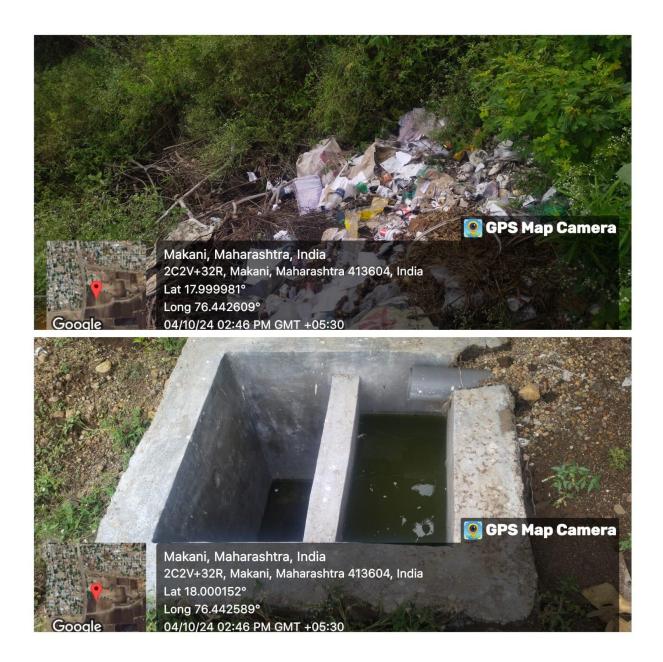
- 1. Sewage waste.
- 2. Laboratory and canteen effluent.

The liquid wastes are mainly drained to improve the ground level of water.

The College do not have any sewage treatment plant yet.

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Non-Degradable Waste:

Non-degradable wastes are **those that cannot be decomposed or dissolved by natural agents**. They remain on earth for thousands of years without any degradation. Hence, the threat caused by them is also more critical. A notable example is electronic and plastics waste which are a commonly used material in almost every field. That can be E-waste, plastic waste etc.

1. E- Waste management:

Bharat Shikshan Sanstha's Arts, Science and Commerce College, Makni has very efficient mechanism to dispose E-wastes generated from various sources. E-wastes are generated from ICT Lab, Physics Lab, Chemistry Lab, Botany Lab and Zoology Lab and Administrative Offices. The e-waste includes out of order equipment's or obsolete items like lab instruments, circuits, desktops and accessories, printer, charging and network cables etc. All these wastes are put to optimal use. All such equipment's which cannot be reused or recycled is being disposed through Vendors (Microcom Computer Education, Omerga).

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