NEW HORIZON
COLLEGE OF ENGINEERING

LIQUID WASTE MANAGEMENT POLICY (LWMP)

New Horizon College of Engineering (NHCE) has been making very distinctive contributions in the field of environment and sustainability, it shall pay considerable attention to minimize the production of waste in the campus. This policy envisages guaranteeing the moral, social and legal responsibilities of the institute in creating an environment friendly and sustainable world devoid of waste and exploitation of nature. This policy is a guidance document to the faculty, staff and students to behave responsibly in the production of waste, waste segregation, storage, handling, transport and disposal. Institute realizes sustainable and holistic waste management essential in reducing its environmental footprint and providing a safe and healthy work environment for teaching and nonteaching employees, students, and visitors. Institute has a duty to ensure that all the campus wastes are disposed of responsibly by using proper waste segregation mechanism at the source and if possible, converting it into value added environment friendly product. This Recycling of Liquid Waste Management Policy (LWMP) is a guidance document to the faculty, staff and students to behave responsibly in the production of waste, waste segregation, storage, handling, transport and disposal.

1 Policy Statement

The New Horizon College of Engineering will adopt the principles of the "best practicable environmental option" in the delivery of its waste management services.

The institute (NHCE) requires all the teaching and non-teaching staff, students, guests and anyone else making use of the premises to comply with this policy and associated "Institute Environmental Guidance" to ensure compliance with all waste legislations. Any solid waste generated in the campus shall be managed and handled in accordance with the compliance criteria and the procedure laid down in Municipal Solid and Liquid Wastes (Management and Handling) Rules, 1999, published under the notification of the Government of India in the Ministry of Environment. The policy envisions a community which is acutely conscious of the anthropogenic condition of the world and therefore strives to create an ecologically healthy, prospering and resource efficient community, where waste is considerably reduced, recycled, reused and disposed of using environmentally friendly safe methods.

2 Introduction

Liquid waste management is increasingly becoming one of the major social and environmental challenges in the country. This is contributed by factors such as rapid population growth, urbanization and increased demand towards industrial development and limited resources to cater

for the growing quantity and pollutants of liquid waste generated. The inadequacies in liquid waste treatments systems have led to water borne diseases such as diarrhoea, cholera as well as deterioration of the environmental quality.

3 The Policy vision

The policy envisions is committed to minimizing waste generation and reducing environmental deterioration and pollution. We aim to provide a fresh and eco-friendly environment for all members of our institution. This Waste Management Policy is based on the core principles of waste management, which include reducing, reusing, recycling, and recovering waste products. All individuals within the college are encouraged to reduce waste creation, and the institution has established a dedicated Waste Management Cell to oversee these efforts.

4 Policy objectives

1. The Institute follows the principle of 3R (Reduce, Reuse and Recycle) to meet its objective of sustainable development by bringing ecological balance.
2. To ensure that waste management is performed in accordance with all waste legislative requirements, including the duty of care, and to plan for future legislative changes and to mitigate their effects.
3. To minimize waste generation at source and facilitate repair, reuse and recycling over the disposal of wastes in a cost-effective manner.
4. To provide clearly defined roles and responsibilities to identify and coordinate each activity of the waste management.

5 Liquid Waste

1. Utilize hand washing water for plant irrigation.
2. Channel washroom water into specially made pits.

6 Organization and Management

All teaching and non-teaching staff as well as students of NHCE, is responsible for overseeing waste management efforts at New Horizon College of Engineering and also focuses on raising environmental awareness, implementing mitigation measures, and promoting sustainable practices throughout the institution.

7 Liquid Waste Minimization

The application of good liquid waste minimization practices will keep the volume of liquid waste and potential pollutants to a minimum. It is the first aspect which should be addressed. Major areas for consideration are:

1. reduction of contaminants in industrial wastes discharged to the sewerage system;
2. minimization of water use by applying water conservation and demand management principles to industrial, commercial and domestic sources;
3. management of domestic products that may add contaminants to the liquid waste flow; and

4. management of sewerage systems to exclude infiltration and storm water Waste minimization can also be enhanced by a combination of actions in the areas of:
5. incentives, such as quantity and quality-based charges for major industrial dischargers and user pays for domestic black water; and
6. education, such as providing information on the use of water efficient appliances (such as low flow shower heads and low water use taps) and environmentally friendly products and practices.

8 Collection of Liquid Waste

Collection of liquid waste is by use of sewer system. The principle of using gravity as the driving force for conveying liquid waste in a sewerage system should be applied wherever possible, because this will minimise the cost of pumping. Other options for managing liquid waste collection system include:

1. minimise odour emissions;
2. minimise infiltration (leakage of groundwater into the pipes) and illegal discharges of storm water to keep liquid waste volumes to a minimum;
3. deliver liquid waste as fresh as possible to the treatment plant so that it is easy to treat and minimise energy usage;
4. avoid deposition and blockage in the sewer; and
5. minimize leakages of liquid waste.

9 Liquid Waste Management

Liquid wastage generated from canteen and toilets is segregated and letting out to sewage treatment plant (STP), where the treated water is reused for flushing and gardening purpose in the campus. Sewage treatment plant capacity considered.

10 Hazardous Waste Management

Hazardous chemicals are not used in the laboratories. Acids in diluted form are used in environment engineering laboratory, which are discharged directly. When necessity arises to utilize a strong acid or base, they are neutralized before discharging. No radioactive elements of any form are used in the campus and thus its waste is not generated in the campus

11 Waste Management Practices

Sewage Treatment Plant (STP) is in use in the institution. The treated water is used for flushing and gardening purpose. The institute has a dedicated collection system where segregation for wet and dry waste basis which is collected using colored bins Blue (Dry waste), Green (Wet waste). Adequate number of trash cans and dust bins are placed all over the campus. The collected waste is disposed on a daily basis.

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