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POLICY ON PREVENTING MARINE POLLUTION 2024

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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
ODISHA

FOREWORD

At Centurion University of Technology and Management, we are committed to promoting environmental sustainability and protecting our planet's natural resources. Marine ecosystems, in particular, are vital to the health of our environment, and their preservation is a responsibility we take seriously. The *Policy on Preventing Marine Pollution* reflects our dedication to minimizing our impact on marine environments and ensuring that our actions contribute to the global effort to protect our oceans.

This policy outlines clear guidelines and practices for preventing pollution that could harm marine life, coastal areas, and water bodies. By adopting responsible waste management, reducing plastic use, and encouraging sustainable practices across our campus, we aim to play our part in safeguarding the health of the seas and oceans.

The *Policy on Preventing Marine Pollution* serves as an important reminder that every member of our university community has a role to play in protecting the environment. By following these guidelines, we can reduce our environmental footprint and set an example of sustainable living for others to follow.

I encourage all students, faculty, and staff to engage with this policy and work together to uphold its principles. Together, we can ensure that Centurion University remains a leader in environmental responsibility, contributing to a cleaner, healthier future for our oceans and the planet.

Prof. (Dr.) Supriya Pattanayak
Vice-Chancellor
Centurion University of Technology and Management

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Policy on Preventing Marine Pollution

1. Introduction

The marine environment is the vast and complex biome that occupies 71% of the earth's surface and supports diverse flora and fauna. But, over time, there is continuous pressure on the marine environment due to various anthropogenic activities including aquaculture, agriculture, industries, fisheries, transportation, mining, tourism and modifications to abiotic factors like sediment and nutrient runoff. This Anthropocene era has led to the ocean being perceived as a haven for pollution. The definition of pollution was initially given by the group of experts on the Scientific Aspects of Marine Pollution (GESAMP), in 1969 as "the introduction by man, directly or indirectly, of substances or energy to the marine environment which resulted in deleterious effects on marine activities, such as fishing and other living resources, the impairment of the quality and the use of seawater, and the reduction of amenities". But later United Nations Convention on the law of seas (UNCLOS), Article 1(4) of 1982, redefined the definition of pollution as "the introduction by man directly or indirectly of substances or energy into the marine environment, which is likely to result in living resources, hazards to human health, a hindrance to marine activities including fishing and other legitimate use of the sea, impairment of quality for the uses of the seawater and reduction of amenities". As the global population and product production continue to expand, the concentration of pollutants in the marine environment is projected to increase further and currently, 80% of marine pollution comes from land. For instance, the production of plastic increased by 13 million tonnes in a single year. The discharge of pharmaceutical pollutants is also expected to rise with population growth, thereby introducing additional chemicals into the ocean through drains and rivers. Moreover, new chemical compounds are produced annually, and their impacts on the marine environment remain largely untested. Pollution in the ocean poses a threat to organisms across the food chain in various ways. Trace amounts of heavy metals and persistent organic pollutants (POPs) in organisms can result in physiological harm and behavioural changes. Reducing marine pollution is a pressing global challenge that must be addressed to safeguard the health of the ocean and the communities and industries that depend on it. UNCLOS Article 194 directed the states to take the necessary measures to prevent, reduce, and control pollution in the marine environment from any source and to ensure that any pollution arising from

activities under their jurisdiction and control does not spread beyond the area in which they exercise sovereign rights. Further, Article 207 calls upon the states to adopt laws and regulations to prevent, reduce and control pollution of the marine environment from land-based activities. Therefore, the adoption of precautionary measures, and awareness campaigns among the staff and students to control these anthropogenic activities at the university level is of utmost require and will have an immense impact on society and will help to bring an idea of a clean environment in larger scale at community, national and international levels in future.

2. Objectives

Centurion University of Technology and Management is committed to executing a few steps to contribute to the mitigation and control of land-based marine pollution instigated by various daily activities of the University and at the community level under the following guidelines:

I. Avoidance of single-use plastic
II. Waste management inside the campus
III. Effluent management in the agricultural field
IV. Behavioural changes in each member across the University
V. Fostering cooperation and partnerships with the local neighbourhood

I. Avoidance of single use plastic

The University has committed to avoid the single use plastic which is one of the largest contributors of both the terrestrial and marine pollution. Plastic persists in the environment for hundreds of years and breaks down into microplastic that is easily contaminated with food webs that has potential to cause detrimental effects in the higher living organisms including humans. The university aims to avoid the use of plastic packages including bottles, food containers, straw and cling wrap.

Implementation:

- Instruction to the students, staff, and all the canteens and vendors inside the University premises to avoid single use plastics, straws, plastic bottles, food containers etc.

- Awareness to the all the students, staff and workers regarding the detrimental effects and possible human hazard caused by the plastic
- Installation of sufficient dustbin for different category of waste
- Disposal of plastic item in proper designated dumping ground and collection of recyclable plastic waste

II. Waste management inside the campus

The university has different manufacturing and research laboratories, wet lab and experimental units. Waste materials from these research facilities are potential to cause hazard in the environment. So, the university has taken utmost care to prevent the leaching of effluent into the drainages and canals.

Implementation:

- Categorization of laboratories and experimental unit effluent based on the level of hazard
- Disposal of hazardous waste materials following the standard protocols.
- Dumping of waste materials into the designated secured dumping pit far away from the natural canals or streams.
- Awareness among the lab users and other residents about the handling of potential harmful chemicals and safe disposal.
- Improving waste collection, recycling, and disposal processes by investing in efficient waste management systems can prevent pollutants from reaching the oceans.

III. Effluent management in agricultural field

Fertilisers containing nitrogen and phosphorus are used in agricultural fields, gardens and aquaculture ponds. When the nutrient gets added into the nearby waterway, it reaches the coastal environment, which contributes to instigating eutrophication in the ocean. So, the University has taken necessary steps to ensure the nutrient rich effluent water to avoid mixing with nearby natural rivers and streams leading to the ocean.

Implementation:

- Regular monitoring of farm ponds water to check the level of nutrients
- Proper dumping of waste from the agricultural field and other animal farm sheds
- Avoidance of use of chemical fertilisers, pesticides and other synthetic chemicals for cropping and farming.
- Preference of organic farming to ensure sustainability

IV. Behavioural changes in all the members of the University

Behaviour changes is the main fundamental steps to be taken up to mitigate and to ensure the compliance of policies and regulatory framework to combat the land based marine pollution efficient

Implementation:

- To educate the people regarding the land based marine pollution through awareness and campaigns
- Observations or celebration of national and international natural resources conservation and protection programmes, to impart the knowledge of a clean and sustainable environment.
- Conduct workshops and training within and outside the campus for awareness regarding the land based marine pollution and their potential threats to the ecosystem, and to the general population.
- Awareness to all the residents and non-residents about the idea of a clean river, clean environment and healthy life.

V. Fostering the cooperation and partnerships with the local neighbourhood:

Addressing land based pollution issues by collaborating with neighbouring villagers and local organisations can lead to coordinated efforts in combating land-based pollution sources and achieving sustainable development goals.

Implementation:

- Collaborative decision making and implementation of framework to mitigate all types of land based pollution.
- Collaborative cleanliness drives in common places like market, river site, drainage and canal to control the flow of litter into the ocean.

3. Approval and Review

This policy has been approved by the university administration and will be reviewed periodically to ensure its effectiveness and compliance with current laws and best practices. Any amendments to the policy will be communicated to the university community.

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Dr. Anita Patra
Registrar
Centurion University of Technology and Management

REGISTRAR
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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT, ODISHA

CAMPUSES:

Paralakhemundi Campus
Village Alluri Nagar
P.O. – R Sitapur, Via- Uppalada
Paralakhemundi, Dist.- Gajapati
Odisha, India. PIN– 761211

Bhubaneswar Campus
Ramchandrapur
P.O. – Jatni, Bhubaneswar
Dist.- Khurda, Odisha,
India, PIN– 752050

Balangir Campus
Behind BSNL Office
IDCO land, Rajib Nagar
Dist.- Balangir, Odisha
India, PIN-767001

Rayagada Campus
IDCO Industrial Area
Pitamahal, Rayagada
Dist.-Rayagada, Odisha
India, PIN-765001

Balasore Campus
Gopalpur,
P.O.-Balasore
Dist.-Balasore, Odisha
India, PIN-756044

Chatrapur Campus
Ramchandrapur,
Kaliabali Chhak,
P.O-Chatrapur, Dist.-Ganjam
Odisha, India, PIN-761020