International Journal of ChemTech Research
CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555
Vol.12 No.04, pp 127-149, 2019

Environmental sensitization of BMLW of Anthropocene epoch: in developing township: Bhubaneswar, India

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Abstract : The Health carewaste (HCW) disposal is social and legal accountability of individuals in addition to maintain sustainable health and reducenosocomial infection of human and theecosystem. Medical wastes disposal are prioritized in EP Act-1986 onwards to improve methods of minimization categorization, quantification, segregation,handling and collection, onsite transport and storage accompanied by treatment and disposal. In management of HCW, the liquid waste contains only 5% of total wastes generated in form of chemicals, heavy metals, excrata and radioactive elements. Protocols about HCLW disposal are dissimilar depending on the size, people and economy of the people in a city and its laws but the risk of exposure is constant for healthcare managers, stake holders and workers.The authenticated and scientific Common Biomedical liquid Waste Treatment (CBLWT) procedure is not available till date.The present study is an approach for categorization, handling and management of liquid wastes of different health care units in a 70 years developed old city, Bhubaneswar along east coast of India. The physico- bio-chemical study of the liquid waste generated from HCU's has been studied and the concentration of physical characters such as pH, electrical conductivity, TSS,turbidity, DO, BOD, COD etc. are observed which is generated from different health care units by using different chemical procedures. The concentration of nonmetals, metals, metalloids and rare earth elements are found by XRF spectroscopy and their possible nosocomial health-care associated infections (HAI's) and their effects are investigated. The different treatment procedures of management of CBLWTare discussed before discharge to local drains. The identification of possible heavy metals/.metalloids/ REE's are found and hospital-acquired infections are identified and the pre-treatment procedure has been tried before disposing the HCLW to the local drains.
Key words : Waste. HCU's, Bio-medical wastes, BMLW, Hospital

Rajshree Biswal *et al* /International Journal of ChemTech Research, 2019,12(4): 127-149.

DOI= http://dx.doi.org/10.20902/IJCTR.2019.120417

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