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BIOLOGICAL OXYGEN DEMAND AND CHEMICAL OXYGEN DEMAND CONTENT OF MAKANI DAM, TQ. LOHARA DIST. OSMANABAD (M.S) INDIA

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ABSTRACT:

The present scientific analysis deals with the study of B.O.D. and C.O.D. of Makani Dam, Tq.Lohara Dist. Osmanabad (M.S.) India. The work was carried out during the year 2021 (January to December). The Makani Dam is mainly constructed for irrigation and Fishery purposes.

The results of the present analysis showed that the C.O.D. and B.O.D. is maximum in summer similarly the values were observed minimum in monsoon and winter.

KEYWORDS: *C.O.D.-B.O.D.-Makani Dam.*

INTRODUCTION

Water is life Day by Day pure water is basic need of life; pure water is a problem of wound it is polluted by various ways (Biological and Chemical). Total life of earth depends on water. The water is used by human beings for Domestic Industry and Agriculture purpose. Everything is originated in the water and everything is sustained by water.

Water pollution is the excess addition of harmful to the life. The Materials are harmful to the life Many workers proved that Due to water pollution, the quality of water is lost-water quality of drinking water varies from time to time and place to place due to interactions of local factors. Due to lack of knowledge about the water quality and their effects the inhabitants are prone to diseases and health problems.

The workers like Adebisi A.A. (1981), Khulbe (1993), Honkock (1973), Kudesi V.P. And Verma S.P. (1986), Mishra (1978), Patki (2002), Mitra A.K. (1982) worked on the water quality of various water resources.

There is no back record found about the water quality C.O.D. and B.O.D. of Makani Dam hence the present work was undertaken.

MATERIAL AND METHODS :

Monthly sample were collected from the Makani Dam for analysis in pre-cleaned 1 liter plastic bottle in morning hours and brought to the laboratories.

For Biological oxygen demand, samples were analyzed with the hello of Winkler:s method and similarly chemical oxygen demand was measured by using dichromate digestion method. The analysis was done by using the standard literature given by APHA (1985).

RESULT AND DISCUSSION :

1. Biological oxygen Demand:-

It indicates the presence of biological matter in the water and express degree of contamination. The value of B.O.D. varies from 3.3 to 24.5 mg/lit. the values of B.O.D. were showed highest during monsoon and minimum in winter because of lesser quality of solid and microbial population.

2. Chemical oxygen Demand:-

It determines the oxygen required for chemical oxidation of organic matter with the help of strong chemical oxidant.

During the present work, the C.O.D. values ranged from 43 to 50.1 mg/lit the maximum values noted in monsoon due to inflow of organic dead matter and minimum were found in winter due to dilution effect.

Month	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Parameter B.O.D.	3.8	4.1	4.6	5.4	5.3	3.4	5.3	10.1	21.3	22.2	23.4	24.6
C.O.D.	4.2	50.0	50.2	49.0	9.6	9.2	4.2	4.5	4.6	4.3	4.4	4.7

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