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## **STUDY OF THE EFFECT OF DIFFERENT FACTORS ON FATE OF INDICATOR MICRO-ORGANISMS IN URBAN SEWER SYSTEMS**

**Priyanka Jamwal<sup>1</sup>, Atul K. Mittal<sup>2\*</sup>, J. M. Mouchel<sup>3</sup>**

<sup>1</sup> *Research Scholar, Environmental Engineering Laboratory, Department of Civil Engineering, Indian Institute of Technology, Delhi, New Delhi 110016, India;* <sup>2</sup> *Assistant Professor, Department of Civil Engineering, Indian Institute of Technology, Delhi, New Delhi 110016, India;*

<sup>3</sup> *Director, Cereve, Ecole nationale des ponts et chaussées, Champs sur Marne, Marne la vallée, Paris 77455, France.*

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### **Abstract**

Coliform bacteria are important indicator of pathogenic micro-organism and their possible discharge into the environment. Despite, importance of these organisms, very little is known about their behaviour in urban sewer system. Type of climatic conditions also affects the distribution micro-organisms in the sewer system. Laboratory experiments were conducted to determine the effect of factors which affect the survival of indicator organism within the urban drainage system. Effects of dilution, suspended solids and bacterial and protozoan indicators in sewage were examined. Predacious protozoa exert major influence on *E.coli* destruction. Growth of *E.coli* was observed in the absence of bacterial and protozoan predators. It is observed that the bacterial predators do not contribute to *E. coli* destruction, because of their lower concentration in domestic sewage. During the wet weather conditions, management of urban drainage/sewer system becomes very crucial. Findings of this study would assist in planning mitigation measure during the wet weather flows.

*Keywords:* indicator organisms, urban sewer systems, protozoan and bacterial predators, sediments

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\* Author to whom all correspondence should be addressed: Phone: 91-11-26591239; Fax: 91-11-26581117; e-mail: [akmittal@civil.iitd.ac.in](mailto:akmittal@civil.iitd.ac.in)