



**ICEEM/03 – ENVIRONMENTAL POLLUTION
PREVENTION**

**SELECTION OF MEDIA FOR THE RECOVERY
OF *SALMONELLA* AND *SHIGELLA* FROM
TREATED DOMESTIC WASTEWATER**

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Abstract

Enumeration of pathogenic microorganisms has become an important issue in the water supply and sanitation (WATSAN) sector with the emerging concerns for the biological quality of treated sewage. Microbiological examinations are generally carried out as per the Standard Methods. However, there is no single media prescribed by the Standard Methods. In the present work, different microbiological media have been evaluated for recovering *Salmonella* and *Shigella*. A sewage treatment plant based on the Upflow Anaerobic Sludge Blanket process has been selected for the recovery of these pathogens from the treated wastewater. It is observed that the *Salmonella* were recovered best by the Xylose-lysine-desoxycholate agar. However, for *Shigella* non-selective medium, i.e., MacConkey agar provided highest recovery.

Keywords: Salmonella, Shigella, culture media, domestic wastewater, recovery

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