

# CONTENTS

## **Nuclear Facilities Siting**

*by the Task Committee on Nuclear Effects of the Committee on Air Resources and Environmental Effects Management of the Environmental Engineering Division* . . . . . 443

## **Prediction of Septic-System Failures**

*by Gary B. Saxton and Joseph M. Zeneski* . . . . . 503

## **Public Water Supply Protection Benefits**

*by Michael B. Sonnen* . . . . . 511

## **Estimation of BOD and DO Probability Distribution**

*by William J. Padgett and A. N. V. Rao* . . . . . 525

## **Effluent Irrigation at Different Frequencies**

*by Allen R. Overman* . . . . . 535

## **Nutrient Budget Analysis for Rend Lake in Illinois**

*by Veerasamy Kothandaraman and Ralph L. Evans* . . . . . 547

## **Stormwater Treatment Systems**

*by Mitchell J. Small and Dominic M. DiToro* . . . . . 557

## **Dispersion Estimates for Hydraulic Dredge Spoil**

*by Marvin R. Pyles and W. L. Schroeder* . . . . . 571

→

---

This Journal is published bimonthly by the American Society of Civil Engineers. Publications office is at 345 East 47th Street, New York, N.Y. 10017. Address all ASCE correspondence to the Editorial and General Offices at 345 East 47th Street, New York, N.Y. 10017. Allow six weeks for change of address to become effective. Subscription price to members is \$10.00. Nonmember subscriptions available; prices obtainable on request. Second-class postage paid at New York, N.Y. and at additional mailing offices. EE, EM, TE.

The Society is not responsible for any statement made or opinion expressed in its publications.

<b>Managed On-Site Disposal in Unsewered Areas</b> by <i>George E. Wilson, Jerry Y. C. Huang, George Tchobanoglous,</i> and <i>Gil Wheeler</i> . . . . .	583
<b>Reclamation of Abandoned Mine Site</b> by <i>James R. Johnson</i> . . . . .	597

---

DISCUSSION

Proc. Paper 14597

---

<b>Nutrient Release from Anaerobic Sediments</b> , by Paul L. Freedman and Raymond P. Canale (Apr., 1977. Prior Discussion: Dec., 1977). <i>closure</i> . . . . .	607
<b>Oxygen-Sag in a Tidal River</b> , by Garry J. Macdonald and Richard N. Weisman (June, 1977. Prior Discussion: Oct., 1978). <i>closure</i> . . . . .	608
<b>Phosphate Removal Using Waste Calcium Sulfate</b> , by Thomas L. Theis and Gail F. Burke (Oct., 1977. Prior Discussion: Oct., 1978). <i>closure</i> . . . . .	609
<b>Activated Sludge-Unified System Design and Operation</b> , by Thomas M. Keinath, Mark D. Ryckman, Caleb H. Dana, and David A. Hofer (Oct., 1977. Prior Discussion: Oct., 1978). <i>closure</i> . . . . .	610
<b>Solution of Granular Bed Filtration Equations,*</b> by Avner Adin (June, 1978). by <i>Fathy Saleh and John L. Cleasby</i> . . . . .	612
<b>Lake Process Models Applied to Reservoir Management,*</b> by Wesley L. Bradford and David J. Maiero (Oct., 1978). by <i>John Burnes</i> . . . . .	615
by <i>Santosh R. Goswami</i> . . . . .	615

---

\*Discussion period closed for this paper. Any other discussion received during this discussion period will be published in subsequent Journals.