

Quality Control Problems in Rhode Island Wastewater

Monitoring Data: Some Causes and Effects

by

Jeanne H. Byrne

Thesis

Submitted in partial fulfillment of the requirements for the
Degree of Bachelor of Arts
in the Department of Environmental Studies at Brown University

May 1988

ABSTRACT

The following thesis is an examination of wastewater monitoring in Rhode Island. Included is a discussion of those problems inherent in gathering monitoring data, and those which are avoidable. Difficulties with source variation, sampling, analysis, data manipulation, and cheating are explained. The report is intended to raise awareness about the uncertainty often associated with the data collected.

Effluent data from the Field's Point wastewater treatment facility is examined to provide a specific example of how monitoring inaccuracies can affect the resulting data. In turn, the effects of uncertainties in the data on those who use them are examined. Recommendations are made for those who utilize and collect the data to make the data reliable and to use them properly.