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The Vermont Department of Environmental Conservation would like to express its appreciation of the Green Mountain Water Environment Associations Laboratory Standards Committee and the many Wastewater Treatment Facility Operators and other professionals who helped edit this manual.

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## INTRODUCTION

The Vermont Department of Environmental Conservation's Wastewater Management Division offered the original version of this manual to Vermont wastewater treatment plant operators in 1983. It was hoped, at that time, the manual would provide a useful tool in which operators could easily find acceptable methods for the analysis of common parameters. It was further hoped that by providing a single source of this type of information, the extreme diversity of analytical procedures being used throughout the State, might decline, somewhat.

In fact, today, we find a great majority of Vermont's treatment plant operators using the manual as a reference. We also find much more consistency in the analytical procedures being used. This makes training and troubleshooting much easier and therefore helps us to help you.

Over the years there have been many changes, of course, as you may have seen reflected in your National Pollution Discharge Elimination System (NPDES) permits. We hope that these changes are addressed in this 1996 revision of the manual. We also hope to address some of the other concerns expressed by operators.

To minimize confusion, the basic style of the original manual has been maintained. That is, each parameter is divided into background, sampling, method, equipment, reagents, procedures, calculations, and references. You will notice that a troubleshooting section has been added at the end of each analytical procedure to assist technicians in diagnosing and correcting analytical problems. Also, suggested quality control measures have been included for each parameter. Please note, references are included at the end of each major parameter section.

We have developed a three-ring binder format so that any future updates or revisions may be easily incorporated into the binder without the need for appendices or confusing page inserts. As these revisions are made, the corrected sections will be sent to the manual owners who will simply remove the appropriate section and replace it with the updated portion. All official revisions will be dated (ie.: Latest Revision: 06/12/96).

Please contact the Operations and Management Section at (802) 241-3822 with any questions, comments or suggestions. We encourage feedback and any constructive criticism as it will help us to improve future revisions.

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