

The Pawtuxet River: Problems Related to Toxic Pollutants from
Ciba-Geigy

by

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Chapter I

INTRODUCTION

The pollution problems of the Pawtuxet River, perhaps more so than those of any other Rhode Island water body, have been the source of much confusion, controversy, and frustration. Much of the lower Pawtuxet is marked by an unpleasant odor and murky appearance that intensify toward the river's end. Just before its final mile, where water quality is worst, the river receives the waste effluent of Ciba-Geigy Chemical Corporation. Although it is by no means the source of all the Pawtuxet's problems, the Ciba-Geigy discharge is nonetheless the single most serious wastewater threat to the river. Along with its contribution to conventional pollution, as indicated by such parameters as bacteria levels and dissolved oxygen concentrations, the Ciba-Geigy effluent delivers to the river a number of organic compounds that until very recently have received relatively little attention in water quality considerations. In the past few years, however, the Environmental Protection Agency has developed criteria for 129 "priority pollutants," a number of which have been found in Ciba-Geigy's effluent. Since the chemical company's discharge permit has expired and is currently being reviewed, the Ciba-Geigy permit application could potentially serve as a landmark case in the application of new pollutant criteria to industrial discharge permits. This thesis will explore the existing pollution situation on the lower Pawtuxet in

relation to Ciba-Geigy and the new government approaches to industrial pollution regulation.