CONTENTS

	Page
Introduction	
Preface Present Approaches to Toxicity Testing – a Perspective	5
Tresent Approaches to Toxicity Testing a Terspective	3
Philosophy and Rationale of Hazard Evaluation The Importance of Sequential Assessment in Test Programs for Estimating Hazard to Aquatic Life An Industrial Approach to Evaluation Environmental Safety of New Products A New Capacitor Fluid – A Case Study in Product Stewardship	17 36 44
Toxicity Testing Methods and Approaches	
Methods for Calculating an LC ₅₀	65
A Mechanicla Toxicant Injector for Flow-Through Toxicity Tests	85
A Flow-Through System for Studying Interaction of Two Toxicants on Aquatic Organisms	90
Method for Assessing Additive Toxicity of chemical Mixtures	99
Mysiopsis bahia : An Estuarine Species Suitable for Life-Cycle Toxicity Tests to Determine the	
Effects of a Pollutants	109
Suitability of Sheepshead Minnows (Cyprinodon variegatus) for Life-Cycle Toxicity Tests	117
Bioassays with a Natural Assemblage of Benthic macroinvertebrates	127
Utility of Toxicity Tests with Embryos and Fry of Fish in Evaluating Hazards Associated with the Chronic Toxicity of Chemicals to Fishes	137
Chronic Toxicity of Chemicals to Fishes	137
Residue Dynamics and Modeling Techniques	
Current Bioconcentration Test Methods and Theory	149
Uptake, Clearance, and Bioconcentration of ¹⁴ C-Sec-Butyl-4-Chlorodiphenyl Oxide in Rainbow	
Trout	162
A Model System to Study the Desorption and Biological Availability of PCB in Hydrosoils	178
Evaluation of the Significance of Waterway Sediment-Associated Contaminants on Water Quality	
at the Dredged Material Disposal Site	196
Application of an Evaporative Loss Model to Estimate the Persistence of Contaminants in Lentic	214
Environments	214
Biological Effects and Interpretation	
An Evaluation of Fenitrothion Toxicity in four Life Stages of Rainbow Trout, Salmo gairdneri	231
Acute Toxicity to and Bioconcentration of Endosulfan by Estuarine Animals	241
The Effects of Subacute Parathion Exposure on the Lacomotor Behavior of the Bluegill Sunfish	
and Largemouth Bass	253
Diet Quality in Fish Toxicology: Effects on Acute and Chronic Toxicity	269
Evaluation of the Efficacy of Sulfite Pulp Mill Pollution Abatement Using Oyster larvae	281
Summary	
Summary	299
Index	303