

TABLE OF CONTENTS

How to Use this Guidebook.....	i
Facility Assessment Survey	iii

SECTION ONE – ENVIRONMENTAL REGULATIONS

CHAPTER 1: Air Quality Regulations

Purpose and Applicability of Regulations.....	1-1
Agencies and Their Laws and Rules	1-1
1.1 Overview of Michigan’s Air Quality Rules	1-6
1.2 Part 2 Rules: Air Permits, and Air Toxics Regulations.....	1-7
1.3 Part 3 Rules: Particulate Matter	1-10
1.4 Part 4 Rules: Sulfur Bearing Compounds.....	1-12
1.5 Part 6 Rules: Existing Sources of VOC Emissions	1-12
1.6 Part 7 Rules: New Sources of VOC Emissions	1-13
1.7 Part 8 Rules: Oxides of Nitrogen (NOx).....	1-14
1.8 Part 9 Rules: Miscellaneous Provisions.....	1-14
1.9 Part 10 Rules: Intermittent Testing and Sampling	1-15
1.10 Part 11 Rules: Continuous Emission Monitoring	1-15
1.11 Part 14 Rules: Clean Corporate Citizen Program.....	1-15
1.12 Michigan Air Emissions Reporting System	1-15
1.13 Tax Exemption for Air Pollution Control.....	1-15
1.14 Federal Air Regulations	1-16
1.15 Prevention of Significant Deterioration.....	1-17
1.16 National Emission Standards for Hazardous Air Pollutants (NESHAPs).....	1-19
1.17 New Source Performance Standards	1-21
1.18 Acid Rain Regulations.....	1-22
1.19 Managing Chemical Risk: Accidental Release/Risk Management Plan.....	1-23
1.20 Ozone Depleting Substances	1-24
1.21 Greenhouse Gas (GHG) Regulations	1-25
Appendix 1-A: Hazardous Air Pollutants (HAPs)	1-26
Appendix 1-B: List of Compounds Excluded from the Definition of a Toxic Air Contaminant	1-28
Appendix 1-C: Standards of Performance for New Stationary Sources	1-29
Where to Go for Help	1-33

CHAPTER 2: Waste Management

Purpose and Applicability of Regulations.....	2-1
Agencies and Their Laws and Rules	2-1
2.1 Waste Reduction, Recycling, and Diverted Waste	2-3
2.2 Solid Waste Disposal and Littering	2-14
2.3 Liquid Industrial By-product	2-20
2.4 Hazardous Waste.....	2-31
2.5 Medical Waste.....	2-74
2.6 Mixed Medical Waste.....	2-76
2.7 Managing Specific Waste Streams	2-78
Where to Go for Help	2-86

CHAPTER 3: Wastewater

Purpose and Applicability of Regulations.....3-1
Agencies and Their Laws and Rules3-1
3.1 Key to Chapter3-2
3.2 Disposal Options3-7
3.3 Common Non-Compliance and Frequently Asked Questions3-23
3.4 Wastewater Treatment Operator Training and Certifications3-31
Where to Go for Help3-32

CHAPTER 4: Material Storage and Transportation

Purpose and Applicability of Regulations.....4-1
Agencies and Their Laws and Rules4-2
4.1 Secondary Containment4-4
4.2 Use and Storage Area.....4-6
4.3 Storage Tanks.....4-8
4.4 Hazardous Materials – U.S. DOT Transportation, Shipping, and Receiving4-17
4.5 Storage of Polychlorinated Biphenyls (PCBs)4-26
Where to Go for Help4-32
Appendix 4-A: Summary of Secondary Containment Regulations4-35

CHAPTER 5: SARA Title III – Emergency Planning and Community Right-to-Know Act

Purpose and Applicability of Regulations.....5-1
Agencies and Their Laws and Rules5-2
5.1 What Does SARA Title III Cover?5-2
5.2 Emergency Planning (Sections 302 & 303)5-3
5.3 Emergency Release Notification (Section 304)5-4
5.4 Hazardous Chemical Inventory (Sections 311 & 312)5-4
5.5 Online Reporting (Sections 302, 311, 312).....5-6
5.6 Toxic Chemical Release Inventory (Section 313).....5-6
5.7 Other SARA Title III Requirements5-8
Where to Go for Help5-14

CHAPTER 6: Environmental Emergencies

Purpose and Applicability of Regulations.....6-1
Agencies and Their Laws and Rules6-1
6.1 Release Prevention Tips.....6-2
6.2 Release Prevention and Response Planning6-2
6.3 Release Notification Requirements in Michigan6-21
6.4 Release Response and Cleanup6-36
Where to Go for Help6-45
Appendix 6-A: Summary of Common Environmental Release Prevention and Response Plans6-48

CHAPTER 7: Sites of Environmental Contamination, Property Transfers, and Liability Issues

Purpose and Applicability of Regulations.....7-1
Agencies and Their Laws and Rules7-2
7.1 Background7-2
7.2 “Due Care” Obligations7-3
7.3 Due Diligence and Baseline Environmental Assessments7-5
7.4 Summary7-7
Where to Go for Help7-8

CHAPTER 8: Activities at or Near the Land/Water Interface

Purpose and Applicability of Regulations.....8-1
Agencies and Their Laws and Rules8-2
8.1 Introduction8-3
8.2 Part 31 of Act 451: Water Resources Protection, Floodplain Regulatory Authority.....8-3
8.3 Part 301 of Act 451: Inland Lakes and Streams8-4
8.4 Part 303 of Act 451: Wetlands Protection8-5
8.5 Part 315 of Act 451: Dam Safety8-6
8.6 Part 323 of Act 451: Shorelands Protection and Management8-6
8.7 Part 325 of Act 451: Great Lakes Submerged Lands8-7
8.8 Part 353 of Act 451: Sand Dunes Protection and Management.....8-7
8.9 Section 404 of the Federal Clean Water Act and Section 10 of the Rivers and Harbors Act.....8-8
8.10 Fees8-8
Where to Go for Help8-9

CHAPTER 9: Drinking Water

Purpose and Applicability of Regulations.....9-1
Agencies and Their Laws and Rules9-2
9.1 Key to Chapter9-2
9.2 Noncommunity (Type II) Water Supplies9-3
9.3 Water Use Program – Great Lakes Protection9-5
9.4 Type III Water Supplies.....9-5
9.5 Cross Connection Requirements9-6
Where to Go for Help9-7

CHAPTER 10: Radioactive Materials Regulations

Purpose and Applicability of Regulations.....10-1
Agencies and Their Laws and Rules10-2
10.1 Environmental Monitoring and Radon Gas10-2
10.2 Nuclear Facilities.....10-2
10.3 Radioactive Materials in the Environment10-3
10.4 Emergency Assistance.....10-3
10.5 Radioactive Waste Disposal10-3
Where to Go for Help10-5

CHAPTER 11: Geological Resources

Purpose and Applicability of Regulations.....11-1
Agencies and Their Laws and Rules11-1
11.1 Geological Information and Records.....11-2
11.2 Oil and Gas11-2
11.3 Mineral Wells.....11-2
11.4 Metallic Mineral Mining and Reclamation11-3
11.5 Sand Dune Mining.....11-3
Where to Go for Help11-4

CHAPTER 12: Pollution Prevention and Environmental Management Systems

12.1 Pollution Prevention12.1
12.2 Environmental Management Systems12.16
Where to Go for Help12.2-5

SECTION TWO – MIOSHA REGULATIONS

PART 1: COMMON REGULATIONS FOR SAFETY AND HEALTH

CHAPTER 13: Hazard Communication/Employee Right-To-Know	13-1
CHAPTER 14: MIOSHA Posting	14-1
CHAPTER 15: MIOSHA Recordkeeping	15-1
15.1 Injury and Illness Recordkeeping	15-1
15.2 What Must Be Recorded	15-2
15.3 The Difference between First Aid and Medical Treatment	15-4
15.4 Reporting Fatalities and Catastrophes	15-4
15.5 Employee Medical Records and Trade Secrets	15-4
CHAPTER 16: Personal Protective Equipment	16-1
16.1 Hazard Assessment	16-1
16.2 Training	16-2
16.3 Face and Eye Protection	16-2
16.4 Foot Protection	16-3
16.5 Hand Protection	16-4
16.6 Respirators	16-4
CHAPTER 17: Process Safety Management of Highly Hazardous Chemicals	17-1
17.1 Elements of Process Safety Management	17-1
CHAPTER 18: Permit-Required Confined Spaces	18-1
CHAPTER 19: Spray Finishing Operations	19-1
19.1 Design and Use	19-1
19.2 Ventilation	19-2

PART 2: MIOSHA HEALTH REGULATIONS

CHAPTER 20: Air Contaminants	20-1
20.1 Employee Exposure	20-1
20.2 Monitoring	20-2
20.3 Engineering Controls	20-2
20.4 Administrative Controls and Personal Protective Equipment	20-3
CHAPTER 21: Asbestos	21-1
21.1 Why Regulate Asbestos	21-1
21.2 Who Is Exposed	21-2
21.3 General Requirements	21-3
21.4 Regulations Enforced	21-5
21.5 Other Asbestos Enforcement Agencies	21-5
CHAPTER 22: Bloodborne Infectious Diseases	22-1
CHAPTER 23: Emergency Response	23-1
CHAPTER 24: First Aid	24-1
24.1 First Aid	24-1
24.2 Emergency Shower/Eyewash	24-1
CHAPTER 25: Sanitation	25-1
CHAPTER 26: Noise	26-1

PART 3: MIOSHA SAFETY REGULATIONS

CHAPTER 27: General Housekeeping Guidelines	27-1
CHAPTER 28: Machine Guarding Requirements	28-1
CHAPTER 29: Openings in Floors and Walls	29-1
29.1 Openings in Floors and Walls	29-1
29.2 Standard Barriers and Toeboards.....	29-1
29.3 Stairways and Railings.....	29-2
29.4 Maintenance of Floors, Platforms, and Stairs	29-2
29.5 Aisle Widths	29-2
29.6 Skylights.....	29-2
CHAPTER 30: Fire Safety	30-1
30.1 General Fire Safety Precautions.....	30-1
30.2 Fire Exits	30-1
30.3 Portable Fire Extinguishers.....	30-2
30.4 Fixed Fire Equipment.....	30-4
CHAPTER 31: Electrical Safety	31-1
31.1 Training and Work Practices.....	31-1
31.2 Equipment Maintenance and Installation.....	31-3
CHAPTER 32: Lockout/Tagout	32-1
32.1 Employer Responsibility.....	32-1
32.2 Lockout/Tagout Program	32-2
32.3 Lockout/Tagout Procedures.....	32-2
32.4 Other Requirements.....	32-4
32.5 Training and Communication	32-5
32.6 Periodic Inspections	32-6
CHAPTER 33: Powered Industrial Trucks	33-1
33.1 Employer Responsibility.....	33-2
33.2 Employee Responsibility.....	33-2
CHAPTER 34: Flammable and Combustible Liquids	34-1
34.1 Safe Practices	34-2
34.2 Design, Construction, and Capacity of Storage Cabinets.....	34-3
34.3 Design and Construction of Inside Storage Rooms.....	34-4
34.4 Housekeeping	34-4
CHAPTER 35: Other MIOSHA Safety Standards	35-1
35.1 Welding and Cutting.....	35-1
35.2 Walking Working Surfaces.....	35-1
35.3 Abrasive Wheels	35-2
35.4 Hand and Portable Powered Tools	35-3
35.5 Air Receivers.....	35-3
35.6 Polishing, Buffing, and Abrading.....	35-3
35.7 Refuse Packer Units	35-3
35.8 Conveyors	35-3
35.9 Overhead and Gantry Cranes.....	35-4
35.10 Crawler, Locomotive, and Truck Cranes.....	35-4
35.11 Underhung Cranes and Monorail Systems.....	35-4
35.12 Slings	35-4

SECTION THREE – CONSTRUCTION AND FIRE CODES

CHAPTER 36: Construction Codes in Michigan

Purpose and Applicability of Regulations.....	36-1
Agencies and Their Laws and Rules	36-1
36.1 Building Permits	36-2
36.2 Electrical Permits	36-3
36.3 Mechanical Permits.....	36-4
36.4 Plumbing Permits.....	36-5
36.5 Boiler Permits.....	36-5
36.6 Elevator Permits.....	36-6
36.7 Michigan's Barrier Free Design Law	36-7
36.8 Americans with Disabilities Act	36-8
36.9 High-Hazard Materials	36-8
Where to Go for Help	36-9

CHAPTER 37: Local Fire Department

Purpose and Applicability of Regulations.....	37-1
Agencies and Their Laws and Rules	37-1
37.1 Introduction	37-2
37.2 Emergency Planning	37-3
37.3 Building and Fire Prevention Codes	37-5
37.4 Storage of Flammable and Combustible Liquids	37-6
37.5 Burning Permits.....	37-6
Where to Go for Help	37-8

APPENDICES

APPENDIX A: Acronyms	A-1
APPENDIX B: Definitions of Regulated Materials.....	B-1
APPENDIX C: DEQ and MIOSHA Overview	C-1
APPENDIX D: Federal and State Laws and Rules	D-1