## TABLE OF CONTENTS

## Preventing Silicosis – A Step-by-Step Guide

Purpose		1V
How to Us	e This Manual	v
Summary		vi
Overview		vii
Chapters		
1.	Silica Substitutes	1
2.	Health Hazards of Abrasive Blasting	7
3.	Getting Organized	18
4.	Air Sampling	36
5.	Minimizing Airborne Silica	45
6.	Respiratory Protection & Personal Protective Equipment	57
7.	Safety Training	78
8.	Cleaning Up	86
9.	Medical Monitoring	93
10.	Keeping Family Safe	103
Questions	and Answers	
Glossary		

Appendices

- I Silica Substitutes for Abrasive Blasting
  - I-A Silica Substitutes Brochure
  - I-B Silica Substitutes Background information
- II Evaluation of Substitute Materials for Silica Sand in Abrasive Blasting Phase 3 Study
- III MIOSHA Occupational Health Standards for Silica
  - III-A PART 590 Silica in General Industry
  - III-B PART 690 Silica in Construction
- IV MIOSHA Occupational Health Standards
  - IV-A PART 523 Abrasive Blasting
  - IV-B PART 601 Air Contaminants in Construction
  - IV-C PART 301 Air Contaminants in General Industry
  - IV-D PART 680 Noise Exposure in Construction
  - IV-E PART 380 Noise Exposure in General Industry
- V OSHA and NIOSH Health Effects Resources
  - V-A Occupational Exposure to Respirable Crystalline Silica Review of Health Effects Literature and Preliminary Quantitative Risk Assessment (OSHA)
  - V-B Preventing Silicosis and Deaths form Sandblasting (NIOSH Alert)
- VI Safety and Health Management System Resources
  - VI-A MIOSHA Safety and Health Management System Guidelines
  - VI-B MIOSHA Construction Safety and Health Management System (Accident Prevention Program

## VI-C MIOSHA Safety and Health Management System Evaluation Guidelines

**TABLE OF CONTENTS** 

- VI-D MIOSHA PowerPoint: Elements of a Safety and Health Management System
- VI-E MIOSHA Fact Sheet: Safety and Health Management System
- VI-F OSHA Recommended Practices for a Safety and Health Program
- VI-G OSHA Recommended Practices for a Safety and Health Program in Construction
- VII Job Safety Analysis Resources
  - VII-A MIOSHA Job Safety Analysis (P#32)
  - VII-B OSHA Job Hazard Analysis
- VIII Health and Safety Committee Resources
  - VIII-A Best Practices for Safety and Health Committees
  - VIII-B American Federation of Teachers (AFT) PowerPoint: Effective Safety and Health Committees
- IX MIOSHA Occupational Health Standard PART 470: Employee Medical Records and Trade Secrets
- X List of AIHA member industrial hygiene consultants in Michigan
- XI MIOSHA Construction Safety Standard PART 1: General Rules
- XII AIHA White Paper: Recommended Skills and Capabilities for Silica Competent Persons
- XIII Sample Silica Exposure Control Plans
  - XIII-A MIOSHA Sample Silica Exposure Plan
  - XIII-B Zurich Silica Exposure Control Plan General Industry
  - XIII-C Marble Institute of America (MIA) and Building Stone Institute (BSI): Silica Exposure Control Plan for General Industry
- XIV Respiratory Protection Resources
  - XIV-A MIOSHA Occupational Health Standard PART 451: Respiratory Protection
  - XIV-B MIOSHA Construction Safety and Health Fact Sheet: Respiratory Protection
  - XIV-C MIOSHA CET Publication SP#05: Respiratory Protection Sample Program
  - XIV-D MIOSHA Physician or Licensed Health Care Professional (PLHCP) Interpretation
  - XIV-E Respirator Medical Questionnaire en Espanol
- XV MIOSHA Personal Protective Equipment Resources
  - XV-A PART 6: Personal Protective Equipment Construction Safety Standard
  - XV-B PART 33: Personal Protective Equipment General Industry Safety Standard
  - XV-C PART 433: Personal Protective Equipment General Industry Occupational Health Standard
  - XV-D CET Publication SP#16: Personal Protective Equipment for General Industry



XVI-A P#014: MIOSHA CET- Construction Fact Sheet: Noise,

**TABLE OF CONTENTS** 

- XVI-B P#5000: MIOSHA CET-Summary of Occupational Noise Standard
- XVI-CP#5620: MIOSHA Hearing Loss Prevention Programs
- XVI-D MIOSHA Fact Sheet #011: Noise and Hearing
- XVI-E P#5621: MIOSHA CET-Noise Information and Training
- XVI-F Pinnacle Sample Hearing Conservation Program
- XVI-G Michigan Municipal League Sample Hearing Conservation Program
- XVII Hazard Communication/Right To Know Resources
  - XVII-A MIOSHA Hazard Communication Law Construction PART 43, General Industry PART 92, Occupational Health PART 430
  - XVII-B Safety Data Sheet (SDS) Location Poster
  - XVII-C Safety Data Sheet (SDS) New or Revised Poster
  - XVII-D Signs Affected by Revised Hazard Communication Standard
  - XVII-E MIOSHA Hazard Communication Program Sample Plan (P#5530)
  - XVII-F MIOSHA Right-to-Know Compliance Guide (SP#22)
- XVIII MIOSHA Occupational Health Standard PART 474: Sanitation
- XIX Recommended Medical Screening Protocol for Silica Exposed Worker (MSU Occupational and Environmental Medicine)
- XX Michigan Administrative Rules for Recording and Reporting PART 11 Resources
  - XX-A PART 11: Michigan Administrative Rules for Recording and Reporting
  - XX-B MIOSHA Form OH-51: Known or Suspected Occupational Disease Report
  - XX-C MIOSHA Log 300: Log of Work Related Injuries and Illnesses
  - XX-D MIOSHA Form 301: Injury and Illness Incident Report
  - XX-E MIOSHA Form 300A: Summary of Work-Related Injuries and Illnesses

\*\*\* All MIOSHA standards cited in this manual may be found at and downloaded from the MIOSHA, Michigan Department of Licensing and Regulatory Affairs (LARA) website at: <u>www.michigan.gov/mioshastandards</u>. MIOSHA standards are also available for a fee by writing to: Michigan Department of Licensing and Regulatory Affairs, MIOSHA Standards Section, P.O. Box 30643, Lansing, Michigan 48909-8143 or calling (517) 322-1845 \*\*\*