

NIOSH 582 Equivalent Course

Sampling and Evaluating Airborne Asbestos Dust



EMSL CANADA, INC.
LABORATORY • PRODUCTS • TRAINING

June 11th – June 14th, 2018

Corporate Event Centre at CHSI,
5110 Creekbank Rd., Mississauga, ON L4W 0A1

COST: \$1,195 (CAD) per student

All instruction will begin promptly at 9:00AM.

Please arrive early to register.

1. Course Overview & Introduction

- 1.1 Registration and Course Introduction
- 1.2 Course Objectives
- 1.3 Asbestos Overview (Mineralogy, Types, History, Uses)
- 1.4 Health Effects

2. Asbestos Regulations

- 2.1 Life Cycle of a Typical Asbestos Project
- 2.2 Regulatory Bodies (i.e., NIOSH, EPA, OSHA, Ontario 278/05, etc.)
- 2.3 Regulatory Requirements
- 2.4 Compliance Determination
- 2.5 Proficiency Programs

3. Sampling

- 3.1 Safety and Respiratory Protection
- 3.2 Types of Air Filter Cassettes
- 3.3 Pumps
- 3.4 Sampling Calibrations
- 3.5 Types of Samples (Area, Personal)
- 3.6 Sampling Strategies
- 3.7 Optimal Fiber Loading

4. Phase Contrast Microscopy

- 4.1 Basics of Phase Optics
- 4.2 Components and Function of PCM
- 4.3 Microscope Alignment
- 4.4 Microscope Calibration
- 4.5 Microscope Maintenance and Cleaning
- 4.6 Resolution, Magnification and Image Quality

5. NIOSH 7400 Method

- 5.1 Overview of the Method
- 5.2 A and B Counting Rules
- 5.3 Calculations
- 5.4 Quality Control
- 5.5 Introduction to Statistics

6. Sample Receiving, Handling & Preparation

- 6.1 Sample Acceptance and Rejection
- 6.2 Unique Sample Identification
- 6.3 Chain of Custody
- 6.4 Sample Preparation Techniques
- 6.5 Hands-on Sample Preparation

7. Sample Analysis & Reporting

- 7.1 Fiber Counting Examples
- 7.2 Procedures
- 7.3 Fiber Counting Worksheets
- 7.4 Hands-on Fiber Counting
- 7.5 Other Fiber Counting/ID Methods (PLM, TEM, SEM)
- 7.6 Calculations (Concentration (f/cc), Density (f/mm²), Blanks in Relation to Calculations, Limit of Detection)

8. Homework Review, Quizzes & Final Exam

- 8.1 Filter Analysis Practical
Analyst must be able to demonstrate the ability to analyze 15 past PT samples analyzed within the acceptable limits determined for the sample.
- 8.2 Written Exam (Passing grade of at least 80%)

Product Special for Attendees ONLY

Meiji Techno offers the MT6500 Series PCM (Phase Contrast Microscopes) for Asbestos fiber counting applications. Meiji Techno manufactures these microscopes pursuant to NIOSH7400 and OSHA ID 160 Reference Methods.

Includes:

- Centering telescope
- Stage micrometer
- Green filter

Product ID: 8709066 -- \$2,350 (USD)

Field Kit Available

Product ID: 8709028A -- \$3,350 (USD)



REGISTER: Contact Jennifer Mazonas at 1-843-737-6955 or Print & Fax to 843-958-8175 or Scan & Email to jmazonas@emsl.com

Company _____

Attendee _____

Attendee _____

Address _____

City _____ State ____ Zip _____

Phone _____

Email _____

Client ID _____

Credit Card # _____ Exp: _____

For workshop and product information, please visit

www.EMSL.com.