Basic Information 582 Prospective Students

Pre-Requisites (what you need before the class)

There are no specific requirements. However, the course is taught in English.

In addition, there are a number of algebraic equations that are used to determine fiber concentrations in air. So, expect to be doing math. A calculator is permissible and encouraged.

It can be beneficial to read and review the NIOSH 7400 Method. It can be found at:

https://www.cdc.gov/niosh/nmam/pdf/7400.pdf

It is also useful to have some familiarity with the OSHA asbestos regulations for the construction industry (29 CFR 1926.1101):

https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.1101

The Course (what to expect)

The course is four and one-half days, running Monday-Thursday 8 AM-5 PM, and Friday 8AM-12 Noon Chicago time (Central), with 1 hour per day for a lunch break (food is provided by McCrone). The course is focused on three aspects: 1) equations to help in determining microscope factors that affect calculating how many fibers are on a filter, fiber loading & airborne concentration equations, and equations to determine regulatory compliance with OSHA exposure limits‡, 2) collecting and preparing samples properly to analyze, 3) aligning and calibrating a phase contrast microscope (PCM) and then using it to analyze and count fibers. These three aspect are spread out over Monday-Thursday. Friday is reserved for testing. Testing includes a 50 question multiple-choice exam and the counting of 4 slides of different fiber types.

Course Completion (what do you get)

Each attendee who attends all four days along with successful completion of both the written exam and the analysis of the 4 fiber samples receives a certificate. This certificate meets the OSHA requirements (29 CFR 1926.1101, Appendix A) for conducting air monitoring for asbestos.

Even though you receive a certificate demonstrating your competence, in order to perform air sampling and analysis in accordance with OSHA regulations, you will still need to: a) follow the NIOSH 7400 method or the OSHA reference method, b) participate in a national quality control (QC) program (such as the AIHA/NIOSH PAT rounds that occur four times per year), c) create and follow intra-laboratory QC procedures, and d) conduct inter-laboratory round-robin testing with at least two other independent labs twice a year.

‡ The course is focused on US regulations, but will touch on other regulations (e.g., Canadian provincial regulations) as needed.

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