



FIELD SAMPLING GUIDE (ASBESTOS & OTHER FIBERS BY PCM-NIOSH 7400)

The following field sampling guide is designed for use as a reference for the field consultant. It summarizes procedures and techniques for the sampling of asbestos and other fibers by PCM (following NIOSH 7400) as they impact the analytical procedures.

For additional information on field sampling equipment, field health and safety, certain regulatory requirements for field sampling, sampling strategies and data interpretation, refer to the appropriate documented methodology and/or regulatory agency.

Matrix	Method	Collection Media	Receommended Volume	Detection Limit	Blanks
Air	NIOSH 7400	.45 Cellulose ester membrane, 25mm; conductive cowl on cassette	400-1800 liters @ flow rate 2-10 L/Min	7 f/mm ² (0.002f/cc with 1200 liters sample volume)	Unsampled cassette 2 or 10% of total samples submitted (whichever is greater)

There are a variety of field conditions which can effect the analytical process. These include:

SAMPLE OVERLOAD

Macroscopically (observed in the field)

if > 50% of the filter surface is covered with particles, the filter may be to overloaded to count and will bias the measured fiber concentration.

Microscopically (observed through the microscope) if 1/6 of the sample field of view is covered by a agglomerate, the microscopist must reject the field of veiw.

Overloaded samples cannot be analyzed.

WET FILTER

A wet filter cannot be analyzed.

NOTE: The laboratory manager will contact the responsible party in the event there is a question on sample integrity. These may include circumstances which may include (but are not limited to):

- Analysis requested outside laboratory's scope of accreditation
- Analysis requested outside laboratory capability (such as lack of equipment or staffing resources).
- Obviously damaged or compromised samples, i.e. opened air cassettes, cassettes with torn or ripped filters.
- Improper labeling
- Improper packaging
- Impossible deadlines
- Obvious faulty sampling technique
- Improper sample media
- Incompatible samples packaged together (i.e.- air samples with bulk samples)
- Inappropriate analytical methodology requested

