

Finding Assistance for Cost-Effective Sampling

Options for sampling:

1. Industrial Hygiene services may be provided from your loss control insurance group as part of your service package or may be available on a fee-for service basis.
2. Self-Sampling- If you have someone with time, they can learn the sampling procedures and protocols. Some laboratories will rent equipment free of charge if you send your samples to them for analysis. They often send written instructions or have an online video to train you in how to conduct sampling. You can also purchase or rent equipment from a vendor.

If you sample yourselves, please consider the following:

- A. You need to get equipment
 - Purchase your own
 - Calibrators must be calibrated annually
 - Need to know how to maintain or prepare to pay for this service if needed
 - Rent pumps, chargers, tubing, cyclones, calibrators and adaptors from an IH equipment vendor
 - Use “free” pumps, chargers, tubing, cyclones, calibrators and adaptors from an IH Laboratory
 - Only “free” if you return samples to them for analysis
 - Must pay for sample analysis
 - Must pay shipping fees-terms vary
- B. You need to establish a relationship with an IH lab
 - Obtain all sampling media from the lab that will be used. Don’t mix samplers or cassettes between labs!!
 - All sampling devices must use a preweighed PVC filter-refer to Slide 9 or ask the lab
- C. You need to develop competency
 - How to use and assemble equipment
 - Where to put devices on the worker
 - Know about potential sampling problems/pitfalls and what to do if they develop
 - How to read lab reports
 - How to interpret results
- D. You need to devote time
 - Order equipment
 - Develop a sample plan
 - Calibrate equipment before sampling and measure flow rate at end of sampling period
 - Make observations throughout the 8-hour sampling period
 - Fill out lab submission forms
 - Document sampling procedures
 - Ship equipment/samples to vendors

- Document sample results and make TWA calculations if needed
3. OSHA's Small Business Assistance Program can be contacted for help. Small businesses are those with fewer than 500 employees (in the company, not per one site). This program operates separately from the enforcement branch of OSHA. If problems are identified, they will expect your company to work toward compliance within a reasonable period of time. Remember, OSHA does not expect all engineering controls to be in place until June 23, 2020. To locate the OSHA On-site Consultation Program nearest to you, call 1 (800) 321-6742. They made 26,000 visits in FY 2017, so this is a well-established and well-used program.
 4. Hire an Industrial Hygienist (IH)- There are Industrial Hygienists who are familiar with foundry work. Many of them are members of AFS. They have the expertise to take the project off your hands, interpret laboratory results, guide you through the process, develop guidance reports after the lab results are available, and guide you through to compliance or refer you to knowledgeable engineering services to help with ventilation and other engineering controls until compliance is achieved.

A qualified Industrial Hygienist should:

- Have experience sampling Respirable Crystalline Silica (RCS) exposures in foundries
- Be willing to be on site at the beginning of the shift and stay through the entire shift
- Make observations of the employees sampled and the work environment throughout the shift
- Use an AIHA Accredited Lab that participates in the proficiency testing program for RCS and follows the requirements of the OSHA Standard
- Provide a written report that includes the jobs sampled, employee names (first and last), descriptions of work done, PPE worn by the employees, exposure controls used, *specific* sampling method used, deviations from typical/normal, sample length, results and TWA calculations if applicable

Types of Industrial Hygienists:

- **American Board of Industrial Hygiene (ABIH) Certified Industrial Hygienist (CIH)** or the **Canadian CRBOH Registered Occupational Hygienist (ROH)**
 - Requires extensive testing process and educational credentials
 - You can verify that someone has a CIH by visiting the public roster of the ABIH (abih.org)
- **ABIH Certified Associate Industrial Hygienist (CAIH)**
 - qualifications for education, experience and examination are less stringent than those for a CIH
- **Associate of Professional Industrial hygienist**
 - A membership organization-fill out a 2-page form
 - No test required to obtain listing as a RIH, RPIH or RIHT
- **Non-certified professionals doing primarily IH work**
- **Safety professionals who do IH as part of their practice**

Where can I find a qualified Industrial Hygienist?

- **American Board of Industrial Hygiene** <http://www.abih.org/about-abih/public-roster>

- Search by state and if the CIH is a consultant
- **American Industrial Hygiene Association (AIHA)** <https://www.aiha.org/about-ih/Pages/Find-an-Industrial-Hygienist.aspx>
 - Can search by state
 - Printed version and online version
 - Paid listing so not all IHs are listed
- **Word of mouth**- talk to other foundries and see who they use and if they were happy with their services

Industrial Hygienists who are AFS Members are listed on the AFS's web site with other silica resources.