Collection Form
for Respirable Crystalline Silica Objective Data

Purpose:
CPWR-The Center for Construction Research and Training is creating a database of respirable crystalline silica exposure data that construction contractors can use as objective data under OSHA’s silica standard 29 CFR 1926.1153(d)(2)(ii).

Exposure monitoring data can be considered objective data only if specific information is gathered during the exposure monitoring process. If the information provided is sufficient, the data will be incorporated in CPWR’s database. The enclosed “Respirable Crystalline Silica Objective Data Form” was developed to facilitate the collection of the required data and information. To ensure the confidentiality of individuals and organizations that contribute to this database, no personal identifiers, such as individual and company names, contact information, monitoring site location, etc., will be shared with anyone outside of the CPWR research team compiling this database. Only the data on equipment, tasks, and exposure conditions required to meet OSHA’s definition of objective data will be shared.

How you can help:
As a safety and health professional, you can help CPWR compile a robust exposure database by:

- Completing the CPWR Respirable Crystalline Silica Objective Data Collection Form when conducting air monitoring. If you are gathering multiple samples under identical conditions, use one form per sample. You can fill out the front and back of the form for the first sample and the back only for each subsequent sample.
- Sending the completed form and a copy of the laboratory analysis report to CPWR at:

  CPWR-The Center for Construction Research and Training  
  Attn: Sara Brooks  
  8484 Georgia Avenue, Suite 1000  
  Silver Spring, MD 20910-5618  
  Phone: (301) 578-8500  
  Fax: (301) 578-8572  
  Email: sbrooks@cpwr.com

If you have any questions or concerns, please contact Sara Brooks at (301) 495-8532
# Respirable Crystalline Silica Objective Data Collection Form

## CONTACT INFORMATION

<table>
<thead>
<tr>
<th>Name:</th>
<th>Company:</th>
<th>Email:</th>
<th>Phone:</th>
</tr>
</thead>
</table>

## SAMPLE LOCATION

<table>
<thead>
<tr>
<th>Site Name:</th>
<th>State:</th>
<th>Country:</th>
</tr>
</thead>
</table>

Number of workers/Company Size:  
Type of Worksite:  
- [ ] Active worksite  
- [ ] Simulated worksite  
- [ ] Laboratory  
Project Type:  
- [ ] Renovation  
- [ ] Demolition  
- [ ] New Construction  
Comments:

## SAMPLING ENVIRONMENT

<table>
<thead>
<tr>
<th>Outdoor</th>
<th>Partial Enclosure</th>
<th>Indoor</th>
<th>Confined Space</th>
</tr>
</thead>
</table>

Temperature (°F):  
Relative Humidity (%):  
Wind Direction:  
- [ ] Upwind  
- [ ] Downwind  
- [ ] Crosswind  
Wind Speed (mph):  
Comments:

Other Ventilation Sources:

## WORK CONDITIONS

Trade/Occupation (i.e. bricklayer, laborer):  
Task (i.e. cutting, grinding):  
Material Disturbed (i.e. block, brick, concrete):  
Decontamination procedures:  
Comments:

## EQUIPMENT INFORMATION

<table>
<thead>
<tr>
<th>Tool</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Water</td>
<td>[ ] LEV</td>
</tr>
<tr>
<td>[ ] Enclosed Cab</td>
<td>Other ______________________</td>
</tr>
</tbody>
</table>

Manufacturer:  
Model:  
Wheel Diameter (if applicable):  
Measured CFM (if applicable):  
Power (hp/rpm):  
Measured Water Flow Rate (if applicable):  
Good Working Order:  
- [ ] Yes  
- [ ] No  
Tool Comments:  
Control Comments:  

## Respiratory Protection

<table>
<thead>
<tr>
<th>Used:</th>
<th>Type:</th>
</tr>
</thead>
</table>
| [ ] Yes | [ ] filtering face respirator (N95)  
- [ ] half-face air-purifying respirator  
- [ ] Other ______________________ |
| [ ] No | Other ______________________ |

Comments (Other PPE):
**Sampling Instructions:**

- Follow NIOSH 7500: Silica, crystalline, by XRD method
- Use pump calibrated with less than 10% error
- Collect personal breathing zone samples
- Preferred sampling duration: 240 minutes (160 – 590 minutes accepted)
- Samples should be representative of silica exposure from one task/control combination (i.e. handheld saw cutting block with LEV)
- Samples analyzed by an accredited lab.

Other sampling methods may be considered with submitted justification. For more information on sampling and analysis see:  
[https://www.cdc.gov/niosh/docs/2003-154/pdfs/7500.pdf](https://www.cdc.gov/niosh/docs/2003-154/pdfs/7500.pdf);  

**Term Definitions:**

1. **Partial enclosure** – area with at least 2 walls, but less than 4

2. **Wind direction** –

3. **Good working order** – Operated and maintained in accordance with manufacturer’s instructions to minimize dust emissions and/or

- integrated water delivery system that continuously feeds water to the blade.
- dust collection that provides air flow recommended by the manufacturer, or greater, and has a filter with 99% or greater efficiency and a filter-cleaning mechanism.
- ventilated booth that provides fresh, climate-controlled air to the operator, or a remote control station.