

OSHA 29 CFR § 1910.1053
Respirable Silica Dust Exposure
Objective Test Data

Testing has been performed to determine the respirable silica dust exposure in accordance with 29 CFR 1926.1153 (d)(2). Testing was performed under the following conditions:

- Sampling Method: NIOSH 0600, 7500 modified OSHA ID 142.
- Test duration: Samplings are relatively good estimates of eight hour TWA assuming same average exposure for the unmonitored work area.
- Sampler: battery powered personal air-sampling pumps with PVC pre-weighed filters.
- Samples analyzed by accredited laboratory for industrial hygiene.
- Analysis of airborne exposure performed by X-ray diffraction.
- Temperature, relative humidity, dew point, precipitation and wind conditions were evaluated.

INDIANA READY MIX CONCRETE INDUSTRY RESULTS FOR RESPIRABLE DUST			
JOB TITLE	CONTAMINANT	RANGE OF SAMPLE PARAMETERS	OSHA PEL
Loader Operator	Respirable dust Respirable crystalline silica (RCS)	0.055 - 10 µg/m³	50 µg/m³
			25 µg/m³ AL
Mechanic	Respirable dust Respirable crystalline silica (RCS)	0.042 - 6.2 µg/m³	50 µg/m³
			25 µg/m³ AL
Driver	Respirable dust Respirable crystalline silica (RCS)	0.04 - 6.6 µg/m³	50 µg/m³
			25 µg/m³ AL
Facility Personnel	Respirable dust Respirable crystalline silica (RCS)	0.042 - 11 µg/m³	50 µg/m³
			25 µg/m³ AL

All samples were below the OSHA PEL for respirable dust and silica species. Testing conducted under normal working conditions. Data assessment subject to change outside the scope of normal working conditions.

Based on the assessments, the following conclusions were reached:

1. Calculated 8hr TWA results of personal air samples collected for crystalline silica indicate that employee exposures are below regulatory exposure limits (OSHA PELs).
2. Current measures are sufficient in maintaining the plant personnel below current applicable exposure limits for silica and respirable dust.
3. Exposure assessment conducted has been reasonable and appropriate to meet compliance with OSHA's Appendix A to § 1910.1053.