

# Examples of Silica Dust-Producing Tasks Highway/Road Construction and Repair

milling

sawing

drilling

chipping

scabbling

jackhammering

grinding

sandblasting

grooving

clean-up

Occupational Health Surveillance Program  
Silicosis Surveillance & Intervention Project



- Many of the following photos show exposure measurements results for certain job tasks.
- The NIOSH\* REL (Recommended Exposure Limit) is used as the metric of exposure.
- The REL is defined here as a Time-Weighted-Average (TWA) or the average amount of silica a worker can be exposed to over an 10-hour workday during a 40-hour workweek.
- NIOSH recommends an exposure limit of 0.05 mg/m<sup>3</sup> TWA for respirable crystalline silica.
- Exposure measurements were conducted in collaboration with the New Jersey Silicosis Outreach and Research (SOAR) Alliance partners.

\*National Institute for Occupational Safety and Health



# Asphalt Milling



machine operator  
1.8 X REL

ground tender  
1.4 X REL

# Concrete Milling



**operator  
22.8 X REL**

**ground  
laborer  
25.8 X REL**



**← Concrete milling machine**



# Scabbling



← Scabbler

# Sweeper-Vacuum-Dust Collector



ineffective water spray →



# Concrete Saws



demo saw

walk-behind saw

# Concrete Sawing



**demo saw  
11 X REL**

**walk-behind saw  
10.2 X REL**



# Co-Workers Can Also be Exposed



# Jackhammer





# Jackhammer



7.2 X REL

# Jackhammer

7.6 X REL





# Dowel Drilling

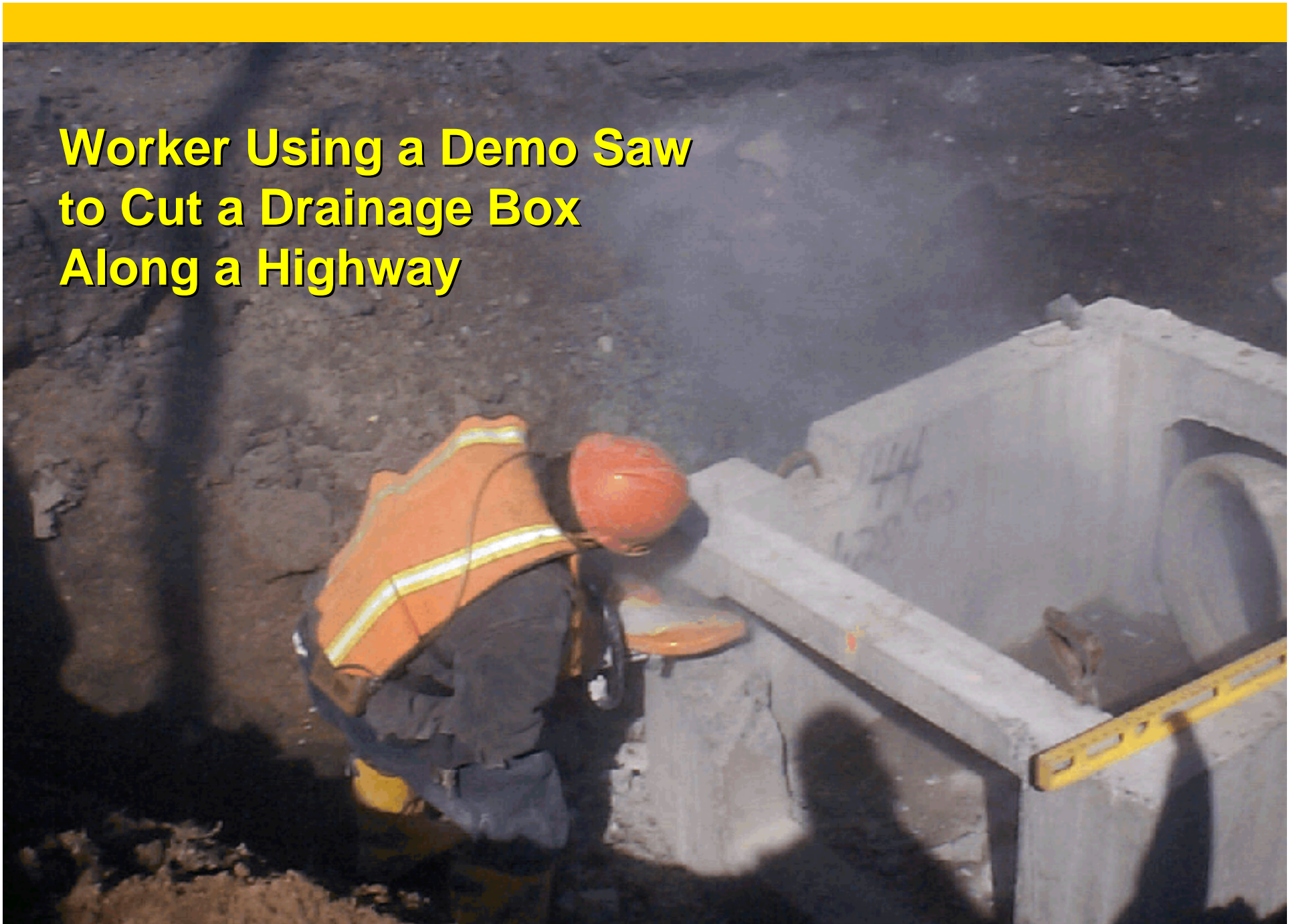


# Dowel Drilling



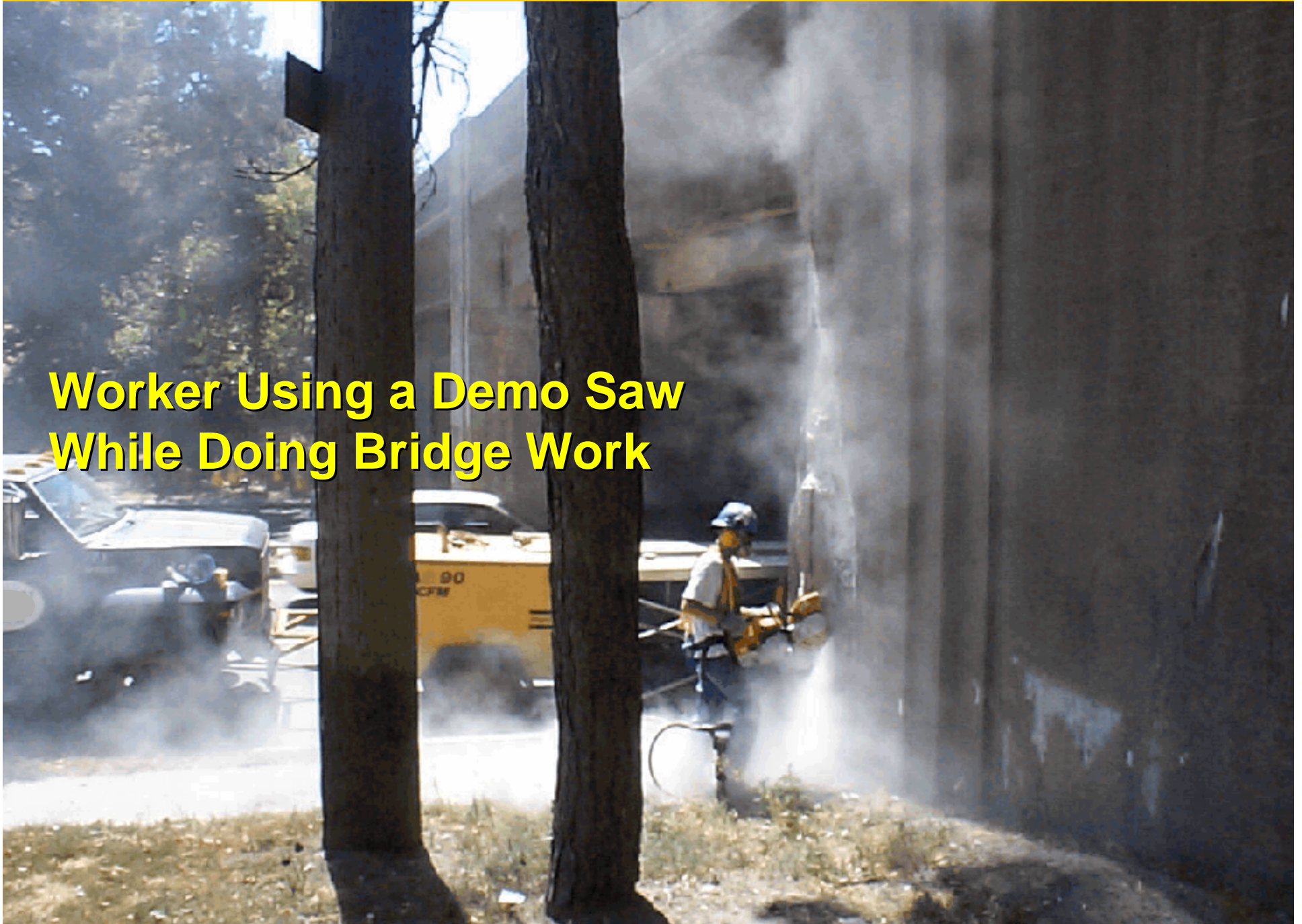


**Worker Using a Demo Saw  
to Cut a Drainage Box  
Along a Highway**





**Worker Using a Demo Saw  
While Doing Bridge Work**





# Chipping Hammer



# Compressed-Air Cleaning





# Compressed-Air Cleaning



# Compressed Air Cleaning

jackhammer crew

