



Blast Evaluation



Ground Vibration Monitoring

## Firm Background

Established in San Diego in 1986, Ninyo & Moore is one of the largest engineering firms specializing in Geotechnical Engineering, Environmental Engineering and Materials Testing and Inspection Services. Engineering News Record (ENR) recognizes the firm as one of the Top 500 Design Firms in the United States.

Ninyo & Moore has fully equipped and certified in-house testing laboratories that offer full-service field and laboratory services for geotechnical design, and soil and materials testing projects.

## Professional Staff

Ninyo & Moore's staff of 500 certified and registered professionals includes:

- Geotechnical engineers
- Civil engineers
- Engineering geologists
- Hydrogeologists
- Geophysicists
- Field technicians
- Special inspectors
- Environmental engineers
- Environmental scientists
- Industrial hygienists
- Asbestos consultants
- Safety professionals
- Indoor environmental consultants
- Microbial consultants
- Lead consultants
- Qualified SWPPP developers/practitioners
- Hazardous waste and regulatory compliance specialists

## Locations

Ninyo & Moore has offices located in the western United States, including California, Arizona, Nevada, Colorado, Utah, and Texas.

## Contact Us

800.427.0401 or  
nminquiries@ninyoandmoore.com

Ninyo & Moore provides vibration and noise monitoring to assess the peak ground velocities, ground accelerations, and sound levels during ongoing construction, industrial and mining activities, as well as baseline surveys prior to new development. Monitoring can reduce the risk of future claims from neighboring properties alleging to have experienced vibration or noise-related disturbances. Monitoring can also help guide industrial and construction programs and provide data to support possible modification of construction or manufacturing processes. Services include:

- Recording baseline and activity-related events
- Pre- and post-activity surveys
- Attenuation and prediction models
- Blast monitoring and blast plan review
- OSHA compliance for worker safety

## Representative Project Experience

**BART Aerial Structures, Oakland, California:** Vibration monitoring during installation of hammer-driven shoring to stage seismic upgrades at pier locations.

**High Rise Building, Chicago, Illinois:** Third-party review of existing ground vibration data from the installation of sheet pile shoring and underpinning.

**Palo Verde Nuclear Generating Station, Wintersburg, Arizona:** Blast plan review, vibration and air blast (noise) monitoring during blasting at a nearby quarry.

**Private Developments, East San Diego County, California:** Ambient Noise Assessments using ANSI Type-2 Sound level meters.

**Meadows Alta Storm Drain Project, Las Vegas, Nevada:** Performed ground vibration monitoring during hoe-ramming for caliche removal.

**Union Pacific Railroad/Sky Harbor Airport, Arizona:** Monitoring slope and vibration-related movement on the 44th Street/UPRR bridge during underpinning for Sky Train Construction.

**Magnolia Sewer Rehabilitation, Orange County, California:** Liability management/vibration and noise monitoring at edge of right-of-way along private property.

**Cobham Avionics, Prescott, Arizona:** Full-shift noise dosimeter monitoring on workers in various areas for OSHA compliance.

**Mayo Clinic Hospital MRI Expansion, Phoenix, Arizona:** Monitoring background vibrations prior to foundation construction for the new MRI expansion.

**Tempe Marketplace, Tempe, Arizona:** Performed vibration monitoring during deep dynamic compaction operations associated with a former landfill at the site.