**Tunnel Safety**

The *Tunnel Safety Orders*, Sections 8400 through 8568, of the *Cal/OSHA Construction Safety Orders*, establish minimum safety standards for tunnels, shafts, and underground chambers during excavation, construction, alteration, repairing, renovating, or demolishing. The full regulations are available at: [http://www.dir.ca.gov/Title8/sub20.html](http://www.dir.ca.gov/Title8/sub20.html).

**NOTE:** Excavating under bridges constructed at grade (waste slab) and constructing CIDH Pile Shafts (30” or larger outside diameter, and over 20 feet in depth) are tunneling operations.

**Injury Illness and Prevention Plan (IIPP)**


The *Cal/OSHA, Tunnel Safety Orders*, Section 8406 requires the Contractor to designate an on-site Tunnel Safety Representative, who is qualified to recognize hazardous conditions and is certified by the Division of Mining and Tunneling. The Tunnel Safety Representative is responsible for directing the IIPP, and must have the authority to correct unsafe conditions and practices, or stop the work if an imminent hazard exists. Section 8406(l) also requires the Tunnel Safety Representative to have a minimum of two years experience working in tunnels and must pass a written test administered by the Mining and Tunneling Unit.

**Tunnel Classification**

Before Caltrans sends a tunnel project to bid, they must contact Cal/OSHA's Division of Mining and Tunneling Unit. Cal/OSHA must review and classify all tunnels for the potential presence of flammable gas and vapors. Tunnels will be classified as: non-gassy, potential gassy, gassy, and extra hazardous. The underground classification shall be in place in all cases prior to actual underground construction.

**Cal/OSHA Inspections**

CAL/OSHA, Division of Mining and Tunneling representatives are required to inspect all tunnel jobsites bi-monthly for compliance with safety laws and regulations. They will also investigate industrial accidents and inspect tunnel jobsites if accidents occur. For responsibilities during Cal/OSHA inspections refer to *Bridge Construction Records and Procedures Manual*, BCM 14-1.0, *Safe Work Practices*. 