

Cal/OSHA Consultation  
Attn: Eric Burg  
Acting Principal Safety Engineer

Mr. Berg,

I am requesting a formal written response from Cal/OSHA regarding:

**Subchapter 7. General Industry Safety Orders**  
**Group 16. Control of Hazardous Substances**  
**Article 108. Confined Spaces**

**§5157. Permit-Required Confined Spaces, Appendix C - Examples of Permit-required Confined Space Programs.**

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**Example 1.**

Workplace. Sewer entry.

Potential hazards. The employees could be exposed to the following:

Engulfment.

Presence of toxic gases. Equal to or more than 10 ppm hydrogen sulfide as measured as an 8-hour time weighted average. If the presence of other toxic contaminants is suspected, specific monitoring programs will be developed.

Presence of explosive flammable gases. Equal to or greater than 10% of the lower flammable limit (LFL).

Oxygen Deficiency. A concentration of oxygen in the atmosphere equal to or less than 19.5% by volume.

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**SCENARIO:**

A crew is preparing to enter an "Active Sewer". The foreman is identified and is listed as the "**Competent Person**" for the Permit Required Confined Space Entry. The Confined Space Entry Permit is signed by the "**Competent Person**" and indicates an Oxygen Deficient Atmosphere, Carbon Monoxide present and Engulfment conditions. Each box on the permit was checked by the "**Competent Person**". The permit also indicates that **Natural Ventilation** is to be used. **Natural Ventilation** created by removing the cover on the manhole for entry and removing the up and downstream manhole covers ("Chimney Effect"). The "**Competent Person**" is asked why he does not have "**forced air ventilation**", the "**Competent Person**" states that his worker is wearing a gas monitor and is attached to the Tripod for extraction in the event of an emergency. The foreman also states he has been instructed by his Safety Manager that "**forced air ventilation**" is not required.

A Contractor's Safety Representative is present and is asked what the contractors Safety Plan states to do. The Safety Representative could not locate the Safety Plan governing the operation. The Contractor's safety representative is asked what is his professional opinion regarding "**forced air ventilation**"? The contractor safety representative states that his "No Response" is his answer.

A Contractor Management Representative arrives and provides a copy of the Contractor's "Confined Space Entry Program". The Contractor Management Representative requests where it states in their policy that "**forced air ventilation**", is required. The contractor informed the Owners Safety Representative that the Confined Space Policy they are using does not state "**forced air ventilation**" is required. At this time they (3) ("**Competent Person**" foreman), Contractor Safety Representative & Contractor Management Representative, are all informed that it is not stated in their policy that "**forced air ventilation**" is required, it does not mean the policy they have is 100% correct. At that time an explanation of the minimum requirements of Cal/OSHA Article 108, 5157 Permit-Required Confined Spaces and the importance of providing "**forced air ventilation**" is reviewed.

An explanation to the definition of a "**Competent Person**" set forth by Cal/OSHA needed to be reviewed. The Contractors foreman, safety representative and the management representative demonstrated that **they do not meet the requirements of a "Competent Person"**, responsible for the Permit-Required Confined Space Entry. All three individuals failed to recognize the minimum requirement to provide "**forced air ventilation**" when entering an active sewer, and the requirement to take immediate corrective action to eliminate the atmospheric hazards. Entry was going to be allowed into the "**Active Sewer**" by the Contractor.

The Contractor's Management Representative, Safety Manager and the foreman need to reread the Cal/OSHA Regulation §5157. Permit-Required Confined Space including Appendix A –Permit Required Confined Space Decision Flow Chart. Also, they needed read the State of California Decision, Docket Nos. 01-R2D4-3946 and 3947, In the Matter of the Appeal of:

GRANITE CONSTRUCTION COMPANY

P.O. BOX 50085

Watsonville, CA 95077-5085

### **QUESTIONS:**

1. Please verify: Is it a requirement to provide "**forced air ventilation**" whenever workers are to enter an "**Active Sewer**"? Reference: Cal/OSHA Regulation §5157, Appendix A and the Decision Flow Chart
2. How is Forced Air Ventilation required to be used in an active sewer? What is the Process for Forced Air ventilation: Prior to entry, during testing and throughout the time workers are inside the Permit Required Confined Space?
3. What citation(s) would Cal/OSHA Enforcement issue to the Contractor in the scenario described above?
4. Would the Owner of the project be included under the Multi-Employer Worksite regulation of the citation(s) issued? Even if they notified the Contractor of the issue to be corrected?
5. *Pending Cal/OSHA Consultation Confirmation requiring "**forced air ventilation**" while working in an active sewer, the Contractor's Safety Manager would have issued **incorrect information**, project-wide.*

Are all members of the Contractor's Safety Department, including any and all persons who will be responsible for administering Permit-Required Confined Space Entry, require retraining?

And Would Cal/OSHA require retraining to be conducted by an independent, 3<sup>rd</sup> party qualified instructor?

Also attached is a copy of the Confined Space Entry Permit – The permit was completed by the Foreman listed as the "Competent Person" for the Confined Space Entry.



## CONFINED SPACE ENTRY PERMIT

Job No & Location: 098-005-374A CS ID# \_\_\_\_\_ CS Permit \_\_\_\_\_

Permit Space Location: [Redacted] Entry Permit Valid From: \_\_\_\_\_ Date: 1-23-15 To Date: 1-23-15  
 Purpose of Entry: Plug & Clean pipes Time: 9:00 AM To Time: 3:30 PM

Permit Space Hazards (check all that apply)

ATMOSPHERIC	<input checked="" type="checkbox"/> Oxygen Deficient	<input type="checkbox"/> Oxygen Enrichment	<input type="checkbox"/> Explosive (Gas/Vapor)
	<input checked="" type="checkbox"/> Carbon Monoxide	<input type="checkbox"/> Hydrogen Sulfide	<input type="checkbox"/> Other Toxic Gases/Vapors
			<input type="checkbox"/> CHLORINE
<input checked="" type="checkbox"/> ENGULFMENT	<input type="checkbox"/> CONFIGURATION		<input type="checkbox"/> MECHANICAL
<input type="checkbox"/> ELECTRICAL	<input type="checkbox"/> SUBSTANCE HAZARDOUS to skin & eyes		<input type="checkbox"/> HEAT STRESS
<input type="checkbox"/> Other Potential Hazards: _____			

TRAINED PERSONNEL

Entrant(s)	In	Out	In	Out	Entrant(s)	In	Out	In	Out
<u>MAID S</u>									

Attendant(s): [Redacted]  
 Entry Supervisor(s): [Redacted]

Gas Detection Meter  
 Calibration Complete     Readings Attached

Communication Procedures Used by Entrant(s) & Attendant(s) - check all that apply.  
 Visual    Voice    Rope    Radio    Other

Control Equipment - check all that apply

<input type="checkbox"/> ISOLATION	<input type="checkbox"/> Lockout/Tagout	<input type="checkbox"/> Double Lock & Bleed	<input type="checkbox"/> Blanking & Blinding	<input type="checkbox"/> Other	<input type="checkbox"/> PERSONAL PROTECTIVE EQUIPMENT
<input type="checkbox"/> INERTING	<input type="checkbox"/> PURGE/CLEAN	<input type="checkbox"/> METHODS OF SAFE REMOVAL & SECURING	<input type="checkbox"/> VENTILATION	<input checked="" type="checkbox"/> Natural	<input type="checkbox"/> Respiratory
<input type="checkbox"/> Ladders (fixed)	<input type="checkbox"/> Other	<input type="checkbox"/> Spider Basket	<input type="checkbox"/> Local Exhaust		<input type="checkbox"/> SCBA <input type="checkbox"/> SAR <input type="checkbox"/> Air Purifying
<input type="checkbox"/> RESCUE & RETRIEVAL EQUIPMENT	<input checked="" type="checkbox"/> Full Body Harness	<input checked="" type="checkbox"/> Tripod w/ mechanical Winch			<input type="checkbox"/> Eye & Face Protect. <input type="checkbox"/> Hearing Protection
					<input type="checkbox"/> Protective Clothing
					<input type="checkbox"/> EXPLOSION PROOF LIGHTING
					<input type="checkbox"/> NON-SPARKING TOOLS
					<input type="checkbox"/> INTRINSICALLY-SAFE ELECTRICAL EQUIP.
					<input type="checkbox"/> GROUND FAULT CIRCUIT INTERRUPTOR
					<input type="checkbox"/> COMMUNICATION EQUIPMENT
					<input type="checkbox"/> Radio <input type="checkbox"/> Phone <input type="checkbox"/> Other
					<input type="checkbox"/> HOT WORK PERMIT
					<input type="checkbox"/> FIRE EXTINGUISHERS
					<input type="checkbox"/> TRAFFIC SAFETY
					<input type="checkbox"/> 10 MIN. ESCAPE PAKS, NUMBER USED _____

ENTRY AUTHORIZATION  
 Entry Authorized by: [Redacted]  
 NAME: [Redacted] TIME: 9:00 AM  
 SIGNATURE: [Redacted] DATE: 1-23-15

Location: [Redacted] Inspector's Name: [Redacted]

Thank you and I look forward to hearing from you.

Sincerely,

Jim Hale, CHST