

Confined Space Hazard Assessment Certification

The following document represents the initial hazard assessment conducted at the U.S. Concrete, Inc. Central Concrete Supply A US Concrete Company facility located at 755 Stockton Avenue, San Jose, California 95126. This assessment was conducted in accordance with the CAL OSHA Title 8 Section 5157 Permit Required Confined Space Standard. The assessment was conducted to identify confined space hazards and select the appropriate control actions for worker protection.

This assessment lead to the development of the following procedures, including the selection, use, and training in personal protective equipment, lockout/tagout, and confined space procedures.

Subsequent hazard assessments will be conducted during the first quarter of each following year, or as operational processes and procedures dictate.

All subsequent changes to the program will be conveyed to the employees' immediately, in the form of retraining and any necessary retesting.

Safety Manager

Date

**U.S. CONCRETE, INC.
SAFETY POLICY and PROCEDURE MANUAL**

FUNCTION	Safety
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TOPIC	Confined Space Entry Program
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OBJECTIVE(S): To provide a work atmosphere that is conducive to attaining a high work standard and as free as possible from safety and health hazards. To that end, U.S. Concrete has devised this Standard Operating Procedure which establishes an entry permit program to ensure that entrants are protected from permit space hazards. This program is based on the Occupational Safety and Health Administration (OSHA) Standard 29 CFR 1910.146 Permit Required – Confined Spaces and American National Standards Institute (ANSI) Standard 117.1-1989, "Safety Requirements for Working in Tanks and Other Confined Spaces".

GENERAL POLICY: (Defined below)

APPLICATION: U.S. Concrete, Inc.

RESPONSIBILITY: President/General Manager

(1) STATEMENT OF POLICY

This program requires each facility to develop and use an entry permit program that includes procedures for hazard recognition, entrant authorization, employee protection and rescue.

This standard operating procedure details those measures to be taken to ensure employee safety when confined space entry is required. All entries into 1) cement and flyash silos, 2) aggregate silos, 3) overhead aggregate storage bins, 4) weigh hoppers, 5) charge hoppers, 6) dust collectors and, 7) above ground fuel/oil storage tanks, 8) truck and central mixers shall conform to the procedures as established by this document.

(2) DEFINITIONS

Acceptable Entry Conditions: Conditions that must exist in a permit space to allow entry and to ensure that the employees involved in with a Permit Required Confined Space Entry can safely enter into and work in the space.

Attendant: A trained individual (i.e. standby) who is stationed outside the permit required confined space

and monitors the authorized entrants inside of the permit required confined space.

Authorized Entrant: Individual who is authorized to enter a permit required confined space.

Engulfment: The surrounding and effective capture of an individual by a liquid or finely divided solid substance, that can be aspirated to cause death by filling or plugging the respiratory system or that exerts enough force on the body to cause death by strangulation, constriction or crushing.

Entry: The action by which a person passes through an opening onto a Permit Required Confined Space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as **ANY PART** of the entrants body breaks the plane of an opening into the space.

Entry Permit: The document which is based on the hazard identification and evaluation of a given confined space and authorizes entry into that permit required confined space. The permit constitutes written authorization and specifies the location and type of work to be performed. In addition, the permit certifies that all existing hazards have been evaluated and the appropriate protective measures and equipment have been assigned to ensure the safety of the worker.

Hazardous Atmosphere: An atmosphere which exposes individuals to a risk of death, incapacitation, injury or acute illness from:

- (i) Flammable gas, vapor or dust in excess of 10% of its LEL;
- (ii) Airborne combustible dust that obscures vision at a distance of 5 ft. or less;
- (iii) Atmospheric Oxygen below 19.5% or above 22%;
- (iv) Atmospheric concentrations of any substance above its PEL;
- (v) Any IDLH atmospheric condition.

Inerting: Rendering an atmosphere non-flammable, non-explosive or chemically non-reactive by means of displacement or dilution by steam or a non-reactive gas.

Low-Hazard Permit Space: A permit space with an extremely low likelihood that an IDLH or engulfment hazard could be present and all other serious hazards have been controlled.

Permit Required Confined Space: An enclosed space which;

- (i) Is large enough and so configured that an individual can bodily enter and perform assigned work;
- (ii) Limits or restricts means of entry and exit;
- (iii) Not designed for continuous occupancy;
- (iv) Has one or more of the following characteristics:
 - (a) contains or has a known potential to contain a hazardous atmosphere;
 - (b) contains a material with a potential for engulfment;
 - (c) an internal configuration with inwardly converging walls, or a floor which slopes downward and tapers to a small cross-section; or
 - (d) contains any other recognized serious safety or health hazard (i.e. uncontrolled machinery).

Retrieval System: Means the equipment (including a retrieval line, chest or full-body harness, and a lifting device or anchor) used for non-entry rescue of persons from a confined space.

(3) **INDIVIDUAL RESPONSIBILITIES**

Facility Manager(s) – are the responsible parties for the daily operational adherence to the confined space entry program. It is these individuals' responsibility to ensure that the employees fully understand the operational procedures and these procedures are strictly followed. If the procedure is not adequate to cover a specific job, the Facility Manager(s), in conjunction with the Safety Manager, shall develop further procedures to ensure safety during the operation.

Supervisors - it is the responsibility of these individuals to notify the respective facility Manager(s) 24 hours prior to any entries, whenever possible. Assist the facility Manager(s). It is also these individuals responsibility to ensure that the proper procedures are followed during all entries and that all equipment is cleaned and returned to its proper storage location.

Individual Employees - are responsible for knowing and following the established procedure that is applicable to the safe performance of the job.

Operations Manager - is responsible for administering the permit required confined space entry program by ensuring; training, procedures, audits and evaluations are properly conducted.

Safety Manager - Is responsible for administering the permit required confined space program by providing training, procedures, audits and evaluations.

(4) **PERMIT PROGRAM**

The permit required confined space entry program established by the facility consists of the following elements, at a minimum.

Hazard Identification: Identification and evaluation of each permit space hazard including severity.

Hazard Control: Establishment of hazard control means, procedures and practices for safe entry.

Permit System: Written program for preparation, issuance and implementation of entry permits.

Employee Information: Signs are posted near permit spaces to provide notification about hazards and entry authorization.

Prevention of Unauthorized Entry: Via training or by posting signs and barriers as necessary.

Employee Training: As provided by this procedure to act as attendants, authorized entrants, and personnel authorized or in charge of entries.

Equipment: The facility shall provide, maintain and ensure the proper use of the equipment necessary for safe entry.

Rescue: Ensure that the equipment and procedures for rescue are available.

Protection from External Hazards: Ensure that barriers to protect entrants from external hazards are

provided.

Duty to other Employees: Supply contractors with information on permit space hazards, efforts to comply with this procedure, other workplace hazards, safety rules and emergency procedures.

(5) **PERMIT SYSTEM**

Permits are required for all entries into confined spaces that contain or have a known potential to contain a hazardous atmosphere, a material with a potential for engulfment, an internal configuration with inwardly converging walls, or a floor which slopes downward and tapers to a small cross-section, or contains any other recognized serious safety or health hazard (i.e. uncontrolled machinery).

Each permit shall be completed for the following information:

- (1) The hazards of the permit space;
- (2) Measures for the isolation of the permit space;
- (3) The measures, Lockout/Tagout, equipment and procedures used to remove or control potential hazards;
- (4) Acceptable environmental conditions to be maintained during entry;
- (5) Testing and monitoring equipment and procedures;
- (6) Rescue and other services to be summoned and the means of communication;
- (7) On-site rescue equipment;
- (8) Communication means used by authorized entrants and attendants;
- (9) Personal protective equipment to be utilized; and
- (10) Any other pertinent information.

In addition to the above information, company policy requires that the permit authorizer, whether they assume direct control of an entry for the duration or relinquish control to another individual, provide the following information on all permits:

- (1) Identity of the permit space;
- (2) The purpose of the entry;
- (3) Date of entry and the authorized duration;
- (4) A list of the authorized entrants;
- (5) A list of the eligible attendants;
- (6) A list of individuals eligible to be in charge of entry; and
- (7) The signature and legible name of the authorizer.

(6) **TRAINING REQUIREMENTS**

Prior to performing any permit required confined space functions, facility employees shall receive the following classroom and on-the-job training.

A. Authorized Entrants

Each authorized entrant prior to participating in any permit required entries shall be trained in;

1. Hazard Recognition

- (i) The hazards which may be faced in all potential facility entries.

Several of the hazards associated with confined space entry at this facility include:

- (a) Oxygen atmospheres below 19.5% (oxygen deficient) or above 22% (oxygen enriched).
- (b) Explosive atmospheres (10% of the Lower Explosive Limit [LEL]).
- (c) Non-flammable toxic atmospheres.
- (d) Skin contamination and possible absorption of materials.
- (e) Engulfment or entrapment hazards.
- (f) The hazards associated with slipping and falling during clean out operations.
- (g) Heat related disorders.
- (h) Noise.

- (ii) The signs and symptoms of exposure to a hazard and the consequences of the exposure.

- (a) Oxygen deficient atmospheres

Exposure to an Oxygen deficient atmosphere (below 19.5%) can lead to initial symptoms of; (1) an increase rate and depth of breathing, (2) dizziness, (3) headaches, (4) rapid heart rate. These symptoms may be further manifested at lower oxygen concentrations to include an inability to move and a semiconscious lack of concern about the imminence of death.

When abruptly entering into areas with little or no oxygen, there are usually no warning symptoms, an immediate loss of consciousness and possible death.

- (b) Toxic atmosphere due to the presence of solvent vapors and/or residues

Exposure to most hydrocarbons over the PEL/TLV will cause central nervous system depression, symptoms which can include; (1) light-headedness, (2) giddiness, (3) nausea, (4) headache, (5) drowsiness, (6) incoordination, (7) fatigue or weakness, (8) progressing to coma and even death. Exact signs and symptoms of exposure to solvent vapors should be obtained from the MSDS for each material present, if known. Respiratory protection will be worn whenever hazardous vapors could be present at any concentrations.

Specific solvents may also produce irritation of the eyes, nose throat and respiratory system and possible skin irritation and dermatitis if skin contamination occurs.

Chronic toxicity due to exposure to various hydrocarbon solvents may vary but can include hepatotoxicity, nephrotoxicity, peripheral neuropathy and cancer.

(c) Heat related disorders

Heat Stroke - The primary symptoms are; (1) confusion, (2) irrational behavior, (3) loss of consciousness, (4) convulsions, (5) lack of sweating (usually), (6) hot, dry skin, and (7) abnormally high body temperature (105.8 F). If the body temperature rises to high, death will follow.

Heat Exhaustion - The primary symptoms are; (1) pale skin, (2) profuse sweating, (3) headache, (4) nausea, (5) vertigo, (6) weakness, (7) thirst, and (8) giddiness.

Heat Cramps - The primary symptoms are cramping of the muscles used during work.

Heat Collapse (Fainting) - The primary symptom is fainting caused by the pooling of blood in the extremities.

Heat Rashes - This is the most common problem in the work environment and results in symptoms of red papules, usually in the area where clothing is restrictive and gives rise to a prickling sensation, particularly as sweating increases.

Heat Fatigue - The primary symptoms are impaired performance of skilled sensorimotor mental, or vigilance jobs.

2. Communication

- (i) The means of communication with the attendant.

----Add Site Specific Means ---

- (ii) The means of notifying an attendant when a self-initiated evacuation will be conducted.

3. Personal Protective Equipment

- (i) The personal protective equipment, such as retrieval lines, respirators or clothing needed for safe entry and exit.

Prior to entry into any permit required confined spaces, the authorized entrants and a least one other individual acting as a standby person shall don the following personal protective equipment.

- (a) Safety glasses and/or goggles
- (b) Hardhat
- (c) Safety harness with life-line
- (d) Respiratory protection; including, full-face supplied air respirator, with a 5-minute escape bottle or Self-Contained Breathing Apparatus (SCBA), if applicable

In those spaces where hazardous chemicals may be present, the following equipment may also be required:

- (e) Full body poly-coated tyvek or equivalent
- (f) Rubber boots, taped at the ankle
- (g) Inner and outer gloves, taped at the wrist

The selection and use of this equipment should be based on the specific hazards of the confined space and the work to be performed.

- (ii) The proper use of the personal protective equipment.
- (iii) All external barriers to be used to protect the entrants from external hazards.

Employee protection from external hazards must be accomplished by isolation of the permit required confined space utilizing the facility specific lockout/tagout procedure.

This isolation of the confined space can be accomplished by:

- (a) Locking out: electrical and mechanical devices, preferably at disconnects remote from the equipment;
- (b) Blanking & Bleeding: pneumatic and hydraulic lines;
- (c) Disconnecting: belt and chain drive, and mechanical linkages on shaft driven equipment where possible; and
- (d) Securing: mechanical moving parts within the confined space with latches, chains, chocks, blocks or other devices.

Isolation of the permit required confined space must also be accomplished by the establishment of barrier tape or ropes to warn unauthorized individuals of the activities taking place.

- (iv) Fall Protection

Whenever entry into a permit required confined space is initiated, the following conditions must be met:

- (a) The life-line must have sufficient strength to withstand the weight of the authorized individual during free-fall;
- (b) The life-line must be in good working condition and able to withstand the environment to which it may be subjected;

- (c) The life-line must be securely fastened outside of the permit space;
- (d) The life-line must be handled by the attendant during all ascents and descents; and
- (e) The attendant and authorized entrant must exercise care to ensure that the life-line(s) and air-hose(s) do not become entangled.

4. Self-Rescue

Entrants must leave the confined space immediately when:

- (i) The attendant orders evacuation;
- (ii) An automatic alarm is activated; or
- (iii) The entrant perceives that they are in danger.

B. Attendants

Prior to acting as an attendant to any permit required confined space entries, the individuals acting as attendants shall receive the following classroom and on-the-job training.

Note: U.S. Concrete, Inc.'s company policy dictates that an attendant will monitor only one confined space entry procedure at a time.

1. Number of Entrants

- (i) The attendants will receive instruction in maintaining an accurate count of the number of employees in a given confined space.

2. Hazard Recognition

- (i) The hazards which may be faced in all potential facility entries.

Several of the hazards associated with confined space entry at this facility include:

- (a) Oxygen atmospheres below 19.5% (oxygen deficient) or above 22% (oxygen enriched).
- (b) Explosive atmospheres (10% of the Lower Explosive Limit [LEL]).
- (c) Non-flammable toxic atmospheres.
- (d) Skin contamination and possible absorption of materials.
- (e) Engulfment or entrapment hazards.
- (f) The hazards associated with slipping and falling during clean out operations.
- (g) Heat related disorders
- (h) Noise

- (ii) The signs and symptoms of exposure to a hazard.

- (a) Oxygen deficient atmospheres

Exposure to an Oxygen deficient atmosphere (below 19.5%) can lead to

initial symptoms of; (1) an increase rate and depth of breathing, (2) dizziness, (3) headaches, (4) rapid heart rate. These symptoms may be further manifested at lower oxygen concentrations to include an inability to move and a semiconscious lack of concern about the imminence of death.

When abruptly entering into areas with little or no oxygen, there are usually no warning symptoms, an immediate loss of consciousness and possible death.

(b) Toxic atmosphere due to the presence of solvent vapors and/or residues

Exposure to most hydrocarbon solvents over the PEL/TLV will cause central nervous system depression, symptoms which can include; (1) light-headedness, (2) giddiness, (3) nausea, (4) headache, (5) drowsiness, (6) incoordination, (7) fatigue or weakness, (8) progressing to coma and even death. Exact signs and symptoms of exposure to solvent vapors should be obtained from the MSDS for each material present, if known. Respiratory protection will be worn whenever hazardous vapors could be present at any concentrations.

Specific solvents may also produce irritation of the eyes, nose throat and respiratory system and possible skin irritation and dermatitis if skin contamination occurs.

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Heat Rashes - This is the most common problem in the work environment and results in symptoms of red papules, usually in the area where clothing is restrictive and gives rise to a prickling sensation, particularly as sweating increases.

Heat Fatigue - The primary symptoms are impaired performance of skilled sensorimotor mental, or vigilance jobs.

- (iii) The methods for monitoring inside and outside of the confined space to determine if it is safe for the entrants to remain in the space.

Prior to engaging in any confined space entry, monitoring for Oxygen and, if applicable, combustible gasses will be conducted the confined space. All equipment used for the monitoring activities shall be pre-calibrated prior to use and the information noted on the confined space entry permit.

Once a confined space has been evaluated for entry, intermittent, hourly, monitoring will be performed and the results of each test recorded on the confined space permit.

Note: All permit required confined space entries shall be conducted utilizing these monitoring parameters, regardless of the level of personal protective equipment.

3. Communication

- (i) The means of maintaining effective and continuous communication with the authorized entrants.
 - (a) Radios, hand signals, and line jerks.
- (ii) Identifying the following situations and notifying an entrant when an evacuation will be conducted.
 - (a) When conditions not allowed in the permit are observed;
 - (b) When behavioral effects of hazard exposure are observed;
 - (c) When a situation outside of the confined space is observed that could endanger the entrants;
 - (d) When an uncontrolled hazard within the confined space is observed;
 - (e) When the attendant must leave the work station.
- (iii) The means of summoning assistance when the entrants need to escape from permit space hazards
- (iv) The actions to take when unauthorized individuals approach or enter a permit space when an entry is underway.
 - (a) Warn the unauthorized persons away from the space;
 - (b) Request the unauthorized individuals to exit if they have entered the permit space;
 - (c) Inform the authorized entrants and any other necessary individuals that an unauthorized entry has been made.

4. Rescue
 - (i) Not to enter the permit space to attempt a rescue
 - (ii) Use the proper rescue equipment and perform any other rescue duties without entering the permit space.

C. Individuals Authorizing or in Charge of Entry

Prior to individuals authorizing or being in charge of permit required entries, they shall receive the following training.

1. Entry authorization and supervision
 - (i) Determining if an entry permit contains the requisite information before authorizing or allowing entry;
 - (ii) Ensuring that the appropriate procedures, practices and equipment for safe entry are in effect;
 - (iii) Ensure that entry operations remain consistent with the permit and that acceptable entry conditions are present;
 - (iv) Authorization and the entry permit are canceled whenever acceptable entry conditions are not present.
2. Unauthorized Personnel
 - (i) Determining the appropriate measures necessary to remove unauthorized personnel from in or around entry permit spaces;
3. Facility Authorized Individuals
 - (i) The following individuals are those authorized by the facility to initiate or be in charge of permit required entries:

--- Add specific personnel titles ---

(7) RESCUE TEAM

Confined space rescues performed at the U.S. Concrete, Inc. ----- facility shall be conducted by trained outside rescue services. Prior to the initiation of any rescue operations, these designated rescuers shall be made aware of the hazards at the facility so that they can equip and train themselves accordingly. It is the responsibility of the facility management to make the appropriate arrangements with their local fire department or other rescue organization for outside assistance.

The only rescue operations that will be performed by facility personnel will involve entrant extractions which do **not** include rescuer entry into the confined space, (e.g. retrieval via life-line).

(8) NON-PERMIT REQUIRED CONFINED SPACES

U.S. Concrete will allow entry into non-permit spaces without providing an attendant and without the permit system, providing compliance with the following provisions:

1. There is no actual or potentially hazardous atmosphere;
2. That the only hazard posed by the space is an actual or potentially hazardous atmosphere;
3. That continuous forced air ventilation alone is sufficient to maintain the space safe for entry.

(9) RECLASSIFICATION FROM PERMIT TO NON-PERMIT SPACE

A space classified by U.S. Concrete as a permit required confined space may be reclassified as a non-permit space under the following procedures:

1. If the space poses no actual or potential atmospheric hazard and if all hazards within the space are eliminated without entry into the space, the permit space may be reclassified as a non-permit space for as long as the non-atmospheric hazards remain eliminated.
2. If it is necessary to enter the permit space to eliminate hazards, such entry shall be made under the provisions of the permit space program. If testing and inspection during that entry demonstrate that the hazards within the space have been eliminated, the permit space may be reclassified as a non-permit space for as long as the hazards remain eliminated.
3. Documentation for the basis of determining that all hazards within a permit space have been eliminated is required through a certification that contains the date, location of the space, and the signature of the person making the determination. The certificate shall be made available to each person entering the space.
4. If hazards arise within a space that has been reclassified, each employee in the space shall exit the space. The space must then be reevaluated to determine whether it has become a permit space.

(10) OUTSIDE PERSONNEL (CONTRACTOR) PROCEDURES

Whenever outside personnel are engaged in activities requiring permit required confined space entry, the following procedures will be instituted:

- (1) The designated Health and Safety Manager and/or the respective facility Manager(s) and the outside employer shall review their respective confined space procedures.
- (2) The respective facility Manager shall ensure that all facility employees are aware of, understand and comply with the off-site personnel confined space entry program.

In the event that the off-site personnel operate under a deficient program, or do not have a program, the work shall not be performed.

(11) RECORD KEEPING

All confined space entry permits associated with this program shall remain on file at the facility for a duration of three (3) years after date of permit closure.

(12) PROGRAM EVALUATION

This permit required confined space entry program shall be evaluated at least annually to determine the overall effectiveness of the program. This evaluation shall be conducted by the Operations Manager and the Safety Manager. Compliance with all program elements will be reviewed and where deficiencies are noted, appropriate action shall be taken to correct them.

Approved by:	Original at US Concrete Houston
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Effective Date:	1/1/03
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Signature:	Original at US Concrete Houston
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ATTACHMENT I

U.S. CONCRETE, INC. LIST OF CONFINED SPACES*

*Note: The Confined Spaces identified in Attachment 1 are based upon typical situations. The low and high hazard designations can be modified in specific case-by-case scenarios. However, unless authorized by either the Director of Safety and Risk Management changes are prohibited.

**U.S. CONCRETE, INC. ----- FACILITY
NON-PERMIT SPACES**

Location

Truck Mixers

1. Trucks and mixers blocked from movement. (See Lockout/Tagout procedure).
2. PPE required for entry: Long sleeve shirt and pants, steel-toed foot-wear, safety glasses or goggles, hard-hat, ear plugs and/or muffs, and sturdy gloves.
3. Respiratory protection (dust masks) or mechanical ventilation required if excessive dust layers are prevalent.
4. No third attendant necessary (one entrant/one attendant).
5. No activities other than inspection or housekeeping (removal of material buildup with air-hammers or other non-hazardous atmospheric producing methods).
6. Welding or other potentially toxic atmosphere producing activity or engulfment hazard negates the non-permit designation.

Central Stationary Mixer

1. Mixer electronically locked out and blocked from movement. (See Lockout/Tagout procedure).
2. PPE required for entry: Long sleeve shirt and pants, steel-toed foot-wear, safety glasses or goggles, hard-hat, ear plugs and/or muffs, and sturdy gloves.
3. Respiratory protection (dust masks) or mechanical ventilation required if excessive dust layers are prevalent.
4. No third attendant necessary (one entrant/one attendant).
5. No activities other than inspection or housekeeping (removal of material buildup with air-hammers or other non-hazardous atmospheric producing methods).
6. Welding or other potentially toxic atmosphere producing activity or engulfment hazard negates the low hazard designation.

Block Plant Mixer

1. Mixer electronically locked out and blocked from movement. (See Lockout/Tagout procedure).
2. PPE required for entry: Long sleeve shirt and pants, steel-toed foot-wear, safety glasses or goggles, hard-hat, ear plugs and/or muffs, and sturdy gloves.
3. Respiratory protection (dust masks) or mechanical ventilation required if excessive dust layers are prevalent.
4. No activities other than inspection or housekeeping (removal of material buildup with air-hammers or other non-hazardous atmospheric producing methods).
5. Welding or other potentially toxic atmosphere producing activity or engulfment hazard negates the low hazard designation.

Dust Collector/Baghouses (Silo Baghouses/Central Mixer/Block Plant)

1. Lockout/Tagout of discharge systems required. (See Lockout/Tagout procedure).
2. PPE required for entry: Long sleeve shirt and pants, steel-toed foot-wear, safety glasses or goggles, hard-hat, ear plugs and/or muffs, and sturdy gloves.
3. Respiratory protection (dust masks) or mechanical ventilation required if excessive dust layers are prevalent.
No attendant necessary.
4. Welding or other potentially toxic atmosphere producing activity negates the low hazard designation. Remains low hazard space if sufficient ventilation is provided.

Read-Mix Bins (Overhead and Free Standing Material Bins)

1. Lockout/Tagout of conveyor, and/or equipment feeding and discharging the bin. (See Lockout/Tagout procedure.)
2. Entrant area must be demarcated with yellow barrier tape reading "**CAUTION.**"
3. Entrant and attendant must have full-body harness with separate life-lines.
4. PPE required for entry: Long sleeve shirt and pants, steel-toed foot-wear, safety glasses or goggles, hard-hat, and sturdy gloves.
5. Respiratory protection (dust masks) or mechanical ventilation required if excessive dust layers are prevalent.
6. Attendant must monitor the entrant's life-line at all times.
7. If additional equipment or assistance is needed, then additional attendants must be provided.
8. Entrant and attendant must be in visual contact with each other or provided with some other means of direct communication (i.e.. signal line or radio).

Block Plant Bin (Overhead Material Bin)

1. Lockout/Tagout of conveyor, and/or equipment feeding and discharging the bin. (See Lockout/Tagout procedure.)
1. Entrant area must be demarcated with yellow barrier tape reading "**CAUTION.**"
2. Entrant and attendant must have full-body harness with separate life-lines.
3. PPE required for entry: Long sleeve shirt and pants, steel-toed foot-wear, safety glasses or goggles, hard-hat, and sturdy gloves.
4. Respiratory protection (dust masks) or mechanical ventilation required if excessive dust layers are prevalent.
5. Attendant must monitor the entrant's life-line at all times.
6. If additional equipment or assistance is needed, then additional attendants must be provided.
7. Entrant and attendant must be in visual contact with each other or provided with some other means of direct communication (i.e.. signal line or radio).

Hoppers (Material Weigh Hopper)

1. Lockout/Tagout of conveyor, and/or equipment feeding and discharging the hopper. (See Lockout/Tagout procedure.)
2. Entrant area must be demarcated with yellow barrier tape reading "**CAUTION.**"
3. Entrant and attendant must have full-body harness with separate life-lines.
4. PPE required for entry: Long sleeve shirt and pants, steel-toed foot-wear, safety glasses or goggles, hard-hat, and sturdy gloves.
5. Respiratory protection (dust masks) or mechanical ventilation required if excessive dust layers are prevalent.
6. Attendant must monitor the entrant's life-line at all times.

7. If additional equipment or assistance is needed, then additional attendants must be provided.
8. Entrant and attendant must be in visual contact with each other or provided with some other means of direct communication (i.e.. signal line or radio).

Hoppers (Ready-Mix Material Weigh Hopper)

1. Lockout/Tagout of conveyor, and/or equipment feeding and discharging the hopper. (See Lockout/Tagout procedure.)
2. Entrant area must be demarcated with yellow barrier tape reading "**CAUTION.**"
3. Entrant and attendant must have full-body harness with separate life-lines.
4. PPE required for entry: Long sleeve shirt and pants, steel-toed foot-wear, safety glasses or goggles, hard-hat, and sturdy gloves.
5. Respiratory protection (dust masks) or mechanical ventilation required if excessive dust layers are prevalent.
6. Attendant must monitor the entrant's life-line at all times.
7. If additional equipment or assistance is needed, then additional attendants must be provided.
8. Entrant and attendant must be in visual contact with each other or provided with some other means of direct communication (i.e.. signal line or radio).

Hoppers (Dump Hopper at Stacker for Free-Standing Ready-Mix Plant)

1. Lockout/Tagout of conveyor, and/or equipment feeding and discharging the hopper. (See Lockout/Tagout procedure.)
2. Entrant area must be demarcated with yellow barrier tape reading "**CAUTION.**"
3. Entrant and attendant must have full-body harness with separate life-lines.
4. PPE required for entry: Long sleeve shirt and pants, steel-toed foot-wear, safety glasses or goggles, hard-hat, and sturdy gloves.
5. Respiratory protection (dust masks) or mechanical ventilation required if excessive dust layers are prevalent.
6. Attendant must monitor the entrant's life-line at all times.
7. If additional equipment or assistance is needed, then additional attendants must be provided.
8. Entrant and attendant must be in visual contact with each other or provided with some other means of direct communication (i.e.. signal line or radio).

Hoppers (Rail and Truck Hoppers)

1. Lockout/Tagout of conveyor, and/or equipment feeding and discharging the hopper. (See Lockout/Tagout procedure.)
2. Entrant area must be demarcated with yellow barrier tape reading "**CAUTION.**"
3. Entrant and attendant must have full-body harness with separate life-lines.
4. PPE required for entry: Long sleeve shirt and pants, steel-toed foot-wear, safety glasses or goggles, hard-hat, and sturdy gloves.
5. Respiratory protection (dust masks) or mechanical ventilation required if excessive dust layers are prevalent.
6. Attendant must monitor the entrant's life-line at all times.
7. If additional equipment or assistance is needed, then additional attendants must be provided.

Block Plant Hoppers (Stacker Hopper/Mixer Weigh Hopper/Dump Hopper)

1. Lockout/Tagout of conveyor, and/or equipment feeding and discharging the hopper. (See Lockout/Tagout procedure.)

2. Entrant area must be demarcated with yellow barrier tape reading "**CAUTION.**"
3. Entrant and attendant must have full-body harness with separate life-lines.
4. PPE required for entry: Long sleeve shirt and pants, steel-toed foot-wear, safety glasses or goggles, hard-hat, and sturdy gloves.
5. Respiratory protection (dust masks) or mechanical ventilation required if excessive dust layers are prevalent.
6. Attendant must monitor the entrant's life-line at all times.
7. If additional equipment or assistance is needed, then additional attendants must be provided.
8. Entrant and attendant must be in visual contact with each other or provided with some other means of direct communication (i.e.. signal line or radio).

U.S. CONCRETE, INC. --- FACILITY HIGH HAZARD PERMIT SPACES

Location

Silos (Cement and Flyash)

1. Permit required for each entry.
2. Lockout/Tagout of conveyor, blower, and/or equipment feeding and discharging the silo.
3. Entrant area must be demarcated with yellow barrier tape reading **"CAUTION."**
4. Oxygen and carbon monoxide monitoring required prior to entry and continuously thereafter, or at least Hourly.
5. Entrant and attendant must have full-body harness with separate life-lines.
6. PPE required for entry: Long sleeve shirt and pants, steel-toed foot-wear, safety glasses or goggles, hard-hat, ear plugs and/or muffs, and sturdy gloves.
7. Respiratory protection (full face, supplied air) required.
8. Attendant must monitor the entrant's life-line at all times.
9. If additional equipment or assistance is needed, then additional attendants must be provided.
10. Entrant and attendant must be in visual contact with each other or provided with some other means of direct communication (i.e.. signal line or radio).

Admix Tanks

1. Permit required for every entry. .
2. Entrant area must be demarcated with yellow barrier tape reading **"CAUTION."**
3. Oxygen, carbon monoxide, and tank specific toxic atmosphere monitoring required prior to entry and continuously thereafter.
4. Entrant and attendant must have full-body harness with separate life-lines.
5. PPE required for entry: Chemically impervious full-body protective suit, non-slip steel-toed foot-wear, goggles, hard-hat, and chemically impervious gloves.
6. Respiratory protection (half or full-face) and mechanical ventilation required.
7. Attendant must monitor the entrant's life-line at all times.
8. If additional equipment or assistance is needed, then additional attendants must be provided.
9. Entrant and attendant must be in visual contact with each other or provided with some other means of direct communication (i.e.. signal line or radio).

Diesel Tank

1. Permit required for each entry.
2. Entrant area must be demarcated with yellow barrier tape reading **"CAUTION."**
3. Oxygen, carbon monoxide, and flammable atmosphere monitoring required prior to entry and continuously thereafter.
4. Entrant and attendant must have full-body harness with separate life-lines.
5. PPE required for entry: Chemically impervious full-body protective suit, non-slip steel-toed foot-wear, goggles, hard-hat, and chemically impervious gloves.
6. Respiratory protection (half or full-face) and mechanical ventilation required.
7. Attendant must monitor the entrant's life-line at all times.
8. If additional equipment or assistance is needed, then additional attendants must be provided.

9. Entrant and attendant must be in visual contact with each other or provided with some other means of direct communication (i.e.. signal line or radio).

Man Holes (Electrical and Sewer)

1. Permit required for each entry.
2. Entrant area must be demarcated with yellow barrier tape reading "**CAUTION.**"
3. Oxygen and carbon monoxide monitoring required prior to entry and continuously thereafter, or at least Hourly.
4. Entrant and attendant must have full-body harness with separate life-lines.
5. Attendant must monitor the entrant's life-line at all times.
6. If additional equipment or assistance is needed, then additional attendants must be provided.
6. Entrant and attendant must be in visual contact with each other or provided with some other means of direct communication (i.e.. signal line or radio)