



## Quality Assurance Procedure

CP-00-7000

Approved:

Date: 22 February 2005

Title: Safety Plan (Injury and Illness Prevention Program)

REV  
NC

Page 1 of 24

### 1.0 POLICY/PURPOSE

Safety is a prime consideration in planning and performance of work. Therefore, no task is undertaken until all the safety ramifications are understood and proper safety precautions are instituted and enforced. The objective of this safety plan is to eliminate injuries and reduce damage to equipment and property. Further, this plan fulfills the requirement for an *Injury and Illness Prevention Program* (IIPP, T8 CCR 3203).

### 2.0 SCOPE

This procedure establishes minimum requirements for all Santa Barbara Applied Research (SBAR), Inc. and MCA Division operations, to include subcontractors. Specific SBAR offices and contracts are authorized to supplement this procedure, as necessary, to comply with local and state OSHA regulatory requirements.

### 3.0 REFERENCES AND DEFINITIONS


#### 3.1 REFERENCES

- 29 CFR 1910: Occupational Safety and Health Standards.
- 29 CFR 1926: Safety and Health Regulations for Construction
- American National Standards Institute (ANSI) standards, technical orders (T.O.s), American Welding Society (AWS) standards, etc.
- T8 CCR, Chapter 4, Subchapters 1,2: Unfired Pressure Vessel Safety Orders Boiler and Fired Pressure Vessel Safety Orders.
- T8 CCR, Chapter 4, Subchapter 4: Construction Safety Orders.
- T8 CCR, Chapter 4, Subchapter 6: Elevator Safety Orders.
- T8 CCR, Chapter 4, Subchapter 7: General Industry Safety Orders.
- Other applicable T8 CCR, Chapter 4 subchapters.
- EM 385-1-1: US Army Corps of Engineers, *Safety and Health Requirements Manual*.
- AFI91-301, Air Force Occupational and Environmental Safety, Fire Protection, and Health (AFOSH) Program
- Various SBAR and MCA safety program work instructions and forms



## Quality Assurance Procedure

CP-00-7000

Approved: 	Date: 22 February 2005	
Title: Safety Plan (Injury and Illness Prevention Program)	REV NC	Page 2 of 24

### 3.2 DEFINITIONS/ABBREVIATIONS

**CCR:** California Code of Regulations.

**CFR:** Code of Federal Regulations

**Functional Area Manager (FAM):** A senior supervisory individual who is responsible for the leadership, direction, and overall success of an area of the company, such as technical services, operations, contracting, finance, engineering, logistics, quality, specific projects/contracts, etc.

**High Risk Operation:** Also referred to as a “hazardous” operation or job. Any task where there is a real or potential condition that can cause mission degradation, serious injury or illness or death, and/or extensive damage to or loss of equipment or property. If a job is rated as “Extremely High” or “High” using the Risk Assessment Matrix, the job or operation is designated as High Risk.

**Major Mission Degradation:** A scheduled customer’s mission is cancelled and/or rescheduled due to a mishap involving company personnel and/or company maintained equipment. There is no minimum dollar amount associated with the mishap.

**Major System Damage:** A Customer's (e.g., Air Force equipment and/or property is harmed by company operations; however, there is no mission impact. Damage is greater than \$10,000. (NOTE: Other customer’s may have a dollar value other than \$10,000.)

**Minor Mission Degradation:** A scheduled customer’s mission is delayed (e.g., a space launch occurs within its prescribed window) due to a mishap involving company personnel and/or company maintained equipment. There is no minimum dollar amount associated with the mishap.

**Minor System Damage:** A Customer's (e.g., Air Force) equipment and/or property is harmed by company operations; however, there is no mission impact. Damage is less than \$10,000. (NOTE: Other customer’s may have a dollar value other than \$10,000.)


**Mishap:** An unplanned event or series of events resulting in death, injury, occupational illness, damage to or loss of equipment or property, and/or damage to the environment. There is no minimum dollar amount.

**NEC:** National Electric Code.



## Quality Assurance Procedure

CP-00-7000

Approved: 	Date: 22 February 2005	
Title: Safety Plan (Injury and Illness Prevention Program)	REV NC	Page 3 of 24

**PPE:** Personal Protective Equipment.

**Probability:** The likelihood that an individual event will occur.

**EH&S:** Environmental Health and Safety. In the company organization, safety is commonly combined with the environmental compliance function for administrative purposes. (**NOTE:** EH&S offices are normally warranted for large contracts, such as the Launch Operations and Support Contract.)

**Risk:** The probability and severity of failure or loss from exposure to various hazards.

**Risk Assessment Matrix (RAM):** A chart, combining severity and probability that is used to estimate and categorize the risk for a specific operation or job. See Figure 3.

**Safety Hold:** A Safety Hold is an order issued by any member of the EH&S office, supervisory personnel, lead technician, Government official, etc. This order is given when in the opinion of the issuing authority there is a situation that is either unsafe or requires more study prior to commencing/continuing the operation. Safety Holds can only be removed by the individual initiating the Safety Hold and EH&S and only after careful consideration of all the facts. Personnel will not proceed until either the issuing authority or EH&S has removed the Safety Hold.

**Severity:** The expected consequences of an event in terms of mission impact, injury, or damage.

## 4.0 RESPONSIBILITIES

### 4.1 Quality Manager

The Quality Manager is responsible for this procedure.

### 4.2 President/CEO

The President/CEO has the authority and responsibility for implementing this injury and illness prevention safety program within the company. When warranted and on a case-by-case basis, the President/CEO ensures appropriate administrative and/or disciplinary actions are taken when safety policies and procedures are not followed.


### 4.3 Executive Vice President

The Executive Vice President (s) ensures offices and specific contracts comply with the provisions of this safety plan. When warranted and on a case-by-case basis, the Executive Vice



## Quality Assurance Procedure

CP-00-7000

Approved: 	Date: 22 February 2005	
Title: Safety Plan (Injury and Illness Prevention Program)	REV NC	Page 4 of 24

President ensures appropriate administrative and/or disciplinary actions are taken when safety policies and procedures are not followed.

### 4.4 Program Managers

Program Managers have the authority and responsibility for implementing this injury and illness prevention safety program within the confines of their specific programs/contracts. When warranted and on a case-by-case basis, they ensure appropriate administrative and/or disciplinary actions are taken when safety policies and procedures are not followed. Further, if a separate EH&S office is not warranted, program/contract managers ensure the applicable responsibilities of the EH&S office are met.

### 4.5 Managers And Supervisors

Managers and supervisory personnel are responsible for the safe conduct of operations within their area of responsibility, managing the risks associated with their operations, and ensuring their personnel comply with all relevant safety directives, for example, the *Code of Safe Practices*.

### 4.6 Employees

Personnel are expected to comply with the pertinent safety directives affecting their specific task, for example, the *Code of Safe Practices*. Further, employees are required to wear the appropriate PPE and do not commence any operation unless the mandatory PPE is on-hand. Also, employees notify the applicable EH&S office if they believe a specific job requires specific PPE that is not presently available.

Employees are expected to report to work in adequate and appropriate clothing. Suitable shoes/boots are required for safety. Sneakers (unless safety toe) are prohibited if there is any danger from falling objects, e.g., tools. Hairstyles that create a hazard will be adequately controlled.

Employees promptly report safety violations to their immediate supervisor and/or their EH&S office. Employee suggestions for safety are always welcome!

### 4.7 EH&S Office

Where a EH&S office is warranted, the safety duties of the EH&S office includes:

- Function as the agency responsible for administration of the occupational safety and health program.



## Quality Assurance Procedure

CP-00-7000

Approved:

Date: 22 February 2005

Title: Safety Plan (Injury and Illness Prevention Program)

REV  
NC

Page 5 of 24

- Ensure safety and health inspections of SBAR operations are conducted and documented, notifying management and supervisory personnel of any violations and/or unacceptable attitude towards safety and health.
- Develop and implement safety/health programs and procedures (e.g., hearing conservation, lockout/tagout, and confined spaces).
- Advise SBAR management regarding all safety and health matters.
- Conduct risk assessments.
- Establish a liaison with customer safety personnel to ensure that SBAR personnel comply with local regulations and emergency procedures.
- Ensure safety and health meetings are conducted and documented.
- Assist subcontract supervisory personnel in establishing effective safety programs in their work areas.
- Ensure a general safety briefings and orientations for new SBAR employees and subcontractors is conducted before they begin work.
- Develop and implement a safety-training program.
- Ensure that safety notices are posted throughout work areas.
- Conduct and document mishap investigations.
- Maintain records and submit reports of occupational illness and/or accidents.
- Investigate and resolve any accidents or exposure to hazardous substances.
- Ensure inclusion of safety requirements in all subcontracts.
- Maintain updated regulations and standards through subscription/update services (e.g., Barclays, *California REGWATCH*, internet searches, etc.)
- Revise as needed and publish the *Code of Safe Practices*. (**NOTE:** Individual EH&S offices, and/or program/contract managers, are authorized to revise the *Code* to fit the conditions for their specific programs/contracts.)
- Review and evaluate subcontractor Job Safety Analyses to ensure that they adequately cover all aspects of a proposed job.
- Conduct pre-performance briefings and on site inspections to insure that subcontractor personnel are properly supervised, trained, motivated and in possession of the proper PPE for the job at hand.



## Quality Assurance Procedure

CP-00-7000

Approved:

Date: 22 February 2005

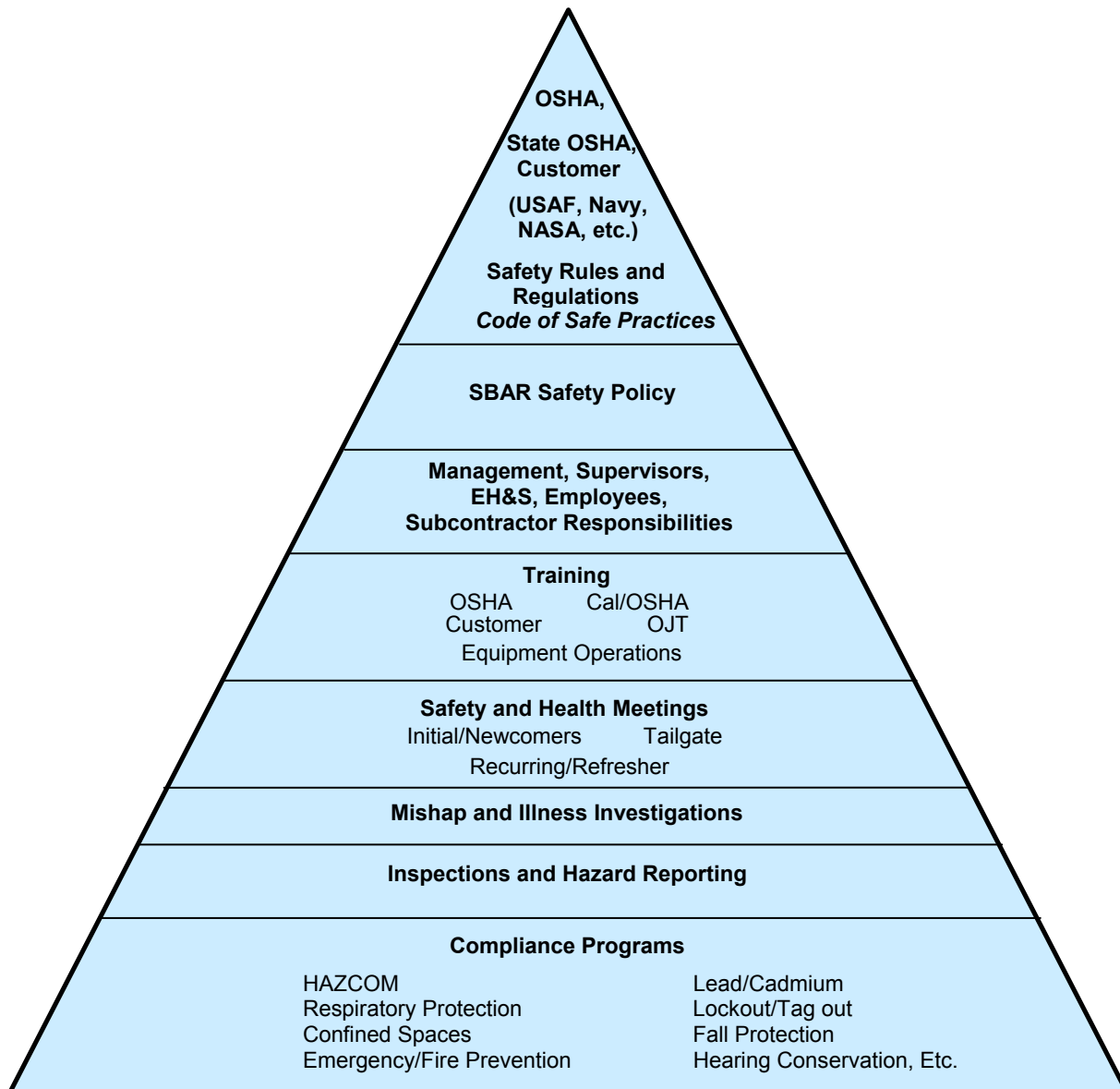
Title: Safety Plan (Injury and Illness Prevention Program)

REV  
NC

Page 6 of 24

### 5.0 REQUIREMENTS/PROCEDURES:

Figure 1 – Safety Program



Approved:



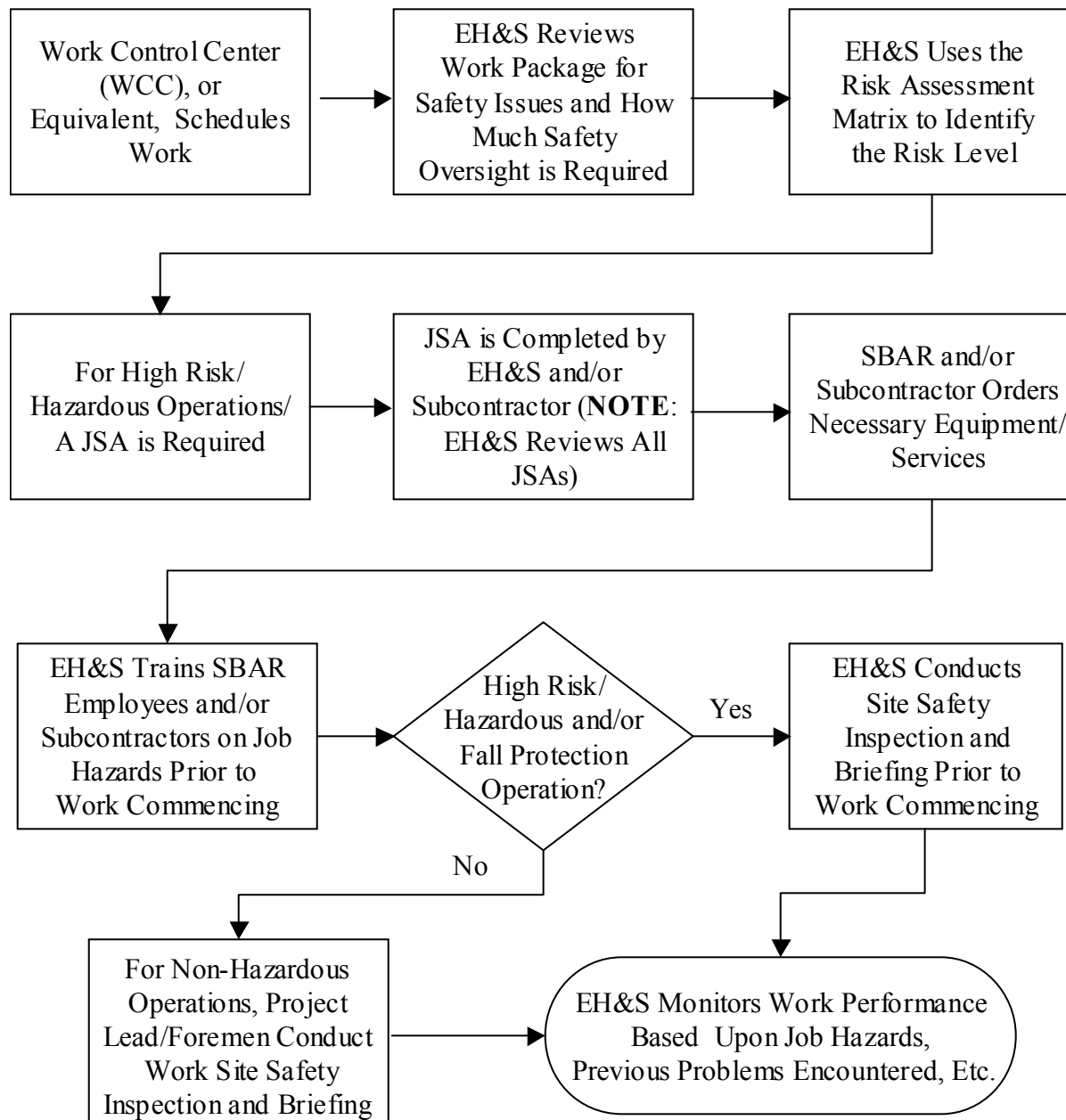
Date: 22 February 2005

Title: Safety Plan (Injury and Illness Prevention Program)

REV  
NC

Page 7 of 24

**Figure 2 -- Process Flow for Safety Planning**





## Quality Assurance Procedure

CP-00-7000

Approved:

*Grace Daswani*

Date: 22 February 2005

Title: Safety Plan (Injury and Illness Prevention Program)

REV  
NC

Page 8 of 24

Figure 3 -- Risk Assessment Matrix

		PROBABILITY					
		Frequent	Likely	Occasional	Seldom	Unlikely	
		A	B	C	D	E	
S E V E R I T Y	Catastrophic	I	Extremely		High		Medium
	Critical	II	High	High		Medium	Low
	Moderate	III	High	Medium		Low	
	Negligible	IV	Medium	Low			
	RISK LEVELS						

### SEVERITY

Catastrophic: Complete mission failure, death, or loss of system.

Critical: Major mission degradation, sever injury, occupational illness or major system damage.

Moderate: Minor mission degradation, injury, minor occupational illness, or minor system damage.

Negligible: Less than minor mission degradation, injury, occupational illness, or minor system damage.

### PROBABILITY

Frequent: Occurs often in the life of the system.

Likely: Occurs several times in the life of the system.

Occasional: Will occur in the life of the system.

Seldom: May occur in the life of the system.

Unlikely: So unlikely you can assume it will not occur in the life of the system





## Quality Assurance Procedure

CP-00-7000

Approved:

Date: 22 February 2005

Title: Safety Plan (Injury and Illness Prevention Program)

REV  
NC

Page 9 of 24

### 5.1 SBAR Safety Policy Statement

The management of Santa Barbara Applied Research, Inc. is committed to the safety of their employees and the protection of equipment and facilities assigned to them. Safe performance is paramount in achieving efficiency.

We can achieve our goal of safe performance without the injury and financial loss by establishing safe working conditions and by providing guidance through information, training, accident investigation, and inspections.

To protect the safety and health of our employees, it is our intent to operate this business within the parameters established by Federal and State laws and to ensure compliance with the standards, which regulate our industry.

Employees at all levels of our organization are expected to report any unsafe conditions to their supervisors so corrective/preventive measures could be implemented.

Working together, we can succeed in having a safe, healthful and profitable workplace from which we will all benefit.

### 5.2 Existing Safety Plans, Forms, and Training Syllabuses

Current safety plans, forms, and training syllabuses developed by MCA Engineers, Inc. (now, a division of SBAR) are authorized for use until converted to SBAR documentation. However, care must be taken to ensure these plans, forms, and syllabuses are appropriately tailored.

### 5.3 Safety Planning

A *Job Safety Analysis Form (Form CP-00-7000-B)*, using the National Safety Council's Job Safety Analysis form or a similar form, is developed prior to commencing any work where the hazards are unknown, personnel are unsure as to which safety precautions require employment, and/or the work is categorized as High Risk. This analysis is also required for subcontractor operations.

The EH&S office consults and coordinates the preparation of accident prevention plans with subcontractors for specific jobs to be performed. In addition, the plans are reviewed and updated as necessary to include anticipated hazards and changes in job conditions. As a minimum for all projects, EH&S documents this process (e.g., safety section of SBAR developed statement of work, Memo for Record).



## Quality Assurance Procedure

CP-00-7000

Approved:

Date: 22 February 2005

Title: Safety Plan (Injury and Illness Prevention Program)

REV  
NC

Page 10 of 24

The following items are considered in the safety planning process:


- Layout of work site, speed limits, access, storage areas, utilities, shop areas, fuel storage tanks, parking areas, electrical distribution lines.
- Temporary electrical installations (methods of supplying electrical power and lighting).
- Types of equipment to be used.
- Types of protective equipment.
- Barricades and warning signs.
- Methods and coordination to re-route traffic or other personnel around work site and work areas.
- Method of cleanup (types of equipment and procedures planned for use).
- Excavation, shoring and de-watering.
- Concrete construction (type of forming, shoring, erection of precast concrete, lifting, placing, etc.).
- Access to work areas and work platforms for workers.
- Methods of minimizing exposure to, and effects of, a fall.
- Potential for performing work in areas where explosive or flammable fuels/chemicals may present a hazard.
- Potential for performing work in areas where exposure to friable asbestos, PCB's, or other health hazards.
- Method of steel erection (bracing, temporary flooring etc.).
- Scaffolding erection.
- Methods of lifting.
- Methods of corrosion control/painting (health hazard involved).
- Connecting and disconnecting utility services (gas, water, electrical, sewers).
- Temporary heating.
- Buddy Care (employees working together for mutual safety in a hazardous environment).

Figure 2 depicts the Safety Planning Process.



## Quality Assurance Procedure

CP-00-7000

Approved: 	Date: 22 February 2005	
Title: Safety Plan (Injury and Illness Prevention Program)	REV NC	Page 11 of 24

### 5.4 Risk Assessment

During the planning process, SBAR evaluates all known risks. EH&S and management use the Risk Assessment Matrix (RAM), Figure 3, to categorize pending jobs. For all High Risk Operations, a Job Safety Analysis is required. Jobs are considered as High Risk if they fall in the “Extremely High” or “High” blocks of the RAM.

### 5.5 Work Time Restrictions for High Risk Operations

A 60-hour workweek (i.e., any seven-day period), with a maximum of 12 hours per day, is established for personnel working High Risk Operations. Additionally, personnel working High Risk Operations, regardless of the number of hours they work in a week, are not allowed to work more than 14 consecutive days. “High steel” corrosion control is an example of a High Risk Operation. Supervisory personnel may work longer hours; however, they are not allowed to exceed the 14 consecutive day requirement.

Only the applicable SBAR Program Manager can waive these requirements, on a case-by-case basis. Prior to granting a waiver, the Program Manager consults with the appropriate supervisor, manager (e.g., Operations and Maintenance, Corrosion Control), and the EH&S office.

### 5.6 Code Of Safe Practices

The *Code of Safe Practices (CP-00-7000-A)* lists mandatory safety precautions that are enforced throughout SBAR and/or a specific program/contract. EH&S publishes, and when needed, revises the *Code of Safe Practices* to meet the hazards associated with a specific program or contract. Further, EH&S conducts training on the Code anytime there are changes and periodically throughout the year. The Code is also mandatory for subcontractors; however, the EH&S office may waive specific portions for subcontractor operations where Code requirements are unnecessary or inappropriate.


### 5.7 New Employees and Subcontractor Safety Training

All new SBAR employees attend an orientation on general safe work practices and receive instructions on hazards unique to their working environment. Initial training includes, but is not limited to, accident and hazardous condition reporting procedures, emergency procedures, fire prevention and protection standards, and individual responsibility for accident prevention. When existing employees are given new job assignments, they first receive the necessary safety and health training. Further, prior to commencing work, subcontractors involved in hazardous operations receive a detailed safety briefing on the hazards they’re likely



## Quality Assurance Procedure

CP-00-7000

Approved: 	Date: 22 February 2005	
Title: Safety Plan (Injury and Illness Prevention Program)	REV NC	Page 12 of 24

to encounter at the job site. “Tailgate” safety meetings conducted by the subcontractors at the various project sites supplement this briefing.

### 5.8 OSHA Required Training

Both Federal and state OSHA (e.g., California) have mandated several general training requirements. The EH&S office determines which job classifications require OSHA mandated training and ensures requirements are met. EH&S maintains all safety and health training records reflecting topic, date, attendance, and instructor’s name. Additionally, equipment operators (e.g., forklifts, aerial platforms, cranes, etc.) are trained/certified on the equipment they will be operating and a record of this training/certification is maintained.

### 5.9 On-The-Job Safety Training

On-the-job safety and health training is conducted by the first line supervisor and EH&S on a regular basis. Employees are trained to work safely to avoid injuries. General hazards, site specific hazards, and methods that are safe/unsafe are identified to affected employees. Ongoing training is conducted to elevate the level of the safety consciousness for all employees.

### 5.10 Safety And Health/Tailgate Safety Meetings


SBAR supervisors constantly acquaint and instruct their personnel on job safety topics that are pertinent to work in progress. Safety meetings, held not less than quarterly, emphasize strict adherence to safety procedures through films, lectures, and safety pamphlets/posters. California projects/contracts that fall under construction safety orders hold a “tailgate” safety meeting at least every ten days. In order to ensure the requirements for a “labor/management safety and health committee” are met, the following topics, when applicable, are discussed at all employee safety meetings:

- Job Safety Analyses results.
- Specific hazards associated with the various work sites.
- Applicable safety rules and regulations.
- “Lessons Learned” from recent mishap investigations.
- General safety education.
- Results of work site inspections.
- Results of investigations of alleged hazardous situations.
- Results of employee safety suggestions.



## Quality Assurance Procedure

CP-00-7000

Approved: 	Date: 22 February 2005	
Title: Safety Plan (Injury and Illness Prevention Program)	REV NC	Page 13 of 24

- Confirmations that identified hazards have been either abated or measures taken to reduce/eliminate the hazard.

**NOTE: Employees are encouraged to actively participate in these meetings.**

Senior level management discusses safety and health issues during their senior management meetings. If necessary, the Program Manager convenes specialized safety and health meetings to discuss specific situations. The Program Manager and/or the EH&S office, decide who is required to attend, on a case-by-case basis.

The various EH&S offices maintain records of all safety and health meetings giving the date, attendees, and topics of discussion. Employees and OSHA (Federal and state) are authorized to view these records.

### 5.11 Posters and Signs

Applicable safety posters and signs are displayed at suitable project sites.

### 5.12 Mishap and Illness Investigation

Mishaps are immediately reported to the appropriate manager and the EH&S office. When appropriate, EH&S conducts a formal investigation and prepares a formal written report. [\*Form CP-00-7000-C, Mishap Investigation Report\*](#) is used and specific programs/contracts are authorized to tailor the form as necessary. Further, as required by OSHA regulations, EH&S or designee makes the appropriate log entry on their OSHA Form 300.

A Mishap Investigating Committee investigates all fatal accidents. The Committee assembles immediately after the accident and consists of at least the following persons:


- President/CEO or Executive Vice President
- Program Manager
- EH&S office
- Applicable SBAR FAM
- Contracts Manager (for subcontractor fatalities)
- Subcontractor management representative (if applicable)
- Immediate Supervisor/Lead Technician

Operations in the area are suspended until the Program Manager; after consultation with the President/CEO or Executive Vice President, customer (e.g., the Air Force, Navy),



## Quality Assurance Procedure

CP-00-7000

Approved: 	Date: 22 February 2005	
Title: Safety Plan (Injury and Illness Prevention Program)	REV NC	Page 14 of 24

federal or state OSHA, the Mishap Investigation Committee, as applicable; is satisfied necessary physical evidence has been obtained. Further, fatalities are immediately reported by phone, regardless of the hour, to the President/CEO or designee (normally, Executive Vice President.

**NOTE: Program Managers are authorized to convene the mishap investigation committee for other mishaps.**

### 5.13 Notification of Family

The Program Manager is responsible for family notifications in case of a fatality or other incident where family notifications are appropriate. The Program Manager makes these notifications after consultation with the President/CEO or Executive Vice President.

### 5.14 Notification of Outside Agencies

Record the date, time and name of the customer, state OSHA (e.g., Cal/OSHA) and Federal OSHA Representative contacted. A FAX or e-mail is used to record/verify the telephone notifications.

#### 5.14.1 Customer (e.g., Air Force, Navy) Notification

SBAR complies with the customer's policies and procedures when it's appropriate to notify the customer of a mishap. The Program Manager or the EH&S office notifies the applicable customer representative and reports the following general types of information, depending upon customer requirements:

- Injury resulting in hospitalization, death, or permanent disability.
- Three or more injured.
- Government property damage at \$2,000 or more.
- Any accident caused by customer personnel or operations.
- Any accident that could or does jeopardize the customer's mission.
- Any other types of mishap information the customer requires.

**NOTE: If there is any doubt, notify the customer.**



## Quality Assurance Procedure

CP-00-7000

Approved:

Date: 22 February 2005

Title: Safety Plan (Injury and Illness Prevention Program)

REV  
NC

Page 15 of 24

### 5.14.2 Federal OSHA Notification

The Program Manager or EH&S notifies OSHA at (800) 475-4020 within 8 hours of a work-related death or the in-patient hospitalization of three or more employees resulting from SBAR operations. Report the employer's name (SBAR, Inc.), accident location, date and time of the accident, number of fatalities or hospitalized employees, company contact person, phone number, and a brief description of the incident. (**NOTE:** For incidents outside of California, the same notification is made to the appropriate OSHA region headquarters.)

Per OSHA Instruction CPL 2.43 "hospitalization" means to be sent to a hospital, or go to a hospital, or to be admitted to a hospital or an equivalent medical facility whether or not treatment was provided and without regard to the length of stay in the hospital. The amount or degree of treatment provided at the hospital is not the issue.

### 5.14.3 State OSHA Notification

The Program Manager or EH&S notifies the appropriate state OSHA (e.g., Cal/OSHA) district office, when required. For Ventura and Vandenberg AFB operations, the district office is in Ventura, (805) 654-4581. For San Diego operations, the district office is in San Diego, (619) 767-2280. (**NOTE:** For incidents outside of California, comply with the reporting requirements of the appropriate state OSHA.) The following events require Cal/OSHA notification within 24 hours:

- An employee is seriously injured on the job or in connection with the job.
- An employee suffers a serious job-related illness.
- An employee dies on the job or in connection with the job.

Per CAL/OSHA, a serious injury or illness is defined as:

- Injury or illness resulting in death
- The employee is hospitalized for more than 24 hours for reasons other than medical observation.
- The employee loses any part of the body or suffers permanent disfigurement.

Other states may define serious injury or illness differently.





## Quality Assurance Procedure

CP-00-7000

Approved:

Date: 22 February 2005

Title: Safety Plan (Injury and Illness Prevention Program)

REV  
NC

Page 16 of 24

The accident report includes the following:

- Time and date of the accident
- Employer's name, address, and telephone number.
- Name and job title of the person reporting the accident.
- Address where the accident or event occurred.
- Name and address of the injured employee(s).
- Nature of injuries.
- Location (e.g., medical facility) where the injured were moved.
- List and identify law enforcement, fire departments, medical, etc. agencies that responded.
- Accident description and whether the accident scene or any of the equipment or machinery involved has been altered.

In fatal accidents or multiple hospitalization cases, OSHA and state OSHA (e.g., Cal/OSHA) contact will be coordinated with the President/CEO or Executive Vice President.

### 5.15 Early Return to Work Program

SBAR makes every effort to provide temporary, light duty work for employees who are restricted from their regular work due to a work-related injury. This program helps injured workers in their rehabilitation from the injury and controls workers' compensation costs. The procedures are as follows:

- Employees having work related injuries and who are restricted from regular work duties are considered and evaluated for temporary modified work by the Program Manager, EH&S office, and applicable FAM.
- All modified work tasks are justified as a valid need of the operation. Tasks are selected for varying degrees of ability, effort, experience and skill requirements.
- Modified duty positions are assigned in accordance with the attending physician's work restrictions.
- In some cases, the period of time for the availability of temporary work is restricted.
- If the employee is unable to return to his/her former position within a "reasonable" period of time, the modified duty position is eliminated.





## Quality Assurance Procedure

CP-00-7000

Approved:

Date: 22 February 2005

Title: Safety Plan (Injury and Illness Prevention Program)

REV  
NC

Page 17 of 24

- If the injured employee is released for temporary modified work by the attending physician, the employee reports to work on the date indicated or within two days of receiving the work release. If the employee fails to report to work when notified, this act is considered a violation of employee work rules and may result in termination of employment.

### 5.16 Inspections

Federal/state OSHA regulations require periodic inspections of the safety program and are normally accomplished at the program/contract level. Inspections are documented, including the date of the inspection, inspector's name(s), findings, recommendations, and follow-up of previous discrepancies or recommendations. EH&S develops, revises (as needed) and distributes inspection checklists. Inspections evaluate the following general areas:

- Compliance with applicable federal, state, local, and military regulations, ordinances, codes, and laws. This includes subcontractor safety performance.
- Status of training, certification, and equipment familiarity.
- Subcontractor safety compliance.
- Work area housekeeping and the absence of avoidable hazardous situations.
- Safety and health warning signs and notices.
- Availability and use of the appropriate personal protective equipment (PPE).
- Appropriate safety certificates and permits for potentially hazardous work (e.g., "burn" permits, confined space permits).
- The presence of strong supervision and a positive attitude towards safety.


EH&S promptly informs the appropriate FAM and Program Manager of any serious safety deficiencies. Safety deficiencies involving subcontractors are also reported to company contracting personnel for action, as appropriate. Further, serious safety deficiencies are also reported in the PAR Database.

For High Risk operations, to include jobs involving fall protection, EH&S conducts an inspection and briefing at the job site with the project lead/foreman prior to the work commencing. This includes both SBAR and subcontractor operations. This inspection is recorded on the [Form CP-00-7000-D Field Safety Briefing and Inspection Checklist](#). EH&S revises/tailors this checklist as necessary. Further, subcontractors are not allowed to proceed unless they've demonstrated their ability to comply with relevant safety rules and directives.



## Quality Assurance Procedure

CP-00-7000

Approved: 	Date: 22 February 2005	
Title: Safety Plan (Injury and Illness Prevention Program)	REV NC	Page 18 of 24

### 5.17 Housekeeping

All employees are required to practice good housekeeping in their work areas.

### 5.18 Emergency Action Plans and Fire Prevention

SBAR has developed emergency action and fire prevention programs IAW 29 CFR 1910.157, T8 3220/3221, and specific customer safety plans (e.g., various Space Launch Complex (SLC) safety plans). OSHA regulations from other states have similar requirements.

#### 5.18.1 Emergencies

In cases of injury, lead/supervisory personnel take charge and ensure area personnel are aware of the situation, stabilize the accident scene, first aid is administered, 911 and/or the appropriate customer's emergency response center is called, etc. Next, lead/supervisory personnel promptly notify the appropriate company FAM and EH&S who jointly respond to the scene. Further, in case of injury or alleged injury to a non-SBAR employee, the lead/supervisor obtains the names, addresses, phone numbers, etc. of the personnel involved/injured.

In the event of a fire or some other emergency, personnel immediately notify 911 and/or the customer's emergency response center, evacuate the facility, and, if possible, fight the fire. SBAR personnel use extreme caution and are only authorized to fight "trash can" type fires. Additionally, someone is designated to meet the fire department and direct them to the scene.

#### 5.18.2 Fire Prevention and Protection

Fire extinguishers are provided where necessary. All extinguishers are inspected, serviced, and maintained annually. Inspections are recorded on the inspection tag attached to each extinguisher.

No material is burned at the project site. **Explosives are not used at project sites unless approved by the customer's contracting officer.** Only approved temporary heating devices are used and all flammable and combustible materials are handled and stored in compliance with NFPA 30 and customer safety requirements. Finally, "No Smoking" signs are provided as appropriate.


### 5.19 Personal Protective Equipment (PPE)

SBAR provides the appropriate PPE to all employees. Subcontractors do the same for their employees, as required. Commonly required items are safety toe footwear, hard hats



## Quality Assurance Procedure

CP-00-7000

Approved: 	Date: 22 February 2005	
Title: Safety Plan (Injury and Illness Prevention Program)	REV NC	Page 19 of 24

goggles/face shields, gloves, hearing protection, respirators, personal fall protection equipment, etc.

### 5.20 Violations/Hazards

When a safety violation or hazard is discovered, the violation/hazard is corrected as soon as possible. If the violation/hazard is life threatening, could cause injury, or could result in equipment damage, the employee discovering the violation/hazard issues a Safety Hold and work in the affected area is immediately terminated until the situation is corrected/abated. Further, employees who knowingly violate safety rules and procedures are subject to appropriate administrative and/or disciplinary measures IAW existing company policies and procedures.

### 5.21 Sanitation and Medical Requirements

Potable water is obtained from the existing domestic water system, bottled water, and/or water jugs are provided. For water jugs, disposable paper drinking cups, from a covered dispenser, are required. Additionally, receptacles for disposal of the cups are provided and all containers are kept in a sanitary condition. Further, chemical toilets and portable washing facilities are provided when working in remote areas.

First aid and CPR training is provided to all employees working in remote areas (15 minutes from medical treatment) and first aid kits are located at all job sites. Personnel injured on the project site receive emergency first aid and are transferred to the nearest medical facility.

### 5.22 Hazardous Materials

SBAR complies with the Hazard Communication Standard program IAW 29 CFR 1910.1200, Subpart Z and the California Hazard Communication program IAW T8 CCR 5194. Other states have similar requirements. Also, for California sites, SBAR complies with California's Proposition 65 (Prop 65) program. Basically, before any new chemical is introduced to the work site, the EH&S first reviews the Material Safety Data Sheet (MSDS) to determine if the chemical is safe to use. Further, SBAR complies with the customers' hazardous material programs. See [SBAR Hazard Communication \(HAZCOM\) Program WI \(CP-00-7000-01\)](#).


### 5.23 Temporary Electrical Service

When required, temporary electrical service is installed and maintained to conform to all of the requirements of Division XV, EM 385-1-1 along with all applicable provisions of the NEC. Further, where required, appropriate warning signs are posted. All temporary components



## Quality Assurance Procedure

CP-00-7000

Approved: 	Date: 22 February 2005	
Title: Safety Plan (Injury and Illness Prevention Program)	REV NC	Page 20 of 24

are plainly marked to indicate the maximum operating voltage, and all circuits are protected against overload and grounded.

### 5.24 Equipment/Machinery

Before any machinery or mechanized equipment is placed in service, it is inspected, checked and determined to be in safe operating condition. The vendor providing rented equipment provides "certification" as to the safety and hands-on training of the operation of the equipment in question. Records of tests, inspections, and training are maintained.

Ongoing inspections are made at such intervals as necessary to insure a safe operating condition and proper maintenance. Any machinery or equipment found to be in an unsafe operating condition is tagged at the operator's position with a DD Form 1577 (Unserviceable (Condemned) Tag-Material), a DD Form 1577-2 (Unserviceable (Repairable) Tag-Material), an AF Form 981(Out of Order), or similar form. The equipment/machinery cannot be used until the unsafe condition has been corrected. Only the person installing the tag, or their supervisor, may remove the tag and put the unit back into service.

All repairs on machinery or equipment are made at a location that ensures the safety of mechanics. Heavy machinery, equipment, or parts thereof which are suspended or held apart by use of slings, hoists, or jacks are also substantially blocked or cribbed before workers are permitted to work underneath or between them. Aerial platforms, bulldozer blades, forklifts, and scraper blades are lowered to rest when not in use.


The following additional practices are also observed:

- Inspections for determination of road conditions and structures are made to ensure that load capacities are safe for the passage or placing of machinery or equipment.
- Platforms of all hoisting equipment are equipped with "broken cable" safety devices.
- Ropes, slings, cables and chains utilized for lifting are thoroughly inspected before each use. Subcontractors are required to furnish proof of load testing on any cranes and lifting equipment utilized.
- When signaling is required, only dependable and fully qualified personnel are used as signalmen in hoisting operations.
- Where traffic controls are required, danger signs and instructional safety signs in the proper color and quantity are installed. Danger signs are prominently displayed as well as "Slow," "Caution," and "No Smoking" signs.



## Quality Assurance Procedure

CP-00-7000

Approved: 	Date: 22 February 2005	
Title: Safety Plan (Injury and Illness Prevention Program)	REV NC	Page 21 of 24

### 5.25 Confined Space Entry

In accordance with 29 CFR 1910.146 and T8 CCR 5156-5159, SBAR complies with OSHA and state (e.g., Cal/OSHA) confined spaces programs. Mandatory actions for working in and around confined spaces have been established. SBAR and subcontractor personnel will not enter any confined spaces without EH&S first determining whether or not the space is a Permit or Non-Permit space. See [SBAR Confined Space Program WI \(CP-00-7000-05\)](#).

### 5.26 Asbestos

Under no circumstances are SBAR personnel authorized to disturb materials containing friable asbestos fibers. This includes, but is not limited to, floor and ceiling tile, piping insulation, Transite shingles and siding. If asbestos is suspected in the workplace, an asbestos survey is conducted. If asbestos is present, a certified asbestos contractor removes the asbestos prior to company personnel beginning work.

### 5.27 Lead/Cadmium Base Paint

SBAR has initiated procedures to ensure personnel are not exposed to harmful levels of lead and/or cadmium; therefore, strict compliance with 29 CFR 1926.62, 29 CFR 1910.1025, T8 CCR 5216, and T8 CCR 1532.1 requirements is mandatory. Further, some customers have their own policies and procedures concerning lead and/or cadmium. For example, Vandenberg AFB has published 30 SW PLAN 32-1002, Lead-Based Paint Management Plan.

Basically, prior to commencing any work, where lead and/or cadmium base paint may be present, a laboratory analysis of the paint to be removed is obtained. Field test kits do not fulfill this requirement. If lead and/or cadmium are present, strict compliance with all of the above-cited documents is mandatory.

### 5.28 Hantavirus


Hantavirus, a serious respiratory illness, is present in dead rodents and rodent excrement. Normally, the risk to humans is small. However, large infestations, especially dried droppings, pose a greater health risk. Unfortunately, on some projects/contracts company employees and subcontractors frequently work in areas where they are likely to encounter dead rodents and/or rodent droppings.

Current Air Force safety precautions (other customers may have similar requirements) state that if the infestation (dead animals or feces) is small and a person is upwind of the site, the infestation can be safely removed using a general purpose disinfectant, latex gloves, plastic bags, and a face shield. If the infestation is large and/or the employee cannot remain upwind of the



## Quality Assurance Procedure

CP-00-7000

Approved: 	Date: 22 February 2005	
Title: Safety Plan (Injury and Illness Prevention Program)	REV NC	Page 22 of 24

site, a HEPA respirator is required to be worn in addition to the above precautions. SBAR follows these precautions and/or hires a contractor specifically trained to deal with such infestations.

### 5.29 Hearing Conservation

On some projects/contracts, SBAR personnel are exposed to harmful levels of occupational noise. Therefore, the company has procedures for a hearing conservation program IAW 29 CFR 1910.95 and T8 CCR 5097/5099 requirements (other state's OSHA departments have similar requirements). The hearing conservation program includes procedures for noise surveys, audiometric testing, use of hearing protection, access to information and training materials, etc. Further, SBAR provides the appropriate hearing protection (i.e., PPE) for each affected employee and, in some cases, institutes administrative controls (e.g., restrict employee exposure) to further protect the hearing of employees. See MCA [Hearing Conservation WI \(MCA-00-7000-03\)](#).

### 5.30 Lockout/Tagout

SBAR has procedures for a lockout/tagout program that implements 29 CFR 1910.147 and CAL/OSHA Pamphlet S-515. See [MCA Lockout/Tagout WI \(MCA-00-7000-02\)](#).

### 5.31 Respiratory Protection

SBAR has procedures for a respiratory protection program IAW 29 CFR 1910.134 and T8 CCR 5144, respectively. See SBAR *Respiratory Protection Program WI (CP-00-7000-04)*.

### 5.32 Fall Protection

Fall protection program requirements are program/site specific and SBAR complies with 29 CFR 1926.503 and T8 CCR 1671.1, respectively. Again, other state's OSHA departments have similar requirements.


### 5.33 Scaffolding

Scaffolding is erected IAW OSHA (29 CFR 1910.28), Cal/OSHA (T8 CCR 3622), and the manufacturer's instructions. Further, anytime scaffolding is erected for the first time, EH&S or other qualified individual inspects the scaffolding prior to use.



## Quality Assurance Procedure

CP-00-7000

Approved: 	Date: 22 February 2005	
Title: Safety Plan (Injury and Illness Prevention Program)	REV NC	Page 23 of 24


### 5.34 New Compliance Programs

As new OSHA, state OSHA (e.g., Cal/OSHA), customer (e.g., Air Force, Navy), etc. safety rules and regulations are promulgated, this procedure is revised, as necessary. If warranted, the various EH&S functions develop new work instructions (WI) and/or current WIs are revised to accommodate the regulatory changes. Additionally, EH&S offices ensure personnel training requirements are met in a timely fashion.



## Quality Assurance Procedure

CP-00-7000

Approved: 	Date: 22 February 2005	
Title: Safety Plan (Injury and Illness Prevention Program)	REV NC	Page 24 of 24


### PREPARATION, REVIEW, AND APPROVAL OFFICIALS

**Prepared By:**



R. W. Stone  
Lead Auditor  
MCA Quality Manager

**Reviewed By:**



M. T. Schmoll  
Director Corporate Programs

**Reviewed By:**



George C. Hambrick  
Executive Vice President  
President, MCA Engineers

**Approved By:**



Grace Vaswani  
President/CEO

### CONTROLLED DISTRIBUTION LIST

**Copy No.**

Master (Electronic)  
Copy

**Copy Custodian**

Quality Manager  
SBAR Web Site/Various Office Servers