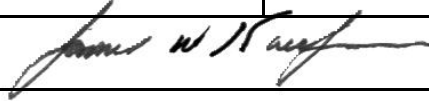


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1.0 POLICY/PURPOSE

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 a safety plan per the LO&SC contract and doubles as the *Injury and Illness Prevention Program* (IIPP, T8 CCR 3203).

2.0 SCOPE

MCA personnel specifically fall under this IIPP while EG&G has developed its own separate IIPP, approved by MCA. This work instruction establishes minimum requirements for all LO&SC operations, to include subcontractors.

3.0 REFERENCES AND DEFINITIONS

3.1 References

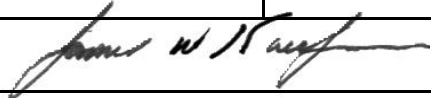
- *ISO 9001: Quality Management Systems-Requirements, Third Edition (2000-12-15)*
- 29 CFR 1910: Occupational Safety and Health Standards.
- 29 CFR 1926: Safety and Health Regulations for Construction
- EWR 127-1 (Ch 1, 3, 5, & 6): Eastern and Western Range 127-1 (EWR 127-1).
- AFOSH standards referenced in the contract and EWR 127-1.
- American National Standards Institute (ANSI) standards, technical orders (T.O.s), American Welding Society (AWS) standards, etc.

NOTE

Cal/OSHA has concurrent jurisdiction with Federal OSHA below Honda Ridge.

- T8 CCR, Chapter 4, Subchapters 1,2: Unfired Pressure Vessel Safety Orders Boiler and Fired Pressure Vessel Safety Orders.

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- 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*.
- Space Launch Complex (SLC) Safety Plans for SLC-2, SLC-3, and SLC-4.
- AFPAM 91-215, *Operational Risk Management (ORM) Guidelines and Tools*
- AFI91-301, *Air Force Occupational and Environmental Safety, Fire Protection, and Health (AFOSH) Program*

3.2 Definitions/Abbreviations

CCR: California Code of Regulations.

CFR: Code of Federal Regulations

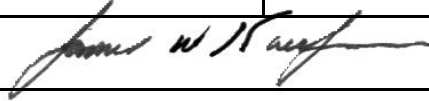
Environmental Health and Safety (EH&S): The LO&SC staff function responsible for the LO&SC safety and environmental programs.

Functional Area Manager (FAM): A senior supervisory individual who is responsible for the leadership, direction, and overall success of an area of the LO&SC, 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.

LO&SC: Launch Operations and Support Contract.

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Major Mission Degradation: A scheduled Western Test Range (WTR) mission is cancelled and/or rescheduled due to a mishap involving LO&SC personnel and/or LO&SC maintained equipment. There is no minimum dollar amount associated with the mishap.

Major System Damage: A Customer's (e.g., Air Force, NASA) equipment and/or property is harmed by LO&SC operations; however, there is no WTR mission impact. Damage is greater than \$10,000.

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

Minor System Damage: A Customer's (e.g., Air Force, NASA) equipment and/or property is harmed by LO&SC operations; however, there is no WTR mission impact. Damage is less 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.

PPE: Personal Protective Equipment.

Probability: The likelihood that an individual event will occur.

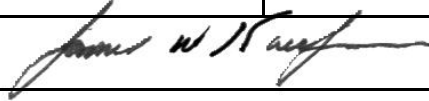
Risk: The probability and severity of failure or loss from exposure to various hazards.

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 and EH&S have removed the Safety Hold.

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

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4.0 RESPONSIBILITIES

4.1 Product Assurance (PA) Manager

The PA Manager is responsible for this WI, provides technical support to the EH&SS (as needed), and performs the duties of the EH& SS when that person is absent.

4.2 Program Manager

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

4.3 Environmental Health and Safety Specialist (EH&SS)

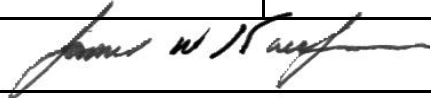
The EH&SS is responsible for the implementation and administration of the safety program and has authority to:

- Report the status of the safety program to LO&SC managers.
- Issue and enforce Safety Holds when requirements are either not met or when there is doubt as to whether or not those requirements will be fulfilled.

Additionally, the EH&SS:

- Ensures safety and health inspections of LO&SC operations are conducted and documented, notifying management and supervisory personnel of any violations and/or unacceptable attitude towards safety and health.
- Conducts risk assessments.
- Establish a liaison with Air Force safety personnel to ensure that LO&SC 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, upon approval of the Contracts/Procurement Manager.

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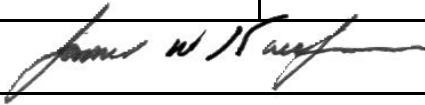
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- Ensure a general safety briefing and orientation for new LO&SC employees and subcontractors is conducted before they begin work.
- Implement a safety-training program.
- Ensure that safety notices are posted throughout work areas.
- Conduct and document mishap investigations.
- Investigate and resolve any accidents or exposure to hazardous substances.
- Ensure inclusion of safety requirements in all MCA and subcontractor project Statements of Work.
- Maintain updated regulations and standards through subscription/update services (e.g., OSHA and Cal/OSHA web sites, *California REGWATCH*, VAFB Technical Library, internet searches, etc.)
- In coordination with EG&G, revise as needed and publish the *Code of Safe Practices*.
- Review and evaluate MCA and subcontractor Job Safety Analyses to ensure that they adequately cover all aspects of a proposed job.
- As necessary, conduct pre-performance briefings and on site inspections to ensure that MCA and subcontractor personnel are properly supervised, trained, motivated and in possession of the proper PPE for the job at hand.
- Maintain a record of increased/decreased costs to the contract as a result of regulatory changes. Once these changes reach \$25,000, notify the MCA Program Manager. (**NOTE:** The Program Manager negotiates equitable adjustments with the Government, as necessary.)

4.5 Contracts/Procurement Manager

The Contracts/Procurement Manager ensures subcontractors comply with the relative portions of this plan as well as all pertinent OSHA, Cal/OSHA, and Air Force safety directives.

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4.6 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*.

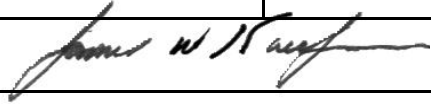
4.7 Employees

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 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 EH&S. Employee suggestions for safety are always welcome! Further, when appropriate, employees use AF Forms 457, USAF Hazard Report, to report hazardous situations to the Air Force.

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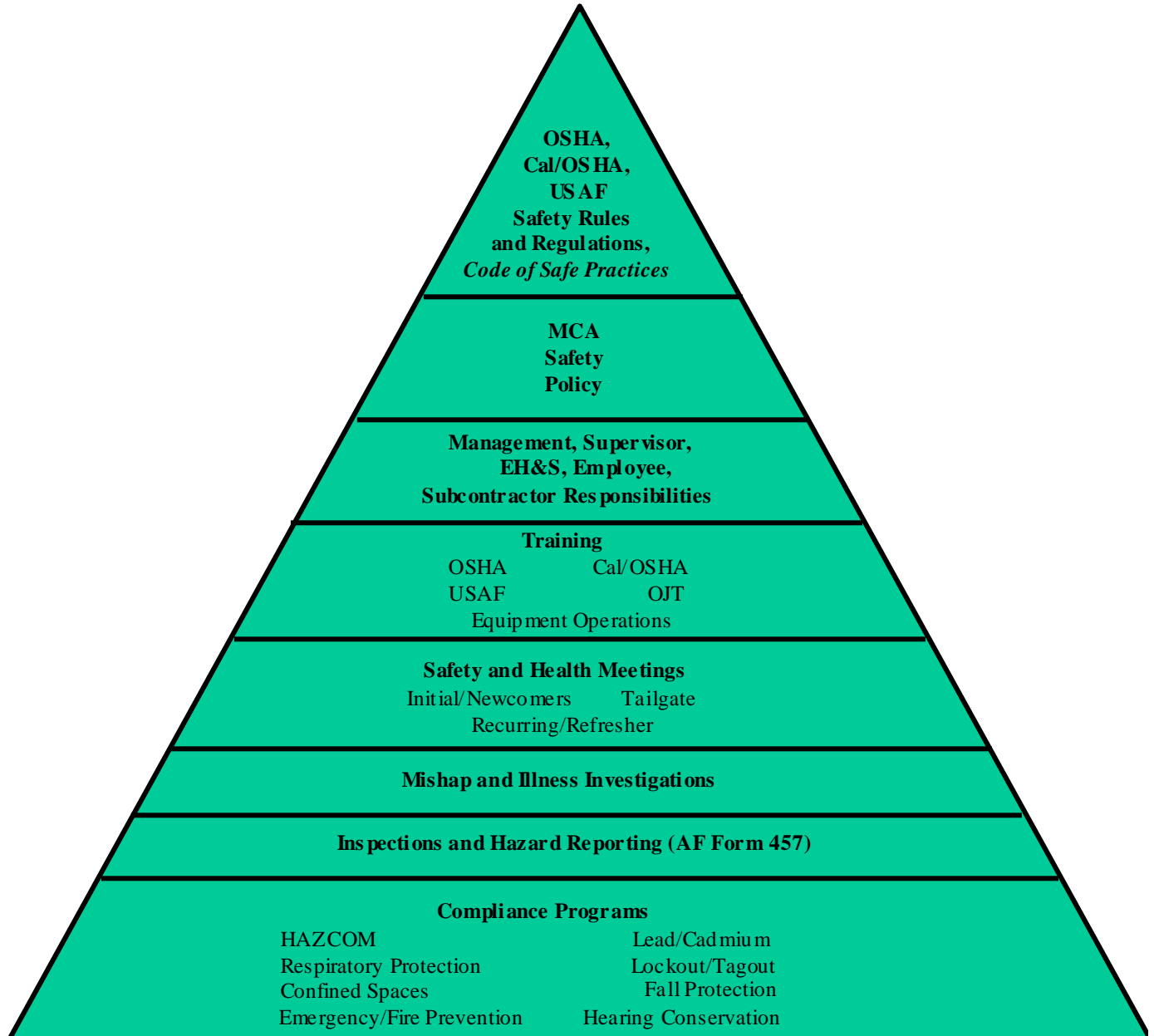
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5.0 REQUIREMENTS/PROCEDURES:

Figure 1 -- Safety Program Overview



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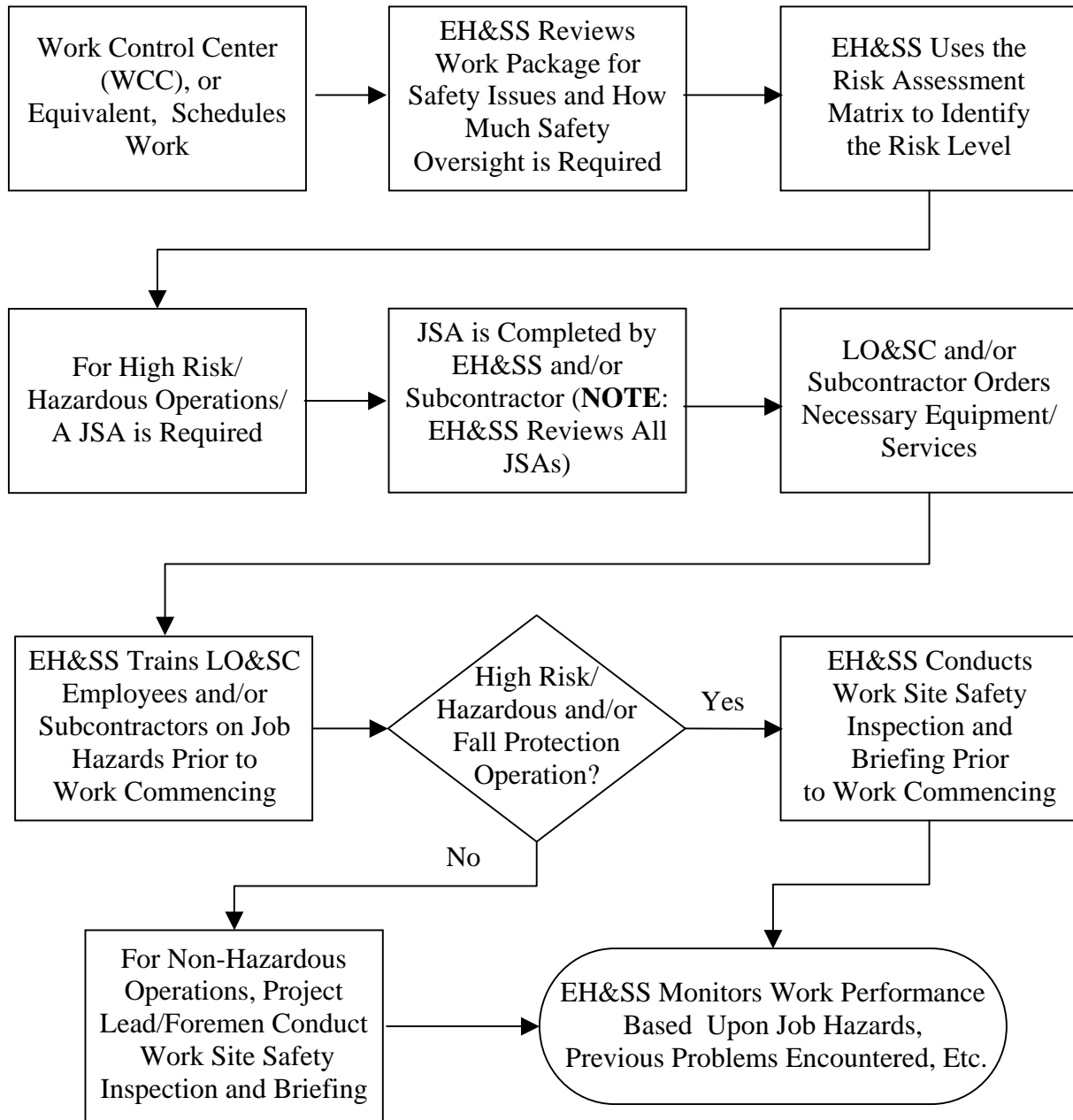
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Figure 2 -- Process Flow for Safety Planning



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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.

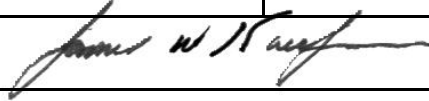
Likely: Occurs several times in the life of the system.

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

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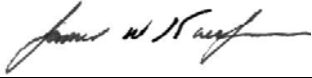
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5.1 General

The Launch Operations and Support Contract (LO&SC), Contract No. F04684-98-C-0014, provides mission essential support for ground systems associated with launch operations and ensures continuing timely, responsive, and technical excellence in mission and test support by the 30 Space Wing (30 SW) to the space, ballistic missile, and related programs operating at Vandenberg AFB, CA. MCA Engineers, Inc. is teamed with EG&G (corrosion control) and are the nucleus of the LO&SC. The LO&SC team is responsible for providing and managing a skilled work-force capable of providing services in the following areas:

- Planning and Programming
- Design
- Studies and Analysis
- Installation
- Fabrication
- Project Coordination/Scheduling
- Repairs, Modification, and Refurbishment
- Quality Control, Testing, and Inspection
- Drafting and Documentation
- Documentation Updating and Maintenance
- Surveillance
- Cost Estimating
- Operation and Maintenance
- Corrosion Control
- Safety and Environmental Compliance

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5.2 MCA Safety Policy Statement

The management of MCA Engineers 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 all will benefit.

5.3 Safety Planning

A Job Safety Analysis, using the National Safety Council's Job Safety Analysis form or a similar facsimile [\\xmca00861m-208\ISO 9001\Forms \(LO&SC\)\JSA Form.doc](\\xmca00861m-208\ISO 9001\Forms (LO&SC)\JSA Form.doc) [\\xmca00861m-208\ISO 9001\Forms \(LO&SC\)\JSA Form \(Directions\).doc](\\xmca00861m-208\ISO 9001\Forms (LO&SC)\JSA Form (Directions).doc), is developed prior to commencing any work where the hazards are unknown, personnel are unsure as to which safety precautions are required, and/or the work is categorized as High Risk. This analysis is also required for some subcontractor operations. Further, EH&S reviews all draft Task Assignments and Work Requests statements of work to ensure all relevant safety requirements are understood and the proper precautions are observed for the forthcoming work.

EH&S 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, 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.
- Types of equipment to be used.

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- 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.

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5.4 Risk Assessment

During the planning process, the LO&SC 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 work week (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 LO&SC 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., Technical Services, Corrosion Control), and the EH&SS.

5.6 Code of Safe Practices

EH&S publishes, and when needed, revises the *Code of Safe Practices*. [\\xmca00861m-208\ISO 9001\Safety \(LO&SC\)\Code of Safe Practices\Code of Safe Practices.doc](\\xmca00861m-208\ISO 9001\Safety (LO&SC)\Code of Safe Practices\Code of Safe Practices.doc) The *Code of Safe Practices* lists mandatory safety precautions that are enforced throughout the LO&SC. This document is signed by the EH&SS and distributed to each employee. 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, EH&S may waive specific portions (e.g., safety toe boots) for subcontractor operations where *Code* requirements are unnecessary or inappropriate.

5.7 New Employees and Subcontractor Safety Training

All new LO&SC 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 to encounter at the job

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site. Safety meetings conducted by the subcontractors at the various project sites supplement this briefing.

5.8 OSHA REQUIRED TRAINING

Both Federal and California OSHA have mandated several general training requirements. The EH&SS 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 MEETINGS

LO&SC supervisors constantly acquaint and instruct their personnel on job safety topics that are pertinent to work in progress. Bi-Weekly safety meetings emphasize strict adherence to safety procedures through films, lectures, and safety pamphlets/posters. Additionally, these meetings fulfill the requirement for a "labor/management safety and health committee" and discuss the following topics:

- 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.

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- Results of employee safety suggestions.
- Confirmations that identified hazards have been either abated or measures taken to reduce/eliminate the hazard.
- Safety Training

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 EH&SS decide who is required to attend, on a case-by-case basis.

The EH&S Office maintains records of all safety and health meetings giving the date, attendees, and topics of discussion. Employees and OSHA (federal and California) 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, lead technicians/foremen prepare the accident report within 24 hours of the incident and forward it to the appropriate FAM, who then forwards the report to EH&S. If warranted, EH&S uses the accident report to conduct a formal investigation and, when warranted, EH&S prepares a formal written report. Further, as required by OSHA regulations, the applicable company (MCA or EG&G) prepares 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:

- Program Manager
- EH&SS

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- Product Assurance Manager
- Applicable LO&SC manager
- Contracts/Procurement 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 Air Force, federal or Cal/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 respective corporate president or designee.

NOTE

THE PROGRAM MANAGER IS AUHTORIZED TO CONVENE THE MISHAP INVESTIGATION COMMITTEE FOR OTHER TYPES OF 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 SBAR President/Vice President.

5.14 NOTIFICATION OF OUTSIDE AGENCIES

NOTE

RECORD THE DATE, TIME, AND NAME OF THE USAF, CAL/OSHA, AND FEDERAL OSHA REPRESENTATIVE CONTACTED. A FAX OR E-MAIL IS USED TO RECORD/VERIFY THE TELEPHONE NOTIFICATION (S).

5.14.1 USAF Notification

For all LO&SC operations, 30 SW/SEGP, 5-7233, expects to be promptly notified of all personal injuries (military, DoD civilian, MCA, and/or subcontractor) and Government equipment damage, regardless of the injury/illness and/or property damage. The EH&SS makes these notifications to 30 SW/SEGP via e-mail.

5.14.2 Federal OSHA Notification

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 LO&SC operations. Report the

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LO&SC employer's name, accident location, date and time of the accident, number of fatalities or hospitalized employees, LO&SC contact person, phone number, and a brief description of the incident.

NOTE

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 CAL/OSHA NOTIFICATION

NOTE

CAL/OSHA HAS JURISDICTION SOUTH OF HONDA RIDGE ON VAFB. REFER TO T8 CCR 342 FOR ADDITIONAL INFORMATION.

Under the following circumstances, EH&S is responsible for notifying the Cal/OSHA district office in Ventura at (805) 654-4581 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.

NOTE

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.**
- **AN EMPLOYEE LOSES ANY PART OF THE BODY OR SUFFERS PERMANENT DISFIGUREMENT.**

The accident report includes the following:

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- 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 Cal/OSHA contact will be coordinated with the respective corporate president or designee.

5.15 EARLY RETURN TO WORK PROGRAM

The LO&SC 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 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.

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- If the employee is unable to return to his/her former position within a “reasonable” period of time, the modified duty position is eliminated.
- If the an 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

EH&S conducts safety and health inspections of ongoing work, including subcontractors. For High-Risk subcontractor operations and jobs involving fall protection, EH&S conducts an inspection and briefing at the job site with the subcontractor and project lead prior to the work commencing. This inspection is recorded on the *LO&SC Field Safety Briefing & Inspection Checklist* [\\xmca00861m-208\ISO 9001\Forms \(LO&SC\)\Field Safety Inspection & Briefing.doc](\\xmca00861m-208\ISO 9001\Forms (LO&SC)\Field Safety Inspection & Briefing.doc) EH&S revises this checklist as necessary. Subcontractors are not allowed to proceed unless they’ve demonstrated their ability to comply with relevant safety rules and directives.

The EH&SS documents inspections, including the date of the inspection, inspector's name(s), findings, recommendations, and follow-up of previous discrepancies or recommendations. Further, 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
- 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).

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- The presence of strong supervision and a positive attitude towards safety.

EH&S promptly informs the appropriate LO&SC FAM and Program Manager of any serious safety deficiencies. Safety deficiencies involving subcontractors are also reported to the Contracts/Procurement Manager for action, as appropriate.

5.17 HOUSEKEEPING

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

5.18 Emergency Action Plans and Fire Prevention

The LO&SC has developed emergency action and fire prevention programs IAW 29 CFR 1910.157, T8 3220/3221, EWR 127-1, and the various Space Launch Complex (SLC) safety plans.

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 SLC Squadron Coordination Center (SCC) is called, someone is designated to meet the ambulance, etc. Next, lead/supervisory personnel promptly notify the appropriate LO&SC manager and EH&S who jointly respond to the scene. Further, in case of injury or alleged injury to a non-LO&SC 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 SCC, evacuate the facility, and, if possible, fight the fire. LO&SC personnel use extreme caution and are only authorized to fight "trash can" type fires. Personnel designate someone 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 Government Contracting Officer.** Only approved temporary heating devices

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are used and all flammable and combustible materials are handled and stored in compliance with NFPA 30 and AFOSH STD 91-43. Finally, "No Smoking" signs are provided as appropriate.

5.19 PERSONAL PROTECTIVE EQUIPMENT (PPE)

LO&SC 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, 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 policies and procedures.

5.21 SANITATION AND MEDICAL REQUIREMENTS

Potable water is obtained from the existing domestic water and/or bottled water is provided. Subcontractors provide disposable paper drinking cups from a covered dispenser and receptacles for disposal of the cups. All containers are kept in a sanitary condition. Chemical toilets and portable washing facilities are provided when working in remote areas.

NOTE

REMOTE LOCATIONS ARE THOSE AREAS THAT CANNOT BE SERVICED BY AN AMBULANCE WITHIN 15 MINUTES.

First aid and CPR training is provided to all employees working in remote areas. 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 (e.g., Santa Barbara Medical Foundation, Lompoc hospital).

5.22 HAZARDOUS MATERIALS

LO&SC has implemented the Hazard Communication Standard program IAW 29 CFR 1910.1200, Subpart Z and the California Hazard Communication program IAW T8 CCR 5194. The EH&S Office, prior to any hazardous material being used for the first time, requires a material safety data sheet (MSDS). LO&SC management notifies the Government Contracting

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Officer and Government Program Manager of any hazardous materials that are encountered and are outside the scope of the contract.

All hazardous materials are ordered through the HAZMART per the LO&SC contract. For first time orders, the Logistics Office obtains a MSDS prior to placing an order with the Air Force supply system.

Prior to introducing any new chemical into the job sites, EH&S reviews the MSDS for Proposition 65 (Prop 65) chemicals and Director's List of Hazardous Substances (Director's List). If any of these chemicals/substances are to be used, EH&S notifies all affected employees and discuss with them the appropriate precautions to take when using the specific chemical. EH&S then updates the master Prop 65/Director's List and distributes it throughout the work force.

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.

Where required, appropriate warning signs are posted. All temporary components 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

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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.

5. 25 CONFINED SPACE ENTRY

In accordance with 29 CFR 1910.146 and T8 CCR 5156-5159, LO&SC has a safety program/procedure for confined spaces that establishes mandatory actions for working in and around confined spaces. LO&SC personnel will not enter any confined spaces without EH&S first determining whether or not the space is a Permit or Non-Permit space.

5. 26 ASBESTOS

Under no circumstances are LO&SC personnel authorized to disturb materials containing friable asbestos fibers. This includes floor and ceiling tile. If asbestos is suspected in the workplace, EH&S notifies the base asbestos control office, 30 CES/CEV. CEV and EH&S review the appropriate asbestos survey to determine if it's safe for LO&SC personnel to proceed. If asbestos is present, a certified asbestos contractor removes the asbestos prior to LO&SC personnel beginning work

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5. 27 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, LO&SC employees frequently work in areas where they are likely to encounter dead rodents and/or rodent droppings.

Current Air Force safety precautions 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 site, a HEPA respirator is required to be worn in addition to the above precautions. In any event, contact EH&S for guidance when dead rodents or their droppings are encountered.

5. 28 HEARING CONSERVATION

Most LO&SC personnel, especially painters, are exposed to harmful levels of occupational noise. Therefore, LO&SC has instituted a hearing conservation program IAW 29 CFR 1910.95 and T8 CCR 5097/5099 requirements. The hearing conservation program includes procedures for noise surveys, audiometric testing, use of hearing protection, access to information and training materials, etc.

LO&SC 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.

5. 29 LOCKOUT/TAGOUT

LO&SC has a lockout/tagout program that implements 29 CFR 1910.147 and CAL/OSHA Pamphlet S-515.

5. 30 Respiratory Protection

LO&SC has a respiratory protection program IAW 29 CFR 1910.134 and T8 CCR 5144, respectively. EG&G and MCA maintain their own separate respiratory protection programs IAW OSHA, Cal/OSHA, and respective company policy. After receiving a favorable written medical review, the unconventional fuels contractor conducts initial, refresher (as needed), and annual training for MCA personnel. EG&G personnel receive their training through their union.

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5. 31 Fall Protection

LO&SC has implemented the fall protection program IAW 29 CFR 1926.503 and T8 CCR 1671.1, respectively. The following additional procedures are also implemented:

- The MCA and EG&G safety staffs inspect their respective company's personal fall arrest equipment at least every six months. These inspections are conducted in December and June of each year and the applicable equipment is tagged/labeled with the date inspected, date next inspection due, and inspector's signature/initials.
- Personal fall arrest equipment failing inspection, whether inspected by the user or the safety staffs, is immediately destroyed. This fact is also reported to Logistics.
- The Bldg 542 and 541 warehouses maintain extra personal fall arrest systems that are ready for immediate issue should the need arise. MCA and EG&G safety personnel are responsible for ensuring this equipment is properly inspected and tagged/labeled.

5. 32 SCAFFOLDING

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

5. 33 New Compliance Programs

As new OSHA, Cal/OSHA, Air Force, etc. safety rules and regulations are promulgated, the PA Manager and EH&SS revise this plan (as needed) and either develops a new work instruction (WI) or revises a current WI to accommodate the regulatory changes. Additionally, EH&S ensures personnel training requirements are met in a timely fashion.

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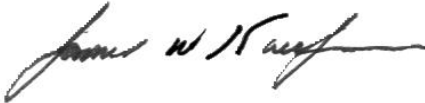
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