

Titan America

SAFETY GUIDELINES
FOR
CONTRACTORS & SUBCONTRACTORS

**MSHA FACILITIES
MANUAL**

Contents

	<i>Page</i>
Purpose of this manual	3
Policy and Goals	3
MSHA Requirements for Independent Contractors	4
Loss Control Responsibilities	7
Disciplinary Policy	9
Communication of Safety and Health Matters	10
Identifying and Evaluating Workplace Hazards	10
Accident, Injury, and Illness Investigations	11
Substance Abuse Policy	11
Reservation of Rights	12
Safety and Health Guidelines	12
MSHA Notice for Contractors	20

PURPOSE

The purpose of this manual is to promote, so far as possible, safe and healthful working conditions for every contractor and subcontractor engaged in project work as well as provide for the safety of the general public from associated hazards by encouraging contractors and subcontractors to assume full responsibility for the administration and enforcement of the Titan America safety guidelines.

DISCLAIMER

This document ***does not***, in any way, intend to replace or modify federal, state and local safety rules and regulations. As such, all contractors and subcontractors shall assume full responsibility for safety and loss control during all phases of their work and shall comply with all applicable federal, state and local safety rules and regulations.

POLICY AND GOAL

It is the policy and goal of Titan America to provide a safe and healthful working environment. To achieve this goal, Titan America has defined safety guidelines for its business operations. All contractors and subcontractors are required to read and become familiar with the Titan America safety guidelines and shall adhere to them while on Titan America property. As such, all contractor and subcontractor employees performing work on Titan America property shall conduct their work in a safe manner consistent with good plant, mine and construction safety practices.

Titan America requires full compliance with all applicable safety guidelines, including but not limited to “project specific” policies, federal, state and local laws, statutes, ordinances, guidelines, requirements, rules, and regulations of government authorities and any other authorities having control or responsibility bearing on the performance of contractor and subcontractor work.

The Titan America safety guidelines, OSHA facilities manual, does not negate, abrogate or otherwise alter the provisions of federal, state and local safety rules and regulations. It is intended to supplement the safety program of each contractor and subcontractor, and to coordinate an overall safety effort. It is understood that the ultimate responsibility for ensuring a safe and healthful working environment rests with each individual contractor and subcontractor.

The Titan America safety guidelines, OSHA facilities manual, is part of the contract documents. All contractors, including own employees, subcontractors, suppliers, vendors, and visitors, are required while on Titan America property and in the conduct of contracts, to comply with the provisions of this manual. **The provisions of the safety guidelines in this manual shall be strictly enforced.** Non-compliance with the provisions of the safety guidelines in this manual shall be treated the same as non-compliance with all contract items. Therefore, any form of non-compliance will result in work stoppage, the dismissal of contractor or subcontractor employees, suppliers, vendors and visitors, and repeated or willful non-compliance will result in contractor dismissal.

Safety will not be sacrificed for production. Safety will be considered an integral part of quality control, cost reduction, and job efficiency. Every level of management and supervision shall be held accountable for the safety performance of employees, subcontractors, suppliers, vendors, and visitors under their supervision.

MSHA REQUIREMENTS FOR INDEPENDENT CONTRACTORS

General Information

The federal Mine Safety and Health Administration (MSHA), part of the U.S. Department of Labor, regulates activities performed at mines, pits and quarries located in the United States and its territories. MSHA defines an “independent contractor” as “any person, partnership, corporation, subsidiary of a corporation, firm, association or other organization that contracts to perform services or construction at a mine.” By contrast, a production-operator means “any owner, lessee, or other person who operates controls or supervises a coal or other mine.”

Independent contractors are specifically regulated under 30 Code of Federal Regulations (CFR) Part 45, pursuant to the 1977 Mine Act. Depending upon the type and duration of work performed at the mine site, independent contractors may also be subject to the training requirements of 30 CFR. Part 46, and safety and health standards contained in 30 CFR. Parts 56, 57 and 58. Production operators are required to maintain certain information for each independent contractor at the mine: the name, address and telephone number of each independent contractor; a description of the nature of the work to be performed by the independent contractor and the location of the work; the independent contractor’s MSHA ID number if any. The production-operator must make this information available to MSHA inspectors upon request.

MSHA ID Numbers for Independent Contractors

Any independent contractor may obtain a permanent MSHA ID number by providing MSHA with its identification information, and the estimated annual hours worked on mine property in the previous calendar year. The Mine Act does not require independent contractors to obtain MSHA ID numbers, but MSHA’s policy holds independent contractors responsible for violations committed by them and their employees.

MSHA’s “General Inspection Procedures” note that, unless cited for a violation, only independent contractors performing the following types of services or construction work at mine sites are required to have MSHA ID numbers.

- Mine development, including shaft and slope sinking
- Construction or reconstruction of mine facilities, including building or rebuilding preparation plants and mining equipment, and building additions to existing facilities
- Demolition of mine facilities
- Construction of dams
- Excavation or earthmoving activities involving mobile equipment
- Equipment installation, such as crushers and mills
- Equipment service or repair of equipment on mine property for a period exceeding five consecutive days at a particular mine
- Material handling within mine property, including haulage of coal, ore, refuse, etc., unless for the sole purpose of direct removal from or delivery to mine property
- Drilling and blasting.

MSHA does not require independent contractors to have identification numbers as a precondition to bidding for work contracts on mine property. If an independent contractor is a successful bidder and the work encompasses any of the nine categories listed on the preceding page, the contractor must obtain an ID number.

MSHA ID numbers have no effect on the compliance responsibility of either the mine operator or the independent contractor. Mine operators have responsibility for all activities at the mine, regardless of whether

the independent contractor has an MSHA ID number. The mine operator's responsibility includes assuring that each independent contractor complies with the Mine Act and all MSHA standards and regulations. Independent contractors are also separately held responsible for compliance with the Mine Act, standards and regulations, regardless of whether or not they have an MSHA ID number.

Reporting Requirements for Independent Contractors

Independent contractors who are performing the types of services or construction work indicated above (see MSHA ID Number section) must report accidents, injuries and illnesses under 30 CFR Part 50.20. In addition, independent contractors must maintain records of such reports under Part 50.40 and file quarterly employment reports under Part 50.30. Without regard to the type of work being performed, all independent contractors are required to comply with the notification, investigation and preservation of evidence requirements of Parts 50.10, 50.11 and 50.12, and they are required to comply with Part 50.41 regarding verification of reports.

Independent contractors must submit separate 7000-2 forms for work performed at metal and nonmetal mines and at coal mines. Separate information must also be provided for surface and underground mines. The independent contractor and the production-operator may coordinate the submission of their quarterly reports so that the production-operator actually submits the report covering the contractor. However, a separate 7000-2 form must be filed for each independent contractor. If the production-operator fails to submit a separate quarterly employment report covering the independent contractor, that contractor may be cited for a violation of its compliance responsibility.

An indexed, comprehensive handbook of MSHA's Metal/Nonmetal Regulations (30 CFR Parts 56, 57 & 58) can be purchased from the National Stone Association at 1 (800) 342-1100.

Questions and Answers Regarding MSHA Qualifications, Orientations, and Training:

- 1) Will the Construction Site be subject to OSHA 1926 or MSHA Construction Standards?

The site will comply with the MSHA Part 46 Standards for training of contractors and for construction.

- 2) Will vendors be required to do the site-specific training?

All vendors will have to attend the site-specific training class as established by Titan America and sign in at the front office.

- 3) How much MSHA training will be required for contractors with less than one-year construction experience?

"Newly-hired" employees will need to take the "24 Hour Training" program as required under Part 46 of MSHA regulations. A minimum of four (4) hours must be completed before they start working at the site, including a site tour. Subsequently, the remaining 20 hours must be completed and certified within 90 days.

- 4) Will accidents be reported to MSHA or OSHA?

All accidents must be reported according to MSHA standards and, as such, must be reported to MSHA Area offices. Serious accidents require notification within 15 minutes.

5) Do all contractors need a MSHA Contractor ID?

No, only the General Contractor must have this ID, which can be obtained by contacting MSHA directly or through their web page www.MSHA.gov or www.elaws.dol.gov/msha/contractorid/msha2.htm.

6) Where is the nearest MSHA office to the jobsite?

7) **VIRGINIA**- Charlottesville VA. U.S. Dept of Labor, MSHA, 319 West Rio Road, Charlottesville, VA. 22901 Tel.: (434) 975-2366

8) **NORTH CAROLINA** – Sanford NC U.S. Dept of Labor; MSHA, 225 Commercial Court, Sanford NC 27330 Tel: (919) 774-8113

9) **KENTUCKY** – Lexington KY U.S. Dept of Labor, MSHA; 152 W. Zandale Drive, Suite 102, Lexington KY 40503 Tel: (859) 276-1384

10) What level of MSHA training will contractors' employees need?

If contractors will be on site for five (5) or more days or will be working on-site off and on over an extended period of time they are required too have:

i) *Contractors' employees with or without at least one-year of construction-work experience (experienced craftsman) will have to be trained in the seven (7) topics of the 30 CFR parts 46.6. This must be part of on-site orientation before each employee starts work.*

ii) *These topics are:*

- *Introductions to work environment, site tour and construction methods. 46.5(b)(1)*
- *Instructions on recognition and avoidance of electrical and other hazards. 46.5(b)(2)*
- *Emergency procedures, escape and firefighting. 46.5(b)(3)*
- *Health and safety aspects of tasks assigned. 46.5 (b)(4)*
- *Instructions as to the statutory rights of minors and their representatives. 46.5 (b)(5)*
- *Authority & Responsibility of supervisors and minors representatives. 46.5(b)(6)*
- *Introduction to the rules and procedures for reporting hazards. 46.5(b)(7)*

iii) *Contractors must comply with either the new miner or newly hired experienced miner training requirements. These requirements require 4 hours before the miner can begin work on the above topics, and then an additional 20 hours within 90 days. 46.5(b)*

11) What level of State Mining Agency training will contractors' employees will need?

12) **DMME (Virginia Department of Mineral Mines and Energy)**

i) *Contractors' employees are required to have a General Mineral Miner (GMM) certification if they are co-mingled with the Titan America miners. Unless the project is totally isolated they are co-mingled)*

ii) *Contractors with three (3) or more workers on-site are required to have a Certified Surface Foreman on-site to conduct work activities and to conduct the workplace examinations.*

13) **NCDENR (North Carolina Department of Environmental and Natural Resources)**

i) *No Specific Training Requirements at this time*

14) **OMSL (Kentucky Office of Mine Safety and Licensing)**

i) *No Specific Training Requirements at this time.*

15) What accident form is applicable to MSHA?

Form 7000-1, which is available from the MSHA. Regional offices.

16) What accident form is applicable to MSHA?

Form 7000-1, which is available from the MSHA. Regional offices.

17) What accident form is applicable to MSHA?

Form 7000-1, which is available from the MSHA. Regional offices.

18) Will contractors have to also maintain the new OSHA 300 log (replaces OSHA 200 log)?

Even though the site is mostly under MSHA jurisdiction, Contractors should consult these respective authorities for clarification.

19) Are there any other applicable codes or standards required by MSHA?

There are additional codes that will be enforced. These pertain to 30 CFR, which include 56, 57 & 58. These codes refer to “compliance of personal protection equipment and construction safety” and can be ordered from Mine Safety Associates, P.O. Box 872, Price, Utah 84501 (435) 637-6477

LOSS CONTROL RESPONSIBILITIES

Contractor Safety Representative

All contractors, of all tiers, shall appoint a competent person (as defined by OSHA) to represent their organization to oversee and actively enforce safety loss control requirements at the jobsite, to include, but limited to the following:

- Identify and evaluate workplace hazards, to include procedures for investigating occupational injuries and illnesses.
- Perform a minimum of one formal safety inspection of the project each week.
- Ensure that all recommendations noted are corrected immediately, and note who corrected the violation, when the correction took place, and what the individual did to abate the violation.
- Distribute and post safety information.
- Monitor the Project Safety Guidelines and subcontractor compliance with these guidelines.
- Assist in the investigation of all accidents, including those of Subcontractors.
- Ensure that employees receive training programs on general and specific safety and health practices for the company and on each of their job assignments.
- Conduct new hire and subcontractor orientation.
- Ensure that there is a procedure for communicating to employees, in an understandable manner, Titan America safety and health rules and procedures.
- Assist the Superintendent with preplanning meetings prior to the start of new phases of construction.
- Ensure compliance with safe and health work practices.
- Ensure that records on training, inspections, and corrective measures are properly maintained, as required by this guide and other state and federal regulations.
- Submit a written report of findings and recommendations to the Superintendent for each inspection, and copy the Titan America Safety Manager.

General Contractor: Project Supervisor

The Project Supervisor's duties and responsibilities include the supervision, management and required compliance to the project safety program by all personnel working on the project. Either the Project Supervisor or "Safety Manager" shall:

- Create a ZERO TOLERANCE POLICY for project safety guideline violations.
- Conduct preplanning meetings with the insurance companies and the Titan America Safety Manager prior to the start of new phases of construction.
- Participate in the development of the Site Specific Project Safety Guidelines, Fire Prevention and Protection Program, Crisis Management Program, and additional safety programs as required.
- Create a Site Logistics Plan of the project.
- Conduct pre-construction safety meetings with all subcontractors prior to their start of work.
- Distribute Site Specific Project Safety Guidelines, Fire Prevention and Protection Program, Crisis Management Program, and additional safety programs as required to each subcontractor before they start work and discuss their active participation in the accident prevention effort.
- Set up the project trailer/office to be compliant with federal, state and local regulations.
- Provide the project trailer/office with a first aid kit, fire extinguishers, exit signs, and an evacuation route.
- Conduct safety orientation for project staff.
- Walk the job on a daily basis, and pay special attention to any hazardous conditions.
- Conduct weekly coordination meetings with safety as the first topic of discussion. Subjects for discussion should cover but not be limited to:
 - Supervisors' observations regarding safety
 - Reports of Safety Findings and Actions taken on any recommendations.
 - Accidents which have occurred during the past month and methods of eliminating or protecting against them.
 - Conditions and/or actions that may affect the public and methods for correcting them.
 - Reports of foreman's Tool Box Safety Meetings.
 - Make reference to hazard communication policy.
 - Identify critical safety work activities.
 - Issue safety information to job staff, foremen and subcontractors once a month concerning safety subjects pertinent to the job.
 - Require that all contractors hold Tool Box Safety and instruct the employees in safe and efficient planning of their work.
 - Solicit comments and suggestions relating to safety.
 - Require all persons employed on the job, General Contractor employees and subcontractors, to wear hard hats and eye protection as a condition of employment.
 - Provide; require (and properly train where necessary) the use of personal protective equipment.
 - Require all subcontractors to provide their employees with the proper safety equipment required by the project safety guidelines, and federal, state and local requirements.
 - Complete the monthly safety report and submit it to the Titan America Safety Manager or other designated member of Titan America management team by the fifth day of each month for the prior month.

Subcontractor Duties and Responsibilities

Subcontractor Safety Program: Within ten (10) days after receipt of notification of contract award, submit to the General Contractor a letter signed by an officer of the company setting forth the following:

- When a copy of their safety program that reflects the contractor's intentions for full and complete compliance with the Project Safety Guidelines will be received.
- How the contractor will comply with the project drug testing requirements.
- (Pre-hire or equivalent, post-accident, for cause)
- Fall protection at 6 feet for all crafts, including steel erection and decking.
- Mandatory hard-hat and eye protection requirement regardless of work being performed.
- Mandatory subcontractor employee safety orientation.
- Furnish a copy of their disciplinary program to the General Contractor.
- Subcontractors shall be required to comply immediately with all safety directives verbal or written.
- Subcontractors are required to participate in project preplanning.
- Subcontractors are required to participate in an accident review meeting to be held within one week of the accident date.

DISCIPLINARY POLICY

Under Titan America's policy, all employees are required to follow company safety policies and operating procedures.

The discipline policy of the General Contractor should encourage their employees to comply with the Titan America Safety Guidelines, OSHA and incorporated references.

Although Titan America reserves the right to discharge "at will," we believe that employees found performing work in an unsafe manner that would endanger the employee or and other employee shall be subject to discipline or termination by management. The General Contractor will determine the course of action best suited to the circumstances.

Subcontractor Disciplinary Policy

In case of imminent danger, the General Contractor's Superintendent shall stop the activity, take immediate steps to correct any unsafe situations up to and including dismissal of the employees involved and then advises the subcontractor's office in writing that such corrections have been made at their expense and insist further negligence does not occur.

Continued failure to correct unsafe conditions by anyone shall be reported to the subcontractor's home office. The subcontractor will be given a set number of hours to make the corrections needed before General Contractor acquires another subcontractor to perform the corrections needed and back charges the offending subcontractor.

COMMUNICATION OF SAFETY AND HEALTH MATTERS

The elements of the Titan America Safety Guidelines and all aspects of its safety and health program shall be communicated in a readily understandable manner to all employees.

Training and Instruction

- All contractors' employees and subcontractor employees will attend an initial site specific training orientation meeting to achieve this goal.
- All employees will receive orientation prior to starting work.
- Visitors will receive orientation prior to leaving the office areas or be escorted while on the site.
- Initial instructions for the new project personnel will include discussion of the site's basic safety regulations.
- The initial indoctrination is to be performed by the General Contractor and subcontractor safety personnel as required.
- Newly employed, promoted, and/or transferred personnel shall be fully instructed in the safety practices required by their assignments. When a new job assignment for which training has not previously been received or whenever new substances, processes, procedures or equipment are introduced to the workplace and represent new hazard, such employees must receive training and instruction in the following areas:
 - MSHA safety requirements (when applicable)
 - General safety and health work practices, and
 - Specific instruction with respect to hazards unique to the job assignment.
- Subcontractors and the General Contractor will conduct weekly "toolbox" training & safety meetings to discuss specific hazards present on the project and applicable controls.
- It is good policy to encourage all employees to report hazards existing at their worksite to their supervisors or the Responsible Person so that corrective action can be taken in a timely manner.

IDENTIFYING AND EVALUATING WORKPLACE HAZARDS

The goal of this program is to identify and evaluate unsafe work conditions and practices so that accidents, injuries, and job-related illnesses are minimized, if not completely eliminated.

Inspections

The principle approach to reducing accidents at Titan America is through periodic scheduled and unscheduled inspections.

- The Project Supervisor and the appropriate Subcontractor Representative will conduct daily walk through.
- The General Contractor will conduct a documented inspection.
- Whenever new substances, processes, procedures, or equipment are introduced to the workplace that represent a new occupational safety and health hazard an inspection shall also be conducted.
- Subcontractors shall forward copies of any and all inspection reports to the General Contractor.

ACCIDENT, INJURY, AND ILLNESS INVESTIGATIONS

- All employees must report all injuries, no matter how slight.
- The Supervisor must review all reports to see that the information is complete and understandable.
- In the case of serious accidents, Supervisors should personally investigate and prepare the report. The investigation will determine at least the following:
 - Who and what was directly involved in the accident.
 - Where and when the accident occurred.
 - The Cause of the accident, if known.
 - Steps/Procedures to take to prevent reoccurrence, if known.

SUBSTANCE ABUSE POLICY

Purpose

In order to maintain a safe, healthful and efficient work environment, and to minimize absenteeism and tardiness, Titan America requires that the Subcontractors (hereinafter the "Contractor") implement a Substance Abuse Policy (hereinafter the "Policy") meeting the minimum criteria set forth herein.

Fundamental Prohibition

Contractor shall at their own expense develop, promulgate and enforce a Policy which prohibits the possession, distribution, promotion, manufacture, sale, use or abuse of illegal and unauthorized drugs, drug paraphernalia, controlled substances and alcoholic beverages (hereinafter "Drugs") by any category of Contractor employee, agent or any person otherwise under the control of Contractor, including employees and agents of subcontractors and consultants (hereinafter "Employees"), while on Titan America premises. Further, employees shall be prohibited from reporting to the Premises under the influence of Drugs and alcohol which affect their working ability or safety, including but not limited to their alertness and coordination.

The Policy must apply to all categories of Employees, including but not limited to regular, part-time, probationary, casual and contract employees of Company, as well as to employees and agents of subcontractors and consultants and Contractor shall take whatever legally permissible steps are necessary or appropriate to enforce compliance with this Policy.

Drug Testing Policy

Titan America requires that the Contractor shall have had a drug screen before working at the site or otherwise require that all Employees undergo a drug screening testing to determine the presence or use of any illegal or unauthorized drugs or substances ("Testing") as a condition of assignment to the Project or continued assignment to the Project. Records must be made available for inspection and verification. The Contractor will also have to conduct such Testing under the following circumstances:

Incidents or Safety Violations

Following an occupational injury requiring treatment by a physician, a potentially serious incident involving rules or safety violations, damage to equipment or property, unusually careless acts or in instances where the incident was due to a failure to wear prescribed protective equipment while working on Titan America property.

Reasonable Suspicion of Illegal Alcohol or Drug Use

A report may be issued when, where reasonable suspicion exists, an Employee exhibits signs of intoxication, drug influence or other behavior causing a prudent and reasonable person to have concern for the safety of such Employee, other Employees or the general public.

Discovery of Illegal or Unauthorized Drugs or Drug Paraphernalia

Drug screen will be conducted where an Employee is found in possession of Drugs or when any Drugs are found in an area controlled or used exclusively by such Employees. Drug Tests will comply with all state statutes.

Sanctions

Employees who produce a confirmed positive test will be permanently prohibited from entering the Premises and working on the Project.

Additional Grounds for Being Barred from the Premises

In addition to providing for the barring of an Employee from the Premises and the Project for a confirmed positive test, Employees may be barred from Titan America Premises for:

- a. Refusal to submit to a search or inspection, urine drug or blood test when requested by Contractor. Contractors can refuse random testing but not for cause testing.
- b. Degrading, diluting, switching, altering or tampering with a Testing sample.
- c. Using, manufacturing, distributing, dispensing, while on the Premises, any illegal or unlawful drug.
- d. Any Employee's off-duty possession, use sale, manufacture or abuse of any illegal drug, whether or not resulting in criminal charges or conviction.
- e. Where an Employee is found in possession of drugs.
- f. Possession of guns, knives or explosives.
- g. Fighting will not be tolerated.

RESERVATION OF RIGHTS

Titan America reserves the rights to interpret, change, revise or depart from any/all policies and procedures at any time without notice. Titan America further reserves the right to promulgate safety standards as may be deemed necessary in the interest of safety. Nothing in this safety manual alters an employer or employee's status or infringes on the rights of any employee or contractor.

SAFETY AND HEALTH GUIDELINES

These guidelines are not an all-encompassing list of controls required on the project. All applicable state and federal regulations shall be complied and be reviewed.

Hard Hats

(ANSI Z89.1 - 1981) All job employees and visitors while on the job site must wear hard hats as a condition of employment or visitation.

Eye Protection

ANSI-approved safety glasses with side shields are required at all times while on the site, except when in offices, lunch areas, shacks, etc. Contractor must meet Safety Guidelines, Federal, State and Local Codes and Regulations. Additional eye protection (i.e., face shield, goggles) shall be provided where hazards require. Contractor employees who wear prescription glasses may work on site with those glasses and side shields. When these individuals are performing duties such as drilling, chipping, grinding, sawing, hammering, etc., they shall wear goggles over their glasses. Prescription sunglasses are not acceptable unless they meet the definition of safety glasses.

Hearing Conservation Policy

1. Limiting exposure to excessive noise through engineering controls. Where engineering controls are not feasible, supervisors should provide and ensure that employees wear hearing protection. When hearing protection is necessary, the use of protective equipment is not optional.
2. Employees exposed to noise levels of 85 decibels or more shall be provided with and required to wear hearing protection, such as earmuffs or ear inserts.
3. Warning signs stating “High Noise Area – Hearing Protection Required” will be posted on the periphery of all work areas where employees may be exposed to excessive noise levels

Foot Protection

All personnel will wear sturdy work boots with durable sidewalls, toes and soles. Soft shoes or sneakers are never permitted. Visitors must wear appropriate sturdy shoes or be kept out of the construction area. Employees must wear foot guards when working with soil tampers or where falling objects could be dropped on one’s shoes.

Body Protection

All personnel shall wear shirts and long trousers to protect against the elements and work site hazards. No sleeveless shirts or shorts are permitted.

Fall Protection Policy

1. All trades shall be protected from a fall when working over 4 feet near an unprotected opening or edge. The term leading edge work is not recognized. All General Contractors and Subcontractor employees are required to be protected from a fall with guardrails, covers, lifts or safety net and personal fall arrest systems. Safety harnesses with the lanyard anchored to appropriate anchorage points, shall be worn when working on swing scaffolds or hydraulic boom lifts and when working above the protection system at floor openings, perimeters and whenever a fall of more than 4 feet could occur.
2. The 4 feet fall policy does not apply when transitioning ladders. Special consideration for fall arrest equipment must be taken when working near the building perimeter or around open shafts.
3. Each Contractor will furnish to the General Contractor prior to the start of work a detailed written description and or drawing of how they and their subcontractor will comply with the 4 feet fall protection requirements for the protection of all of their employees throughout all phases of their work.(The GC will set the standards of Fall Protection, all subs will be required to comply)

Floor and Roof Openings

A standard railing or cover per CFR 1926 subpart M must protect floor and roof openings. When wire rope is used for guardrails, the cables may be 1/2-inch wire rope, but in no situation may they be less than 1/4 inch steel cable; any coatings used on the cables to prevent cuts or lacerations will be over the 1/4-inch diameter. When wire rope is used for top rails it shall be flagged at no more than six-foot intervals with highly visible materials. **At No Time Will Any Guardrail Be Used As A Horizontal Anchorage For Personal Fall Arrest Equipment.**

Scaffold Requirements

Toe boards shall be placed on all working levels of the scaffold. Cross bracing does not take the place of a guardrail. This exceeds OSHA standards. For more information on scaffolds refer to the OSHA Standards CFR 1926.451.

Rebar Protection

Employees must not be permitted to work above vertical protruding reinforcing steel unless it has been protected to eliminate the hazard of impalement. (NO MUSHROOM CAPS) Caps that are approved by OSHA and meet ANSI requirements shall be acceptable when employees are working at any height above exposed rebar; fall protection/prevention is the first line of defense against impalement. Fall protection/prevention is also applicable when the rebar is below grade, e.g., footings or other excavations, where a fall into a trench would present an impalement hazard. When work is at grade, impalement exposure is dependent upon numerous situations and conditions; proximity of rebar to worker, height of rebar, e.g., working around rebar that is 3-6 feet high would not likely pose an impalement hazard. Rebar caps/covers are appropriate to prevent cuts, abrasions or other minor injuries when working at grade and there is no impalement hazard.

Portable Ladders

Metal and wooden ladders will not be used on Titan America property. The only exception to this policy is metal ladders designed and used specifically for attachment to scaffolds.

Excavation and Related Work and Adjoining Property

1. Removal of rock or concrete by blasting and pile driving causes vibrations which may be sufficient to damage structures nearby, as may the removal of earth which results in the movement of bracing systems and underpinning, or soil consolidation resulting from lowering of water table, etc.
2. A review of the sub-surface conditions (determined from on-site borings) and the plans of existing buildings (where available) are necessary to evaluate lateral and vertical integrity. An inspection to evaluate the condition of adjoining/existing structures may be desirable prior to (and possibly after ceasing) operations.
3. Representatives of General Contractor, the appropriate subcontractor, the insurance carrier, and the neighboring property owner(s) noting the deficiencies shall inspect the property. All photographs or videos should be dated and made part of the permanent job records. A consultant can also be hired to completely detail the condition of the structures.

Powder Actuated Fastening Tools

Only low velocity powder actuated fastening tools shall be used on Titan America property. The stud, pin, or fastener of these tools shall be caused to have a velocity not to exceed 300 feet per second when measured 6-1/2 feet from the muzzle by accepted ballistic test methods. Never leave the Tool LOADED.

Cranes and Derricks

1. Equipment must comply with the American National Standard Institutes/ ASME B30 Standards for Cranes, Hoists and Derricks and the Occupational Safety and Health Standard CFR 1926.550 Subpart N - Cranes, Hoists and Derricks.
2. Crane Operators must show Certification of Crane Operators (CCO) or another outside testing agency such as the North American Crane Bureau (NACB) before being allowed to operate a crane on the project. If they are not certified then verification of qualifications shall be performed by the contractor and written documentation provided to the General Contractor.
3. Rated Load capacities and recommended operating speeds, special hazard warnings or instructions must be conspicuously posted on all equipment. Instructions or warnings must be visible to the operator.
4. The subcontractor must provide a current annual inspection of the crane. This includes proof of Monthly inspection before crane is used. Copies are to be maintained at the jobsite. The Crane is to be inspected by the operator on a daily basis.
5. Wire rope, its attachments, fittings, sheaves, and safety devices must be inspected weekly with a copy of the record of the inspection, including a maintenance lubrication check, submitted to the General Contractor. A competent person other than the person who installed, reaved, and attached the wire rope must make inspection.
6. An anti two-block device or warning device is required on all cranes except pile driving equipment.
7. All accessible areas within the radius of the counterweight swing must be barricaded to limit access.
8. Required clearance must be maintained between the crane and energized power lines.
9. Personnel are prohibited from riding on the hook or the "headache" ball. All OSHA and ANSI requirements must be followed when using personnel baskets. Personnel baskets are not to be used to hoist anything other than personnel. The General Contractor must approve use of a Personnel basket.

Signs and Barricades

1. At locations where potential hazards exist, contractor personnel shall be responsible for posting, installing and maintaining signs, signals and barricades to detour the passage of persons or vehicles.
2. Flagmen must wear a fluorescent safety vest and be trained in proper hand signals
3. Red barricade tape is to be used in situations where entry is prohibited or requires special permission. Yellow tape with caution warnings is to be used where entry is allowed as long as the cautions are followed.
4. Post The Signs And Barricades Without Delay, And Remove Them When The Hazards No Longer Exist. Additional posting requirements are found in the Federal Occupational Safety and Health Act, Construction Standards.

Hazard Communication Policy

The MSHA Hazard Communication Standard requires that all employers with employees exposed to hazardous chemicals at their worksite establish a hazard communication program (HAZCOM). This program must transmit information to the employees about the hazardous chemicals they are, or may be, exposed to at the site.

Material Safety Data Sheets (MSDS)

The General Contractor will be responsible for obtaining and maintaining the on-site file of all MSDS's supplied by the Subcontractors while all MSDS's may not be uniform in appearance, they must convey the same message.

1. Identify the Product
2. Known acute and chronic health effects and related health information (Target organ effects)
3. Exposure Limits (TLV) Threshold Limit Value
4. If the product is a suspected carcinogen
5. Personal protective equipment to be used
6. Emergency and First-Aid procedures
7. Identification of the party responsible for the MSDS

The Project Superintendent will ensure that an MSDS is obtained with each shipment of any material on the hazard substance survey list, should one not be obtained at that time, they will follow-up in writing to the parties involved to obtain one, within 72 hours after notification.

Container Labeling

The Project Supervisor and/or the Project Safety Director will verify that all containers received for use are:

- a. Clearly labeled as to content;
- b. Appropriate warnings noted; and
- c. Names and addresses of the manufacturers listed

Contractors Employee Training and Education

Instruction of those employees that must have MSDS training should include but not be limited to:

- a. How to read and understand the information provided on the MSDS's and labels supplied by the subcontractor.
- b. An overview of the requirements contained in the Hazard Communication Standard.
- c. While the Hazard Communication standard may discuss "chemicals" it may also include such items as welding or burning gases, cement, solvents, glues, wood dust, welding fumes and other such common items of every jobsite.
- d. Hazardous materials they are likely to be exposed to on the job.
- e. Personal protective equipment required for various operations and how it should be used and maintained

After attending the training class, each employee will sign a form to verify they have been properly trained with regards to the Hazard Communication Standard, and understand this company's policy regarding the Hazard Communication Policy.

Confined Spaces

It will be the General Contractor's responsibility to review and monitor the confined space programs and operations of its subcontractors who are required to utilize a confined space program in their work.

Requirements:

1. Identify the Confined Space.
2. Coordinate for shut off, lock out and tag out all energy sources and mechanical hazards.
3. Verify ventilation or engineering controls of the confined space.
4. Obtain test results of the atmosphere from the subcontractor.
5. Verify rescue and fall protection requirements are being utilized.

Approval by the General Contractor is required for a Contractor Employee to enter any permit-required confined space. Upon approval, the Contractor's Employee(s) shall comply with the requirements of the subcontractors' program including all medical/respiratory requirements stipulated.

Subcontractor requirements:

1. Coordinate with the General Contractor's project staff all requirements for the confined space operation.
2. Inform the General Contractor's Project Site Superintendent of the "competent person" designated for the work.
3. Submit their Confined Space Program to the General Contractor's Project Site Superintendent for review and approval.
4. Continuous Atmosphere testing.
5. Coordinate for local rescue teams services and confirm they are trained in confined space entry/rescue.
6. Have on site the fall protection, perimeter protection, signage and personal protective equipment necessary for working in a confined space.
7. Mechanical and alternate means to evacuate personnel from the confined space.
8. Entrants, attendants, rescuers and entry supervisors must be trained prior to performing any duties relating to permit-required confined space.

Respiratory Protection Policy

1. The General Contractor will make all efforts to maintain an injury and illness free workplace, and will make every effort to protect our employees from harmful airborne substances. Respirators are to be worn when working with or exposed to gases, fumes, vapors or dusts above the MSHA-permissible exposure limit (PEL) or when an oxygen-deficient atmosphere exists.
2. Respirator users must be trained in use, selection, maintenance, storage and inspection prior to use. It is the responsibility of contractor management to train its employees.

3. Respirator users must have a fit test conducted prior to wearing a negative pressure respirator. It is the responsibility of the contractor to conduct the test.
4. Respirators must be cleaned and stored properly.
5. Do not wear a respirator when anything comes between the face seal and user's face, such as facial hair; head cover protruding under the seal or temple pieces on glasses.

Bloodborne Pathogen Prevention Policy

This program will apply to all Contractors' employees who could "as a result of performing their job duties to face contact with blood and other potentially infectious body fluids. Each contractor should have a trained employee(s) and certified in first aid and CPR who might be "reasonable anticipated" to come in contact with bodily fluids also must follow the rules and regulations set forth in this program.

Requirements:

1. When dealing with blood or other body fluids, Contractors' employees are required to follow Universal Precautions. According to the concept of Universal Precautions, all human blood and other human body fluids are treated as if known to be infectious for HIV, Hepatitis B, and other blood borne pathogens.
2. Contractor employees who render first aid must be supplied with rubber gloves rated at 5 microns or less and resuscitation masks, a BBP kit should be part of the first aid kit.
3. All blood spills shall be immediately contained and cleaned with an anti-viral solution, or by a solution of bleach and water.
4. Any material saturated with blood must be considered Regulated Waste. This means liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; and items that are caked with dried blood or other potentially infectious materials. Discarded Band-Aids and gauze containing small amounts of blood products are not considered regulated waste. Disposal of all regulated waste shall be the responsibility of emergency medical personnel.
5. All contractors must have at least one person on-site with a current First Aid/CPR certification. This employee will have a current certification card.

FIRE PREVENTION

1. Storage of any material within 10 feet of fire hydrants is strictly prohibited.
2. No motors or machinery shall be left running during non-working hours except as specifically directed by Titan America.
3. All heating equipment shall have necessary safety devices and shall be wired, piped, and operated according to all applicable codes, rules and regulations.
4. All fuel and solvent containers shall be placed on drip pans.
5. No open burning or fires shall be permitted on site. Anyone doing so is subject to immediate dismissal.
6. Fire extinguishers shall be a minimum of 20# ABC type and placed and maintained on the job in conspicuous locations according to OSHA requirements. These fire extinguishers shall not be moved or discharged except for fighting a fire. Anyone discharging an extinguisher as a prank will be subject to immediate dismissal.

7. All gas bottles such as propane, oxygen and acetylene shall be properly supported and stored and tied in a vertical position in areas designated by Titan America. All stored bottles shall be capped.
8. During "HOT WORK", a fire watch will be required and shall be the responsibility of the contractor performing this work. A fire watch, knowledgeable of fire protection equipment and procedures, must be present with a fire extinguisher and/or fire hose when "HOT WORK" is being performed. The fire watch must remain in the area for at least 30 minutes after all "HOT WORK" has been completed. If the contractor feels they cannot provide a fire watch then the area directly below and adjacent to the welding, cutting or burning must be free of combustible material for twenty feet. If the area is not free of flammable or combustible material and no fire watch is used then flame proof tarps or blankets shall be used to prevent a fire. If the welder cannot readily see the area where sparks or slag may fall into or on then they must use a fire watch.
9. Smoking is prohibited except in designated areas.

Housekeeping

A clean job promotes efficiency, reduces accidents to personnel and minimizes fire risk (from cigarettes, etc.) The following are basic project guidelines:

- Remove all scrap lumber and rubbish.
- Store combustibles such as fuels, paint, flammable materials, lumber, roofing felt and paper away from possible fire-sources.
- Material storage not permitted within 6' of a ladder, stairwell, aisle or walkway or within 10' of outer perimeter edges of upper floors and roofs.

ELECTRICAL

Ground Fault Circuit Interrupters

All 120 volts single-phase 15 and 20-ampere receptacle outlets which are not a part of the permanent wiring of the structure and which are in use by employees and subcontractors shall have approved GFCI's. Subcontractors shall test and document testing of the GFCI on a monthly basis. The project is 100% GFCI compliant. An assured grounding program may be used in addition to the GFCI Program.

Extension Cords

Only round, heavy duty (type S, ST, SO, STD) is acceptable. Cords also must be maintained in their original designed configuration. Any cord which is damaged or has a grounding pin removed should be positively removed from service.

Lock Out/Tag Out Procedure

1. This procedure shall cover the demolition and/or change out of existing active electrical/piping lines under contract.
2. The intent of this procedure is to limit the danger of the unexpected release of stored or residual energy that could cause injury to employees and/or the public.
3. This procedure will establish minimum requirements for the control of such hazardous energy. Further requirements may be added as deemed necessary to Titan America.
4. Titan America will be responsible for controlling all aspects of the lock out/tag out procedure. This procedure shall be coordinated with the appropriate trade of the system.

Lock Out:

1. If a system can be locked out through design or by other means, this will be the preferred method.
2. The lockout device shall be substantial enough to prevent removal without the use of excessive force. Lock boxes and other multiple lock devices will be used as needed.
3. The lock will be a separately keyed lock for use only with the lockout system.
4. The lock out device will be labeled with the supervisor's name and company of those exposed to the system being locked out as well as the employee's names. There shall be one lock for each employee (including the General Contractor) exposed to the system.

Tag Out:

1. The tag out system will only be used if the energy isolation device (i.e., pull box, valve) cannot be locked out. Prior approval by the General Contractor is required.
2. Tag out devices, including their means of attachment, shall be substantial enough to prevent accidental removal.
3. The tag shall warn against the energizing of the tagged system such as: Do Not Start, Do Not Open, Do Not Close, Do Not Energize, and Do Not Operate.
4. The names of each employee and designated supervisor shall be displayed on the tag.
5. The tag shall not be removed except by the Project Supervisor. The Supervisor is responsible for the UN-tagging of the system after all exposed employees have been informed of the pending removal of the tag. The designated construction or facility Representative shall activate the system.

Training and Documentation:

1. Each General Contractor's employee and subcontractor employee affected by the lockout/tag out system shall be trained in this procedure.
2. Each employee affected shall be trained in the identification of the lockout/tag out devices.

In the event a lock is left on the lock out device and all affected subcontractors have verified, with the General Contractor, the removal of this lock, the facility representative and General Contractor's safety representative shall be contacted. These representatives shall remove the abandoned lock with authorization.

In the event someone is found tampering with a lock out/tag out device, disciplinary action will be taken.

General Safety Rules

- √ Horseplay of any kind is absolutely forbidden on the project site.
- √ When discarding boards, always remove protruding nails or bend them down.
- √ Protective blinds must be used around welders to prevent other employees from receiving arc burns.
- √ The use, possession, sale, transfer or purchase of alcohol, illegal drugs or controlled substances on the project is prohibited. Firearms and other weapons are forbidden on the jobsite.
- √

MSHA NOTICE FOR CONTRACTORS

The purpose of this notice is to provide you with information about the Federal Mine Safety and Health Act of 1977 (Mine Act) and to assure that you are aware of your responsibilities as a contractor on mine property under the Mine Act.

“Independent contractors performing services or construction” at a mine fall within the jurisdiction of the Mine Act. This means that independent contractors must comply with the Mine Act and the safety and health standards contained in Title 30, Code of Federal Regulations (30 CFR).

The Mine Safety and Health Administration (MSHA) is the Federal agency which administers the provisions of the Mine Act and enforces its requirements. MSHA issues citations and orders to independent contractors for violating safety and health laws. Each violation cited will result in the assessment of a civil penalty.

Contractors who perform work on mine property must be informed of hazards, which exist on the property and are specific to the mining operation.

Independent contractors and contractor employees have been injured and killed while performing work on mine property. Between January 1, 2000 and June 4, 2004, there were 36 contractor fatalities at mine sites.

- 16 involved production activities, drilling and blasting, loading, hauling and dumping;
- 7 involved the delivery of supplies or the hauling away of mine materials;
- 2 occurred during construction of new facilities, or demolition of old facilities;
- 8 involved repairing or maintenance of mine equipment;
- 3 involved Railcars.