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This document has been published by Lockheed Martin Space and applies to all Lockheed Martin Space locations including satellite locations.

This publication is a digest of basic applicable standards and should not be considered as a substitute for provisions of the Occupational Safety and Health Act of 1970 or other local, state and federal environmental and occupational safety and health programs and/or requirements.

Any discrepancy between this publication and regulatory and contractual requirements shall be resolved by using the most stringent requirement.



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Introduction

Commitment

Lockheed Martin Space (LMS) is committed to mission success with a proactive, predictive and preventive Environment Safety and Health strategy to enable program performance excellence. We strive to operate our facilities in a regulatory compliant, responsible manner that provides a safe and healthy workplace for employees, contractors, and visitors. LMS works to prevent occupational injury and illness, protect our products and facilities, as well as the environment and surrounding communities, while committing to pollution prevention and conservation of natural resources.

Applicability

This publication applies to any organization or individual (Contractor and Subcontractor) engaged by LMS through written agreement to perform work at LMS owned, leased, controlled, and/or operated facilities or at sites where LMS has work



General Requirements

Contractor Management

Using their own procedures, Contractor shall comply with all applicable laws, regulations, all communicated LMS, site and program-specific requirements.

Contractor shall:

- Communicate and coordinate with LMS POC and LMS ESH, activities regarding regulatory compliance, site-specific requirements and procedures, and site-specific training, as applicable

- Manage and ensure subcontractors comply with all applicable laws, regulations, and all communicated LMS, site and/or program-specific requirements. As well as communicate applicable ESH requirements to subcontractors working on site

- Hold regular safety meetings with all project personnel, document agenda and keep attendance records. Contractor shall provide documentation to LMS upon request.

- Report to LMS, Contractor occupational injuries/illnesses, incidents involving damage to



Contractor Inspections

Contractor shall:

- Perform regular work area/field inspections to ensure compliance with all applicable laws, regulations, and all communicated LMS, site and/or program-specific requirements
- Document inspections and provide to LMS upon request
- Document corrective actions taken where deficiencies are identified
- Provide the name of the Contractor on-site safety representative to the LMS prior to starting work at the jobsite.

Risk Plan

Contractor shall submit a Risk Plan to the LMS POC, for high-risk work activities, including but not limited to: roofing, demolition, asbestos abatement, environmental remediation, spill response and clean-up, confined space entry operations space, trenching and excavations, work with high voltage or potentially energized equipment, control of hazardous energy, cranes, work at heights, overhead work, disabling fire-protection or critical equipment, work with ordnance/explosives, quick-acting acutely toxic materials/chemicals, or and any other activities that pose a significant risk and impact to the health and safety of people, flight hardware, the facilities, and the environment. The level of detail of the RP will be contingent on the scope of the project.

At a minimum, the Risk Plan shall include the following:

- Contractor Name (e.g. company name)
- Scope of the project
- Project dates
- Identification of high risk activities
- Controls and hazard mitigation

Enforcement Policy

LMS will enforce compliance to applicable laws, regulations, and all communicated LMS, site and/or program-specific through a process of progressive discipline. Escalation of disciplinary action is dependent on the severity and frequency of repeated acts of indiscipline. Examples include, but are not limited to verbal notices or warnings, notices of violation, suspension of work, expulsion from the work-site, and removal from participation on bidding for future LMS work and up to contract termination.

LMS shall stop contractor work, if contractor does not provide documentation to LMS when requested. Documentation may include, but not limited to, risk plans, proof of training, certification, and equipment calibration.



Site Briefing / Training

Site Briefing

Contractor shall complete “Contractor ESH Site Briefing,” on emergency procedures, general site policies, ESH policies, and potential hazards, prior to performing work on LMS premises. Contractor ESH site-specific briefing link: <http://www.lockheedmartin.com/us/ssc/edc/eshr.html>

Training

Contractor shall:

- Be trained (by their employer) according to applicable regulatory standards (e.g. OSHA, EPA, DOT) for the tasks performed at LMS premises.
- Maintain written proof of current trainings, certifications, licenses, medical certification, and respiratory fit testing
- Provide written proof to LMS upon request

Training may include, but not limited to:

- Competent Person
- Hazard Communication (Global Harmonized System)
- Personal Protective Equipment



Environmental Requirements

Air Emissions



Contractor shall arrange with the LMS POC and/or LMS ESH for the characterization, handling, storage and disposal of all hazardous waste generated on site

Contact LMS POC and/or ESH to coordinate drop off/pick up of hazardous waste containers. DO NOT transport hazardous waste containers

Store hazardous waste in approved containers and properly label to identify the type of waste

For oil and hazardous material spills, notify LMS Security and LMS POC and LMS ESH immediately

Hazardous waste shall not be discharged through any storm water system or sanitary sewer system or disposed of on any outside grounds

Natural Resources

Contractor is responsible for preserving the natural resources within the project boundaries and outside the limits of permanent work

Contractor shall restore natural resources to an equivalent or improved condition upon completion of work. Activities will be confined to within the limits of the work indicated or specified

Except in areas to be cleared, Contractor shall not remove, cut deface, injure or destroy trees or shrubs without the permission from LMS

Contractor shall not fasten or attach ropes, cables or guy wires to existing nearby trees for anchorage, unless authorized by LMS. Where use of attach ropes, cables or guys wires is authorized, Contractor shall be responsible for any resulting damage

Soil Disturbances

Activities that will disturb existing soil conditions (e.g., trenching, boring, excavations, post hole digging, etc.) and/or alter drainage systems shall be reviewed and authorized by LMS POC and LMS ESH prior to commencement of activities

Contractor shall coordinate with LMS ESH regulatory notifications and/or permits and shall fully comply with all laws, regulations, permit restrictions, and procedures

Excavated soil shall be contained (placed on top of plastic/visqueen or inside lined dumpsters and covered with plastic/visqueen) for reuse or proper disposal pending



depending on the area of land to be disturbed; identify their role as primary or secondary operator

Large construction activities which disturb 5 or more acres or are part of a larger common plan of development that will disturb 5 or more acres, are regulated under a construction general permit

Small construction activities which disturb at least 1 but less than 5 acres or are part of a larger common plan of development that will disturb at least 1 but less than 5 acres, are also regulated under a general permit

If a permit is required, contractor is required to comply with all aspects of the general p



Contractor shall provide and maintain appropriate spill kits/absorbent materials onsite to be used promptly in the event of incidental spills

Contractor is wholly responsible for the cost of cleanup

Spill or release of any chemical substance shall be immediately reported to LMS

Security and LMS POC and LMS ESH

Health and Safety Requirements

Abrasive Blasting

LMS ESH shall approve sandblasting operations and its materials prior to commencement of work activities

Silica-based blasting material is prohibited and shall be not used

Contractor shall provide tarpaulin drop cloths and windscreens under and around blasting operations to confine and collect dust, sand, paint and other debris

LMS ESH will take a representative sample of waste materials to determine if the material is hazardous

Collect abrasive blasting waste containing lead or other heavy metals in approved containers

Collect dust, sand, paint and other debris resulting from sandblasting operations and store in drums with watertight lids

Emissions from abrasive blasting activities shall be controlled by the Contractor

Blasting material shall be cleaned up immediately after completion of the activity or at the end of the work day

Aerial and Scissor Lifts

Contractor shall follow the Manufacturer operator manual when operating boom-supported aerial platforms (aerial lifts), scissor lifts and vehicle mounted work platforms.



Only battery or electrical powered vehicles may be used indoors unless approved by ESH.

Asbestos

Prior to demolition of asbestos containing materials Contractor shall comply with the following:

Notify LMS POC and the LMS ESH when performing any maintenance, repair, renovation, construction, removal, demolition or salvage activities on any Asbestos Containing Material (ACM) or materials suspected to contain asbestos

Asbestos sampling shall be coordinated with LMS POC and LMS ESH

Contact LMS POC in advance for small-scale, short duration operations, such as pipe repair, valve replacement, installing electrical conduits, installing or removing drywall, and other general building maintenance or renovations operations to establish acceptable monitoring and work practices

DO NOT disturb or dispose of ACM without LMS ESH approval

Immediately report any incidental disruption of ACM or Potentially Asbestos Containing Material (PACM) to the LMS POC

All work shall be completed in a way that will not expose LMS employees to asbestos
Contractor will post signs in accordance with OSHA stating that asbestos work is in progress

Asbestos waste/contaminated debris shall be coordinated with LMS



Any space considered a permit-required confined space by LMS shall be considered permit-required by the contractor

Contractor shall also be informed of any special precautions or procedures that LMS has implemented for the protection of employees in or near the permit required confined space where contractor may be working

Contractor shall provide on-site rescue, per OSHA requirement

Control of Hazardous Energy (Lockout/Tagout)

Contractor shall be responsible for developing and implementing an effective Lockout/Tagout procedure. Also b 6(f)-4(ecti)13(v)11(



Remove all compressed gas cylinders from LMS's premises upon job completion
Not



Only wet cutting will be permitted for cutting or grinding concrete blocks, concrete and bituminous concrete

DO NOT unnecessarily shake bags of cement, concrete mortar or plaster

Electrical Safety

Electrical work performed on LMS premises shall meet the following criteria:

Energi



Environmental permits may be required prior to the work start date. Environmental sampling may be required prior to soil disposal. Soil piles shall not be removed from site without LMS approval.

The Competent Person shall inspect all excavations before work begins, during and as conditions change.

Prior to entry into excavations and/or trenches, the space shall be evaluated to determine if confined space requirements apply.

If evidence of a hazardous condition is found, exposed employees shall be removed from the hazardous area immediately until the necessary precautions have been taken to ensure their health and safety.

All excavations, regardless of depth, shall be barricaded or covered with a standard guard rail or an alternate method approved by the LMS ESH Office. Any excavation that shall remain open past the normal work shift shall be equipped with appropriate protection to prevent accidental access and will include reflectors and lights.

Barricades shall be sufficiently rigid that a person cannot displace them by walking into them at a normal speed.

Walkways shall be provided where employees or equipment are required or permitted to cross over excavations. When walkways are utilized, a guardrail system shall be in place.

Any liquid entering an excavation that requires disposal (dewatering) shall be removed in a manner approved by the LMS ESH.

Soils shall be considered C type soils unless deemed otherwise by a competent soils engineer.

Submit, prior to start of excavation/trenching a Cal/OSHA Annual Permit to LMS POC and LMS ESH, for trenches that are 5 feet or deeper, if workers will be entering the trench. (California only).

Daily inspections of excavations shall be conducted and documented by the competent person. Inspections shall be conducted as often as necessary.

The atmospheres shall be tested prior to workers entering trenches that are 4 feet or deeper, when there is a potential for hazardous atmosphere to exist in the trench. The atmosphere shall be testing ench. The



Groundwater monitoring wells shall not be disturbed. Damaged wells will require immediate repair or replacement. Contact ESH if any wells are disturbed or damaged.

Explosives

Contractor shall coordinate with LMS POC and LMSCC when brining, handling, installing, etc. explosives or ordnance devices (defined by DOT and BATF regulations) on LMS premises.

Fall Protection

Utilize an adequate fall protection system for activities including, but not limited to,



No work shall be performed, or any valve opened or closed on any fire suppression system without the prior approval of LMS FPS, Security, Facilities or the ESH Office. LMS FPS representative Security, Facilities and the ESH along with the Contractor are responsible for ensuring that all notifications are made, and all precautions are taken before work is performed on the fire sprinkler system.

Material shall not be stacked within 18 inches of fire sprinkler heads.

Material or other equipment shall not be placed upon or suspended from any fire sprinkler pipes, valves or supports, either temporarily or permanently.

Ceiling tiles and escutcheons shall be put back or replaced if needed when work is complete or on-hold to ensure that the automatic fire suppression system activates as designed.

Any work performed on fire protection equipment is to be done only with consent of the LM Responsible Authority (e.g. ESH, LM Site Fire Department, or LM Plant Protection). Opening and closing valves in fire protection lines shall be done by or only in the presence of an LM Responsible Authority or designated representative. Construction materials, ladders, or other equipment shall not be supported by, placed upon, or suspended from any fire sprinkler system, either temporary or permanently. All Contractors must provide adequate fire protection for their work areas as required by applicable codes and regulations

Hand and Power Tools

Tools shall be supplied by the Contractor and shall be operated per manufacturer's manual, maintained in a safe operating condition, free from defects or wear which may constitute a hazard to any person or property

Electric power operated tools shall be grounded or double-insulated with proper assured equipment grounding inspections or Ground Fault Circuit Interrupter (GFCI) protection at all work areas

Contractor shall not issue or allow the use of unsafe hand tools

Pneumatic power tools shall be secured to the hose to prevent





Enclosed non-combustible disposal chutes are required whenever solids waste materials are dropped greater than ten (10) feet

Outside storage of chemicals is prohibited unless adequate secondary containment is used, and chemicals are protected from contact with precipitation

Hoses and extension cords shall be bridged as appropriate and shall be removed and coiled at the end of the task

Sharp objects, such as nails, which protrude from packing materials, equipment, or other construction debris shall be removed or bent to remove the hazard

Hot Work

Contractor involved in welding, grinding, cutting, torching, brazing, soldering work and use of any type of open flame and spark-producing equipment shall:

Plan any Hot Work activity well in advance of the project so appropriate approval can be obtained and work stoppages avoided.

Obtain a Hot Work Permit from the LMS Fire Prevention Services, prior to commencing work.

Post HOT WORK permit in the work area.

Adhere to the instructions for site preparation and the safety and fire precautions printed on the Hot Work Permit.

Supply fire extinguisher(s) for the hot work to be performed. Portable fire extinguishers shall be serviceable with appropriate current service tags attached and clearly labeled as belonging to the Contractor.



without first obtaining a "Hot Work Permit" from LM (e.g., ESH, LM Site Fire Departments, Facility Operations & Services, or Security). Personnel performing the hot work must provide a fire watch, who is trained in extinguisher use, with an appropriate fire extinguisher to monitor the hot work area. After completion of the hot work, the permit shall be signed off by Contractor and returned to the permit issuer. Under no circumstances shall Contractors burn any materials, except as a routine consequence of welding or cutting operations or when applying flame-activated coatings.

Indoor Air Quality

Contractor shall perform work in a manner that will minimize and control the production and migration of chemical vapors, gases, dust and dirt into adjacent areas. Work that may negatively affect indoor air quality (IAQ) shall be adequately ventilated. Only electric powered equipment is allowed inside the building without the prior approval of the LMS ESH. Use of adhesives, paints or other odor emitting products regardless of their SDS approval for use on-site are not to be used for any task during normal working hours or in any occupied areas unless approved by the designated LMS POC or ESH. Chemical containers should be covered when not in use to restrict any emissions to the atmosphere. Any identified or suspected microbial growth observed in/on LMS buildings or property shall be reported to LMS POC and LMS ESH for assessment. Contractor shall not disturb the observed growth.

Ionizing Radiation

Use of ionizing radiation-producing equipment (e.g., x-ray machines, radiation (alpha, beta, gamma, or neutron emitters)) requires approval from the LMS POC and LMS ESH. Contractor shall provide copy of their Radioactive Materials License and/or X-ray registration to LMS POC and LMS ESH, prior to performing operation. Radiation sources shall not be stored overnight or left unattended on LMS premises without prior authorization by LMS POC and LMS ESH. If permitted, equipment shall be stored in accordance with all local regulations and shall be disabled via key removal, electronic keypad lock or other equally effective means.

Noise



potentially known to contain lead, immediately contact the LMS POC and LMS ESH to determine the presence of lead

If potential lead-based paint is observed, secure the area and provide proper warning signs and barricades to keep employees from entering areas until the areas are properly assessed, abated and cleared by the LMS POC and LMS ESH

Contractor shall not introduce any material with any amount of lead without LMS ESH approval

Any Contractor activity that may disturb or introduce any material with any amount of Cadmium shall not commence work until the Contractor has received approval from ESH

Abatement contractor shall submit an abatement plan for review and approval by ESH

prior to start of work. Only LMS-approved subcontractors shall be used by Contract1 0 41 0 0 1 104 Tnre



Contractor shall post signs at the work site entry point(s) informing personnel the specific PPE required to access the work area.

Portable Ladders

Ladders shall be selected based on the nature of the work, the load and the height to be reached.

Contractor shall:

- Inspect the ladder frequently to identify any defects prior to each use. Inspections shall be performed by qualified person
- Maintain the ladder's safety feet and other auxiliary equipment in good working condition to ensure proper performance
- Keep the rungs free of grease, lubricants and other materials.
- Set-up extension ladders with the base away from the wall at a 1 to 4 ratio
- Use the ladder in a fully extended configuration and do not use if the ladder is leaning against walls/structures
- Store ladders in a safe manner when not in use. Place ladders where they will not obstruct traffic and secure them as necessary
- Identify each company-owned ladder with the company name and without concealing any structural defects

Contractor shall NOT:

- Use a ladder if the manufacturer's identification, rated capacity and warning labels are missing or illegible
- Use any ladder found in disrepair and/or non-compliant. In this instance, the ladder shall be marked defective, be withdrawn from service, and removed from LMS premises.
- Place any ladders in front of door openings unless the door is blocked open, locked or guarded
- Place the ladder in passageways, driveways or any location where the ladder become displaced by other work activities unless protected by barricades or guards.
- Use a ladder to gain access to any elevated platform or roof unless the top of the ladder is secured and/or tied-off to prevent lateral movement. The ladder shall extend a minimum of 3 feet above the next level (point of support at the eave, gutter or platform line)
- Load any ladders beyond the maximum rated capacity
- Allowed any employee to sit or stand on the top cap or top step of any step ladder
- Utilize portable metal ladders near electrical circuits or energized equipment

Powder Actuated Tools

Contractor shall:

- Notify LMS prior to work involving the use Powder Actuated Tools on LMS premises



Meet the tool design requirements in American National Standard Institute (ANSI), A 10.3 – 1977 for Explosive Actuated Fastening Tools

Test the tool daily before use and all defects discovered before or during use shall be immediately corrected

NOT load tool until immediately before use

NOT leave loaded tools or powder loads unattended or available to unauthorized persons

NOT use powder-actuated tools in explosive or flammable atmospheres

Keep the tool, studs and cartridges in a safe area. Only authorized Contractor shall have access to the storage area

Keep boosters and cartridges in a storage container under lock and key

Identify, isolate and properly dispose of any misfires

Always clear the work area on all sides and post appropriate warning signs

Inspect the barrel to make sure that it is free from obstructions prior to using

Always unload a powder-actuated before disassembling, assembling, replacing the barrel or cleaning

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maintenance, modifications or repairs. Contractors shall follow local site requirements as it relates to utility shutdowns. In the event of an unplanned emergency shutdown, contact LMS Security and LMS POC.

Vehicle Operations and Powered Industrial Trucks

Only electric-powered equipment is allowed inside of buildings. Gasoline, diesel and liquefied petroleum (LP) gas-powered internal combustion engines shall not be used inside any LMS building unless approval is obtained from LMS POC and LMS ESH. Such equipment includes, but is not limited to, powered industrial trucks (PITs/Forklifts), cranes, earthmoving equipment, pressure washers, concrete saws, generators and any other equipment having a gas-powered/combustion engine.

If a Contractor requires the use of a non-electric-powered piece of equipment inside a LMS building, the Contractor shall submit TO LMS POC and LMS ESH, a written plan that includes:

- Work to be performed
- Duration of time anticipated to be inside of the building
- Mitigating controls utilized to maintain a safe work environment/area
- Equipment to be used
- Other additional environmental hazards
- Identification of methods of ventilation

For non-electric powered equipment operated indoors, Carbon Monoxide (CO) levels shall not exceed 35 ppm (50 mg/m³) for 8 hours, 50 ppm (70 mg/m³) for 4 hours, and 100 ppm (140 mg/m³) for 15 minutes.



Operators must be trained in the proper use of attachments because they alter the performance of the forklift. Attachments affect the truck's performance by changing its center of gravity, visibility and capacity. Operators will be trained in the fork and attachment adaptation, operation and use limitations.

Slings, cables or chains attached to the forks to lift materials or objects are prohibited

Vehicles that enter a building shall use an audible alarm and operate at a speed no faster than a brisk walking pace.

Contractor vehicles to be considered for a compound pass shall show proof of the operability of all applicable safety features of the vehicle to include golf carts and Personal Owned Vehicles (POV).

Contractor vehicles shall not be serviced (e.g., oil changes, tune-ups, washing/detailing, brake changes, etc.) while on LMS property except in emergency situations (e.g., towing for repairs, flat tire repair, jump start, windshield replacement, etc.). These occurrences shall be immediately reported to LMS Security.

Contractor shall follow all traffic regulations, postings, signs and designated parking areas.

Contractor vehicles must be in good repair and roadworthy.

Vehicles that have limited visibility must be equipped with back-up alarms or a flag

person must accompany the vehicle to1 0 0 1 90.024 481.87 Tm0 g0 G[078}TJETQq0.0000912 0eq

