

PM-8013, Attachment A, Revision 48 and all subsequent 48.x releases

Contractor Environment Safety & Health Handbook

Approved by:

/s/

Kendra Jones

**Environmental Health & Safety Engineering Manager
Lockheed Martin Aeronautics Company**

This handbook has been published by Lockheed Martin Aeronautics Company and applies to all LM Aero locations including satellite plants. Each site is authorized to make appropriate changes such as department names, company address, and emergency telephone numbers, etc., if the basic contents remain unchanged.

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

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

ESH Contractor's Revision Log

Issue	Date	Description or Reason for Change
48	February 2025	<ul style="list-style-type: none"> Removed Palmdale LSV paragraph. (Pg 12) Updated Competent Persons paragraph . (Pg 13) Removed Competent Person Sheet (pages 52-53) and added to Supply Chain Admin webpage. Revised wording Inspections. (Pg 9)
47	December 2024	<ul style="list-style-type: none"> Added Kendra Jones as the Environmental Health & Safety Engineering Manager (Page 1)
46	November 2024	<ul style="list-style-type: none"> Added requirement for subcontractors in Palmdale to submit Form 12109 (Page 9)
45	June 2024	<ul style="list-style-type: none"> Updated wording regarding need for OSHA 30 certification (Pg. 9) Added definition for “Critical Deficiency” and updated reference list (Pgs. 15 & 17) Emphasized need for clearer communication in the event of a critical deficiency (Pg. 39) Updated Attachment A: Helpful Telephone Numbers section (Pgs. 44 & 45) Updated Attachment B: Contractor Orientation Checklist Safety and Health Program section (Pg. 46) Deleted Attachment E; no longer required for FTW
44	May 2024	<ul style="list-style-type: none"> Updated Attachment H
43	December 2023	<ul style="list-style-type: none"> Due to replacing the HMEL with the Lockheed Martin Priority Chemicals List Updated image for LOTO lock and tags for Palmdale (page 38)
42	December 2022	<ul style="list-style-type: none"> Update Issue# only. Added note to AC regarding notification to update external SCM ESH website when change is made
41	December 2022	<ul style="list-style-type: none"> Added Palmdale Only vehicle decal requirement (page 12) Added point-based traffic enforcement reference (page 32)
40	September 2022	<ul style="list-style-type: none"> Removed Palmdale Only: Contractors shall mark company vehicles with vehicle numbers (Page 12) Removed Palmdale Only vehicle operator training requirement (page 32)
39	July 2022	<ul style="list-style-type: none"> Added Vehicle Signage Requirements (page 11-12) Added Palmdale Only vehicle decal requirement (page 12) Updated Palmdale Only vehicle operator training requirement (page 32)
38	November 2021	<ul style="list-style-type: none"> Updated contractor responsibility to clarify how often weight tickets must be submitted. (page 25)
37	June 2021	<ul style="list-style-type: none"> Subcontractor summary updates (page 9) Subcontractor management updates (page 11) ESH 05 summary paragraphs removed (page 16) Chemical review process revisions to clarify process (page 27-29) Confined space permit requirements revisions (page 38) Revised attachment B Update to Marietta emergency contact numbers Formatting updates
36	October 2020	<ul style="list-style-type: none"> Removed all references to “Fort Worth only” including Attach H; Added Fort Worth Safety Manual as Attach H Added ESH-04 requirements for contractor notifying LM of OSHA required reporting of fatality and/or injuries (page 12) Clarified vehicle and equipment refueling while indoors (page 27) Fixed formatting issues and page numbering

		<ul style="list-style-type: none"> Palmdale Only requirement for LSV operation added, Contractor Vehicle Orientation linked (page 12) Low Speed Vehicle (LSV) acronym added (page 15)
35	December 2019	<ul style="list-style-type: none"> Update form for Fort Worth 12745 to 13126 (page 10)
34	October 2019	<ul style="list-style-type: none"> Revise evaluation process for subcontractors (page 10)
33	October 2018	<ul style="list-style-type: none"> Added blue light requirement for contractor vehicles (Fort Worth)
32	August 2018	<ul style="list-style-type: none"> Replaced ESH website links Added Electrical PPE violation policy Added concrete waste requirement Added contractor vehicle parking restriction (Palmdale) Updated wording for Asbestos Added gate pass rule change (Palmdale) Updated labeling asbestos requirement (Palmdale) Changed welding shield requirement Added EMCS number Removed sentence from Attachment B Added energized work permit
31	October 2017	<ul style="list-style-type: none"> Changed sentence under fall protection requirements to read: "Follow the OSHA standard 1926.502 and Cal/OSHA Article 24 paragraph Fall Protection. Contact safety with any questions regarding these requirements. Roof access plans require Approval from ESH."
30	July 2017	<ul style="list-style-type: none"> Revised Fall Protection Requirements
29	April 2017	<ul style="list-style-type: none"> Revised training badges expiration for 2 years, added FOD Awareness Added Current National Electric Code and specific section for temporary and portable lights Added barricade requirement for overhead work Added spraying operations indoors and outdoors Changed Fort Worth usage form number 10977 Added excavation permit requirement Spotter requirement for portable ladders Added light requirement for golf carts/all-terrain vehicles Added Vehicle Permit requirements under parking Added licensed under blasting Added Overhead crane work requirement
28	February 2017	<ul style="list-style-type: none"> Added statement to Contractor Environment, Safety and Health Program section (page 8) to address iCAR requiring Contractors to maintain copies of FOD/HRA for work described in their job instructions
27	February 2016	<ul style="list-style-type: none"> Revised owner to Michael Beauchamp Revised section on container management (page 23) to address iCAR Remove references to VPP Clarified attire to be worn by Electricians Add references to Cal/OSHA Title 8 Add CARB requirements (CA only)
26	February 2014	<ul style="list-style-type: none"> Deleted Attach J; no longer required in MAR Deleted Attach K; no longer required for FTW Added vehicle safety requirement Added OSHA 30 construction requirement Added Contractor vehicle labeling requirement Added requirement in FTW for ESH Contractor training

		<ul style="list-style-type: none"> Added statement banning use of metal ladders Modified LOTO section to clarify Contractor responsibility Renamed Attachments “I” and “J” to “G” and “H” Table of Contents Updated
25	Unknown	<ul style="list-style-type: none"> Issue 25 changes were not noted in the Revision Log
24	March 2013	<ul style="list-style-type: none"> Fixed link (page 8, 9, 29 and Attachment D, F, I, J) to Contractor Safety Briefing Changed Document Approval from Dorothee D. Currie to Lisa Bosserman (page 1) Corrected page numbers in Table of Contents
23	November 2012	<ul style="list-style-type: none"> Incorporated ability to utilize external Contractor for inspections (page 9-10) Removed requirement to label dumpsters with contents (page 25)
22	May 2011	<ul style="list-style-type: none"> Incorporated Contractor requirement regarding safety performance data and training records (page 7) Deleted fourth bullet and inserted ESH Contractor Briefing Statement and applicable requirements (page 8) Revised language regarding how Contractors are to complete ESH Form 12109 on (page 8) Incorporated ESH 05 Procedure (page 16-17) Incorporated Lead Acid Batteries statement (page 20) Inserted the indented paragraph stating Permit requirement and land disposal document for Marietta (page 24) Clarification of chemical usage recording requirements (page 24) Clarified what constitutes a “closed container” (page 25) Incorporated Palmdale’s Pesticide/herbicide site usage requirements (page 26) Incorporated how completed site-specific hazardous material product data information and SDS(s) are to be approved (page 28) Incorporated POC instructions for completion of Hazardous Review Submittal Form 10121 (page 28) Incorporated explanation of “significant” quantities regarding hazardous materials and definition of “new or unique” (page 28)
21	July 2010	<ul style="list-style-type: none"> Replace Steve Hirtzel with Dorothee D. Currie’s as PM 8013 Approver Incorporate changes requiring Contractors to complete ESH Contractor Questionnaire regardless if any tasks are to be performed Deleted tasks on (pages 8 and 9) Incorporated requirement to have supervisor or superintendent to have a 10-hour training course (Palmdale only) Incorporate the inclusion of VPP Program Requirements (page 10) Incorporate Bloodborne Pathogen changes per site and subassembly plants (page 19) Incorporate Specific Eye and Head Protection guidelines. (page 28) Clarification of Fort Worth speed limit on (page 30) Facilities Construction Group name and phone number change (page 46)
20	Unknown	<ul style="list-style-type: none"> This revision number was skipped in the sequence
19	December 2009	<ul style="list-style-type: none"> Incorporated how ISO 14001 information is to be disseminated via English and Spanish hyperlinks to affected Facilities POCs. (page 6) Incorporated OSHA sanctioned Voluntary Protection Program (VPP) requirement for Contractor reporting regarding Contractor working 1000 hours quarterly –Fort Worth only. (page 6) Revised language regarding who is responsible for handling Bloodborne pathogens. (page 11)
18	April 2009	<ul style="list-style-type: none"> Incorporate Department of Transportation requirements including criteria for acceptable transport of hazardous materials under DOT’s Materials of Trade (MOT) exceptions

		<ul style="list-style-type: none"> • Pesticides Management (Marietta Only)
17	October 2008	<ul style="list-style-type: none"> • Removes Attachment C, HMRB example form, HMRB form completion referenced in the body of the text
16	June 2008	<ul style="list-style-type: none"> • Adds vehicle idling requirements • Updates Contractor waste disposal requirements at Fort Worth • Adds Fort Worth Air Emissions Signage Requirements • Added permitted equipment malfunction contact information
15	April 2008	<ul style="list-style-type: none"> • Adds Contractor requirement to ensure that someone can communicate with all employees at the work site. (page 6) • Defines the use of a disciplinary process for ESH contractual noncompliance. (page 7) • Provides spill containment requirements. (page 17) • Provides refrigerant service or maintenance requirements. (page 17) • Updates Marietta emergency phone numbers. (page 36) • Adds requirement to provide weights of landfill and recycled wastes to site ESH (page 18) • Further defines Palmdale specific Hazard Communication requirements (page 21)
14	March 2007	<ul style="list-style-type: none"> • Adds referenced Table of Contents (page 4) • Expands electrical requirements to include arc flash protection and allows temporary use of extension cords used in series. (page 11) • Adds crane lift plan requirements (page 28) • Adds LM Aero fall protection req. (page 30) • Requires Contractor to maintain daily scaffold documentation. (page 34) • Adds additional fall protection requirements during steel erection. (page 34)
13	June 2006	<ul style="list-style-type: none"> • Deletes Attachment G & H • Updates Marietta requirements for greater than 55 Gallon of VOCs per job site
12	May 2006	<ul style="list-style-type: none"> • Updates ESH Training Requirements • Updates Palmdale Emergency Numbers
11	October 2005	<ul style="list-style-type: none"> • Handbook substantially revised
7 – 10	October 2005	<ul style="list-style-type: none"> • Do not exist. Issue numbers deleted to match AeroCode one-page summary
6	April 2004	<ul style="list-style-type: none"> • Corrected attachment reference errors • Clarified site specific references • Clarified requirements on training documentation and prior coordination of hazardous waste disposal
5	July 2003	<ul style="list-style-type: none"> • Includes requirements for all LM Aero sites • Consolidated Environmental requirements for Contractors into the handbook • Renamed handbook
4	December 2001	<ul style="list-style-type: none"> • Added additional information on the use of aerial lifts and scissor lifts. Revised head protection (hard hat) requirements. Deleted date on form FWP5057
3	September 2001	<ul style="list-style-type: none"> • Handbook completely rewritten
2	October 1995	<ul style="list-style-type: none"> • Updated references to LMTAS. Added information concerning vehicle operations on the Flight Line, Lockout/Tagout Programs, Personal Protective Equipment, and Trenching. Deleted information regarding Chemical Emergency Evacuation of Building 181 and numerical reference tables
1	May 1987	<ul style="list-style-type: none"> • Original Issue

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INTRODUCTION

APPLICABILITY

This handbook applies to all Contractors, Service/Technical Representatives, Vendors & Suppliers performing work/services or delivering goods on LM Aero owned or operated facilities. For purposes of brevity the above will be referred to in this document simply as Contractor.

POLICY STATEMENT

It is Lockheed Martin Aeronautics Company's (LM Aero's) policy to provide a safe and healthy working environment. The purpose of this handbook is to make all Contractor personnel aware of the critical need to maintain a safe workplace, to eliminate causes of accidents and provide direction on environment, safety & health, and fire requirements.

<https://www.lockheedmartin.com/en-us/suppliers/business-area-procurement/aeronautics/terms-and-conditions/environment-safety-health.html>

ESH is Everyone's Responsibility

LM Aero is registered to ISO 14001 Environment, Safety and Health Management System

CONTRACTOR ENVIRONMENT, SAFETY, AND HEALTH PROGRAM

All Contractors, Service/Technical Representatives, Vendors & Suppliers, including Subcontractor personnel, shall:

- Be familiar with and comply with all applicable Federal, State, and local and municipal environmental, safety & health, and fire regulations, statutes, rules and ordinances while working on LM Aero premises.
- Carefully read the ESH provisions of their contract, including, but not limited to, the assignment of personnel, training, and safety equipment requirements.
- Ensure environment, safety, and health information, provided by LM Aero, is communicated to all their employees and Subcontractors working on-site.
- Contractors shall review the ESH Contractor Safety Briefing, when available, and the applicable requirements of this handbook with their employees and Subcontractor employees before entering LM Aero premises. The ESH Contractor Safety Briefing can be found at the following internet link: <https://www.lockheedmartin.com/en-us/suppliers/business-area-procurement/aeronautics/terms-and-conditions/environment-safety-health.html> or may be obtained through your contract POC. The General Contractor shall maintain written proof of the ESH Contractor Safety Briefing review for their employees and Subcontractor employees working on LM Aero leased or owned property.

- Upon entry into the facility and before starting any work, contractors shall coordinate their activities with their assigned LM Aero POC. The POC shall communicate with LM Aero Safety & Health (S&H), Fire Protection Services (FPS), Environment Safety and Health (ESH), and other appropriate functions to establish safety, health, fire, and environmental precautions.
- The Contractor shall always have at least one (1) person on site who speaks and understands English and can effectively communicate with Contractor and Subcontractor employees.
- Contractor supervisor and/or superintendent must have an OSHA 30 certification (Construction or General Industry), as required by ESH.
- All Contractors working on site must maintain a copy of any applicable FOD plans and Hazardous Risk Assessments (HRA) for the work described in their job instructions.
- **Marietta Only:** contractors shall have a designated supervisor on each job whenever performing work on LM Aero premises. The supervisor shall know the name and contact information of their LM Aero POC.

General Contractors must complete ESH Questionnaire Form 12109 provided by LM Aero Global Supply Chain (GSC) Buyer. After completion, the general contractor must return their form to the buyer and have it approved by ESH before a PO can be awarded. If it is contemplated that the subcontractors will be performing any tasks or services on LM Aero leased or owned property, the subcontractor must complete the 12109 form and submit to General Contractor for review prior to beginning work onsite and made available to ESH upon request.

Palmdale Only: Subcontractors must submit ESH Questionnaire Form 12109 to the buyer. The buyer will submit the form to ESH for approval prior to work beginning onsite.

Note: Both the Contractor and Subcontractor(s), regardless of tier, are subject to enforcement provisions of OSHA/CalOSHA and other federal, state, and local regulations.

Contractors shall be subject to inspection by LM Aero, ESH and /or a third-party inspector. Inspections by ESH and/or a third-party inspector shall be documented on Form 11713 Contractor Safety Inspection Report. Inspections shall then be routed to the LM POC responsible for flowing them down to the contractor. The responsible contractor shall document corrective actions and submit a corrective action report to the LM POC. The Contractor, LM POC, and inspector will track all violations until they are closed by an acceptable corrective action. Corrective actions shall be closed in a reasonable time frame, depending on severity, and as determined by ESH. Inspection reports with no adverse findings shall be routed the same as described above. No further action is needed.

When an unsafe act or condition is witnessed by ESH and/or the LM POC, a stop work order may be issued depending on the severity of the condition. A stop work order will be communicated to ESH management, Facilities management, the LM POC, and the Buyer. A

corrective action plan must be submitted by the Contractor, and approved by ESH, before work can resume.

NOTICE

Failure of the Contractor to comply with safety, health, fire, or environment requirements may result in suspension of work and/or cancellation of the service, contract, or Purchase Order.

NOTICE

References in this handbook to OSHA standards shall mean the equivalent state OSHA standards (Cal/OSHA standards, Title 8, California Code of Regulations, in California). References in this handbook to EPA standards shall mean the equivalent state EPA standards (Cal/OSHA standards, Title 26, California Code of Regulations, in California). References in this handbook to DOT standards shall include any equivalent state DOT standards (e.g., TX DOT in Texas) corresponding to Code of Federal Regulations Title 49 (49CFR) including both hazardous Materials Regulations and Federal Motor Carrier Safety Regulations.

All OSHA or Cal/OSHA and EPA or Cal/EPA and DOT requirements are not contained in this handbook. The Contractor must be familiar with and comply with appropriate OSHA, EPA and DOT standards at the LM Aero site where they are working. If there is conflict between the information in this handbook and the OSHA, EPA and DOT regulation, the more stringent requirement(s) shall apply.

NOTE: Non-Construction Work

When performing non-construction work, Contractors should obtain copies of the OSHA *Occupational Safety and Health Standards for General Industry* (29 CFR Part 1910). We recommend that Contractors performing construction work obtain copies of the OSHA *Occupational Safety and Health Standards for the Construction Industry* (29 CFR Part 1926) before starting work at LM Aero. Copies of Federal OSHA standards may be obtained from the local OSHA area office, or through the OSHA website [here](#). For operations in California, standards can be found on the Cal/OSHA website [here](#).

SUBCONTRACTOR MANAGEMENT

General Contractors are to communicate contractual Environmental, Safety and Health (ESH) information, ensure Subcontractors are trained on applicable ESH regulations, and review the applicable requirements of this handbook, *Contractor's Environment, Safety and Health Handbook* (PM-8013), with all subcontractors prior to beginning work on LM Aero premises. Documentation of training is explained in the paragraph titled "ESH Training". An updated version of this list will be maintained by the Contractor and kept available at the Contractor's field office or base of operations at the jobsite.

LM Aero will enforce compliance to contractual ESH requirements and LM Aero ESH initiatives (specific site requirements) through a process of progressive discipline. Examples include, but are not limited to warnings, suspension of work, expulsion from the work site, and removal from participation on bidding future LM Aero work and contract termination.

The General Contractor will evaluate Subcontractors' Safety Performance based upon the following criteria prior to beginning work onsite and submit completed Subcontractor ESH approval form (12109) to ESH upon request.

- Evaluate the circumstances where a Subcontractor has had an occupational fatality (companywide) within the previous 3 years to ensure effective corrective actions are in place.
- Contractor shall evaluate Subcontractors' safety performance, by comparing the Subcontractor's OSHA-Injury/Illness" rates [i.e. Total OSHA-recordable cases per 200,000 hours and Lost Workday Cases (with days away from work) per 200,000 hours] against the most recent published OSHA data available for the Subcontractor's Standard Industrial Classification (SIC) code, or North American Industry Classification System (NAICS).
- The general Contractor will ensure: the average of the Subcontractor's injury rates for the past 3 completed years is less than 125% of their 3-year SIC or NAICS average
 - If a general or subcontractor **exceeds** the injury rate requirements, they must provide a written explanation and identify their injury vehicles improvement actions to ESH. ESH will determine if the general and/or subcontractor is authorized to perform work on LM Aero property.

LM AERO ESH REQUIREMENTS

LM Aero will not provide Contractor personnel with safety equipment. Contractor personnel shall not use or operate LM Aero tools, machinery, equipment, vehicles, or cranes, or other material, unless specifically stated in the contract and approved by the POC. The LM POC must notify ESH when this occurs.

Contractors shall label all powered industrial vehicles (i.e. golf carts, forklifts, scissors lifts) and personal vehicles with company name and a 24-hour POC cell phone number prior to arriving on site so that it is easily recognizable to LM personnel. Signage shall be no smaller

than 8 ½” x 11” and shall be attached to both passenger and driver front doors. Signs shall be either painted, decaled, or magnetic and shall be displayed prior to entering the site. For vehicles with non-ferrous bodies it is permissible to attach signage to both windshield wipers in a fashion that allows them to be readily visible or placed upon the dash of the vehicle on both the driver and passenger side readily visible (determined by LM POC or Security). All equipment used on site is required to have readily visible signage in a weather resistant fashion and maintained or replaced as needed. Equipment must have signage applied immediately after being unloaded on LM property. Vehicles found not to comply with these regulations will be booted or denied access to the site. Repeat offenders will have their site driving privilege revoked at the discretion of Lockheed Martin.

Palmdale Only: Contractors shall mark all company work vehicles with vehicle reflective numbers on the driver’s side front and back bumpers. Decals shall be no smaller than 2 inches in height

The Contractor shall be responsible for obtaining the necessary Fire Protective Services (FPS) and/or Environment, Safety & Health (ESH) permits to conduct their work in compliance with regulations and LM Aero site requirements. Some environmental permits can only be obtained by ESH. In that event, the Contractor will provide ESH with the information necessary to complete and submit the permit application.

The Contractor shall compile a list of employees designated as “Competent Persons” as defined and required by specific OSHA standards. Contractors shall maintain the list of employees designated as “Competent Persons”. Regardless of project scope/cost, every project shall have a designated competent person provided by either the general or Subcontractor. The list will be maintained by the Contractor and kept available at the onsite Contractor’s field office or base of operations at the jobsite. Contractors may use the form provided by the Project Manager, ESH, or use their own equivalent form.

Contractors and their sub-contractors, if applicable, shall report injuries that require medical attention or OSHA notification to the LM POC within 8-hours of incidence.

ESH TRAINING

The Contractor shall provide general and specific ESH training to their employees according to applicable OSHA, EPA and DOT standards for the work performed. Training may include, but is not limited to, competent person, hazard communication, personal protective equipment, control of hazardous energy (lockout/tagout), confined space, fire extinguishers, fall protection, motorized work platforms, powered industrial trucks, refrigerant equipment installation or servicing, powder-actuated hand tools, scaffolding, high voltage electricity, trenching, hazardous material transportation (DOT), motor carrier safety (DOT), and hazardous waste management.

The Contractor shall maintain written proof of ESH training for their employees and Subcontractor’s employees working on LM Aero leased or owned property. The Contractor will

provide written proof of training for their employees and Subcontractor employees within 24 hours upon request by ESH or the contract POC. It is the Contractor's responsibility to ensure timely training and retraining.

Marietta Only: The Contractor shall provide to the POC prior to beginning work a signed "High Risk Activity" letter for contracts or projects where work involves the following activities: confined space entry, excavation and trenching, work at heights that requires fall protection, hazardous energy control (lockout tagout), high voltage electricity, Scaffold erection and use, and steel erection. The letter must be signed by the Contractor and indicate understanding and acceptance of obligation to maintain ESH training currency for the Contractor's and Subcontractor's employees for the duration of the project or activity. For projects or contracts that may exceed a year in duration, the Contractor will provide the POC a signed "High Risk Activity" letter annually.

MEDICAL EMERGENCIES

Contractor's shall have on-site personnel trained in first aid, as required by OSHA regulations. Contact your LM POC when your employee or your Subcontractor's employee is injured on LM Aero Premises.

LM Aero Medical and/or Security and Emergency Services Departments, where available, will provide or notify appropriate emergency responders for initial medical services (first response) for medical emergencies occurring on LM Aero premises. Offsite facilities not staffed with Security and Emergency Services personnel will use the 911 emergency reporting systems. If blood or other body fluids are present, the area and/or equipment shall be secured to prevent unauthorized personnel from encountering the fluids. Contractor personnel (unless authorized to do so) shall not attempt to clean up blood or other body fluids.

Designated departments and/or trained employees will clean up and properly dispose Bloodborne Pathogens at the other sites and subassembly plants are as follows:

- Fort Worth – (Facilities & Plant Engineering) Sanitation Personnel
- Palmdale – Plant Engineering Sanitation Services
- Marietta – SES and a Contract Service Company
- Clarksburg – Volunteer trained employees
- Johnstown – Trained general laborers and volunteer emergency responders
- Meridian – Janitors and trained first aid employees
- Pinellas – Maintenance Team and trained first aid responders

Marietta Only: Security and Emergency Service (SES) will be contacted to clean up and disinfect small to intermediate sites where body fluids Bloodborne Pathogens (BBP) are present and to remove and properly dispose of contaminated products. A contract service company will be employed to clean up and disinfect large sites involving BBP.

DEFINITIONS

1. Approved Substitute: A substance listed under the EPA's Significant New Alternative Program (SNAP) as a replacement for a class I or Class II ODS.
2. Buyer: Lockheed Martin Aeronautics Company (LM-Aero). Any reference to "Buyer" shall include its duly appointed representatives i.e. POC.
3. Competent Person: One who can identify existing and predictable hazards in the surroundings or working conditions, which are unsanitary, hazardous or dangerous to employees, and who is authorized to take prompt corrective measures to eliminate them. Work requiring a Competent Person shall not be performed on LM Aero premises without a Competent Person present at the job site.
4. Contractor: Any agent/agency engaged by LM Aero through written contract (or other written agreement) to perform work on LM Aero owned or operated premises i.e. Contractors, Service/Technical Representatives, Vendors & Suppliers that are performing services, construction, renovation, facilities maintenance or support tasks. This includes all tiers of Subcontractors bringing in workers and/or equipment to perform construction, renovation, and facilities maintenance or support tasks. For purposes of brevity the above will be referred to in this document simply as Contractors.
 - Not included are Contract employees working under LM Aero's direct supervision – they fall under LM Aero's employee ESH programs.
5. Critical Deficiency: A deficiency that, if not corrected, can have a material effect on the ability of the fire protection system or unit to function as intended in a fire event.
6. Excavation: Any man-made cut, cavity, trench, or depression in an earth surface, formed by earth removal.
7. Hazardous Material: Any chemical or substance which is a physical hazard, or an environmentally hazardous substance, hazardous waste, marine pollutant, elevated temperature material, material designated as hazardous in the 49 CFR 172.101 Hazardous Materials Table, samples believed to be hazardous, and materials that meet the hazard class and division defining criteria in 49 CFR Part 173.
8. Injury and Illness Prevention Plan: A safety plan required by CalOSHA for all employers in California as defined by Title 8, Section 3203
9. LM Aero: See Buyer.
10. Point of Contact (POC): An LM Aero representative responsible for providing oversight of Contractors, to ensure compliance with the terms and conditions of the contract, Purchase Order, or other authorizing documents.
11. Refrigeration Technician: Any person who performs maintenance, service, repair, or preparation for disposal that could reasonably be expected to release class I or class II substances, or their approved substitutes, from appliances into the atmosphere.
12. Vehicle: Any means of transportation used to transport personnel and/or property/equipment (e.g., automobiles, trucks, lift trucks, scooters, and golf carts).

ACRONYMS

AC	-	AeroCode
ANSI	-	American National Standards Institute
AQMD	-	Air Quality Management District
CalEPA	-	California Environmental Protection Agency
CalOSHA	-	California Occupational Safety and Health
CARB	-	California Air Resources Board
CDL	-	Commercial Driver's License
CFR	-	Code of Federal Regulations
CMV	-	Commercial Motor Vehicle
CP	-	Company Policy
DOT	-	Department of Transportation
EPA	-	Environmental Protection Agency
ESH	-	Environment, Safety & Health
FMCSA	-	Federal Motor Carrier Safety Administration
FMCSR	-	Federal Motor Carrier Safety Regulations
FOD	-	Foreign Object Damage
FPS	-	Fire Protection Services
GFCI	-	Ground Fault Circuit Interrupter
HAP	-	Hazardous Air Pollutants
HMR	-	Hazardous Material Regulations
IIPP	-	Injury and Illness Prevention Plan (CA)
LM Aero	-	Lockheed Martin Aeronautics Company
MOT	-	Materials of Trade (DOT)
NEC	-	National Electric Code
NFPA	-	National Fire Protection Association
ODS	-	A Class I or Class II Ozone Depleting Substance
PIV	-	Post Indicator Value
POC	-	Point of Contact
PPE	-	Personal Protective Equipment
PSI	-	Pounds per Square Inch
RQ	-	Reportable Quantity (49 CFR 172.101 Table 1 to App. A)
S&H	-	Safety & Health
SDS	-	Material Safety Data Sheet

REFERENCES

ISO 14001 Brochure	ISO 14001 Standard
29 CFR Part 1910	Occupational Safety and Health Standards for General Industry
29 CFR Part 1926	Occupational Safety and Health Standards for the Construction Industry
California Title 8	California Safety Orders
ESH 05	Corporate ESH Contractor Management Procedure
NFPA 25	2021 Edition (Federal) and 2013 Edition (California)

GENERAL REQUIREMENTS

The following LM Aero safety, health, fire, environmental, and transportation requirements and information are general requirements for safe performance and are not a complete list of regulatory requirements. LM Aero's POC, ESH, and FPS Departments can provide additional information, on request.

AISLES, ROADS, AND EXITS

Do not close or impede the use of any aisle, road, or exit (even temporary) without the POC's approval.

DEPARTMENT OF TRANSPORTATION REQUIREMENTS

Contractors shall comply with all DOT requirements for transport of hazardous materials (HM) (Hazardous Material Regulations 49 CFR Parts 100-185) and for operation of commercial motor vehicles (CMVs) (Federal Motor Carrier Safety Regulations 49 CFR Parts 40, 303, 325, 350-399) when transporting HM or operating CMVs onto or off of Lockheed Martin Aeronautics property.

Contractors who transport hazardous materials under DOT's Materials of Trade (MOT) exceptions per 49 CFR 173.6 must comply with all MOT exception criteria including:
Materials of Trade Quantity Criteria

The following hazard class/division quantity limits apply:

- For classes 3, 8, 9, divisions 4.1, 5.1, 5.2, 6.1 and ORM-D, the gross mass, including packaging, must not exceed:
 - PGI – 1 pound (0.5Kg) or 1 pint (0.5L)
 - PGII, PGIII, or ORM-D – 66 pounds (30Kg) or 8 gallons (30L)
 - Diluted mixture of Class 9 < 2% concentration – 400 gallons
 - For division 2.1 or 2.2 in a cylinder, the quantity must not exceed 220 pounds (100Kg) per cylinder
- For division 2.2, non-liquefied material, with no subsidiary hazard, in permanently installed tanks built to ASME standards, the capacity may not exceed:
 - 70 gallons
 - For division 4.3 material in PGII or PGIII, gross capacity < 1 oz. (30ml)
 - The total weight of ALL Materials of Trade carried on one motor vehicle cannot exceed 440 lbs., not including class 9 mixtures (< 2% concentration) in packaging of < 400gallons.

Note: Some types of DOT hazards (e.g., class 1, 2.3, 4.2, 7) do not qualify for MOT exceptions. Also note that hazmat that is allowed as MOT, must be in approved packaging that is no less effective than original manufacturer's packaging, must be secured against movement during transport, and must satisfy hazard communication requirement for marking with name

of material including ID# for bulk packages and 'RQ' if material in one package > RQ quantity. Note also that chemical samples (e.g., environmental or IH samples being sent to lab for analysis) may qualify as MOT if the lab doing the analysis performs all the 'DOT functions' including picking up the samples.

ELECTRICAL

Ensure activities involving electrical work and electrical equipment brought onto LM Aero premises conform to OSHA 29 CFR 1910 and/or 1926 electrical standards (or equivalent state OSHA standards), NFPA 70: National Electrical Code (NEC) 2017 and other applicable electrical codes, and this manual.

Contractor and Subcontractor workers shall not work on live equipment (greater than 50 volts) unless:

- De-energizing equipment introduces additional or increased hazards (such as cutting ventilation to a hazardous atmosphere location) or, it is not feasible due to equipment design or operational limitations (such as when voltage testing is required for diagnostics).

When it is necessary to work on or near "live" equipment: Contractors must document proposed work practices to their LM POC, which must include assessing the risks, using the proper tools and wearing adequate personal protection equipment described in NFPA 70E, which includes but is not limited to the following:

- Ensure electrical equipment is properly maintained and in safe operating condition.
- Extension cords shall be of the grounded type (3 prong), with the grounding prong intact. Extension cords are not to be more than 150 feet long and are to be plugged directly into an approved receptacle. Do not connect extension cords in series.
- Flexible cords shall be used only in continuous lengths without splice or tape.
- Flexible cords shall be connected to devices and fittings so that strain relief is provided, which will prevent pull from being directly transmitted to joints or terminal screws.
- Extension cords constructed of metal junction boxes and flexible cords shall not be used.
- Extension cord sets used with portable electric tools and appliances shall be of three-wire type and shall be designed for hard or extra-hard usage. Flexible cords used with temporary and portable lights shall be designed for hard or extra-hard usage as defined by the National Electric Code ANSI/NFPA Article 400.
- Flexible cords and cables shall be protected from potential damage. Sharp corners and projections shall be avoided.
- Conductors entering boxes, cabinets, or fittings shall be protected from abrasion and openings through which conductors enter shall be effectively closed. Unused openings in cabinets, boxes, and fittings shall also be effectively closed.
- All energized junction boxes, circuit breaker panels, and other electrical equipment shall be covered to prevent accidental contact.

- All electrical equipment (e.g. machinery, power tools, extension cords, and lights) shall be grounded. **Exception:** Double insulated hand tools do not require grounding.
- Use ground fault circuit interrupters (GFCIs) on all electrical tools, cords, and equipment. As an alternative, an Assured Grounding Program according to OSHA 29 CFR Part 1926.404(b) (1) (ii) (or equivalent state OSHA requirement) may be used if a Competent Person is designated.
- GFCIs shall be used in wet or damp locations, outdoors and in inclement weather.
- All lamps, provided for temporary, general illumination, shall be protected from accidental contact or breakage. Metal-case sockets shall be grounded.
- Temporary lights shall not be suspended by their electric cords, unless designed to be suspended in this manner.
- Only approved, explosion-proof electrical equipment (Class I, Division 1) shall be used in areas containing hazardous concentrations of flammable gases and/or vapors which exist continuously, intermittently, or periodically under normal operating conditions, or which exist frequently because of repair or maintenance operations.
- Only approved explosion-proof electrical equipment (Class II, Division 2) shall be used in areas containing hazardous concentrations of dust.
- Use an adequately rated test instrument to test each phase conductor or circuit part to verify it is de-energized.

Electricians should coordinate with LM POC and complete required documentation before accessing electrical equipment.

ELEVATED WORK

- **Do not** perform work over LM Aero personnel, aircraft or equipment unless otherwise approved by the LM Aero S&H Department and coordinated by the POC.
- When working in elevated locations, ensure materials and tools do not fall. Attach taglines or thongs to hand tools and wrap them around wrists or tie them to the belt to prevent tools from falling.
- Contractors shall barricade areas under overhead work above isles, crosswalks, or high personnel areas and clear them of personnel. If this is not possible, work may be rescheduled to a time when personnel are not present.
- Tools, materials, and trash shall not be dropped or thrown to or from elevated locations.
- Use lifelines, lanyards, full body harnesses and other protective equipment to protect against fall hazards when guardrails or other recognized methods of fall protection cannot be utilized.
- **Exceptions:** Fall protection requirements for scaffolds, steel erection, and stairways and ladders shall comply with 29 CFR Part 1926 Subpart L, “Scaffolding”, Subpart R, “Steel Erection”, and Subpart X, “Stairways and Ladders” or equivalent state requirements. Consult with a Competent Person before beginning work.
- **Do not** use aerial lifts and scissor lifts as cranes, jack stands, or forklifts.

- Contractors will wear fall protection equipment (full body harness and lanyard) while in the platform of aerial lifts and “cherry pickers”. When working from an aerial lift or scissor lift, personnel shall maintain a firm footing on the platform floor while working therein. Do not use planks, step-stands, ladders, or other devices on the platform for achieving additional height or reach.
- Notify the POC before working in or near a roof support structure or any other location where contact with energized overhead cranes or power lines may occur. The Contractor must implement their own energy control (lockout/tagout) procedure to adequately protect against potential hazardous energy sources.

EMERGENCY PROCEDURES

Ensure personnel are familiar with and know the location of the following emergency items:

- The nearest telephone and emergency numbers to call to report a Fire, a medical emergency requiring an Ambulance or a Chemical Spill. A Chemical spill is defined as a spill of any substance including water.
- The nearest fire extinguisher. LM Aero does not require Contractor personnel to use fire protection equipment but provides the equipment in the event the Contractor chooses to use it. In some circumstances the Contractor may be required to provide additional fire extinguishers.
- The nearest emergency exits.
- The nearest emergency eyewash and shower or water source, if applicable.

The means of notifying emergency services shall be posted by the Contractor at the work site. The Contractor shall notify all the on-site personnel on how to best avail themselves of these services. **See Attachment A.**

If emergency medical services are not available within two (2) to four (4) minutes of the job site, the Contractor shall have at least one first aid and CPR certified worker. It is the Contractor’s responsibility to assess the availability of emergency medical services.

The Contractor shall provide an approved first aid kit at the worksite. An example of the minimal contents of a generic first aid kit is described in American National Standard Institute (ANSI) Z308.1 Minimum Requirements for Workplace First Aid Kits and Supplies.

ENVIRONMENTAL REQUIREMENTS

Contractor shall evaluate jobsite and activities and take necessary action to ensure no negative adverse environmental effects will occur due to materials and no wastewaters enter storm drains.

Palmdale Only: Contractors shall provide POC copies of air permits and/or CARB related registration documents at the jobsite.

The Contractor shall obtain written authorization from the POC prior to beginning renovation projects which include any land disturbances (clearing, grading, or excavation activities), the disturbance of any asbestos-containing material in a building or facility, or before the demolition of a building or facility, even when no asbestos is present.

Contractors servicing permitted equipment must immediately contact ESH and then their LM-Aeronautics POC when they encounter/cause an equipment malfunction or encounter/cause operating conditions outside of the stated permit conditions.

Lead Acid Batteries: When installing machinery or equipment that contains lead acid batteries and the batteries are not specifically listed as a line item on the Purchase Order, the Contractor must notify ESH prior to installation.

The following activities are always prohibited while on LM Aero premises:

- No open burning.
- No activities which cause a nuisance to the facility. Examples of a nuisance are excessive dust and odors that carry over to non-LM Aero sites.
- Entering LM Aero's premises with or using materials containing banned chemicals list found in **Attachment D**.
- **Marietta Only:** Entering AF Plant 6 with or using materials containing banned chemicals in **Attachment D** and the Marietta Banned List found in the Contractors ESH briefing, provided by your POC.

Contractors shall not conduct the following activities without prior approval from the site POC and ESH:

- Outdoor painting, paint stripping or abrasive cleaning.
- Seal coating operations on parking lot pavement, roads or tarmac.
- Use of coatings and/or solvents.
- Any activities that involve significant usage of water or generation of wastewater.
- Any activities that result in discharging water or pollutants to a sink, or storm, floor or sewer drain.
- Any activities that disturb one acre of land or more.
- Connecting to any existing exhaust ducts or control equipment or installation of any equipment having air emissions.
- Transport on or off site of DOT hazardous materials requiring placarding without site POC and/or ESH knowledge.
- Dispose of waste material in LM Aero waste containers (e.g., dumpsters or roll offs)
- Dispose of hazardous waste without ESH approval.
- Dispose of waste materials, excavated soils and concrete.
- It is highly recommended that Contractors utilize non-gasoline powered vehicles wherever possible and that their access to inside work areas may be restricted if they use gasoline powered vehicles.
- All Contractors shall not allow excessive idling of vehicles at construction sites.

- **Palmdale Only:** In-use off-road vehicles shall not idle for more than 5 consecutive minutes
 - Park vehicle(s) on unpaved areas.

Contractor Waste Generation

Contractors planning operations that may generate waste must notify the POC of all hazardous wastes likely to be generated because of Contractor activity and coordinate waste management activities with the POC.

Contractors shall not dispose of any materials on LM Aero's premises without specific instructions and authorization from their POC and ESH. Obtain instructions from the POC and ESH regarding disposal of the following materials:

- Chemicals, paints, and toxic materials.
- Soil, construction debris, wash, or rinse waters.
- Protective clothing, laboratory equipment, medical devices (syringes/needles)
- Empty chemical containers, aerosol cans
- Batteries, absorbent materials, tires
- Used oil filters, air filters, paint filters
- Asphalt and concrete should be recycled
- If there is any doubt about disposal, contact your POC

Contractors shall handle, transport and dispose of all non-hazardous wastes in accordance with Federal, state, municipal, local and other rules, regulations, ordinances and requirements. Contractors must segregate hazardous waste from non-hazardous waste.

Universal Waste

Operations involving the removal of unbroken lamps containing mercury or other hazardous constituents shall comply with the following universal waste requirements. Universal wastes must be stored to prevent leaking and breakage. Contact POC with any questions about appropriate handling.

- Used fluorescent, High Intensity Discharge (HID), sodium vapor, and metal halide lamps must be contained in the original bulb container or other sturdy packaging to prevent breakage. Contact your POC for information on appropriate packaging. In Marietta, shipping containers for unbroken waste lamps are provided by ESH.
- Containers of unbroken lamps must be labeled as "Universal Waste – Lamps" and contain the date of accumulation start, as well as any information required by site specific labels. Contact your POC for site specific labels.
- Containers must be dated when the first lamp is placed in the container, and the containers must be sealed when they are full.
- Full, closed containers of waste lamps with all required labeling should be delivered to the appropriate storage location as specified by the POC.
 - **Palmdale Only:**
 - Plant 10 – Bldg. 629

- Site 2 – Bldg. 250
- Site 7 – Bldg. 722
- **Marietta Only:** Contact your POC for access to “Used Lamp” accumulation points.
- Operations involving the removal of broken lamps and/or lighting ballast(s) from the work site shall be coordinated with the POC prior to start of work. Broken lamps and/or lighting ballasts may be hazardous or state-regulated waste and must be handled accordingly. Contact Hazardous Waste Operations (Marietta) or HazMat (Palmdale) for regulated waste containers.
- Unless otherwise directed by your POC, Contractors are responsible for providing storage and shipment containers for unbroken waste lamps. Containers must be appropriate to the size, type, and number of lamps being stored, and must be managed in a manner that prevents breakage (Lids fully closed and enough packing material to prevent breakage).

Hazardous Materials Spills/Leaks

Call LM Aero FPS at 911 from any in-plant telephone (Fort Worth, Marietta, Palmdale) to report an actual or suspected spill or leak of oils, paints, acids, or other chemicals that have the potential for entry into soil, sinks, floor drains, or storm drains. Immediately notify your POC of any actual or suspected spills or leaks.

- Spill Containment: The presence of fuel or oil storage containers on site with an individual capacity of 55 gallons or greater and a combined total capacity of 1320 gallons or greater will require the Contractor to prepare an oil spill prevention, control, and countermeasure (SPCC) plan per the requirements in Title 40 Code of Federal Regulations (CFR) Part 112. Contact your LM Aero POC and coordinate with ESH if this condition is expected to exist.
 - **NOTE:** Only containers with a capacity of 55 gallons or greater are counted toward the total capacity. The gas tanks on vehicles and mobile equipment do not count toward the total capacity. The tank on a tank truck or tank trailer does count towards the total capacity if the tank holds fuel or oil and is kept on-site.
- Refrigerant Equipment: Contractors shall coordinate with their POC for site specific refrigerant tracking and reporting requirements.
 - All work that requires opening a refrigerant system or that could reasonably be expected to result in a release of Class I or Class II ozone depleting substance (ODS), or their approved substitutes, to the atmosphere shall utilize recovery/reclamation equipment that is certified by an EPA approved testing agency.
 - Refrigerant usage (installations, additions, removals, etc.) must be reported to the Lockheed Martin POC for possible inclusion in site air emissions inventories. Check with your contract POC or the ESH organization to determine if site-specific reporting form submittal is required.
- Intentionally venting or releasing any Class I or Class II ODS, or their approved substitutes, to the atmosphere is expressly forbidden.
- The following site reporting requirements apply:
 - **Marietta Only:**

- Contractors using greater than 55 gallons of material containing volatile organic compounds (VOC) per job shall complete a Hazardous Material Usage Log, Form 10977 and submit the log to the POC not later than the end of the calendar year.
- Jobs ending prior to the end of the calendar year may submit the completed Form 10977 to the POC at job completion.
- The POC shall provide the completed Form 10977 to the air quality engineer.
- Exemptions from this requirement must be approved by the Environmental Resources air quality engineer or department manager.
- **Palmdale Only:**
 - Contractors must record daily usage of painting and coating products (**Attachment F – Form 10977**) These completed chemical usage records must be submitted to ESH monthly.
 - Pesticide/herbicide application Contractors must retain site usage records (previous year plus current) to provide ESH upon request. This information is typically requested on an annual basis.
 - Water treatment Contractors must retain site usage records (previous year plus current) to provide to ESH upon request. This information is typically requested on an annual basis.
 - If a Contractor's operations require air pollution permit(s), the Contractor shall maintain copies of Permit(s) to Operate, CARB related registration/documentation, or documentation to show an exemption from the permit requirements on-site. Contractors shall make the documentation readily available for all equipment and materials used by the Contractor.
- ESH (Fort Worth and Palmdale) and Material Operations/Chemical Warehouse (Marietta) will retain manifests, land disposal restrictions documents, bills of lading, and other shipping documentation.

Container Management:

- Keep material containers closed when not in use.
- Roll-off containers used for the accumulation of material shall be covered and closed at the end of work shift.
 - “Keep covered and closed” refers to closing all roll-off doors and placing a cover (e.g. tarp) on the roll-off such that the entire top of the roll-off is covered (i.e. “end to end”).
 - Roll-offs shall be labeled with the point-of-contact name with phone number for the container.
- Alternate disposal methods will be approved by ESH.
- Containers shall not be stored near storm drains.
- Containers used to accumulate hazardous waste must be labeled with LM Aero hazardous waste decals.
- Hazardous material and waste containers must be appropriate per DOT requirements, compatible with materials contained, not leaking, and not overfilled.

- All hazardous material containers transported on or off site other than MOT must bear all required DOT markings and DOT labels.
- Liquid storage containers, including mobile and stationary tanks with the capacity of 55 gallons or greater must have secondary containment. Any mobile petroleum tanks (e.g. on trailers) must have secondary containment around them at their parking site. Tanks mounted on motor vehicles (e.g. in beds of pickups, tank trucks) are excluded from this requirement.
- Contractor is to provide to Lockheed Martin site ESH POC weights of project construction and demolition debris that are going to landfill and materials that are recycled.

Pesticides Management:

- All pesticide / insecticide / rodenticide use must be approved by ESH and applied by the Licensed Commercial Applicator (company) currently under contract by Facilities & Plant Engineering (F&PE). Contractor approved pesticide / insecticide / rodenticide materials shall not be mixed or stored on site unless specifically authorized by ESH.
- Disposal of pesticide materials is the Contractor's responsibility.
- **Palmdale Only:** Pesticide/herbicide application Contractors must retain site usage records (previous year plus current) to provide to ESH upon request. This information is typically requested on an annual basis.

EXCAVATIONS, FLOOR, AND ROOF OPENINGS

- In areas where there is suspected or known contamination, soil samples must be analyzed to determine extent and type of contamination before start of excavation.
 - An Excavation Permit is required.
 - The LMCO POC will provide a copy to the Contractor to complete. The form is returned to the LMCO POC. The form is reviewed by many. Comments are made. The form is returned to the LMCO POC.
 - The LMCO POC discusses the findings with the Contractor and the Excavator. The form is then posted on site.
 - The Contractor should contact their LM POC and ESH to determine soil testing requirements.
 - Spoil piles will not be removed from site without approval from the POC.
- Before entry, excavations and trenches shall be evaluated for potential confined spaces.
- Ensure a Competent Person inspects all excavations before work begins and as needed during the shift. When the Competent Person finds evidence of a hazardous condition, exposed employees shall be removed from the hazardous areas until the necessary precautions have been taken to ensure their safety.
- All excavations, regardless of depth, shall be barricaded or covered. If barricades are utilized and are left overnight, they shall be equipped with appropriate lights or reflectors.
- 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.

- Temporary covers for holes in floors, roofs, and other walking/working surfaces shall be:
 - Capable of supporting, without failure, at least twice the weight of personnel, equipment, and materials that may be imposed on the cover at any one time.
 - Secured to prevent accidental displacement by the wind, equipment, or personnel.
 - Color coded or marked with the word “HOLE” or “COVER” to provide warning of the hazard. If non-English speaking personnel are in the area, the wording shall be marked in a language personnel will understand.
- Concrete patches/repairs shall be made with a material comparable to the material removed and shall have a texture and surface similar to the removed materials and surrounding areas. Concrete repairs shall not be left with a sandy/gravelly surface that may cause an employee slip hazard.

FLAMMABLE, COMBUSTIBLE, TOXIC AND OTHER HAZARDOUS MATERIALS

Hazardous materials on LM Aero’s premises shall be labeled in compliance with OSHA 29 CFR Part 1910.1200, “Hazard Communication”. Hazardous materials shall be contained in approved containers and used, stored, and transported in accordance with ESH, FPS and DOT requirements.

- The Contractor shall coordinate with the POC for compliance with these guidelines.
- For all hazardous materials used on Lockheed Martin property, Contractors shall maintain SDSs on site, or be able to obtain them immediately and produce them on request.
- Contractors shall not use banned hazardous materials. Contractors can obtain from the POC the identity of hazardous chemicals used in LM Aero operations to which Contractor's employees may be exposed.
- Flammable and combustible liquids, such as solvents, paint thinners, gasoline, and diesel fuels shall be used and handled in a safe manner.
 - No more than five (5) gallons of these materials may be stored at one location without specific approval from LM Aero’s FPS Department.
 - Only approved safety container shall be used to contain flammable and combustible liquids, except paint. Containers shall be limited to a five (5) gallon capacity and kept closed when not in use.
 - Plastic containers shall not be used to contain flammable or combustible liquids. Refueling of vehicles or equipment (e.g. welders, aerial lifts, powered industrial vehicles, etc.) within a building is prohibited. Exception: propane tank changes are authorized.
 - All flammable materials shall be removed from the work site or properly stored at the end of each workday.
- Adequate ventilation and/or respiratory protection shall be provided and maintained when flammable or toxic liquids are used, especially in enclosed areas. This precaution also applies to spray and/or brush painting.

HAZARD COMMUNICATION PROGRAM

LM Aero maintains a list of hazardous chemicals used by LM Aero employees at LM Aero facilities. Safety Data Sheets (SDS) for those hazardous chemicals is available from your POC, if requested. Contractors with employees working on LM Aero premises shall:

- Not bring any hazardous materials on LM Aero property containing chemicals on the LM Aero banned list or other local banned list.
- Review their contract(s) for information on hazardous chemicals. All bidders must be able to furnish a list for LM Aero approval, of chemicals, paints, cleaners, compounds, and other liquid products that will be used and an SDS for hazardous materials as defined by OSHA 29 CFR Part 1910.1200 (or equivalent state OSHA requirement).
- Inform their employees of the hazards they may encounter, provide training, and supply personal protective equipment required to safely perform their work.
- Each Contractor, including Subcontractors, shall maintain an SDS file at the work location for each hazardous material used on LM Aero property.
- Not use hazardous materials within 25 feet of HVAC inlet air ducts unless approved by your POC.
- Notify POC of any proposed process that may trigger ESH concerns. Typical examples of projects requiring ESH approval may include specialty cleaning operations, drinking or other water treatment operations, or flushing/retro-fill of oil-filled electrical transformers.

Palmdale Only: All Contractors shall provide SDS's to the POC along with a completed Hazardous Material Review form (Form 10121). All submittals will be reviewed and approved by ESH prior to bringing any chemicals onsite.

Fort Worth and Marietta Only: Contractors should use only hazardous materials on the Approved Hazardous Materials List. You may view the approved hazardous materials list at <https://www.lockheedmartin.com/en-us/suppliers/business-area-procurement/aeronautics/terms-and-conditions/environment-safety-health.html>

Marietta Only: In order to use hazardous materials not on the approved hazardous material list the Contractor must review the material SDSs for prohibited and targeted hazardous materials contained in the Lockheed Martin Priority Chemicals list. The list can be found at <https://www.lockheedmartin.com/en-us/suppliers/business-area-procurement/aeronautics/terms-and-conditions/environment-safety-health.html>. Use of any material(s) containing prohibited chemicals is banned. For all other materials, contractors should provide the Facilities POC with the SDS(s) for each hazardous material to be used. Provide your POC the SDS(s) as soon as possible as the approval process may take as long as three weeks.

- The POC will provide the SDSs to ESH for number assignment.
- ESH will assign an SDS number to each hazardous material and provide the numbers to the POC.

- The POC must then electronically submit each completed HMRB submittal form for each material, by SDS number, to the HMRB for approval. Materials are submitted at the following URL: http://maru208.mar.lmco.com/cgi-bin/newmims/main_menu
- **Hazardous materials must be HMRB approved prior to being brought on site.** ESH will notify the POC if the material is approved or disapproved. If disapproved an appeal can be filed, which will be presented to the HMMP by the POC.
- *Emergency variance requests* shall be approved by the POC and ESH.

HOUSEKEEPING AND MATERIAL STORAGE

Always maintain good housekeeping. Clean work areas and store items neatly at the end of each work shift. Remove combustible material (e.g., trash, wood, rags, cardboard, paper) at the end of each day.

MACHINERY, TOOLS, AND EQUIPMENT

Contractor shall not use or operate LM Aero's tools, machinery, vehicles, cranes, or other equipment, unless approved and supervised by the POC.

- Points of operation on power-transmission equipment (e.g., gears, chains, sprockets, belts, pulleys) and portable powered tools (e.g., portable grinders, portable saws, pneumatic nailers/staplers) shall be guarded.
- Machines, tools, and equipment shall be inspected frequently and removed from service if defective.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Contractor shall be responsible for providing PPE and ensuring their personnel wear required PPE (e.g., eye protection, face protection, head protection, hand protection, hearing protection, foot protection, respiratory protection, fall protection) appropriate for the hazard. **LM Aero shall not furnish Contractor personnel with any PPE.**

Specific Eye Protection Requirements

Contractor personnel shall wear eye protection, equipped with side shields when exposed to operations generating a hazard to the eyes and when in LM Aero areas where eye protection is required (glasses, side shields and goggles).

- Contractor personnel shall wear eye and face protection in accordance with ESH's PM-8013 (Contractor Safety Handbook); all eye protection must comply with ANSI Z87.1. Safety glasses shall include side impact protection (side shields); ordinary glasses (reading or non-occupational eye wear) do not provide required eye protection and if ordinary glasses are worn, ANSI Z87.1 covers what must be worn over them.
 - Face shields alone do not meet the ANSI impact resistance requirements and shall not be used as primary eye protection; ANSI Z87.1 approved eye protection must be worn over face shields to meet eye protection requirements.
- Eye protection must be provided when the following hazards are present:

- Dust and other flying particles, such as metal shavings or sawdust
- Corrosive gases, vapors, and liquids
- Molten metal that may splash
- Materials that may splash, such as chemicals
- Intense light from welding and laser eye/face protection must be tinted accordingly
- The job tasks requiring eye protection could be, but are not limited to electrical work, drilling, sweeping, sawing, cutting, shaping, crushing, breaking, nailing, digging, boring etc. Moreover, eye protection will be required if any person is in the area where these hazards may exist. Eye protection will not be required in an office if the hazards do not exist.

Specific Head Protection Requirements

Contractor personnel shall wear head protection (hard hats) when exposed to the possibility of head injury from impact, falling or flying objects, or electrical shock and burns. The Class of hard hat required to be worn shall be based upon the type of exposure to which personnel are exposed (e.g., impact and penetration, electrical shock and burns).

- Head protection must comply with ANSI Z89.1. Hard hats are required where there is a potential for injury to the head from falling objects.
- Job tasks requiring head protection could be, but are not limited to crane operations, overhead construction work, some electrical work, working underneath low structures that could result in a struck against injury.
 - Head protection will be required if a person is in the work area where these tasks are being performed. For example, if a worker is sweeping the floor where any of the above hazards exist, a hard hat must be worn.
- Hard hats will be worn when these hazards are present:
 - Falling objects such as tools
 - Bumping head against objects, such as pipes or beams
 - Contact with exposed electrical wiring or components
 - Flying objects

Hand Protection

Contractor personnel shall wear hand protection (gloves) when exposed to hand hazards. Gloves shall not be worn close to revolving/rotating machinery or equipment.

Hearing Protection

Contractor personnel shall wear hearing protection when performing tasks or working in areas where the noise level is above 85 dB (8-hour Time Weighted Average [TWA]).

Foot Protection

Contractor personnel shall wear foot protection when exposed to foot hazards from sharp objects and impact.

Respiratory Protection

Contractors shall maintain a Respiratory Protection Program in accordance with OSHA 29 CFR Part 1910.134, including respirator selection, medical examinations, training, and fit test, when the contracted activity requires respiratory protection.

Fall Protection

Contractor personnel shall use fall protection equipment, such as full body harnesses and lanyards, in compliance with the requirements of OSHA 29 CFR Part 1926, Subpart E, “Personal Protective and Life Equipment” and OSHA 29 CFR 1926, Subpart M, “Fall Protection”.

PORTABLE LADDERS

- Ensure ladders are in good condition and free from structural defects.
- Immediately remove defective ladders from use, mark them as defective, and keep them from service until repaired.
- If using a ladder in an aisle, roadway, or doorway, barricade the area around the ladder and/or post it to protect the ladder from being struck with a spotter watching the surrounding area.
- No metal ladders shall be permitted for use on the worksite.

SMOKING

Smoking is prohibited on LM Aero property. Contractors caught smoking or using any tobacco products will be banned from the worksite.

VEHICLE OPERATIONS

The following general practices apply:

- Each passenger riding in a vehicle must be seated in a manufacturer approved seat while on LM Aero premises.
- Riding in the bed of pickups and trailers is prohibited.
- Wear seat belts in accordance with State motor vehicle laws, or when provided on equipment.
- Personnel shall not use electronic devices while operating vehicles on Aeronautics property, unless the vehicle is parked in a safe and legal location or, for voice communications only, unless a hands-free device is used.
- Pedestrians, aircraft, and authorized emergency vehicles always have the right of way.
- Use extreme caution when passing through doors that lead to the outside of the building and when passing personnel doors that exit into traffic aisles.
- Ensure vehicles do not enter buildings unless approved by the POC or other authorized LM Aero representative.
- Always use extreme caution to avoid vehicle-pedestrian accidents, especially during lunch, break periods and at shift changes.

- Only emergency vehicles shall pass into or through hazardous areas enclosed by barricades or areas designated by signs as hazardous.
- All in-plant traffic accidents involving property damage or personal injury shall be reported immediately to the POC.
- When possible, equipment powered by internal combustion engines shall be vented outside, except for movement to or from the work area.
- Internal combustion vehicles parked shall be turned off to reduce air pollution.
- Vehicles and trailers shall not be overloaded as to weight or size of load. Material that cannot be safely transported in a vehicle, on a trailer or on a skid, shall not be carried by these means. If material has the potential for movement, it shall be adequately secured prior to movement.
- Standing on a moving vehicle is prohibited, unless the vehicle is designed for such operation (e.g., scissor lifts, aerial lifts). Manufacturer's specifications and recommendations shall be followed.
- The Contractor shall ensure that each powered industrial truck (forklift) operator is competent to operate a powered industrial truck safely, as demonstrated by the successful completion of the training and evaluation specified in OSHA 29 CFR Part 1910.178(a)
- Operators of commercial motor vehicles must have an appropriate driver's license or CDL and other records as may be required by Federal Motor Carrier Safety Regulations.
- Vehicles operating during hours of darkness, inclement weather, and poorly illuminated areas shall be equipped with operational headlights and taillights. This includes any golf carts or non-standard all-terrain vehicles.
- **Palmdale Only:** Contractors operating vehicles on Lockheed Martin premises who do not adhere to vehicle operation requirements are subject to potential numerical point assignment based on violation, escalation to appropriate LM-POC, and potential site access removal

Signals, Stop, and Yield Signs

- Vehicle operators shall use mechanical or standard arm signals when turning and shall observe all State and local traffic regulations while on LM Aero's premises.
- Vehicle operators shall observe all posted traffic signs.
- Except on aisles equipped with "Stop" signs at the intersection, vehicles traveling on north-south aisle have the right-of-way over other vehicles. However, north-south vehicle operators shall continue to watch for pedestrians and slow down at intersections.

Speed Limits (Except Flight Line)

The rate of speed shall be reduced for existing road conditions. In congested areas, speeds shall be reduced. Unless otherwise posted, the following speed limits are in effect:

- Marietta:
 - In buildings and in parking lots, 5 mph
 - Outside areas, 20 mph
- Palmdale:
 - Outside areas, 20 MPH

- Parking lots, 10 MPH
- Fort Worth:
 - In buildings, 5 MPH
 - Outside areas, 20 MPH
 - Parking lots, 15 MPH

Flight Line

The following apply when operating vehicles on the flight line:

- Contractor personnel are not permitted on the flight line unless in the performance of a contractual job task. Entry onto the flight line requires POC authorization and shall only be through designated FOD checkpoints.
- The flight line speed limit is 15 MPH.
- Special purpose vehicles, such as tugs and forklifts, shall not exceed 10 MPH.
- Vehicles shall not exceed 5 MPH when near aircraft.
- Except for emergency vehicles, vehicles shall not be driven within ten (10) feet of parked aircraft.
- Vehicles shall not be parked or driven closer than 25 feet in front of or 200 feet to the rear of any aircraft when the engine is running or about to be started.
- When parking on the flight line, vehicles shall not be parked pointed directly towards an aircraft.
- All vehicles shall approach parked aircraft with the driver's side of the vehicle toward the aircraft. This does not include vehicles parking in front of the run station.
- Vehicles shall not be parked in front of or driven into the path of taxiing aircraft.
- Only vehicle operators licensed by the government shall be allowed to drive on or across the runways.
- Vans, pickups, and automobiles are not to be used for towing unless they are properly equipped for towing.
- At night, headlights directed toward moving aircraft will be turned off. Parking lights will be utilized.
- When the driver's seat is vacated, ignition is to be turned off, brakes set, and gear lever placed in reverse. If the vehicle is equipped with an automatic transmission, the gear lever is to be placed in the park position.
- Vehicles left unattended on the aircraft parking ramp, shall utilize wheel chocks to secure the vehicle from rolling, unless the vehicle is equipped with a parking brake.

Parking

- Vehicle Permits may be obtained from the LMCO POC with the approved Badge Request Form. Justification must be provided. Vehicle permits must always be displayed for security to check.
- If authorized to bring vehicles onto the facility, observe in-plant parking regulations. Gate passes may be revoked at any time by LM POC or ESH.
- **Palmdale Only:** Gate passes are not required for vehicles.

WARNING SIGNS AND BARRICADES

- Erect and properly maintain necessary safeguards to protect Contractor personnel, LM Aero employees, and others. Isolate work areas from LM Aero operations and employees by using warning tape, barricades, or another effective means.
- Before beginning work, inform the POC of work posing a potential danger to LM Aero personnel and obtain POC's written authorization to proceed.

SPECIAL REQUIREMENTS

ASBESTOS

- Immediately report any contact with asbestos-containing or suspected asbestos-containing materials to the POC. Cease work immediately until the POC gives approval to resume work
- Notify POC in advance of any maintenance, repair, renovation, construction, removal, demolition, or salvage activities in which any materials contain asbestos.
 - Unless directed otherwise by the POC, the Contractor shall provide notification to the POC who will notify ESH.
 - LM Aero ESH will review plans for removal/demolition work and, if necessary, specify the requirements for establishing regulated areas and monitoring.
 - ESH will ensure that notifications required by regulatory agencies are properly coordinated and submitted to the agencies within the time frames specified in the regulations.
- Contact LM Aero POC in advance of 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.
- All work shall be completed in a way that will not expose LM Aero's personnel to asbestos.
- Contractor will post signs stating asbestos work is in progress and secure the immediate area with flagging (or equivalent material) to keep personnel from entering the area.
 - The signs shall bear the following information:

**DANGER
ASBESTOS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
AUTHORIZED PERSONNEL ONLY**

- Contractor shall take adequate precautions to prevent asbestos from becoming airborne.
- Extra caution should be exercised when working near air intakes and exhausts. Where possible all doors near the area shall be closed to prevent drafts.

- Contractor shall comply with all applicable laws and regulations, including without limitation, the OSHA and Environmental Protection Agency (EPA) regulations relating to the handling or removal of asbestos. OSHA 29 CFR Part 1926.1101, Table 1, specifies, among other things, exposure limits, monitoring requirements, hazard communications, medical surveillance, record keeping, work practices and personal protective equipment.
- Bags of asbestos waste/contaminated debris shall have a readily visible label and be legibly marked as follows:

DANGER
CONTAINS ASBESTOS FIBERS
MAY CAUSE CANCER
CAUSES DAMAGES TO LUNGS
DO NOT BREATHE DUST
AVOID CREATING DUST
Contractor's Name
Date
Location of Removal

- Bags of asbestos waste/contaminated debris shall be delivered to a waste accumulation area designated by the POC.
 - Asbestos waste shall be disposed of at a landfill approved by ESH.
 - ESH (Fort Worth and Palmdale) and Material Management (Hazardous Waste Operations) and/or ESH (Marietta) will retain manifests, land disposal restriction documents, bills of lading, and other shipping documentation.
- Palmdale Only: bags of asbestos waste/contaminated debris placed in roll off containers shall have a readily visible label and legibly marked.
 - Labels/Markings will be provided by HazMat.
- Contractor, or their designated representative, shall inspect the job site at the end of each day to ensure all asbestos debris, in the area, has been properly cleaned up.
- Abatement Contractors and Subcontractors shall provide a copy of the results of all area, personnel, and/or bulk sampling to the POC.
- LM Aero ESH shall approve, in writing, any exceptions to the above.

BLASTING

- Blasting operations shall be performed only by licensed and experienced personnel.
- LM Aero ESH, FPS and Security must be notified of blasting operations at least 48 hours in advance.
- No explosives shall be stored on Lockheed Martin/ Air Force property overnight.
- The time for blasting and the control of traffic during such blasting must be cleared in advance with ESH and Security.
- All blasting areas must have an appropriate "clear" zone established.

CHEMICAL PROCESSING AREAS

To avoid potential hazards or employee exposures, information on fluids contained in piping and tanks shall be obtained from the POC before starting work.

- No work with loose material and tools shall be performed over tanks.
- Loose items shall be fastened, with thongs, to a belt or wrist.
- All overhead work, above any process tanks, shall be approved by the POC and affected departments prior to performing any work activities.

COMPRESSED GAS CYLINDERS

- Cylinders showing evidence of damage, missing, or defective components shall not be used.
 - Damaged or defective cylinders shall be removed from service.
 - Threads and fittings of cylinders, regulators, and valves shall not be modified.
- All compressed gas cylinders must meet DOT requirements and must have current pressure tests.
- Do not lift cylinders with ropes or chain slings.
- If a cylinder is designed for a valve protection cap, ensure the cap is in place when the cylinder is not in use, not connected for use, or is being transported.
- Cylinder valves shall be shut off when left unattended (e.g. breaks, lunch, end of work shift).
- Store oxygen and fuel gas cylinders a minimum distance of 20 feet apart or separate them by a noncombustible barrier at least five (5) feet high having a fire resistance rating of at least ½ hour. Oxygen and fuel gas cylinders may be stored together, on cylinder carts, only when gases are in use.
- Store propane cylinders, not in use on forklifts or other equipment, outside of buildings, in a storage area designated by LM Aero's FPS or ESH Department.
- Remove all compressed gas cylinders from LM Aero's premises, upon job completion.

CONCRETE AND MASONRY CONSTRUCTION

All protruding reinforcing steel, onto and into which employees could fall, shall be guarded to eliminate the hazard of impalement.

CONFINED SPACE ENTRY

Contractors shall be informed, by the construction documents, statement of work, and/or their POC, if the workplace contains confined spaces (both permit, and non-permit required).

- All Contractors are responsible for developing and administering their own Permit Required Confined Space Program.
 - The written program and confined space entries are subject to inspection by LM Aero's S&H Department and the POC.
 - Contractors shall be informed, by their POC, of the elements, including the hazards identified and the experience the LM Aero has concerning the space that makes the space in question, a permit required confined space.

- The Contractor shall also be informed of any special precautions or procedures that LM Aero has implemented for the protection of employees in or near the permit required confined spaces where Contractor personnel may be working.
- The POC shall ensure that LM Aero's FPS Department is notified of all permit required confined space operations involving Contractor personnel.
 - Contractors are responsible for obtaining rescue services and providing notification to the POC of the rescue service organization.
 - The Contractor shall notify LM Aero FPS department upon entering and exiting the permit required confined space, this shall include the number of workers entering and exiting.
- Joint entry operations involving LM Aero's employees and Contractors shall be under the supervision and control of LM Aero's Entry Supervisor. With joint entry operations between two (2) or more Contractors, the Entry Supervisor shall be designated by the POC. Entry by the POC or any other LM Aero employee into a confined space occupied by Contractor personnel requires a LM Aero Confined Space Entry Permit.
- Upon the conclusion of entry operations, Contractors shall brief the LM POC regarding the permitted confined space program followed and any hazards confronted or created in the space during entry.
- A copy of the permit, with any information accumulated by the Contractor concerning the confined space, including this classification of the confined space, hazards/problems encountered, and any comments, shall be forwarded to LM Aero's S&H Department for inclusion into the historical record(s) of the confined space(s).
- **Marietta Only:** A copy of the permit is only required upon request.

CRANES AND HOISTING OPERATIONS

- Do not use or operate LM Aero's cranes, hoisting equipment, or lifting attachments, without POC approval and supervision.
- Inspect cranes, hoisting equipment, and lifting attachments before each use. Remove damaged or defective equipment from service. Do not lift loads over personnel.
- Any work on, near or around the Overhead Cranes in Building 4 or 5 shall be coordinated with LMCO Project POC.
- Ensure crane rail stops, equipped with visible flagging, are installed on all crane rails when work is to be performed in the crane path (e.g. aerial lift operations). Coordinate rail stop installation through the POC.
- Load testing requirements shall be followed through ASME B30 series referenced under the OSHA standard 1910.6.
- When requested by the LM POC or ESH representatives, provide a written lift plan. A written lift plan will include as a minimum:
 - Make and model of the crane
 - Name of the crane operator, documentation of training and competent person responsible for the execution of the lift plan.
 - A copy of the crane's most recent certificate of annual inspection.

- A copy of the crane's maximum loads at various boom angles and radii.
- Utilizing the crane boom angle and radius information identify all loads that will exceed 75% of the crane capability.
- Identify if two or more cranes are required.
- Identify number of ground handlers and location of ground handlers
- Communication method between ground handlers and crane operator
- Location of material staging area
- Method of managing vehicle and pedestrian traffic

DEMOLITION

Projects requiring the demolition or removal of building structural members requires a written 11 working day notification to the POC whether asbestos is present in the work area

ENERGY CONTROL PROCEDURES (LOCKOUT/TAGOUT) /SHUTDOWNS

The Contractor is responsible for developing and implementing their own effective lockout/tagout program that complies with OSHA 29 CFR Part 1910.147, "The Control of Hazardous Energy (Lockout/Tagout)" and NFPA 70E.

- Equipment with sources of hazardous energy (e.g. electrical, mechanical, gravitational, hydraulic, pneumatic, chemical, thermal) or equipment with potential for environmental contamination shall be locked and tagged out prior to servicing or maintenance work being performed.
- The Contractor and POC shall exchange information on each other's Lockout/ Tagout Programs and identify the lockout and tagout devices to be utilized. LM Aero's energy control lockout and tagout devices are shown below:



- Any work done by a Contractor and LM Aero personnel, on the same equipment, at the same time, shall incorporate both Contractor's and LM Aero's lockout/tagout programs, utilizing lockout/tagout devices from both parties.
- Palmdale - Contractors cleaning, repairing, maintaining or otherwise servicing LM Aero equipment shall use LM Aero's lockout/tagout procedures.
- All utility shutdowns shall be coordinated through the POC. Utility shutdowns include electrical, steam, compressed air, domestic water, sanitary sewer, industrial waste, air conditioning, heating and chilled water systems.
- Contractors working on systems at 600 volts and above shall coordinate the shutdown and energy control procedures with the POC and the LM Aero's Plant Engineering Department. Contractors working on systems less than 600 volts shall coordinate with the POC.
- Fire protection equipment, including risers, hydrants, fire alarm panels, smoke detectors, valves, fire mains and any other fire protection equipment shall not be activated, altered, changed, deactivated, or worked on until notification is given to, and approval is granted by, LM Aero's FPS Department.
- Contractors must immediately provide in-person or telephone notification (no voicemail or email) to LM Aero's FPS Department or Plant Protection in the event a critical deficiency is identified while inspecting, testing, maintaining, activating, altering, changing, deactivating, or working on fire protection equipment.
 - Critical deficiencies shall include, but are not limited to system leakage, interruption of water supply, frozen or ruptured piping, false fire alarm activation, and suppression system release.
- LM Aero's FPS Department shall be notified when work has been completed on any fire protection system and before the system is tested and restored to service.

FALL PROTECTION

Contractors and their Subcontractors performing work above four or six feet depending on industry requirements shall:

- Use an approved method of fall protection.
- Follow the OSHA standard 1926.502 and Cal/OSHA Article 24 paragraph Fall Protection. Contact safety with any questions regarding these requirements. Roof access plans require approval from ESH.

LM Aero Steel Erection fall protection requirements can be found in the Steel Erection Paragraph.

HOT WORK (WELDING AND CUTTING) AND TAR POTS

- Cutting and/or welding are permitted in fire safe areas only.
 - Within an operating plant or building, cutting and/or welding shall be done preferably in an area designated for such work, such as a maintenance shop or a detached outside location.

- Such areas shall be of noncombustible or fire-resistive construction, essentially free from combustible and flammable contents, and suitably segregated from adjacent areas.
- When it is not practical to move work (as in most construction activities) the area shall be made safe by removing combustibles or protecting combustibles from ignition sources (e.g. open flames, hot surfaces, sparks).
- **Hot work permits are required prior** to performing welding, cutting, open flame, hot surface or spark producing operations e.g. grinding, outside of established welding areas.
 - Hot work permits apply to cutting, welding (arc and gas), soldering and brazing operations, and tar pots. Instruction for obtaining hot work permits shall be obtained from the POC.
 - Hot work permits are authorized by LM Aero's FPS Department and must be issued by LM POC prior to beginning any operations involving hot work.
 - The duration of permit is specified by the person issuing it and the expiration date and time is noted on the permit.
 - Permit is only good for conditions and location written on permit. Hot work permits shall be posted in the work area.
- When an area cannot be made fire safe, LM Aero' FPS Department shall ensure a fire watch is provided.
 - The Contractor shall provide a fire watch for all hot work operations and shall notify the LM Aero's FPS after they have performed the required 30-minute follow up.
 - The permit is then signed by the Contractor and returned to FPS.
 - LM Aero's FPS Department shall be notified by the LM Aero POC at least 48 hours in advance of planned hot work operations that will require a fire watch.
 - The LM Aero POC will provide the FPS department the location, duration, and charge number for welding operation requiring stand by.
- The Contractor Supervisor, in charge of the work, is responsible for moving all combustibles a safe distance away (at least 35 feet horizontally) and ensuring there are no openings in walls or floors where sparks or slag could fall and ignite combustibles.
 - Flammable and combustible liquids are not allowed within 50 feet of hot work.
 - If this is not possible, it is the Contractor Supervisor's responsibility to protect all exposed combustibles with fire resistant sheeting or blankets, before beginning hot work operations and provide a fire watch.
 - All conditions of the permit must be met before the permit is signed and issued
- Oxygen and acetylene bottles shall only be stored on welding carts when in use.
- Hot work shall not be performed in any area where the fire protection sprinkler system is shut down; exception: prior approval has been obtained from LM Aero's FPS Department.
 - LM Aero's FPS Department shall ensure fire extinguishers, provided by the Contractor, are available in the work area before a hot work permit is issued, and shall insure Contractor personnel are made aware of the location of nearby extinguishers and/or other fire protection equipment (e.g. fire alarm boxes, fire hoses).
 - Contractors are required to supply fire extinguishers 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.
- If a flammable atmosphere is suspected, or if the hot work is to be performed in a closed area containing flammables, LM Aero's FPS Department shall evaluate the atmosphere (Lower Explosive Limit (LEL) tests) and specify protective measures to be taken.
 - With approval of the site FPS department, the Contractor may make these evaluations.
 - A calibrated atmospheric measuring instrument will be used to perform these tests.
- Special precautions shall be taken when welding or cutting metal, which has been used for fuel tanks, regardless of how long the fuel has been drained.
 - The welding or cutting operation shall be ventilated and/or purged with nitrogen.
 - Metals that are contaminated with chemical residue must be decontaminated before welding.
 - Respiratory protection may be necessary for welders, depending on contaminant.
- Hot work shall not be performed on any pressurized line (e.g. steam, air, gas, oxygen, acetylene) until pressure is removed and hazardous energy control (lockout/tagout) procedures are implemented.
 - The POC shall be consulted if unsure or questions arise.
- Arc welding performed in line of sight of open aisles or employee work areas, regardless of the height of the welding operation, shall be shielded.
- **Tarpots shall:**
 - Not block any exits, means of egress, gates, roadways, or entrances and shall be located a minimum of 10 feet away from exits or other means of egress.
 - Not be placed where vapors may enter a building.
 - Not be placed within 50 feet of explosives operation or explosives storage facility, without the prior approval of LM Aero's FPS and S&H Departments.
 - Not be placed within 25 feet of any flammable or combustible liquid containers or storage areas.
 - Not be located inside or on the roof of any buildings.
 - Be attended by at least one employee knowledgeable in the operation and hazards of the equipment. The employee shall be within 25 feet of and within sight of the pot, always.
 - Have two fire extinguishers, with a rating of at least 20 B. Fire extinguishers shall be located within 25 feet of the tar pot.
- Used roofing mops and rags shall be stored away from buildings and combustible materials. Discarded roofing mops and rags shall not be in contact with combustible materials.

IONIZING RADIATION

Contractors, utilizing ionizing radiation sources (radioactive materials or radiation producing machines), shall comply with all State or Nuclear Regulatory Commission (NRC) regulations.

- Contractors using sources of radiation shall have any required license or registration.

- Out of state Contractors shall notify the applicable local radiation regulating agency where the radiation source will be used and gain approval prior to performing any operations.
- A copy of the Contractor's license or registration, radiographer's qualifications, and a site safety plan shall be submitted to LM Aero's S&H Department prior to performing any radiographic operations.
- Radiation sources shall not be stored overnight or left unattended on LM Aero's premises without prior authorization by LM Aero ESH.
 - If permitted, equipment shall be stored in accordance with all local regulations and must be disabled via key removal, electronic keypad lock or other equally effective means.

LASERS

Lasers used at LM Aero's site shall comply with the requirements of State regulations as well as any other applicable Federal requirements in 21 CFR Part 1040 and industry standard ANSI Z136.1.

- The POC must be notified in advance of operations requiring the use of Class IIIB and/or Class IV laser or laser products prior to entry into LM Aero's facility.
- The POC shall communicate this information to LM Aero's S&H Department.
- Any Contractor suspected of being exposed to laser operations shall seek medical attention and report the exposure to their POC, who will pass the information onto LM Aero's S&H Department.

LEAD

Contractors will not perform work that involves lead unless specifically contracted to do so under the contract and is qualified to perform such work in accordance with 29 CFR 1926.62- Lead and its related appendices.

- All painted surfaces shall be assumed to contain lead or other hazardous metals.

PAINTING

- Painting shall be coordinated through the POC to prevent disruption to LM Aero's operations.
- If painting in a confined space, evaluate the area for hazards and follow confined space entry requirements, coordinating with the POC. Contractor personnel shall comply with the applicable requirements of OSHA 29 CFR Part 1910.146 (or equivalent state OSHA requirement).
- If painting on roofs, close air intakes for air handling systems to prevent intake of vapors into the ventilation system.
- Do not use walls or partitions made of cardboard, plastic, or other combustible material, unless authorized by LM Aero's FPS/ESH Department.

- Ensure that all paint containers are properly stored, and paint related wastes are properly disposed.

POWDER-ACTUATED TOOLS

- Only trained Contractor personnel shall use powder-actuated tools. Proof of certification must be provided to LM POC or ESH representative upon request.
- Powder-actuated tools shall not be used in an explosive or flammable atmosphere.
- The tool, studs, and cartridges shall be kept in a safe area. Only authorized Contractor personnel shall have access to the storage area. Tools or powder loads shall never be left unattended in a place where they would be available to unauthorized person. Boosters and cartridges shall be kept in a storage container under lock and key.
- Misfires shall be identified, isolated and properly disposed.

SCAFFOLDS

Contractors shall be familiar with the type of scaffolds being used and the requirements specific to each type.

- Erect, move, dismantle, or alter scaffolds only under a Competent Person's supervision and direction.
- Ensure work is performed only by experienced and trained personnel selected for such work by the Competent Person
- The feasibility and safety of providing fall protection for personnel erecting or dismantling supported scaffolds is to be decided by a Competent Person.
- Fall protection shall be provided when erecting or dismantling scaffolds where the installation and use of such protection is feasible and does not create a greater hazard.
- Scaffolds and scaffold components are to be inspected by a Competent Person for visible defects before each work shift and after an occurrence, which could affect a scaffold's structural integrity.
- Documentation of the scaffold inspection shall be maintained on the scaffold.

STEEL ERECTION

Activities involving steel erection issues shall conform to 29 CFR 1926 Subpart R- Steel Erection. Contractors and their Subcontractors shall:

- Use an approved method of fall protection.
- Accomplish a written Job Safety Analysis for all steel erection work and provide the Fall Protection Job Safety Analysis to LM POC or LM ESH when requested.

ATTACHMENT A

Helpful Telephone Numbers

Fort Worth

Emergency Numbers

To report a fire, chemical spill, or other emergency:

In-plant extension	911
From cellular telephone	817-777-3473

Non-Emergency Numbers

EMCS	817-777-7136
Fire Protection Services	817-777-2163
	817-777-2164
	817-777-3134
	817-777-3135

Plant Engineering

Facility Protection Services

In-plant extension	7-2567
	7-2569
From cellular telephone	817-777-2567
	817-777-2569
Gate 2	817-777-4507
Gate 6 (After hours)	817-777-4513

POC: _____
Office Telephone Number: _____
Pager Number: _____
Cellular Telephone Number: _____

Marietta

Emergency Numbers

Emergency Services	770-494-4911
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Non-Emergency Numbers

Environmental, Safety, and Health	678-733-0035
Environmental, Safety, and Health – General Information	770-494-4121
Environmental Resources Department	770-494-6428
Fire Protection Services (Confined Space/Hot Work Permits)	770-494-3970
Hazardous Waste Management – Collection/Spills/Disposal	770-494-4936
	770-494-4937
Facilities Engineering/Support Facilities Maintenance Desk	770-494-2951
Facilities Engineering & Support	770-494-2762
Medical – Information	770-494-2762
Security – General Information	770-494-3473

POC: _____
Office Telephone Number: _____
Pager Number: _____
Cellular Telephone Number: _____

Palmdale

Emergency Numbers

To report a fire, chemical spill, or other emergency:

In-plant extension 911

From cellular telephone 661-572-2010

POC: _____
Office Telephone Number: _____
Pager Number: _____
Cellular Telephone Number: _____

ATTACHMENT B
Contractor Orientation Checklist Safety and Health Program
(Note: Included in Form 12109)

<small>Lockheed Martin Aeronautics Company Supply Chain Management</small>	LOCKHEED MARTIN																			
<u>CONTRACTOR ORIENTATION CHECKLIST</u> (Marietta & Palmdale Required)																				
Company Name: _____ Date: _____																				
Company POC Name: _____																				
Company POC Email: _____ Company POC Phone: _____																				
<p>Representatives of the above-named Contractor have reviewed the below applicable LM Aero Safety and Health Program, OSHA, or Cal-OSHA orientation topics on date above.</p> <p><u>Contractor Link</u> – https://www.lockheedmartin.com/en-us/suppliers/business-area-procurement/aeronautics/terms-and-conditions/environment-safety-health.html</p> <p><u>Please mark all the specific orientation topics that apply:</u></p> <p>A. Environmental Management System (EMS) Contractor enrolled in International Standard Organization (ISO) 14001? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>B. Contractor Orientations: Reviewed with employees and/or subcontractors (Written record must be submitted within 24 hours when requested by contract POC or ESH)</p> <table border="0" style="width: 100%;"><tr><td><input type="checkbox"/> PM-8013 Contractor ESH Handbook</td><td><input type="checkbox"/> Asbestos Notification – Palmdale Only</td></tr><tr><td><input type="checkbox"/> Marietta Contractor Safety Briefing</td><td><input type="checkbox"/> Contractor Low Speed Vehicle Orientation – Palmdale Only</td></tr><tr><td colspan="2"><input type="checkbox"/> Palmdale Contractor Orientation</td></tr></table> <p>C. Operations specific Safety and Health requirements (check all applicable; if any in this section are checked, <u>contact POC because further documentation is required.</u>)</p> <table border="0" style="width: 100%;"><tr><td><input type="checkbox"/> Confined Space Entry</td><td><input type="checkbox"/> Hazardous Materials- Onsite Use</td></tr><tr><td><input type="checkbox"/> Control of Hazardous Energy (Lockout/Tagout)</td><td><input type="checkbox"/> Ionizing and Non-Ionizing Radiation (lasers, RF)</td></tr><tr><td><input type="checkbox"/> Crane Operations</td><td><input type="checkbox"/> Scaffold Erection</td></tr><tr><td><input type="checkbox"/> Excavation</td><td><input type="checkbox"/> Steel Erection</td></tr><tr><td><input type="checkbox"/> Fall Protection</td><td><input type="checkbox"/> Welding and cutting (Hot Work Operations)</td></tr><tr><td colspan="2"><input type="checkbox"/> Other _____</td></tr></table> <p>D. Injury and Illness Prevention Plan (IIPP) – <u>Palmdale Only</u> Employers must establish, implement and maintain an effective IIPP. Employers with 10 or more employees must have a written IIPP and provide it to ESH. Employers with less than 10 employees must orally communicate project safety concerns and submit documentation of communication to ESH. IIPP in place (Compliant with Title 8 California Code of Regulation (CCR) Section 3203) Yes <input type="checkbox"/> No <input type="checkbox"/></p>		<input type="checkbox"/> PM-8013 Contractor ESH Handbook	<input type="checkbox"/> Asbestos Notification – Palmdale Only	<input type="checkbox"/> Marietta Contractor Safety Briefing	<input type="checkbox"/> Contractor Low Speed Vehicle Orientation – Palmdale Only	<input type="checkbox"/> Palmdale Contractor Orientation		<input type="checkbox"/> Confined Space Entry	<input type="checkbox"/> Hazardous Materials- Onsite Use	<input type="checkbox"/> Control of Hazardous Energy (Lockout/Tagout)	<input type="checkbox"/> Ionizing and Non-Ionizing Radiation (lasers, RF)	<input type="checkbox"/> Crane Operations	<input type="checkbox"/> Scaffold Erection	<input type="checkbox"/> Excavation	<input type="checkbox"/> Steel Erection	<input type="checkbox"/> Fall Protection	<input type="checkbox"/> Welding and cutting (Hot Work Operations)	<input type="checkbox"/> Other _____		
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<input type="checkbox"/> Other _____																				
<p>Contractor is responsible for insuring flow-down of this information to all levels of employees (including subcontractors) working on the project. Contact ESH if additional information is needed. When form is complete, Contractor shall provide LM POC and ESH a copy of this attachment and maintain one copy on file or provide copy upon request.</p> <p>Contractor Signature: _____ Date: _____</p>																				
<div style="display: flex; justify-content: space-between; font-size: small;"><div>Page 4</div><div>Important Notice: The current version of this form can be found on the LM Intranet. Lockheed Martin Aeronautics Company Supply Chain Management</div><div>12109-05062024</div></div>																				

ATTACHMENT C
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ATTACHMENT D

Lockheed Martin Priority Chemicals List

The LM Priority Chemicals List can be found at the following external web site and is applicable to all LM Aero Locations:

<https://www.lockheedmartin.com/en-us/suppliers/business-area-procurement/aeronautics/terms-and-conditions/environment-safety-health.html>

ATTACHMENT E

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ATTACHMENT F

The Facilities Contractor Hazardous Material Usage Log Form(s) form can be found at the following external web site and is applicable to LM Aero:

<https://www.lockheedmartin.com/en-us/suppliers/business-area-procurement/aeronautics/terms-and-conditions/environment-safety-health.html>

Example Form for Marietta and Palmdale

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