Lockheed Martin
Space Systems Company (LMSSC)

Contractor Environment, Safety & Health (ESH)
Site Briefing - Boulder, Colorado

The purpose of the Contractor ESH briefing is for LMSSC to provide information to contractors (non-LM employees) with key ESH items and protocols to safeguard contractors, visitors, LM employees and the environment while working at LMSSC

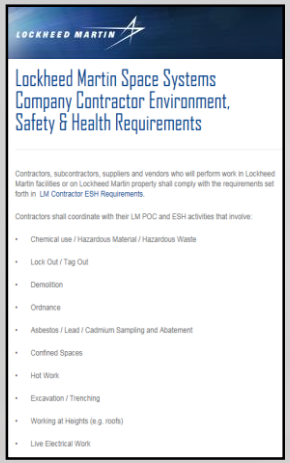
10/9/17

Scope

- The target audience of this presentation are contractors who have the potential to be involved in construction, renovation, repair, maintenance, custodial work, environmental remediation, work with hazardous chemicals, or work in potentially hazardous locations

- Contractors shall be cognizant of requirements contained in the LMSSC External Website for Contractors (http://www.lockheedmartin.com/us/ssc/edc/eshr.html) which incorporates the LMSSC Contractor ESH Requirements (http://www.lockheedmartin.com/content/dam/lockheed/data/space/documents/edc/2017/ESH-PO-001%2C%20Rev.%205%2C%20ESH_Requirements_3-21-17.pdf)

- Contractor must ensure its sub-tier subcontractors comply with the above requirements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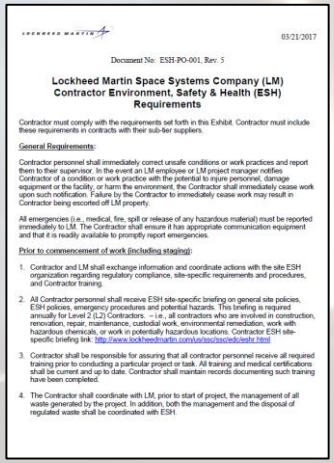
Lockheed Martin Space Systems Company Contractor Environment, Safety & Health Requirements

Contractors, subcontractors, suppliers and vendors who will perform work in Lockheed Martin facilities or on Lockheed Martin property shall comply with the requirements set forth in LM Contractor ESH Requirements.

Contractors shall coordinate with their LM POC and ESH activities that involve:

- Chemical use / Hazardous Material / Hazardous Waste
- Lock Out / Tag Out
- Demolition
- Ordnance
- Asbestos / Lead / Cadmium Sampling and Abatement
- Confined Spaces
- Hot Work
- Excavation / Trenching
- Working at Heights (e.g. roofs)
- Live Electrical Work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03/21/2017

Document No: ESH-PO-001, Rev. 5

Lockheed Martin Space Systems Company (LM) Contractor Environment, Safety & Health (ESH) Requirements

Contractor must comply with the requirements set forth in this Exhibit. Contractor must include these requirements in contracts with their sub-tier suppliers.

General Requirements:

Contractor personnel shall immediately correct unsafe conditions or work practices and report them to their supervisor. In the event an LM employee or LM project manager notifies Contractor of a condition or work practice with the potential to injure personnel, damage equipment or the facility, or harm the environment, the Contractor shall immediately cease work upon such notification. Failure by the Contractor to immediately cease work may result in Contractor being escorted off LM property.

All emergencies (i.e., medical, fire, spill or release of any hazardous material) must be reported immediately to LM. The Contractor shall ensure it has appropriate communication equipment and that it is readily available to promptly report emergencies.

Prior to commencement of work (including staging):

1. Contractor and LM shall exchange information and coordinate actions with the site ESH organization regarding regulatory compliance, site-specific requirements and procedures, and Contractor training.
2. All Contractor personnel shall receive ESH site-specific briefing on general site policies, ESH policies, emergency procedures and potential hazards. This briefing is required annually for Level 2 (L2) Contractors. – i.e., all contractors who are involved in construction, renovation, repair, maintenance, custodial work, environmental remediation, work with hazardous chemicals, or work in potentially hazardous locations. Contractor ESH site-specific briefing link: http://www.lockheedmartin.com/us/ssc/ssc/edc/eshr.html
3. Contractor shall be responsible for assuring that all contractor personnel receive all required training prior to conducting a particular project or task. All training and medical certifications shall be current and up to date. Contractor shall maintain records documenting such training have been completed.
4. The Contractor shall coordinate with LM, prior to start of project, the management of all waste generated by the project. In addition, both the management and the disposal of regulated waste shall be coordinated with ESH.

General Policies

- Communicate regularly with your LMSSC POC (typically a member of Facility Operations & Services - FO&S)
- Contractor personnel shall immediately correct unsafe conditions and work practices
- Only hands free communication devices shall be used while driving
- LM campuses are ‘non-smoking’
- Follow good housekeeping practices
- Designate work areas with safety barriers and signage as needed
- Obey all traffic rules and speed limits, park in designated areas

Contractor Training

- The contractor shall be responsible for ensuring that all contractor personnel receive OSHA-required training prior to conducting a particular project or task; examples include, but are not limited to, personal protective equipment (PPE), fall protection, hazard communication (HazCom), lockout-tag-out (LOTO), confined space and powered industrial trucks (PITs)

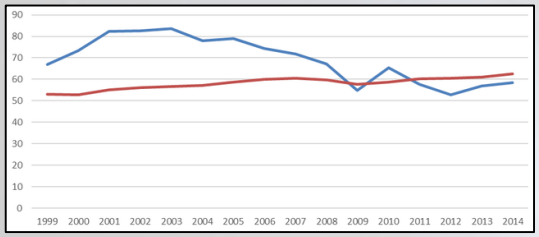
- OSHA 'Competent' or 'Qualified' Person:

  The contractor is responsible for providing a competent and / or qualified person for hazardous operations or tasks as defined by OSHA for the entire duration of the hazardous operation. Example tasks include, but are not limited to: asbestos/lead abatement, welding, erecting/changing scaffolding, excavation, demolition, remediation, use of accessory hoisting equipment, cranes and fall protection

- All training and medical certifications shall be current and up to date; LM may request proof of training at any time

Contractor S&H Programs / Records

- The contractor shall be responsible for ensuring that compliant OSHA-required written safety and health (S&H) programs are maintained; examples include, but are not limited to HazCom, and LOTO
- LM may request to review written programs at any time
- LM may request Company injury records and require that contractors meet minimum industry rates
- LM may request/review Company Notice of Violation (NOV) information



Emergencies

- Know where the site evacuation assembly point is located; re-enter only when given the all clear by LM
- Immediately report emergencies, incidents, and accidents to the contractor supervisor and LM Point of Contact
- Report emergencies such as fire or instances where multiple personnel are injured:
  - Boulder: Dial **2-911** from an in-house phone
- Provide the dispatcher with the following information:
  - Type of emergency (hazardous material spill, medical, fire)
  - Location (e.g. street, building no., floor, column no., etc.)
- For Environment, Safety and Health dial the ESH Hotline **(303) 977-4444**

Spine Road

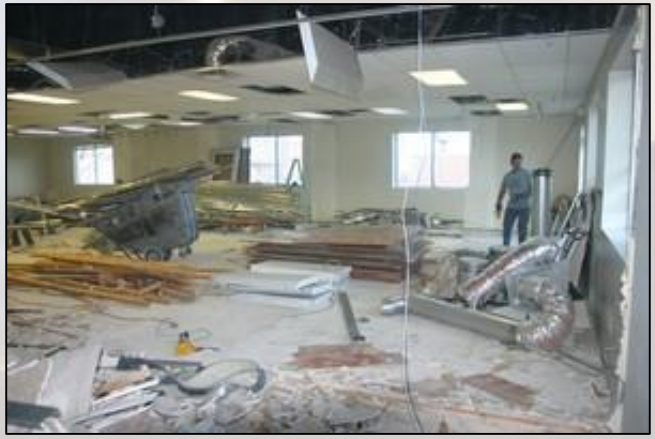
Odell Place

Other locations:
As directed
real-time

Potential Site Hazards

Potential hazards you may encounter at LMSSC:

- Hazardous materials / hazardous waste
- Non-ionizing radiation (e.g. radio-frequency)
- Fall hazards
- Asbestos & lead (during demolition)



Confined Space

Note that all permit-required confined spaces are placarded ***except***:

- Sewer/lift station manholes/entrances
- Storm water, waste water manholes/entrances

Example Placarded
Permit-Required Confined Spaces

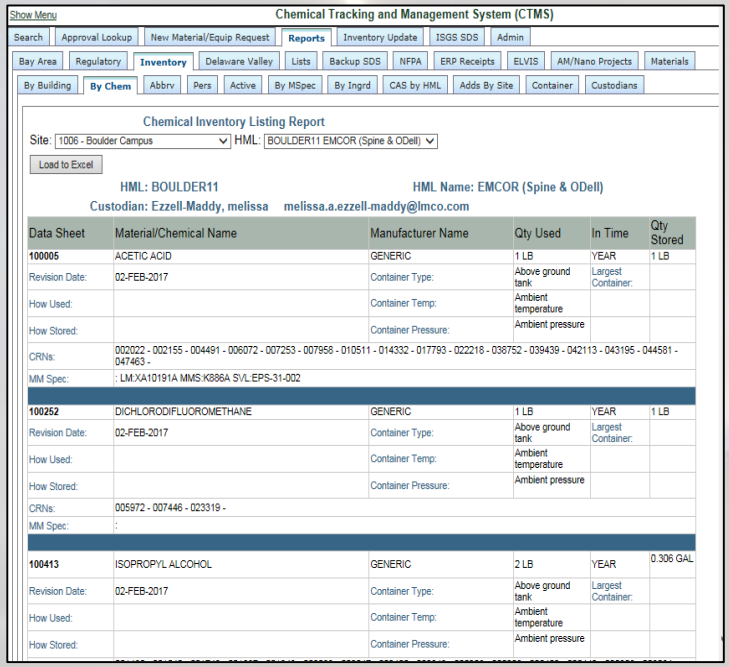
Non Placarded Sewer/Lift Station Manholes/Entrances – **ALL are Permit-Required Confined Spaces**

Non Placarded Water System Manholes/Entrances – **ALL are Permit-Required Confined Spaces**

Contractor Chemicals

- Contractors shall ensure that all chemicals are approved by ESH *prior to* their initial use
- Globally Harmonized System (GHS)-compliant Safety Data Sheets (SDS) shall be submitted with each new chemical request
- Accurate contractor chemical inventories shall be maintained; coordinate Chemical Tracking and Management System (CTMS) entry with ESH

SAFETY DATA SHEET



Chemical Tracking and Management System (CTMS)

Chemical Inventory Listing Report

Site: 1006 - Boulder Campus HML: BOULDER11 EMCOR (Spine & ODell)

Load to Excel

HML: BOULDER11 HML Name: EMCOR (Spine & ODell)

Custodian: Ezzell-Maddy, melissa melissa.a.ezzell-maddy@lmco.com

Data Sheet	Material/Chemical Name	Manufacturer Name	Qty Used	In Time	Qty Stored
100005	ACETIC ACID	GENERIC	1 LB	YEAR	1 LB
Revision Date:	02-FEB-2017	Container Type:	Above ground tank	Largest Container:	
How Used:		Container Temp:	Ambient temperature		
How Stored:		Container Pressure:	Ambient pressure		
CRNs:	002022 - 002155 - 004491 - 006072 - 007253 - 007958 - 010511 - 014332 - 017793 - 022218 - 038752 - 039439 - 042113 - 043195 - 044581 - 047463 -				
MM Spec:	: LM:XA10191A MMS:K886A SVL:EPS-31-002				
100252	DICHLORODIFLUOROMETHANE	GENERIC	1 LB	YEAR	1 LB
Revision Date:	02-FEB-2017	Container Type:	Above ground tank	Largest Container:	
How Used:		Container Temp:	Ambient temperature		
How Stored:		Container Pressure:	Ambient pressure		
CRNs:	005972 - 007446 - 023319 -				
MM Spec:	:				
100413	ISOPROPYL ALCOHOL	GENERIC	2 LB	YEAR	0.306 GAL
Revision Date:	02-FEB-2017	Container Type:	Above ground tank	Largest Container:	
How Used:		Container Temp:	Ambient temperature		
How Stored:		Container Pressure:	Ambient pressure		

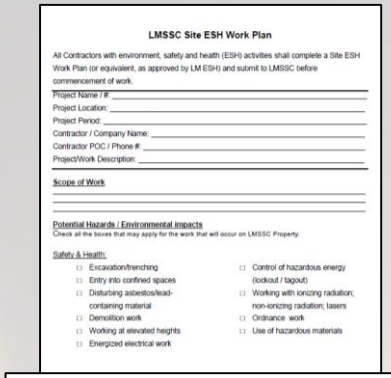
Contractor Chemicals / Waste Management

- Contractors shall not introduce any **asbestos-containing** material into the work site
- Contractors shall not introduce any paints or coatings that contain **lead** or **hexavalent chromium** into the work site
- All chemical containers shall remain properly labeled at all times (including cases of ‘immediate use’)
- All potentially hazardous waste generation shall be coordinated with ESH
- All hazardous waste, used oil, used glycol, ‘drip pans’ and similar waste containers shall remain properly labeled at all times

Hazardous Activities

Contractors shall coordinate with their LM POC and ESH when conducting activities that involve:

- Lock Out / Tag Out
- Demolition (including potential disturbance of materials that contain asbestos and lead)
- Ordnance
- Confined Spaces
- Hot Work
- Excavation / Trenching
- Working at Heights (e.g. roofs or other areas with a potential for fall hazards)
- Live Electrical Work
- Lifts / Cranes



LMSSC Site ESH Work Plan

All Contractors with environment, safety and health (ESH) activities shall complete a Site ESH Work Plan (or equivalent, as approved by LM ESH) and submit to LMSSC before commencement of work.

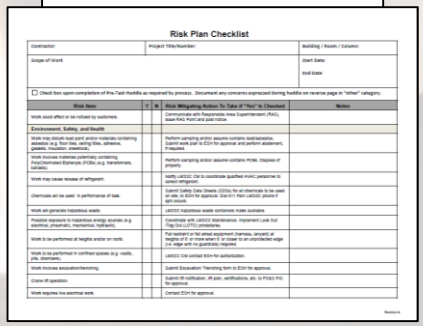
Project Name / #:
Project Location:
Project Period:
Contractor / Company Name:
Contractor POC / Phone #:
Project/Work Description:

Scope of Work

Potential Hazards / Environmental Impacts
Check all the boxes that may apply for the work that will occur on LMSSC Property.

Safety & Health:

- ☐ Excavation/trenching
- ☐ Entry into confined spaces
- ☐ Disturbing asbestos/lead-containing material
- ☐ Demolition work
- ☐ Working at elevated heights
- ☐ Energized electrical work
- ☐ Control of hazardous energy (lockout / tagout)
- ☐ Working with ionizing radiation; non-ionizing radiation; lasers
- ☐ Ordnance work
- ☐ Use of hazardous materials



Risk Plan Checklist

Contractor: | Project Title/Number: | Building / Room / Column:

Scope of Work | Start Date: | End Date:

☐ Check box upon completion of Pre-Task Huddle as required by process. Document any concerns expressed during huddle on reverse page in "other" category.

Risk Item	Y	N	Risk Mitigating Action To Take if "Yes" Is Checked	Notes
Work could affect or be noticed by customers.			Communicate with Responsible Area Superintendent (RAS), issue RAS Point and post notice.	
Environment, Safety, and Health				
Work may disturb suspect paint and/or materials containing asbestos (e.g. floor tiles, ceiling tiles, adhesive, gaskets, insulation, sheetrock).			Perform sampling and/or assume contains asbestos/lead. Submit work plan to ESH for approval and perform abatement, if required.	
Work involves materials potentially containing Polychlorinated Biphenyls (PCBs) (e.g. transformers, ballasts).			Perform sampling and/or assume contains PCBs. Dispose of properly.	
Work may cause release of refrigerant.			Notify LMSSC CM to coordinate qualified HVAC personnel to collect refrigerant.	
Chemicals will be used in performance of task.			Submit Safety Data Sheets (SDSs) for all chemicals to be used on site, to ESH for approval. Dial 911 from LMSSC phone if spill occurs.	
Work will generate hazardous waste.			LMSSC hazardous waste containers made available.	
Possible exposure to hazardous energy sources (e.g. electrical, pneumatic, mechanical, hydraulic).			Coordinate with LMSSC Maintenance. Implement Lock Out Tag Out (LOTO) procedures.	
Work to be performed at heights and/or on roofs.			Full restraint or fall arrest equipment (harness, lanyard) at heights of 6' or more when 6' or closer to an unprotected edge (i.e. edge with no guardrails) required.	
Work to be performed in confined spaces (e.g. vaults, pits, chambers).			LMSSC CM contact ESH for authorization.	
Work involves excavation/trenching.			Submit Excavation Trenching form to ESH for approval.	
Crane lift operation.			Submit lift notification, lift plan, certifications, etc. to FO&S PIO for approval.	
Work requires live electrical work.			Contact ESH for approval.	

Specific jobs may require completion of a Site ESH Work Plan, FO&S Risk Plan Checklist or equivalent

Air Emissions

- Activities that generate air pollution emissions (e.g., gases, dust, smoke, fumes, liquid droplets, and excessive odors) must be reviewed and authorized by ESH or their designees.
- Contractor is responsible for regulatory notifications and/or permits and shall fully comply with all laws, regulations, permit restrictions, and procedures.
- Contractor shall notify the LMPOC and ESH if they bring on any combustion equipment such as boilers, generators, compressors, tar kettles, tanks, pumps, etc.
- Contractor shall provide equipment specification sheet listing at a minimum, equipment rated capacity and fuel consumption rates, equipment environmental sheets, and MSDS for fuels combusted.

Miscellaneous

- Indoor Environmental Quality:

  Adequate control techniques shall be used (e.g., vacuum cleaning instead of sweeping, separation of work area from occupied space using plastic barriers) to minimize emission / spread of dust or other contaminants into occupied spaces

- Noise:

  Prior to performing work inside an LMSSC building, contractors shall use every effort to prevent noise from adversely impacting LM employees working nearby; ESH shall pre-approve any equipment brought onsite that produces noise over 75 dB

- Powder-Actuated Tools:

  Only properly trained personnel shall be allowed to operate these tools; powder-actuated tools shall not be loaded until immediately before use and shall never be left loaded while unattended

- Lasers:

  Obtain ESH approval prior to bringing any class 3B or 4 laser onto the site

This Training

- Work involving “ESH Hazards”:
  Contractors whose work involves the potential to be involved in construction, renovation, repair, maintenance, custodial work, environmental remediation, work with hazardous chemicals, or work in potentially hazardous locations (for example in confined spaces or around energized equipment) are required to **take this training annually**. Please ensure FO&S or ESH receives a copy of the **completed roster** each year.
- Work not involving “ESH Hazards”:
  Contractors whose work does not involve the potential to be involved in construction, renovation, repair, maintenance, custodial work, environmental remediation, work with hazardous chemicals, or work in potentially hazardous locations are only required to **take this training once**. Submission of a roster to FO&S or ESH is optional.
- When completing a training roster use either of the flowing slide templates; whichever fits your company’s specific needs.

LMSSC Contractor Acknowledgment of "Contractor ESH Site Briefing"

Complete and submit this form to FO&S or ESH

I acknowledge that I have reviewed and understand
LMSSC Boulder Campuses Contractor ESH Site Briefing.

Date: _____

Company: _____

Printed Name: _____

Signature: _____

LM Badge # (if applicable): _____ LMSSC POC: _____

LMSSC Contractor Acknowledgment of "Contractor ESH Site Briefing"

Roster version: Complete and submit this form to FO&S or ESH

Company: _____ Date: _____ LMSSC POC: _____

I acknowledge that I have reviewed and understand LMSSC Boulder Campuses Contractor ESH Site Briefing.

Printed Name	**Signature**	**LM Badge #** **(if applicable)**