

ENVIRONMENT, HEALTH AND SAFETY (EHS) REQUIREMENTS FOR ON-SITE PROVIDERS

All independent contractors are required to provide a safe and healthy job site for their employees, Buyer's employees of The Boeing Company's Mesa Arizona Facility (Buyer) and other personnel who enter the job site.

This clause number D415M shall be incorporated into all of Seller's subcontracts for independent contractors (a.k.a. service providers) operating at Buyer's Boeing Mesa facility or associated remote sites. Nothing herein shall be construed to relieve the contractor of its responsibility to comply with applicable federal, state and local fire code, environmental, health and safety laws, regulations and requirements. Such responsibility rests solely upon the contractor.

In the event of conflicting regulatory, code, or contractual requirements, the most stringent requirement shall apply. The minimum safety, health, and environmental requirements applicable to work performed on Buyer property are found in 29 Code of Federal Regulations (CFR) Part 1910 (Occupational Safety and Health Standards for General Industry), 29 CFR 1926 (Occupational Safety and Health Standards for the Construction Industry), 40 CFR (Protection of the Environment), 49 CFR (Transportation), the International Building Code, the International Fire Code, the National Electrical Code, and National Fire Protection Association (NFPA) Standard 70E (Standard for Electrical Safety in the Workplace).

1. INTRODUCTION

Buyer recognizes that many hazards are inherent during maintenance and construction activities. The contractor is required to follow applicable federal, state and local governmental safety and environmental regulations. This applies to all construction, maintenance and service work performed at any Buyer location.

2. GENERAL INFORMATION

(A) Notifications

All general contractors and independent contractors (not working for a general contractor) that perform construction, maintenance and/or service work at Buyer's Boeing Mesa facility shall designate a person as the on-site Safety Representative. The contractor shall provide written notification to the Buyer's Procurement Agent of the name and title of the contractor's on-site Safety Representative for the project. The Safety Representative need not be a supervisor or manager but must have responsibility and authority to identify and correct safety and environmental hazards. In addition, the Safety Representative must notify the Buyer's Environment, Health and Safety (EHS) Department of the date and time of when a pre-job safety meeting will be conducted.

The contractor shall provide the Buyer's Procurement Agent or the Buyer's Onsite Activity Representative with a list of hazardous materials used to perform work activities, quantities to be used, and Material Safety Data Sheets (MSDS's) prior to the hazardous materials arriving onto Buyer's property. The Buyer's Environment, Safety and Health Department must review and approve all hazardous materials prior to their introduction onto the Buyer's property.

In addition, the contractor shall notify the Buyer's Procurement Agent, Onsite Activity Representative, EHS, and/or Fire Departments of all hazardous work activities, as identified in Section 3 of this clause, prior to the commencement of the work activity.

The Buyer's Onsite Activity Representative will notify the contractor(s) of hazardous materials and environments that may be encountered at its facility, and to which contractor(s) may be exposed, prior to commencing work. This information is maintained by the Buyer's Environment, Health and Safety Department.

(B) Emergencies

Emergencies at Buyer's Boeing Mesa facility are to be reported by dialing 911 from a Boeing phone. This number must be called immediately in case of fire, medical emergency, hazardous material incident, or damage to Buyer's property. Contractors shall avoid using cell phones to call outside emergency services. However, cell phones may be used to report emergencies at Buyer's Boeing Mesa facility by dialing (480) 891-0911.

Contractors shall report all serious occupational injuries and illnesses that occur on Buyer's property to Buyer's EHS Department or Buyer's Health Services. Injuries are considered serious if they require medical treatment beyond first aid.

For information on occupational safety, health and environmental requirements at Buyer's Boeing Mesa facility, call 480-891-0718 or 480-891-0727.

(C) *Personal Protective Equipment*

The contractor shall provide any required personal protective equipment (PPE). When required, training in the use of the PPE will be the responsibility of the contractor. PPE includes head, eye, hearing, hand, foot, respiratory protection, and fall protective equipment. Contractors must follow Buyer's PPE requirements where posted. All PPE must meet performance standards set by government agencies.

(D) *Smoking*

The Buyer's Boeing Mesa facility is a tobacco-free work place. Tobacco products including pipes, cigars, cigarettes, chew, snuff, snus (spitless tobacco) and clove cigarettes are banned on all the Buyer's premises, including building entrances, parking lots and loading docks.

(E) Pedestrian and Vehicle Traffic

All Buyer's traffic and parking regulations must be observed. All types of vehicles shall obey stop signs and all *other* signs and markings within Buyer's premises. Walkways are to be used where provided. Contractors shall not take shortcuts through operating areas or buildings. Unauthorized personnel are prohibited from the flight ramps, fuel farm, and other posted areas.

The in-plant speed limit is 15 miles per hour (MPH), unless otherwise posted. Gasoline and diesel powered vehicles shall not be operated inside buildings without coordination with the Buyer's Procurement Agent, Onsite Activity Representative, EHS, and/or Fire Departments.

(F) Tools and Equipment

Contractors shall provide the equipment necessary for the safe performance of the work. Use of ladders, scaffolding, barricades, rigging equipment, hand tools, power tools, hoists, and forklifts shall follow safe industrial practices as well as applicable federal, state, and local safety standards. The Buyer's Procurement Agent, Onsite Activity Representative, and/or EHS Department may inspect any tools or equipment used on the job site. However, any such inspection or approval shall not relieve the contractor of their responsibility for the appropriateness, quality, and/or safe use of the tool or equipment.

The contractor must notify the Onsite Activity Representative, Contract Administrator and/or the Boeing Mesa EHS Department of explosive actuated tools and devices used on the project.

(G) Housekeeping

Work areas must be maintained in a safe condition and cleaned up continually as the job progresses. All trash and debris shall be removed from the work area by the end of each workday by the contractor.

(H) Inspections

The contractor or contractor's safety representative shall conduct work area inspections. Inspections shall be made periodically throughout the job to ensure that safe working conditions are maintained and that no safety hazards exist. All applicable federal, state, and/or local fire safety codes must be followed. In addition, the Buyer's EHS Department may inspect the Service Provider's work areas to manage risk to the Buyer and the Buyer's employees, not for the benefit

of Service Provider personnel. Unsafe work conditions will be reported to the assigned Buyer Procurement Representative or Onsite Activity Representative. If an imminent hazard is observed, EHS will stop the Service Provider project in question and contact the On-Site Activity representative to coordinate corrective action.

3. HAZARDOUS WORK ACTIVITIES

(A) Burning and Welding

The contractor must comply with current Occupational Safety and Health Administration (OSHA) standards for all burning, cutting, and welding operations. A Burn Permit must be obtained from the Buyer's Fire Department for all cutting, welding, soldering and burning operations. The contractor must have a fire extinguisher approved by the Buyer's Fire Department within 25 feet of the hot work. In addition, each hot work operation may require a dedicated "fire watch" during operations as deemed necessary by the Buyer's Fire Department. All combustible materials shall be removed from the work area. The contractor must ensure adequate employee and facility protection during all stages of operations.

(B) Confined Space Entry

All work involving entry into confined spaces shall be conducted according to current Occupational Safety and Health Administration (OSHA) standards and accepted industrial practices. Contractors shall utilize a permit system for confined space entry. Personnel shall be trained on confined space hazards and precautions prior to entry. A trained attendant or supervisor shall be present at all times during confined space entry. The contractor shall supply all tools, equipment, and monitoring instruments necessary for safe confined space entry.

The Buyer's Onsite Activity Representative will provide contractors with information on known and suspected hazards of existing confined space entry locations at Buyer's facility. Buyer's confined space entry procedures may be provided to contractors for information purposes only. This information is maintained by the Buyer's Environment, Health and Safety Department.

The contractor shall furnish evidence of a minimally acceptable program to the Buyer's EHS Department prior to entering confined spaces.

(C) Energized Electrical Work

The contractor must comply with current OSHA and NFPA 70E standards for safe work on energized electrical systems. Work on or near energized exposed movable conductors (e.g. power lines) or energized equipment with exposed

conductors operating at 50 volts or greater, shall only be done when approved in writing by the Buyer's Onsite Activity Representative.

(D) Lock/Out and Tag/Out Requirements

The contractor must comply with current OSHA and NFPA 70E standards for the proper control of hazardous energy. OSHA regulations, NFPA 70E, and Buyer's policies require that all machines/equipment are isolated from energy sources prior to performing work where inadvertent start-up or energy release could pose a personnel hazard.

All equipment that could present a hazard from inadvertent activation or energy release during maintenance, servicing, construction, or installation shall have the energy supply locked out and tagged except where the energy supply is needed for troubleshooting, inspecting, positioning, or servicing the equipment.

The contractor shall request permission from Buyer's Onsite Activity Representative prior to the proposed lockout of equipment or circuits. All affected employees shall be notified when equipment is "locked out" and when lockout is removed.

Work on or near exposed energized electrical equipment, and when making connection to live pipeline systems, shall be done only when approved in writing by the Onsite Activity Representative.

(E) Trenching and Excavations

The contractor must comply with current OSHA standards for all trenching and excavation activities. All trenches and excavations shall be properly guarded with barricades or caution tape. Personal protective systems, including shoring, shielding, sloping, and/or benching shall be utilized when required for trenches over 4 feet deep. If shielding or shoring is installed, contractor employees can only work inside the protected area of the personal protective system. In addition, proper access/egress methods, including ladders, stairs, and/or ramps shall be installed when required.

(F) Overhead Work/Elevated Workstations

The contractor must comply with current OSHA standards for overhead work, leading edge work, and work from elevated workstations, including scaffolding, ladders, powered platforms, and manlifts. All overhead work shall be performed with adequate fall protection for workers and pedestrian protection from falling objects.

The contractor must comply with current OSHA standards for the use of mobile cranes and other material hoisting equipment. All hoisting equipment must be

posted with the rated capacity. Personnel are not permitted under a suspended load. The use of cranes is limited to trained and authorized personnel only.

(G) Spray Painting/Spray Finishing/Spray Coating

Spray coating operations shall only be conducted in areas approved by the Buyer's EHS and Fire Departments. All electrical equipment shall be rated for Class I, Division I locations where flammable or combustible liquids are sprayed in addition to being well ventilated and unoccupied.

(H) Solvent Cleaning

Approval from the Buyer's EHS Department is required for all solvent cleaning operations. All waste and residual solvent shall be disposed of according to Section 5 (A) of these terms and conditions.

(I) Abrasive Blasting

Approval from the Buyer's EHS Department is required for all abrasive blasting operations. Approved blasting operations shall be conducted in unoccupied or out-of-doors enclosed areas.

(J) Radiation and Lasers

Approval from the Buyer's EHS Department is required prior to the use of radioactive materials, x-rays *sources* and/or class 3b or class 4 lasers. The use of these products must comply with current Federal and state regulations and is limited to licensed, trained and/or authorized personnel.

4. HAZARD COMMUNICATION

(A) General

It is important that all workers be informed of potential exposures to hazardous materials. This applies to the contractor's employees and Buyer's employees at or near the job site. Consequently, two-way communication is essential between the contractor and the Buyer.

The Buyer's Onsite Activity Representative will provide information on the hazardous materials that exist at the work site to which the contractor's employees might be exposed. This information is maintained by the Buyer's EHS Department.

Each contractor is required to provide the Buyer's Procurement Agent, Onsite Activity Representative, and/or the EHS Department with a list of chemical products to be used, quantities to be used and Material Safety Data Sheets (MSDS) on each chemical. The contractor shall provide the hazardous material

information to the Buyer's EHS Department and obtain approval for use prior to the hazardous materials arriving on-site.

(B) Labeling

All chemical products brought on site must be appropriately labeled in accordance with current OSHA requirements.

5. ENVIRONMENTAL CONCERNS

(A) Hazardous Waste

Hazardous wastes are those materials specified by the U.S. Environmental Protection Agency (EPA) (40 CFR 206 through 261) or the Arizona Department of Environmental Quality (ADEQ) (A.A.C. R18-8-260 through R18-8-261). The ADEQ also defines special wastes (A.R.S. R18-8-301). Additionally, Buyer classifies and manages certain non-regulated materials as hazardous waste. These materials include, but are not limited to empty product cans and used oil.

On-site contractors are responsible for properly collecting, segregating, packaging, identifying, and labeling hazardous wastes and special wastes. The contractor must also notify Buyer's EHS Department of these materials so that Buyer may properly manage the wastes.

In no case will the on-site contractor dispose of any hazardous wastes on Buyer's property, e.g., in general trash or recycling dumpsters, on the ground, in dry wells, or in sewer drains.

Additionally, contractors are expressly prohibited from removing hazardous wastes and special wastes from Buyer's property. All hazardous wastes, which are generated as a result of the contract, will remain on-site for proper disposal by the Buyer.

Contractors performing work at Buyer's facility shall ensure all fuel and oil containing equipment and containers are leak free. Any cleanup that resulted from the spilling or leaking of fuel or oil, including petroleum-contaminated soil, will be properly disposed of by Buyer per State of Arizona regulations. Any cost encountered from the cleanup and disposal of these wastes will be the responsibility of the contractor that generated the waste.

(B) Air Quality

Contractors which have the potential of releasing Hazardous Air Pollutants (HAP's) or Volatile Organic Compounds (VOC's), or which perform processes that may otherwise adversely affect ambient air quality must obtain approval from the Buyer's EHS Department before the project begins. Examples include, but are

not limited to: painting operations, abrasive blasting, solvent usage, open burning and earth moving. These projects may require an air quality permit from the Maricopa County Air Quality Department.

Contractors that use products with HAP's or VOC's may be required to maintain usage records. Forms for recording the usage of these products will be provided by the Buyer's EHS Department. If required, and upon completion of the contract, the contractor must return the completed usage forms to the Onsite Activity Representative or Buyer's EHS Department.

Contractors engaged in dust generating operations, defined as any activity capable of generating fugitive dust, must comply with Maricopa County Air Quality Department requirements.

Contractors engaged in dust generating operations that disturb more than a one-tenth (0.10) of an acre, or as determined by the Buyer's EHS Department, must obtain an Earthmoving (EM) Permit and Dust Control Plan (DCP) from the Maricopa County Air Quality Department. Copies of the EM Permit and DCP must be submitted to the Buyer's Onsite Activity Representative prior to commencement of work.

Contractors performing dust generating operations that do not require an Earthmoving Permit must submit their Maricopa County Dust Registration Number and employee Dust Compliance Training records to the Onsite Activity Representative prior to commencement of work. During each day of operation, these contractors must keep records of the methods of dust control used, and sub-contractor dust registration numbers. These records must be submitted to the Buyer's Onsite Activity Representative at the end of each day of work.

During each day of operation, contractors must keep records of the methods of dust control used. The preferred method of dust control is by watering. If other methods of dust control are to be utilized, contractors must obtain prior approval from Buyer's EHS Department. During periods of work stoppage, temporary stabilization of all disturbed surfaces must be implemented. During each day of operation, contractors must keep records of the methods of dust control used, and sub-contractor dust registration numbers.

At the completion of the project, final stabilization must occur. Final stabilization can include: paving with asphalt or concrete, applying gravel or crushed stone in sufficient quantity to cover disturbed areas, establishing a vegetative cover, or watering until a crust is established and then limiting vehicle access to prevent re-disturbance.

(C) Water Quality

No chemicals or hazardous materials shall be discharged into any drain, sanitary sewer system, sink, water retention basin, or on the ground.

Storm water runoff from construction activities on buyer's premises has the possibility to impact storm water quality by contributing sediment and other pollutants exposed at the construction site. These sediments and pollutants may enter the buyer's dry wells if allowed out of the construction area. Therefore it is essential that exposed materials and possible sediment contamination is kept to a minimum. Also, all storm water must remain on site. If there is a possibility that storm water may be discharged off site the contractor must notify the buyer prior to the start of the project. In addition to storm water discharges, all releases of water from testing of or draining of water from fire, cooling, irrigation, and sewer lines, or any type of discharge must be approved prior to discharge. At no time may any discharge of any waters be allowed off site.

To protect storm water quality and on site dry wells, erosion and sediment control Best Management Practices (BMPs) shall be implemented as appropriate. Construction site operators are required to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste that may cause adverse impacts to water quality. Buyer's construction activities must minimize the disturbance to surrounding areas, preserve natural vegetation, and implement good housekeeping practices. Construction activities that disturb large areas shall implement soil erosion controls such as mulch, grass, and stockpile covers. In addition, sediment controls such as silt fences, inlet protection, check dams, stabilized construction entrances, and sediment traps shall be implemented.

Most erosion and sediment controls require regular maintenance to operate correctly. Accumulated sediments should be removed frequently and materials should be checked periodically for wear. Regular inspections by qualified personnel, which can allow problem areas to be addressed, should be performed after major rain events.