



Service Provider Manual

Houston

March 2016

Emergency Numbers

Prior to the start of work, please write in the correct emergency numbers you are given by your company representative or the Boeing Onsite Activity Representative in the space provided below.

Emergency: 911 then 281-244-4444 (Boeing Security) _____

In case of emergency - Give the following information:

1. Your name and your employer's name.
2. Phone number from which you are calling.
3. Location of the incident:
 - City, street address (if known)
 - Building number and floor level
 - Column number
 - Nearest door number
4. Nature of emergency.

Don't hang up until told to do so!

You are a vital link in the emergency and must relay changes in the state of the emergency.

Boeing Onsite
Activity
Representative: _____

Other Numbers: Amy Espinoza (Boeing Site Services Manager) _____

281-468-4199

Margie Scott (JLL Facility Manager)

281-786-9449

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INTRODUCTION

Boeing is committed to high standards for safety, health, fire prevention, security, and the environment. As a Service Provider to Boeing, you are expected to maintain the same high standards.

You will be interfacing with Boeing operations and working closely with personnel from various Boeing organizations and related Service Providers. Therefore, it is important that you, your employees, and your subcontractors are familiar with Boeing safety, health, fire prevention, security, and environmental requirements.

As a Service Provider, you are responsible for ensuring that your employees and all your sub-contractors follow safe work practices and comply with all federal, state, local, and Boeing contract requirements. This booklet is intended to help you comply with Boeing safety, health, fire, security, and environmental requirements. Nothing herein shall relieve you of your responsibility to comply with federal, state, and local laws, codes, rules, regulations, and Boeing-contract requirements.

Your Boeing Onsite Activity Representative is your primary point of contact. Some work activities you are involved in may require additional coordination with Boeing Environment, Health and Safety (EHS), Fire, Security, and other entities as appropriate. The Boeing Onsite Activity Representative will facilitate this coordination.

Throughout this manual, activities requiring additional coordination are identified with the statement "Additional coordination is required."

Please read this booklet, and if you do not fully understand the information provided in all sections or if there are site-specific issues, discuss your questions with your supervisor or your Boeing Onsite Activity Representative.

Ensure that each of your personnel and subcontractors that will be performing work for Boeing are aware of the requirements of this manual.

Requirements of some locations or activities may differ from those in this manual. Consult with your Boeing Onsite Activity Representative for questions and additional requirements that may apply to your contract. Service Provider employees violating Boeing requirements are subject to removal from the site.

Your cooperation is expected and appreciated.

1.0 GENERAL INFORMATION

1.1 General Rules

- a. All Service Providers are to stay within assigned work areas. Wandering in non-assigned work areas is strictly prohibited.
- b. Service Providers shall comply with all posted safety requirements, including but not limited to rules concerning: hearing protection, eye protection, confined space entry, access barriers, parking and driving requirements.
- c. Use of offensive language and display of offensive materials is not permitted.
- d. Horseplay, theft, fighting, harassment, gambling, and possession or use of alcohol or controlled substances is strictly prohibited.
- e. Firearms or other weapons, and ammunition are strictly prohibited. Other weapons include any instrument or device declared to be a prohibited weapon by Boeing Security & Fire Protection, such as knives (blade over 3 inches), swords, bows, arrows and similar objects. Mock or non-functional weapons are also strictly prohibited. Contact your Boeing Onsite Activity Representative if there is a business reason for blades over 3 inches in length. Additional coordination is required.
- f. Use of Boeing assets such as equipment, machinery, tools, phones, utilities, etc., is prohibited without prior permission from the Boeing Onsite Activity Representative. Additional coordination is required. The use of Boeing assets by Service Providers is generally forbidden unless there is a specific business need such as unique tooling required for a project or additional risk incurred in operating portable equipment such as cranes.
- g. Use of a photographic or camera-enabled device must be properly authorized using a Camera Permit. Additional coordination is required.
- h. Radio frequency devices, such as portable radios, are controlled on Boeing property and must be pre-approved before use. Additional coordination is required.
- i. Tobacco use of any kind is prohibited on Boeing property, including Boeing-controlled, owned or leased grounds, parking lots, private vehicles and buildings, in Boeing-controlled, owned or leased vehicles, or in pre-delivered products. This prohibition

includes the use of any product that gives the appearance of using tobacco (examples: e-cigarettes, herbal chew).

- j. Animals are not to be brought onto Boeing property. Contact your Boeing Onsite Activity Representative regarding the use of guide dogs or other human service animals. Additional coordination is required.
- k. Phone or electronic device use is not permitted while walking or operating vehicles or equipment, unless hands-free. Personal phone or electronic device use is permitted in designated safety zones only.
- l. Reflective Apparel meeting ANSI/ISEA Class II is required on flight line/ramp areas.

1.2 Badge Identification

- a. You must obtain an identification badge and visibly display and wear the badge while on Boeing property.
- b. Lending or borrowing identification badges is strictly prohibited.

1.3 Vehicles and Mobile Equipment

- a. Personal and Service Provider vehicles and industrial mobile equipment used inside secured Boeing property are allowed with special permission only and may require a Boeing-issued parking pass.
- b. Service Provider vehicles, personal vehicles, and industrial mobile equipment and accessories shall be maintained in a safe operating condition.
- c. Service Provider vehicles, equipment, or supplies shall not block entrance ramps, truck doors, plant access aisles, emergency routes (including lanes or zones), or parking specified for Boeing equipment, facilities, or plant personnel without prior approval from the Boeing Onsite Activity Representative. Additional coordination is required.
- d. Posted speed limit and traffic signs shall be followed at all times while on Boeing property.
- e. Vehicles must yield right-of-way to:
 - Pedestrians
 - Moving aircraft
 - Emergency vehicles
- f. Service Provider vehicles are not permitted on flight line ramps without prior approval. Additional coordination is required.
- g. Seat belts, when available, shall be worn at all times.

- h. Personnel shall not be transported in the beds of trucks.
- i. Do not idle vehicles unnecessarily.
- j. Do not idle vehicles near building air intakes or building entrances.
- k. Operation of diesel, and gasoline-powered equipment is restricted in Boeing buildings. This restriction does not apply to transient vehicles or short-term loading and unloading inside occupied buildings. If diesel or gasoline powered equipment is to remain running inside a Boeing building, then the equipment exhaust shall be piped or vented to the outside of the building or use a Boeing-approved filtering system. Additional coordination is required.

1.4 Required Postings

The Service Provider is responsible for ensuring that all federal, state, and local agency permits and posters are placed at the entrance to the job site, or at a location as directed by the Boeing Onsite Activity Representative. Additional coordination is required.

2.0 EMERGENCY PROCEDURES

2.1 Evacuations

- a. All Service Providers shall participate in scheduled evacuation exercises or drills.
- b. In the event of a building or site evacuation, immediately evacuate through the nearest safe exit and report to your designated assembly point. If you do not know your assembly point, check with your immediate supervisor or Boeing Onsite Activity Representative. In all cases, instruction and directions given by your supervisor, security, or other emergency response personnel shall be followed.
- c. In the event of a building or site incident in which you are asked to "shelter in place," follow the posted directions, or direction from the designated emergency response personnel, to the closest designated "shelter in place" location.
- d. Do not leave the assembly point or shelter in place location until authorized to do so by Boeing Security & Fire Protection or local emergency response agencies.
- e. Ensure there is an effective means of communication with all of your employees and subcontractors working at the site.

2.2 Emergency Notification

Immediately report all emergency and significant incident situations to the Boeing emergency number listed on page i of this booklet and your Boeing Onsite Activity Representative.

You must know the building number, grid/column line number, floor level, and door number.

Remember: do not hang up until the dispatcher tells you to do so. You are a vital link in the emergency response and must relay changes in the state of the emergency.

Emergency and significant incident are defined as follows.

- a. Emergency: Any event requiring emergency personnel and equipment, including but not limited to:
 - Visible flame, smoke, noxious odors or noise that may attract the attention of the surrounding community or that results in the evacuation of personnel.
 - An event that places human life, the environment, or property at risk.

- Environmental spills or releases.
- b. Significant Incident: Any event involving one or more of the following.
- Death, serious injury, or exposure of an individual to hazardous substances that requires attention beyond first aid, hospitalization, or results in permanent impairment.
 - Property damage to Boeing or Boeing customer assets.
 - Damage or the potential for damage to a Boeing product or related production component or part.

3.0 FIRE PREVENTION

3.1 Fire Extinguishers

- a. As required and approved by the Boeing Fire Department or a Boeing Security and Fire representative, all Service Providers shall provide their own Factory Mutual (FM) Approved or Underwriters Laboratory (UL) Listed portable fire extinguishers in good working order. Fire extinguishers approved by the Boeing Fire Department or a Security and Fire representative for the specific hazards of the location must be readily accessible in the immediate area.
- b. All fire extinguisher activations must be reported immediately and treated as an emergency.

3.2 General Housekeeping

- a. Boeing trash receptacles shall not be used for construction debris.
- b. All construction trash and debris receptacles shall be located away from any Boeing building or structure. If construction chutes are required, the location and design of the chute shall be approved by the Boeing Fire Department or a Boeing Security and Fire representative. Coordinate with the Boeing Onsite Activity Representative. Additional coordination is required.
- c. All work areas shall be maintained in a clean state. Clean up and remove trash, scrap, excess materials, and other debris. This shall be done at least daily and whenever the accumulation constitutes a fire hazard.
- d. Burning of trash is prohibited.
- e. Wood, sawdust, or shavings shall not be used as absorbents for spilled flammable or combustible liquids or petroleum lubricants.

3.3 Equipment Requirements

- a. All equipment must be operated in accordance with the manufacturer's instruction manual.
- b. All powered equipment shall be refueled outdoors, away from storm drains and clear of structures, with engines shut off. Spill containment must be provided for equipment fueling. Spill clean up kits must be available at refueling locations.
- c. Gasoline, liquid propane gas, or propane-powered equipment shall be allowed on building roofs only with prior

written approval. Coordinate with the Boeing Onsite Activity Representative. Additional coordination is required.

- d. Electrical equipment used in areas where flammable atmospheres (vapors, dusts, or mists) may exist shall have appropriate National Fire Protection Association (NFPA) class and division ratings for explosion proofing.
- e. Air monitoring shall be conducted, as necessary, to check for hazardous emissions from powered equipment operating within buildings, excavations, or enclosed structures. Monitoring results shall be available for review if requested by Boeing.

3.4 Flammable Liquids

- a. The Service Provider shall comply with all safety regulations and codes pertaining to labeling, handling, and storage of flammable and combustible products.
- b. Flammable liquids shall not be used or stored inside Boeing buildings unless contained in an FM Approved, UL Listed or Boeing-approved container and only in quantities needed to accomplish the immediate tasks.
- c. Effective methods of spill retention, containment, and cleanup of materials are required.
- d. Containers and dispensing apparatus shall be electrically bonded and grounded when dispensing or transferring flammable liquids, except for portable containers less than five gallons in capacity.
- e. Portable flammable liquid containers five gallons or greater in size must be of metal construction.
- f. Service Provider flammable liquid storage locations must be approved through the Boeing Onsite Activity Representative. Additional coordination is required.

3.5 Spray Painting, Flammable Resins, Chemicals

- a. Inspection and written approval are required before painting, including spray painting or cleaning with flammable materials. Additional coordination is required.
- b. All electrical equipment shall be rated for Class I, Division 1 locations where flammable or combustible liquids are sprayed. Spray operations shall be conducted in well ventilated, unoccupied areas. Additional coordination is required.

- c. Only explosion-rated or intrinsically safe electrical equipment, including forklift trucks that are, for example, EE or EX rated, shall be used in hazardous locations, such as flight hangars, paint booths, and tank lines. Additional coordination is required.
- d. A minimum distance of 20 feet from ignition sources is required.

3.6 Storage of Combustible Materials

Contact the Onsite Activity Representative to obtain approval for the storage of combustible materials. Additional coordination is required.

3.7 Welding/Cutting Activities

- a. A Boeing hot-work permit is required before performing all open-flame, welding, or spark-producing work.
- b. Coordinate with the Boeing Onsite Activity Representative regarding hot work permit requirements at your location.
- c. Fire-retardant protective materials (such as fire blankets) shall be used to contain sparks and prevent them from falling against walls, on wooden floors, through flooring, on combustibles or valuable materials and equipment, or into hidden spaces.
- d. Flash shields, fire-resistive curtains, or other suitable shields shall be placed around the hot work area to protect any adjacent personnel from sparks and arc flash.
- e. All flammable materials shall be a minimum of 35 feet away from hot work areas.
- f. Arc welding machines with the potential to interfere with implanted medical devices shall be posted with an appropriate hazard warning.
- g. Local ventilation is required for welding operations that will generate welding fumes inside the building. Coordinate with Boeing Onsite Activities Representative. Additional coordination is required.
- h. Service Providers shall provide their own FM Approved or UL Listed portable fire extinguishers. Fire extinguishers approved for the specific hazards of the location must be readily accessible and fully charged.

- i. The Service Provider shall assign a fire watch for any open flame or spark producing work. The fire watch shall be trained in the use of portable fire-fighting equipment. The fire watch shall be solely dedicated to the assigned activity and remain on standby a minimum of 30 minutes following the end of any and all open-flame activities.
- j. The assigned fire watch shall notify the Boeing Fire Department, or other agency that issued the hot work permit, upon completion of work. Coordinate with the Boeing Onsite Activity Representative. Additional coordination is required.
- k. Hot-work permits shall be removed and destroyed upon completion of work or when they expire.

3.8 Fire Protection Systems

- a. Notify the Boeing Onsite Activity Representative 24 hours in advance of all proposed requests for fire protection system closure or impairments. Additional coordination is required.
- b. Boeing requests a 14 day notice for any non-emergency fire system impairment event, but realizes situations may arise where this is not always possible. However, under no circumstance shall the notice for non-emergency fire system impairment shut off events be less than 7 days. Coordinate with the Boeing Onsite Activity Representative. Additional coordination is required.
- c. Before using any fire hydrant or building standpipe system as a water supply, the Service Provider must obtain approval through the Boeing Onsite Activity Representative. Additional coordination is required.
- d. The Service Provider shall verify with the Boeing Onsite Activity Representative that all fire-extinguishing protection systems (sprinklers) are operational in an area of welding and open-flame cutting. Additional coordination is required.

3.9 Temporary Structures and Enclosures

- a. A separation of 25 feet shall be maintained between temporary buildings and storage areas and other buildings or areas. All temporary installations must have prior approval by the Boeing Onsite Activity Representative. Temporary walls or partitions shall be noncombustible. Additional coordination is required.

- b. Plastic or Visqueen film shall be fire resistive, UL Listed or FM Approved, and meet the requirements of NFPA #701, "Standard Methods of Fire Tests for Flame Propagation of Textiles and Films."

3.10 Roofing

The Boeing Onsite Activity Representative shall be notified in advance of all roof work involving: welding; open flame equipment; spark-producing or hot work, or use of a heat gun, coatings, solvents or chemicals, before start of the work. Additional coordination is required.

3.11 Emergency Egress

Service Providers shall not block or obstruct emergency exits or other means of egress at any time.

4.0 SAFETY REQUIREMENTS

4.1 Occupational Health and Safety Advisory Management Series (OHSAS)

The following is the Boeing Safety and Health Policy. Boeing and its employees are committed to:

- a. Conduct operations in compliance with applicable laws, regulations and Boeing policies and procedures.
 - b. Continually reduce occupational injuries/illnesses by assessing, evaluating, communicating, and controlling or eliminating occupational health and safety risks.
 - c. Continually improve our occupational health and safety management system.
 - d. Work together with our stakeholders on activities that promote occupational health and safety.
- 4.2 Service Provider personnel must have knowledge of how their actions may impact worker safety and health and the consequences of not following proper procedures and requirements.
- 4.3 Service Providers at Boeing facilities must ensure that their employees are made aware of the Boeing Safety and Health Policy. For more information on the Boeing OHSAS program contact your Boeing Onsite Activity Representative.
- ### 4.4 Project-Specific Safety Plans
- a. The Service Provider shall prepare a written, project-specific safety plan with the details in the plan applicable for work being performed, and submit the plan to the Boeing Onsite Activity Representative, upon request, for Boeing review. Project-specific safety plans shall be available and communicated at the location where the work is being performed.
 - b. The Service Provider shall submit to Boeing, on request, a copy of its company safety program.
 - c. The Service Provider shall provide written notification to the Boeing Onsite Activity Representative of the name and title of the Service Provider's on-site safety representative for the project.
 - d. Contact your Boeing Onsite Activity Representative for additional assistance. Additional coordination is required.
- ### 4.5 Personal Protective Equipment
- a. The Service Provider shall provide their employees all required personal protective equipment (PPE) and ensure that it is used. Boeing does not provide PPE to Service Provider personnel.

- b. All PPE must conform to applicable regulatory requirements and appropriate industry standards.
 - c. Examples of PPE are
 - Industrial safety glasses with side shields
 - Face protection
 - Body protection
 - Ear plugs and muffs
 - Hard hats
 - Gloves and hand protection
 - Full-body safety harness and lanyards
- 4.6 Hazard Communication/Safety Data Sheets
- a. Boeing shall provide, on request, the safety data sheet (SDS) for any hazardous material under Boeing control within the assigned work area.
 - b. Before any hazardous material arrives on site, the Service Provider shall furnish to the Boeing Onsite Activity Representative the following information on each hazardous material to be used:
 - 1. The identity of each hazardous material;
 - 2. An SDS for each hazardous material; and
 - 3. The quantity of each hazardous material to be used and/or stored on site.
 - c. All hazardous material containers shall be properly identified and labeled as to their contents. Hazardous material container labels must include:
 - 1. The identity of the hazardous material;
 - 2. The manufacturer of the hazardous material; and
 - 3. Appropriate hazard warnings
 - d. The Service Provider shall bring to the job site only the amount of hazardous materials necessary for the project.
- 4.7 Electrical Safety
- a. All electrical incidents and near misses shall be reported immediately to the Boeing Onsite Activity Representative.
 - b. Equipment used by Service Providers must be approved by a nationally recognized testing laboratory.
 - c. The Service Provider shall supply ground fault circuit interrupters for all temporary electrical wiring cords and portable equipment and tools.

- d. The Service Provider must comply with current OSHA and NFPA 70E standards for safe work on or near 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 Boeing Onsite Activity Representative. Additional coordination is required.
 - e. Portable electrical equipment (e.g., extension cords, drills, etc.) shall be maintained in a safe working condition.
 - f. Equipment, carts or other items shall not be stored in front of electrical panels or substations
 - g. Combustible materials shall not be stored in any substation or electrical room.
 - h. After completion of work, substations and electrical rooms shall be secured to prevent unauthorized access.
 - i. Do not daisy chain extension cords. Extension cords must be plugged directly into an approved receptacle.
 - j. Temporary power cords must be protected from damage.
- 4.8 Control of Hazardous Energy
- a. Prior to shutdown of any Boeing equipment, building system, or utility, the Service Provider shall notify the Boeing Onsite Activity Representative. Additional coordination is required.
 - b. All equipment that could present a hazard from inadvertent activation or release of energy during maintenance or servicing shall have the energy supply locked out and tagged except where the energy supply is needed for testing, troubleshooting, inspecting, or servicing equipment.
 - c. Before working on any energized system, the Service Provider shall take the following steps in accordance with the Service Provider's company procedures:
 - 1. Refer to machine-specific instructions on controlling Multiple Energy Sources.
 - 2. Isolate the energy sources and release all energy or potential energy (e.g., electrical [stored], gravity, kinetic, pressure, thermal, pneumatic, and hydraulic).
 - 3. Install your company physical lockout device and lockout tag for each affected employee. The tag must include:

- i. Employee name, company name, date, and phone number (or pager number).
 - ii. Off-shift contact and phone number (requires someone to be available 24 hours per day).
 - iii. Boeing Onsite Activity Representative (add to blank space, if no specific field).
 - 4. Before proceeding with work, test or try out the system to ensure zero energy state.
 - d. For joint occupancy jobs that require lock out/tag out, the Service Provider shall coordinate its hazardous energy plan with the Boeing Onsite Activity Representative. Additional coordination is required.
- 4.9 Trenching and Excavations
- a. Notify and obtain approval from the Boeing Onsite Activity Representative before excavating or opening any trench. Additional coordination is required.
 - b. Before starting work, for both indoor and outdoor excavations, a qualified service shall be used to locate the approximate location of subsurface installations such as sewer, telephone, fuel, electric, water lines, or any subsurface installations that may be encountered during excavation work. While the excavation is open, subsurface installations shall be protected, supported, or removed as necessary to safeguard personnel.
 - c. Hand-digging shall be required where there is any risk of contacting underground utilities or structures.
 - d. The Service Provider shall physically barricade all excavations, trenches, and operating excavation equipment.
 - e. Daily inspections of excavations, adjacent areas, and protective systems shall be made by a competent person for evidence of hazardous conditions. Inspections shall also be made after every rain storm or other hazard-increasing occurrence. If a hazardous condition is observed, personnel shall be removed from the hazard area until the hazardous condition is corrected.
 - f. The Service Provider's competent person shall assess the soil condition to determine the method of shoring or sloping required for excavation.

- g. All excavations and trenches 5 feet or more in depth shall be benched, shored, sloped, or otherwise protected to ensure that collapse does not occur.
- h. Excavated soils must be placed not less than two feet away from the excavation.
- i. Place excavated soils on the up-slope side of the trench whenever possible to capture sediment runoff in the event of rain.

4.10 Warning Signs and Barricades

- a. The Service Provider shall supply appropriate signs, barricades, flashing light barricades, ground attendants, and flagging, as required, to keep unauthorized personnel out of potentially hazardous work areas. Additional coordination is required.
- b. Highly visible physical barriers such as warning tape shall be used by Service Providers to identify their work area and to prevent Boeing personnel and others not directly involved with the project from entering.
- c. Substantial barricades, such as chain link fencing, standard guardrails, etc., are required around excavations, holes, or openings in floors, roof areas, edges of roofs, and elevated platforms. In addition, barricades are required around overhead work and wherever necessary to warn or protect all personnel.

4.11 Confined Space Entry

- a. All confined-space incidents or near misses shall be reported immediately to the Boeing Onsite Activity Representative.
- b. Service Providers shall request from the Boeing Onsite Activity Representative information on confined space hazards identified and precautions/procedures (if any) that Boeing has implemented for protection of Boeing employees working in or near existing confined space locations.
- c. The Service Provider shall have and follow its own written confined space entry program, including an entry permit system, monitoring equipment, ventilation, retrieval system, and observation personnel, except as provided for in Section 4.11.d.

- d. For jointly occupied confined spaces, the Service Provider shall coordinate its confined-space entry plan with the Boeing Onsite Activity Representative. Additional coordination is required.
 - e. Service Providers must independently evaluate hazards presented by work in or near Permit Required Confined Spaces (PRCSs) and implement precautions and hazard controls necessary for safe entry and work in PRCSs. Prior to entry, Service Provider must contact the identified rescue service provider and ensure its availability.
 - f. Rescue service contact information must be readily available to PRCS personnel. Additional coordination is required.
 - g. The Service Provider shall have its written confined space entry program available at the work site and post the confined-space entry permit at the point of entry.
 - h. Upon completion of PRCS entry operations, provide a copy of the closed permit(s) to the Boeing Onsite Activity Representative.
 - i. The Service Provider will debrief the Boeing Onsite Activity Representative after the conclusion of PRCS entry operations. This debrief shall include
 - 1. information regarding the confined space program followed and
 - 2. any hazards confronted or created in confined spaces during entry operations.
- 4.12 Fall-Protection Program
- a. A fall protection work plan is required when fall protection systems including, but not limited to, anchorage points, static lines, lanyards, and full body harnesses must be utilized because fall hazards cannot be eliminated through the use of passive systems such as guardrails.

- b. All fall-protection equipment and devices shall meet American National Standards Institute (ANSI) Z359 standards.
- c. The Service Provider shall provide all necessary fall protection equipment to its employees.
- d. The Service Provider shall inspect and maintain its fall protection equipment and shall promptly remove from the worksite any fall protection equipment found to be defective.
- e. Before considering the use of material handling equipment to lift personnel, the Service Provider shall consult with the Boeing Onsite Activity Representative. Additional coordination is required.
- f. Service Providers must have measures in place to protect personnel in the area of elevated work from hazards resulting from dropped tools, work materials, etc. This may include the use of barricades, spotters, and nets. The inclusion of tool and parts control / inventory provisions in the project specific safety plan may be required. Contact the Boeing Onsite Activity Representative for more information. Additional coordination is required.
- g. When Service Provider personnel utilize personal fall protection equipment, the Service Provider must have a documented fall protection rescue plan. Service provider fall protection rescue plans must be available for Boeing review upon request.
- h. Prior to accessing roof tops the Service Provider shall coordinate access with the Boeing Onsite Activity Representative. Authorized Service Provider personnel may only enter approved areas of roof tops necessary to perform the Service Provider's scope of work. Additional coordination is required.
- i. Before accessing a roof, the Service Provider must have a fall protection work plan identifying the area of the roof where work will be occurring and describing the required safeguards for employees. The Service Provider will make the plan available to Boeing for review upon request.

4.13 Ladders and Scaffolding

- a. Ladders shall be in good condition and used as intended (e.g., do not use portable A-frame step ladders as straight ladders).
- b. Portable metal ladders shall not be used for electrical work. The use of metal ladders is completely prohibited at some Boeing sites. Contact the Boeing Onsite Activity Representative prior to use.
- c. Ladders shall not be used in front of doorways without posting or otherwise protecting the area.
- d. Scaffolds will have an inspection/certification tag affixed to scaffold prior to use.
- e. Scaffolding systems shall be erected and regularly inspected by a competent person. All scaffolding shall have work platforms fully planked; all braces, access ladders, proper guardrails, and toe boards must be installed. Where items may fall onto personnel working or passing below, safety netting shall be provided.
- f. During scaffolding erection, dismantling, and use, all employees shall be fully protected from fall hazards.

4.14 Work Permits

There may be additional site-specific permit and licensing requirements other than those specified in this document. Check with the Boeing Onsite Activity Representative for further clarification. Additional coordination is required.

4.15 Foreign Object Debris / Foreign Object Damage

- a. Foreign Object Debris (FOD) is any substance, debris or article that could find its way into a product system (e.g., aircraft, radar system, satellite, launch system, etc.) and cause damage. Service Providers shall take the following steps to prevent Foreign Object Damage.
 1. Prior to performing work within a FOD area, Service Providers must coordinate activities with the Boeing Onsite Activity Representative. Additional coordination is required.

2. Follow any posted FOD requirements when working in a FOD Critical, FOD Control, or FOD Awareness area.
3. Maintain accountability for all tools, construction materials, hardware, and personal items brought into work areas.
4. Properly contain and secure tools, construction materials, hardware and personal items to prevent them from falling off carts, being moved by weather events, or otherwise migrating into product systems.
5. Pick up any dropped tools, debris or other objects promptly.
6. Clean up and remove trash, scrap, excess materials, and other debris at least daily.
7. Immediately report missing / lost tools and other items to the Boeing Onsite Activity Representative.
8. When work involves loose material (i.e., concrete, asphalt, gravel, dirt, etc.) that can migrate onto product system traveled surfaces or factories where product systems are manufactured, construct FOD barriers as necessary to surround the work area, contain all debris, and sweep up the area of any loose debris daily.

4.16 Crane Operations

a. General

1. Service Providers must coordinate all crane operations with the Boeing Onsite Activity Representative, including material deliveries and hoisting operations. Additional coordination is required.
2. The Service Provider shall provide and use cranes and rigging that have been proof loaded and have required certifications available at the job site.
3. Service Providers must provide, upon request, evidence of crane safety training for the specific equipment to be utilized in accordance with Section 4.19.
4. All crane operations must conform to American Society of Mechanical Engineers (ASME) P30 Standard and American National Standard Institute (ANSI) B30 Standards.

b. Overhead Cranes

1. Service Providers shall obtain approval from the Boeing Onsite Activity Representative and schedule any work requiring access to and use of Boeing overhead cranes and crane space, work adjacent to Boeing overhead cranes, or work around Boeing overhead cranes. These activities may require the installation of bridge-crane rail stops, or inactivation of bridge cranes to preclude collision with Service Provider equipment. Hazardous energy control requirements are found in Section 4.8, Control of Hazardous Energy. Additional coordination is required.
2. Mechanical, electronic or other approved crane stop systems shall be installed in front and behind personnel while they are working in an elevated position, or while they are making a lift of materials through the crane travel zone, to protect them from the crane they may be working on and from any other crane entering from another area or adjacent bay.

c. Mobile Cranes

1. Service Providers shall obtain written approval from the Boeing Onsite Activity Representative prior to use of a mobile crane greater than 200 feet in height and whenever the crane would be used within 20,000 feet of an airport or flight line. Additional coordination is required.
2. Service Providers shall provide and use cranes and rigging that have been proof loaded and Service Providers shall have all required certifications available at the job site.
3. Lift plans are to be provided to Boeing upon request.

4.17 Utility Shutdowns

Service Providers shall minimize service interruption during unavoidable utility shutdowns. Service Providers shall submit utility shut down requests to the Boeing Onsite Activity Representative a minimum of two weeks before the requested date of the utility shutdown or as soon as it is known to be required. Additional coordination is required.

4.18 Joint Occupancy Issues (Occupied Work Areas)

- a. The Service Provider shall cooperate and coordinate work with Boeing and other Boeing Service Providers so all work may be promptly and properly performed without undue interference or delay. The Service Provider shall afford Boeing and other Boeing Service Providers reasonable opportunity for the execution of their work. Contact your Boeing Onsite Activity Representative for additional assistance. Additional coordination is required.
- b. For work in close proximity to Boeing personnel, Boeing products, or other non-Boeing persons, a joint project specific safety plan may be required. Contact your Boeing Onsite Activity Representative for more information. Additional coordination is required.

4.19 Training

- a. The Service Provider shall ensure that all of its employees are properly trained and hold regulatory-required certifications for all jobs and tasks that require specific training and/or competency to meet all applicable federal, state, and local regulations prior to conducting work for Boeing.
- b. All Service Provider employees shall be trained in, and be knowledgeable of, the Service Providers' Project Specific Environmental, Health and Safety Plan.
- c. The Service Provider shall submit to Boeing, on request, validation of the training received by Service Provider employees.
- d. Service provider employees must receive information / orientation as necessary to comply with site-specific requirements.

4.20 Radiation Safety

- a. Written approval must be obtained through the Boeing Onsite Activity Representative before any of the following activities occur. Additional coordination is required.
 1. Licensed radioactive material (e.g., gamma radiography equipment, moisture density gauges, etc.) is brought onsite.
 2. Class 3b or 4 lasers (as indicated by the label on the equipment) are brought onsite.
 3. Radio frequency sources capable of exposing personnel above OSHA limits are brought onsite.
 4. Machines that produce x-rays (x-ray machines, XRF units, etc.) are brought onsite.
 5. Service Providers work in any area restricted for purposes of radiation protection.
 6. Service Providers work with any radioactive material possessed under a Boeing license.

4.21 Traffic Control

- a. When delivering and receiving material, Service Providers shall ensure that traffic controls are in place, including flaggers, truck waiting areas, staging areas, and appropriate traffic guidance signs.
- b. If at any time a road or other traffic hazard (e.g., obstructions, poor lighting, etc.) exists that impacts drivers, pedestrians, or material handling activities, Service Provider must place obvious warning devices in order to alert affected people/vehicles approaching the hazard. These warning devices shall remain in place until the hazard is mitigated. For all traffic control issues, coordinate with your Boeing Onsite Activity Representative. Additional coordination is required.

4.22 Explosives Safety (Class 1 and Explosive Containing Devices [ECDs])

Note: This does not apply to ammunition or powder actuated tools.

- a. ECDs are devices, regardless of hazard class, that contain an explosive such as fire extinguishers (halon bottles), or other articles during their installation or removal.
- b. Before bringing an explosive or ECD onto Boeing property, Service Providers must prepare an explosives safety plan and work instructions for use of the explosive and/or ECD, and provide the plan and instructions to Boeing upon request.
- c. Prior to the commencement of explosives work, coordinate with the Boeing Onsite Activity Representative. Additional coordination is required.

5.0 Environmental

5.1 ISO 14001 Environmental Management System (EMS)

- a. Service Providers at Boeing facilities that are ISO 14001 certified must ensure that their employees are made aware of the Boeing Environmental Policy and written procedures established for activities, products, and services necessary to protect the environment.
- b. The following is the Boeing Environmental Policy.
Boeing is committed to:
 1. Conduct operations in compliance with applicable environmental laws, regulations, and Boeing policies and procedures.
 2. Prevent pollution by conserving energy and resources, recycling, reducing waste and pursuing other source reduction strategies.
 3. Continually improve our environmental management system.
 4. Work together with our stakeholders on activities that promote environmental protection and stewardship.
- c. Service Providers must be familiar with and comply with the Boeing Environmental Policy and have knowledge of how their actions may impact the environment, and the consequences of not following proper procedures. For more information on the ISO 14001 program contact your Boeing Onsite Activity Representative.

5.2 Hazardous Materials

- a. Hazardous materials stored on Boeing sites shall be labeled, stored under cover, in containment, and be segregated with regard to material compatibility. Storage areas must be approved by the Boeing Onsite Activity Representative. Additional coordination is required.
- b. Secondary containment must be provided for operations involving the transfer (e.g., pouring, pumping, or dispensing) of hazardous materials.
- c. A utilization report may be required at some locations for hazardous materials that are brought on site. Verify requirements with the Boeing Onsite Activity Representative. Additional coordination is required.

- d. Keep containers closed when not in use.
- e. No lead or asbestos containing materials are permitted to be brought on site, without prior approval by the Boeing Onsite Activity Representative. Additional coordination is required.
Powder Actuated Tools - Only lead-free cartridges may be used.
- f. When bringing hazardous materials onto a Boeing site, notify the Boeing Onsite Activity Representative. Additional coordination is required.

5.3 Waste Handling and Disposal

- a. If Service Provider activities generate hazardous or solid waste, coordinate with the Boeing Onsite Activity Representative. Service Provider must develop a written plan for managing waste to the Boeing Onsite Activity Representative upon request. Additional coordination is required.
- b. Hazardous Waste:
 - 1. Boeing disposes of all hazardous waste, including universal waste, used oils, etc. that is generated on its property, regardless of the party that generates the waste. Service Providers shall not take hazardous waste off site. If the Service Provider needs assistance with hazardous waste management, establishing a waste accumulation point or complying with hazardous waste regulations, contact the Boeing Onsite Activity Representative.
 - 2. All hazardous waste generated by the Service Provider shall be properly segregated, containerized, and labeled by the Service Provider, as directed by the Boeing Onsite Activity Representative. Additional coordination is required.
 - 3. Keep all waste containers closed between waste additions to containers.
 - 4. Monitor your waste stations on a daily basis. Inspect the stations for leaks and full containers of waste. Report any issues such as spills, bulging containers, etc. to the Boeing Onsite Activity Representative.
 - 5. When a waste drum becomes full, it must be immediately removed from the work site as directed by the Boeing Onsite Activity Representative. Additional coordination is required.

6. If managing hazardous waste in an “accumulation area”, a container must not accumulate waste for more than 60 days after the date shown on the hazardous waste label affixed to the container.
 7. Never dump or discharge hazardous waste into storm drains, building sanitary sewer drains, rest rooms or solid-waste containers.
- c. Non hazardous waste as defined by federal or state regulation. Follow non-hazardous waste disposal policies as communicated by the Boeing Onsite Activity Representative. These policies cover construction debris, waste minimization and recycling. Additional coordination is required.

5.4 Suspect Materials

a. Asbestos Awareness

1. Notify the Boeing Onsite Activity Representative prior to conducting activities that may disturb asbestos. Additional coordination is required.
2. Boeing project locations may contain asbestos-containing materials. Prior to the start of work, obtain a written asbestos determination/survey from the Boeing Onsite Activity Representative regarding the presence or absence of asbestos-containing materials (ACM) associated with the work.
3. Abatement of all ACM affected by the project shall be coordinated by the Boeing Onsite Activity Representative. Additional coordination is required.
4. If, after the project commences, the Service Provider discovers a possible asbestos disturbance, new suspect materials, or there is a change in the scope of work or affected area of work, stop work immediately and notify the Boeing Onsite Activity Representative. Work shall remain stopped until a resolution can be coordinated by the Boeing Onsite Activity Representative. Additional coordination is required.

b. Lead Awareness

1. Notify the Boeing Onsite Activity Representative prior to conducting activities that may disturb lead. Additional coordination is required.

2. All painted surfaces are presumed to contain lead unless determined otherwise.
 3. Lead can be found in a variety of different products, such as greases, solders, sealants, paints, coatings, lead shielding in walls and around tables, lead pipes, ceramic tile glaze, and counterweights.
 4. Operations or processes that may cause lead exposure include but are not limited to:
 - i. Spray painting with paints containing lead.
 - ii. Grinding, sanding, or welding on lead-based paints.
 - iii. Soldering activities.
 - iv. Demolition of oxidized lead shielding.
 5. Lead containing paint shall be removed before Service Provider proceeds with any grinding, sanding, or welding activities.
 6. Never use compressed air to remove lead dust.
 7. All lead-abatement activities are coordinated through the Boeing Onsite Activity Representative. The Service Provider shall prepare a written plan for lead abatement activities and provide that plan to Boeing upon request. Additional coordination is required.
 8. If, after the project commences, the Service Provider discovers a possible lead-containing material disturbance or new suspect material, work shall stop immediately until the Boeing Onsite Activity Representative can determine the next course of action.
- c. Soils and Remediation
1. Final disposition of all soil shall be coordinated through the Boeing Onsite Activity Representative. Additional coordination is required.
 2. Immediately contact the Boeing Onsite Activity Representative listed at the front of this document if you notice contaminated soil or water during excavation activities. Watch for fuel and solvent smells, visible oil sheen, and other indications of contamination. Stop work immediately until the Boeing Onsite Activity Representative can determine the next course of action.

5.5 Air Quality

- a. If Service Provider activities may produce emissions of any air pollutant, the Service Provider must develop a written plan for minimizing these emissions and provide this plan to the Boeing Onsite Activity Representative upon request. Additional coordination is required.
- b. The Service Provider shall not emit any air contaminant in sufficient quantities and of such characteristics and duration that is likely to be injurious to human health, plant or animal life, or property, or which unreasonably interferes with enjoyment of life or property. Contact the Boeing Onsite Activity Representative if you are not sure your activity falls in this category.
- c. Open burning is strictly prohibited.
- d. Minimize idling of equipment whenever possible.
- e. Vehicles and equipment shall not leave the work site coated with dust, dirt, or mud.
- f. Truck loads and roll-off containers with loose materials shall be covered. The Service Provider shall take appropriate measures to prevent drag-out and fugitive emissions.
- g. All Service Providers shall take measures to prevent overspray and airborne emissions from painting and blasting operations from depositing on adjacent buildings and automobiles. Any such deposits must be swept up immediately.
- h. Abrasive blasting and spray-painting operations shall be performed inside a booth designed to capture the blast grit or overspray. Outdoor blasting or painting of structures or items too large to be reasonably handled indoors shall employ control measures, such as curtailment during windy periods, and enclosure of the area being painted or blasted. Contact the Boeing Onsite Activity Representative for specific requirements before starting outdoor blasting or painting activities. Additional coordination is required.
- i. For grade-and-fill operations associated with construction and demolition projects, employ water spray as needed to prevent visible dust emissions. The application of water for dust control that does not infiltrate into the ground must be contained by use of the approved erosion and sediment controls.

- j. Airborne and blowing dust and debris shall be controlled. The Service Provider is responsible to obtain any necessary dust control permits. Contact the Boeing Onsite Activity Representative before the start of any activity that may generate dust.
- k. All material that contains volatile organic compounds (VOC), such as paints, coatings, sealants, or resins that are to be used shall be pre-approved through the Boeing Onsite Activity Representative. Additional coordination is required.
- l. If internal combustion engines or equipment using refrigerants are brought onsite (e.g., emergency generators, temporary boilers, freezers) additional permitting or recordkeeping may be required. Use of this type of equipment shall be pre-approved through the Boeing Onsite Activity Representative. Additional coordination is required.

5.6 Water Quality

- a. If Service Provider activities may produce wastewater, or if the Service Provider may handle hazardous materials in an area that may be exposed to stormwater, the Service Provider must develop a written plan for handling such wastewater or stormwater. This plan must be provided to the Boeing Onsite Activity Representative upon request. Additional coordination is required.
- b. Wastewater, including, but not limited to, concrete slurry, water from dewatering, cooling water and stormwater, shall be handled in accordance with instructions from the Boeing Onsite Activity Representative or the Service Provider's written wastewater plan.
- c. Never pour any liquid into a storm drain. Potable water or fire hydrant water can not be discharged to a storm drain without written permission provided through the Boeing Onsite Activity Representative. Additional coordination is required.
- d. Do not use a hose or pressure washer to clean pavement unless the resulting wastewater can be contained. Alternative methods, such as sweeping, shall be used.
- e. No vehicle, equipment, or building washing is permitted outside without prior approval from the Boeing Onsite Activity Representative. Contact your Boeing Onsite Activity Representative for additional assistance. Additional coordination is required.

- f. Equipment and vehicles shall be maintained in good working order to prevent leakage of fluids (e.g., fuel, hydraulic fluids, and antifreeze). Methods to prevent and contain leaks must be implemented by the Service Provider (e.g., drip pads).
- g. Sanitary sewage and industrial wastewater shall be disposed of in accordance with instructions from the Boeing Onsite Activity Representative. Additional coordination is required.
- h. Store all hazardous materials and hazardous waste (including contaminated demolition debris) in a covered and contained area to prevent possible stormwater or soil contamination. The containment shall be large enough to hold 110% of the volume of the largest container. This applies to materials and waste that are both hazardous and nonhazardous in nature.
- i. Implement the Boeing-approved Best Management Practices (BMPs) as needed, to prevent stormwater contamination, such as, but not limited to, silt fences, tarps for rain covers, and drain covers. Approved BMPs are available from the Boeing Onsite Activity Representative. Additional coordination is required.
- j. When a Stormwater Pollution Prevention Plan (SWPPP) is required:
 - 1. The Service Provider will submit a SWPPP to the Boeing Onsite Activity Representative. Additional coordination is required.
 - 2. A copy of the site Construction General Permit, SWPPP, and National Pollution Discharge Elimination System (NPDES) General Permit must be kept at the construction site at all times during construction and prior to notification from the agency that the NPDES permit has been terminated.
Note: Coordinate with Boeing Onsite Activity Representative to ensure all required permits have been obtained and are posted.
 - 3. The Service Provider shall maintain a site log book that contains a record of the implementation of the SWPPP and other permit requirements including the installation and maintenance of BMPs, site inspections, and stormwater monitoring.

- k. Refueling and mobile equipment repair shall be conducted away from storm drains and waterways. Refueling over unpaved areas must be fitted with temporary containment or spill control. Spill clean-up materials shall be staged on site, in well marked containers, and in sufficient quantity and locations to respond to spills such as hydraulic equipment leaks.
- l. Portable toilets must be secured as necessary to prevent them from being blown or knocked over and must be leak-free, maintained in good working order, and located at least 100 feet from any waterway or storm water conveyance structure. Portable toilets must be serviced by a permitted company and cannot be dumped at the site.

6.0 SITE-SPECIFIC REQUIREMENTS

Contact the Boeing Onsite Activity Representative for additional requirements for the location at which you are performing work.

Chemicals in the Bay Area Building (BAB) are stored in safety cabinets in the Central Plant (roof) and garage. Chemicals in Tower II are stored in safety cabinets in room 2202, room 2404 and the central plant. Confined spaces are located in the BAB kitchen exhaust vault (North side of BAB), elevator pits (OSHA permit until downgrade), sanitary sewers, storm sewers, and grease traps. The BAB penthouse roof (above the building roof) has potential for radio frequency (microwave) exposure from antennae attached to the penthouse roof. Hazardous waste containers are located at BAB (garage).

Additional phone numbers:

Matt Painter (JLL Facility Manager) 409-927-6345

Kelly Byerley (EHS) 281-226-4657

Kathryn Tharpe (EHS) 281-244-4146

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