



Service Provider Manual

Not subject to U.S. Export Administration Regulations (EAR), (15 C.F.R. Parts 730-774) or U.S. International Traffic in Arms Regulations (ITAR), (22 C.F.R. Parts 120-130).

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.

Emergencies

Emergency Call Number: (844) 898-6644

In case of emergency – Provide the following information:

- a. Your name and your employer's name.
- b. Phone number from which you are calling.

Location of the incident:

- City, street address (if known)
- Building number and floor level
- Column number
- Nearest door number

- c. 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 OAR Notification

Notify your Boeing Onsite Activity Representative of emergency and non-emergency incidents. Additional reporting may be required.

Boeing OAR Call Number: _____

Other Call Numbers: Non-Emergency: (844) 358-8800

Hot Work Permit: (844) 358-8800

TABLE OF CONTENTS

	PAGE
INTRODUCTION.....	4
1.0 GENERAL INFORMATION.....	5
2.0 EMERGENCY PROCEDURES.....	7
3.0 FIRE PREVENTION.....	9
4.0 SAFETY REQUIREMENTS.....	13
5.0 ENVIRONMENTAL.....	24
6.0 SITE-SPECIFIC INFORMATION.....	31

QUICK REFERENCE GUIDE BY SUBJECT

	Page		Page
Air Quality	27	Ladders and Scaffolding	19
Asbestos Awareness	26	Lasers	23
Badge Identification	6	Lead Awareness	26
Cameras	5	Lockout, Tag, Tryout Program.....	16
Conduct	5	Personal Protective Equipment.....	14
Confined Space Entry	17	Project-Specific Safety Plans.....	14
Crane Operations	21	Radiation Safety	23
Electrical Safety	15	Radios	5
Emergency Egress	12	Recycling	24
Emergency Notification	8	Required Postings	7
Equipment Requirements	9	Roofing	12
Evacuations	7	Safety Requirements	13
Explosives	23	Spray Painting, Flammable Resins, and Chemicals	10
Fall-Protection Program	18	Storage of Combustible Materials	11
Fire Extinguishers.....	9	Suspect Materials	26
Fire Protection Systems	12	Temporary Structures and Enclosures	12
Flammable Liquids	10	Training	22
Foreign Object Damage	20	Traffic Control.....	23
Forklift Operations.....	6	Trenching and Excavations	16
General Housekeeping	9	Use of Boeing Assets.....	5
General Rules	5	Utility Shutdowns.....	22
Hazardous Materials	24	Vehicles and Mobile Equipment.....	6
Hazard Communication/ Material Safety Data Sheet	14	Warning Signs and Barricades.....	17
Hazardous Waste and Solid Waste Handling and Disposal ...	25	Waste Handling and Disposal.....	25
Hot Work	11	Water Quality	28
ISO 14001	24	Welding/Cutting Activities	11
Incident/Accident Reporting.....	7	Work Permits	20
Joint Occupancy Issues (Occupied Work Areas)	22		

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.

Watch the Boeing Onsite Service Provider Orientation video on the Boeing Supplier Portal: <http://www.boeingsuppliers.com/environmentLinks.html> (accessible from any smart device).

Ensure that each of your personnel and subcontractors that will be performing work for Boeing are aware of the requirements of this manual and watches the orientation [video http://www.boeingsuppliers.com/environmentLinks.html](http://www.boeingsuppliers.com/environmentLinks.html).

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 bicycling. Stop movement when safe to use the electronic device. When driving, must use the electronic device in hands-free mode. This requirement does not apply to work activities that require the use of an electronic device during movement (e.g. crane and two team communications). Additional local rules may be more stringent.
- 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. Forklifts must be isolated from pedestrians with barricades or spotters when transporting between areas. Additional coordination is required.
- e. Posted speed limit and traffic signs shall be followed at all times while on Boeing property.
- f. Vehicles must yield right-of-way to:
 - Pedestrians
 - Moving aircraft
 - Emergency vehicles

- g. Service Provider vehicles are not permitted on flight line ramps without prior approval. Additional coordination is required.
- h. Seat belts, when available, shall be worn at all times.
- i. Personnel shall not be transported in the beds of trucks.
- j. Do not idle vehicles unnecessarily.
- k. Do not idle vehicles near building air intakes or building entrances.
- l. 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.

1.5 Incident/Accident Reporting, Including Near Misses

- a. Report any incidents that creates a risk to Boeing operations (people product, property, assets) to the Boeing Onsite Activity Representative. Additional coordination is required.
- b. An “Incident” is any unplanned event that results in or has the “potential to result” (i.e., near miss) in occupational injury/illness or environmental impact.

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 customer assets.
 - Damage or the potential for damage to 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 may be allowed on building roofs. 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 (e.g., for NO, NO₂, CO, SO₂) 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 of 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 Management System (OH&SMS)

Service Providers at Boeing facilities must ensure that their employees are made aware of the Boeing Safety and Health Policy. The following is the Boeing Safety and Health Policy. Boeing and its employees are committed to:

- a. Provide a framework for establishing Occupational Health & Safety (OH&S) objectives and plans to achieve them.
- b. Conduct operations in compliance with applicable laws, regulations, and Boeing policies and procedures.
- c. Provide safe and healthy working conditions for the prevention of work-related injury and ill health appropriate to the purpose, size, and context of Boeing and to the specific nature of OH&S risks and opportunities.
- d. Continually reduce occupational injuries and illnesses by assessing, evaluating, communicating, and controlling or eliminating OH&S risks.
- e. Continually improve our OH&S management system.
- f. Work together with our stakeholders on activities that promote OH&S.
- g. Commit to consultation and participation of workers, and, where they exist, workers' representatives.
- h. Use the change register process in Enablon for the review of facilities, equipment, and tooling changes to ensure compliance and reduce risk when facilities, equipment, or tooling is changed (i.e., new, modified, relocated, repurposed, removed).

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 OH&SMS 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

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.

- a. 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.
- b. 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).
 - iv. Before proceeding with work, test or try out the system to ensure zero energy state.
- c. 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.
- c. 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.

- d. Hand-digging shall be required where there is any risk of contacting underground utilities or structures.
- e. The Service Provider shall physically barricade all excavations, trenches, and operating excavation equipment.
- f. 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.
- g. 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
 - information regarding the confined space program followed and,
 - 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

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.

- a. Prior to performing work within a FOD area, Service Providers must coordinate activities with the Boeing Onsite Activity Representative. Additional coordination is required.
- b. Follow any posted FOD requirements when working in a FOD Critical, FOD Control, or FOD Awareness area.
- c. Maintain accountability for all tools, construction materials, hardware, and personal items brought into work areas.
- d. 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.
- e. Pick up any dropped tools, debris or other objects promptly.
- f. Clean up and remove trash, scrap, excess materials, and other debris at least daily.
- g. Immediately report missing / lost tools and other items to the Boeing Onsite Activity Representative.
- h. 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

Written approval must be obtained through the Boeing Onsite Activity Representative before any of the following activities occur. Additional coordination is required.

- a. Licensed radioactive material (e.g., gamma radiography equipment, moisture density gauges, etc.) is brought onsite.
- b. Class 3b or 4 lasers (as indicated by the label on the equipment) are brought onsite.
- c. Radio frequency sources capable of exposing personnel above OSHA limits are brought onsite.
- d. Machines that produce x-rays (x-ray machines, XRF units, etc.) are brought onsite.
- e. Service Providers work in any area restricted for purposes of radiation protection.
- f. 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 (Class 1) and Explosive Containing Devices (ECDs)

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

- a. 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.
- b. 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. 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.
- b. 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.
- c. 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.
- f. Powder Actuated Tools - Only lead-free cartridges may be used.

- g. 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:
 - Spray painting with paints containing lead.
 - Grinding, sanding, or welding on lead-based paints.
 - Soldering activities.
 - 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 cannot 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.

The following provisions identify additional obligations for Service Providers when performing work at Boeing Commercial Airplanes Fabrication Division facilities in Portland, Oregon.

These requirements supplement, but do not replace, other applicable requirements in contracts and agreements between Boeing and the Service Provider; provisions of the Service Provider's project-specific Safety plan; and applicable laws and regulations. Additionally, the Service Provider must comply with the following:

- The Service Provider must review and comply with all safety requirements of Boeing's ISO 45001 Occupational Health and Safety Management Systems Policy, document #D950-11840-1, available upon request.
- The Service Provider must review and comply with all environmental requirements of Boeing's ISO 14001 Environmental Management System Manual, document #239-16-01282, available upon request.
- Boeing Portland Fabrication has a combined ISO 14001/45001 EHS Management System. Please contact the Boeing Onsite Activity Representative (OAR) or Portland EHS Department for further information.
- All employees of the Service Provider must wear a Boeing ISO 14001/45001 badge extender if provided.
- The Service Provider must comply with all applicable federal and Oregon State regulations. Where a Boeing requirement exceeds/is more stringent than the applicable federal or Oregon State requirement, the Service Provider must comply with the Boeing requirement. If the Service Provider is not sure whether a particular requirement applies to the work being performed, or believes that two or more applicable requirements may conflict with each other, the Service Provider must immediately inform the Boeing Onsite Activity Representative (OAR) to resolve questions about the requirements.

The Service Provider shall STOP work whenever an unexpected hazard is identified that creates a potential risk of bodily injury to persons, or damage to property, products or the environment. The Service Provider shall contact the Boeing OAR assigned to the activity for further guidance and assistance to resolve the identified hazard.

TABLE OF CONTENTS

	PAGE
6.1 Definitions.....	33
6.2 Contact Information and Reporting Requirements.....	34
6.3 Badging Process.....	35
6.3.1 Non-Employee Badging Request.....	35
6.4 Confined Space Notification Process.....	36
6.5 Crane Rail Stop Process	37
6.6 Electrical Power Outages.....	37
6.7 Electronic Devices.....	38
6.8 Emergent Work Requirements.....	38
6.9 Environmental Requirements.....	39
6.9.1 Water Quality.....	39
6.9.2 Use of Liquids at the Site.....	40
6.9.3 Air Quality.....	40
6.9.4 Oil and Hazardous Material Spill Response.....	40
6.9.5 Solid Waste and Special Wastes.....	41
6.10 Fire Protection.....	42
6.11 Forklift Operating Zones.....	45
6.12 Hazardous Communications.....	45
6.13 Mobile Cranes.....	46
6.14 Parking and Traffic Requirements.....	47
6.15 Pedestrian Requirements.....	48
6.16 Personal Protective Equipment (PPE).....	49
6.17 Planned Work Requirements.....	50
6.18 Powered Platforms.....	51
6.19 Pre-Dig Process.....	52
6.20 Training Requirements.....	52

6.1 Definitions

a. Boeing Onsite Activity Representative (Boeing OAR)

The Boeing employee who has been designated to oversee and monitor Service Provider activities for the Using Organization. The term Onsite Activity Representative is not a job description – it is a functional title only. The following personnel often serve as OAR for Service Provider activities: Project Engineer, Project Administrator, Construction Management, Contract Administrator, and Maintenance Analyst, etc.

b. Electronic Devices

Electronic devices include cell phones, smart phones, notebooks, tablets, portable music players such as iPods & MP3 players, headphones and ear buds used for music, gaming devices, video, helmet cameras, pagers, radio players, two-way radios, etc.

c. Emergent Work

Emergent work is primarily performed by Equipment Maintenance and Supplier Management. It is characterized by short notice for the needed work to be performed and limited project duration. This type of work can be on a contract with a recurring service provider or a new Service Provider that provides very specialized services.

d. Forklift Operating Zones

A zone designated for the use of forklifts where controls effectively separate pedestrians and vehicle traffic from the forklift activity. A Forklift Operating Zone can be permanent or temporary.

e. Planned Work

Planned work is primarily performed by Equipment Engineering and Construction Management. It is characterized by long notice, longer project durations, larger scope, multiple Boeing OARs, and possibly sub-contractors of a Boeing Service Provider.

f. Project Specific Environmental Health and Safety Plan (PSEHSP)

Written plan developed by the Service Provider that identifies project specific environmental, health and safety hazards, and the processes, procedures and safeguards used to control these hazards. Plans may cover a single job or a group of similar or related jobs.

g. Safety Zone

A Safety Zone is a location where employees typically face fewer risk of workplace hazards of injury. Use of personal electronic devices is permitted in Safety Zones.

h. Service Provider (SP)

The independent supplier/contractor performing work for the Boeing Using Organization on property owned, operated, leased, occupied, or controlled by The Boeing Company.

6.2 Contact Information and Reporting Requirements

a. Boeing On-Site Activity Representative (OAR)

1. Prior to beginning work on a project at the Site, the Service Provider must obtain the name and contact information of the Boeing OAR.
2. Maintain contact and update status of activities with the Boeing OAR throughout the duration of the project.

b. Emergency Reporting

1. In the event of an emergency (e.g., workplace injury, environmental spill, etc.), the Service Provider must immediately report the emergency to Boeing Security at (844) 898-6644.
2. When reporting an emergency, the Service Provider should be prepared, to the extent possible, to report the location (including building, floor, room, column, and the nearest door), the incident type, the nature of injuries, and the severity of injuries.
3. Your assistance may be needed to direct Boeing Security to the location of the emergency. Do not end the call until instructed to do so by Boeing Security.
4. The Service Provider must report all spills of hazardous materials and/or hazardous waste to Boeing Security at (844) 898-6644, to the Boeing OAR, and to the Site Environmental, Health and Safety representative.
5. Any response to a spill of hazardous materials and/or hazardous waste must be coordinated with the Site Environmental, Health and Safety representative.
6. The Service Provider is required to follow all emergency provisions included in the Service Provider's project specific/site specific safety plan.
7. See the inside front cover of this Service Provider Manual for additional requirements related to emergency reporting.
8. The OAR is required to submit hazard, near-miss, incident, injury and spill reports on behalf of the Service Provider utilizing Enterprise tools.

c. Injury and Near Miss Reporting

The Service Provider must report all workplace safety incidents, injuries, near miss incidents, illnesses, and property damage to the Boeing OAR immediately.

Non-Emergency Boeing Security and Fire Protection

For access issues (e.g., locked door, aisle blockage, etc.) and work permit requirements (e.g., hot work permits, etc.), the Service Provider should contact Non-Emergency Boeing Security at (844) 358-8800. The Service Provider must provide unimpeded access to their work areas during business and off-shift hours to agents of the company conducting authorized tasks.

6.3 Badging

- a. Service Providers must obtain and visibly display a Boeing identification badge on outer apparel above the waist with face-side visible on the front of the outermost garment while on Boeing property.
- b. All badges are issued in the 85-129 Main Security Gate House. The Security Gate House is located at 19000 NE Sandy Blvd, Portland OR 97230.

1. Main Security Gatehouse Badging Hours:

Temporary badges can be obtained 24/7. Hard badges require approval and coordination with your Boeing Management sponsor and are obtained by appointment only at Boeing Portland. To obtain a temporary badge, the badge recipient must complete the Non-Boeing Badge request at minimum 5 business days prior to coming onsite as well as presenting one of the following export-controlled documents to gain unescorted access to the site:

- Non-U.S. Passport with unexpired temporary I-551 Stamp
- Unexpired United States Passport or Passport Card
- Certificate of U.S. Citizenship (Form N-560 or N-561)
- Certificate of U.S. Naturalization (Form N-550 or N-570)
- U.S. Permanent Resident Card (Form I-551)
- Certification of Birth Abroad (Form FS-545)
- Certification of Report of Birth (Form DS-1350)
- Consular Report of Birth Abroad (Form FS-240) issued by the U.S. Department of State
- Original or certified copy of U.S. birth certificate issued by a State, county, municipal authority, or territory of the U.S. bearing an official seal (Puerto Rican birth certificate issued on/after July 1, 2010)

6.3.1 Non-Employee Badge Request

- a. Non-employees at Boeing include contractors, consultants, Construction workers, and others who are not Boeing direct hires.
- b. A non-employee may obtain either an “Escort-Required” or “No Escort Required” badge.

1. "Escort-Required" badges require a Boeing employee or other Authorized person to physically escort the visitor at all times during the visit. Non-Employees are not authorized to escort for service work.
 2. "No Escort Required" badges must be sponsored by a Boeing Manager or authorized employee.
- c. Non-employees may be issued a Boeing SecureBadge if their Boeing manager/sponsor determines based on the frequency and requirements of their business (2+ days a week at a minimum for the duration of a year).
 - d. Those non-employees who have SecureBadges, which allow for unescorted access to Boeing sites, are required to undergo a background screening in order to work at any Boeing facility within the United States.
 - e. Badge Requests must be received in the Badge Office five (5) days prior to the start of the assignment.
 - f. Non-employee must report to the Badge Office for their new badge within 6 months or the request will be canceled and new paperwork required.
 - g. SecureBadges must be returned upon termination of the non-employee's onsite business.
 - h. Lost or stolen badges must be immediately reported to the Boeing Portland Badge office at Portlandbadgeoffice@boeing.com.
 - i. SecureBadges and Paper Badges must be removed immediately upon exiting the facility and stored in a safe location. Badges are not authorized to be stored in vehicles.

6.4 Confined Space Notification

- a. Work that involves Confined Spaces must be coordinated with the Boeing OAR.
- b. The OAR and Service Provider must evaluate confined spaces for environmental hazards, such as heat, cold, process lines, energy sources, etc. Appropriate work practices must be used to protect employees, such as minimize heat or cold stress, use mechanical ventilation, prevent chemical exposure, lockout-tagout, etc.
- c. The Service Provider must prepare and provide to the Boeing OAR a confined space entry plan that complies with Oregon Administrative Rules 437-002-0146, Permit Required Confined Space (PRCS) entry plans. PRCS entry plans must include a rescue plan.
- d. The Service Provider may satisfy permit required confined space rescue (1) by using their own confined space rescue-trained team,

(2) by a contracted confined space rescue service, or, (3) by utilizing a city fire department that has agreed to be your confined space rescue primary provider.

- e. If applicable, the Boeing OAR will advise the Service Provider of known hazards likely to be present in the Confined Space they will enter.
- f. Prior to starting confined space entry operations, the Service Provider must call Boeing Non-emergency Dispatch at (844) 358-8800 and provide notification of confined space operations start time, number of entrants, building number, column number, or outdoor location.
- g. Upon completion of confined space entry operations, the Service Provider must contact Boeing Non-Emergency Dispatch at (844) 358-8800 and provide notification of confined space operations stop time.

6.5 Crane Rail Stop Process

Work at elevated heights may place workers and equipment in locations that require protection from potential hazards of bridge crane operations. Crane rail stops are allowed to be installed on crane rails to create a work zone.

Prior to installation of crane rail stops, arrangements must be made with the Boeing OAR, with concurrence from affected stakeholders that include local crane support and Business Unit. Additionally, the crane electrodes, which are mounted on the orange-colored crane rails, must be de-energized.

Locate the crane pendants for all affected cranes and position the cranes to create a work zone for the elevated work. Shut off and apply lockout-tagout to the electrical disconnect switches for all affected cranes. Use an appropriate ladder or man lift to access and install crane stops on the crane rails to establish the work zone. After the crane rail stops are installed, the affected cranes may be returned to service.

Upon completion of elevated work, perform lockout-tagout of the crane electrical disconnect switches to allow removal of the crane rail stops. After removal of the crane rail stops, remove lockout-tagout from the crane electrical disconnect switches and return the cranes to service.

6.6 Electrical Power Outages

Planned work that requires electrical panels and/or branch circuits to be shut off requires coordination between the Service Provider, Boeing OAR and affected work areas prior to shutting off electrical power.

6.7 Electronic Devices

The use of electronic devices is allowed to meet job requirements. Electronic device use (including phones) is not permitted while walking or bicycling. Ensure safe surroundings and stop movement before using an electronic device for a work purpose. When driving, an electronic device must be used in hands-free mode. This requirement does not apply to work activities that require the use of an electronic device during movement (e.g. crane and two team communications).

- Do not use an electronic device while driving a vehicle, or operating any equipment.
 - Texting or talking on a cell phone while driving (unless hands-free) are violations of Company rules and Oregon State law.
- a. Pedestrians
- Do not use a personal technology device while walking in the vicinity of moving vehicles (aisle ways, parking lots, etc.).
 - Do not use a personal technology device while walking through a work area.
 - Move to a safe location before using or answering a phone.
 - Do not text and walk.
- b. Headphones for Two-Way Communication
- Wired or wireless headphones that are only used for two-way communication are allowed.

6.8 Emergent Work Requirements

It is recognized that the time constraints and the narrow scope of emergent work usually do not allow nor require detailed levels of pre- task planning. To adequately communicate local hazards to the Service Provider and the Service Provider to communicate potential hazards that they can create, the following process has been developed. This process will be used for work that is classified as Emergent Work which is mostly conducted by Equipment Maintenance and Supplier Management. Boeing OARs other than Equipment Maintenance and Supplier Management that believe it would be appropriate to use this process must coordinate with their supporting EHS professional for concurrence.

- a. The Boeing OAR is responsible for providing the Service Provider with a copy of the Boeing Service Provider Manual, ensuring that the Service Provider understands the requirements, and providing clarification when needed.
- b. The Boeing OAR and the Service Provider will work together to conduct a pre-task review to verify work requirements.

- The pre-task review will be conducted in lieu of the standard PSEHSP.
 - The pre-task review is to ensure that the Boeing OAR can communicate to the Boeing OAR how safety and environmental hazards will be mitigated, Boeing personnel and assets will be protected, and what hazards the Service Provider may introduce while performing their task.
- c. The pre-task review does not relieve the Service Provider or the Boeing OAR from any State or Company requirements that are set forth within the contract or the Boeing Service Provider Manual.

6.9 Environmental Requirements

When bringing hazardous materials onto a Boeing site, notify the Boeing Onsite Activity Representative. The Service Provider shall provide safety data sheets (SDS) for all materials and chemicals, e.g. paint, solvent, adhesives, lubricants, etc., that are to be used on site. The SDSs will be evaluated through Portland material approval process to determine whether the materials and/or chemicals are allowed to be used at Boeing Portland. The OAR will submit the request for chemical and material approval on behalf of the Service Provider. The Service Provider will follow comments resulting from the material approval process. Additional coordination with Boeing Portland EHS is required.

6.9.1 Water Quality

The site operates under a City of Gresham industrial wastewater permit, a state issued stormwater permit and national pollutant discharge elimination system permit. Non-domestic discharges to sanitary sewer must be reviewed and approved by Boeing Portland EHS prior to discharge.

Service Provider and its employees are allowed to park in dirt and gravel areas as identified by the Boeing OAR.

- a. With the exception of fire systems and water and products used for yards and ground maintenance which are approved by Boeing Portland Environmental, rain water is the only liquid allowed to release to the ground.
- b. Potable water and other consumable beverages, such as coffee, may not be poured onto the ground.
- c. Any use of liquids that may be released to ground must be coordinated through the Boeing OAR and EHS.

6.9.2 Use of Liquids at the Site

- a. For work that requires Service Providers to use liquids on site, e.g. fuels, chemicals, water, etc., the Service Provider must identify a covered storage location with secondary containment for such liquids.
- b. The Service provider must ensure that a spill kit is available at the storage location to address any spills that may occur.
- c. Unless specified otherwise by contractual agreement, the Service Provider is solely responsible for providing necessary means to contain a spill.
- d. The measures to address liquid use at the Site and to address spills must be incorporated into the PSEHSP.

6.9.3 Air Quality

The site operates under a state issued air contaminant discharge permit with set emission limits.

- a. For work that may include use of a portable, non-road engine(s) (e.g., a generator) with a cumulative maximum rated brake horsepower (BHP) greater than 500, the Service Provider must notify the Boeing OAR and the Boeing Site Air Environmental Engineer 48 hours (two business days) prior to delivery of such engine(s) to the Site.
- b. The Service Provider must include provisions necessary to address environmental, health and safety risks of portable, non-road engines in the Project Specific Environmental Health and Safety Plan (PSEHSP).
- c. To mitigate the exhaust odors emitted from diesel-fueled on-road and construction equipment being used inside buildings, diesel equipment should be powered with EPA Tier 4-equipped engines and fueled with bio-diesel blend B20 (or higher percentage of biodiesel).
- d. Portable, non-road engines (e.g., generators and light plants), shall not remain in a fixed location for more than 9 months without coordination with the Boeing Site Air Environmental Engineer.
- e. Per site's air contaminant discharge permit, take reasonable precautions to prevent fugitive dust emissions from becoming airborne.

6.9.4 Oil and Hazardous Material Spill Response

- a. The Service Provider must obtain and review the Spill Prevention Control and Countermeasures (SPCC) Plan for the Site when handling oil or fuels in containers greater than 55 gallons in volume.

- b. The Service Provider shall incorporate into the project-specific environmental plan provisions needed to ensure that the Service Provider and its workers comply with the SPCC Plan.
- c. In the event of a spill of a hazardous material or hazardous waste, the Service Provider must take appropriate actions to comply with the SPCC Plan, including:
 - Call Boeing Security & Emergency Response at (844) 898-6644 to report any spills of hazardous materials.
 - Actions to prevent the flow of hazardous material wastes to uncontained areas of the Site.
 - Clean up the spill if it is determined that cleanup will not expose workers to health or safety risks.

6.9.5 Solid Waste and Special Wastes

Solid waste deposited in Boeing containers must be properly segregated at the direction of the Onsite Activity Representative. Do not move or relocate existing hazardous waste collection stations.

- a. Wood: Unpainted wood consisting of pallets, boxes, shipping dunnage, construction debris, plywood, chip board, CDF or other wood may be placed into one of several Wood Recycling boxes around the site. The wood should be unpainted and untreated. The wood should be free of foam, plastic liners, large metal fasteners (including corner brackets, bolts, hooks or other large metal items that could damage an industrial wood shredder).
- b. Oily Solids: May be discarded into Boeing site's general garbage. Oily solids may include air filters, cardboard, rags, short sections of hose, PPE, wood (sized to fit into the site's compactor), absorbents (kitty litter, pads and booms), mops, and other miscellaneous solids. Oily Solids should not contain free liquids.
- c. Mixed Chips: Mixed Chips generated from clean up or demolition activities, should be free of debris and trash. Mixed chips should be collected in chip bins or unlined drums with chip bins being the preferred container. The chip bin or drum should be labeled as Mixed Chips.
- d. Bulk Combustible Items: Large items that are combustible should be placed into the 40-yard roll-off box located at the SE corner of Building 85-105. Examples of bulk combustible items include sheet plastic, lengths of oil-free hose, boxes (wood or cardboard) that contain foam, plastic liners, large metal fasteners or bracing, painted wood, furniture, (wooden desks, chairs or tables), foam packaging and plastic. Smaller items may be accumulated in tub skids. All bulk combustible items should be liquid- and oil-free since the material will be exposed to rain. Bulk combustible items are burned in a waste-to-energy recovery facility.

- e. **Bulk Non-Combustible Debris:** Large items that are not suitable for energy recovery are to be placed into the large roll-off box located at the Building 85-105 West Forging Yard. Examples of these items might include dry wall debris, fiberglass insulation, small chunks of asphalt or concrete, concrete, or articles that are a combination of materials that are not readily manually separable or recyclable. These bulk items must be liquid- and oil-free due to their exposure to rain.
- f. **Scrap Metal:** Non-aerospace metals should be placed into one of two miscellaneous scrap metal bins on site. Items that may be placed into the bin include electric motors, railings, stands, light fixtures with ballasts and bulb removed, desk chair bottoms, or carts; these must be liquid- and oil-free as well. Metal placed into the miscellaneous scrap metal bin is not limited to steel; aluminum and some copper is acceptable.
- g. **Special Waste:** Some wastes from industrial processes that are not Hazardous Wastes may require special handling or a disposal permit at the landfill. Follow the directions on how and where to manage these wastes from the Boeing OAR.
- h. **Service Providers** are only allowed to place items into one of the listed containers at the direction of the Boeing OAR. Service providers are encouraged to contact an Environmental Engineer if there are any questions concerning the proper disposition of waste materials during the course of the Service Provider's project.

6.10 Fire Protection

a. Definitions of Welding / Cutting Activities

1. **Area Permit:** A Hot Work Permit issued to the supervisor or foreman of multiple operations in a common area that allows multiple persons to perform hot work from one permit.
2. **Approved Welding Area:** An area where welding, cutting and open flame operations are performed on a regular basis in support of customer requirements. Approved weld areas are required to remain fire safe at all times.
3. **Fire Watch:** A person assigned to the welding operation for the purpose of watching for fire, and who may try to extinguish a fire only when obviously within the capacity of the available equipment. The Fire Watch must be provided with the Site Emergency Number (844-898-6644) and must immediately report all fire incidents, being prepared to provide: nature of emergency, building number and column location.

4. Hot Work: Operations that include, but are not limited to, cutting, welding, open flame, barbecues, warming devices such as sterno or open flame chaffing dishes used outside approved dining areas, soldering, thermitite welding, heat gun operations on A/C, beehive smokers, weed burners and tar pot, torch applied roof systems.
5. Single Permit: A Hot Work Permit issued to a single operator of hot work equipment (i.e. one permit, one operator).

b. Hot Work Permit

A Hot Work Permit will be required on the Portland site for any operation that will produce Open Flames, Welding, or Spark-producing work. All flammable materials shall be a minimum of 50 feet away from hot work areas. Additional coordination with Boeing Portland Security & Fire Services is required.

All Hot Work Permits shall be requested through Boeing Non-Emergency Dispatch at (844-358-8800). The Patrol Officer will verify that all hazard mitigation is in place prior to issuing a Hot Work Permit.

1. Roof Operations

- i. Torch-applied roofing systems require service providers to have been trained through the Certified Roofing Torch Applicator (CERTA) program administered through the National Roofing Contractors Association.
- ii. Require a post-work fire watch for at least one (1) hour after torches have been extinguished using thermal imaging, followed by fire monitoring using an approved method and duration.

If the project contains overhead operations or operations near any flammables or combustible metals, or a Hot Work that will require numerous Hot Work Permits, a Job Walk must be scheduled a minimum of 48 hours in advance of these Hot Work activities.

Job Walk will include: The site Fire Prevention Inspector (contact # 424-367-9912) and The Boeing Construction Manager for that project. Be ready to identify the nature of the Hot Work (welding, cutting, grinding), work location, types of materials to be welded, if the space will be jointly occupied at time of work, and planned work schedule. Fire Prevention will identify all hazard mitigation activities necessary to be in place prior to receiving a Hot Work Permit. The Hot Work job scope and complete hazard mitigation plan will be clearly communicated to Site Security and the Boeing Onsite Activity Representative in advance of the project beginning.

The assigned Fire Watch shall notify Boeing Non-Emergency Dispatch at (844) 358-8800 upon completion of work. Coordinate with the Boeing Onsite Activity Representative.

c. Sprinkler Impairment and Restoration

1. Definitions:

- i. Fire Protection Systems – Include all water based, gaseous, Foam, Non- Aircraft VESDA, Smoke/Heat Detection, UV/IR Systems, Kitchen Hood, Wet Chemical, etc.
- ii. Impairment - Any condition which prevents equipment from operating at full performance, or adversely affects installed automatic features.

2. Servicing of Sprinkler Systems

All planned sprinkler impairments shall be scheduled a minimum of 48 hours (two business days) in advance of the planned impairment. Planned impairments shall be scheduled through the Boeing Portland Fire Prevention Inspector by calling (424) 367-9912.

Boeing requests a minimum of 48 hours (two business days) notice for any non-emergency fire system impairment event, but realizes situations may arise where this is not always possible. However, under no circumstances shall the notice for non-emergency fire system impairment shut off events be less than 48 hours (two business days). Coordinate with the Boeing Onsite Activity Representative.

Provide building number and specific sprinkler system control valve number, specific reason for sprinkler impairment, duration of planned impairment, and the name and contact number for who is working on the impairment.

When the vendor is ready to conduct the scheduled impairment and/or at the conclusion of the impairment, contact Boeing Non-Emergency Dispatch at (844) 358-8800 to have the valve unlocked/restored. Unplanned or Emergency sprinkler impairment will be addressed through Boeing Emergency Dispatch at (844) 898-6644.

d. Powder-Actuated Tools and Fastening Systems (PAEF)

1. Powder-actuated tools and fastening systems require a Hot Work Permit. Contact Boeing Non-Emergency Dispatch at (844) 358-8800, or, Portland Security Manager at (503) 676-1888 at least 24 hours (one business day) in advance of planned work. The Service provider must prepare and submit a safety plan to

the Boeing Fire Prevention Inspector or Security Manager for review and approval. The safety plan must address training, handling, sweeping, storage, and disposal procedures for managing PAEF.

2. Powder loads must be stored in a lockable metal container or cabinet during daily work activities. No other flammable materials may be stored in the same container or cabinet.

6.11 Forklift Operating Zones

A Forklift Operating Zone (FOZ) is an area designated for the use of forklifts where controls effectively separate pedestrians and vehicle traffic from the forklift activity. A Forklift Operating Zone can be permanent or temporary.

Portland site has ten operational forklift Operating Zones. These Zones are identified at the entry/exit with signs and painted information on the roadway.

Pedestrians (all persons who do not have an assigned role in an ongoing forklift activity or a task located inside the Zone) are not allowed to pass through these Zones. To be authorized to enter a Zone, one of the following must apply:

- a. Employees/Service Providers are assigned a role such as the forklift driver, move coordinator, spotter, and flagger may be in a forklift Operating Zone during the move activity, if the activity requires their presence.
- b. Employees/Service providers who perform tasks (that do not involve a forklift) that are located inside a Zone, can be performed if a forklift is not operating in the Zone.
 1. NOTE: The Employee/Service Provider must stop movement if a forklift enters the Zone until the forklift has complete their work and exits the Zone.
- c. During a building emergency evacuation, entering a Forklift Operating Zone is allowed.

6.12 Hazardous Communications

- a. Asbestos
 1. The Service Provider shall comply with all federal, state, and local requirements pertaining to asbestos. Where work being performed at the Boeing Portland facility includes any action that may disturb building materials, the Service Provider

must include the following provisions in the project- specific safety plan:

- i. Prior to performing any work that may disturb building materials, the Service Provider shall contact the Boeing OAR for coordination with Boeing Portland Environmental, Health and Safety (EHS).
- ii. The Service Provider and its workers are prohibited from disturbing any building material (e.g., cutting, drilling, and breaking up) without prior authorization of Boeing Portland Environmental, Health and Safety (EHS) and notice from Boeing Portland EHS that any necessary asbestos abatement has been completed.

b. Heavy Metals

1. In addition to lead, which is addressed in Section 5.4 of the Boeing Enterprise Service Provider Manual, the Service Provider must evaluate potential hazards from other heavy metals that may be found at the Site, including, but not limited to, beryllium, cadmium and chromium.
2. The Service Provider shall include provisions in the project-specific safety plan to address potential hazards from heavy metals.
3. When complying with safety measures related to heavy metals, the Service Provider shall coordinate with the Boeing OAR and Boeing Portland EHS. The Service Provider shall evaluate (in consultation with Boeing Portland EHS) whether heavy metal remediation is required.

6.13 Mobile and Site Cranes

- a. Mobile cranes are commonly used in support of construction and maintenance activities. Lifts will be performed to Oregon OSHA Subdivision CC and ASME B30 series standards. All mobile crane operators must be trained and certified through a valid accrediting agency for the specific type of equipment that is being operated.

The following documentation will be prepared by the Service Provider and submitted to the Boeing OAR:

1. Copy of the Mobiles Cranes/Derricks Worksheet
2. Copy of the operator's certification card
3. Copy of the rigger's certification card
4. Copy of the signal person's certification card
5. A documented lift plan that states:
 - i. Names and roles, including lift director
 - ii. A site drawing with radius and distance

- iii. A copy of the load chart
 - iv. Type of rigging and rigging plan
- b. Site-owned overhead cranes may be used by Service Providers with prior approval and coordination with the Portland Facilities representative. The Service Provider shall make arrangements and provide required material handling equipment. Crane operators shall be:
1. Trained to operate overhead cranes in accordance with Oregon Administrative Rule 437-002-0228, Oregon General Requirements for cranes, and,
 2. Certified/qualified through an accredited crane operator testing organization, an audited employer program, the U.S. military, or a government entity.

6.14 Parking and Traffic Requirements

a. Prohibited Parking

The Service Provider and its employees are prohibited from parking any vehicle or placing any material in a location that blocks a fire lane, impedes the flow of traffic, blocks pedestrian walkways or crosswalks, or blocks access to a doorway.

b. Personal Vehicle Parking

Service Provider Employees may only park personal vehicles in clearly identified parking spots. If a parking credential is required for the parking location, the employee must place the parking credential in a location (e.g., beneath windshield) where it is visible and readable at all times. Examples include: ADA credential, Boeing Medical credential, Visitor Stall Credential, and Carpool Credential.

c. Service Provider Parking

Service Providers must inform the Boeing OAR and Portland Security of deliveries of equipment, materials, supplies, etc. to the Site. The Boeing OAR and Portland Security must grant prior approval for the parking location of such delivery.

1. Service Providers may park in stalls that are not identified as 'Medical', 'Handicap', and 'Visitor'.
2. Service Providers are only allowed to park outside of designated parking stalls and next to buildings for short term deliveries. A short term delivery or "load/unload" zone may be utilized for no more than 15 minutes without prior authorization from Boeing Security.

3. The vehicle may not block access, fire lanes, or pedestrian access.
4. The vehicle must have its warning flashers on and the engine must be turned off.
5. Failure to adhere may result in the vehicle being towed or access being denied to the operator or company.

d. Traffic

When driving vehicles at the Site, the Service Provider and its employees must comply with all traffic signs and signals and adhere to all traffic rules. Vehicles may not be operated in excess of the posted speed limit for all on-site roadways and parking lots: 15 MPH.

1. Pedestrians always have the right of way. Stop and let pedestrians pass.

e. Vehicle and Mobile Equipment Roadside Assistance

1. Roadside Assistance is available through Non-Emergency Boeing Dispatch at (844) 358-8800 for limited vehicle and equipment activities. Roadside Assistance is limited to battery jump start. As necessary, coordinate with Portland Security if a vendor is needed to provide additional roadside assistance such as delivering a replacement battery, performing a door unlock, or changing a tire on site.
2. Repairs to vehicles and mobile equipment are not allowed on site. As necessary, contact Non-Emergency Boeing Dispatch at (844) 358-8800 and request permission from Portland Security to allow a towing/transport vendor on site to move vehicles and equipment to an off-site repair facility.

6.15 Pedestrian Requirements

a. Pedestrian crosswalks and identified walkways:

Service Provider and its employees must use marked pedestrian crosswalks and identified walkways when walking on the Site and must maintain awareness of roadways and moving vehicles.

b. Pedestrian access to buildings:

1. When entering or exiting a building, the Service Provider and its employees must use pedestrian doors.
2. Pedestrians walking in factory areas must walk in aisles marked by pedestrian symbols.

3. Pedestrians are prohibited from entering or exiting a building through roll-up doors. Exception may be granted for employees acting as spotters for equipment and manually moving materials by pushcarts or hand carts. Coordinate with the Boeing OAR for approval.

6.16 Personal Protective Equipment (PPE)

For work at the Site, the Service Provider must include the PPE requirements discussed below in their PSEHSP. These PPE requirements are not intended to be a complete list of PPE needed for work at the Site. The Service Provider must evaluate potential hazards for work being performed for each specific project and determine appropriate PPE for such work.

a. Eye Protection

Eye protection is required for all factory and construction work areas across the Site. Tinted, shaded, photo-chromic or mirrored lenses are prohibited for indoor work except when performing work that may expose employees to potentially harmful levels of ultraviolet, visible, or infrared radiation (welding, working with lasers, etc.).

Areas that do not require eye protection include factory offices and break areas surrounded by permanent walls 6 feet tall, non-factory offices, cafeterias, rest rooms, conference rooms, etc.

b. Foot Protection

ANSI/ASTM hard-toed shoes are required for all work areas across the Site, with the exception of non-factory offices and during designated tours.

c. Fall Protection

Where work is being performed at heights of four (4) feet or greater personal fall protection shall be used in compliance with Oregon OSHA requirements.

Temporary or permanent installation of a fall protection system requires the Service Provider to perform a structural assessment of existing and new structures, and coordinate installation of equipment through the Boeing OAR.

d. Hearing Protection

1. Certain areas of the Site have noise levels that require the use of hearing protection PPE. These areas are known as High Noise Level Areas (HNLAs) and will be identified with purple-lined floor markings or posted signage at the entrance and exits. Hearing protection is required to be worn at all times when performing work in a HNLA.

2. Certain operations within each building will require hearing protection PPE. Observe posted High Noise level Operations signage throughout the factory. Hearing protection is required to be worn when conducting any of the tasks listed on the signs (i.e. compressed air use, drilling, riveting, fastener installation, etc.)

e. Hard Hats

Certain areas of the Site have overhead hazards that require the use of head protection PPE.

All personnel are also required to wear a hard hat during:

- Crane operations
- While in the crane envelope
- While exposed to overhead hazards
- As required by industry-specific code

f. High Visibility Reflective Vests

Service Provider employees and their subcontractors who are exposed to potential hazards caused by moving transport vehicles or mobile equipment in construction zones and street/highway traffic must wear highly visible upper body garments, e.g. shirt, outer wear or safety vest. The colors must contrast with other colors in the area sufficiently to make the worker stand out. Colors equivalent to string red, strong orange, strong yellow, strong yellow-green or fluorescent versions of these colors are acceptable

During hours of darkness, Service providers and their subcontractors must wear ANSI/ISEA 107-compliant high visibility garments having reflective material visible from all sides.

6.17 Planned Work Requirements

Planned work allows for a more measured and thorough approach to notifying Service Providers of local hazards and the Service Provider notifying the Boeing OAR of potential hazards that their activities can create. Work that is generally classified as planned work is mostly conducted by Equipment Engineering and Construction Management.

The following process has been developed for planned work:

- a. The Boeing OAR is responsible for providing the Service Provider with a copy of the Boeing Service Provider Manual, ensuring that the Service Provider understands the requirements and providing clarification when needed.

- b. The Boeing OAR will invite the Service Provider to an onsite Pre-Work Meeting with affected stakeholders. Stakeholders may be Boeing Fire and Security, EHS, Engineering, representatives from the Business Unit, Subject Matter Experts, and other impacted individuals. The Boeing OAR shall follow a prepared agenda that covers site specific hazards, non-obvious hazards, and as needed, distribute copies of the Boeing Service Provider Manual to the Service Provider.
- c. Prior to, but no later than, the Pre-Work Meeting, the Service Provider will submit their PSEHSP for review by the Boeing OAR.
 - The Boeing OAR will submit to the stakeholders, such as EHS for review.
 - Work may not be performed until the PSEHSP has been fully reviewed and all inconsistencies have been addressed.
- d. The service provider safety plan and any required permits, such as Hot Work, Permit Required Confined Space, etc., must be posted at the work location for the duration of the work.
- e. The PSEHSP does not relieve the Service Provider or the Boeing OAR from any State or Company requirements that are set forth within the contract of the Boeing Service Provider Manual.

6.18 Powered Platforms

The Boeing Company identifies Powered Platforms to be powered mobile vehicles used to elevate employees; these include self-propelled mobile platforms (e.g. scissor lifts), boom-supported elevating work platforms (e.g. cherry pickers, boom lifts, aerial lifts, etc.), and individual mobile personnel lifts (e.g. vertical mast lifts).

A spotter is required for the following conditions to communicate with the powered platform operator and ensure that equipment operation and elevated work activities present minimal adverse effects to Boeing products and processes:

- When moving a boom lift or oversized powered platform through an airlock having an automated roll-up door that could time out. Additionally, it is recommended to open and lockout the automated door control to assure safe passage of equipment through the airlock.
- When moving a powered platform in a transportation aisle (e.g. main aisles), manufacturing area (e.g. branch aisles), or machining area (e.g. between machining stations).
- When performing elevated work in a manufacturing area.
- When performing elevated work within 10 feet of an indoor or outdoor pedestrian door or overhead door.

6.19 Pre-Dig Process

Excavations have the potential to damage underground utilities or may expose contaminated soils. At the Portland Site, excavations are classified as any type of work that penetrates the ground surface.

- a. Service Providers shall request the Boeing OAR to provide a Boeing Portland Environmental Affairs / Facilities Excavation Approval Form. The Excavation Form shall be completed and forwarded to Portland Environmental for review and approval prior to the start of excavation activities.
- b. Underground utilities shall be located for the entire run of excavation.
- c. Examples of work that qualifies as excavations are saw cutting, core drilling, lagging below grade, and mechanical or hand excavation and landscape work.

6.20 Training Requirements

- a. Chemical Access Training
 1. For work that requires the Service Provider and its employees enter any high hazard area:
 - i. Prior to initiating the project, employees of the Service Provider must complete High Hazard Area Access Training and obtain a Red Badge that allows access to the high hazard area.
 - ii. Service Provider employee(s) who have not completed the required High Hazard Access Area training and are entering red badge designated zones must be accompanied by an escort (either a Service Provider employee or Boeing Portland employee) who has completed required training and been issued a Red Badge. The escort must sign in and issue a Yellow Badge to all persons they are escorting.
 2. For work that requires the Service Provider and its employees enter any blue badge designated area:
 - i. Service Provider employee(s) who have not completed the High Hazard Access Area training and are entering blue badge designated zones must be accompanied by an escort (either a Service Provider employee or Boeing Portland employee) who has completed any area access training and been issued a Red Badge or Blue Badge. The escort must sign in and issue a Yellow Badge to all persons they are escorting.

b. Service Provider Safety Orientations

1. Service Providers are required to give and have each employee and their subcontractors review the Boeing Service Provider Manual.
2. Service Providers are required to have all employees and their subcontractors review the Project Specific Environmental Health and Safety Plan (PSEHSP).
3. Where formal Service Provider Orientations are available, the Service Provider will follow the applicable guidance.

NOTES:

The Boeing Company
100 N. Riverside
Chicago, IL 60606-1596
MC 7A-UR

BOEING is a trademark of Boeing Management Company

Copyright © 2020 Boeing. All rights reserved.

Printed in the USA