

SP SECTION 3000 - HAZARDOUS MATERIAL

SP 3001

SUBJECT: Hazardous material. OSHA.

SPECIAL PROVISION TEXT:

1. The Seller shall include a Material Safety Data Sheet (MSDS), OSHA Form 174 or equivalent prior to, or with each shipment of hazardous material (Ref.29 CFR, Part 1910.1200). The Seller shall provide emergency response information with each shipment of hazardous material (Ref.49 CFR 72.604).

NOTE: The material identity must be listed as it appears on the container label.

2. The Seller shall provide the following information as an attachment to the Material Safety Data Sheet if not contained on the MSDS:
 - (A) The McDonnell Douglas Helicopter Systems RM number (if applicable).
 - (B) Proper DOT/DOD shipping name and hazard class per 49 CFR, Part 173, including the "RQ" value as per 49 CFR 172.101 "Hazardous Material Table".
3. All primary containers of hazardous materials shall bear the following labels:
 - (A) A label containing the material identity, manufacturer's name and address, and appropriate hazard warnings per 29 CFR, Part 1910.1200.
 - (B) All primary and/or over packaging shall be marked or labeled with the proper DOT shipping name and identification number, any special hazard warning, and a label that represents the hazard classification of the material per 49 CFR, Part 172.
4. Packaging: If there are hazardous and non-hazardous material in the same shipment, the hazardous and non-hazardous items must be packaged separately.
5. Packing sheets: If there are hazardous and non-hazardous material in the same shipment, there must be two separate packing sheets, one containing only the hazardous material, and the other containing only the non-hazardous material.
6. Seller shall address and ship all hazardous materials shipments to:
McDonnell Douglas Helicopter Systems
Bldg. 539 Hazardous Material Receiving Dock
5000 E. McDowell Road
Mesa, AZ 85215-9797

SP 3004

SUBJECT: Hazardous material. OSHA.

SPECIAL PROVISION TEXT:

1. "Hazardous material," as used in this clause, is defined in the Hazardous Material Identification and Material Safety Data clause of this purchase order/subcontract.
2. The Seller shall label the item package (unit container) of any hazardous material to be delivered under this purchase order/subcontract in accordance with the Hazard Communication Standard (29 CFR, 1910.1200 et seq). The standard requires that the hazard warning label conform to the requirements of the standard unless the material is otherwise subject to the labeling requirements of one of the following statutes:

- (A) Federal Insecticide, Fungicide, and Rodenticide Act;
 - (B) Federal Food, Drug, and Cosmetics Act;
 - (C) Consumer Product Safety Act;
 - (D) Federal Hazardous Substances Act; or
 - (E) Federal Alcohol Administration Act.
3. The Seller shall list which hazardous material listed in the Hazardous Material identification and Material Safety Data clause of this purchase order/subcontract will be labeled in accordance with one of the acts in paragraphs (2)(A) through (E) of this clause instead of the Hazard Communication Standard. Any hazardous material not listed will be interpreted to mean that a label is required in accordance with the Hazard Communication Standard.

Material (if none, insert "none")	Act

- 4. The Seller agrees to submit, before award, a copy of the hazard warning label for all hazardous materials not listed in paragraph (2) of this clause. The Seller shall submit the label with the Material Safety Data Sheet being furnished under the Hazardous Material Identification and Material Safety Data clause of this purchase order/subcontract.
- 5. The Seller shall also comply with MIL-STD-129, Marking for Shipment and Storage (including revisions adopted during the term of this purchase order/subcontract).
- 6. Packaging: If there are hazardous and non-hazardous material in the same shipment, the hazardous and non-hazardous items must be packaged separately.
- 7. Packing sheets: If there are hazardous and non-hazardous material in the same shipment, there must be two separate packing sheets, one containing only the hazardous material, and the other containing only the non-hazardous material.
- 8. Seller shall address and ship all hazardous materials shipments to:
McDonnell Douglas Helicopter Systems
Bldg. 539 Hazardous Material Receiving Dock
5000 E. McDowell Road
Mesa, AZ 85215-9797

SP 3012

SUBJECT: Explosives. Liquid/solid pyrotechnic material.

SPECIAL PROVISION TEXT:

Fifteen (15) days prior to the initial shipment, the Seller will provide the Boeing-Mesa Buyer with the following written information:

- 1. Manufacturer's name, address and telephone number
- 2. Part number
- 3. Drawing number
- 4. Item nomenclature
- 5. Contract or Purchase Order number

6. Lot number
7. Item gross weight
8. Net explosive weight per item
9. Quantity Distance Class from DOD Contractor's Safety Manual DOD 4145-26M
10. Quantity Distance Class, Compatibility Group, and Coast Guard Class from NAVSEA OP 5
11. DOT Explosive Approval Letter showing DOT Proper Shipping Name and Hazard Class
12. DOT Competent Authority Approval Letter showing UN Proper Shipping Name, UN Number, UN Class and Compatibility Group
13. Environmental Control Requirements (e.g. temperature, humidity, etc.)
14. Two copies of applicable DOT Exemption
15. Two copies of IRS Explosive License or Permit

The above listed data shall also be mailed to:

Occupational Health and Safety Department
Building M541-F118
McDonnell Douglas Helicopter Systems
5000 East McDowell Road
Mesa, AZ 85215-9797

SP 3015

SUBJECT: Polyacrylonitrile (PAN) based carbon fiber. PAN.

SPECIAL PROVISION TEXT:

1. This clause applies only if the end product furnished under this purchase order/subcontract contains polyacrylonitrile carbon fibers (alternatively referred to as PAN-based fibers or PAN-based graphite fibers).
2. PAN carbon fibers contained in the end product shall be manufactured in the United States or Canada using PAN precursor produced in the United States or Canada.
3. The Buyer may waive the requirement in paragraph 2. in whole or in part. The Seller may request a waiver from the Buyer by identifying the circumstances and including a plan to qualify domestic or Canadian sources expeditiously.

SP 3016

SUBJECT: Carbonyl iron powders.

SPECIAL PROVISION TEXT:

Restriction:

The Seller agrees that all carbonyl iron powders contained in supplies provided under this purchase order/subcontract shall be manufactured in the United States or Canada by an entity more than 50 percent of which is owned or controlled by citizens of the United States or Canada.

Definition: Carbonyl iron powders are particles produced from the thermal decomposition of iron penta carbonyl.

SP 3024

SUBJECT: Radioactive material.

SPECIAL PROVISION TEXT:

Fifteen (15) days prior to the initial shipment, the Seller will provide the Boeing-Mesa Buyer with the following written information:

1. Contract or Purchase Order number
2. Manufacturer's name, address and telephone number
3. Licensed material description, isotope name and activity
4. Part number
5. Drawing number
6. Transport group
7. Special operating/control procedures and inspection requirements
8. Seller's license number and applicable Boeing-Mesa license number

The Boeing-Mesa Buyer shall forward the above information to Occupational Health and Safety Services. All radioactive materials are to be delivered to Receiving Department, except as specifically authorized by the Environmental Health and Safety Department.

SP 3025 (06/13/2003)

SUBJECT: Boeing Mesa Safety, Health and Environmental Affairs (SHEA)
On-Site Service Providers - Contract Attachment

SPECIAL PROVISION TEXT:

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

Special Provision 3025 (SP3025) shall be incorporated into contracts for all independent contractors operating at Boeing Mesa or associated remote sites. Nothing herein shall be construed to relieve the contractor of its responsibility to comply with applicable federal, state and local fire code, environmental, health and safety laws, regulations and requirements. Such responsibility rests solely upon the contractor.

In case of discrepancies between various requirements, the order of precedence shall be the most recent edition of 29 Code of Federal Regulations (CFR) Parts 1910 (Occupational Safety and Health Standards for General Industry) and 1926 (Occupational Safety and Health Standards for the Construction Industry), 40 CFR Protection of the Environment, 49 CFR Transportation, and the Uniform Fire Code.

1. INTRODUCTION

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

2. GENERAL INFORMATION

(A) Notifications

All general contractors and independent contractors (not working for a general contractor) that perform construction, maintenance and/or service work at Boeing Mesa shall designate a person as the on-site Safety representative. The contractor shall provide written notification to the Boeing

Mesa Contract Administrator of the name and title of the contractor's on-site Safety Representative for the project. The Safety Representative need not be a supervisor or manager but must have responsibility and authority to identify and correct safety and environmental hazards. In addition, the Safety Representative must notify the Boeing Mesa Safety, Health and Environmental Affairs (SHEA) Department of the date and time of when a pre-job safety meeting will be conducted.

The contractor shall provide the Boeing Mesa Contract Administrator and/or SHEA Department with a list of hazardous materials used to perform work activities, quantities to be used, and Material Safety Data Sheets (MSDS's) prior to the hazardous materials arriving onto Boeing Mesa property.

In addition, the contractor shall notify the Boeing Mesa Contract Administrator, SHEA, and/or Fire Departments of all hazardous work activities, as identified in section 3, prior to the commencement of the work activity.

The Boeing Mesa SHEA Department will notify the contractor(s) of hazardous materials and environments that may be encountered at its facility, and to which contractor(s) may be exposed to prior to commencing work.

(B) Emergencies

Emergencies at Boeing Mesa are to be reported by dialing 911 from a Boeing phone. This number must be called immediately in case of a fire, medical emergency, hazardous material incident, or damage to Boeing Mesa property. Contractors shall avoid using cell phones to call outside emergency services. However, cell phones may be used to contact Boeing Mesa Security by dialing (480) 891-3111.

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

For information on occupational safety, health and environmental requirements at Boeing Mesa, call 480-891-4287 or 480-891-3220.

(C) Personal Protective Equipment

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

(D) Smoking Areas

Smoking is only authorized in designated and posted smoking areas. Smoking is not allowed inside buildings or vehicles, in transit between buildings, while operating a motor vehicle, or within fifty (50) feet of any helicopter, aircraft, hangar, fuel, explosives, or chemical storage area.

(E) Pedestrian and Vehicle Traffic

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

The in-plant speed limit is 15 miles per hour (MPH) unless otherwise posted. Gasoline and/or diesel powered vehicles shall not be operated inside buildings without coordination with the Boeing Mesa Contract Administrator, SHEA, and/or Fire Departments.

(F) Tools and Equipment

Contractors shall provide the equipment necessary for the safe performance of the work. Use of ladders, safety belts, scaffolding, barricades, rigging equipment, hand tools, power tools, hoists, and forklifts shall follow safe industrial practices as well as applicable federal, state, and local

safety standards. The Facilities Project Engineer, the Contract Administrator, and/or the Boeing Mesa SHEA Department may inspect any tools or equipment used on the job site. However, any such inspection or approval shall not relieve the contractor of their responsibility for the appropriateness, quality, and/or safe use of the tool or equipment.

The contractor must notify the Facilities Project Engineer, Contract Administrator and/or the Boeing Mesa SHEA Department of explosive actuated tools and devices used on the project.

(G) **Housekeeping**

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

(H) **Inspections**

The contractor or contractor's safety representative shall conduct work area inspections. Inspections shall be made periodically throughout the job to ensure that safe working conditions are maintained and that no safety hazards exist. All applicable federal, state, and/or local fire safety codes must be followed. In addition, the Boeing Mesa SHEA Department may inspect contractor work areas to ensure safe working conditions. Unsafe work conditions will be reported to the assigned Facilities Project Engineer or Contract Administrator.

3. **HAZARDOUS WORK ACTIVITIES**

(A) **Burning, Cutting, and Welding**

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

(B) **Confined Space Entry**

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

The Boeing Mesa SHEA Department will provide contractors with information on known and suspected hazards of existing confined space entry locations at Boeing Mesa. Boeing Mesa's confined space entry procedures may be provided to contractors for informational purposes only.

The contractor shall furnish evidence of a minimally acceptable program to the Boeing Mesa SHEA Department prior to entering confined spaces.

(C) **Energized Electrical Work**

The contractor must comply with current OSHA standards for safely working around energized electrical systems. Work on or near energized lines or equipment of 600 volts or greater, shall only be done when approved in writing by the Boeing Mesa Contract Administrator.

(D) **Lock/Out and Tag/Out (LOTO) Requirements**

The contractor must comply with current OSHA standards for the proper control of hazardous energy. OSHA regulations and Boeing Mesa policies require that all machines/equipment are isolated from energy sources prior to performing work where accidental start-up might cause injury.

Lockout is the preferred method of isolating machines or equipment from an energy source (i.e. electrical, mechanical, or pneumatic power systems). Danger tags and blocking and blanking procedures shall be used as alternate methods of controlling energy or stored energy in process lines or equipment.

The contractor shall request permission from Boeing Mesa's Facilities Project Engineer prior to proposed lockout of equipment or circuits. All affected employees shall be notified when equipment is "locked out" and when a lock and tag is removed.

Work on or near exposed energized electrical equipment, and when making connection to live pipeline systems, shall be done only when approved by the Boeing Mesa Contract Administrator and/or SHEA department.

(E) Trenching and Excavations

The contractor must comply with current OSHA standards for all trenching and excavation activities. All trenches and excavations shall be properly guarded with barricades or caution tape. Personal Protective systems, including shoring, shielding, sloping, and/or benching shall be utilized when required for trenches over 5 feet deep. If shielding or shoring is installed, contractor employees can only work inside the protected area of the personal protective system. In addition, proper access/egress methods, including ladders, stairs, and/or ramps shall be installed when required.

(F) Overhead Work/Elevated Workstations

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

The contractor must comply with current OSHA standards for the use of mobile cranes and other material hoisting equipment. All hoisting equipment must be posted with the rated capacity. Personnel are not permitted under a suspended load. The use of cranes is limited to trained and authorized personnel only.

(G) Spray Painting/Spray Finishing/Spray Coating

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

(H) Solvent Cleaning

Approval from the Boeing Mesa SHEA Department is required for all solvent cleaning operations. All waste and residual solvent shall be disposed of according to the requirements stated in Section 5(A) of this procedure.

(I) Abrasive Blasting

Approval from the Boeing Mesa SHEA Department is required for all abrasive blasting operations. Approved blasting operations shall be conducted in unoccupied or out-of-doors enclosed areas.

(J) Radiation and Lasers

Approval from the Boeing Mesa SHEA Department is required prior to the use of radioactive materials, x-ray sources and/or class 3b or class 4 lasers. The use of these products must comply with current federal and State regulations and is limited to licensed, trained and/or authorized personnel.

4. HAZARD COMMUNICATION

(A) General

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

The Boeing Mesa SHEA Department will provide information on the hazardous materials that exist at the work site to which the contractor's employees might be exposed.

Each contractor is required to provide the Boeing Mesa Contract Administrator and/or the SHEA Department with a list of chemical products to be used, quantities to be used and Material Safety Data Sheets (MSDS) on each chemical. The contractor shall provide the hazardous material information to the Boeing Mesa SHEA Department and obtain approval for use prior to the hazardous materials arriving on-site.

(B) **Labeling**

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

5. **ENVIRONMENTAL CONCERNS**

(A) **Hazardous Waste**

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

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

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

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

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

(B) **Air Quality**

Contractors which have the potential of releasing Hazardous Air Pollutants (HAP's) or Volatile Organic Compounds (VOC's), or which perform processes that may otherwise adversely affect ambient air quality must obtain approval from the Boeing Mesa SHEA Department before the project begins. Examples include, but are not limited to: painting operations, abrasive blasting, solvent usage, open burning and earth moving. These projects may require an air quality permit from the Maricopa County Environmental Services Department Air Quality Division.

Contractors that release HAP's or VOC's on Boeing Mesa property must maintain a record of those materials used that contain the HAP's and VOC's. Forms for recording the use of products containing HAP's and VOC's are available from the Boeing Mesa SHEA Department. Upon completion of the contract, the contractor must return the completed usage forms to the Facilities Project Engineer or the Boeing Mesa SHEA Department.

Contractors which will be performing earthmoving operations that disturb more than a one-tenth (0.10) of an acre of ground surface must obtain an Earthmoving (EM) Permit and Dust Control Plan (DCP) from the Maricopa County Environmental Services Department. Copies of the EM Permit and DCP must be submitted to the Facilities Project Engineer and/or Boeing Mesa SHEA

Department prior to beginning the activity. A copy of the EM Permit and DCP must be retained on site at all times. During each day of operation, contractors must keep records of the methods of dust control used. The preferred method of dust control during activity is by watering. When active earthmoving is not being performed, and the project is not complete, temporary stabilization of all disturbed surfaces must be implemented. The preferred method of temporary stabilization is by watering until a crusted surface has formed and limiting vehicle access to prevent re-disturbance. At the completion of the project, final stabilization must occur. Final stabilization can include: paving with asphalt or concrete, applying gravel or crushed stone in sufficient quantity to cover disturbed areas, establishing a vegetative cover, or watering until a crust is established and then limiting vehicle access to prevent re-disturbance. If any other methods of dust control are going to be used, contractors must obtain prior approval from the Boeing Mesa SHEA Department. Upon completion of the contract, the contractor must submit copies of the completed daily records of dust control measures implemented to the Facilities Project Engineer or Boeing Mesa SHEA Department.

(C) **Water Quality**

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

Storm water runoff from construction activities on the Boeing Mesa site has the possibility to impact storm water quality by contributing sediment and other pollutants exposed at the construction site. These pollutants may enter the dry wells in storm water that is discharged. It is also essential that all storm water be maintained on site. The discharge of storm water off site requires an authorization to discharge storm water under a National Pollution Discharge Elimination System (NPDES) construction storm water permit.

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

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

SP 3025 (04/01)

SUBJECT: Safety and Environmental - seller personnel.

SPECIAL PROVISION TEXT:

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

Nothing herein shall be construed to relieve the contractor of its responsibility to comply with applicable federal, state and local fire code, environmental, health and safety laws, regulations and requirements. Such responsibility rests solely upon the contractor.

In case of discrepancies between various requirements, the order of precedence shall be the most recent edition of 29 Code of Federal Regulations (CFR) Parts 1926 and 1910, 40 CFR Protection of the Environment, 49 CFR Transportation, and the Uniform Fire Code.

1. INTRODUCTION

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

2. GENERAL INFORMATION

(A) **Notifications**

The contractor shall provide written notification to the Boeing Mesa Purchasing Representative/Buyer/Facilities Engineer/ of the name and title of the contractor's on-site safety representatives for the project.

In addition, the contractor shall provide the Boeing Mesa Safety, Health and Environmental Affairs Department or the Purchasing Representative with an advance list of hazardous materials used to perform work activities. See list of responsibilities under Hazard Communication, Section 4.

The Boeing Mesa Safety, Health and Environmental Affairs Department will notify the contractor(s) of hazardous materials which may be encountered at its facility, to which contractor(s) may be exposed, prior to commencing work.

(B) **Emergencies**

The emergency telephone number at Boeing Mesa is extension 911. This number must be called immediately in case of fire, medical, hazardous material incident, or damage to Boeing Mesa property.

For information on I, occupational safety, health and environmental rules at Boeing Mesa, call 480-891-4287 or 480-891-3220.

(C) **Personal Protective Equipment**

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

(D) **Smoking Areas**

The available smoking areas are clearly designated. Smoking is not allowed inside buildings or within fifty (50) feet of any helicopter, aircraft, hanger, fuel, or chemical storage area.

(E) **Pedestrian and Vehicle Traffic**

All Boeing Mesa traffic and parking regulations must be observed. Walkways are to be used where provided. Contractors shall not take shortcuts through operating areas or buildings. Unauthorized personnel are prohibited from the flight ramps, fuel farm, ordnance test range, and other posted areas.

The in-plant speed limit is 15 MPH, unless otherwise posted. Gasoline and diesel powered vehicles shall not be operated inside buildings without specific authorization.

(F) **Tools and Equipment**

Contractors shall provide the equipment necessary for the safe performance of the work. Use of ladders, safety belts, scaffolding, barricades, rigging equipment, hand tools, power tools, hoists, and forklifts shall follow safe industrial practices as well as applicable federal, state, and local safety standards. Any tools or equipment used on the job site may be inspected by the Facilities Construction Coordinator or the Contract Administrator and/or Boeing Mesa-Boeing Mesa's Safety,

Health and Environmental Affairs Department. However, any such inspection or approval shall not relieve the contractor of their responsibility for the appropriateness, quality, and/or safe use of the tool or equipment.

(G) **Housekeeping**

Work areas must be maintained in a safe condition and cleaned up continually as the job progresses. All trash and debris must be removed from the work area by the contractor at least daily.

(H) **Inspections**

A work area inspection shall be made by the contractor's safety representative. Inspections are to be made early at the beginning and end of each shift and periodically throughout the day to ensure that safe working conditions are maintained and that no safety hazards exist. All applicable federal, state, and/or local fire safety codes must be followed.

3. HAZARDOUS WORK ACTIVITIES

(A) **Burning and Welding**

A Hot Work Permit must be obtained from the Boeing Mesa Fire Protection Department for all cutting, welding and/or soldering operations. In all cutting or welding operations, at least one person shall be assigned as a "fire watch" up to one-half hour after work is completed. All combustible materials shall be removed from the work area. A contractor provided approved fire extinguisher must be within 30 feet of the hot work. The contractor must ensure adequate employee and facility protection during all stages of operations.

(B) **Confined Space Entry**

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

The Safety, Health and Environmental Affairs Department will provide contractors with information on known and suspected hazards of existing confined space entry locations at Boeing Mesa. Boeing Mesa's confined space entry procedures may be provided to contractors for information purposes only.

The contractor shall furnish evidence of a minimally acceptable program to the Safety, Health and Environmental Affairs Department prior to entering confined spaces.

(C) **Energized Electrical Work**

Work on or near energized lines or equipment of 600 volts or greater, shall only be done when approved in writing by the Boeing Mesa Purchasing Representative /Buyer/Facilities Coordinator.

(D) **Lock/Out and Tag/Out Requirements**

OSHA regulations and Boeing Mesa policies require that all machines/equipment are isolated from energy sources prior to performing work where accidental start-up might cause injury.

Lockout is the preferred method of isolating machines or equipment from an energy source (i.e., electrical, mechanical, or pneumatic power systems). Danger tags, blocking and blanking procedures shall be used as additional methods of controlling energy or stored energy in process lines or equipment.

The contractor shall request permission from Boeing Mesa's Facilities Project Engineer prior to proposed lockout of equipment or circuits. All affected employees shall be notified when equipment is "locked out" and when lockout is removed.

Work on or near "live" energized electrical equipment shall be done only when approved by the Facilities Construction Coordinator.

The contractor must comply with current OSHA standards on the control of electrical and mechanical energy.

(E) **Trenching and Excavations**

All trenches and excavations shall be guarded by barricades or caution tape. All trenches and excavations over 4 feet deep shall be shored or laid back to a stable angle in accordance with OSHA standards. A trench box may be used in lieu of shoring or laying back the sides of the trench. If used, contractor employees can only work inside the protected area of the trench box.

(F) **Overhead Work/Elevated Workstations**

All overhead work shall include protection for workers and pedestrians below. Scaffolding and man-lifts shall comply with OSHA requirements.

(G) **Spray Painting/Spray Finishing/Spray Coating**

Approval from the Safety, Health and Environmental Affairs Department is required for all spray finishing operations. All electrical equipment shall be rated for Class I, Division I locations where flammable or combustible liquids are sprayed. Spray operations shall be conducted in well ventilated, unoccupied locations.

(H) **Solvent Cleaning**

Approval from the Safety, Health and Environmental Affairs Department is required for all solvent cleaning where more than 1 pint of solvent per shift is used. All waste/residual solvent shall be disposed of according to Section 5 (A) following.

(I) **Abrasive Blasting**

Approval from the Safety, Health and Environmental Affairs Department is required for all abrasive blasting operations. Blasting shall be conducted in unoccupied or out-of-doors enclosed areas.

4. **HAZARD COMMUNICATION**

(A) **General**

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

The Safety, Health and Environmental Affairs Department will provide information on the hazardous materials that exist at the work site to which the contractor's employees might be exposed.

Each contractor is required to provide the Safety, Health and Environmental Affairs Department or the Purchasing Representative with a list of chemical products to be used, quantities to be used and Material Safety Data Sheets (MSDS) on each chemical.

(B) **Labeling**

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

5. **ENVIRONMENTAL CONCERNS**

(A) **Hazardous Waste**

Hazardous wastes are those materials specified by the U.S. Environmental Protection Agency (EPA) (40 CFR 206-261) or the Arizona Department of Environmental Quality (ADEQ) (A.A.C. R18-8-260-R18-8-261). The ADEQ also defines special wastes (A.R.S. R18-8-301). Additionally,

Boeing Mesa classifies and manages certain non-regulated materials as hazardous waste. These materials include, but are not limited to empty product cans and used oil.

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

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

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

(B) Air Quality

Contractors which have the potential of releasing hazardous air pollutants (HAP's) or volatile organic compounds (VOC's), or which perform processes that may otherwise adversely affect ambient air quality must obtain approval from the Safety, Health and Environmental Affairs Department before the project begins. Examples include, but are not limited to: painting, abrasive blasting, solvent usage, open burning and earth moving. These projects may require an air quality permit from the Maricopa County Division of Air Pollution Control.

Contractors which release HAP's or VOC's on Boeing Mesa property must maintain a record of those materials used that contain the HAP's and VOC's. Forms for recording the use of products containing HAP's and VOC's are available from the Facilities Project Engineer or the Safety, Health and Environmental Affairs Department. Upon completion of the contract, the contractor must return the completed usage forms to the Facilities Project Engineer or the Safety, Health and Environmental Affairs Department.

Contractors which will be performing earthmoving operations that disturb more than a one-tenth of an acre of ground surface must obtain an Earthmoving (EM) Permit and Dust Control Plan (DCP) from the Maricopa County Environmental Services Department. Copies of the EM Permit and DCP must be submitted to the Facilities Project Engineer or SHEA Department prior to beginning the activity. A copy of the EM Permit and DCP must be retained on site at all times. During each day of operation, contractors must keep records of the methods of dust control used. The preferred method of dust control during activity is by watering. When active earthmoving is not being performed, but the project is not complete, temporary stabilization of all disturbed surfaces must be implemented. The preferred method of temporary stabilization is by watering until a crusted surface has formed and limiting vehicle access to prevent re-disturbance. At the completion of the project, final stabilization must occur. Final stabilization can include: paving with asphalt or concrete, applying gravel or crushed stone in sufficient quantity to cover disturbed areas, or watering until a crust is established and then limiting vehicle access to prevent re-disturbance. If any other methods of dust control are going to be used, contractors must obtain prior approval from SHEA. Upon completion of the contract, the contractor must submit copies of the completed daily records of dust control measures implemented to the Facilities Project Engineer or SHEA.

(C) Water Quality

Boeing Mesa has no storm sewers; however, there are many drywells on-site, which have iron grates that resemble sewers. Absolutely no chemicals are allowed to be discharged into these dry wells. Additionally, no chemicals are allowed to be discharged into the sanitary sewer system drains.

SP 3040

SUBJECT: Ozone

SPECIAL PROVISION TEXT:

An ozone depleting substance warning statement is required on delivery documentation, when applicable, in accordance with EPA final rule located at 40 CFR Part 82, "Protection of Stratospheric Ozone," Subpart E, "Labeling of Products Using Ozone-Depleting Substances."