

## SP SECTION 3000 - HAZARDOUS MATERIAL

### SP 3001 (02/01)

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 (02/01)

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 (02/01)

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 (02/01)**

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 (02/01)**

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 (02/01)**

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 (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 (02/01)**

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."