

2. AMENDMENT/MODIFICATION NO. 000006 3. EFFECTIVE DATE JUN 23 2009 4. REQUISITION/PURCHASE REQ. NO. 5. PROJECT NO. (If applicable)

6. ISSUED BY CODE MSFC NASA/Marshall Space Flight Center Procurement Office Marshall Space Flight Center AL 35812 7. ADMINISTERED BY (If other than Item 6) CODE MSFC NASA/Marshall Space Flight Center Marshall Space Flight Center AL 35812

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) HPM CORP 2625 W ENTIAT AVE KENNEWICK WA 99336-3078 9A. AMENDMENT OF SOLICITATION NO. (x) 9B. DATED (SEE ITEM 11)

10A. MODIFICATION OF CONTRACT/ORDER NO. NNM09AA03C 10B. DATED (SEE ITEM 13) 10/09/2008 CODE 1WHJ8 FACILITY CODE

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers  is extended.  is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required) See Schedule

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A. B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). X C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: 52.243-1, Changes Fixed Price D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor  is not  is required to sign this document and return 3 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) The purpose of this modification is to update the Variation in Quantity Clause, Update the Performance Work Statement, Update Data Procurement Document and Occupational Health Services Staff Education Certification and Licensing Requirement. Accordingly, the following changes are made:

|               | Total NTE Lump Sum | Total Funds |
|---------------|--------------------|-------------|
|               | Contract Value     | Obligated   |
| Previous Amt. | \$3,277,672        | \$3,277,672 |
| This Mod      | -0-                | \$ -0-      |
| Revised Amt.  | \$3,277,672        | \$3,277,672 |

Continued ... Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print) CHARLES E. ROSS, D.O. PROGRAM MANAGER 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Bobby J Holden 15B. CONTRACTOR/OFFEROR 15C. DATE SIGNED 6-13-09 16B. UNITED STATES OF AMERICA 16C. DATE SIGNED 6/23/09 (Signature of person authorized to sign) (Signature of Contracting Officer)

**CONTINUATION SHEET**

REFERENCE NO. OF DOCUMENT BEING CONTINUED  
NNM09AA03C/000006

PAGE OF  
2 2

NAME OF OFFEROR OR CONTRACTOR  
HPM CORP

| ITEM NO.<br>(A)    | SUPPLIES/SERVICES<br>(B)  | QUANTITY<br>(C) | UNIT<br>(D)   | UNIT PRICE<br>(E) | AMOUNT<br>(F) |                   |                   |                   |                   |                    |                     |  |  |  |  |
|--------------------|---|-----------------|---------------|-------------------|---------------|-------------------|-------------------|-------------------|-------------------|--------------------|---------------------|--|--|--|--|
|                    | <p>A. Paragraph F.5 , Variation In Quantity (Lump Sum) is hereby deleted in it's entirety and replaced with the updated Paragraph F.5.</p> <p>B. Attachment J-1, Performance Work Statement for Occupations Health Services is hereby deleted in't entirety and replaced with the updated Attachment J-1.</p> <p>C. Attachment J-2, Data Procurement Document is hereby deleted in it's entirety and replaced with the updated Attachment J-2.</p> <p>D. Attachment J-13, Occupational Health Services Staff Education Certification and Licensing is hereby deleted in it's entirety and replaced with the updated Attachment 13.</p> <p>E. The modifications made above are reflected in total on the changes pages enclosed herein. In order to reflect these changes made, the pages listed below are hereby deleted from, or added to, Contract NNM09AA03C. A vertical change bar is included in the right margin in the specific area of change.</p> <table border="0" style="margin-left: 40px;"> <tr> <td style="text-align: center;">Page(s) Deleted</td> <td style="text-align: center;">Page(s) Added</td> </tr> <tr> <td style="text-align: center;">F-3</td> <td style="text-align: center;">F-3</td> </tr> <tr> <td>J-1-1 thru J-1-31</td> <td>J-1-1 thru J-1-29</td> </tr> <tr> <td>J-2-1 thru J-2-38</td> <td>J-2-1 thru J-2-34</td> </tr> <tr> <td>J-13-1 Thru J-13-4</td> <td>J-13-1- thru J-13-4</td> </tr> </table> <p>LIST OF CHANGES:<br/>Total Amount for this Modification: \$0.00<br/>New Total Amount for this Version: \$0.00<br/>New Total Amount for this Award: \$17,355,193.00</p> | Page(s) Deleted | Page(s) Added | F-3               | F-3           | J-1-1 thru J-1-31 | J-1-1 thru J-1-29 | J-2-1 thru J-2-38 | J-2-1 thru J-2-34 | J-13-1 Thru J-13-4 | J-13-1- thru J-13-4 |  |  |  |  |
| Page(s) Deleted    | Page(s) Added   |                 |               |                   |               |                   |                   |                   |                   |                    |                     |  |  |  |  |
| F-3                | F-3   |                 |               |                   |               |                   |                   |                   |                   |                    |                     |  |  |  |  |
| J-1-1 thru J-1-31  | J-1-1 thru J-1-29   |                 |               |                   |               |                   |                   |                   |                   |                    |                     |  |  |  |  |
| J-2-1 thru J-2-38  | J-2-1 thru J-2-34   |                 |               |                   |               |                   |                   |                   |                   |                    |                     |  |  |  |  |
| J-13-1 Thru J-13-4 | J-13-1- thru J-13-4   |                 |               |                   |               |                   |                   |                   |                   |                    |                     |  |  |  |  |

(f) Contractor Phase-Out. Phase-out activities shall be accomplished in accordance with FAR 52.237-3, Continuity of Services. Prior to contract completion, a successor contractor(s) may be selected to perform the work IDIQ covered by the PWS. The Contractor shall conduct an orderly phase-out of contract activities prior to completion of this contract and assumption of responsibility for the effort described in the PWS by a successor contractor(s). The Contractor shall remain responsible for the effort covered by the PWS during phase-out activities. Upon written notice by the Contracting Officer, the Contractor shall conduct phase-out activities for up to 21 calendar days in accordance with FAR 52.237-3, Continuity of Services. Upon Completion of Phase-Out, at the government's option, the Contractor will be required to furnish to the Government, at no higher than vendors invoice price, all remaining medical and office supplies that were Contractor procured.

(End of clause)

**F.5 VARIATION IN QUANTITY (LUMP SUM)**

A. If the furnished or delivered quantity of items in the table below varies on an annual basis more than twenty (20) percent above or below the number of services listed, an equitable adjustment in the Lump Sum price (upward or downward) shall be made upon demand of either party. The equitable adjustment shall be based upon any increase or decrease in costs due solely to the variation above 120 percent or below 80 percent of the number of services.

| Service Provided  | PWS Reference | Number Provided Annually |
|---|---------------|--------------------------|
| Patient Exams (e.g. Part I and Part II, treadmill, mammogram) | 3.1           | 8150                     |
| Injections: Flu   | 3.1.9         | 2500                     |
| Injections: Others  | 3.1.4         | 1400                     |
| Industrial Hygiene: Inspection\Surveys                        | 4.1           | 640                      |
| Industrial Hygiene: Asbestos Activities                       | 4.1.7         | 760                      |
| Industrial Hygiene: Monitoring and Analysis                   | 4.1           | 840                      |
| Health Physics Activities                                     | 5.1           | 1600                     |
| Respiratory Protection Program Activities                     | 6.1           | 8700                     |

B. For purposes of determining the applicability of this clause, the following shall not be included in the count of services performed, or item delivered:

(1) any services or items which the Contractor is required to provide to remedy the consequences of any act or omission on the part of the Contractor, or its agents, employees, or subcontractors, or

(2) any items or services which the Contractor performs or delivers in order to support its own operations (rather than satisfy the requirements of this contract). Examples under category (1) include any repair or restorative work which might be required due to the negligence of Contractor employees; examples under category (2) include services expended by the Contractor to move or relocate its personnel on-site, and the acquisition of equipment and supplies to

## PERFORMANCE WORK STATEMENT FOR OCCUPATIONAL HEALTH SERVICES

### 1.0 INTRODUCTION

The George C. Marshall Space Flight Center has a general requirement for the management of the Occupational Health Services which includes occupational medicine, industrial hygiene, respiratory protection and radiation safety services at the Marshall Space Flight Center (MSFC). This requirement includes providing the necessary management, resources, all supplies (e.g., office, clinical, medical, industrial hygiene, health physics, respiratory protection services), materials, office, analytical/laboratory support and personnel (not otherwise provided by the Government) to perform the total effort.

The performance of this PWS will require the following:

- (a) Contractor personnel to process, update, and maintain information on current employees,
- (b) Contractor personnel to utilize Government provided information systems,
- (c) Contractor personnel to plan, furnish, and manage the resources required to provide quality, timely, and cost effective occupational health services to MSFC, and
- (d) Contractor personnel to provide the necessary expertise and capabilities required to continuously maintain an occupational health operation which complies with all federal, state, local, and NASA regulatory standards and meets all necessary parameters to ensure that the MSFC is a healthy work environment for all of its personnel.

The Government will provide computers to appropriate contractor personnel supporting this contract. The Government will provide maintenance and support for all Government furnished software and hardware unless otherwise specified. The Government will provide all maintenance and administration of the onsite network infrastructure. The Government may at anytime access and review any information contained therein. The information, including changes made under this contract, is Government property, for the exclusive use of the Government, and may not be transferred to another location, in any form, or used by the Contractor for any purpose except for work performed under this contract.

## **2.0 OCCUPATIONAL HEALTH SERVICES GENERAL REQUIREMENTS**

### **2.1 Lump Sum FFP Requirements**

#### **2.1.1 General**

- (a) The Contractor shall ensure personnel supporting this contract meet the education, certification, and licensing requirements as defined in attachment J-13.
- (b) The Contractor shall participate in, or lead, MSFC Safety, Health, and Environmental (SHE) committees and/or subcommittees as directed by the COTR. Participation shall include such activities as chairing, organizing, coordinating, or providing administrative support for action tracking and resolution.
- (c) The Contractor shall support the MSFC Marshall Team Meeting (Center Director's monthly SHE Staff Meeting) as directed by the COTR.
- (d) The Contractor shall provide administrative and technical support for periodic internal and external program audits including but not limited to those by NASA Headquarters (HQ) Office of the Chief Health and Medical Officer (OCHMO), NASA HQ Safety or Environmental Functional Reviews, and other outside agencies. The Contractor shall also prepare audit reports and follow up reports to respond to any audit findings.
- (f) The Contractor shall recommend improvements to enhance MSFC occupational and preventive health programs, and review Federal, State, and NASA documents, and trade publications to determine applicability and impact of any new or proposed regulations or best practices on operations, alert the COTR, in writing, of regulation and program changes affecting this contract, and recommend an implementation plan for identified changes.
- (g) The Contractor shall develop and maintain procedures and records for P.W.S. elements 4 (Industrial Hygiene), 5 (Health Physics), and 6 (Respiratory Protection) in an ISO equivalent content and Quality Work Instruction format within eighteen months of the effective date of the contract or as approved by the COTR.

The Contractor shall obtain AAAHC accreditation for the MSFC OHS Clinic within thirty months of the effective date of the contract or as approved by the COTR contingent upon all necessary building modifications being performed by NASA.

- (g) The Contractor shall inform the COTR of any medical equipment deterioration and the need for replacement or repairs on Government Furnished Equipment.
- (h) The Contractor shall provide services during the following hours of operation:
  - 1) The regular hours of operation for Occupational Health Services, including Respiratory Protection Services will be conducted within normal duty hours Monday through Friday. Normal duty hours are defined as a 5-day week, Monday through Friday (excluding Federal holidays), 8 hours per day between 6 a.m. and 6 p.m.

- 2) The Medical Clinic will be open from 7 a.m. to 3:30 p.m. Monday through Friday (excluding Federal holidays).
  - 3) On an as-needed basis, Occupational Health personnel will be required to report to duty outside normal duty hours to perform inspections of areas containing hazardous materials such as asbestos or lead where prior or on-going activities may have disturbed the material. The exact time for reporting to work will be dependent on the extent of the inspection(s) required, on any given day, outside the normal duty hours. Further, in the event of a hazardous chemical spill or other environmental health related mishaps Occupational Health personnel may be required to participate as a member of the response team outside normal duty hours.
  - 4) Ambulance services will be provided 7 days a week, 24 hours each day. Coverage for weekdays (excluding Federal holidays) 7 a.m. to 5 p.m. will be accomplished onsite to ensure a maximum response time of 4-minutes (from time of call received to time arrived at scene) exclusive of the 8000 area where the response time will not exceed 15 minutes. Coverage for weekdays 5 p.m. through 7 a.m., weekends, and holidays will be accomplished to ensure a maximum response time of 15 minutes. Onsite standby service will be provided during Center sponsored activities, such as test operations, and incidents such as chemical spills or fires. These may occur during normal or after hours. More than one vehicle may be required for this service.
- (a) The Contractor shall ensure applicable personnel attend appropriate continuing education courses, conferences, and/or seminars annually, or as required, to maintain competency, technical skill, and certification requirements.
  - (b) The Contractor shall participate and support Center special activities such as Annual Safety Day and Health and Fitness Expo.
  - (c) The Contractor shall maintain electronic document records of all written products, administrative, and operational procedures required for the implementation of their OH functions such as internal operating procedures, reports, records of employee certification and training, fieldwork records, and other auditable activities.
  - (d) The Contractor shall participate in NASA Headquarters OCHMO sponsored Video Teleconference Seminars (VITS); training as appropriate on a variety of occupational health topics; support special Headquarters' requirements for data collection; and support/participation in periodically targeted health topics, such as Solar Safe, Blood Pressure Month, Ergonomics.
  - (e) The Contractor shall update and maintain the content for the Occupational Health Web site with information that includes, but is not limited to, current health topics, applicable links, and sampling data; provide required responses to MSFC question/answer forums such as "Dr. Know", "IDEAS", and the SCRS program; and maintain the occupational health library.

- (f) The Contractor shall update and maintain the content for the Occupational Health Web site to provide customer satisfaction feedback.
- (g) The Contractor shall attend the annual NASA OCHMO sponsored occupational health conference. As a minimum, attendees shall be a Nurse, Physician and an Industrial Hygienist. The conference is one week and takes place in the continental U.S., normally in the vicinity of a NASA Center.
- (h) The contractor shall ensure applicable employees maintain membership in appropriate professional organizations.
- (i) The Contractor shall fully cooperate with other contractors and Government employees and shall carefully adapt scheduling and performance of work under this contract to accommodate the work by others, heeding any direction that may be provided by the COTR.
- (j) The Contractor, prior to performing any work in a building, shall coordinate and schedule work with the customer(s) of the facility or area being affected.
- (k) The Contractor and their employees shall become acquainted with and comply with all applicable Government directives, instructions, policies, and regulations, or abide by requirements as directed by the COTR.
- (l) The Contractor shall ensure that their employees know how to report any accident, fire, toxic chemical, electrical, security, flooding, or police emergency.
- (m) The Contractor shall post emergency telephone numbers at the job site. Report all emergencies by dialing 911 for ambulance, fire, security, or environmental mishaps. The Protective Services Control Center (PSCC), also known as Security, operates 24 hours a day, 7 days a week and may also be reached for assistance at 544-4357, Option 1.
- (n) The Contractor shall provide all safety and personal protective equipment required to perform the work specified in this contract. All work shall be conducted in a safe manner and shall comply with all safety and health directives, instructions, policies, and regulations and any revisions, updates, or successor documents as listed in this contract.
- (o) The Contractor shall demonstrate proactive and innovative safety and health practices on a continual basis throughout the contract period.
- (p) The Contractor's workspace may be inspected periodically for OSHA and NASA violations. Abatement of violations will be the responsibility of the Contractor as determined by the Government. The Contractor shall provide assistance to applicable NASA/MSFC organizations, investigative organizations, and the OSHA inspector if a complaint is filed or an investigation or inquiry is initiated on a company employee.

- (q) The Contractor shall report to the COTR and the MSFC Industrial Safety Office, exposure from any substance, possible exposure from any substance, and all accidents resulting in death, trauma, occupational disease, bodily injury, or environmental damage.
- (r) The Contractor shall submit to the COTR, the appropriate Property Support Assistant, and the Protective Services Office a full report of all instances of loss, damage, destruction, and theft of Government property. All damage reports shall be submitted within 24 hours of the occurrence. Suspected incidents of vandalism or purposeful destruction of property shall be reported to the Protective Services Control Center for investigation.
- (s) The Contractor shall comply with all NASA and local security requirements. The Contractor shall submit the name and address of each employee hired for work on this contract upon request of the COTR. Neither the Contractor nor any of their employees shall disclose or cause to be disseminated any information concerning Government operations, including those performed by contractors for the Government, which could result in or increase the likelihood of the possibility of a breach of security or interrupt the continuity of operations. Disclosure of information relating to the services hereunder to any person not entitled to receive it, or failure to safeguard any classified, unclassified sensitive, or export controlled information that may come to the Contractor or any person under their control in connection with work under this contract, may subject the Contractor, their agents, or employees to criminal liabilities. All inquiries, comments, or complaints arising from any matter observed, experienced, or learned as a result of or in connection with the performance of this contract, shall be directed to the COTR if the resolution requires dissemination of official information.
- (t) The Contractor shall obtain authorized access to buildings and facilities, and arrange for them to be opened and closed to accomplish work under this contract. Note that a higher level of security and limited access to some buildings demands that scheduled work be well coordinated. Typically, access may be coordinated through the Building Manager and/or approved by an employee listed on the posted Label 24, Controlled Security Area. MPR 1600.1 provides guidance for entrance into secure areas or offices. Keys may be issued to the Contractor on a case-by-case basis when there is an established need approved by the Protective Services Office. MPR 1600.1 provides guidance for ensuring compliance with MSFC lock and key procedures. However, it shall be the Contractor's responsibility to arrange for adequate security of the buildings and facilities at the end of each workday. The Contractor shall be responsible for the cost of replacing any keys that are furnished to and lost by their employees. If the COTR decides that a lock must be replaced because of the loss of a key by the Contractor's employees, the Contractor shall pay the cost of that replacement. Similarly, the Contractor shall pay the cost of changing a combination if the COTR has reasonable cause to believe that the combination has been compromised. The Contractor shall identify a single point key coordinator to interface with the Government for all issues related to key control. In addition to keys assigned to the Contractor, the Contractor may sign individual keys out from a general use key cabinet maintained in the Utility Control System (UCS) control room in Building 4250. These keys are intended for access to areas for short-term work. The Contractor shall comply with key sign-out and sign-in controls established by the UCS Contractor.

- (u) The Contractor shall provide to the COTR the name or names of the responsible supervisory person or persons authorized to act for the Contractor. The list shall be updated whenever changes occur. The Contractor shall also provide names for points of contact to the COTR that the Utility Control System (UCS) Contractor will enter into UCS standard operating procedures associated with notification of abnormal work conditions.
- (v) The Contractor shall remove from the site any individual whose behavior is deemed by the Contracting Officer, COTR, or Protective Services Office to be contrary to the public interest or inconsistent with the best interests of Government security.
- (w) No employee or representative of the Contractor shall be admitted to the site of work unless they furnish satisfactory proof that they are a citizen of the United States, or, if an alien, their residence within the United States is legal.
- (x) The Contractor shall display the company name on each of the Contractor's vehicles in a manner and size that is clearly visible. All Contractor vehicles shall display a valid state license plate, shall be maintained in good repair, and adhere to all state and local codes. All drivers shall adhere to all State and Federal laws and Redstone Arsenal and NASA regulations.
- (y) The Contractor shall obtain all appointments, licenses, and permits required for the prosecution of the work. The Contractor shall comply with all applicable Federal, State, and local laws. Evidence of such permits and licenses shall be provided to the COTR before work commences.
- (z) The Contractor shall ensure that reports to customers accurately describe the work performed, including observations, findings, and recommendations.

### **2.1.2 Emergency Preparedness**

- (a) The Contractor shall be responsible for all occupational health aspects of the MSFC Emergency Preparedness and Emergency Response Team in accordance with MPR 1040.3.
- (b) The Contractor shall participate in planning and response for chemical, biological, radiological, and other emergency activities and participate in exercises at MSFC and Redstone Arsenal.
- (c) The Contractor shall participate in local community response activities in accordance with mutual aid agreements as directed by the COTR.
- (d) The Contractor shall immediately inform the COTR or designated representative in cases of emergency involving exposures or hazards that appear to be dangerous to health or life and provide recommendations to alleviate the emergency conditions. The contractor shall serve as a member of appropriate emergency response teams.

### **2.1.3 Occupational Health Training**

- (a) The Contractor shall provide health training in all areas of Occupational Health and Medicine, including but not limited to: hearing conservation, respiratory protection, ergonomics, laboratory safety, asbestos awareness, chemical hygiene, radiation and laser safety, lead safety, AED, blood-borne pathogens, and confined space entry. Training shall be conducted by technically qualified personnel. All trainers shall have field expertise in the subject area in which they are conducting training.
- (b) The Contractor shall provide training that meets Federal, MSFC, or certifying organization's requirements.
- (c) The Contractor shall ensure health training class offerings are published on MSFC SHE Training homepage and SATERN to ensure employees have access for scheduling.
- (d) The Contractor shall provide certificates of completion to the trainees for training not covered via SATERN and/or send a list of personnel trained to the MSFC training office.

### **2.2 IDIQ Requirements**

- (a) The Contractor shall provide support in the event of natural disasters or catastrophic situations involving other NASA Centers as directed by the COTR.
- (b) The Contractor shall provide additional occupational health services such as equipment acquisitions and special technical support as defined by MSFC, not covered in Lump Sum Effort.

### **2.3 Documentation and Reporting Requirements**

- (a) The Contractor shall report and document performance of this PWS and fulfill the requirements of associated Data Requirement Descriptions (DRD's) as outlined in Data Procurement Document (DPD) 1237 (Attachment J-2). The contractor shall determine the data restriction that applies to each data deliverable and mark or transmit the data restriction in accordance with section 2.3.3 of the Data Procurement Document.
- (b) The Contractor shall prepare and maintain a report identifying and listing all equipment and tools, including but not limited to the items in attachment J-5, provided by the Government for use by the contractor in the performance of contracted effort, and for which the contractor has been given physical custody. This plan shall be prepared and maintained in accordance with DRD 1237LS-001.
- (c) The Contractor shall prepare and submit Standard Operating Procedures consistent with NPR 1800.1 for clinic operations, industrial hygiene operations, radiation safety operations, and respiratory protection services in accordance with DRD 1237MA-001.
- (d) The Contractor shall provide a monthly Progress/Self-Monitoring Report in accordance with DRD 1237MA-003.

- (e) The Contractor shall prepare and submit a Contractor Employee Clearance Document to NASA with a list of all current onsite contractor employees working under this contract with their designated locations and Form 383-1 for terminated onsite employees in accordance with DRD 1237MA-012.
- (f) The Contractor shall prepare and submit an Industrial Hygiene Building Survey Report and Air Sampling Plan in accordance with DRD 1237MA-004.
- (g) The Contractor shall prepare and submit a Badged Employee and Remote IT User Listing in accordance with DRD 1237MA-011.
- (h) The Contractor shall prepare and submit a Position Risk Designation for Non-NASA Employee Form in accordance with DRD 1237MA-013.
- (i) The Contractor shall establish and implement an industrial safety, occupational health, and environmental program that (1) prevents employee fatalities, (2) reduces the number of SHE mishaps, (3) reduces the severity of employee injuries and illnesses, and (4) protects the environment through the ongoing planning, implementation, integration and management control of these programs in accordance with DRD 1237SA-001. The SHE Plan shall address each of the following MSFC SHE core program requirements in detail that are applicable to the contracted effort:
  - a. Management leadership and employee involvement.
  - b. System and worksite analysis.
  - c. Hazard prevention and control.
  - d. Safety, health and environmental training.
  - e. Environmental compliance.
- (j) The Contractor shall report mishaps and safety statistics to the MSFC Industrial Safety Branch in accordance with DRD 1237SA-003. The contractor shall submit direct to the NASA Incident Reporting Information System (IRIS) or shall use the forms listed in section 15.4 of DRD 1237SA-003 or electronic equivalent to report mishaps and related information required to produce the safety metrics.
- (k) The Contractor shall prepare and submit a Professional Certifications/Licensures and Training Requirements Schedule in accordance with DRD 1237MA-002.
- (l) The Contractor shall provide the COTR, in a contractor defined format, an annual schedule of training requirements/projections for continuing education, certification, or skills improvement needs for all contractor personnel.
- (m) The Contractor shall generate, review, update, and maintain all applicable MSFC and NASA occupational health and related procedures. These include but are not limited to, manuals, management directives/procedural requirements/instructions, and circulars.
- (n) The Contractor shall be responsible for developing, reviewing, and proposing updates to all applicable MSFC directives, procedures, and instruction.

- (o) The Contractor shall prepare and submit an Organizational Conflicts of Interest (OCI) Avoidance Plan in accordance with DRD 1237MA-014.
- (p) The Contractor shall prepare and submit a list of credentials for all personnel covered by certification and licensure requirements in accordance with DRD 1237MA-002.

Documentation Reduction: In accordance with Section 101 of Executive Order 13101 of September 14, 1998, Greening the Government through Waste Prevention, Recycling, and Federal Acquisition, the Contractor is encouraged to submit paper documents, such as offers, letters, or reports that are printed or copied double-sided on recycled paper that meet minimum content standards specified in Section 505 of Executive Order 13101, when not using electronic commerce methods to submit information or data to the Government.

### **3.0 MEDICAL SERVICES REQUIREMENTS**

#### **3.1 Lump Sum FFP Requirements**

##### **3.1.1 General**

- (a) The Contractor shall provide comprehensive medical services to enhance the health and well-being of the workforce that is compliant with NPR 1800.1 and MPR 1810.1.
- (b) The Contractor shall provide medical services as set forth below to all NASA-MSFC civil servant, NASA-MSFC resident contractor personnel, NASA-MSFC guests and NASA tenant personnel resident at MSFC.
- (c) The Contractor shall provide the administrative and technical operations and management of Occupational Medicine (OM) functions.
- (d) The Contractor shall provide administrative support for medical services through the use of health information management systems that supports physical examination management, patient scheduling and notification, reception desk operations, and records management with the capability for statistical and analytical data collection and retention.

##### **3.1.2 Occupational Medicine Services**

- (a) The Contractor shall provide comprehensive OM services in accordance with NPR 1800.1 and MPR 1810.1 designed to enhance the health and well-being of the work force. Services shall be provided to NASA and MSFC contractor activities (including special events), personnel, and facilities.
- (b) The Contractor shall provide occupational related examinations (as well as laboratory and other tests as appropriate) including pre-placement, surveillance, job certification, special purpose and other examinations as medically necessary that meet the requirements of the NASA Occupational Health Program Procedures, NPR 1800.1, Occupational Safety and Health Administration (OSHA), Department of Transportation (DOT), American National Standards Institute (ANSI), Nuclear Regulatory Commission (NRC), NASA standards and other regulatory agencies. These examinations will be provided to selected civil service and onsite contractor personnel. In addition to receiving the basic physical examination, other exams/diagnostics may be required. Occupational related exams include, but are not limited to, the following personnel:
  - a. Occupations that involve potential exposure to:
    - 1. Chemicals, solvents, paint, or fuel.
    - 2. Benzene.
    - 3. Insulation (fiberglass, asbestos).
    - 4. High pressure systems.
    - 5. Welding.
    - 6. Lasers.

7. Pesticides/herbicides.
  8. Mercury/Lead/heavy metals.
  9. Respiratory hazards.
  10. Noise - Hearing Conservation.
- b. Security Officers - meet required qualifications (including annual treadmill).
  - c. Food handlers (including TB skin test; 'blue card' certification).
  - d. Mission support (specifics defined as appropriate).
  - e. Heavy/critical equipment.
- (c) The Contractor shall evaluate, treat, and provide appropriate recommendations for disposition of all occupational injuries and illnesses.
  - (d) The Contractor shall provide a Worker's Compensation Program Medical Case Manager to assess injured worker's needs, implement interventions, collaborate with treatment physicians/rehabilitation providers, identify needed resources, participate in the evaluation of the medical treatment plan and case management process, assist supervisors and employees with return to work issues, develop and conduct educational programs for all involved entities, and develop processes to identify situations that require early intervention to maximize outcomes.
  - (e) The Nurse Case Manager shall review preexisting workers compensation files for proper medical documentation at least every two years at the Federal Workers Compensation regional office in Jacksonville, FL. The review typically takes place over a period of 3 days.
  - (f) The Nurse Case manager shall attend the Federal Workers Injury compensation class within one year of start of contract at the Federal Workers Compensation regional office in Jacksonville, FL.
  - (g) The Contractor shall identify trends associated with all injuries or illnesses that may be related to the work environment, investigate those trends, and recommend actions required for prevention.
  - (h) The Contractor shall provide appropriate return to work clearance or duty limitations to patients and their employers.
  - (i) The Contractor shall perform laboratory, x-ray, or other tests within the scope and capability of the onsite medical facility at the request of a private physician if the conditions under evaluation or treatment are job-related.
  - (j) The Contractor shall administer medications and/or tests (such as shots and blood pressure checks) prescribed by the employee's private physician if these onsite activities enable the employee to remain at work for the balance of the normal work shift. Services requested by the employee's private physician must be in writing. A Contractor physician shall evaluate and approve, as appropriate, the written request. The employee will furnish any of the necessary medications and required specialized equipment.

- (k) The Contractor shall refer patients to their personal physician when significant abnormal conditions are discovered at the time of scheduled physical examinations or in the course of treatment for occupational illnesses or injuries, but which in themselves are not related to the patient's employment. Information on the evaluation and treatment shall be requested from the private physician to determine any effect on employment or need for work limitations.

### **3.1.3 Emergency and Therapeutic Medicine**

- (a) The Contractor shall provide initial emergency treatment, including dispensary services as needed, for illnesses and injuries sustained by MSFC employees (civil service, contractor, and official visitors). Emergency treatment/transportation for the Child Development Center participants may also be provided when acute illness or injury occurs.
- (b) The Contractor shall provide necessary information required for worker's compensation and other reporting requirements to appropriate organization for occupational injuries and illness.
- (c) The contractor shall provide pharmacy services, including the requisitioning or purchase, storage, safeguarding, accountability, and dispensing of all pharmacy supplies, drugs, and medicines necessary to the operation of the medical services.
- (d) The Contractor shall provide the MSFC Drug Control Officer for narcotic and sedative drugs, if required. Normal procedures allow patients to receive an initial dose of medication (prescription or non-prescription) for prompt treatment of symptoms. Written prescriptions are provided to the patient for additional medications, if required by the physician. Examples of routinely provided medications include aspirin, ibuprofen, antihistamines, decongestants, topical antibiotic/cortisone/burn ointments, throat lozenges, antibiotics, muscle relaxers, antacids, nitroglycerin, and eye/ear drops.
- (e) The Contractor shall perform blood pressure and pulse evaluations.
- (f) The Contractor shall perform dermabond operations for clinic visit personnel suffering from superficial cuts/wounds that can be closed with dermabond.

### **3.1.4 Preventive Medicine**

- (a) The Contractor shall provide a preventive medicine program to promote, maintain, and improve the physical and psychological well being of the worker in the work place.
- (b) The Contractor shall provide voluntary annual health maintenance examinations to NASA civil service employees. The basic examination shall include, but not be limited to, the following:
  1. Height, weight, blood pressure.
  2. Visual acuity test and tonometry.
  3. Audiogram.

4. Laboratory Profile to include chemistry profile, Total Iron Binding Capacity (TIBC) when deemed medically appropriate by the examination provider, CBC with differential, complete urinalysis and Lipid Profile.
  5. Thyroid; minimum of FreeT4 and TSH.
  6. Resting electrocardiogram.
  7. Pulmonary function study.
  8. A complete examination by an appropriate licensed health professional (such as a physician or nurse practitioner) which includes, as a minimum, the following evaluation/examinations/patient consultation: ENT; head/neck; blood pressure; hernia; eye/retinal; heart and lungs auscultation; reflexes; skin (whole body exam for potential skin cancer upon patient request); as appropriate - breast, prostate, scrotal, rectal, pelvic; and lab results review. More frequent examination and additional tests may be performed, if considered necessary in the judgment of the examining physician.
- (c) The Contractor shall offer additional tests/diagnostics annually or as noted below. These include, but are not limited to, the following:
1. Mammogram (per American Cancer Society guidelines).
  2. Prostate Sensitive Antigen (PSA) (per American Cancer Society guidelines).
  3. Hemocult (offered annually for employees age 40 and over).
  4. Treadmill (offered biannually for civil service employees over age 45; triannually for civil service employees under age 45; annually for protective services personnel; or as prescribed by a physician).
  5. Image guided papanicolaous smear.
  6. Chest x-ray, as dictated by Standard, or when required by physician.
  7. LpPLA2 (approximately 250 per year).
- (d) The Contractor shall administer prescribed medications (e.g., allergy shots) to civil servant and onsite contractor employees to minimize time away from work.
- (e) The Contractor shall provide immunizations and other injections to civil service employees as deemed necessary by the Medical Director, providing necessary information regarding immunization and performing appropriate documentation.
- (f) The Contractor shall provide support services to MSFC workforce for official travel to include:
1. Traveler briefings with up to date information on destination environmental issues and infectious outbreaks;
  2. Travel related medical reviews prior to authorization of overseas travel to include: identifying the need for vaccinations (such as yellow fever), providing standard immunizations (such as tetanus-diphtheria, polio, measles mumps and rubella (MMR), hepatitis A and hepatitis B), reviewing and evaluating pre-existing medical conditions, personal medications, and destination medical capabilities;
  3. Travel packets to employees traveling to overseas sites in accordance with MPR 1810.1. Packets to contain some basic medical supplies, such as Tylenol, Band-Aids, non-adhesive bandages, gauze pads antibiotic ointment, anti-diarrhea medication, anti-pruritic

cream, antihistamine, throat lozenges, cold relief tablets, anti-motion sickness medication, and antacids:

4. Prescriptions for malaria medications for travel to those countries that the Centers for Disease Control recommend malaria prophylaxis. OM physicians shall discuss the need for malaria prophylaxis individually with the traveler and prescribe the most appropriate anti-malarial medication;
5. Information on other aspects of travel related medical concerns such as jet lag, stress, travelers' diarrhea, motion sickness, hypoxia, high altitude illness, decompression illness, and blood clots.

### **3.1.5 Mission Support Services**

- (a) The Contractor shall provide mission support services to include support to MSFC elements whose missions involve the use of human test subjects. Contractor functions in this connection include medical advice, counseling, monitoring, and special physical examinations of personnel engaged in such activities as, life support systems, and certain task analyses.

### **3.1.6 Miscellaneous Medical Services**

- (a) The Contractor shall provide a physician designated to serve as the Medical Director for the Marshall Space Flight Center. The Medical Director shall also serve in the following capacities:
  1. As the Medical Review Official (MRO) under the terms established by the Federal Drug-Free Workplace Program;
  2. As the Medical Advisor of the MSFC Wellness Center;
  3. As the MSFC Medical Technical Authority and;
  4. As the Physician Director of the MSFC AED Program.
- (b) The Contractor shall provide physician evaluations to include but not be limited to the following:
  1. Disability Retirement.
  2. Fitness for Duty.
  3. Return to Work.
  4. Handicap Parking.
  5. Overseas Travel.
  6. Pre-employment.
  7. Respirator Approval/Disapproval.
  8. Physical Exercise Program Approval/Disapproval.
- (c) The Contractor shall provide consultation services to employees on health-related matters; as needed, perform completion of life insurance forms and other forms, such as adoption applications.

- (d) The Contractor shall provide medical advice and assistance to the MSFC Employee Assistance Program that is available to MSFC civil service employees having alcohol, drug, and/or emotional problems.
- (e) The Contractor shall conduct epidemiological studies and assure controls are provided for all MSFC areas to determine and control the presence of communicable diseases. This effort may be accomplished by contractor personnel or by an epidemiological consultant, depending on the circumstances. The findings/results shall be reviewed and recommendations/comments provided to the COTR. In any event, the Medical Director is responsible for communication and coordination with appropriate public health agencies.
- (f) The Contractor shall provide health education for employee training and occasional lectures or seminars on health matters of general interest to MSFC personnel. Typical topics include, but are not limited to, skin cancer, weight control, smoking, lead, asbestos, TB, cancer, overview of medical service functions, and self-breast examination. This function also includes the development and/or distribution of health related newsletters and other materials.

### **3.1.7 Clinical X-ray and Laboratory Services**

- (a) The Contractor shall provide accredited clinical laboratory services.
- (b) The Contractor shall provide medical x-ray services and ensure all x-rays are read by an American Board Certified Radiologist and asbestos-related chest x-rays are read by "B" readers in compliance with OSHA standards.
- (c) The Contractor shall ensure medical x-ray film or other media used and written reports are delivered to the clinic and become property of the Government.

### **3.1.8 Management of Medical Records**

- (a) The Contractor shall maintain accurate and complete medical records of patients for NASA. This shall include maintaining an accurate and complete data for patient records as specified by NASA and transitioning existing electronic health data into an Agency-wide electronic health record system once it is implemented. The contractor shall ensure that the employee medical records are secured and confidentially maintained. Records must be maintained in accordance the following (most current revision):
  1. NPD 1382.17E Privacy Act System of Records (NASA 10HIMS)
  2. OSHA record keeping regulations
  3. HIPAA regulations
  4. NASA communication requirements
- (b) The contractor shall ensure medical records are disposed of in accordance with the NASA Record Retention Schedule and the current Privacy Act.

- (c) The Contractor shall ensure the information contained in the employee medical record is sufficient to provide data for use in job placement, to establish health maintenance, for treatment and rehabilitation, for use in epidemiological studies, and to help management with program evaluation and improvement.
- (d) The Contractor shall ensure employees have access to their medical records upon receipt of a signed release by the employee or receipt of a notarized designation by the employee or third party.
- (e) The Contractor shall ensure medical records (both hard copy and electronic) are available for Agency Medical quality control review.

**NOTE:** The medical records (written and electronic) developed during past contract years will be transferred to the new contractor and will be subject to the clause G.3, Installation-Accountable Government Property. All medical records (both hard copy and electronic records) remain the property of the Government. The Government will advise the contractor as to how the records shall be maintained and stored.

### **3.1.9 Flu Shots**

- (a) The Contractor shall operate the annual MSFC Flu Shot program, purchasing, offering and providing flu shots to MSFC contractors and civil servants.

### **3.1.10 Automated External Defibrillator (AED)**

The contractor shall administer, maintain and oversee the Centerwide Automated External Defibrillator (AED) Program consisting of approximately one hundred (100) AEDs and provide medical oversight/review for any Emergency Medical Services programs in accordance with MSFC MWI 1800.1, MSFC Automated External Defibrillator Program (draft).

### **3.1.11 Ambulance Services**

- (a) The Contractor shall provide ambulance services for MSFC.
- (b) The Contractor shall ensure ambulances used during this contract are stocked, supplied and maintained in accordance with the Alabama Department of Public Health Office, EMS and Trauma and are compliant with applicable regulations and requirements for an Advanced Life Support unit.
- (c) The Contractor shall provide ambulance stand by during emergencies such as fires, chemical spills, and explosive disposal. These may occur during regular hours or after hours.
- (d) The Contractor shall provide onsite ambulance/medical support to prescheduled special events or activities. These include, but are not limited to, functions to which the general public is invited, the annual employee picnic, and support during visits by VIPs to the Center.

**3.2 IDIQ Requirements**

- (a) The Contractor shall provide additional medical services such as equipment acquisitions and special technical support as defined by MSFC, not covered in Lump Sum Effort.

**3.3 Documentation and Reporting Requirements**

- (a) The Contractor shall develop, maintain and implement a Medical Quality Assurance Program in accordance with DRD 1237QE-001 that evaluates all aspects of medical care provided to ensure compliance with NPR 1800.1, *NASA Occupational Health Program*.
- (b) The Contractor shall provide to the COTR, within 48 hours, a copy of each ambulance run report.

## **4.0 INDUSTRIAL HYGIENE SERVICES REQUIREMENTS**

### **4.1 Lump Sum FFP Requirements**

#### **4.1.1 General**

- (a) The Contractor shall investigate workforce complaints of potential workplace hazards and coordinate with the affected employee and the appropriate organizations to resolve issues where appropriate.
- (b) The Contractor shall serve on Evaluation/Review/Mishap Investigation teams such as Operational Readiness Inspection (ORI), and Test Readiness Review (TRR).
- (c) The Contractor shall manage, support, and implement all site occupational health promotions and SHE certification/accreditation activities, to include ISO 18001, as directed by COTR.
- (d) The Contractor shall provide guidance and recommendations concerning the selection, use, and control of personal protective equipment.
- (e) The Contractor shall ensure records of individuals' exposure to hazardous substances or physical agents as measured and documented are filed in the individuals' medical record.
- (f) The Contractor shall provide technical assistance to other organizations, including other onsite contractors, as needed regarding industrial hygiene and environmental health matters.
- (g) The Contractor shall provide appropriate assistance to staff (e.g., safety and environmental) and line organizations (e.g., engineering, program, and procurement) to ensure the incorporation of protective health measures in new equipment, emergency response processes, and facilities.
- (h) The Contractor shall employ exposure-monitoring techniques to ensure compliance and conformity with current industry standards and guidelines.
- (i) The Contractor shall provide industrial hygiene standby support, as requested, in areas that have a potential health hazard(s) because of the nature of the operation in progress. These include, but are not limited to, asbestos and lead abatement activities, chemical mishaps, and test area activities. The Contractor shall keep the COTR apprised of these situations.
- (j) The Contractor shall provide necessary industrial hygiene monitoring, sampling, testing and analyses for, but not limited to, bioaerosols, volatile organic compounds, lead, hexavalent chrome, cadmium and other heavy metals, welding fumes, particulates, and heat stress.
- (k) The Contractor shall provide laboratory support to study, analyze, and evaluate environmental, biological, and radiological materials (examples: asbestos, bioaerosols, lead, radon, organics, inorganics, metals, and microbials).

- (l) The Contractor shall utilize appropriate American Industrial Hygiene Association (AIHA) accredited laboratories or other industry accepted accreditations when a particular category is not listed by AIHA for analytical and microbiological services.
- (m) The Contractor shall recommend appropriate physical examinations and diagnostic testing, as applicable, for all persons working in job categories requiring monitoring.
- (n) The Contractor shall provide expert consultation in heat illness prevention, perform heat illness hazard assessments and provide Centerwide notification of heat stress conditions.
- (o) The Contractor shall provide microbiology testing of air, surface and water samples, to include, but not be limited to indoor air quality (IAQ), cooling towers, potable water sources, and dairy products.
- (p) The Contractor shall perform monitoring/analysis of both air and bulk lead samplings as a support operation during construction/modification and mission support projects which are carried out by various civil service or contractor personnel, and, at times, outside firms. Monitoring results, recommendations, corrective actions or any other pertinent information shall be provided as required. Follow-up inspections shall be performed as necessary. A written report of the activity shall be submitted to appropriate organizations, including the COTR or designated representative.
- (q) The Contractor shall establish a formal mechanism to evaluate programmatically whether Center personnel are complying with occupational health related policies.

#### **4.1.2 Industrial Hygiene Support**

- (a) The Contractor shall provide comprehensive industrial hygiene services that is compliant with NPR 1800.1 and MPD 1840.1
- (b) The Contractor shall perform surveys, studies, investigations, and appropriate exposure monitoring to identify, evaluate and control potential chemical, physical or biological hazards in the work environment that may cause illness, injury, disease, or impaired well being.

#### **4.1.3 Building Surveys**

- (a) The Contractor shall provide a comprehensive survey of all buildings, including exhaust hoods surveys, at least once annually. The Contractor shall provide recommendations or notifications of corrective action required of discrepancies identified to appropriate organizations/personnel. The Contractor shall perform follow-up inspections as necessary and serve as a resource to the user organization in closure of findings. The Contractor shall enter all finding into a Government provided tracking system.

- (b) The Contractor shall perform industrial hygiene hazard assessments on all buildings to determine the potential employee exposures (e.g., physical, chemical, biological.) associated with the activities performed in each building consistent with NPR 1810.1.
- (c) The Contractor shall establish a sampling plan as a result of these assessments (within 15 days following assessment of a building) for monitoring hazards in each building. The contractor shall identify appropriate monitoring to be conducted during the building assessment. The contractor shall enter required monitoring into a government provided database (e.g., SHETrak) as an open finding. The point of contact will coordinate with the contractor to ensure sampling is conducted. The item will remain open in SHETrak until the sampling requirement is completed. Any sampling conducted will be submitted in accordance with DRD 1237MA-004.
- (d) The Contractor shall perform reassessments of buildings, based on changes within the building or activities performed (e.g., functional, operational, process, etc.).
- (e) The Contractor shall review plans, specifications, drawings, and other documentation for proposed changes to existing facilities or for the construction of new facilities where chemical, physical, biological or other potential health hazards may exist. The contractor shall also work with the MSFC Industrial Safety, Facilities Management Office, and operating officials in determining potential health hazards and recommendations for proper preventive measures before commencing new projects or other activities as appropriate.

#### **4.1.4 Sanitation**

- (a) The Contractor shall inspect all food service outlets (including preparation sites, storage areas, and mobile canteens) for proper sanitation, care, personnel certification requirements, storage of food and associated operations that is compliant with the NASA food sanitation requirements, Hazard Analysis Critical Control Point (HACCP) guidance, FDA Food Code and Alabama Department of Public Health. The Contractor shall conduct inspections at least quarterly, and may be increased as directed by COTR. Follow-up inspections shall be performed as necessary to audit closure of corrective actions/recommendations. Food service locations include, but are not limited to, 4200, 4203, 4346, 4471, 4610, 4663, 4666, and 4708.
- (b) The Contractor shall perform sanitary surveys of day care operations, barber shops, recreation facilities and exercise facilities, and special events.
- (c) The Contractor shall monitor potable water distribution and facilitate testing as necessary to ensure its potability in accordance with EPA requirements. This testing/monitoring is normally provided and performed by the Army Chemical Laboratory (ACL). The Contractor shall only be required to perform this testing in limited instances when not provided by the ACL. Coordination with appropriate Facilities Management Office personnel is required prior to monitoring activities.

**4.1.5 Hearing Conservation**

- (a) The Contractor shall administer hearing conservation programs for employees whose occupations, in accordance with Federal and NASA requirements, expose or may expose them to risk of hearing damage or loss. The Contractor shall ensure all hazardous noise areas are identified, documented, and appropriately posted and perform required monitoring. The contractor shall provide noise data to user organizations as requested to allow posting of potential hazardous noise locations and maintain a comprehensive listing of all hazardous noise areas at MSFC. The Contractor shall provide expert consultation in noise hazard assessment and hearing loss prevention; assess noise hazards, engineering controls and hearing protection; and coordinate a "Buy Quiet" program.

**4.1.6 Offsite Support**

- (a) The Contractor shall perform, annually, a comprehensive occupational health review at the SRB Element at KSC, FL. The Contractor shall provide necessary recommendations and corrective actions. Allow one week for this effort.
- (b) The contractor shall perform appropriate surveys, within a 50-mile radius at the offsite Huntsville-area locations of MSFC operations, including but not limited to the National Space Science Technology Center (NSSTC) and Intergraph-leased facilities. The Contractor shall provide follow-up to provide assistance and support in their efforts to close items.
- (c) The Contractor shall submit Industrial Hygiene Survey Building Report and Air Sampling Plan to the COTR in accordance with DRD 1237MA-004.

**4.1.7 Asbestos Program**

- (a) The Contractor shall provide services to the asbestos program to include:
1. At least one AHERA inspector and AHERA Management Planner.
  2. At least two personnel trained to perform polarized light microscopy (PLM) and phase contrast microscopy (PCM).
  3. Applicable air monitoring, air/bulk sample collection, identification, and analysis, including PLM, PCM, and transmission electron microscopy (TEM), of potential asbestos containing materials (ACM), including projects being performed by onsite contractors. Bulk sampling for asbestos will be limited to reasonable support of Facilities Management Office (or other MSFC entity) activities such as building modifications and repairs.
  4. Serving as the technical authority for the MSFC asbestos program and provide guidance on the requirements of Federal, State, and local occupational and environmental health regulations.
  5. Inspections to identify suspect ACM; risk analysis of scheduled facilities operations and maintenance where ACM is present; assessment of written asbestos abatement procedures; pre/post-abatement inspections; surveys and audits of asbestos abatement operations; clearance level air monitoring and inspections for abatement projects; and

- perform monitoring and analyses of asbestos air samples during asbestos abatement and other asbestos related projects conducted by onsite contractors.
6. Providing data for the update of the MSFC Asbestos database and the asbestos management information system and maintaining the center-wide asbestos survey once completed.
  7. Coordinating directly with NASA and contractor facilities management organizations responsible for management of construction of facilities and other facility maintenance activities requiring work with ACM.
  8. Providing oversight to asbestos related activities performed by offsite construction contractors. Support for offsite contractor activities will normally be limited to oversight. However, air monitoring and sampling for these efforts will be provided for projects of 4 days or less duration.
  9. Performing quarterly, annual, or as-needed routine air sampling in all occupied buildings as dictated by the type/condition of the asbestos-contaminated material.
  10. Providing procedural monitoring during abatement projects to ensure compliance with regulations.
  11. Reporting analytical results and findings to appropriate organizations and maintain those results in accordance with Federal regulations.
  12. Providing recommendations/corrective actions and perform follow-up audits to verify closure of such.
  13. Providing consultative services for all phases of ACM control.
  14. Participating in AIHA Proficiency Analytical Testing (PAT) program for air and bulk asbestos. All qualified personnel shall participate in the program. Periodically, samples shall be sent to an independent asbestos laboratory to compare the information with that of the in-house asbestos results. The contractor shall be responsible for all costs associated with the programs annual fees and renewals.

#### **4.1.8 Hazard Communication Program**

- (a) The Contractor shall serve as the MSFC administrator for the Hazard Communication Program operation.
- (b) The Contractor shall provide training in the identification, evaluation and communication of chemical hazards in the workplace, as required by the OSHA Hazard Communication Standard, as well as any MSFC general and hazard specific training; maintain a current master file of MSDS in coordination with the Logistics Services Contractor; and support Center functions to maintain compliance.
- (c) The Contractor shall assist MSFC organizations in the non-routine acquisition of MSDS.
- (d) The Contractor shall provide technical assistance to other organizational elements in the final implementation of all health aspects of the OSHA HAZCOM Standard and the MSFC HAZCOM program.

- (e) The Contractor shall review Procurement Requests for acquisition of chemicals to assure that appropriate Material Safety Data Sheets (MSDS) are available and personnel are advised of appropriate protective measures for new chemicals.

#### **4.1.9 Imminent Health Threat**

- (a) The Contractor shall immediately stop any operation which appears to represent a potential immediate danger to life and health exposure or imminent health hazard in accordance with MPR 8715.3 NASA General Safety Program Requirements. The Contractor shall immediately inform the organization responsible for the activity, the COTR, and Occupational Health Officer. The Contractor shall then support any activities to alleviate hazardous conditions and implement corrective actions.

#### **4.1.10 Monitoring Equipment**

- (a) The Contractor shall properly maintain monitoring equipment and shall ensure that it is ready onsite for use at all times.
- (b) The Contractor shall ensure that all equipment is calibrated to manufacturer's or consensus standard recommendations.
- (c) The Contractor shall maintain proficient operating skill of all instrumentation/equipment. The contractor shall provide an effective system for maintaining individual operating skills for applicable instrumentation (e.g.: monthly in-service meetings). Some Government-provided equipment such as the Hazmat ID and SAM 935 Radiation and Surveillance and Measurement system items require special training which applicable contractor personnel will be expected to have or receive within 90 calendar days of award.

#### **4.1.11 Confined Space Entry Program**

- (a) The Contractor shall administer the MSFC Confined Space Entry Program in accordance with MPR 1840.1. The contractor shall perform confined space pre-entry evaluations/surveys/assessments to determine the presence of potential health hazards/hazardous atmospheres and issue appropriate entry permits. The contractor shall provide expert consultation in confined space hazard assessment; manage the MSFC inventory of confined spaces; provide recommendations and requirements for confined space entry and work, and perform atmospheric monitoring in support of confined space entry operations.

#### **4.1.12 Indoor Air Quality Program**

- (a) The Contractor shall provide expert consultation on indoor air quality (IAQ); investigate IAQ complaints and identify potential causes; perform necessary sample collection, studies and analyses, coordinate with affected employees and their employers, and appropriate organizations to resolve issues where appropriate.

**4.1.13 Ergonomic Program**

- (a) The Contractor shall manage and operate the MSFC ergonomics program, utilizing standard industrial hygiene practices.
- (b) The Contractor shall coordinate with MSFC Office of Center Operations, Logistics Office to resolve workstation and furniture issues.
- (c) The Contractor shall provide expert ergonomic consultation and conduct musculoskeletal disorder (MSD) hazard assessments.
- (d) The Contractor shall train and assist appropriate Center personnel with ergonomic evaluations and recommendations to improve workstations to facilitate the prevention and/or control of cumulative trauma disorders.

**4.1.14 Consultation Services**

- (a) The Contractor shall assist in the development of Center policies, documents, designs, and plans to determine the adequacy of preventive measure and controls, and ensure compliance with applicable Federal, State, local, and NASA regulations and requirements.
- (b) The Contractor shall review existing and proposed Federal, State, and local regulations and NASA policies to determine applicability and potential impact on Center operations.
- (c) The Contractor shall prepare or assist in the preparation of technical training materials and review technical training materials developed by other MSFC personnel.
- (d) The Contractor shall provide technical and administrative assistance to the Government in interfacing with regulatory agencies.
- (e) The Contractor shall participate in Agency and third party reviews and audits of the MSFC OH Program, and assist in development and implementation of appropriate corrective action plans.

**4.2 IDIQ Requirements**

- (a) The Contractor shall provide additional industrial hygiene services such as equipment acquisitions and special technical support as defined by MSFC, not covered in Lump Sum Effort.

**4.3 Documentation and Reporting Requirements**

- (a) The Contractor shall prepare and submit Industrial Hygiene Building Survey and Air Sampling Plan in accordance with DRD 1237MA-004.

- (b) The Contractor shall prepare and submit Cafeteria Inspection Reports in accordance with DRD 1237MA-006.
- (c) The contractor shall prepare and submit an Industrial Hygiene Building Inspection Schedule in accordance with DRD 1237MA-008.
- (d) The Contractor shall prepare and submit an Asbestos Quality Assurance Program Plan in accordance with DRD 1237MA-009.

## **5.0 HEALTH PHYSICS (IONIZING AND NONIONIZING RADIATION) REQUIREMENTS**

### **5.1 Lump Sum FFP Requirements**

#### **5.1.1 General**

- (a) The Contractor shall provide comprehensive Health Physics Services compliant with NPR 1800.1, MPD 1860.1 and MPD 1860.2.
- (b) The Contractor shall review plans of proposed operations involving the use of ionizing radiation to assure that adequate protective measures are incorporated into the layouts and engineering drawings, and consult with the MSFC Radiation Safety Committee (RSC) on these matters. The Contractor shall serve as the Recording Secretary of this Center Committee.
- (c) The Contractor shall maintain and provide inventory records of ionizing and non-ionizing radiation sources under the administrative control of MSFC.
- (d) The Contractor shall perform annual audits of the radiation safety program per the Nuclear Regulatory Commission (NRC) and MSFC site requirements.
- (e) The Contractor shall serve as the Center's Radiation Safety Officer (RSO) and be qualified to be listed as the RSO on the site NRC Materials License.
- (f) The Contractor shall develop and maintain Centerwide procedures and assist operating segments in developing operating procedures for radiological operations.
- (g) The Contractor shall provide initial and refresher training in the safe use/handling of radioactive materials and radiation producing devices, at least annually, to all onsite personnel involved with same.
- (h) The Contractor shall supply and distribute radiation/laser/RF/UV/IR signs, labels, and notices in accordance with applicable regulations/standards.
- (i) The Contractor shall ensure appropriate inventory and calibration of ionizing and nonionizing radiation monitoring instrumentation.
- (j) The Contractor shall attend the annual NASA Headquarters Health Physics conference. As a minimum, one health physicist shall attend. The conference is one week and takes place in the continental U.S., normally in the vicinity of a NASA Center.

**5.1.2 Ionizing Radiation Program**

- (a) The Contractor shall perform inventories, leak tests and periodic surveys (at least annually) to comply with the site NRC license and the provisions of MSFC Radiation Safety program directives MPD 1860.2 and MPR 1860.1 are being met.
- (b) The Contractor shall provide, maintain, distribute, collect, and read dosimetry devices. Local handling of personal dosimeters for offsite processing is required (the current process is for the Army Radiation Laboratory to process MSFC Thermoluminescence Dosimeters (TLDs)). The Contractor shall process and maintain personal dosimetry reports. The Contractor shall provide a copy of the personal dosimetry report to each participant as required by the Nuclear Regulatory Commission (NRC).
- (c) The Contractor shall maintain a roster of all personnel associated with ionizing radiation.
- (d) The Contractor shall develop policies, procedures, and processes for acquiring, safe use and handling of neutron generating devices.
- (e) The Contractor shall develop and submit NRC license renewal and amendment applications to the NRC to conduct this program at MSFC in accordance with DRD 1237MA-015.
- (f) The Contractor shall establish and maintain a program to comply with site and regulatory requirements for x-ray generating equipment, operations, and devices.
- (g) The Contractor shall provide support for special research projects involving depleted uranium.
- (h) The Contractor shall monitor operations, develop and provide necessary employee training for processes and projects involving neutron generating devices.
- (i) The Contractor shall confirm all operations, including contractors; involving radioactive materials are performed within the parameters of the NRC license.

**5.1.3 Radioactive Waste Management**

- (a) The Contractor shall impound radioactive material, seal-off contaminated areas and decontaminate, and facilitate tests of contaminated or potentially contaminated personnel.
- (b) The Contractor shall review and approve all procurements of radioactive material and ionizing radiation producing devices. The Contractor shall receive and ship all radioactive material at MSFC. The Contractor shall ensure records and documentation are in compliance with all appropriate regulations.
- (c) The Contractor shall screen onsite scrap metal bins for possible radioactive contamination before they are removed from the Center.

**5.1.4 Nonionizing Radiation Program**

- (a) The Contractor shall maintain and updated a current inventory of class 3B and 4 laser-producing devices as well as hazardous RF, UV, and IR producing devices at MSFC.
- (b) The Contractor shall maintain and update Centerwide procedures for the safe use of nonionizing radiation. The Contractor shall review plans, specifications, and operating procedures for all operations involving nonionizing radiation producing devices. The Contractor shall maintain a file of all approved Standard Operating Procedures (SOPs).
- (c) The Contractor shall review and approve all purchase requests for nonionizing radiation producing devices and use the information gained to update the inventory records.
- (d) The Contractor shall maintain a current roster of all employees associated with hazardous nonionizing operations.
- (e) The Contractor shall monitor operations to verify that all areas having hazardous nonionizing radiation producing devices are adequately identified with proper warning signs and other appropriate devices. The Contractor shall ensure protective equipment is evaluated periodically to ensure proper working order.
- (f) The Contractor shall conduct hazard evaluation of all nonionizing radiation work areas, at least annually. The Contractor shall confirm all operations involving nonionizing radiation producing devices are performed within OSHA, NASA and MSFC Nonionizing Radiation Safety Program (MPD 1860.2) requirements, including those performed by the contractor.
- (g) The Contractor shall prepare information which will define the operational hazards involved in the use of the laser equipment and which may be used by operational personnel as guidance in protecting themselves and others from hazards caused by nonionizing radiation (Laser, RF, UV, IR) producing devices; serve as Laser/RF/ UV/IR Safety Officer for the Center.

**5.1.5 Radon Management**

- (a) The Contractor shall identify applicable monitoring sites and establish a 5 year radon monitoring schedule to ensure areas are monitored at least twice during the life of the contract.
- (b) The Contractor shall monitor and perform analysis for radon as appropriate, within all applicable areas. The contractor shall inform the COTR and appropriate organizations of results and provide necessary recommendation or notification of corrective action required for discrepancies identified. The contractor shall perform follow-up monitoring/inspections as necessary.
- (c) The Contractor shall maintain and update radon sampling results utilizing the Government provided radon Web site.

**5.2 IDIQ Requirements**

- (a) The Contractor shall dispose of radioactive material.
- (b) The Contractor shall provide additional health physics services such as equipment acquisitions and special technical support as defined by MSFC, not covered in Lump Sum Effort.

**5.3 Documentation and Reporting Requirements**

- (a) The Contractor shall prepare NRC license and amendments in accordance with DRD 1237MA-015.
- (b) The Contractor shall prepare and submit Radiation Survey Reports in accordance with DRD 1237MA-005.
- (c) The Contractor shall prepare and submit Laser (nonionizing radiation) Survey Reports in accordance with DRD 1237MA-007.

**6.0 RESPIRATORY PROTECTION REQUIREMENTS****6.1 Lump Sum FFP Requirements****6.1.1 General**

- (a) The Contractor shall administer the MSFC Respiratory Protection Program and provide maintenance and repair services for all Government-owned respiratory protection equipment located at MSFC and Redstone Arsenal (RSA). These services shall consist of, but not be limited to, medical coordination, inspection, testing, training, preventive maintenance/cleaning, repairing, storage and issuing, quantitative/qualitative face-fit testing, filling compressed air cylinders, ensuring proper hydrostatic testing of Self Contained Breathing Apparatus (SCBA) cylinders is performed, and required record-keeping.
- (b) The Contractor shall perform all services in accordance with applicable Occupational Safety and Health Administration (OSHA) and other regulatory standards.
- (c) The Contractor shall maintain the Government provided datasheets containing all relevant information for respiratory protection participants in two parts. One part shall cover all MSFC associated personnel. The other part shall cover all Redstone Arsenal associated personnel. This Redstone Arsenal information shall be provided to the COTR annually.

**6.2 IDIQ Requirements**

- (a) The Contractor shall provide additional respiratory protection services such as equipment acquisitions and special technical support as defined by MSFC, not covered in Lump Sum Effort.

**6.3 Documentation and Reporting Requirements**

None

DATA PROCUREMENT DOC.  
NO. ISSUE  
1237 Revision A

**NNM09AA03C**

CONTRACT/RFP

EXHIBIT NUMBER

**J-2**

ATTACHMENT NUMBER

**Occupational Health Services**

PROJECT/SYSTEM

**DATA PROCUREMENT DOCUMENT**

**HPM Corporation**

CONTRACTOR

**June 23, 2009**

DATE

National Aeronautics and  
Space Administration

| National Aeronautics and Space Administration   |                                 |     |                    |                          | DATA PROCUREMENT DOC.  |
|---|---------------------------------|-----|--------------------|--------------------------|--|
| <b>DOCUMENT CHANGE LOG</b>                      |                                 |     |                    |                          | NO. ISSUE  |
|   |                                 |     |                    |                          | 1237 Revision A  |
| INCORPORATED REVISIONS<br>OUTSTANDING REVISIONS |                                 |     | AS OF:<br>06-23-09 | SUPERSEDING:<br>10-09-08 | PAGE:  |
| AUTHORITY<br>(DPD Revision)                     | PORTION AFFECTED - PAGE NO./NO. |     |                    |                          | REMARKS  |
|   | INTRO                           | SGR | DRL                | DRD                      |  |
| Contract Mod. 006                               |                                 |     | X                  | X                        | <p>Merged DRD 1237MA-002, Contractor Personnel Training Requirements/Schedule with DRD 1237MA-016, Professional Certifications and Licensures and renamed DRD 1237MA-002, Professional Certifications/Licensures and Training Requirements Schedule and deleted DRD 1237MA-016.</p> <p>Merged DRD 1237MA-004, Industrial Hygiene Building Inspection Reports with DRD 1237MA-010, Industrial Hygiene Hazard Assessment Documentation and renamed DRD 1237MA-004, Industrial Hygiene Building Survey and Air Sampling Plan and deleted DRD 1237MA-010.</p> <p>Deleted the following DRD:<br/>1237SA-002, Personnel Certification Plan</p> |

## 1.0 INTRODUCTION

1.1 Scope: Subject to the Rights in Data clause, this Data Procurement Document (DPD) sets forth the data requirements in each Data Requirements Description (DRD) and shall govern that data required by the DPD for the contract. The contractor shall furnish data defined by the DRD's listed on the Data Requirements List (DRL) by category of data, attached hereto, and made a part of this DPD. Such data shall be prepared, maintained, and delivered to NASA in accordance with the requirements set forth within this DPD. In cases where data requirements are covered by a Federal Acquisition Regulation (FAR) or NASA FAR Supplement (NFS) clause, that clause shall take precedence over the DPD, consistent with clause FAR 52.215-8.

1.2 DPD Description: This DPD consists of a Document Change Log, an Introduction, a Statement of General Requirements, DPD maintenance procedures, a DRL, and the DRDs.

1.2.1 General Requirements: The general requirements, as specified in paragraph 2.0 of this DPD, prescribe those requirements applicable to the preparation, maintenance, and delivery of data that are better defined in aggregate than in the individual DRDs.

1.2.2 Data Requirements List (DRL): Throughout the performance of the contract, the DRL provides a listing by data category of the data requirements of the DPD.

### 1.2.3 Data Requirements Descriptions (DRDs)

1.2.3.1 Each data requirement listed on the DRL is given complete definition by a DRD. The DRD prescribes content, format, maintenance instructions, and submittal requirements.

1.2.3.2 For the purpose of classification and control, DRD's of this DPD are grouped into the following broad functional data categories:

| <u>CATEGORY SYMBOL</u> | <u>DESCRIPTION</u>  |
|------------------------|---------------------|
| LS                     | Logistics/Support   |
| MA                     | Management          |
| QE                     | Quality Engineering |
| SA                     | Safety              |

1.2.3.3 The symbols representing these data categories form part of the prefix of the DRD identification number. The first numerical characters reflect the DPD number.

1.2.3.4 To facilitate the usage and maintenance of the DPD, the DRDs have been sectionalized in accordance with the above data categories.

1.2.3.5 The DRDs are filed by data category and are in alpha-numeric sequence as listed on the DRL page (or pages) that precedes the DRDs.

1.2.4 Document Change Log (DCL): The Document Change Log chronologically records all revision actions that pertain to the DPD.

1.2.5 DPD Maintenance Procedures: Maintenance procedures define the detailed methods to be employed in maintaining the DPD. Detailed maintenance procedures are specified in paragraph 3.0 of this DPD.

1.3 Data Types for Contractual Efforts: The types of data and their contractually applicable requirements for approval and delivery are:

| <u>TYPE</u> | <u>DESCRIPTION</u> |
|-------------|--------------------|
|-------------|--------------------|

1\* All issues and interim changes to those issues require written approval from the requiring organization before formal release for use or implementation.

- 2\* NASA reserves a time-limited right to disapprove in writing any issues and interim changes to those issues. The contractor shall submit the required data to NASA for review not less than 45 calendar days\*\* prior to its release for use. The contractor shall clearly identify the release target date in the "submitted for review" transmittal\*\*\*. If the data is unacceptable, NASA will notify the contractor within 45 calendar days\*\* from the date of submission, regardless of the intended release date\*\*\*. The contractor shall resubmit the information for reevaluation if disapproved. The submittal is considered approved if the contractor does not receive disapproval or an extension request from NASA within 45 calendar days\*\*.
- 3 These data shall be delivered by the contractor as required by the contract and do not require NASA approval. However, to be a satisfactory delivery, the data shall satisfy all applicable contractual requirements and be submitted on time.
- 4 These data are produced or used during performance of the contract and are retained by the contractor. They shall be delivered only when NASA requests in writing and shall be delivered in accordance with the instructions in the request. The contractor shall maintain a list of these data and shall furnish copies of the list to NASA when requested to do so.
- 5 These data are incidental to contract performance and are retained by the contractor in those cases where contracting parties have agreed that formal delivery is not required. However, the Contracting Officer or the Contracting Officer's Representative shall have access to and can inspect this data at its location in the contractor's or subcontractor's facilities, or in an electronic database accessible to the Government.
- \* Note: Type 1 and Type 2 data may be placed under NASA configuration management control when designated by NASA. CM control requires the contractor to submit Type 1 and Type 2 data updates through Engineering Change Proposals (ECPs).
- \*\* Note: This time limit may be tailored for individual DPD's to meet the requirements of the procuring activity.
- \*\*\* Note: If the contractor does not identify a release target date or if the intended release date is shorter than 45 calendar days from the date of submission, the 45 calendar days review cycle stands (or the tailored Type 2 time limitation for the specific procurement).

## 2.0 STATEMENT OF GENERAL REQUIREMENTS

- 2.1 Applicable/Reference Documents: Documents included as applicable documents in this DPD are the issue specified in the Statement of Work, and form a part of the DPD to the extent specified herein. Applicable documents listed in Item 15.2 of a DRD are applicable only to the preparation of the deliverable documentation described by that DRD.

References to documents other than applicable documents in the data requirements of this DPD may sometimes be utilized, and shall be indicated in 13. Remarks of the DRD. These do not constitute a contractual obligation on the contractor. They are to be used only as a possible example or to provide related information to assist the contractor in developing a response to that particular data requirement.

## 2.2 Subcontractor Data Requirements

- 2.2.1 The contractor shall specify to subcontractors and vendors, if any, the availability source of all data required for the satisfactory accomplishment of their contracts. The contractor shall validate these requirements for documents when appropriate; where the requirement concerns other contractor data, the contractor shall provide his subcontractor or vendor with the necessary documents. All such requests shall be accomplished under the auspices of the contractor.
- 2.2.2 Reference to subcontractor data in the contractor's responses is permissible, providing the references are adequate and includes such identification elements as title, number, revision, etc., and a copy of the referenced data is supplied with the response document at time of delivery to NASA.

2.3 Data Distribution, Format, Data Restriction Marking, and Transmittal

2.3.1 Distribution: Distribution of required documentation shall be in quantities determined by the Contracting Officer. Recipient names and email (if applicable) addresses shall be noted on a separate distribution list to be furnished by the Contracting Officer. The Contracting Officer's letter may include other information pertinent to delivery of data, as required.

2.3.2 Format

2.3.2.1 Electronic Format: Electronic submission of data deliverables is required. Electronic deliverables shall be printable. Data deliverables shall be delivered to NASA in the format specified below unless a specific format is required by a DRD. Data submittals shall consist of a single Adobe Acrobat PDF file and the native format electronic file(s). The preferred native formats include Microsoft Word, Excel, PowerPoint or CAD drawing plot file, as appropriate. Where a single native format file is not possible, multiple files may be integrated into a single ZIP file for submission. The organization of the contents of the integrated ZIP file shall be made readily apparent to the reader, and each file within the integrated product shall be clearly identifiable and traceable within the organization of the integrated product. If files are fragmented, file names shall be labeled logically and contiguously, and the files shall be easily reassembled or merged (e.g. 1 filename, 2 filename, 2a filename, etc.). The software versions shall be confirmed prior to submittals.

2.3.2.2 Hardcopy Format: In addition to the electronic submittal, one hardcopy package of specific data deliverables shall be delivered to the NASA Contracting Officer for the Government contract file. This requirement is indicated in Item 15.4, Format of each DRD. The hardcopy package shall consist of the contractor's Transmittal Memo and one copy of the data deliverable.

2.3.3 Data Restriction Marking

2.3.3.1 Data Restriction Determination and Marking Requirements: The contractor shall determine the data restriction that applies to each data deliverable and mark the data restriction on the data coversheet, or indicate the data restriction in the data transmittal package if the data format precludes identification of data restriction directly in the data. The contractor shall make a determination for each individual data deliverable item, and shall not apply a default or blanket data restriction marking to all data deliverables (e.g., "data may be export restricted"). If NASA does not agree with the contractor applied data restriction, the NASA Contracting Officer shall return the data to the contractor, cancel the markings, or ignore the markings consistent with the procedures set forth in the "data rights" clause(s) contained in the contract.

2.3.3.2 Data Restriction Categories and Marking Statements: The contractor shall consider the following data restriction categories, as a minimum, and utilize specified marking statements.

If data delivered under this contract is subject to the International Traffic in Arms Regulations (ITAR), the data shall contain an "ITAR Notice" as follows:

**International Traffic in Arms Regulations (ITAR) Notice**

This document contains information which falls under the purview of the U.S. Munitions List (USML), as defined in the International Traffic in Arms Regulations (ITAR), 22 CFR 120-130, and is export controlled. It shall not be transferred to foreign nationals, in the U.S. or abroad, without specific approval of a knowledgeable NASA export control official, and/or unless an export license/license exemption is obtained/available from the United States Department of State. Violations of these regulations are punishable by fine, imprisonment, or both.

If data delivered under this contract is subject to the Export Administration Regulations (EAR), the data shall contain the "EAR Notice" as follows:

**Export Administration Regulations (EAR) Notice**

This document contains information within the purview of the Export Administration Regulations (EAR), 15 CFR 730-774, and is export controlled. It may not be transferred to foreign nationals in the U.S. or abroad without specific approval of a knowledgeable NASA export control official, and/or unless an export license/license exception is obtained/available from the Bureau of Industry and Security, United States Department of Commerce. Violations of these regulations are punishable by fine, imprisonment, or both.

If the contract contains FAR 52.227-14 *Alternate II*, the "Limited Rights Notice" may be applicable to data (other than computer software) delivered under this contract.

If the contract contains FAR 52.227-14 *Alternate III*, the "Restricted Rights Notice" may be applicable to computer software delivered under this contract.

If the contract contains FAR 52.227-20, the "SBIR Rights Notice" may be applicable to SBIR data delivered under this contract.

If the contract contains NFS 1852.237-73, a sensitive information legend may be applicable to information delivered under this contract

In accordance with the applicable data clause (e.g., FAR 52.227-14(c) or FAR 52.227-20(c)), the contractor may be able to assert a copyright claim in data delivered under this contract. When claim to copyright is made, the Contractor shall affix the applicable copyright notices of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including contract number) to the data when such data are delivered to the Government.

**2.3.4 Transmittal**

2.3.4.1 Data shall be transmitted to NASA by email, CD or DVD, hardcopy, or other mechanism agreed to by the Contracting Officer, COTR, and Project representatives who are responsible to receive, index, and store the data deliverables.

2.3.4.2 If email is used to transmit data deliverables, the email size shall be 10 Megabytes or less to ensure receipt by the NASA email servers. Encrypted email format shall be used to transmit data which has been judged sensitive by the contractor (e.g., export controlled, limited rights data, SBIR, restricted computer software, copyrighted, and Personally Identifiable Information (PII).)

2.3.4.3 **Data Transmittal Package:** Each data transmittal package shall include:

a. Transmittal memorandum that specifies the meta-data below for each data transmittal:

1. Contract number.
2. Data Requirements Description (DRD) number.
3. DRD data type (specified in Item 3 on the DRD).
4. Submission date or milestone being satisfied.
5. Document number and revision.
6. Document title.
7. File names of all files being delivered; file naming convention shall clearly identify the document being delivered.
8. Distribution (as defined by the Contracting Officer's letter).
9. Requested response date.
10. Contractor assigned data restriction (export controlled, limited rights data, SBIR, restricted computer software, copyrighted, etc.) if not marked on data.

11. NASA Records Retention Schedule (NRRS) number, if applicable. (See NPR 1441.1, NASA Records Retention Schedules)
- b. Printable electronic files or hardcopy data.
- 2.3.5 Electronic data deliverables should be transmitted directly to the MSFC Repository through the Digital Asset Manager web interface. Instructions for electronic data submittals can be found at [http://cio.msfc.nasa.gov/repository/repository\\_submittal.html](http://cio.msfc.nasa.gov/repository/repository_submittal.html). Document submitters must register for a Documentum user account through the NASA Account Management System (NAMS). Computer-Aided Design (CAD) drawings shall be submitted in the original native vector, Hewlett-Packard Graphic Language (HPGL), and raster image formats.
- 2.4 Printing: All printing, duplicating, or binding shall be in accordance with NFS 1852.208-81, Restrictions on Printing and Duplicating. Printing of formal reports and Type 1 and 2 data in book format shall be in accordance with the following general specifications:
- Method of reproduction – offset/xerography.
  - Finished size – 8 1/2" X 11".
  - Paper – 20-pound opaque bond.
  - Cover – Litho cover stock.
  - Pages shall be printed on both sides; blank pages shall be avoided when possible.
  - Oversize pages shall be avoided when possible, but if necessary shall be folded to 8 1/2" X 11".
  - Binding shall be the most economical method commensurate with the size of the report and its intended use.
- 2.5 Contractor's Internal Documents: The contractor's internal documents shall be used to meet the data requirements of this DPD unless a specific format is required by the applicable DRD.
- 2.6 Document Identification: Type 1 and 2 documents published by the contractor and submitted in response to the data requirements of this DPD shall be identified within an organized identification numbering system prescribed to NASA by the contractor and, if applicable, as approved by NASA. For all data types, the document number, change legend, date, and title constitute the minimum identification of the specific document and shall appear on the cover and title page. The contract number shall also appear on the cover and title page as separate markings. The originator and organization shall be included on the title page. The document number, change legend, and date shall appear on each page of the document. In the front matter of each document, identify the DPD number and applicable DRD number(s) required for document preparation. Successive issues or revisions of documents shall be identified in the same manner as the basic issue and shall have appropriate change identification. Drawings and ECP's are excluded from the marking provisions of this paragraph. All Type 1 documentation, excluding configuration management requirements, shall be marked "PRELIMINARY PENDING NASA APPROVAL," and once approved shall be reissued with "APPROVED BY NASA" and the date and approval authority annotated on the cover.
- 2.7 Reference to Other Documents and Data Deliverables in Data Submittals: All referenced documents shall be made readily available to the cognizant NASA organization upon request. The contractor should make sure that the references are available to NASA in a manner which does not incur delays in the use of the response document. Reference may be made, within one data submittal, to other data submittals delivered in response to this DPD in those cases where the data required by one DRD may have been delivered by the contractor in response to another DRD. The reference to previously-submitted data shall include the applicable DRD number, data submittal version date, and location within the referenced document.
- 2.8 Maintenance of Type 1 Document Submittals
- 2.8.1 Revisions of Type 1 documentation may be accomplished either by individual page revision or by a complete reissue of the document identified in accordance with requirements of 2.7 above, with the exception of drawings (which shall be revised in accordance with contract configuration management requirements).
- 2.8.2 Individual page revisions shall be made as deemed necessary by the contractor or as directed by the Contracting Officer.

- 2.8.3 A Type 1 document shall be completely reissued when, in the opinion of the contractor and/or NASA, the document has been revised to the extent that it is unusable in its present state, or when directed by the Contracting Officer. When complete reissues are made, the entire contents of the document shall be brought up to date and shall incorporate revised pages. All revisions shall be recorded. A revision log shall identify complete reissues except for periodic reports and documents which are complete within themselves as final.
- 2.8.4 Changes of a minor nature to correct obvious typing errors, misspelled words, etc., shall only be made when a technical change is made, unless the accuracy of the document is affected.
- 2.8.5 All revised pages shall be identified by a revision symbol and a new date. Each document shall contain a log of revised pages that identify the revision status of each page with the revision symbol. This list shall follow the table of contents in each document. The line or lines revised on a given page shall be designated by the use of vertical line in the margin of the page, and the change authority shall be indicated adjacent to the change.
- 2.8.6 Contractor Type 1 documents shall not be submitted containing pen and ink markups which correct, add to, or change the text, unless schedule problems exist and approval is obtained in writing from the Contracting Officer. Such markups, however, shall not exceed 20 percent of the page content and shall be acceptable provided that the reproduced copies are legible. In addition, hand-drawn schematics, block diagrams, data curves, and similar charts may be used in original reports in lieu of formally prepared art work, as long as legibility of copies is not impaired. Acceptability shall be determined by the Contracting Officer.
- 3.0 DPD MAINTENANCE PROCEDURES
- 3.1 NASA-Initiated Change: New and/or revised data requirements shall be incorporated by contract modification to which the new or revised portion of the DPD shall be appended. The contractor shall notify the Contracting Officer in the event a deliverable data requirement is imposed and is not covered by a DRD, or when a DRD is changed by a contract modification and for which no revision to DPD is appended. In such cases, the contractor shall submit the requested changes to NASA for approval. See paragraph 3.3.1 for change procedures.
- 3.2 Contractor-Initiated Change: Contractor-proposed data requirements or proposed changes to existing requirements shall be submitted to NASA for approval.
- 3.3 DPD Change Procedures
- 3.3.1 Changes to a contractual issue of this DPD shall be identified by NASA on the Document Change Log.
- 3.3.2 The date of the DPD shall be entered under the "as of" block of the Document Change Log. The date that was in the "as of" block shall be entered in the "Superseding" block.
- 3.3.3 The Document Change Log entitled "Incorporated Revisions" shall be changed to indicate the modification number, portions affected, and remarks. All changes to the DPD/DRDs shall be identified in the "Remarks" column.
- 3.4 DPD Reissues
- 3.4.1 When conditions warrant, the DPD shall be reissued by NASA for each contract modification that affects the DPD and shall supersede the existing DPD in its entirety. Reissues shall be issued by contractual direction.
- 3.4.2 All revision dates shall remain in the Date Revised block on all DRDs. The issue symbol, which shall commence with "A" and progress through "Z," shall be entered in the DPD identification block of each DRD page of the DPD.

## Occupational Health Services

## Data Requirements List

| <u>DRD</u>                           | <u>DATA TYPE</u> | <u>TITLE</u>  | <u>OPR</u>                |
|--------------------------------------|------------------|---|---------------------------|
| LS – Logistics Support<br>1237LS-001 | 2                | Government Property Management Plan                                       | AS41                      |
| MA – Management                      |                  |   |                           |
| 1237MA-001                           | 2                | Standard Operating Procedures   | AS10                      |
| 1237MA-002                           | 2                | Professional Certifications/Licensures and Training Requirements Schedule | AS10                      |
| 1237MA-003                           | 3                | Progress/Self-Monitoring Report   | AS10                      |
| 1237MA-004                           | 3                | Industrial Hygiene Building Survey and Air Sampling Plan                  | AS10                      |
| 1237MA-005                           | 3                | Radiation Survey Reports  | AS10                      |
| 1237MA-006                           | 3                | Cafeteria Inspection Reports  | AS10                      |
| 1237MA-007                           | 3                | Non-ionizing Radiation Survey Reports                                     | AS10                      |
| 1237MA-008                           | 3                | Industrial Hygiene Building Inspection Schedule                           | AS10                      |
| 1237MA-009                           | 3                | Asbestos Quality Assurance Program Plan                                   | AS10                      |
| <del>1237MA-010</del>                | <del>3</del>     | <del>Industrial Hygiene Hazard Assessment Documentation</del>             | <del>AS10</del>           |
| 1237MA-011                           | 3                | Badged Employee and Remote IT User Listing                                | AS10                      |
| 1237MA-012                           | 3                | Contractor Employee Clearance Document                                    | AS10                      |
| 1237MA-013                           | 3                | Position Risk Designation for Non-NASA Employee                           | AS10                      |
| 1237MA-014                           | 3                | Organizational Conflicts of Interest (OCI) Avoidance Plan                 | AS10                      |
| 1237MA-015                           | 3                | NRC License Renewal/Amendment   | AS10                      |
| <del>1237MA-016</del>                | <del>3</del>     | <del>Professional Certifications and Licensures</del>                     | <del>AS10</del>           |
| QE – Quality Engineering             |                  |   |                           |
| 1237QE-001                           | 2                | Medical Quality Assurance (QA) Plan                                       | AS10                      |
| SA – Safety                          |                  |   |                           |
| 1237SA-001                           | 2                | Safety, Health and Environment (SHE) Plan                                 | AS10/QD12                 |
| <del>1237SA-002</del>                | <del>2</del>     | <del>Personnel Certification Plan</del>                                   | <del>QD12/QD40/ED01</del> |
| 1237SA-003                           | 3                | Mishap and Safety Statistics Reports                                      | QD12                      |

## DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.:** 1237                      **ISSUE:** Revision A
2. **DRD NO.:** **1237LS-001**
3. **DATA TYPE:** 2
4. **DATE REVISED:** 06-23-09
5. **PAGE:** 1/1
6. **TITLE:** Government Property Management Plan
7. **DESCRIPTION/USE:** To describe the method of controlling and managing Government property.
8. **OPR:** AS41                      9. **DM:** AS10
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** Preliminary three months after Authority to Proceed (ATP)
12. **SUBMISSION FREQUENCY:** Final one year after ATP, revise as required
13. **REMARKS:** This document shall be the official contract requirements document for the control and identification of all Government property.
14. **INTERRELATIONSHIP:** PWS paragraph 2.3b
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Government Property Management Plan defines the contractor's methods of care, accounting, and control of Government property.
- 15.2 **APPLICABLE DOCUMENTS:**

|             |   |
|-------------|---|
| FAR         | <i>Federal Acquisition Regulation, Part 45</i>  |
| NPR 5100.4B | <i>Federal Acquisition Regulation Supplement, (NASA/FAR Supplement) Part 18-45 and latest revisions thereto</i> |
- 15.3 **CONTENTS:** The Government Property Management Plan shall satisfy the requirements of the documents listed in 15.2, and the contract. This plan shall consist of those procedures which constitute the contractor's property management system and shall include the following categories:
 

|                          |                           |
|--------------------------|---------------------------|
| a. Property management.  | i. Reports.               |
| b. Acquisition.          | j. Consumption.           |
| c. Receiving.            | k. Utilization.           |
| d. Identification.       | l. Maintenance.           |
| e. Records.              | m. Subcontractor control. |
| f. Movement.             | n. Disposition.           |
| g. Storage.              | o. Contract close-out.    |
| h. Physical inventories. |                           |
- 15.4 **FORMAT:** Contractor format is acceptable.
- 15.5 **MAINTENANCE:** Changes shall be incorporated by change page or complete reissue.

## DATA REQUIREMENTS DESCRIPTION (DRD)

- |                         |                   |                                      |
|-------------------------|-------------------|--------------------------------------|
| 1. <b>DPD NO.:</b> 1237 | ISSUE: Revision A | 2. <b>DRD NO.:</b> <b>1237MA-001</b> |
| 3. <b>DATA TYPE:</b> 2  |                   | 4. <b>DATE REVISED:</b> 06-23-09     |
|                         |                   | 5. <b>PAGE:</b> 1/1                  |
6. **TITLE:** Standard Operating Procedures
7. **DESCRIPTION/USE:** To assure Standard Operating Procedures are available for training and reference.
8. **OPR:** AS10                      9. **DM:** AS10
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** To be coordinated with the COTR within 90 days after contract award
12. **SUBMISSION FREQUENCY:** One time. Update as required
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraph 2.3c
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Standard Operating Procedures provides data on all repetitive operations where quality or safety considerations are a factor.
- 15.2 **APPLICABLE DOCUMENTS:**  
       NPR 1800.1                      *NASA Occupational Health Program Procedures*
- 15.3 **CONTENTS:** The Standard Operating Procedures shall meet the requirements of NPR 1800.1 and include but not be limited to, the following:
- a. Physical examination protocols.
  - b. Clinical laboratory procedures.
  - c. Cardiopulmonary laboratory procedures.
  - d. Clinic Operations.
  - e. X-ray machine procedures.
  - f. Medical waste procedures.
  - g. Privacy Act procedures.
  - h. Bloodborne pathogen procedures.
  - i. Allergy injections.
  - j. Radioactive material handling procedures.
  - k. Asbestos sampling and analysis.
  - l. Lead sampling and analysis.
  - m. Respiratory protection program.
  - n. Employee complaint procedures.
  - o. "Safety and Health Plan" review procedures.
  - p. Medical Management.
  - q. Infectious Waste Management.
  - r. Indoor Air Quality Activities.
  - s. Industrial Hygiene Operations
- 15.4 **FORMAT:** Contractor format is acceptable with MSFC approval.
- 15.5 **MAINTENANCE:** Changes shall be incorporated by change page or complete reissue.

## DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.:** 1237                      **ISSUE:** Revision A
2. **DRD NO.:** 1237MA-002
3. **DATA TYPE:** 3
4. **DATE REVISED:** 06-23-09
5. **PAGE:** 1/1
  
6. **TITLE:** Professional Certifications/Licensures and Training Requirements Schedule
  
7. **DESCRIPTION/USE:** To assure MSFC that the contractor's plans for maintaining highly trained personnel is viable and to submit a summary list of credentials for all personnel covered by certification and licensure requirements.
  
8. **OPR:** AS10                      9. **DM:** AS10
  
10. **DISTRIBUTION:** Per Contracting Officer's letter
  
11. **INITIAL SUBMISSION:** Within 60 days after contract award
  
12. **SUBMISSION FREQUENCY:** Revise as required; update at least annually
  
13. **REMARKS:**
  
14. **INTERRELATIONSHIP:** PWS paragraphs 2.3k and 2.3p
  
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Professional Certifications/Licensures and Training Requirements Schedule will show essential credentials for personnel on the contract for whom certifications and licensures are required and will give a summary of the continuing education hours required to maintain those certifications and licensures within the designated renewal period.
- 15.2 **APPLICABLE DOCUMENTS:**  
NPR 1800.1                      *NASA Occupational Health Program Procedures*
- 15.3 **CONTENTS:** The Professional Certifications/Licensures and Training Requirements Schedule shall meet the requirements of NPR 1800.1 and contain but not to be limited to:
  - a. Last date of licensing and/or certification.
  - b. Date of renewal for licensing and/or certification.
  - c. Certifying and/or licensing entity.
  - d. Copy of certification and/or license.
  - e. Number of professional continuing education hours needed for renewal of license and/or certification.
- 15.4 **FORMAT:** To be established with agreement from the COTR.
- 15.5 **MAINTENANCE:** None required

## DATA REQUIREMENTS DESCRIPTION (DRD)

- |                         |                   |                                  |
|-------------------------|-------------------|----------------------------------|
| 1. <b>DPD NO.:</b> 1237 | ISSUE: Revision A | 2. <b>DRD NO.:</b> 1237MA-003    |
| 3. <b>DATA TYPE:</b> 3  |                   | 4. <b>DATE REVISED:</b> 06-23-09 |
|                         |                   | 5. <b>PAGE:</b> 1/1              |
6. **TITLE:** Progress/Self-Monitoring Report
7. **DESCRIPTION/USE:** To provide NASA with visibility of contract performance and accomplishment compared with planned activities.
8. **OPR:** AS10                      9. **DM:** AS10
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** Tenth of month following the first month of operation
12. **SUBMISSION FREQUENCY:** Monthly, due 10 days after the end of each month being reported
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraph 2.3d
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Progress/Self-Monitoring Report provides data for the assessment of contract performance, schedule, and quality of the tasks to be performed.
- 15.2 **APPLICABLE DOCUMENTS:** None
- 15.3 **CONTENTS:** The Progress/Self-Monitoring Report addresses actual and potential problems and progress toward meeting contract requirements. Discussions of problems shall include proposed recovery plans and actions to be taken. Discussions of progress should be keyed to overall contract objectives.
- This report shall discuss the work schedules and actual work performed against the plan and any anticipated impacts.
- Data points, as reflected in the workload indicators identified by the COTR, shall be included. Additional data shall include a summary of exam appointments indicating whether or not employees were scheduled within 12 to 14 months of prior exam date and that mandatory exams timelines met regulatory standards. Summarize workload indicators in form of "Variation in Quantity Clause" requirements.
- Other information that may assist the Government in evaluating the contractor's quality, technical and schedule performance.
- Safety metrics and other data to support safety awareness/education of all employees.
- 15.4 **FORMAT:** Contractor format is acceptable with COTR approval.
- 15.5 **MAINTENANCE:** None required

## DATA REQUIREMENTS DESCRIPTION (DRD)

- |                         |                   |                                  |
|-------------------------|-------------------|----------------------------------|
| 1. <b>DPD NO.:</b> 1237 | ISSUE: Revision A | 2. <b>DRD NO.:</b> 1237MA-004    |
| 3. <b>DATA TYPE:</b> 3  |                   | 4. <b>DATE REVISED:</b> 06-23-09 |
|                         |                   | 5. <b>PAGE:</b> 1/2              |
6. **TITLE:** Industrial Hygiene Building Survey Report and Air Sampling Plan
7. **DESCRIPTION/USE:** To assure compliance with OSHA regulations.
8. **OPR:** AS10                      9. **DM:** AS10
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** Industrial Hygiene Building Survey Report and Air Sampling Plan will be submitted no later than the first 15 days following the first survey after contract award for any completed buildings
12. **SUBMISSION FREQUENCY:** Building Survey Report and Air Sampling Plan will be due by the 10<sup>th</sup> of the month following completion of the report/plan. Findings from the reports/plans will be entered in a government-provided tracking system. Follow-up inspections will be performed within 30 working days following appropriate notification of correction action required to the user organization. Any industrial hygiene monitoring results will be submitted no later than that 10<sup>th</sup> of the month following completion of the laboratory analysis. Industrial Hygiene monitoring results indicating an imminent threat to personnel or property will be communicated immediately to the COTR, or their designee, by any means available including, but not limited to, verbal, email, or telephone.
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraphs 2.3f, 4.1.6, and 4.3a
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Industrial Hygiene Building Survey Report and Air Sampling Plan provides documentation to required parties of potential industrial hygiene hazards identified, notification to pertinent parties that a corrective action is needed in their area, any industrial hygiene hazards requiring testing, and the group/organization that is responsible for scheduling the testing.
- 15.2 **APPLICABLE DOCUMENTS:**  
       NPR 1800.1                      *NASA Occupational Health Program Procedures*
- 15.3 **CONTENTS:** The Industrial Hygiene Building Survey Report and Air Sampling Plan shall be of sufficient detail to permit MSFC to properly evaluate the hazards or potential hazards present on the site. Information contained therein shall comply with NPR 1800.1 NASA Occupational Health Program Procedures and applicable state, federal and local regulations as necessary for appropriate documentation. In general, the Building Survey Report and Air Sampling Plan shall contain, but not necessarily be limited to:
- a. Brief narrative of activities taking place in the building at time of survey.
  - b. Identification of the hazard(s) and, if required, any comments/notations to adequately describe the hazards.
  - c. SHE TRAK finding numbers associated with all findings.
  - d. Number of persons exposed to hazard.
  - e. Location of hazard.
  - f. Recommendations for protective devices/corrective actions/abatement to correct the hazard, if applicable.
  - g. Education activities performed, if applicable.
  - h. Any follow-up activities anticipated, if applicable.
  - i. Results of any personal protective equipment inspections, if applicable.

**DRD Continuation Sheet****TITLE:** Industrial Hygiene Building Survey Report and Air Sampling  
Plan**DRD NO.:** 1237MA-004**DATA TYPE:****PAGE:** 2/2**15. DATA PREPARATION INFORMATION (CONTINUED):**

- j. Processes/activities requiring industrial hygiene monitoring. Documentation shall include, as a minimum:
  - 1. Organization/group/contractor responsible for the process/operation to be monitored.
  - 2. Process/operation requiring industrial hygiene monitoring.
  - 3. Number of people exposed.
  - 4. Job categories exposed.
  - 5. Chemical/agent to be monitored.
  - 6. Sampling technique and/or method.
  - 7. Applicable standards, if applicable.
  - 8. Location to include room/lab number, if applicable.
- k. Any industrial hygiene monitoring reports will be appended to the most recent Building Survey Report and Air Sampling Plan. Industrial hygiene monitoring reports shall include, at a minimum:
  - 1. Process/area where monitoring was performed.
  - 2. Material/process/device generating chemical/physical agent. For chemical materials this shall include the material's trade name and the HMMS reference number.
  - 3. Chemical/physical agent sampled.
  - 4. Result of sampling.
  - 5. Appropriate reference standard with which to compare sampling result.
  - 6. Average duration to which personnel are exposed to the chemical/physical agent. This shall include reference time frame (e.g., 8 hours per day, 20 hours per week, 5 days per year, etc.)
  - 7. Measurement technique/method employed.

15.4 **FORMAT:** To be established with agreement from the COTR.

15.5 **MAINTENANCE:** None required

## DATA REQUIREMENTS DESCRIPTION (DRD)

- |                         |                          |                                      |
|-------------------------|--------------------------|--------------------------------------|
| 1. <b>DPD NO.:</b> 1237 | <b>ISSUE:</b> Revision A | 2. <b>DRD NO.:</b> <b>1237MA-005</b> |
| 3. <b>DATA TYPE:</b> 3  |                          | 4. <b>DATE REVISED:</b> 06-23-09     |
|                         |                          | 5. <b>PAGE:</b> 1/1                  |
6. **TITLE:** Radiation Survey Reports
7. **DESCRIPTION/USE:** To assure compliance with Nuclear Regulatory Commission (NRC) Regulations.
8. **OPR:** AS10                      9. **DM:** AS10
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** Within six months following contract award
12. **SUBMISSION FREQUENCY:** Annually, within 15 working days following inspection
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraph 5.3b
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Radiation Survey Report provides proper notification of completion of any radiation surveys and reporting of identified discrepancies to required parties.
- 15.2 **APPLICABLE DOCUMENTS:**  
 10 CFR (Title 10)                      *Nuclear Regulatory Commission (NRC) Rules and Regulations*
- 15.3 **CONTENTS:** The Radiation Survey Reports shall be of sufficient detail to permit MSFC to properly evaluate the radiation hazard or potential hazard. The report shall also include the complete inventory of all ionizing radiation sources and producing devices. Information contained therein shall comply with 10 CFR (Title 10) and applicable state, federal, and local regulations as necessary for appropriate documentation.
- 15.4 **FORMAT:** Contractor format is acceptable.
- 15.5 **MAINTENANCE:** None required

## DATA REQUIREMENTS DESCRIPTION (DRD)

- |                         |                   |                                  |
|-------------------------|-------------------|----------------------------------|
| 1. <b>DPD NO.:</b> 1237 | ISSUE: Revision A | 2. <b>DRD NO.:</b> 1237MA-006    |
| 3. <b>DATA TYPE:</b> 3  |                   | 4. <b>DATE REVISED:</b> 06-23-09 |
|                         |                   | 5. <b>PAGE:</b> 1/1.             |
6. **TITLE:** Cafeteria Inspection Reports
7. **DESCRIPTION/USE:** To provide details of cafeteria inspections.
8. **OPR:** AS10                      9. **DM:** AS10
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** No later than 45 days following first cafeteria inspection after contract award.
12. **SUBMISSION FREQUENCY:** Quarterly, within 10 working days following inspection All findings shall be entered into a government-provided tracking system.
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraph 4.3b
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Cafeteria Inspection Report provides proper notification to required parties of completion of any cafeteria inspections and reporting of identified discrepancies.
- 15.2 **APPLICABLE DOCUMENTS:** None
- 15.3 **CONTENTS:** The Cafeteria Inspection Report shall be of sufficient detail to permit MSFC to properly evaluate the sanitation conditions and any potential hazards. Information contained therein shall at least be comparable to that required by the state of Alabama and the Food and Drug Administration (FDA).
- 15.4 **FORMAT:** Contractor format is acceptable with COTR approval.
- 15.5 **MAINTENANCE:** None required

## DATA REQUIREMENTS DESCRIPTION (DRD)

- |                         |                   |                                  |
|-------------------------|-------------------|----------------------------------|
| 1. <b>DPD NO.:</b> 1237 | ISSUE: Revision A | 2. <b>DRD NO.:</b> 1237MA-007    |
| 3. <b>DATA TYPE:</b> 3  |                   | 4. <b>DATE REVISED:</b> 06-23-09 |
|                         |                   | 5. <b>PAGE:</b> 1/1              |
6. **TITLE:** Non-ionizing Radiation Survey Reports
7. **DESCRIPTION/USE:** To assure compliance with all applicable Federal, state and other industry accepted standards American National Standards Institute (ANSI) standards.
8. **OPR:** AS10                      9. **DM:** AS10
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** No later than six months following contract award
12. **SUBMISSION FREQUENCY:** Annually, within 15 working days following inspection
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraph 5.3c
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Non-ionizing Radiation Survey Reports provides proper notification to required parties of completion of any laser surveys and reporting of identified discrepancies.
- 15.2 **APPLICABLE DOCUMENTS:** None.
- 15.3 **CONTENTS:** The Non-ionizing Radiation Reports shall be of sufficient detail to permit MSFC to properly evaluate hazardous or potentially hazardous conditions. The report shall also include the complete inventory of all non ionizing radiation producing devices. Information contained therein shall comply with applicable state, federal, and local regulations as necessary for appropriate documentation.
- 15.4 **FORMAT:** Contractor format is acceptable.
- 15.5 **MAINTENANCE:** None required

## DATA REQUIREMENTS DESCRIPTION (DRD)

- |                         |                   |                                      |
|-------------------------|-------------------|--------------------------------------|
| 1. <b>DPD NO.:</b> 1237 | ISSUE: Revision A | 2. <b>DRD NO.:</b> <b>1237MA-008</b> |
| 3. <b>DATA TYPE:</b> 3  |                   | 4. <b>DATE REVISED:</b> 06-23-09     |
|                         |                   | 5. <b>PAGE:</b> 1/1                  |
- 
6. **TITLE:** Industrial Hygiene Building Inspection Schedule
  7. **DESCRIPTION/USE:** To provide schedule planning for building inspections.
  8. **OPR:** AS10                      9. **DM:** AS10
  10. **DISTRIBUTION:** Per Contracting Officer's letter
  11. **INITIAL SUBMISSION:** Fifteenth of month following first month of operation after Authority to Proceed (ATP)
  12. **SUBMISSION FREQUENCY:** Update annually by January 15th of each year
  13. **REMARKS:**
  14. **INTERRELATIONSHIP:** PWS paragraph 4.3c
  15. **DATA PREPARATION INFORMATION:**
  - 15.1 **SCOPE:** The Industrial Hygiene Building Inspection Schedule provides details regarding scheduled inspections.
  - 15.2 **APPLICABLE DOCUMENTS:** None
  - 15.3 **CONTENTS:** The Industrial Hygiene Building Inspection Schedule shall include each building/structure, the month it is to be inspected, and name of individual to whom it is assigned.
  - 15.4 **FORMAT:** Contractor format is acceptable.
  - 15.5 **MAINTENANCE:** None required

## DATA REQUIREMENTS DESCRIPTION (DRD)

- |                         |                          |                                      |
|-------------------------|--------------------------|--------------------------------------|
| 1. <b>DPD NO.:</b> 1237 | <b>ISSUE:</b> Revision A | 2. <b>DRD NO.:</b> <b>1237MA-009</b> |
| 3. <b>DATA TYPE:</b> 3  |                          | 4. <b>DATE REVISED:</b> 06-23-09     |
|                         |                          | 5. <b>PAGE:</b> 1/1                  |
6. **TITLE:** Asbestos Quality Assurance Program Plan
7. **DESCRIPTION/USE:** To assure quality processes are utilized in collecting and analyzing asbestos samples.
8. **OPR:** AS10                      9. **DM:** AS10
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** Within 90 days following contract award
12. **SUBMISSION FREQUENCY:** One time, update as required
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraph 4.3d
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Asbestos Quality Assurance Program Plan provides procedures for collecting and analyzing asbestos samples.
- 15.2 **APPLICABLE DOCUMENTS:**
- |                  |                 |
|------------------|-----------------|
| 29 CFR 1910.1001 | <i>Asbestos</i> |
| 29 CFR 1926.1101 | <i>Asbestos</i> |
- 15.3 **CONTENTS:** The Asbestos Quality Assurance Program Plan shall meet industry standards.
- 15.4 **FORMAT:** Contractor format is acceptable.
- 15.5 **MAINTENANCE:** Changes shall be incorporated by change page or complete reissue.

## DATA REQUIREMENTS DESCRIPTION (DRD)

- |                         |                   |                                  |
|-------------------------|-------------------|----------------------------------|
| 1. <b>DPD NO.:</b> 1237 | ISSUE: Revision A | 2. <b>DRD NO.:</b> 1237MA-011    |
| 3. <b>DATA TYPE:</b> 3  |                   | 4. <b>DATE REVISED:</b> 06-23-09 |
|                         |                   | 5. <b>PAGE:</b> 1/1              |
6. **TITLE:** Badged Employee and Remote IT User Listing
7. **DESCRIPTION/USE:** To assist NASA in conducting contractor floor checks and to determine if the employees meet the minimum background investigation requirements.
8. **OPR:** AS50                      9. **DM:** AS10
10. **DISTRIBUTION:** Per Contracting Officer's letter. One copy each shall go to MSFC's Protective Services Office, Facilities Planning and Business Management Office and IS30/Steven Deuschendorf.
11. **INITIAL SUBMISSION:** No later than 10 working days after Authority to Proceed (ATP)
12. **SUBMISSION FREQUENCY:** Formal update quarterly and email changes as personnel changes occur to distribution. If deemed necessary by the Contracting Officer, the contractor shall submit the list at times other than stated.
13. **REMARKS:** Reference is made to Federal Acquisition Regulation (FAR) Clause, FAR 52.215-2, *Audit and Records--Negotiations* (June 1999), NPR 1600.1, *NASA Security Program Procedural Requirements*.
14. **INTERRELATIONSHIP:** PWS paragraph 2.3g
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Badged Employee and Remote IT User Listing provides NASA with a list of all MSFC badged contractor employees, as well as, any contractor remote IT users who will have access to the MSFC IT system.
- 15.2 **APPLICABLE DOCUMENTS:** None
- 15.3 **CONTENTS:** The Badged Employee and Remote IT User Listing shall include the following information for each employee: employee's full name (first and middle names must be birth names), last four digits of the Social Security Number (SSN), date of birth, place of birth, duty position, duty location (building/room number), shift assignment, and supervisor's name. Additionally, if applicable, the type of security background check already completed (NACLC or SSBI) and the date it was completed.
- 15.4 **FORMAT:** Contractor format using Excel Spreadsheet is acceptable.
- 15.5 **MAINTENANCE:** None required

## DATA REQUIREMENTS DESCRIPTION (DRD)

- |                         |                   |                                      |
|-------------------------|-------------------|--------------------------------------|
| 1. <b>DPD NO.:</b> 1237 | ISSUE: Revision A | 2. <b>DRD NO.:</b> <b>1237MA-012</b> |
| 3. <b>DATA TYPE:</b> 3  |                   | 4. <b>DATE REVISED:</b> 06-23-09     |
|                         |                   | 5. <b>PAGE:</b> 1/1                  |
6. **TITLE:** Contractor Employee Clearance Document
7. **DESCRIPTION/USE:** To ensure that badged contractor employees who no longer require Center access properly clear all accounts when the access is no longer needed.
8. **OPR:** AS50                      9. **DM:** AS10
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** Immediately when the access is no longer needed
12. **SUBMISSION FREQUENCY:** As required
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraph 2.3e
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Contractor Employee Clearance Document provides verification that all badged employees have properly cleared all accounts when the access is no longer needed.
- 15.2 **APPLICABLE DOCUMENTS:** None
- 15.3 **CONTENTS:** The Contractor Employee Clearance Document shall contain all the information required by MSFC Form 383-1.
- 15.4 **FORMAT:** MSFC Form 383-1, "Contractor Employee Clearance Document".
- 15.5 **MAINTENANCE:** None required

## DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.:** 1237                      **ISSUE:** Revision A
2. **DRD NO.:** **1237MA-013**
3. **DATA TYPE:** 3
4. **DATE REVISED:** 06-23-09
5. **PAGE:** 1/1
  
6. **TITLE:** Position Risk Designation for Non-NASA Employee
  
7. **DESCRIPTION/USE:** To ensure that contractor employees are screened to an appropriate risk determination in accordance with NPR 1600.1, *NASA Security Program Procedural Requirements*, Chapter 4.
  
8. **OPR:** AS50                      9. **DM:** AS10
  
10. **DISTRIBUTION:** Per Contracting Officer's letter. One copy shall go to MSFC Protective Services Office.
  
11. **INITIAL SUBMISSION:** No later than 10 working days after Authority to Proceed (ATP)
  
12. **SUBMISSION FREQUENCY:** Update as personnel or position changes occur
  
13. **REMARKS:**
  
14. **INTERRELATIONSHIP:** PWS paragraph 2.3h
  
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Position Risk Designation for Non-NASA Employee provides information necessary to determine the type of investigation required and how closely an individual is screened for a position.
- 15.2 **APPLICABLE DOCUMENTS:**  
NPR 1600.1                      *NASA Security Program Procedural Requirements*
- 15.3 **CONTENTS:** The Position Risk Designation for Non-NASA Employee shall contain all the information required by NASA Form 1760 in accordance with NPR 1600.1, *NASA Security Program Procedural Requirements*.
- 15.4 **FORMAT:** NASA Form 1760, "Position Risk Designation for Non-NASA Employee".
- 15.5 **MAINTENANCE:** None required

## DATA REQUIREMENTS DESCRIPTION (DRD)

- |                         |                   |                                  |
|-------------------------|-------------------|----------------------------------|
| 1. <b>DPD NO.:</b> 1237 | ISSUE: Revision A | 2. <b>DRD NO.:</b> 1237MA-014    |
| 3. <b>DATA TYPE:</b> 3  |                   | 4. <b>DATE REVISED:</b> 06-23-09 |
|                         |                   | 5. <b>PAGE:</b> 1/2              |
6. **TITLE:** Organizational Conflicts of Interest (OCI) Avoidance Plan
7. **DESCRIPTION/USE:** To demonstrate to the Government that the Contractor will mitigate organizational conflicts of interest and ensure that the contractor provides unbiased, impartial advice and adequately protects sensitive data.
8. **OPR:** AS10                      9. **DM:** AS10
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** 60 days after contract award
12. **SUBMISSION FREQUENCY:** Revise as required; update at least annually
13. **REMARKS:** Reference is made to 1852.237-72, *Access to Sensitive Information*; 1852.237-73, *Release of Sensitive Information*.
14. **INTERRELATIONSHIP:** PWS paragraph 2.3o and H.14
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Organizational Conflicts of Interest (OCI) Avoidance Plan demonstrates that no organizational conflict of interest exists or that any such potential conflicts have been adequately avoided or mitigated, especially when using subject matter experts or technical experts connected to any prime contractor or subcontractor performing or planning to propose on design, development, and/or delivery of space flight hardware, software, mission integration services or other critical systems related to MSFC. The Contractor should not assume that government performance of a contracted task is a form of mitigation.
- 15.2 **APPLICABLE DOCUMENTS:** None
- 15.3. **CONTENTS:** The Organizational Conflicts of Interest (OCI) Avoidance Plan shall include the following:
- a. Organizational conflicts of interest pertaining to impaired objectivity shall be addressed as follows:
    1. Describe the nature of the conflict including any business relationships that might create a conflict with the performance of the work statement
    2. Describe the plan for avoiding, neutralizing, or mitigating the conflict, including the following with regard to subject matter experts/technical experts if applicable:
      - (a) That the management reporting chains between this contract and the work performed by the subject matter experts/technical experts for the conflicting business relationship are separated from each other.
      - (b) That the subject matter experts/technical experts when performing under this contract are physically separated from the portion of the company performing the work for the conflicting business relationships.
      - (c) That each subject matter expert/technical expert performing under this contract signs an express, binding, written agreement setting forth all responsibilities and duties to avoid organizational conflicts of interest and to protect sensitive data provided under this order.
      - (d) That techniques are in place to ensure that the contractor shall not favor the conflicting business relationships and will avoid the appearance of conflicts of interest.

## DRD Continuation Sheet

**TITLE:** Organizational Conflict of Interest (OCI) Avoidance Plan

**DRD NO.:** 1237MA-014

**DATA TYPE:** 3

**PAGE:** 2/2

15. **DATA PREPARATION INFORMATION (CONTINUED):**

- b. With regard to access to nonpublic information, the avoidance plan shall contain a plan to safeguard all proprietary/sensitive data the contractor (including all employees and subject matter experts/technical experts) receives. This plan shall include:
1. A provision that the contractor shall not disclose or improperly use the proprietary/sensitive data received or accessed under this contract.
  2. A provision that information, whether in hard copy or on electronic media, shall be marked, handled, stored, and destroyed in order to preclude an unauthorized disclosure of information.
  3. A provision that information technology shall be protected to prevent unauthorized disclosure of information.
  4. A provision that employees performing the effort must sign an express binding written agreement clearly agreeing to protect sensitive data.
  5. A requirement that subcontractors have appropriate OCI avoidance procedures in place for the use of subject matter experts.
  6. A requirement for periodic self-audits, the results of which shall be made available to the Government.
  7. Initial and periodic refresher OCI training for the contractor employees/experts working on this contract.
  8. A description of organizational and employee sanctions for violation of the OCI order clause or OCI Avoidance Plan provisions.
  9. Provisions on record keeping requirements regarding OCI (e.g., training, written agreements). The contractor shall make these records available to and cooperate with any neutral third party the Government assigns to review adherence to their OCI mitigation plan.
  10. A provision requiring the contractor to report any real, apparent, or potential conflict of interest that may arise to the Contracting Officer.
  11. A provision requiring the contractor to update the OCI Avoidance Plan upon occurrence of any event that will cause a change to the plan.

15.4 **FORMAT:** Contractor format is acceptable.

15.5 **MAINTENANCE:** Changes shall be incorporated by change page or complete reissue.

## DATA REQUIREMENTS DESCRIPTION (DRD)

- |                         |                   |                                      |
|-------------------------|-------------------|--------------------------------------|
| 1. <b>DPD NO.:</b> 1237 | ISSUE: Revision A | 2. <b>DRD NO.:</b> <b>1237MA-015</b> |
| 3. <b>DATA TYPE:</b> 3  |                   | 4. <b>DATE REVISED:</b> 06-23-09     |
|                         |                   | 5. <b>PAGE:</b> 1/1                  |
6. **TITLE:** NRC License Renewal/Amendment
7. **DESCRIPTION/USE:** To assure compliance with Nuclear Regulatory Commission (NRC) Regulations.
8. **OPR:** AS10                      9. **DM:** AS10
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** As required by the NRC
12. **SUBMISSION FREQUENCY:** As required by the NRC or when amendments are required to the license.
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraphs 5.1.2e and 5.3a
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The NRC License Renewal/Amendment maintains current NRC license and submit required license renewal information and request for amendments.
- 15.2 **APPLICABLE DOCUMENTS:**  
 10 CFR (Title 10)                      *Nuclear Regulatory Commission (NRC) Rules and Regulations*
- 15.3 **CONTENTS:** The NRC License Renewal/Amendment shall provide sufficient information to adequately describe all radioactive material, radiological controls and other information by the NRC as defined in 10 CFR (Title 10). All amendments shall be prepared to provide sufficient detail to changes of the MSFC radioactive material inventory.
- 15.4 **FORMAT:** Contractor format is acceptable.
- 15.5 **MAINTENANCE:** None required

## DATA REQUIREMENTS DESCRIPTION (DRD)

- |                         |                          |                                      |
|-------------------------|--------------------------|--------------------------------------|
| 1. <b>DPD NO.:</b> 1237 | <b>ISSUE:</b> Revision A | 2. <b>DRD NO.:</b> <b>1237QE-001</b> |
| 3. <b>DATA TYPE:</b> 2  |                          | 4. <b>DATE REVISED:</b> 06-23-09     |
|                         |                          | 5. <b>PAGE:</b> 1/1                  |
6. **TITLE:** Medical Quality Assurance (QA) Plan
7. **DESCRIPTION/USE:** Documentation of quality planning, control, and improvement processes.
8. **OPR:** AS10                      9. **DM:** AS10
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** 60 days after contract award
12. **SUBMISSION FREQUENCY:** Revise as required; update at least annually
13. **REMARKS:**
14. **INTERRELATIONSHIP:** PWS paragraph 3.3a
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Medical Quality Assurance (QA) Plan describes the contractor's approach to providing quality service in the performance of this contract.
- 15.2 **APPLICABLE DOCUMENTS:**  
 NPR 1800.1                      *NASA Occupational Health Program Procedures*
- 15.3 **CONTENTS:** The Medical Quality Assurance (QA) Plan shall evaluate all aspects of the medical quality assurance program and meet the requirements of NPR 1800.1 and address as a minimum the following:
- a. Maintaining confidentiality and privacy of clinic operations.
  - b. Assuring safe clinic operations.
  - c. Validation of staff knowledge.
  - d. Assurance of credentials and licensures of medical staff.
  - e. Ensuring and maintaining current internal operating procedures are in place and followed.
  - f. Conducting internal audits and medical chart reviews.
  - g. Validation of readiness of medications, supplies and equipment.
  - h. Assuring appropriate medical records system are in place.
- 15.4 **FORMAT:** Contractor format is acceptable.
- 15.5 **MAINTENANCE:** Changes shall be incorporated by change page or complete reissue.

## DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.:** 1237                      **ISSUE:** Revision A
2. **DRD NO.:** 1237SA-001
3. **DATA TYPE:** 2
4. **DATE REVISED:** 06-23-09
5. **PAGE:** 1/4
6. **TITLE:** Safety, Health, and Environmental (SHE) Plan
7. **DESCRIPTION/USE:** A contractor generated document that describes the contractor's approach to assuring compliance with the Marshall Space Flight Center (MSFC) SHE core program requirements. The contractor's SHE Plan shall describe how the contractor will (1) prevent employee fatalities, (2) reduce the number of SHE mishaps, (3) reduce the severity of employee injuries and illnesses, and (4) protect the environment through the ongoing planning, implementation, integration and management control of the contractor's industrial safety, occupational health, and environmental program in accordance with NFS 1852.223-73.
8. **OPR:** AS10/QD12                      9. **DM:** AS10
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** Preliminary with proposal
12. **SUBMISSION FREQUENCY:** Ten days after Authority to Proceed (ATP); update as required
13. **REMARKS:**
14. **INTERRELATIONSHIP:** NFS 1852.223-70, *Safety and Health*; NFS 1852.223-72, *Safety and Health (Short Form)*; NFS 1852.223-73, *Safety and Health Plan*; FAR 52.223-1, *Biobased Product Certification*; FAR 52.223-2, *Affirmative Procurement of Biobased Products Under Service and Construction Contracts*; FAR 52.223-3, *Hazardous Material Identification and Material Safety Data*; FAR 52.223-10, *Waste Reduction Program*; FAR 52.223-13, *Certification of Toxic Chemical Release Reporting*; and FAR 52.223-14, *Toxic Chemical Release Reporting*; 52.223-15, *Energy Efficiency in Energy-Consuming Products*; 52.223-16. *IEEE 1680, Standard for Environmental Assessment of Personal Computer Products*. DRD 1237SA-003, *Mishap and Safety Statistics Report*. PWS paragraph 2.3i
15. **DATA PREPARATION INFORMATION:**
  - 15.1 **SCOPE:** The Safety, Health, and Environmental Plan shall describe the contractor's methods of planning, implementing and controlling industrial safety, occupational health, and environmental requirements to assure compliance with the MSFC SHE program over the duration of this contract.
  - 15.2 **APPLICABLE DOCUMENTS:** Code of Federal Regulations (CFR) and listed consensus standards are applicable to all contracts to the extent specified in the contract. NASA and MSFC documents are applicable to all contracts performed onsite to extent specified in the contract.
    - 29 CFR Part 1903                      *Inspections, Citations, and Proposed Penalties*
    - 29 CFR Part 1910                      *Department of Labor; Occupational Safety and Health Administration Standards for General Industry*
    - 29 CFR Part 1926                      *Department of Labor; Occupational Safety and Health Administration Standards for Construction Industry*
    - CFR Title 40 Parts 1-1068              *Protection of Environment*
    - ANSI Standards applicable to the scope of this contract
    - ASME Boiler and Pressure Vessel Code applicable to the scope of this contract
    - NFPA Standards                      *National Fire Codes*
    - NASA-STD-8719.11                      *Safety Standard for Fire Protection*
    - NPR 8715.3                      *NASA General Safety Program Requirements*
    - MPR 1040.3                      *MSFC Emergency Plan*
    - MPD 1800.1                      *MSFC Smoking Policy*
    - MPR 1800.1                      *Bloodborne Pathogens*

## DRD Continuation Sheet

TITLE: Safety, Health, and Environmental (SHE) Plan

DRD NO.: 1237SA-001

DATA TYPE: 2

PAGE: 2/4

15. **DATA PREPARATION INFORMATION (CONTINUED):**

|             |  |
|-------------|--|
| MPR 1800.2  | <i>MSFC Ergonomics Program</i>   |
| MPR 1810.1  | <i>MSFC Occupational Medicine</i>  |
| MPD 1840.1  | <i>MSFC Environmental Health Program</i>                                       |
| MPR 1840.1  | <i>MSFC Confined Space Entries FFFASUFF one of the FFFAFFFAF gram</i>          |
| MPR 1840.2  | <i>MSFC Hazard Communication Program</i>                                       |
| MPD 1840.3  | <i>MSFC Respiratory Protection Program</i>                                     |
| MPR 1840.3  | <i>MSFC Hazardous Chemicals in Laboratories Protection Program</i>             |
| MPR 1840.4  | <i>MSFC Asbestos Program</i>   |
| MPD 1860.1  | <i>Laser Safety</i>  |
| MPD 1860.2  | <i>MSFC Radiation Safety Program</i>   |
| MPR 3410.1  | <i>Training</i>  |
| MWI 3410.1  | <i>Personnel Certification Program</i>   |
| MPD 8500.1  | <i>MSFC Environmental Management Policy</i>                                    |
| MPR 8500.1  | <i>MSFC Environmental Management Program</i>                                   |
| MPR 8500.2  | <i>MSFC Environmental Management System Manual</i>                             |
| MWI 8540.2  | <i>Affirmative Procurement Program for Environmentally Preferable Products</i> |
| MWI 8550.1  | <i>Waste Management</i>  |
| MWI 8550.2  | <i>Storm Water Management</i>  |
| MWI 8550.3  | <i>Wastewater Compliance</i>   |
| MWI 8550.4  | <i>Air Emissions Compliance</i>  |
| MWI 8550.5  | <i>Chemical Management</i>   |
| MWI 8621.1  | <i>Close Call and Mishap Reporting and Investigation Program</i>               |
| MPR 8715.1  | <i>Marshall Safety, Health and Environmental (SHE) Program</i>                 |
| MWI 8715.1  | <i>Electrical Safety</i>   |
| MWI 8715.2  | <i>Lockout/Tagout Program</i>  |
| MWI 8715.3  | <i>Hazard Identification &amp; Warning System</i>                              |
| MWI 8715.4  | <i>Personal Protective Equipment (PPE)</i>                                     |
| MWI 8715.5  | <i>Building Manager Program</i>  |
| MWI 8715.9  | <i>Occupational Safety Guidelines for Contractors</i>                          |
| MWI 8715.10 | <i>Explosives, Propellants, &amp; Pyrotechnics Program</i>                     |
| MWI 8715.11 | <i>Fire Safety Program</i>   |
| MWI 8715.12 | <i>Safety, Health, and Environmental Finding Tracking System (SHEtrak)</i>     |
| MWI 8715.13 | <i>Safety Concerns Reporting System (SCRS)</i>                                 |
| MWI 8715.15 | <i>Ground Operations Safety Assessment &amp; Risk Mitigation Program</i>       |
| MPD 8900.1  | <i>Medical Operations Responsibilities for Human Space Flight Programs</i>     |

(NOTE: This document only applies to Space Station contracts)

15.3 **CONTENTS:** The contractor's Safety, Health, and Environmental (SHE) Plan shall clearly describe their approach and methods for assuring compliance with the following MSFC SHE core program requirements and the applicable documents listed in 15.2 to the extent specified as applicable to this contracted effort.

a. Management leadership and employee involvement:

1. A description of the contractor's policy and managements commitment to (1) provide a safe and healthful workplace for personnel (i.e., employees, customers, and public), (2) protect the property and the environment, and (3) assure compliance with EPA, OSHA, NASA, MSFC MPR 8715.1 and all other MSFC SHE document requirements listed in 15.2 that are applicable to this contracted effort.
2. A description of the techniques implemented by the contractor to assure management and employees are (1) held accountable and fully understand their roles and responsibilities to perform their jobs/tasks in a safe and healthful manner while protecting the environment and (2) these roles and responsibilities are flowed-down to all subcontractors, when applicable.

## DRD Continuation Sheet

**TITLE:** Safety, Health, and Environmental (SHE) Plan

**DRD NO.:** 1237SA-001

**DATA TYPE:** 2

**PAGE:** 3/4

**15. DATA PREPARATION INFORMATION (CONTINUED):**

3. A description of the actions taken or the disciplinary program implemented by the contractor when management or employees are discovered not performing their jobs/tasks in a safe and healthful manner or protecting the environment and how these actions are flowed-down to subcontractors, when applicable.
  4. A description of how self evaluations of the contractor's safety, health and environmental program are performed and documented, and includes the frequency of these self evaluations.
  5. Provide the identification, by title, of the individual assigned by the contractor to be responsible for implementing the contractor's SHE program elements and will serve as the day-to-day SHE Point of Contact (POC) for this contracted effort.
  6. A description of how the SHE plan is maintained current with contract, NASA and MSFC requirements, and updated as necessary.
- b. System and worksite analysis:
1. A description of how the contractor assures potentially hazardous conditions are identified in the work area and operations (e.g., hazard analysis, safety assessment, risk assessment and employee identified concerns).
  2. A description of the interrelationship between the applicable MSFC documented programs listed in 15.2 and the OSHA programs that require documented program applicable to this contracted effort (e.g., Respiratory Protection, Hazard Communication, Confined Space, and Lockout/Tagout).
  3. A description of how each contractor supervisor performs and documents monthly safety visits of their assigned work area in accordance with MPR 8715.1 and MWI 8715.12. (NOTE: Onsite safety visits shall be performed once per month per supervisor and documented in the MSFC SSWP.)
- c. Hazard prevention and control:
1. A description of how the contractor assures potentially hazardous conditions are controlled in the work area or in an operation. This can include the generation of plans, procedures, and other working documents that clearly identify the hazardous conditions and the necessary cautions taken to mitigate the hazards in accordance with MWI 8715.15. (NOTE: MSFC Safety Branch concurrence is required for all onsite hazardous procedures and MSFC requires these procedures and plans to be reviewed annually.)
  2. A description of how the contractor assures (1) the procurement, storage, issuance, and use of hazardous chemical and materials is in accordance with MPR 8500.1 and (2) the recycling and disposal of any hazardous waste generated under this contracted effort is in accordance with MWI 8550.1 [NOTE: This can be described in e. environmental compliance if CPR e. is applicable.] [Applicable ONLY to contracts containing potentially hazardous operations defined in the Tailoring Notes or that purchase or use chemicals, or generate hazardous waste]
  3. A description of the contractor's emergency management program and provide a list of contractor emergency points of contact located onsite in accordance with MPR 1040.3. (NOTE: Onsite contractors may use MPR 1040.3 as their emergency management program.)
  4. A description of how the contractor assures all mishaps and close calls are investigated to the extent necessary to determine root cause and the reporting requirements are in accordance with MWI 8621.1. (Reference DRD 1237SA-003, *Mishap and Safety Statistics Report*).
  5. A description of how the contractor provides safety, health, and environmental services applicable to this contracted effort (e.g., hazardous waste disposal, industrial hygiene monitoring, emergency medical support, hearing conservation program, respiratory protection, and hazard communication). (NOTE: Provide a list of all services that are to be provided by MSFC for onsite work.)
  6. A description of how contractor employees are trained to and given the authority to suspend work where safety, health or environmental conditions warrant such action in accordance with 29 CFR 1903 and MPR 8715.1.

## DRD Continuation Sheet

**TITLE:** Safety, Health, and Environmental (SHE) Plan

**DRD NO.:** 1237SA-001

**DATA TYPE:** 2

**PAGE:** 4/4

**15: DATA PREPARATION INFORMATION (CONTINUED):**

- d. Safety, health and environmental training:
  1. A description of how each contractor employee is (1) trained to recognize hazards, (2) avoid accidents, (3) know the hazards specific to their job, and (4) fully understands the contractor's disciplinary program in accordance with 29 CFR Part 1903, MPR 3410.1, and MPR 8715.1.
  2. A description of how contractor employee training needs are determined that are specific to the job the employee is expected to perform in accordance with 29 CFR Part 1910 and MPR 3410.1. (NOTE: Onsite employee training assessments shall be performed using the SHE Training Assessment located on the MSFC SSWP.)
  3. A description of how the contractor provides and documents training for employees that are designated as (1) competent, or (2) qualified, or (3) authorized, or (4) certified to perform operations that require job specific training in accordance with 29 CFR 1910 or 29 CFR 1926. [NOTE: This applies to job categories being performed onsite that do not require a MSFC Safety Certification per MWI 3410.1.]
  4. Provide a list of operations or job categories performed by the contractor that require a MSFC Safety Certification under this contracted effort in accordance with MWI 3410.1, "Personnel Certification Program." (NOTE: Onsite contractor safety certifications required by MWI 3410.1 shall be tracked in the MSFC Certification Database (CERTRAK).)
- e. Environmental compliance – A description of how the contractor assures compliance with environmental laws and regulations CFR Title 40 Parts 1-1068, Alabama Department of Environmental Management (ADEM), and MPR 8500.1 under this contracted effort by:
  1. Reporting hazardous and toxic substance use in accordance with MWI 8550.5.
  2. Implementing and reporting green procurements in accordance with MWI 8540.2.
  3. Reducing, reusing, and recycling of hazardous and toxic substances prior to disposal in accordance with MWI 8550.1.
  4. Minimizing stormwater pollution in accordance with MWI 8550.2.
  5. Ensuring equipment and processes permitted by applicable laws in accordance with MWI 8550.4.
  6. Disposing of solid and liquid materials as permitted by applicable laws in accordance with MWI 8550.1.

15.4 **FORMAT:** Contractor format is acceptable.

15.5 **MAINTENANCE:** Changes shall be incorporated by change page or complete reissue.

## DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.:** 1237                      **ISSUE:** Revision A
2. **DRD NO.:** 1237SA-003
3. **DATA TYPE:** 3
4. **DATE REVISED:** 06-23-09
5. **PAGE:** 1/3
6. **TITLE:** Mishap and Safety Statistics Reports
7. **DESCRIPTION/USE:** To provide reporting of metrics, mishaps, close calls, and serious non-occupational injuries or illnesses.
8. **OPR:** QD12                      9. **DM:** AS10
10. **DISTRIBUTION:** Per Contracting Officer's letter
11. **INITIAL SUBMISSION:**
  - a. **Safety Statistics** for the previous month shall be submitted by the 10<sup>th</sup> of each month after contract award.
    1. Safety statistics are reported using MSFC Form 4371, or an electronic notification system equivalent, or direct input to NASA Incident Reporting Information System (IRIS) database by the contractor designated IRIS representative.
    2. Safety statistics reports shall include: contract number, subcontractors, NAISC codes, number of employees, number of supervisors, hours worked, and number of injuries including days away from work and/or first-aid cases.
    3. Access to IRIS database can be obtained from the MSFC S&MA IRIS administrator located in the MSFC Industrial Safety Branch (ISB) after contract award.
  - b. **Initial reporting for ALL mishaps (Type A, B, C and D mishaps and close calls) for ALL contractors working onsite** shall be reported to MSFC Industrial Safety Branch (ISB) as soon as possible, but **no later than 1 hour** of occurrence or awareness by:
    1. Direct input through the "SHE Report" located on the Safety, Health & Environmental (SHE) webpage located on "Inside Marshall." On the SHE webpage select the "Mishaps, Questions and Concerns" pull-down menu, then select "Report Mishaps/Close Calls/ Concerns." (At MSFC this is the preferred method of reporting), or
    2. Calling the Safety Hotline (256) 544-0046 or 544-HELP (4357), option "safety," or
    3. Direct input into the NASA Incident Reporting Information System (IRIS) by the contractor designated IRIS representative.
  - c. **Initial reporting for Type A and B mishaps and high visibility close calls** for contractors working **offsite** shall be reported to MSFC Industrial Safety Branch (ISB) as soon as possible, but **no later than 1 hour** of occurrence or awareness by either of the following methods in section b.2 or b.3.
    1. If a contractor employee has any type mishap while visiting a MSFC controlled site, they shall report immediately to their site sponsor in addition to other reporting requirements.
  - d. **Initial reporting for Type C and D and low visibility close calls** for contractors working **offsite** shall be reported via the Safety Statistics Report submitted monthly. Follow-up information for these type mishaps and close calls can be requested by MSFC ISB.
  - e. **Initial reports for all mishaps and close calls** shall provide as much information as possible, but at a minimum include the following: location and time of incident, number of fatalities, number hospitalized, type of damage, estimated cost, brief description, and contact person's name and phone number in accordance with MWI 8621.1 and NPR 8621.1.
  - f. **Reporting of a non-work-related fatality or serious injury or illnesses that occur to contractor employee while working onsite** shall be within **24 hours** of occurrence or awareness of injury by:
    1. Notifying the Contracting Officer and MSFC ISB. (For contractors working offsite reporting of a non-work-related injury or illness notification is at the discretion of the family.)
  - g. **Follow-up reporting for ALL contractors:**
    1. **Type A or B mishaps, or high visibility mishaps or close calls:** Follow-up report **within 24 hours** through IRIS entry by the contractor designated IRIS representative, or electronic submittal to MSFC ISB.

## DRD Continuation Sheet

**TITLE:** Mishap and Safety Statistics Reports

**DRD NO.:** 1237SA-003

**DATA TYPE:** 3

**PAGE:** 2/3

11. **INITIAL SUBMISSION (CONTINUED):**
2. **Type C or D mishaps, or non-high visibility close calls:** Follow-up report or update within 6 days through IRIS entry by the contractor designated IRIS representative, or electronic submittal to MSFC ISB.
  3. **Type A, B, and Close Calls with high Type A or B potential Investigation Mishap Board Report:** submitted after completion of investigation. Corrective Action Plan submitted upon Endorsing Official approval.
  4. **All Mishaps:** Follow-up Corrective Action Plan/Status 30 days after first mishap.
- h. **Safety Concerns, Hazards, and non-reportable mishaps** for contractors working onsite shall be reported per MPR 8715.1 and MWI 8715.13.
12. **SUBMISSION FREQUENCY:** Safety Statistics (MSFC Form 4371, IRIS entry, or an equivalent electronic submittal) - By the 10<sup>th</sup> of each month to MSFC ISB. All Mishaps: Monthly Follow-up Corrective Action Plan/Status until corrective actions implemented and closure received by updating record in IRIS data base (preferred) or electronic submittal to MSFC ISB.
13. **REMARKS:**
14. **INTERRELATIONSHIP:** DRD 1237SA-001, *Safety, Health, and Environmental (SHE) Plan*. PWS paragraph 2.3j
15. **DATA PREPARATION INFORMATION:**
- 15.1 **SCOPE:** The Mishap and Safety Statistics Reports document all mishaps and close calls as required in NPR 8621.1.
- 15.2 **APPLICABLE DOCUMENTS:**
- |             |   |
|-------------|---|
| NPR 8621.1  | <i>NASA Procedural Requirements for Mishap and Close Call Reporting, Investigating, and Recordkeeping</i> |
| MPR 8715.1  | <i>MSFC Safety, Health, and Environmental (SHE) Program</i>   |
| MWI 8621.1  | <i>Close Call and Mishap Reporting and Investigation Program</i>  |
| MWI 8715.13 | <i>Safety Concerns Reporting System (SCRS)</i>  |
- 15.3 **CONTENTS:** The Mishap and Safety Statistics Reports shall contain the information required by NPR 8621.1 and MWI 8621.1.
- 15.4 **FORMAT:** The following formats or electronic equivalent shall be submitted:
- a. MSFC Form 4371, "MSFC Contractor Accident and Safety Statistics."
  - b. Mishap Board Report using the format provided in NPR 8621.1.
  - c. Additional Information Submittal per MWI 8621.1.
- 15.5 **MAINTENANCE:** None required
- 15.6 **DEFINITIONS:** NASA Mishap. An unplanned event that results in at least one of the following:
- a. Injury to non-NASA personnel, caused by NASA operations.
  - b. Damage to public or private property (including foreign property), caused by NASA operations or NASA-funded development or research projects.
  - c. Occupational injury or occupational illness to NASA personnel.
  - d. NASA mission failure before the scheduled completion of the planned primary mission.
  - e. Destruction of, or damage to, NASA property except for a malfunction or failure of component parts that are normally subject to fair wear and tear and have a fixed useful life that is less than the fixed useful life of the complete system or unit of equipment, provided that the following are true: 1) there was adequate preventative maintenance; and 2) the malfunction or failure was the only damage and the sole action is to replace or repair that component.

## DRD Continuation Sheet

TITLE: Mishap and Safety Statistics Reports

DRD NO.: 1237SA-003

DATA TYPE: 3

PAGE: 3/3

15. **DATA PREPARATION INFORMATION (CONTINUED):**

Close Call. An event in which there is no injury or only minor injury requiring first aid and/or no equipment/property damage or minor equipment/property damage (less than \$1000), but which possesses a potential to cause a mishap.

High Visibility (Mishaps or Close Calls). Those particular mishaps or close calls, regardless of the amount of property damage or personnel injury, that the Administrator, Chief/OSMA, CD, AA/OIA, or the Center SMA director judges to possess a high degree of programmatic impact or public, media, or political interest including, but not limited to, mishaps and close calls that impact flight hardware, flight software, or completion of critical mission milestones.

Type A Mishap. A mishap resulting in one or more of the following: (1) an occupational injury or illness resulting in a fatality, a permanent total disability, or the hospitalization for inpatient care of 3 or more people within 30 workdays of the mishap; (2) a total direct cost of mission failure and property damage of \$1 million or more; (3) a crewed aircraft hull loss; (4) an occurrence of an unexpected aircraft departure from controlled flight (except high performance jet/test aircraft such as F-15, F-16, F/A-18, T-38, OV-10, and T-34, when engaged in flight test activities).

Type B Mishap. A mishap that caused an occupational injury or illness that resulted in a permanent partial disability, the hospitalization for inpatient care of 1-2 people within 30 workdays of the mishap, or a total direct cost of mission failure and property damage of at least \$250,000 but less than \$1,000,000.

Type C Mishap. A mishap resulting in a nonfatal occupational injury or illness that caused any days away from work, restricted duty, or transfer to another job beyond the day or shift on which it occurred, or a total direct cost of mission failure and property damage of at least \$25,000 but less than \$250,000.

Type D Mishap. A mishap that caused any nonfatal OSHA recordable occupational injury and/or illness that does not meet the definition of a Type C mishap, or a total direct cost of mission failure and property damage of at least \$1,000 but less than \$25,000.

Offsite. A contractor that is not located on a NASA Center or NASA-owned facility.

Onsite. A contractor that is located on a NASA Center or NASA-owned facility.

**Occupational Health Services Staff Education,  
Certification and Licensing Requirements****Medical Services**

- (a) The Contractor shall ensure that all personnel assigned and utilized for performance of this contract possess and maintain all licenses, training, registrations, credentials, certifications, and certificates required by NASA Headquarters and MSFC, as well as Federal, State, and local governments. All Board certifications shall be provided by a board certifying entity in the United States.
- (b) The Contractor shall identify, verify and document all certifications, licenses, registrations, and training requirements for each staff position.
- (c) The Contractor shall ensure the Program Manager has, at a minimum, 1) a Bachelor's degree from an accredited college/university, and 2) at least five years experience in managing an occupational medicine and industrial hygiene program.
- (d) It is preferred that the Administrative Manager have: 1) a Bachelor's degree in Business Administration or a related field; 2) at least five years experience in office administration or business management; 3) a medical terminology background; and 4) previous supervisory experience.
- (e) The Contractor shall ensure that the Medical Director: 1) is a graduate of an accredited medical school; 2) is licensed to practice medicine in the State of Alabama; 3) is Board certified in a preventive medicine, occupational medicine and/or a primary care specialty; 4) is certified in Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS); 5) has a current registration from the Drug Enforcement Agency; 5) has at least ten years experience in preventive medicine, occupational medicine, and/or a primary care specialty; and 6) be a Medical Review Officer. In addition, three years experience as the Medical Director of a clinic, practice, or ambulatory care facility is preferred.
- (f) The Contractor shall ensure that all physicians: 1) have graduated from an accredited medical school; 2) are licensed to practice medicine in the State of Alabama; 3) are Board certified in a preventive medicine, occupational medicine and/or a primary care specialty; 4) are certified in Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS); and 5) have a current registration from the Drug Enforcement Agency. In addition, at least five years experience in preventive medicine, occupational medicine, and/or a primary care specialty; and experience in Occupational Medicine and as a Medical Review Officer is preferred.

- (g) The Contractor shall ensure that all nurses: 1) are Registered Nurses; 2) maintain licenses in the State of Alabama; 3) are Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certified; and 4) are either Certified Occupational Health Nurse (COHN) (preferred) or have at least three years experience in occupational medicine.
- (h) The Contractor shall ensure that all nurse practitioners: 1) have a Masters of Nursing degree from an accredited school; 2) are a Certified Registered Nurse Practitioner (CRNP); 3) have and maintain a current CRNP license in the State of Alabama; 4) are Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certified; and 5) have at least three years experience as an occupational health nurse (R.N.). A Certified Occupational Health Nurse Specialist (COHN-S) certification is preferred.
- (i) The Contractor shall ensure that the Workman's Compensation Case Manager: 1) is a Registered Nurse with at least three years nursing, case management, and occupational medicine experience; 2) has a Bachelor of Science, Nursing (BSN) from an accredited school; 3) has a certification in Case Management; and 4) has experience in administration of the Federal Employee's Compensation Act. In addition, a Masters of Science in Case Management and/or a Certified Occupational Health Nurse (COHN) is preferred.
- (j) The Contractor shall ensure that all ambulance support personnel: 1) have a current license; 2) are credentialed by the State of Alabama and/or a National Registry Paramedic (EMT III); and 3) certified in BCLS and ACLS.
- (k) The Contractor shall ensure that all Medical and Laboratory Technologists: 1) are graduates of an accredited medical technology program; 2) AMT registered; 3) have completed formal radiology technology training; 4) are ARRT registered; 5) meet all Clinical Laboratory Improvement Amendment (CLIA) requirements for ongoing certification; and 6) have a minimum of five years experience.
- (l) The Contractor shall ensure that appropriate contractor personnel have adequate training and experience performing cardiopulmonary stress testing per the Bruce protocol.
- (m) The Contractor shall ensure that appropriate contractor personnel have the capability to maintain data in Government provided databases and expertise in software/hardware applications.
- (n) The Contractor shall ensure that all personnel who perform audiometric testing are Council in Accreditation for Occupational Hearing Conservation (CAOHC) certified within six months of the effective date of the contract.

**Industrial Hygiene**

- (a) The Contractor shall ensure that all Industrial Hygienists: 1) have a minimum of a Bachelor of Science (B.S.) degree in industrial hygiene or a related area from an accredited university; 2) have at least three years of related experience in industrial hygiene and/or environmental health; 3) and have and maintain HAZWOPER certification. In addition, formal training in industrial hygiene (IH), health physics, toxicology, industrial ventilation, industrial hygiene management, environmental health management, and/or additional related fields is preferred. American Board of Industrial Hygiene Certification (CIH) or eligibility and AHERA certification also preferred.
- (b) The Contractor shall ensure that at least two Industrial Hygienists including the Industrial Hygiene Manager and the Senior Industrial Hygienist have and maintain certification as a Certified Industrial Hygienist (CIH) through the American Board of Industrial Hygiene (ABIH).
- (c) The contractor shall ensure that the Industrial Hygiene Manager: 1) has a minimum of ten years of technical experience in Environmental Health (EH)/Industrial Hygiene (IH); 2) has at least five years in IH program Management; and 3) **maintains training in HAZWOPER**. In addition, experience in Occupational Health Services (OHS) management systems is preferred.
- (d) The contractor shall ensure the Senior Industrial Hygienist: 1) has a minimum of seven years technical experience in IH and/or Environmental Health; and 2) **maintains training in HAZWOPER**. In addition, having and maintaining an Asbestos Hazard Emergency Response Act (AHERA) certification is preferred.
- (e) The contractor shall ensure that appropriate contractor personnel serve as the Respirator Program Administrator.
- (f) The Contractor shall ensure that appropriate contractor personnel maintain certification as an Asbestos Hazard Emergency Response Act (AHERA) Inspector under the AHERA model accreditation as required by EPA.
- (g) The Contractor shall ensure that appropriate contractor personnel can perform onsite Polarized Light Microscopy (PLM) and Phase Contrast Microscopy (PCM) asbestos analysis. For PCM analysis completion of the NIOSH 582 "Sampling and Evaluation of Airborne Asbestos Dust" course is required. For PLM analysis completion of the "McCrone Microscopical Identification of Asbestos" or equivalent is required.

**Health Physics**

- (a) The Contractor shall ensure that the Senior Health Physicist: 1) has a B.S. degree from an accredited university/college in Engineering, Physics, Mathematics, Chemistry, Physical or Biological Sciences, IH, or other related field; 2) has at least five years of directly related experience in health physics field/radiation (ionizing and nonionizing) safety; 3) has appropriate training and experience to serve as a Laser Safety Officer; and 4) has and maintains HAZWOPER certification. In addition, certification or eligibility by the National Registry of Radiation Protection Technologist (NRRPT) or CHP is preferred. Formal training in health physics, radiation safety, laser safety, or other related fields is also preferred.

**Respiratory**

- (a) The Contractor shall ensure that all Respiratory Service technicians have experience and adequate training in qualitative and quantitative fit testing and respiratory protection equipment maintenance and repair.