

## FFPO Procedure Blue Sheet Form

A. Procedure Title (list manual, procedure series, or specific procedure #)

SPR Accident Prevention Manual

Section 18 Ergonomics Program

B. Procedure Name/series type (i.e., operations, maintenance, etc.) E S & H

C. Check (✓) one of the following:

1.  Procedure(s) accepted “as is” with terminology replaced as denoted in the Site Procedures Approved Terminology Replacement List for the FFPO SPR M&O contract.

2.  In addition to the changes in approved terminology for the FFPO SPR M&O contract, improvements to the procedure are warranted:

Category 1 Finding (Resolution prior to contract start)

Category 2 Finding (Resolution within 90 days of contract start)

Category 3 Finding (Resolution to the Issues Management program)

D. Comments/Notes:

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E. Forward a copy of this form to the FFPO Director, Business Management for revision tracking.

Signed

FFPO Reviewer Signature

02/26/14

Date

Steve Mahan

FFPO Reviewer Print Name



## 18. ERGONOMICS PROGRAM

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### 18.1. INTRODUCTION

Ergonomics is the science and art of optimizing the interaction between employees and their work environment. Its goal is the prevention of Work Related Musculoskeletal Disorders (WMSDs) and improvement in the efficiency of the tasks performed by the worker. At work, this goal is accomplished through inspections and detailed analysis of each work area and worker interaction in order to recommend specific administrative and engineering controls. Musculoskeletal disorders may be related to non-work activities. Employees are encouraged to consider ergonomic hazards at home as well as work.

### 18.2. PROGRAM REQUIREMENTS

Line management is responsible for ensuring that the ergonomic principles outlined in this program are understood and implemented into all office and field activities on the SPR. All employees shall understand and follow the guidelines in this program and are encouraged to report signs and symptoms of WMSD to their supervisor or a safety monitor. In addition, employees may participate in the various program elements such as ergonomic job hazard analysis, developing controls for their work areas, training development, and program evaluation.

### **18.2.1. Controls**

- a. Administrative Controls. Examples of administrative controls for ergonomic risk factors include the following.
  1. Employee Rotation
  2. Adjustment of work pace
  3. Behavioral modifications
  4. Redesign of work methods
- b. Engineering Controls. Examples of engineering controls for ergonomic risk factors include changing, modifying, or redesigning the following.
  1. Workstations
  2. Tools
  3. Facilities
  4. Equipment
  5. Materials
  6. Processes

### **18.2.2. Signs of Work Related Musculoskeletal Disorders (WMSDs)**

Signs of WMSDs include objective physical findings which when linked to work activities become the basis for an OSHA recordable MSD.

- a. Signs of WMSDs include:
  1. decreased grip strength,
  2. loss of function,
  3. deformity,
  4. swelling,
  5. cramping, and
  6. redness or loss of color.

### **18.2.3. Symptoms of Musculoskeletal Disorders (WMSDs)**

Symptoms or physical indications that an employee may be developing a musculoskeletal disorder can vary in severity depending on the employee's exposure level. Symptoms often appear gradually, beginning as muscle fatigue or pain while engaged in an activity which disappears during rest.

Usually symptoms become more severe as the exposure continues. (For example, tingling at work may continue when the employee is at rest, then numbness or pain may occur and make it difficult to perform on the job, and finally pain may become so severe that the employee is unable to perform physical work activities.) Examples of WMSD symptoms include the following.

- a. Numbness
- b. Burning
- c. Pain
- d. Tingling
- e. Aching
- f. Stiffness

#### **18.2.4. Work Related Musculoskeletal Disorders (WMSDs) Criteria**

A WMSD is limited to a disorder that meets these criteria:

- a. It is recordable on OSHA 300 log.
- b. It occurred in a job where the risk factors present could reasonably be expected to have caused or contributed to the type of WMSD reported.
- c. A significant part of the injured employee's regular job duties involves exposure to these risk factors (that is, not an incidental exposure).

#### **18.2.6. Management of Musculoskeletal Disorders**

The DM Human Capital department is responsible for managing all medical issues for employees who have a WMSD or who report signs and symptoms of a WMSD.

##### **18.2.6.1. Medical Treatment and Diagnosis of WMSDs**

- a. Medical treatment protocols and diagnosis of WMSDs will be established by the health care provider with the concurrence of the contract physician or clinic.
- b. Treatment can include but is not limited to
  1. work restrictions,
  2. braces and splints,
  3. physical therapy,
  4. exercise regimes, and
  5. surgery.
- c. Information relating to controls recommended by the Health Care Provider will be provided to the New Orleans IH staff in order to effectively oversee the management of MSD on the SPR.

#### **18.2.7. Program Evaluation**

- a. Program overview is provided by the New Orleans IH staff on an annual basis.
- b. Results of the formal evaluation will be provided to the ESC and SSMC.
- c. Program activities include elements such as
  1. assessment and inspection activities, and
  2. total program costs.
- d. Outcome measures include:
  1. the number of OSHA recordable WMSDs, and
  2. the costs associated with managing WMSDs,
- e. The evaluation includes a measurement of both program activities and outcomes.

#### **18.2.8. Record Keeping**

See the table at the end of this chapter, Ergonomic Record Keeping Requirements, for information on record retention responsibilities and schedules within the ergonomics program.

### **18.3. ERGONOMIC HAZARD IDENTIFICATION AND INFORMATION**

It is important for all employees to be able to recognize signs and symptoms of WMSDs and to understand the importance and mechanism for early reporting. In addition, all employees must be

able to recognize ergonomic hazards that are reasonably likely to cause or contribute to WMSDs. This section describes mechanisms by which ergonomic hazards are identified and communicated to the Site Safety Specialist, supervisors, and safety monitors so appropriate controls can be developed.

### **18.3.1. Employee Participation**

- a. All employees shall report signs and symptoms of WMSDs to their supervisor or a safety monitor.
- b. All employees are required to complete a computer-based training course informing them of the ergonomic hazards associated with their job.
- c. If an employee is experiencing MSD symptoms, advise the supervisor so work assignments can be structured so as not to contribute to further aggravation of the condition. DM Industrial Hygienists will assist at the supervisor's or employee's request.

### **18.3.2. Reporting WMSDs**

- a. For WMSD symptoms that require medical response use the Supervisors Report of Illness/Injury to report the injury/illness.
- b. Supervisors will report employee signs and symptoms of WMSDs that do not require medical response to DM Industrial Hygiene.

### **18.3.3. Site Inspection Procedures**

- a. Site Safety Specialists and safety monitors should include ergonomic hazards as part of their routine inspections.
- b. The Site Safety Specialist should ensure that inspections are conducted:
  1. whenever a significant change in the workstation has occurred (for example, an employee changes offices, or a change in equipment or tools in the field),
  2. at the request of an employee,
  3. whenever an employee reports signs and symptoms of a WMSD.

## **18.4. JOB HAZARD ANALYSIS AND CONTROL (ERGONOMICS)**

### **18.4.1. Purpose**

- a. The purpose of a Job Hazard Analysis (JHA) in the ergonomics program is to develop specific administrative and engineering controls for ergonomic hazards in the office and field environments.
- b. Although supervisors are responsible for conducting JHAs, a more detailed JHA is conducted by a New Orleans industrial hygienist using a systematic approach that involves the Site Safety Specialist, supervisors, and individual employees.
- c. The final goal of a JHA is to reduce the risk factors associated with each task and prevent the occurrence of WMSDs using the best control measures possible.

### **18.4.2. Process**

- a. The Site Safety Specialist is an important part of the JHA process by providing assistance to the New Orleans IH staff in conducting an advanced JHA when required.
- b. The overall JHA process involves the supervisor and/or site safety specialist assessing the hazard and recommending the appropriate controls within the scope of their training.
- c. If assistance is needed, the Site Safety Specialist may request assistance from a New Orleans industrial hygienist in developing advanced control measures for identified ergonomic hazards.
- d. The Site Safety Specialist, supervisors, and employees then assist the industrial hygienist in developing and implementing appropriate controls.

### **18.5. REQUESTING, PURCHASING, AND DISTRIBUTING ERGONOMIC EQUIPMENT**

Several departments are involved in the overall support of the ergonomic program. They provide the needed equipment recommended by a JHA or safety inspection. These departments include:

- a. Information Services (IS),
- b. Facility Support,
- c. Procurement.

#### **18.5.1. Identifying Equipment Needs**

- a. All major and minor ergonomic equipment is cataloged by Material Management with the assistance of the New Orleans IH staff.
- b. Major and minor ergonomic equipment lists are updated by the New Orleans IH staff as necessary.
- c. All ergonomic equipment needs must be identified by a formal JHA conducted by a New Orleans industrial hygienist or through correspondence from a licensed health care provider.
- d. Minor ergonomic equipment can be recommended by the Site Safety Specialist based on formal safety monitor inspections or supervisor JHAs.

#### **18.5.2. Requesting and Purchasing Ergonomic Equipment**

- a. Requests for major ergonomic equipment such as chairs and furniture are submitted by the New Orleans IH staff to Facility Support.
- b. Requests for major ergonomic equipment such as computer devices (phone headsets and mice) are submitted by the New Orleans IH staff to IT&S.
- c. Once Facility Support and/or IT&S receive the requests for these purchases from the New Orleans IH staff, these departments are responsible for entering purchase requests for the identified equipment and subsequently distributing the equipment to the employee identified in the JHA. Requisitions must contain at a minimum the following:
  1. type of equipment needed as listed in the Material Management catalog,
  2. name of the individual needing the equipment, and
  3. the JHA number for the assessment.
- d. The New Orleans IH staff will enter requisitions intended to restock site supplies with the needed minor ergonomic equipment.
- e. Procurement will purchase all ergonomic equipment according to the description provided by the Material Management catalog.

**18.5.3. Distribution of Ergonomic Equipment**

- a. The Site Safety Specialist will maintain an inventory of minor ergonomic equipment necessary for distribution as a result of a formal recommendation from a JHA or safety inspection. Sites can submit requests for restocking their inventory directly to the New Orleans IH staff.
- b. In addition to maintaining a stock of minor ergonomic equipment for distribution to employees, the Site Safety Specialist is responsible for coordinating the receipt and distribution of major ergonomic equipment that has been requested for purchase by the New Orleans IH staff.
- c. After the initial issue, the routine repair and replacement of ergonomic equipment will be coordinated by the Site Safety Specialist through the New Orleans IH staff.

**18.5.4. Ergonomic Equipment Use and Maintenance**

- a. Once ergonomic equipment is issued, each employee is responsible for the proper use, maintenance, and care of the ergonomic equipment issued to them for the duration of their employment on the SPR.
- b. Requests for repair or replacement should be submitted to the Site Safety Specialist
- c. Assistance in the use of ergonomic controls will be provided to each employee by the Site Safety Specialist or a safety monitor.
- d. The Site Safety Specialist will coordinate repair/replacement of minor equipment through New Orleans IH staff.
- e. Major equipment repair/replacement should be coordinated through the appropriate department (i.e., Facility Support or IS).

**18.6. TABLES: ERGONOMICS PROGRAM**

<b>TABLE 18.1. ROLES AND RESPONSIBILITIES IN MANAGING THE ERGONOMICS PROGRAM</b>	
<b>Position or Department</b>	<b>Responsibility</b>
Employees	<ul style="list-style-type: none"> <li>a. Responsible for understanding elements of the ergonomics program and for being able to identify hazards that contribute to development of WMSDs. In addition, each employee should be able to identify when he or she is experiencing the various signs and symptoms of WMSDs and report them immediately to their supervisor.</li> <li>b. All employees shall report signs and symptoms of WMSDs to their supervisor or a safety monitor.</li> <li>c. All employees are required to complete a computer-based training course informing them of ergonomic hazards associated with the job.</li> <li>d. Participate in the development and implementation of controls.</li> </ul>
Directors, Managers and Supervisors	<ul style="list-style-type: none"> <li>a. Responsible for ensuring their employees understand all requirements in this program.</li> <li>b. Ensure that controls recommended by a Job Hazard Analysis (JHA) or Job Safety Analysis are being used effectively.</li> <li>c. Be aware of the mechanism for reporting signs and symptoms of WMSDs through the Supervisors First Report of Injury form and for requesting assistance in developing controls for preventing these</li> </ul>

**TABLE 18.1. ROLES AND RESPONSIBILITIES IN MANAGING THE ERGONOMICS PROGRAM**

Position or Department	Responsibility
	types of injuries. d. Responsible for performing a JHA or hazard assessments as described in this APM. e. Be able to identify potential ergonomic risk factors and ergonomic hazards when they are present during the JHA process. f. Use the Supervisors Report of Illness/Injury to report employee signs and symptoms of WMSDs, assessing the hazard and recommending appropriate controls within the scope of their training.
Site Safety Specialist	a. Assist and support line management, safety monitors, and employees in understanding the objectives of the ergonomics program and the use of recommended controls. b. Assist New Orleans Industrial Hygiene (IH) staff in implementation and development of controls for identified ergonomic hazards. c. Be the primary point of contact at each site for the distribution of ergonomic equipment. d. Provide assistance to the New Orleans IH staff in conducting an advanced JHA when required e. Assess the hazard and recommend appropriate controls within the scope of their training f. Ensure that inspections are conducted as follows: <ol style="list-style-type: none"> <li>1. whenever a significant change in the workstation has occurred (examples: an employee changes offices or there’s a change in equipment or tools in the field),</li> <li>2. at the request of an employee,</li> <li>3. whenever an employee reports signs and symptoms of a WMSD.</li> </ol> g. If assistance is needed, the Site Safety Specialist may request assistance from a New Orleans IH in developing advanced control measures for identified ergonomic hazards.
Behavioral Observers	a. Note ergonomically at risk behaviors and provide feedback to the employee. b. With the employee’s permission, the observer can request a detailed evaluation by the Industrial Hygiene staff.
Behavioral Steering Committee	a. Ensure ergonomic definitions are included in all Critical Behavior Inventories. b. Measure the risk by measuring the frequency that ergonomic-related behaviors are performed at-risk. c. Evaluate the frequency at which the at-risk behaviors are performed, thus enabling the steering committee to make collective inferences and verify that ergonomic controls are or are not in place.
Safety Monitors	a. Responsible for identifying ergonomic hazards in their monthly inspections of their areas. Monitors can assist the Site Safety Specialist in developing and implementing controls or by assisting employees in the use of recommended controls. b. Ensure that inspections are conducted as follows: <ol style="list-style-type: none"> <li>1. whenever a significant change in the workstation has occurred (examples: an employee changes offices or there’s a change in</li> </ol>

<b>TABLE 18.1. ROLES AND RESPONSIBILITIES IN MANAGING THE ERGONOMICS PROGRAM</b>	
<b>Position or Department</b>	<b>Responsibility</b>
	equipment or tools in the field), 2. at the request of an employee, 3. whenever an employee reports signs and symptoms of a WMSD.
New Orleans Safety and Health	a. Directs and supports the entire ergonomic program by providing assistance and consultation to the ESC (Executive Safety Council), SSMC, Behavioral Steering Committees, and departments responsible for requesting and purchasing ergonomic equipment intended to control identified ergonomic hazards. New Orleans industrial hygienists are responsible for conducting detailed JHAs and for assisting site implementation of the appropriate controls. b. New Orleans Industrial Hygienists provide IH support to the sites, to DOE, and to Deltha-Critique. c. A more detailed JHA is conducted by a New Orleans industrial hygienist using a systematic approach that involves the Site Safety Specialist, supervisors, and individual employees.
Engineering	a. Participate in the development and implementation of controls.
Medical Services	a. The DM Medical Services department is responsible for coordinating prompt, effective medical management for employees diagnosed with a WMSD or who report signs and symptoms of a WMSD. b. The New Orleans IH staff assists the Medical Services department in the overall management of WMSDs by providing them with information about ergonomic hazards and a list of available controls.

<b>TABLE 18.2. ERGONOMIC RECORD KEEPING REQUIREMENTS</b>			
<b>RECORD TYPE</b>	<b>LOCATION</b>	<b>RESPONSIBLE PARTY</b>	<b>RETENTION TIME*</b>
Employee Comfort Surveys	Each site	Site Safety Specialist	As per note below.
	New Orleans Safety and Health	New Orleans Industrial Hygiene	As per note below.
All Professional Reports and Evaluations	New Orleans Safety and Health	New Orleans Industrial Hygiene	As per note below.
Ergonomic JHAs	Each Site	Site Safety Specialist	As per note below.
	New Orleans Safety and Health	New Orleans Industrial Hygiene	As per note below.

**\*NOTE ON TABLE: Retention Time.**

Inactive records that are no longer required for current use should be removed from the office. Records are to be prepared and sent to storage in accordance with procedures listed in ASI1400.29, "Records Management Program." The only approved disposition and retention authorities for all Federal records are the Federal schedules as published by the Archivist of the United States at the National Archives and Records Administration in Washington, D.C (NARA). The DM Records Inventory and Disposition Schedule (RIDS) is a drill-down of these Federal schedules, and is to be used to determine the handling of specific DM records. Once the retention period stated in the Federal schedules has been reached, records will be dispositioned (permanent records transferred to NARA and temporary records destroyed) in accordance with the Federal Schedules. In the absence of an approved RIDS (i.e., a RIDS that has been signed by the DM Records Officer), contact the Records Management Department for handling instructions.