

SOP-203 (Ver. 3)

**Ergonomics Program** 

Standard Operating Procedure (SOP)

Effective: 1/25/2022 Supersedes: 11/02/2020

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# James Herberg

#### I. Purpose

The purpose of the Ergonomics Program is to protect Orange County Sanitation District (OC San) staff and contract employees from work-related musculoskeletal disorders (WMSDs), promote awareness of ergonomic risk factors, increase proper reporting of signs and symptoms of musculoskeletal disorders (MSDs), and implement an effective training program.

The Ergonomics Program will provide a comprehensive approach to detect, correct, and prevent musculoskeletal disorders (MSDs). This will be accomplished by training employees in the awareness of and proper reporting of ergonomic risk factors and early reporting of signs and symptoms of MSDs. reviewing incident reports, conducting workplace ergonomic risk assessments, employing engineering and administrative ergonomic hazard reduction controls, and educating employees about the potential effects of ergonomic risk exposures.

#### Background П.

OC San has developed this Ergonomics Program in accordance with the state of California Occupational Safety and Health Administration (Cal-OSHA) regulations, including Repetitive Motion Injuries (Title 8, California Code of Regulations (CCR), Section 5110).

#### III. Definitions

Administrative Controls – Changes in the way that work is assigned or scheduled to reduce the magnitude, frequency, or duration of exposure to ergonomic risk factors. Examples of administrative controls for musculoskeletal disorders may include employee rotation, job task broadening, alternative tasks, employer-authorized changes in work pace.

**Engineering Controls** – Methods of controlling worker exposure to risk factors by redesigning equipment, tools, and workstations. Engineering controls are part of hazard prevention and control. Engineering controls are physical changes to a job that reduce MSD hazards.

Ergonomics – the science of fitting workplace conditions and job demands to the capabilities of the working population.

Health Care Professional (HCP) – physician or other licensed health care professional whose legally permitted scope of practice (e.g., license, registration, or certification) allows them to provide independently or to be delegated the responsibility to carry out some or all the MSD management or Return to Work requirements.

**Identical Work Activity -** Employees performing the same repetitive motion task, such as but not limited to, word processing, assembly, or loading.

Job Safety Analysis (JSA) - is a safety procedure which helps integrate accepted safety and health principles and practices into a task or job operation

**OSHA-300 form -** A form that the OC San is required to complete, fill out, and tun in for all employee injuries that shall be recorded in accordance with 8 CCR 14300

**Musculoskeletal Disorders (MSD)** – An injury or disorder of the muscles, nerves, tendons, joints, ligaments, cartilage, or spinal disks that are caused by sudden, sustained, or repetitive physical exertion, are not the result of any instantaneous non-exertion event (e.g., slips, trips, or falls, motor vehicle accidents), and range in severity from mild/occasional to intense/chronic pain as diagnosed by a health care professional.

**MSD Hazard -** The presence of risk factors in a job which occur at a magnitude, duration, or frequency reasonably likely to cause MSDs that result in work restrictions or medical treatment beyond first aid.

**Personal Protective Equipment (PPE)** – Gloves, hard hats, eye protection, kneepads and other equipment that may help reduce hazards until other controls can be implemented, or to supplement existing controls. Examples of PPE include vibration-reduction gloves and carpet layer's knee pads.

**Risk Factors** – An aspect of a job that increases the worker's chance of getting a work-related musculoskeletal disorder from force, awkward posture, repetition, vibration, and contact stress.

**Work Practice Controls** - Changes in the way an employee performs the physical work activities of a job that reduce or control exposure to MSD hazards. Work practice controls involve procedures and methods for safe work. Example of a work practice control is the use of two-person lift teams. Work practice controls also include procedures for safe and proper work that are used to reduce the duration, frequency, or severity, including training, job rotation and gradual exposure to the work.

**Work Related Causation-** The repetitive motion injuries were predominantly caused (i.e., 50% or more) by a repetitive job, process, or operation.

**Work-related Musculoskeletal Disorders (WMSDs)** – MSDs that can be attributed to the work environment and the performance of work. MSDs that are made worse or longer lasting by work conditions requiring lifting, pushing pulling or carrying irregularly shaped objects, maintain awkward or unnatural postures, withstand cold temperatures, withstand vibrations from machines and tools, and increase the intensity, frequency, or duration of activities.

**Work Restrictions -** Limitations, during the recovery period, on an employee's exposure to MSD hazards. Work restrictions may involve limitations on the work activities of the employee's current job (light duty), transfer to temporary alternative jobs, or temporary removal from the workplace for recovery.

# IV. Responsibilities

## A. Risk Management

Risk Management will serve as the Program Administrator for the Ergonomics program, which includes:

- 1. Develop and update the Ergonomics Program in accordance with applicable regulations and guidance documents.
- 2. Evaluate the effectiveness of this program on an annual basis.
- 3. Report to and consult with various committees or teams on ergonomic issues.
- 4. Train employees on methods of early reporting and musculoskeletal disorder signs and symptoms, and ergonomic risk factors and potential harm to their bodies.
- 5. Prioritize ergonomic evaluations based on available incident rate data.
- 6. Perform ergonomic risk factor measurements and observations and communicate results to supervision and employees.
- 7. Support the Ergonomics program with resources and staff.
- 8. Evaluate ergonomic injuries to help develop long term goals.
- 9. Maintain records of ergonomic evaluations and recommendations for equipment improvements.
- B. Supervision

Supervisors and Managers are key personnel in promoting and maintaining a safe work environment. Supervisory responsibilities related to the Ergonomics Program include:

- 1. Support and implement corrective measures to identified ergonomic risk factor exposures to reduce or eliminate ergonomic injuries.
- 2. Establish a safety culture which encourages active employee participation.
- 3. Encourage early reporting of signs and symptoms of MSDs.
- 4. Ensure employees follow the health care professionals (HCPs) recommendations regarding work restrictions.
- 5. Notify Risk Management of ergonomic issues reported by their employees.
- 6. Notify Risk Management of changes in the workplace processes or equipment that may change (increase or decrease) ergonomic risk factors.
- 7. Ensure employees have completed required ergonomics training.
- C. Employees

Employees are often the first to see or experience ergonomic hazards. Due to firsthand experience and job knowledge, employees are valuable assets in identifying ergonomic hazards and reducing musculoskeletal disorders. Employees are responsible for:

- 1. Identifying and reporting ergonomic hazards to their supervisor and Risk Management.
- 2. Reporting early signs and symptoms of musculoskeletal disorders.
- 3. Follow safe work practices related to their jobs that are intended to reduce ergonomic risks.
- 4. Abide by the health care professionals' treatment requirements.
- 5. Actively participate in the recognition, analysis, and abatement of ergonomic risks

# V. Procedure

## A. Workplace Analysis

A key component of the Ergonomics Program is the identification and evaluation of existing or potential ergonomic hazards. Ergonomic evaluations will be conducted by Risk Management to identify and evaluate WMSDs. Ergonomic evaluations will be completed under the following conditions:

- 1. Employee requests an evaluation of their office, industrial or laboratory work area.
- 2. Each job, process, or operation of identical work activity or a representative number of such jobs, processes, or operations of identical work activities shall be evaluated for exposures which have caused RMIs.
- 3. When early signs or symptoms of a musculoskeletal disorder is reported or if a musculoskeletal disorder injury has occurred while performing a job task.
- 4. Projects in the design phase to verify ergonomic risk factors are identified and corrected.
- B. Hazard Prevention and Control

Once ergonomic hazards have been identified, a control method or combination of control methods will be implemented to control or prevent the hazard. Any exposures that have caused RMIs shall, in a timely manner, be corrected or if not capable of being corrected have the exposures minimized to the extent feasible. The following controls maybe considered:

- 1. Engineering Controls where feasible, preferred method for controlling WMSD hazards. Engineering controls are the physical changes to jobs that control exposure to WMSD hazards, which include a physical design change to the workstation, tool and equipment design or selection, adjustability for differing individual capabilities and limitations.
- 2. Work Practice Controls Safe work procedures and techniques to reduce the likelihood of exposure to WMSD hazards through alteration of the way the job or physical work is performed, such as proper lifting techniques, proper use of tools, and correct use of ergonomic equipment.
- 3. Administrative Controls Procedures and methods instituted by Supervision that significantly reduce daily exposure to WMSD hazards by alternating the way work is performed, which includes the reduction in duration and/or frequency and severity of exposures (e.g., alternative

work scheduling, increased task staffing, job rotation or enlargement, extra relief personnel during peak times, changes of job methods).

- 4. Personal Protection Equipment May only be used as an interim control, except where other controls are not feasible.
- C. Evaluation

The ergonomic evaluation will evaluate the job, task, processes, or workstation. Once the evaluation has been completed the following may be conducted:

- 1. Workstation adjustment.
- 2. Office ergonomic equipment will be recommended.
- 3. Input devices will be ordered through Information Technology (IT).
- 4. Job Safety Analysis (JSA) will be conducted.
- 5. Ordering new tools and equipment
- 6. A Service Request will be created through MAXIMO
- 7. Small project request through Engineering
- D. Medical Management

OC San will make available prompt and effective medical management whenever an employee has a WMSD. Medical management, including recommended work restrictions, will be provided at no cost to the employee. Medical treatment protocols for the health care professional will establish WMSDs

- 1. When reports of WMSDs are made, employees will be provided with prompt access to health care professionals for effective evaluation, treatment, and follow-up.
- 2. Information will be provided to the HCPs to help ensure medical management is effective.
- 3. Written medical opinion will be obtained from the HCP and the employee will be promptly provided a copy.
- E. Training

Training is critical to the success of the Ergonomics Program at OC San. Training and education should give Supervision and employees an understanding of the potential risk of injuries, there causes, symptoms, prevention, and treatment. The OC San training covers the following key concepts:

- 1. Overview of Ergonomics principles.
- 2. The signs and symptoms of work-related musculoskeletal disorders, the importance of early reporting symptoms and injuries to their supervisor, and medical management procedures.
- 3. How to recognize workplace risk factors associated with work-related musculoskeletal disorders and the ways to reduce exposure to those risk factors.

- 4. Hazard prevention and control measures used to reduce MSDs exposure.
- 5. Ergonomic regulation and associated responsibility.
- 6. Methods used by the employer to minimize RMIs
- F. Program Evaluation

Risk Management has established procedures and mechanisms to monitor the implementation and effectiveness of the Ergonomics Program and establish baseline measurements. Injury date will be collected, stored, and analyzed through Cority.

# VI. Recordkeeping

All records created or generated during this procedure shall be legible and stored in a way that they are readily retrievable in facilities or electronic document/content management systems that provide a suitable environment to prevent damage, deterioration, or loss. Records may be in the form of any type of media, such as hard copy or electronic media. The OC San Records Retention Schedule is the official procedure governing the retention, retirement, and destruction of District records. Document owners should use these schedules to determine the item and series that

best fit their records. Document owners are responsible for ensuring that documents are properly marked, indexed, and filed for their projects or area of responsibility.

#### VII. References

Title 8 California Code of Regulations, Section 5110 Repetitive Motion Injuries

#### VIII. Revision History

| Version | Date       | Ву            | Reason                             |
|---------|------------|---------------|------------------------------------|
| 1       | 05/18/2009 | Bauer, Wesley | New                                |
| 2       | 05/14/2012 | Tetsch, Gina  | Revision                           |
| 3       | 01/14/2020 | Stone, Jereme | Periodic Update – Refer to Program |
|         |            |               | Change Log                         |
| 4       | 12/08/2021 | Stone, Jereme | Annual Program Update – Refer to   |
|         |            |               | Program Change Log                 |