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Policies and Procedures

Title: ARS Occupational Medical Surveillance Program

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This P&P contains ARS policy and responsibilities regarding the medical surveillance of employees potentially exposed to chemical, biological, and/or physical hazards in the work environment. It describes the procedures for establishing and administering a comprehensive Occupational Medical Surveillance Program (OMSP) which replaces the earlier Occupational Health Maintenance Program.

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1. Applicability

The contents of this P&P are applicable to all functions under the direction of the ARS Administrator whether accomplished by ARS personnel, cooperators, or contractors within ARS. Exceptions to the provisions of this P&P require Office of the Director, Human Resources Division (HRD) and/or Administrative & Financial Management (AFM) approval. Waivers must be documented and copies furnished to the next higher management level. In all instances, however, program coverage consistent with the intent of the pertinent provision will be provided.

2. Policy

It is ARS policy to provide an Occupational Medical Surveillance Program (OMSP) for authorized employees considered for assignment or presently assigned to work with chemical, biological, and/or physical hazards. The OMSP will be established and administered according to the procedures detailed in this P&P.

Participation in the OMSP is voluntary. Medical evaluations required by OSHA regulations may be performed in conjunction with the OMSP, however the OMSP should not be confused with OSHA requirements. The OMSP is a voluntary, broad-based medical surveillance program, and its purpose is to identify exposures to potentially harmful agents and aid in the early detection of adverse health effects, if any. OSHA-mandated medical evaluations are limited and specific to the hazard of work activity in question.

The results of all examinations provided under this program will be safeguarded in accordance with 5 CFR 293, Subpart E, "Employee Medical File System Records."

3. Authorities

- The Occupational Safety & Health (OSH) Act of 1970, Section 6 (b)(7)
- 29 Code of Federal Regulations (CFR) 1960
- 29 CFR 1910
- 5 CFR Chapter 1, Part 339, Medical Qualification Determinations
- 5 CFR 293, Subpart E, Employee Medical File System Records

4. Coverage

The OMSP examines authorized employees to establish health-status baselines and detect work-related changes in health status. Medical records will document procedures performed, establish baselines, and work-related physiological changes (if any) throughout the employee's career.

This information will be used to establish trends and to determine unusual susceptibility to illness from exposures in the work environment, permit identification of harmful effects of agents used, and provide medical treatment and advice. It also will be used to plan, implement, and evaluate occupational and preventive health programs.

The OMSP is designed for the detection of occupationally significant medical anomalies. The limited medical procedures performed are not intended, and should not be construed, to substitute for the care provided by the employee's personal physician.

Employees may be provided treatment for occupational injuries and exposures from the OMSP Local Provider (the local clinic/examiner providing medical services). However, payment for these services resulting from a work-related injury should be administered through the Office of Workers' Compensation Program (OWCP) and will be recorded on the location's Occupational Safety and Health Administration (OSHA) log, if appropriate. In such an instance, employees must complete the appropriate OWCP forms, e.g., CA-1 or CA-2.

5. Program Description/Procedures

Selection Criteria for Authorized Employees

The selection of eligible enrollees for the OMSP (i.e., the accurate definition of "Authorized Employees") is generally determined by the occupational exposures indicated on Form ARS-182A/B and the employees supervisor. Although it is impossible to establish selection criteria which provide adequate guidance in all cases, the following rules should apply in most instances.

Consult with ARS Safety, Health, and Environmental Management Branch (SHEMB), Area Safety and Health Manager (ASHM), Cluster Environmental Protection Specialist (CEPS), and/or your location safety staff for assistance with individual cases that involve more nebulous circumstances.

Employees meeting the following criteria may participate in the OMSP:

- Those who work with, or are potentially exposed to, chemical, biological, and/or physical hazards that could cause adverse health effects, e.g., pesticide applicators, animal caretakers, and maintenance workers.
- Those who are identified by their supervisor based on his/her assessment of the work environment.

According to OSHA regulations, ARS is required to perform medical monitoring of employees meeting the following criteria:

- Those who are required to wear respiratory protection.
- Those who are required to be in a Hearing Conservation Program.
- Those who apply pesticides labeled Danger or Warning (Toxicity Category 1 and 2).
- Those who are required to be in the Bloodborne Pathogen Program.
- Those who work with chemical and/or physical hazards, where their work environment is at or above the Action Level, e.g., one-half the Permissible Exposure Level (PEL) or Threshold Limit Value (TLV).

NOTE: The last criterion is the most complex rule to apply because it takes into account factors such as synergistic effects, the relative toxicity of the material (i.e., less toxic materials will generally have higher PELs and vice versa), the nature of the workplace (e.g., generation rates, available ventilation, room size), potential exposure duration on a daily basis, and a myriad of other complicating factors. The SHEMB, ASHM, CEPS and/or your location safety staff are available for consultation and advice regarding some of these decisions. Normally the determination of Action Levels will be made by the responsible safety staff.

In as much as the OMSP is a medical surveillance program that is already in place, ARS recommends its use for performing the medical monitoring required under these mandates. (For example, employees who are required to use a respirator when performing their duties must receive an initial medical evaluation.) ARS facilities are free to use other mechanisms to perform the monitoring.

All employees who meet the aforementioned criteria will complete an ARS-182A/B form identifying their occupational exposures as a tool to determine their participation. The annual

medical occupational examination date will be established based on birth date or some other recurring date. The frequency of examinations may be altered when supported by industrial hygiene data.

Selection of Appropriate Medical Tests

The selection of appropriate medical procedures to identify work-related adverse effects in employee populations is frequently a "best estimate" process which is subject to criteria that are continuously changed or modified. The ARS Medical Matrix identifies minimal test requirements. The Local Provider may add additional tests with prior approval from the Contracting Officer.

The determination of work-related diseases or adverse health effects uncovered by medical tests is complicated by the fact that occupational related diseases frequently do not differ in their presentation from diseases of the general population. Although the diagnosis may be made by the examining physician, the determination of the proximate cause(s) of the disease/anomalies, and the relationship to potential toxic exposures in the workplace is considerably more difficult; it is frequently impossible. This relationship is dependent upon the history of exposure to a particular agent, the degree and duration of exposure, the efficacy of industrial hygiene controls, and the presence of compounding factors such as smoking and non-work related exposures. The determination of work-related diseases or adverse health effects, therefore, cannot be made with absolute certainty, and must depend upon the interpretation of these factors by expert occupational medical judgment.

Recommendations for the Establishment of Medical Monitoring Services from a Local Provider

Basic medical services vary throughout the nation according to available levels of expertise and costs. Economical services are most often available through a reimbursable agreement with a Government affiliated provider, such as a Public Health Service Clinic, Federal Occupational Health (FOH), a Veteran's Administration Hospital, or a military complex.

Administration of the medical surveillance services should be under the supervision of a licensed doctor of medicine (MD) or doctor of osteopathy (DO). In addition, at a minimum, the MD/DO should be Board Certified in Occupational Medicine or Board Certified in Internal Medicine. If a person with these credentials is not available, then an MD/DO who is Board Eligible in Occupational Medicine or Internal Medicine would be an acceptable alternative. In either case, a physician with experience and interest in occupational medicine is preferred.

Reimbursement for administrative costs such as postage, duplication, etc., should be included in the Local Provider Agreement. Official postage-and fees-paid envelopes, cards, and labels cannot be used for this purpose. (*See P&P 263.1*).

To enhance the effectiveness of the Local Provider, the completed ARS Forms 182-A/B and C(or C(2)) should be sent to the physician for review so that lab and other tests are completed

prior to the enrollee's medical occupational examination. A generic Statement of Work is available from the ASHM.

Data Submission, Interpretation, Communication, and the Overall Procedures for Operating the OMSP

The following sequence of actions provides detailed guidance regarding every step required in the operation of the OMSP:

- The OMS Coordinator and supervisor identify the authorized employees in accordance with the previously described selection criteria.
- The OMS Coordinator provides ARS-182A/B, C, or C(2) forms (available on INFORMS) to authorized employees.
- The employee fills in the ARS-182A/B. The employee may require assistance from the supervisor, from a location Safety and Health Committee representative, or from the ASHM/CEPS to ensure that the information provided accurately represents potential work exposures. The employee signs the appropriate block on ARS-182A/B and returns it to the supervisor.
- The supervisor reviews the ARS-182A/B, recommends the employee for OMS participation, if appropriate, signs the form, and forwards to the OMS Coordinator.
- The participating employee completes the ARS-182C or 182C(2).
- Based on the potential work exposures identified in the ARS-182A/B, the OMS Coordinator uses the ARS Medical Matrix to generate the list of appropriate tests that are to be conducted by the Local Provider. This listing is sent to the Local Provider along with the ARS-182A/B. The ARS-182C, or C(2) form is sent to the Local Provider either by the employee or the OMS Coordinator. The Local Provider may order additional tests for qualifying hazards that are not listed in the ARS Medical Matrix after contacting the Contracting Officer and/or Reviewing Medical Officer (RMO).
- The OMS Coordinator schedules medical testing with Local Provider for participating employees.
- The employee undergoes the specified medical tests and medical occupational examination. The examining physician notes findings on ARS-182D.
- The examining physician signs the examination form and sends legible copies of all materials (ARS-182A/B, ARS-182C or C(2), lab results, physical examination form ARS-182D) to the RMO within 14 days of examination completion. The Local Provider is responsible for identifying and communicating serious or life-threatening disorders directly to the employee during the exam.

- The RMO will perform a detailed review of each medical file received and compare this information to previous test results. Historical and current exposure information, and the latest toxicological data, shall be reviewed in an effort to identify health status changes.
- Following this review, the designated management official, usually the OMS Coordinator, will receive a letter for each employee that will identify the tests performed, occupational findings, and recommendations for additional tests (if necessary).
- The employee will also receive a personalized copy which documents work-related findings plus any other medically significant findings unrelated to work which the employee should bring to the attention of his/her personal physician.
- The accumulation of a uniform database will be available for the performance of trend analysis, occupational illness statistics, and comparison studies which will facilitate the recognition and control of health problems throughout the ARS. The data will be maintained and controlled by the RMO (DHHS, Division of Federal Occupational Health).

6. Summary of Responsibilities

The Administrator, ARS

- Provides leadership and funding in support of the Occupational Medical Surveillance Program goals and policies.

Area Directors/Center Directors/Location Coordinators/ Research Leaders

- Ensure funds are provided for establishment of an agreement with a Local Provider for the delivery of medical services as outlined in this P&P.
- Assign responsibility for development and administration of Local Provider agreement to the AAO/LAO, as appropriate.
- Provide funds to support industrial hygiene services associated with this program.
- Appoint OMS Coordinator for the Area/Location/Management Unit.
- Ensure training for OMS Coordinator on the Occupational Medical Surveillance Program.

Area Administrative Officers/Location Administrative Officers

- Ensure the establishment of the Local Provider agreement for medical services as outlined in this P&P.

- Authorize payment of invoices from Local Provider of medical services after receiving report of findings and determinations from the RMO.

Supervisors

- Identify employees who are potentially exposed to chemical, biological, and/or physical hazards, and who are recommended to be enrolled in the OMSP according to the selection criteria provided in this P&P.
- Authorize employee enrollment in the OMSP based on the hazards to which the employee is exposed and results of the industrial hygiene surveys. Consult with OMS Coordinator, CDSO, Location Safety Specialist, ASHM, and/or CEPS, as appropriate.
- Ensure the distribution of ARS-182A/B, C, C(2), D, and any associated forms required to complete the OMS examination.
- Review the employee(s) ARS-182A/B to ensure it is complete and accurate before signing.
- Ensure that all completed exposure forms are reviewed by the OMS Coordinator prior to the visit with the Local Provider.
- Review letters from RMO and ensure occupational recommendation findings are addressed.

All Employees Meeting Section 5 Criteria

- Complete an initial ARS-182 A/B form identifying exposure information, sign and give to supervisor.

Authorized Employees

- The Medical History form (ARS-182C) will be provided to all new employees prior to their first medical examination. The Medical History Update form (ARS-182C(2)) will be provided to employees already enrolled in the OMSP. Participants will complete the appropriate medical history form, and forward it to the OMS Coordinator in a sealed envelope, unless directed to bring it to the medical test site. Employees already enrolled need only complete the ARS-182C(2) that updates their medical history annually. The ARS-182C & 182C(2) are confidential and are covered by the Privacy Act.

Director, Human Resources Division (HRD)

- Monitor and administer the overall OMSP.
- Serve as designated Employee Medical File System Manager for ARS (may delegate).

- Provide liaison between ARS personnel (e.g., ASHM, CEPS and/or location Safety Specialist) and the RMO.
- Designate RMO as the custodian of the Employee Medical File System in accordance with 5 CFR Part 293.

ASHM, CEPS, and Location Safety Specialist (as appropriate)

- Evaluate work environments and determine ways to eliminate or limit potential exposure to qualifying hazards.
- Provide or assist in arranging industrial hygiene services (e.g., determining Action Levels) when requested, and ensure the results are sent to the RMO so that the workplace environment may be more accurately described in terms of exposure potential.
- Assist location level personnel in all phases of the establishment of an effective OMSP.
- Review the RMO(s) quarterly synopsis report of anomalies (without personal identifiers).

OMS Coordinator (locally assigned personnel)

- Coordinate with AAO/LAO, supervisors, and employees to identify eligible employees.
- Enroll authorized employees and schedule appropriate medical tests according to the guidelines presented in this P&P.
- Forward all completed forms to the Local Provider and assure that the confidentiality of all employee medical information is preserved.
- Enforce the agreement/contract to ensure that resultant medical data are submitted by the Local Provider to the RMO (the appropriate centralized data review facility as specified in this P&P).
- Schedule initial and follow-up examinations and routine retesting as required.
- Distribute report of work-related medical findings to each supervisor.

Local Provider

- Provide the facilities to perform the medical services.
- Review ARS-182A/B, C, C(2) forms.

- Schedule exams so that when possible the lab test results are available to the examiner at the time of exam. This is usually a two-step process: a) lab tests/procedures performed then, b) appointment scheduled with examiner.
- Select appropriate diagnostic testing based on ARS Medical Matrix (minimum test requirements shall be based on the ARS Medical Matrix).
- Perform the medical occupational examination.
- Analyze the laboratory and medical occupational examination results and discuss the results with the employee at the time of the examination. Compare with prior history and exam results if data available.
- Complete the ARS-182D and note irregularities and abnormalities which would jeopardize the performance of the employee's normal work duties.
- Identify and communicate serious or life threatening disorders directly to the employee during the exam. If these are work-related, the findings will be expeditiously reported directly to the RMO.
- Forward legible copies of all data to the RMO within 14 days of the exam. (Copies of all medical records shall be sent directly to the RMO to ensure confidentiality. No medical information should be returned to the employee's workplace. The one exception is that Respirator Medical Clearance certificates shall be returned directly to the local OMS Coordinator.)
- Provide advice and consultation services to participants and to local management officials.

Reviewing Medical Officer

- Review all forms and medical data forwarded by the Local Provider of medical services.
- Determine if the participant has detectable medical problems, and if so, to what extent they may possibly be work-related.
- Prepare and send a confidential letter, mailed directly to each participant's mailing address within 30 days. This letter documents all medical problems detected in addition to identifying specific anomalies deemed to be work-related. A copy of this letter goes to the Local Provider.
- Prepare and send a separate employer letter, mailed directly to the OMS Coordinator that only documents work-related abnormalities. The employee also receives a copy. A copy of this letter is also sent to the Local Provider when there have been significant occupational findings.

- Provide medical surveillance information to the HRD and ASHM on a routine basis, as defined by ARS. Services provided will include occupational illness statistics and trend analyses.
- Provide consultation services as requested.
- Prepare, update, and distribute the ARS Medical Matrix in CD-ROM to ASHM.
- Attend annual program review meetings.

7. Glossary

Action Level. That level of worker exposure, determined by workplace sampling, at or above which medical monitoring will be performed. The concentration designated in 29 CFR, Part 1910 for a specific substance, calculated as an 8-hour time-weighted average, which initiates certain activities such as exposure monitoring and medical surveillance, usually one-half the Permissible Exposure Limit (PEL - see definition below). For substances with an OSHA PEL, the action level is defined and may be one-half of the PEL. For exposures not regulated by OSHA, other consensus standards may be used for an action level. One such consensus standard is use of one-half of the Threshold Limit Value (TLV - see definition below) as an action level.

AD/CD. Area Director/Center Director.

ARS-182A/B. Occupational Medical Surveillance Program -- Occupational Exposures (9/01) (replaces previous edition which is not usable).

ARS-182C. Occupational Medical Surveillance Program -- Occupational/Medical Questionnaire (11/00) (replaces previous edition which is not usable).

ARS-182C(2). Occupational Medical Surveillance Program B Medical History Update Form (9/00).

ARS-182D. Occupational Medical Surveillance Program -- Physical Examination Form (9/00) (replaces previous edition which is not usable).

ARS Medical Matrix. A list of minimum criteria, including laboratory and ancillary tests which should be performed on individuals reporting exposures to a variety of chemical, physical or biological hazards. It is based on testing criteria which are recommended by the National Institutes of Occupational Safety and Health (NIOSH), OSHA, and published references in the field of Occupational Medicine and Toxicology.

ASHM. Area Safety and Health Manager.

Authorized Employees. Can be any employee, e.g., research scientists, technicians, certified pesticide applicators, maintenance personnel, or other Federal employees who have been specifically trained and assigned by a supervisor to work with or in the vicinity of qualifying hazards. Non-Federal workers, such as those employed by cooperators or contractors, may be authorized OMSP physicals at ARS expense if the task order that specifies the job requirements includes participation in the OMSP. Physical examinations may be provided as part of this program.

CEPS. Cluster Environmental Protection Specialist.

CFR. Code of Federal Regulations.

Chemical, Biological, and/or Physical Hazards. Chemical hazards (e.g., pesticides, solvents, any exposures to chemicals where alteration of health status may occur, etc.); other hazards (e.g., asbestos and any other respiratory hazards); physical hazards (e.g., noise, lasers, radiation, etc.); biological hazards (e.g., rabies, human blood and body fluids, exposure to animals, etiologic agents, etc.).

Emergency Exposure. Any occurrence, such as but not limited to, equipment failure, rupture of containers, or failure of control equipment that may or does result in an unexpected release of and exposure to a hazardous substance or condition.

FD. Facilities Division.

Hearing Conservation Program. Employees exposed to noise levels equal to or exceeding an 8 hour time-weighted average action level of 85 dBA shall be included in a hearing conservation program. The program includes annual audiometric exams and training on the importance, use, and care of hearing protectors. Feasible engineering and administrative controls shall be considered to reduce employee's exposure below 85 dBA so that this program will not be required.

HRD. Human Resources Division.

Industrial Hygiene. The science and art devoted to the recognition, evaluation, and control of those environmental factors or stresses, arising from the workplace which may cause sickness, impaired health and well being, or significant discomfort and inefficiency among employees and/or citizens of the community.

LAO/AAO. Location/Area Administrative Officer.

LC. Location Coordinator.

Local Provider. A licensed practicing clinician or professional health care provider who will perform the medical occupational examination on the employee. The examining physician should be experienced in the field of Occupational Medicine and Industrial Health or a Board-Certified Internist.

Medical Occupational Examination. Medical examinations performed to prevent work-related health problems by assessing the health status of individuals in relation to their work and making medical recommendations regarding worker placement, accommodation, and exposure controls. An occupational medical examination may include:

- **Medical and Occupational History.** Information regarding an individual's medical background including work history, specific occupational exposures, work practices, and work-related health problems. The occupational history augments the basic medical history in assisting the practitioner in determining if the worker has (or is at risk of developing) work-caused or aggravated health problems.
- **Physical Examination.** The process of inspection, palpation, percussion, and auscultation of the body to detect pathologic conditions.
- **Clinical Laboratory Tests.** Clinical tests and measurements used to characterize the status of specific organ systems and physiologic functions.
- **Biological Monitoring.** Analysis of a body component (blood, urine, expired breath, hair, etc.) to detect the presence of or effect of an agent in the body and assess potential for harm.

OMSP. Occupational Medical Surveillance Program.

OMS Coordinator. The Occupational Medical Surveillance Coordinator is a person who acts as the coordinator for the program at location level.

OSHA. Occupational Safety and Health Administration.

PEL. Permissible Exposure Limit which is the exposure level that is published and enforced by OSHA as a legal standard. (Table Z-1, Z-2, or Z-3 of OSHA regulation 29 CFR 1910.1000).

Respiratory Protection Program. The employer shall provide a medical evaluation to determine the employee's ability to use a respirator, before the employee is fit tested or required to use the respirator in the workplace. The employer may discontinue an employee's medical evaluations when the employee is no longer required to use a respirator.

Reviewing Medical Officer (RMO). A licensed MD/DO with Board Certification in Occupational Medicine whose training and experience have led to the development of expertise in the field of occupational medicine. This specialty involves the observation of work practices and toxic exposure potentials in an effort to detect, confirm, and prevent work-related illnesses. The RMO will perform trend analysis and inform the enrollee and the appropriate management officials of any work-related problems through a formalized report of medical findings and determinations. The RMO is currently provided by the Department of Health & Human Services, Division of Federal Occupational Health, through an inter-agency agreement.

SHEMB. Safety, Health, and Environmental Management Branch.

Threshold Limit Value (TLV). Airborne concentrations of substances that represent conditions under which it is believed that nearly all workers may be repeatedly exposed day after day without adverse health effects. TLV's are recommendations from the American Conference of Governmental Industrial Hygienists (ACGIH).

Time-Weighted Average (TWA). Concentrations of stressors or hazards which have been weighted for time duration of the sample. Most commonly expressed as an average concentration for a normal 8-hour workday or 40-hour week.

Workplace. A physical location where the work or operations are performed. Workplaces may be administrative, operational, or industrial.

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