

(iii) Discuss the relevant authorities that support the position asserted, including rulings, regulations, interpretations, and previous decisions issued by DOE; and

(iv) Furnish full and complete answers to any questions set forth in the preliminary notice.

(2) Copies of all relevant documents must be submitted with the reply.

(d) If a contractor fails to submit a written reply within 30 calendar days of receipt of a PNOV:

(1) The contractor relinquishes any right to appeal any matter in the preliminary notice; and

(2) The preliminary notice, including any proposed remedies therein, constitutes a final order.

(e) A copy of the PNOV must be prominently posted, once final, at or near the location where the violation occurred until the violation is corrected.

**§ 851.43 Final notice of violation.**

(a) If a contractor submits a written reply within 30 calendar days of receipt of a preliminary notice of violation (PNOV), that presents a disagreement with any aspect of the PNOV and civil penalty, the Director must review the submitted reply and make a final determination whether the contractor violated or is continuing to violate a requirement of this part.

(b) Based on a determination by the Director that a contractor has violated or is continuing to violate a requirement of this part, the Director may issue to the contractor a final notice of violation that states concisely the determined violation and any remedy, including the amount of any civil penalty imposed on the contractor. The final notice of violation must state that the contractor may petition the Office of Hearings and Appeals for review of the final notice in accordance with 10 CFR part 1003, subpart G.

(c) If a contractor fails to submit a petition for review to the Office of Hearings and Appeals within 30 calendar days of receipt of a final notice of violation pursuant to §851.42:

(1) The contractor relinquishes any right to appeal any matter in the final notice; and

(2) The final notice, including any remedies therein, constitutes a final order.

**§ 851.44 Administrative appeal.**

(a) Any contractor that receives a final notice of violation may petition the Office of Hearings and Appeals for review of the final notice in accordance with part 1003, subpart G of this title, within 30 calendar days from receipt of the final notice.

(b) In order to exhaust administrative remedies with respect to a final notice of violation, the contractor must petition the Office of Hearings and Appeals for review in accordance with paragraph (a) of this section.

**§ 851.45 Direction to NNSA contractors.**

(a) Notwithstanding any other provision of this part, the NNSA Administrator, rather than the Director, signs, issues and serves the following actions that direct NNSA contractors:

- (1) Subpoenas;
- (2) Orders to compel attendance;
- (3) Disclosures of information or documents obtained during an investigation or inspection;
- (4) Preliminary notices of violations; and
- (5) Final notices of violations.

(b) The NNSA Administrator shall act after consideration of the Director's recommendation.

**APPENDIX A TO PART 851—WORKER SAFETY AND HEALTH FUNCTIONAL AREAS**

This appendix establishes the mandatory requirements for implementing the applicable functional areas required by §851.24.

**1. CONSTRUCTION SAFETY**

(a) For each separately definable construction activity (e.g., excavations, foundations, structural steel, roofing) the construction contractor must:

(1) Prepare and have approved by the construction manager an activity hazard analysis prior to commencement of affected work. Such analyses must:

- (i) Identify foreseeable hazards and planned protective measures;
- (ii) Address further hazards revealed by supplemental site information (e.g., site characterization data, as-built drawings) provided by the construction manager;
- (iii) Provide drawings and/or other documentation of protective measures for which

applicable Occupational Safety and Health Administration (OSHA) standards require preparation by a Professional Engineer or other qualified professional, and

(iv) Identify competent persons required for workplace inspections of the construction activity, where required by OSHA standards.

(2) Ensure workers are aware of foreseeable hazards and the protective measures described within the activity analysis prior to beginning work on the affected activity.

(3) Require that workers acknowledge being informed of the hazards and protective measures associated with assigned work activities. Those workers failing to utilize appropriate protective measures must be subject to the construction contractor's disciplinary process.

(b) During periods of active construction (*i.e.*, excluding weekends, weather delays, or other periods of work inactivity), the construction contractor must have a designated representative on the construction worksite who is knowledgeable of the project's hazards and has full authority to act on behalf of the construction contractor. The contractor's designated representative must make frequent and regular inspections of the construction worksite to identify and correct any instances of noncompliance with project safety and health requirements.

(c) Workers must be instructed to report to the construction contractor's designated representative, hazards not previously identified or evaluated. If immediate corrective action is not possible or the hazard falls outside of project scope, the construction contractor must immediately notify affected workers, post appropriate warning signs, implement needed interim control measures, and notify the construction manager of the action taken. The contractor or the designated representative must stop work in the affected area until appropriate protective measures are established.

(d) The construction contractor must prepare a written construction project safety and health plan to implement the requirements of this section and obtain approval of the plan by the construction manager prior to commencement of any work covered by the plan. In the plan, the contractor must designate the individual(s) responsible for on-site implementation of the plan, specify qualifications for those individuals, and provide a list of those project activities for which subsequent hazard analyses are to be performed. The level of detail within the construction project safety and health plan should be commensurate with the size, complexity and risk level of the construction project. The content of this plan need not duplicate those provisions that were previously submitted and approved as required by § 851.11.

## 2. FIRE PROTECTION

(a) Contractors must implement a comprehensive fire safety and emergency response program to protect workers commensurate with the nature of the work that is performed. This includes appropriate facility and site-wide fire protection, fire alarm notification and egress features, and access to a fully staffed, trained, and equipped emergency response organization that is capable of responding in a timely and effective manner to site emergencies.

(b) An acceptable fire protection program must include those fire protection criteria and procedures, analyses, hardware and systems, apparatus and equipment, and personnel that would comprehensively ensure that the objective in paragraph 2(a) of this section is met. This includes meeting applicable building codes and National Fire Protection Association codes and standards.

## 3. EXPLOSIVES SAFETY

(a) Contractors responsible for the use of explosive materials must establish and implement a comprehensive explosives safety program.

(b) Contractors must comply with the policy and requirements specified in the DOE Manual 440.1-1A, DOE Explosives Safety Manual, Contractor Requirements Document (Attachment 2), January 9, 2006 (incorporated by reference, see § 851.27). A Contractor may choose a successor version, if approved by DOE.

(c) Contractors must determine the applicability of the explosives safety directive requirements to research and development laboratory type operations consistent with the DOE level of protection criteria described in the explosives safety directive.

## 4. PRESSURE SAFETY

(a) Contractors must establish safety policies and procedures to ensure that pressure systems are designed, fabricated, tested, inspected, maintained, repaired, and operated by trained and qualified personnel in accordance with applicable and sound engineering principles.

(b) Contractors must ensure that all pressure vessels, boilers, air receivers, and supporting piping systems conform to:

(1) The applicable American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (2004); sections I through section XII including applicable Code Cases (incorporated by reference, see § 851.27)

(2) The applicable ASME B31 (Code for Pressure Piping) standards as indicated below; and or as indicated in paragraph (b)(3) of this section:

(i) B31.1—2001—Power Piping, and B31.1a—2002—Addenda to ASME B31.1—2001 (incorporated by reference, see § 851.27);

- (ii) B31.2—1968—Fuel Gas Piping (incorporated by reference, see § 851.27);
- (iii) B31.3—2002—Process Piping (incorporated by reference, see § 851.27);
- (iv) B31.4—2002—Pipeline Transportation Systems for Liquid Hydrocarbons and Other Liquids (incorporated by reference, see § 851.27);
- (v) B31.5—2001—Refrigeration Piping and Heat Transfer Components, and B31.5a—2004, Addenda to ASME B31.5—2001 (incorporated by reference, see § 851.27);
- (vi) B31.8—2003—Gas Transmission and Distribution Piping Systems (incorporated by reference, see § 851.27);
- (vii) B31.8S—2001—Managing System Integrity of Gas Pipelines (incorporated by reference, see § 851.27);
- (viii) B31.9—1996—Building Services Piping (incorporated by reference, see § 851.27);
- (ix) B31.11—2002—Slurry Transportation Piping Systems (incorporated by reference, see § 851.27); and
- (x) B31G—1991—Manual for Determining Remaining Strength of Corroded Pipelines (incorporated by reference, see § 851.27).

(3) The strictest applicable state and local codes.

(c) When national consensus codes are not applicable (because of pressure range, vessel geometry, use of special materials, etc.), contractors must implement measures to provide equivalent protection and ensure a level of safety greater than or equal to the level of protection afforded by the ASME or applicable state or local code. Measures must include the following:

(1) Design drawings, sketches, and calculations must be reviewed and approved by a qualified independent design professional (*i.e.*, professional engineer). Documented organizational peer review is acceptable.

(2) Qualified personnel must be used to perform examinations and inspections of materials, in-process fabrications, non-destructive tests, and acceptance test.

(3) Documentation, traceability, and accountability must be maintained for each unique pressure vessel or system, including descriptions of design, pressure conditions, testing, inspection, operation, repair, and maintenance.

5. FIREARMS SAFETY

(a) A contractor engaged in DOE activities involving the use of firearms must establish firearms safety policies and procedures for security operations, and training to ensure proper accident prevention controls are in place.

(1) Written procedures must address firearms safety, engineering and administrative controls, as well as personal protective equipment requirements.

(2) As a minimum, procedures must be established for:

(i) Storage, handling, cleaning, inventory, and maintenance of firearms and associated ammunition;

(ii) Activities such as loading, unloading, and exchanging firearms. These procedures must address use of bullet containment devices and those techniques to be used when no bullet containment device is available;

(iii) Use and storage of pyrotechnics, explosives, and/or explosive projectiles;

(iv) Handling misfires, duds, and unauthorized discharges;

(v) Live fire training, qualification, and evaluation activities;

(vi) Training and exercises using engagement simulation systems;

(vii) Medical response at firearms training facilities; and

(viii) Use of firing ranges by personnel other than DOE or DOE contractor protective forces personnel.

(b) Contractors must ensure that personnel responsible for the direction and operation of the firearms safety program are professionally qualified and have sufficient time and authority to implement the procedures under this section.

(c) Contractors must ensure that firearms instructors and armorers have been certified by the Safeguards and Security National Training Center to conduct the level of activity provided. Personnel must not be allowed to conduct activities for which they have not been certified.

(d) Contractors must conduct formal appraisals assessing implementation of procedures, personnel responsibilities, and duty assignments to ensure overall policy objectives and performance criteria are being met by qualified personnel.

(e) Contractors must implement procedures related to firearms training, live fire range safety, qualification, and evaluation activities, including procedures requiring that:

(1) Personnel must successfully complete initial firearms safety training before being issued any firearms. Authorization to remain in armed status will continue only if the employee demonstrates the technical and practical knowledge of firearms safety semi-annually;

(2) Authorized armed personnel must demonstrate through documented limited scope performance tests both technical and practical knowledge of firearms handling and safety on a semi-annual basis;

(3) All firearms training lesson plans must incorporate safety for all aspects of firearms training task performance standards. The lesson plans must follow the standards set forth by the Safeguards and Security Central Training Academy's standard training programs;

(4) Firearms safety briefings must immediately precede training, qualifications, and

evaluation activities involving live fire and/or engagement simulation systems;

(5) A safety analysis approved by the Head of DOE Field Element must be developed for the facilities and operation of each live fire range prior to implementation of any new training, qualification, or evaluation activity. Results of these analyses must be incorporated into procedures, lesson plans, exercise plans, and limited scope performance tests;

(6) Firing range safety procedures must be conspicuously posted at all range facilities; and

(7) Live fire ranges, approved by the Head of DOE Field Element, must be properly sited to protect personnel on the range, as well as personnel and property not associated with the range.

(f) Contractors must ensure that the transportation, handling, placarding, and storage of munitions conform to the applicable DOE requirements.

#### 6. INDUSTRIAL HYGIENE

Contractors must implement a comprehensive industrial hygiene program that includes at least the following elements:

(a) Initial or baseline surveys and periodic resurveys and/or exposure monitoring as appropriate of all work areas or operations to identify and evaluate potential worker health risks;

(b) Coordination with planning and design personnel to anticipate and control health hazards that proposed facilities and operations would introduce;

(c) Coordination with cognizant occupational medical, environmental, health physics, and work planning professionals;

(d) Policies and procedures to mitigate the risk from identified and potential occupational carcinogens;

(e) Professionally and technically qualified industrial hygienists to manage and implement the industrial hygiene program; and

(f) Use of respiratory protection equipment tested under the DOE Respirator Acceptance Program for Supplied-air Suits (DOE-Technical Standard-1167-2003) when National Institute for Occupational Safety and Health-approved respiratory protection does not exist for DOE tasks that require such equipment. For security operations conducted in accordance with Presidential Decision Directive 39, U.S. POLICY ON COUNTER TERRORISM, use of Department of Defense military type masks for respiratory protection by security personnel is acceptable.

#### 7. BIOLOGICAL SAFETY

(a) Contractors must establish and implement a biological safety program that:

(1) Establishes an Institutional Biosafety Committee (IBC) or equivalent. The IBC must:

(i) Review any work with biological etiologic agents for compliance with applicable Centers for Disease Control and Prevention (CDC), National Institutes of Health (NIH), World Health Organization (WHO), and other international, Federal, State, and local guidelines and assess the containment level, facilities, procedures, practices, and training and expertise of personnel; and

(ii) Review the site's security, safeguards, and emergency management plans and procedures to ensure they adequately consider work involving biological etiologic agents.

(2) Maintains an inventory and status of biological etiologic agents, and provide to the responsible field and area office, through the laboratory IBC (or its equivalent), an annual status report describing the status and inventory of biological etiologic agents and the biological safety program.

(3) Provides for submission to the appropriate Head of DOE Field Element, for review and concurrence before transmittal to the Centers for Disease Control and Prevention (CDC), each Laboratory Registration/Select Agent Program registration application package requesting registration of a laboratory facility for the purpose of transferring, receiving, or handling biological select agents.

(4) Provides for submission to the appropriate Head of DOE Field Element, a copy of each CDC Form EA-101, Transfer of Select Agents, upon initial submission of the Form EA-101 to a vendor or other supplier requesting or ordering a biological select agent for transfer, receipt, and handling in the registered facility. Submit to the appropriate Head of DOE Field Element the completed copy of the Form EA-101, documenting final disposition and/or destruction of the select agent, within 10 days of completion of the Form EA-101.

(5) Confirms that the site safeguards and security plans and emergency management programs address biological etiologic agents, with particular emphasis on biological select agents.

(6) Establishes an immunization policy for personnel working with biological etiologic agents based on the evaluation of risk and benefit of immunization.

(b) [Reserved]

#### 8. OCCUPATIONAL MEDICINE

(a) Contractors must establish and provide comprehensive occupational medicine services to workers employed at a covered work place who:

(1) Work on a DOE site for more than 30 days in a 12-month period; or

(2) Are enrolled for any length of time in a medical or exposure monitoring program required by this rule and/or any other applicable Federal, State or local regulation, or other obligation.

(b) The occupational medicine services must be under the direction of a graduate of a school of medicine or osteopathy who is licensed for the practice of medicine in the state in which the site is located.

(c) Occupational medical physicians, occupational health nurses, physician's assistants, nurse practitioners, psychologists, employee assistance counselors, and other occupational health personnel providing occupational medicine services must be licensed, registered, or certified as required by Federal or State law where employed.

(d) Contractors must provide the occupational medicine providers access to hazard information by promoting its communication, coordination, and sharing among operating and environment, safety, and health protection organizations.

(1) Contractors must provide the occupational medicine providers with access to information on the following:

(i) Current information about actual or potential work-related site hazards (chemical, radiological, physical, biological, or ergonomic);

(ii) Employee job-task and hazard analysis information, including essential job functions;

(iii) Actual or potential work-site exposures of each employee; and

(iv) Personnel actions resulting in a change of job functions, hazards or exposures.

(2) Contractors must notify the occupational medicine providers when an employee has been absent because of an injury or illness for more than 5 consecutive workdays (or an equivalent time period for those individuals on an alternative work schedule);

(3) Contractors must provide the occupational medicine provider information on, and the opportunity to participate in, worker safety and health team meetings and committees;

(4) Contractors must provide occupational medicine providers access to the workplace for evaluation of job conditions and issues relating to workers' health.

(e) A designated occupational medicine provider must:

(1) Plan and implement the occupation medicine services; and

(2) Participate in worker protection teams to build and maintain necessary partnerships among workers, their representatives, managers, and safety and health protection specialists in establishing and maintaining a safe and healthful workplace.

(f) A record, containing any medical, health history, exposure history, and demographic data collected for the occupational medicine purposes, must be developed and maintained for each employee for whom medical services are provided. All occupational medical records must be maintained in accordance with Executive Order 13335, In-

centives for the Use of Health Information Technology.

(1) Employee medical, psychological, and employee assistance program (EAP) records must be kept confidential, protected from unauthorized access, and stored under conditions that ensure their long-term preservation. Psychological records must be maintained separately from medical records and in the custody of the designated psychologist in accordance with 10 CFR 712.38(b)(2).

(2) Access to these records must be provided in accordance with DOE regulations implementing the Privacy Act and the Energy Employees Occupational Illness Compensation Program Act.

(g) The occupational medicine services provider must determine the content of the worker health evaluations, which must be conducted under the direction of a licensed physician, in accordance with current sound and acceptable medical practices and all pertinent statutory and regulatory requirements, such as the Americans with Disabilities Act.

(1) Workers must be informed of the purpose and nature of the medical evaluations and tests offered by the occupational medicine provider.

(i) The purpose, nature and results of evaluations and tests must be clearly communicated verbally and in writing to each worker provided testing;

(ii) The communication must be documented in the worker's medical record; and

(2) The following health evaluations must be conducted when determined necessary by the occupational medicine provider for the purpose of providing initial and continuing assessment of employee fitness for duty.

(i) At the time of employment entrance or transfer to a job with new functions and hazards, a medical placement evaluation of the individual's general health and physical and psychological capacity to perform work will establish a baseline record of physical condition and assure fitness for duty.

(ii) Periodic, hazard-based medical monitoring or qualification-based fitness for duty evaluations required by regulations and standards, or as recommended by the occupational medicine services provider, will be provided on the frequency required.

(iii) Diagnostic examinations will evaluate employee's injuries and illnesses to determine work-relatedness, the applicability of medical restrictions, and referral for definitive care, as appropriate.

(iv) After a work-related injury or illness or an absence due to any injury or illness lasting 5 or more consecutive workdays (or an equivalent time period for those individuals on an alternative work schedule), a return to work evaluation will determine the individual's physical and psychological capacity to perform work and return to duty.

(v) At the time of separation from employment, individuals shall be offered a general health evaluation to establish a record of physical condition.

(h) The occupational medicine provider must monitor ill and injured workers to facilitate their rehabilitation and safe return to work and to minimize lost time and its associated costs.

(1) The occupational medicine provider must place an individual under medical restrictions when health evaluations indicate that the worker should not perform certain job tasks. The occupational medicine provider must notify the worker and contractor management when employee work restrictions are imposed or removed.

(i) Occupational medicine provider physician and medical staff must, on a timely basis, communicate results of health evaluations to management and safety and health protection specialists to facilitate the mitigation of worksite hazards.

(j) The occupational medicine provider must include measures to identify and manage the principal preventable causes of premature morbidity and mortality affecting worker health and productivity.

(1) The contractor must include programs to prevent and manage these causes of morbidity when evaluations demonstrate their cost effectiveness.

(2) Contractors must make available to the occupational medicine provider appropriate access to information from health, disability, and other insurance plans (de-identified as necessary) in order to facilitate this process.

(k) The occupational medicine services provider must review and approve the medical and behavioral aspects of employee counseling and health promotional programs, including the following types:

(1) Contractor-sponsored or contractor-supported EAPs;

(2) Contractor-sponsored or contractor-supported alcohol and other substance abuse rehabilitation programs; and

(3) Contractor-sponsored or contractor-supported wellness programs.

(4) The occupational medicine services provider must review the medical aspects of immunization programs, blood-borne pathogens programs, and bio-hazardous waste programs to evaluate their conformance to applicable guidelines.

(5) The occupational medicine services provider must develop and periodically review medical emergency response procedures included in site emergency and disaster preparedness plans. The medical emergency responses must be integrated with nearby community emergency and disaster plans.

#### 9. MOTOR VEHICLE SAFETY

(a) Contractors must implement a motor vehicle safety program to protect the safety

and health of all drivers and passengers in Government-owned or -leased motor vehicles and powered industrial equipment (*i.e.*, fork trucks, tractors, platform lift trucks, and other similar specialized equipment powered by an electric motor or an internal combustion engine).

(b) The contractor must tailor the motor vehicle safety program to the individual DOE site or facility, based on an analysis of the needs of that particular site or facility.

(c) The motor vehicle safety program must address, as applicable to the contractor's operations:

(1) Minimum licensing requirements (including appropriate testing and medical qualification) for personnel operating motor vehicles and powered industrial equipment;

(2) Requirements for the use of seat belts and provision of other safety devices;

(3) Training for specialty vehicle operators;

(4) Requirements for motor vehicle maintenance and inspection;

(5) Uniform traffic and pedestrian control devices and road signs;

(6) On-site speed limits and other traffic rules;

(7) Awareness campaigns and incentive programs to encourage safe driving; and

(8) Enforcement provisions.

#### 10. ELECTRICAL SAFETY

Contractors must implement a comprehensive electrical safety program appropriate for the activities at their site. This program must meet the applicable electrical safety codes and standards referenced in § 851.23.

#### 11. NANOTECHNOLOGY SAFETY—RESERVED

The Department has chosen to reserve this section since policy and procedures for nanotechnology safety are currently being developed. Once these policies and procedures have been approved, the rule will be amended to include them through a rulemaking consistent with the Administrative Procedure Act.

#### 12. WORKPLACE VIOLENCE PREVENTION—RESERVED

The Department has chosen to reserve this section since the policy and procedures for workplace violence prevention are currently being developed. Once these policies and procedures have been approved, the rule will be amended to include them through a rulemaking consistent with the Administrative Procedure Act.

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