Job Description

Job Code: LAB-0P20A4
Title: Industrial Hygiene & Safety Prof 4
FLSA: EX

Function: Industrial Hygiene & Safety Prof
Family: Env Safety Health
Category: Operations

Salary
Min: $83,100
Mid: $111,700
Max: $142,500

Summary

The industrial hygiene and safety (IHS) professional develops, recommends, and implements programs, policies, and procedures associated with the recognition, measurement, evaluation, and control of potential health and safety hazards. The IHS professional may provide daily industrial hygiene and safety support to programmatic or facility organizations or the IHS professional may manage and administer one or more institutional health and safety programs or services.

Individuals at this level have broad expertise or unique knowledge, uses skills to contribute to development of objectives and principles and to achieve goals in creative and effective ways. Develops advanced concepts, techniques, and standards based on professional principles and theories. Viewed as an expert in the field within the Laboratory. Works on unusually significant, unique or complex issues. Provides solutions that are highly creative and where analysis of situations or data requires an evaluation of intangibles. Has impact on successes of future concepts, products or technologies. Erroneous decisions or recommendations would normally result in failure to reach goals crucial to significant organizational objectives and would profoundly affect the image of the organization. Creates formal networks involving coordination among groups, and other key decision makers. Regular contacts with other resources internal and external to the organization. Works under consultative direction toward predetermined long-range targets. Assignments are often self-initiated. Virtually self-supervisory. Uses independent judgment for determining course of action to accomplish objectives. Uses wide latitude in the methods, techniques and evaluation criteria for obtaining results.

Job Duties

1. Safety and security are a primary responsibility for all Laboratory employees. Maintains required safety and security training, assures safety and security compliance, and makes safety and security an integral part of every task, including taking the necessary steps to stop work if continuing the job is unsafe or compromises security.
2. Leads technical operational safety and health reviews and inspections to determine deficiencies that require corrective action, reports results, and recommends corrective actions.
3. Reviews, interprets and may have influence on national, federal, local, and Department of Energy/National Nuclear Security Administration (DOE/NNSA) safety standards, manuals, reports and other formal written communications and develops institutional and/or local requirements and guidance.
4. Serves as technical advisor and coordinator on safety and occupational health issues.
5. Evaluates work activities, designs, develops, implements and recommends safety and health protective equipment and risk mitigation or abatement controls.
6. May own, or act as a subject matter expert with development, maintenance, and implementation of industrial hygiene and safety programs and services including: asbestos, aviation safety, beryllium, biosafety, carcinogens, chemical management, confined space, cranes/hoists/rigging, electrical safety, ergonomics, industrial hygiene and safety equipment, explosives, fall protection, firearms, forklifts, indoor air quality, injury/illness recordkeeping, lasers, lockout/tagout, machine shop safety, noise, non-ionizing radiation, personal protective equipment, pressure safety, reproductive health hazards, respiratory protection, vehicle/pedestrian safety, ventilation, and other Laboratory programs, as assigned.
7. May manage the planning, development, production, and presentation of health, safety, and environmental training programs.
8. May assess and determine related training requirements based on regulatory requirements and best practices.
9. May assess training programs and trainers to ensure effectiveness, consistency, and compliance with mandated training requirements.
10. Evaluates industrial hygiene and safety program effectiveness and the achievement of safety objectives.
11. Identifies deficiencies, recommends corrective measures and assists with the development of implementation plans at institutional levels.
12. Performs safety analyses of complex data to identify trends and hazard reduction requirements and actions.
13. May lead, review and approve the investigation of events to determine causation factors and/or improper work/behavioral practices.
14. Reviews plans, designs and specifications for operations and facilities to identify proper hazard controls.
15. Provides recommended engineering controls to project management personnel.
16. Works independently to develop, maintain, implement and supervise industrial hygiene and safety programs and services.
17. Assures customer implementation of integrated work management (IWM) by gaining an understanding of operations, assisting with the development and review of integrated work documents (IWDs) and associated operating procedures to ensure hazards are appropriately identified and controlled, participating in pre-job walk-downs prior to commencement of work, and conducting periodic safety and health inspections to ensure compliance with applicable safety and health requirements.
18. Provides on-The-Job training to peers in support of the industrial hygiene and safety qualification program.
19. Supports deployed staff assignments consistent with support service agreements (SSA).
20. Complies with IH/S, project organization, and site-specific requirements.
21. Serves as the project leader for safety and health issues, providing advice and guidance to support resolution of safety and health issues.
22. Develops hazardous materials communications.
23. Writes expert-level and complex technical reports based on the interpretation of complex data, observations, and current regulations.
24. Makes recommendations for changes in the work environment based on interpretations and principles of professional practices.
25. Keeps current on existing and proposed changes in health and safety regulations.
26. Provides leadership to less experienced industrial hygiene and safety professionals and safety technicians.
27. Serves as lead person or technical expert on a variety of industrial hygiene and safety-related special projects.
28. May design, develop and implement requirements for industrial hygiene and safety databases, and develops and implements controls to ensure accuracy of databases.
30. Develops advanced concepts, techniques, and standards in the field of industrial hygiene and safety, based on professional principles and theories. Has impact on success of future concepts, products or technologies.
31. Works on unusually significant, unique or complex industrial hygiene and/or safety issues, providing solutions that are highly creative and where analysis of situations or data requires an evaluation of intangibles.
32. Creates formal networks involving coordination among groups, and other key decision makers in the IHS field. Maintains regular contacts with other resources internally and externally to the organization.
33. Uses wide latitude in the methods, techniques and evaluation of criteria for obtaining results.
34. Adheres to all Laboratory and industry regulatory guidance and governance specific to industrial hygiene and safety.
35. Ensures all industrial hygiene and safety work, materials, processes and final products meet quality specifications and are completed according to established requirements.
36. Fosters a mutually respectful work environment that is free from discrimination and harassment.

Job Knowledge

- Expert-level knowledge of and experience with industrial hygiene and safety controls and the surveillance of related safety measures and requirements.
- Expert-level knowledge of and experience with industrial hygiene/safety-related risk assessments and corrective actions.
- Expert-level knowledge of Laboratory requirements, environmental protection policies, practices, and procedures, and federal, state, and local laws, regulations, policies, and procedures pertaining to industrial hygiene/safety.
- Expert-level knowledge of common and unique work hazards, occupational safety practices, operating configuration, and lockout/tagout policies and practices.
- Expert-level knowledge of techniques and procedures for IHS monitoring and sample analysis.
- Expert-level knowledge of electrical and mechanical systems, for facility and R&D operations.
- Expert-level knowledge of ergonomic and human factors design policies, practices, and guidelines.
- Expert-level knowledge and skill in observing worksite procedures physical layouts, and in interviewing employees to gather information on operations, material used, and equipment that may result in illness, impairment, injury, or impact on the health of workers and/or members of the community.
- Expert-level experience and skill in conducting research, investigating alternative solutions, and recommending solutions to problems affecting industrial hygiene/safety.
- Expert-level knowledge and skill in preparing written reports incorporating findings, risk assessments, and recommended corrective actions, as well as in establishing appropriate priorities for action using the risk assessment codes (RACs) and for documentation of the regulatory requirements.
- Expert-level skill to communicate major, complex elements of industrial hygiene/safety to technical and non-technical personnel.
- May require expert-level knowledge and skill in coordinating with occupational medicine personnel regarding workers enrolled in the medical surveillance program.
- Expert-level skills in the preparation and presentation of industrial hygiene/safety technical reports.
- Expert-level knowledge and ability to evaluate hazard controls (i.e., personal equipment (PPE), engineering controls, and work practices) and recommend improvements or new controls to eliminate or reduce hazards.
- Expert-level knowledge and ability to evaluate exposure data to determine the extent or presence of actual of potential health hazards by comparing with appropriate standards (i.e., risk assessments).
- Expert-level knowledge and ability to develop, review, and evaluate site-specific safety/ health programs and requirements.
May require expert-level proficiency in leading development of, and conducting industrial/safety training programs.

Expert-level ability to lead and conduct accident investigations.

Expert-level knowledge of statistical analysis techniques (descriptive and inferential) for trend identification.

Expert-level knowledge of office automation application (i.e., spreadsheets, graphics, database management, communication practices, the compliance tracking system.

Expert-level knowledge of the procurement process to incorporate health requirements into subcontract documents, evaluate subcontractor health and safety plans, and oversee subcontracted work.

Expert-level knowledge and ability to coordinate and maintain liaison with agencies and other related services including local, state, and federal levels.

Expert-level ability to represent the Laboratory on various boards and committees.

Expert-level knowledge and ability to review work plans, blueprints, specifications, and other documents to ensure the application of health standards for illness and injury prevention in the construction and modification of facilities.

Expert-level knowledge and skill in developing educational material and training techniques to promote awareness of health hazards and corresponding preventive procedures (i.e., hazard communications and hazardous toxic waste).

May require expert-level knowledge and skill in providing related educational material for training and in conducting training via different media (i.e., oral presentations and posters).

Expert-level knowledge and ability to promote professional relationships between and among other disciplines (i.e., procurement, finance, engineering, construction, personnel, safety, medical, etc.).

Expert-level knowledge and ability to publicize and promote occupational health policies and regulations (i.e., PPE and work practices).

Expert-level knowledge of human performance, ESHQ improvement initiatives and compliance with same.

**Education**

Position typically requires a bachelor’s degree and a minimum of twelve years related experience, or an equivalent combination of education and experience. At this level, post graduate course work may be expected.

This position may be subject to DOE Order 5480.20A, Personnel Selection, Training, and Qualification Requirements for DOE Nuclear Facilities. This DOE Order establishes entry-level requirements to ensure employees in the positions can successfully perform the requirements of the job.

**NONREACTOR NUCLEAR FACILITY**

**MINIMUM EDUCATION AND EXPERIENCE**

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<th>Job Title</th>
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<td></td>
<td>Degree</td>
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<tr>
<td>Managers</td>
<td>BS (1)</td>
<td>4 yr (2)</td>
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<td>Supervisors</td>
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<td>Operators</td>
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<td>Technicians</td>
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<td>Maintenance Personnel</td>
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<td>Technical Staff</td>
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<tr>
<td>Training Coordinators</td>
<td>HS</td>
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The Training Manager shall have a baccalaureate including courses in education and technical subjects (baccalaureate need not be in engineering or related science).

Education or experience that is job related may be substituted on a case-by-case basis. The degree may fulfill 3 of the 4 years of nuclear experience required on a one-for-one time basis.

Experience consistent with the material being presented.

Instructors who are responsible for instruction on subjects such as Technical Safety Requirements shall have received training on facility operating characteristics and principles, and operating limits (Safety Limits, Limiting Control Settings, and Limiting Conditions for Operation) and their bases.

Instructors shall have demonstrated knowledge of instructional techniques through training or experience and be qualified by the Training Manager (or equivalent) for the material being presented.

- **Direction**

  **A. Supervision Received**
  
  - Virtually self-supervisory.

  **B. Supervision Exercised**
  
  - Provides functional and operational direction to reporting IHS support, and/or clerical employees, if assigned.

  **C. Contacts**
  
  - Frequent contact with customer organizations and members of IHS core and field services to provide IHS information and activities, internal and external oversight organizations, professional peers within DOE and across industry, line managers, and employees.

This description is not intended to be a complete statement of every aspect of the position, but rather to act as a guide to the essential functions to be performed. Assigned functions of this job may vary, and other duties and responsibilities may be assigned or changed at the discretion of management.