Job Title: Fire Protection Engineer

Requisition ID 7343 - Posted 02/10/2022 - Tennessee (TN) - Technical Professional - Full Time

The Engineering Management Division at the Oak Ridge National Laboratory (ORNL) seeks to hire one early-to-mid-career Fire Protection Engineer (FPE) to support the ORNL Non-Reactor Nuclear Facilities Division (NNFD). NNFD manages several strategic national assets to ensure global leadership in nuclear science and engineering. Supported research includes developing radiopharmaceuticals, powering deep space exploration, expanding the periodic table of elements, production of unique nationally strategic isotopes, reactor component investigation, and much more.

Purpose/Function of Job
This position will primarily focus on providing fire protection and systems engineering support for the ORNL NNFD. NNFD manages production, storage, and distribution for the Department of Energy’s heavy element research program, producing isotopes that are critical for medical research, scientific discovery, global security, energy, and industry application.

This position is also responsible for assisting in the implementation of all technical aspects of the Fire Protection Program at ORNL. ORNL FPEs are assigned to support research, operations, and facility management activities across the campus and at associated off-site facilities. This includes missions in nuclear facilities, accelerator facilities, supercomputing facilities, and a wide range of other laboratories and structures.

This position supports the implementation of ORNL’s comprehensive fire prevention/protection program, which is designed to reduce the threat of fire and related perils to life, missions, property, and the environment while complying with Department of Energy (DOE) requirements.

Major Duties/Responsibilities:
This position will primarily focus on providing fire protection and systems engineering support for facilities/operations managed by ORNL NNFD. This includes:

- Assignment as a system engineer for NNFD nuclear facilities;
- Designation as an FPE point-of-contact for NNFD operations, projects, and missions. This includes support of day-to-day operations, review of work packages, periodic facility walkdowns, and providing FPE consultations to research and development, engineering, maintenance support, construction, etc.;
- Interpreting and assuring compliance with DOE, state, federal, and consensus standards;
- Performing, and/or reviewing, scheduled Fire Protection Engineering Assessments (FPEAs) and/or Fire Hazards Analyses (FHAs) in alignment with the requirements of DOE Order 420.1C;
- Developing project-specific fire protection design criteria and associated specifications, as well as developing and maintaining System Design Descriptions per DOE-STD-3024;
- Performing design reviews of planned construction and building/process modifications;
- Supporting the design, installation, modification, and commissioning efforts for fire- and life safety-related systems/features;
- Interpreting requirements and implementing associated safeguards to mitigate risk associated with the use, handling, and storage of hazardous materials;
- Supporting ORNL’s fire barrier program and chemical inventory management program in assigned facilities;
- Providing technical support for areas of interest beyond traditional fire protection responsibilities (e.g. nuclear safety, occupational safety, etc.).
- Serving on support teams and special projects; and
- Abiding by the Battelle Safe Conduct of Research Principles.

Basic (Required) Qualifications:

- The successful candidate will hold a bachelor’s degree in Engineering or Fire Protection Engineering Technology from an ABET/ETAC accredited program.
- This position requires the ability to obtain and maintain a clearance from DOE. As such, this position is a Workplace Substance Abuse Program (WSAP) testing designated position. WSAP positions require
passing a pre-placement drug test and participation in an ongoing random drug testing program.
- Work will involve various physical requirements and certain working conditions and as such a post-offer, pre-hire physical will be required.

Preferred Qualifications:
- A P.E. license in the field of fire protection engineering is preferred, but not required.
- In addition to interpreting and applying prescriptive code requirements, the ideal candidate will possess the ability to develop, propose, and implement defendable risk-based decisions related to fire safety issues.
- Experience and skill to perform effective Fire Hazard Analyses which properly support nuclear facility Safety Bases. The skill to appropriately apply computer fire modeling (e.g. CFAST, FDS), in support of these analyses, is a plus.
- Understand and be able to apply the principles of the “Highly Protected Risk” concept from DOE Order 420.1C.
- Good oral communication and technical writing skills and will be proficient with common computer software used in the office environment.
- A strong sense of customer support and an ability to develop and foster positive customer relationships.
- Possess the social skills necessary to have positive interactions and collaborations with fellow ORNL FPEs.
- Experience with the fire hazards of gloveboxes, hot cells, and similar nuclear work environments.
- Experience with application of the building code is preferred, but not required.
- Membership in the Society of Fire Protection Engineers and/or the National Fire Protection Association is preferred, but not required.

This position will remain open for a minimum of 5 days after which it will close when a qualified candidate is identified and/or hired.

We accept Word (.doc, .docx), Adobe (unsecured .pdf), Rich Text Format (.rtf), and HTML (.htm, .html) up to 5MB in size. Resumes from third party vendors will not be accepted; these resumes will be deleted and the candidates submitted will not be considered for employment.

If you have trouble applying for a position, please email ORNLRecruiting@ornl.gov.

ORNL is an equal opportunity employer. All qualified applicants, including individuals with disabilities and protected veterans, are encouraged to apply. UT-Battelle is an E-Verify employer.