Patrick Sean Muldoon, CHP
Senior Health Physicist/Health and Safety Project Manager

Education

B.Sc., Technology (Nuclear Science/Health Physics Specialty), Regents College, 1993
MBA, University of Phoenix, 2005

Experience Summary

Mr. Muldoon is a senior health physicist with over 25 years of experience in the nuclear power and health physics fields. He is currently working for NASA at Ames Research Center as the Ionizing and Nonionizing Radiation Safety Officer with additional managerial duties in industrial hygiene.
Mr. Muldoon worked at NASA as a contractor from 1999 to 2005 where he managed the OSHA VPP efforts as well as the Industrial Hygiene and Radiation and Laser Safety Programs. He also was the co-leader of the 24/7 Hazardous Materials Team at the Center. After a brief hiatus, where he worked in business development for a contractor company and as a senior medical health physicist at Stanford University, he returned to NASA Ames in 2006 as a contractor and was eventually offered, and accepted, a government position with NASA in March 2007. He has excelled in several specialties of health physics including: nuclear reactor theory and operations in the nuclear Navy aboard a nuclear-powered fast attack submarine; high-level contamination and radiation repair operations as an overhaul and refueling radiological controls supervisor at a US Navy Shipyard; medical health physics as an Assistant Radiation Safety Officer, Radiation Safety Officer, and Environmental Health and Safety Manager at the Veterans Affairs Medical Center in San Francisco and Alternate Radiation Safety Officer for Stanford University (including Stanford Hospital and Veterans Affairs Medical Center, Palo Alto); and laboratory radiation safety in the research environment both as Radiation Safety Officer for the research laboratories at the Veterans Affairs Medical Center and as the Radiation Safety Officer for NASA Ames.

Mr. Muldoon has been identified as an exemplary professional and a leader in every assignment he has undertaken. His innovative approaches and personal drive add quality to each project he tackles. As he takes on more challenging assignments, he changes the landscape by improving performance and processes in the assignments he leaves for all who follow him. For example, at the VA Medical Center he developed an audit tracking and documenting system that significantly reduced the number of laboratory violations by identifying key areas of concern and quantifying the deficiencies. He also acted on his own initiative and created an intranet-based radiation safety training program at the NASA Ames Research Center. This system significantly reduced the amount of time personnel needed to be away from their workstations while enhancing their learning environment. Finally, his leadership and management skills at NASA Ames revived a lackluster Industrial Hygiene program and converted it into an award winning model of efficiency and quality.

Professional Expertise

- Program Management
- VPP Management
- Industrial Hygiene and Environmental Health and Safety Management
- Radiation Safety Officer (medical and research)
- Laser Safety Officer
- Emergency Radiological Response
- Radiation Safety Training – classroom and computer-based training development
- Radiological Supervision and Evaluation of Nuclear Systems Maintenance and Overhaul

Credentials
Professional Experience – 27 years
Comprehensive Practice of Health Physics; Certified Health Physicist (CHP)
Registered Radiological Protection Technologist (RRPT)
U.S. Naval Reactors, Naval Shipyard Article 108

Professional Affiliations
Health Physics Society
American Academy of Health Physics
Northern California Chapter of the Health Physics Society
National Registry of Radiation Protection Technologists
Bay Area Laser Safety Officers
International Association of Hazardous Materials Technicians

Work History

NASA, Radiation Safety Officer, EH&S Manager, March 2007 – Present

Mr. Muldoon serves as the Radiation and Nonionizing Radiation Safety Officer for NASA Ames Research Center. This position was converted from a contractor position to a government position in March 2007. In addition to the duties and responsibilities listed below under previous employment in this position as a contractor, Mr. Muldoon now also has additional duties managing the technical aspects of the support contract to NASA. Mr. Muldoon has also been assigned responsibility for managing the following industrial hygiene programs at Ames: respiratory protection, ventilation, cryogenics safety, and personal protective equipment.

Consolidated Safety Services, Inc., Radiation Safety Officer, November 2006- March 2007

Mr. Muldoon was the Radiation Safety Officer for the NASA Ames Research Center's NRC broad scope byproduct material license. Mr. Muldoon was responsible for all aspects of radioisotope and radiation use at the Center. Mr. Muldoon also represented NASA as the Center's Laser Safety Officer. During this period Mr. Muldoon performed extensive work to bring both the Center's laser safety and radiation safety programs back up to the high standards of earlier years. Records were organized, required surveys, audits, and inventories were completed and returned to proper schedules, and the Ionizing and Nonionizing Radiation Safety Committees were informed of program deficiencies and of actions being taken to return the programs to compliance. Mr. Muldoon also coordinated with the NRC to close an open lost radioactive check source incident that had occurred the previous year.

Stanford University, Sr. Health Physicist/Alternate Radiation Safety Officer, May 2006 to November 2006

Mr. Muldoon was the responsible health physicist for Stanford Hospital and the VA Medical Center in Palo Alto, responsible health physicist for the Stanford University Cyclotron Physics and Radiochemistry, responsible health physicist for the Stanford University animal imaging laboratory, and the responsible health physicist for several research laboratories using various radioisotopes including PET positron emitting radioisotopes. Mr. Muldoon was also responsible for providing health physics training to doctors, nurses, and technologists working with medical and research uses of radiation.

Integrated Science Solutions, Inc., Health and Safety Project Manager, March 2005 – May 2006

Mr. Muldoon performed business management duties at the ISSi corporate office assisting in marketing and process development. He continued to provide Health Physics training and consultation to corporate and private ISSi clients. He also served as a resource for the NASA Ames Disaster Assistance and Response Team (DART) during this period.

Integrated Science Solutions, Inc., Health and Safety Manager, December 2001 to 2005

In addition to the responsibilities described below for the years 1999 - 2001, Mr. Muldoon assumed additional management responsibilities December of 2001. Initially, Mr. Muldoon was appointed to manage the Center's OSHA Voluntary Protection Program, Fire Protection Program, Asbestos and Lead Program, and to continue to manage the Health Physics Program. Each program received exemplary grades from the client for managerial and technical accomplishment under Mr. Muldoon's management. In August 2002, in an effort to boost program performance in the Industrial Hygiene group, Mr. Muldoon's skills were called upon to include management of the Industrial Hygiene Program. The Industrial Hygiene Program improved to be graded very good to excellent by the NASA client and Mr. Muldoon's performance was graded as excellent. Mr. Muldoon managed 8 professionals and one administrative assistant in the Industrial Hygiene, Health Physics, and OSHA Voluntary Protection Programs.

Integrated Science Solutions, Inc., Radiation Safety Officer, 2000 to December 2001
Science Applications International Corporation, **Radiation Safety Officer, 1999 to April 2000**

Mr. Muldoon was the Radiation Safety Officer for the NASA Ames Research Center's NRC broad scope byproduct material license. Mr. Muldoon was responsible for all aspects of radioisotope and radiation use at the Center. Mr. Muldoon restructured the Center's radiation safety training program to make it more accessible and efficient for researchers. This included development of computer and intranet based training and enriching the radiation safety refresher training program to provide short and informative monthly training to replace the existing structured annual training course. Mr. Muldoon also redesigned the laboratory survey and audit program to bring it up to professional standards and to allow for better tracking of laboratory violations and deficiencies. Additionally, Mr. Muldoon was the Center's Laser and Non-Ionizing Radiation Safety Officer. He was well-respected by the researchers and Non-Ionizing Radiation Safety Committee members for his professionalism and team member approach to implementing the program safety rules, regulations and requirements. The intranet web-based training program he developed for the laser safety program is one of the finest in the industry. For the emergency response team, Mr. Muldoon developed response procedures and policies for dealing with radiological casualties ranging in severity from small-scale radiological spills to large fires or explosions resulting in the release of radioactive material. Mr. Muldoon has also provided hands-on practical radiation instrument use training for the response team members. Mr. Muldoon is trained as an Operational First Responder (FRO) for Nuclear, Biological, and Chemical Terrorism response, as a Hazardous Materials Industrial Technician, and as an Incident Commander. He served on the hazardous materials response team and was the co-manager of the team.

VA Medical Center San Francisco, Environmental Health and Safety Manager / Radiation Safety Officer, 1998 to 1999

Mr. Muldoon managed the Medical Center's Environmental Health and Safety Office consisting of 6 professional and 2 clerical staff. He reported to upper management on all aspects of safety at the Medical Center. He was responsible for compliance of the research and clinical programs as allowed by medical broad scope materials license issued by the Nuclear Regulatory Commission (NRC).

VA Medical Center, San Francisco, Assistant Radiation Safety Officer, 1993 to 1998

Mr. Muldoon had the following applicable responsibilities: laboratory audit program for compliance with local and NRC regulations, training program for authorized users on radiation protection, technical writer for the Radiation Safety Manual, the Medical Center's urine bioassay program (including justification of limits), training guides and manuals, a new survey form (including various computerized formats), an extensive list of memoranda clarifying Radiation Safety Policies and Procedures, and designed the survey forms and survey and audit procedures for 40 research laboratories and reviewed all radiation and contamination surveys conducted in these laboratories.

Mare Island Naval Shipyard, Vallejo, CA, Refueling and Overhaul Radiological Controls Supervisor, 1985 to 1993

Mr. Muldoon supervised physical science technicians responsible for ensuring compliance to health physics rules and regulations during refueling of nuclear reactors. He reviewed and helped to write the health physics controls for safe refueling and defueling of naval reactors. Mr. Muldoon was a management representative for the Radiological Controls Office coordinating the defueling team and actively participating in the decision-making process for the defueling and refueling of nuclear submarine reactors. He performed planning and briefing of radioactive work to insure full compliance with ALARA principles and DoD rules and regulations. Mr. Muldoon reviewed surveys for trends and compliance and procedures for proper radiological controls. He also trained the technicians who worked on his team on proper compliance and job site auditing procedures.

Naval Nuclear Power Program (USS Puffer (SSN 652), Pearl Harbor, HI), Electrician's Mate First Class, 1977 to 1983

Mr. Muldoon received an honorable discharge in 1983. Awards, medals, ribbons, and recognition are available upon request.

Honors and Awards

Contractor Certificate of Appreciation (December 2001) – for work performed as a member of the PAI/ISSi Emergency Response Team
Contractor Certificate of Excellence (October 1999) - for work performed as a member of the SAIC Emergency Response Team
VPP Achievement Recognition from NASA's Safety, Health and Medical Service's Division

Specialized Training

U.S. Navy Nuclear Power School
U.S. Naval Shipyard Radiological Controls Technician and Supervisor
Laser Safety
Medical Health Physics
Radiopharmaceutical Internal Dose Assessment
40-Hour Hazardous Waste Operations and Emergency Response – 40 CFR 1910
40-Hour Hazardous Materials Industry Technician – California Code of Regulations, Title 8 Chapter 4 Section 5192(q)]
American Red Cross CPR
First Responder Operations Nuclear, Biological, Chemical Terrorism (CSTI)
Crestcom Bullet Proof Manager