



Westinghouse Electric Company LLC  
Hematite Decommissioning Project  
3300 State Road P  
Festus, MO 63028  
USA

ATTN: Document Control Desk  
Director, Office of Federal and State Materials and  
Environmental Management Programs  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Direct tel: 314-810-3376  
Direct fax: 636-937-6380  
E-mail: richardc@westinghouse.com  
Our ref: HEM-13-58  
Date: May 2, 2013

Subject: Westinghouse Hematite Decommissioning Project: Change in Hematite  
Radiation Safety Officer (License No. SNM-00033, Docket No. 070-00036)

- References:
- 1) Hematite License No. SNM-33, Amendment 60, as approved by NRC (Camper) letter to Westinghouse (Richardson), dated April 11, 2013, Issuance of Hematite Amendment No. 60 Approving Westinghouse Hematite Request for Alternate Disposal of Specified Low-Activity Radioactive Material and Granting Exemptions to 10 CFR 30.3 and 10 CFR 70.3 (ADAMS Accession No. ML12158A372)
  - 2) Westinghouse (Copp) letter HEM-12-151 to NRC (Document Control Desk), dated November 14, 2012, "Revised Resume for Interim Change in Hematite Radiation Safety Officer" (ADAMS Accession No. ML123200408)

License Condition 16 of Hematite License No. SNM-33 (Reference 1) incorporates by reference the Decommissioning Plan (DP) for the Hematite Decommissioning Project (HDP), and the resolutions to requests for additional information (RAIs) from the U.S. Nuclear Regulatory Commission (NRC). Section 9.3 of the DP, after RAI resolutions, requires HDP to submit a notification with 30 days of a change in the individual serving in the position of Radiation Safety Officer (RSO). The notification shall include a summary of the new individual's experience, qualifications and an evaluation verifying the minimum requirements for the position are met.

On April 29, 2013, Westinghouse Electric Company LLC (Westinghouse) assigned Mr. Joseph S. Guido as the HDP RSO. Mr. Gerald J. Rood has been assigned a new position, Principle Project Engineer. Mr. Rood's new responsibilities will be to actively observe and review all field activities in a dedicated effort to maintain compliance with policies, procedures, technical and regulatory requirements as site remediation continues.

Mr. Guido has previously been the Interim RSO at HDP, as identified in Reference 2. Attachment 1 contains Mr. Guido's experience and qualifications and Attachment 2 contains an evaluation verifying that his experience and qualification meet the minimum requirements for the RSO.

Should you have questions or need any additional information please contact Kevin Davis of my staff at (314) 810-3348.

Sincerely,



Dennis C. Richardson  
Deputy Director  
Hematite Decommissioning Project

Attachments: 1) Resume of Joseph S. Guido  
2) Evaluation of Experience and Qualifications of Joseph S. Guido to Satisfy  
Hematite License Requirements for Radiation Safety Officer

cc w/Attachments:

J. J. Hayes, NRC/FSME/DWMEP/DURLD/MD  
M. M. LaFranzo, NRC Region III/DNMS/MCID  
J. M. Tapp, NRC Region III/DNMS/MCID  
J. W. Smetanka, Westinghouse

**ATTACHMENT 1**

**Resume of Joseph S. Guido**

**Westinghouse Electric Company LLC, Hematite Decommissioning Project**

**Docket No. 070-00036**

**Joseph S. Guido, RRPT, CHP**

**Education / Training**

M.E., 1993, Health Physics, University of Florida  
B.S., 1992, Nuclear Engineering Sciences, University of Florida  
2002 Health Physics Society Internal Dosimetry Summer School  
2007 Visual Sampling Plan Course  
2005 MCNP Training Course  
2001 Microshield Training Course

**Professional Registrations:**

National Registry of Radiation Protection Technologists, RRPT, 1988  
American Board of Health Physics Comprehensive Certification, 1998, 2002, 2006

**Employment Summary:**

Radiological Engineer, System One Holdings, LLC, Westinghouse Hematite Decommissioning Project, 2009 - present  
Health Physicist, Quantaflux, LLC, 2005 - 2009  
Health Physicist, MJW Corporation, 2003 - 2009  
Health Physicist, U.S. DOE Mound Facility, 2005 - 2006, 2002 - 2003, 1998 - 2001  
Health Physicist, West Valley Nuclear Services, 2001 - 2002  
Health Physicist, Radian International, 1993 - 1998.  
Radiological Engineer, Energy Services Group, 1992.  
Health Physics Research Assistant, University of Florida, 1990-1993  
Health Physics Supervisor, Bartlett Nuclear, 1990.  
Health Physics Technician, various, 1983-1989, 1993.

**Computer Proficiency:**

Visual Basic/VBA, Spreadsheet Macro and Application Development (Excel, Quatro Pro, ODBC and DAO connectivity)  
Resrad / Resrad-Build, Visual Sampling Plan, Riskcalc, Cap88PC, Gen II, RSAC-5, Varskin, Microshield

**Experience Summary:**

**Radiological Engineer Support to Hematite Decommissioning Project (System One)**

Radiological Engineer, Hematite Decommissioning Project (2009 – present). Performs health physics evaluations for alternate waste disposal requests per 10 CFR 20.2002, for decommissioning planning and responses to requests for additional information, for final status survey planning, and for environmental monitoring. Manages dosimetry, ISOCS, and radiological sampling programs. Acted for the RSO during his absence and was the Interim RSO (12/2011 to 2/2012 and 10/2012 to 11/2012).

**Health Physics Support to EEOICPA Program (MJW)**

Health Physicist, Supplemental Dose Reconstruction Group (2003 – 2009). Performed internal and external dose reconstructions for EEOICPA program. Assessed legacy bioassay data using current dosimetric models using IMBA dose assessment code.

**Health Physics Support to U.S. EPA (Quantaflux)**

Health Physicist, AWBERC (2007-2009). Provided on-site support to AWBERC RSO. Performed training, source control and leak checks, and technical support.

**Health Physics Support to Mound MARSSIM Survey (Quantaflux)**

Health Physicist / Radiological Engineer, (2005 - 2007). Provided data evaluation and report generation supported for MARSSIM survey of DOE facility. Developed automated data processing routines in Microsoft Excel and Access to facilitate analysis and reporting of survey data. Evaluated anomalous conditions identified during final status survey and provided path forward. Operated Canberra ISOCs system to perform in situ characterization of facility structures and waste packages.

**Radiological Engineering Support to DOE Mound Facility (Mound)**

MARSSIM Engineer (2005 - 2006). Provided coordination and technical support in preparation for the implementation of MARSSIM at the DOE Mound Site. Reviewed existing Environmental Restoration and Radiological Control procedures for consistency with MARSSIM. Developed action plan to incorporate necessary procedure revisions and generation of new procedures (including generic verification sampling plan). Reviewed and validated radiological measurement data and assisted with preparation of the Final Status Survey Report. Additional Mound Radiological Engineering Support - Performed internal and external exposure assessment and pathway analysis for criteria document for onsite reuse of crushed concrete and disposition of legacy chemicals.

Health Physicist, Exposure Assessment Group (2002 - 2003). Responsible for coordination and technical oversight of transition of external dosimetry contract to a new vendor. Revised applicable procedures and developed technical requirements necessary to implement changes. Performed internal dose assessments for individuals based on urinalysis data.

Supervisor, External Dosimetry and Radiological Records (2000 - 2001). Responsible for management of the external dosimetry and radiological records programs. Reviewed TLD data from vendor processing laboratory and provided supervision for 3 dosimetry / records technicians. Performed external dose assessments for individuals with lost, damaged or questionable dosimeter results. Supported dose reconstruction efforts through the identification and retrieval of historical radiological data. Implemented intranet based radiological records tracking initiatives to streamline tracking and retrieval of radiological records.

ALARA Program Coordinator (1998 – 2000) at DOE Mound Facility. Responsible for the overall development and coordination of ALARA Program activities and tracking of Radiological Performance indicators. Responsible for ALARA program re-engineering effort to incorporate Integrated Safety Management Principles into longstanding ALARA program. Also

responsible for re-focus of ALARA program from an external dose basis to one with more focus on internal exposure and contamination control.

**Health Physics Support to DOE West Valley Site (WVNS)**

Dosimetry Group Leader (2001 – 2002) Responsible for technical management of external and internal dosimetry and records management programs. Provide direct supervision to staff of two professional staff and two technicians. Responsible for review and approval of external dosimetry, bioassay and quality assurance data. Streamlined data management activities for radiological records database and whole body counter operations. Initiated total quality management (TQM) evaluation process to identify process improvements for bioassay sample management. Reviewed and interpreted bioassay data (urine and whole body scan measurements) to determine follow-up actions and assess of internal exposure.

**Health Physics support to McClellan AFB, CA (Radian)**

Project Manager (1997 – 1998) for the development of field sampling plans for closure of 50 sites which have a potential for residual radioactive contamination. Integrated CERCLA and MARSSIM guidance into sample design. Coordinated input from California State Department of Health Services, US EPA Region IX, and Air Force stakeholders.

**Health Physics / Information Technology support to West Valley Nuclear Services, NY (Radian)**

Task Leader (1996 - 1998) for the development of a data visualization tool for access / analysis of environmental data. Software development included implementation of ODBC connectivity to LIMs data from Microsoft Excel using Visual Basic for Applications.

**Radiological Safety and Licensing Support to 2 commercial clients, Rochester, NY (Radian)**

Health Physicist (1997 - 1997) providing licensing and radiation safety support to commercial pharmaceutical / research companies. Responsible for license transfer / amendments, radiological review of new facilities, effluent permits / dose evaluations, and radiation safety program documentation.

**Dow Midland Thorium Decommissioning, Midland (Radian)**

Health Physicist (1996 – 1996) for the closure of a NRC licensed radioactive storage area. Approximately 100,000 cubic yards of thorium impacted process waste and 10,000 cubic yards of mixed waste were removed and shipped offsite for disposal. Responsible for the radiation safety portion of the project. These responsibilities included ALARA compliance, worker monitoring and training, record keeping, radiological engineering and control, and managing waste contaminated with thorium. Performed internal dose assessments for site personnel based on air sampling data.

**Health Physics Operational Support to Lockheed Martin Advanced Environmental Systems (LMAES), Pit 9 Comprehensive Demonstration Project, INEEL (Radian)**

Health Physicist (1995 – 1997) for the design and construction of a treatment facility which will ultimately excavate, treat, and repackage 250,000 ft<sup>3</sup> of low level mixed TRU waste buried in a

disposal pit at the INEEL. Performed ALARA reviews of facility designs, developed internal and external exposure estimates for projected site activities, performed shielding reviews, developed a comprehensive contamination control and prevention strategy, and radiological safety sections of the site Preliminary Safety Analysis Report (PSAR).

**Health Physics Operational Support to Lockheed Martin Advanced Environmental Systems and Technologies (LESAT), LESAT Headquarters, Houston, TX (Radian)**

Health physicist (1995 – 1995) to assistant to Corporate Environmental Health and Safety Manager for LESAT. Revised decommissioning and decommissioning funding plan for 2 LESAT radiological facilities. Participated in company wide implantation of EPA Green Lights program. Developed waste stream analysis documents for proposed radioactive waste treatment systems at both the Savannah River Site and Oak Ridge National Laboratories

**Health Physics Operational Support McClellan AFB, Sacramento, CA (Radian)**

Health Physicist (1995 - 1996) to assist in radiological characterization of base facilities. Participated in development of Interim Basewide Remedial Investigation Radiation Strategy. Performed a remedial investigation of drums buried on site. Responsibilities included investigation and inventory of drum with suspect radioactively contaminated contents, preparation of work plan, and Health and Safety Plan. Level A (supplied air) personal protective equipment was worn during inventorying and radioactivity screening activities. Lead interim action for the removal and overpack of a suspected mixed waste drum. Developed monitoring and health and safety plans for surface and subsurface radiological characterization efforts including evaluation of internal and external radiological hazards.

**Radiological Site Characterization - Lodi, NJ (Radian)**

Health Physicist (1995) for completing a radiological characterization study for a property in Lodi, New Jersey. Responsibilities included site investigation, calibration and response checks of instrumentation, borehole soil sample collection, data analysis, and preparation of work plan and Health and Safety Plan.

**Health Physics Operational Support, TA-35 Decommissioning Project, Los Alamos National Laboratory, Los Alamos, NM (Radian)**

Health Physicist (1994 - 1995) for decommissioning project for the TA-35 Phase Separator Pit. Health Physics oversight included radiation safety, ALARA, instrumentation selection and use, monitoring, and waste characterization.

**Health Physics Operational Support for Environmental Restoration Health and Safety Team, Los Alamos National Laboratory, Los Alamos, NM (Radian)**

As a Health Physicist (1993 – 1995) on the Los Alamos National Laboratory Environmental Restoration Health and Safety Technical Team, provided technical and administrative guidance to subcontractors at multiple field sites throughout Los Alamos National Laboratory. Worked with the Operational Health Physics Group (HS-1) to issue guidance on the implementation of radiological controls, per the Radiological Control Manual and DOE order 5480.11, at environmental restoration field sites. Performed field verification audits at environmental restoration work sites to ensure compliance with OSHA's 29 CFR 1910.120, DOE's Radiological



Control Manual, DOE orders and applicable LANL administrative procedures. Provided impromptu radiation safety workshops to interested parties during Environmental restoration Project activities. Performed risk assessment for excavation of a gas pipeline on a site containing low level cesium-137, Pu-239, and Am-241 contamination. Developed radiological acceptance criteria for the Environmental Restoration Program Sample Management Facility. Performed environmental assessment for an air rotary drill rig dust suppression system used during characterization at a site contaminated with transuranic contamination. Developed radiological protection sections of a model health and safety plan which incorporated action/response levels based on radiological screening results. Wrote radiological protection sections of site specific health and safety plans for the following projects: characterization efforts at a former radioactive material landfill, excavation of radioactive waste transfer lines, and characterization efforts at an underground hydro-nuclear experiment area.

**Health Physics Support for Radiological NESHAPs program, Los Alamos National Laboratory, Los Alamos, NM (Radian)**

Health Physicist (1993 - 1995) supporting the LANL NEPA compliance group, performed new source reviews, air activation calculations, and exposure modeling for the following facilities: 15 MeV electron accelerator, 600 MeV proton accelerator, and 30 MeV proton accelerator. Gathered operational and process knowledge from site accelerator health physics staff. Validated calculations through review of facility radiological data and operational parameters. Evaluated off-site exposure potential for 157 un-monitored stacks at facilities which use radioactive materials. Developed radioactive source inventory, characterized emissions potential, and modeled off-site releases (using CAP-88PC).

**Health Physics Support, University of Florida, Gainesville, FL (U of F)**

Health Physics Research Assistant (1990 – 1993) for University of Florida, Department of Environmental Engineering. Performed environmental sampling for a mixed waste incineration facility. Sampled vegetation, soil and water to identify radionuclide contaminants. Operated, maintained, and calibrated high purity germanium spectroscopy system. Performed gamma spectroscopy on wood samples to determine Cs-137 content. Performed gamma spectroscopy on soil and fill samples to determine radium concentration. Performed airborne tritium and tritium oxide analysis in support of a TIGER team corrective action plan at the DOE facility. Performed calibration of liquid scintillation counter. Extracted distillate from silica-gel columns. Developed a quality control program for the liquid scintillation counter which was included in the EPA cross-check program.

**Radiological Engineering Support, Crystal River Nuclear Plant, Red Level, FL (ESG)**

As a Radiological Engineer (1992 - 1992) performed ALARA reviews of maintenance work requests at the Crystal River Nuclear Power Plant. Reviewed approximately 10 work requests to insure that controls were implemented to minimize radiation exposure during work activities. Performed post-job reviews of all outage activities to determine the need for additional radiological controls.



**Health Physics Technician at 12 Commercial Nuclear Power Stations (Bartlett, various)**

Health Physics Technician (1983 - 1990) at the following nuclear power plants: Surry, Diablo Canyon, Arkansas Nuclear One, Prairie Island, Washington Public Power Supply System #2, Dresden, St. Lucie, Clinton, Peach Bottom, Maine Yankee, and Crystal River. Performed radiation, contamination and airborne radioactivity surveys. Determined protective clothing requirements necessary to maintain radiological controls during work activities at commercial nuclear power facilities. Accompanied workers into radiological areas during performance of work activities to monitor potential changing radiological conditions. Updated protective requirements in response to changing radiological conditions. Generated applicable radiation work permits.

**ATTACHMENT 2**

**Evaluation of Experience and Qualifications of Joseph S. Guido to  
Satisfy Hematite License Requirements for Radiation Safety Officer**

**Westinghouse Electric Company LLC, Hematite Decommissioning Project**

**Docket No. 070-00036**

Evaluation of Experience and Qualifications of Joseph S. Guido to  
Satisfy Hematite License Requirements for Radiation Safety Officer

I. Introduction

This evaluation compares the experience and qualifications of Joseph S. Guido to the requirements of Hematite License No. SNM-33 for the Radiation Safety Officer (RSO). The contents of Mr. Guido's current resume was the primary source used to ascertain his experience and qualifications. Based on the evaluation documented below, it is determined that Mr. Guido's experience and qualifications meet or exceed the requirements of Hematite License No. SNM-33 applicable to the RSO. A copy of his resume is provided as Attachment 1 to this letter.

II. Evaluation

A. License Requirements for RSO Experience and Qualifications

License Condition 16 of Hematite License No. SNM-33 incorporates by reference Section 9.3.5 of the Decommissioning Plan after RAI resolutions. Section 9.3.5 states:

“In general, the RSO will have the knowledge and ability necessary to respond effectively to the radiation safety needs of the HDP. The RSO will have a background of training and experience and a maturity of judgment sufficient to recognize the need for expert assistance at an early stage in the development of potential radiation safety problems involving disciplines outside of his or her area of expertise.”

“At a minimum the RSO will meet the following criteria. An acting RSO shall be designated when the named RSO is not present on-site. The acting RSO shall meet the first three bullets listed below:

- A B.S. in the physical sciences, industrial hygiene, or engineering from an accredited college or university, or an equivalent combination of training and relevant experience in radiological protection. Two years of relevant experience are considered equivalent to one year of academic study. (Required for acting RSO.)
- At least three years of work experience in applied health physics, industrial hygiene, or similar work relevant to radiological hazards associated with site remediation. This experience should involve actually working with radiation detection and measuring equipment. (Required for acting RSO.)
- A thorough knowledge of the proper application and use of health physics equipment used for the radionuclides present onsite, the analytical procedures used for radiological sampling and monitoring, and the methodologies used to calculate personnel exposure to radionuclides present at the site. (Required for acting RSO.)
- Strong skills in written and oral communication and organizational management.
- Previous managerial experience.

B. Evaluation of Experience and Qualifications to License Requirements for RSO

The license requirements applicable to an individual designated as RSO are evaluated against the experience and qualifications documented in Mr. Guido's resume as follows:

- *In general, the RSO will have the knowledge and ability necessary to respond effectively to the radiation safety needs of the HDP. The RSO will have a background of training and experience and a maturity of judgment sufficient to recognize the need for expert assistance at an early stage in the development of potential radiation safety problems involving disciplines outside of his or her area of expertise.*

Based on the attached resume, Mr. Guido has the training background of a Bachelor of Science degree in Nuclear Engineering Sciences and a Masters Degree in Environmental Engineering from an accredited college. In addition, he is a Certified Health Physicist with over fifteen years of experience in radiological protection, health physics, and other work relevant to radiological hazards associated with site remediation. Therefore, this license requirement is satisfied.

- *A B.S. in the physical sciences, industrial hygiene, or engineering from an accredited college or university, or an equivalent combination of training and relevant experience in radiological protection. Two years of relevant experience are considered equivalent to one year of academic study.*

The attached resume indicates that Mr. Guido holds a Bachelor of Science degree in Nuclear Engineering Sciences and a Masters Degree in Environmental Engineering from an accredited college. Therefore, this license requirement is satisfied.

- *At least three years of work experience in applied health physics, industrial hygiene, or similar work relevant to radiological hazards associated with site remediation. This experience should involve actually working with radiation detection and measuring equipment.*

As indicated in his resume, Mr. Guido is a Certified Health Physicist with over fifteen years of experience in radiological protection, health physics, and other work relevant to radiological hazards associated with site remediation. Much of his experience involved health physics support for decommissioning projects (at Los Alamos, West Valley, and Mound) and included working with radiation detection and measuring equipment. Therefore, this license requirement is satisfied.

- *A thorough knowledge of the proper application and use of health physics equipment used for the radionuclides present onsite, the analytical procedures used for radiological sampling and monitoring, and the methodologies used to calculate personnel exposure to radionuclides present at the site.*

Mr. Guido is a Certified Health Physicist with over fifteen years of experience in radiological protection, including health physics, other work relevant to radiological hazards associated with site remediation. Much of his experience involved health physics support for decommissioning projects (at Los Alamos, West Valley, and Mound) and included working with radiation detection and measuring equipment. Mr. Guido has over 2 years of experience on-site at HDP and previously has acted for the RSO in his absence. Mr. Guido has hands on experience with

radiation monitoring equipment while working in operational health physics at commercial nuclear power stations, and while working at environmental remediation projects such as at the DOE Midland Michigan site, and at Los Alamos National Laboratory. Mr. Guido has demonstrated knowledge of the proper application of radiation monitoring equipment as evident from his experience developing field monitoring and sampling plans and operation of gamma spectroscopy systems (ISOCs and whole body counting systems). Mr. Guido's knowledge of analytical procedures is demonstrated from his experience working as an internal dosimetrist (DOE Mound Site) and Dosimetry Group leader (DOE West Valley Site). Additionally, Mr. Guido has performed internal and external dose assessments while at the DOE Mound and West Valley sites, as well as during his experience with the NIOSH EEOICPA program. As indicated, Mr. Guido's work responsibilities have included the proper application and use of: (1) health physics equipment appropriate for radionuclides present onsite; (2) analytical procedures used for radiological sampling and monitoring; and (3) methodologies used to calculate personnel exposure. Therefore, this license requirement is satisfied.

- *Strong skills in written and oral communication and organizational management.*

Based on the attached resume, Mr. Guido's extensive experience in health physics has involved written and oral communications, including procedures, studies, permits, licenses and training, that involved varying organizational levels and contractors. Therefore, this license requirement is satisfied.

- *Previous managerial experience.*

Based on the attached resume, Mr. Guido has previous management experience at the DOE West Valley Site and DOE Mound Facility. Mr. Guido has over 2 years of experience of acting for the HDP RSO in his absence. Therefore, this license requirement is satisfied.

### III. Conclusion

Based on the evaluation documented above, it is determined that Mr. Guido's experience and qualifications meet or exceed the RSO requirements of Section 9.3.5 of the Decommissioning Plan incorporated into the Hematite license.