

2.0 ORGANIZATION AND ADMINISTRATION

2.1 Organizational Responsibilities and Experience Requirements

2.1.1 Project Director

The Project Director (Director) has overall project responsibility to ensure safety and compliance of the decontamination and decommissioning of the Hematite Facility while complying with applicable laws and regulations. The Director is responsible for observing and enforcing facility policies and procedures and interfacing with NRC representatives.

At a minimum the Director shall have:

- B.S. in appropriate discipline or equivalent combination of education and experience. Significant experience in project management of large complex projects.
- Demonstrated commitment to ensuring the safety of workers, the public, and the environment.
- Experience with stakeholder interactions.

2.1.2 Project Oversight Committee Chairman

The Project Oversight Committee Chairman (Chairman) is the head of the Project Oversight Committee. The Chairman is responsible for:

- Chairing the Project Oversight Committee
- Designating sub-committees, in writing, with the concurrence of the majority of the safety committee.
- Determining which committee members shall attend each meeting according to the topics to be covered.
- Recommending committee members to represent, at a minimum, D&D operations and EH&S.

At a minimum, the Chairman will have:

- B.S. in appropriate discipline or equivalent combination of education and experience.
- Competency in nuclear safety.

2.1.3 Radiation Safety Officer

The Radiation Safety Officer (RSO) is responsible for the establishment and guidance of programs in radiation protection. He also evaluates potential and/or actual radiation exposures, establishes appropriate control measures, approves written procedures, and assures compliance with pertinent policies and regulations. Under his direction, health physics personnel administer the established site policy, collect samples, perform analyses, take measurements, maintain records, and generally assist in performing the technical aspects of the radiation protection program.

In general, the RSO will have the knowledge and ability necessary to respond effectively to the radiation safety needs of the Hematite Site. 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. Specifically the RSO will have, or have access to, individuals with

the following skills and knowledge, as necessary to support the radiation protection program as described in Chapters 3 and 5 of this license:

- Reviewing and approving radiological protection procedures
- Monitoring and surveys of areas in which radioactive material is used
- Oversight of ordering, receipt, surveys, and delivery of licensed material
- Packaging, labeling, surveys, etc., of shipments of licensed material
- Personnel monitoring program, including determining the need for and evaluating bioassays, monitoring personnel exposure records, and developing corrective actions for those exposures approaching maximum permissible limits
- Radiological environmental monitoring program, including the need for evaluating air, liquid and soil effluents and developing corrective actions for those effluents approaching maximum permissible limits.
- Radiological training of personnel
- Inventory and leak tests of sealed sources
- Responding to and investigating incidents and accidents involving radioactive material
- Maintaining required radiological records

The RSO shall perform quarterly reviews of these items to ensure compliance with Chapters 3 and 5 of the license and that activities involving the use of radioactive material are being conducted safely.

The RSO is responsible for making a written annual report reviewing the employee exposures and effluent release data to the Project Oversight Committee and executive management having responsibility for the license. This report shall include a review of audits, inspections, and radiological measurements performed during the past calendar year with emphasis on the data collected from the following areas: employee exposures; bioassay results; in-plant airborne radioactivity; and environmental monitoring.

At a minimum the RSO will have:

1. A Bachelors' degree 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 generally considered equivalent to 1 year of academic study.
2. At least 1 year of work experience in applied health physics, industrial hygiene or similar work relevant to radiological hazards associated with site remediation. This experience should involve working with radiation detection and measuring equipment.
3. 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 methodologies used to calculate personnel exposure to radionuclides present at the site.
4. Strong skills in written and oral communication and organizational management.
5. Past managerial experience.
6. Applicable experience in health and safety fields.
7. Experience in Emergency Management Operations and emergency management.

An acting RSO shall be designated when the named RSO is not present on-site. The acting RSO shall meet RSO qualifications 1), 2) and 3).

2.2 Project Management

In addition to the organizational responsibilities described in Section 2.1, key project units will be managed to ensure safe and compliant site operations. A Project Management Plan (PMP) shall be maintained which includes the following information:

- A description of the decommissioning organization, including descriptions of the individual decommissioning project units within the decommissioning project; organization, such as project management, health and safety, and remedial activities;
- A description of the responsibilities of each of these decommissioning project units;
- A description of the reporting hierarchy within the decommissioning project management organization, including a chart or diagram showing the relationship of each decommissioning project unit to other project units and decommissioning project management; and
- A description of the responsibility and authority of each unit to ensure that decommissioning activities are conducted in a safe manner and in accordance with approved written procedures, including stop work authority as required by this license and the manner in which concerns about safety issues are managed within the overall decommissioning project.

A copy of the current PMP is provided to meet the project management requirements as described above. Changes to the organization described in the PMP can be made by the Project Director with appropriate input from the POC chairman. The organization will contain the key units listed below. The staffing of these key units will be by persons meeting the minimum requirements. Key units may be combined under single individuals as appropriate for the effective management of the project.

The organization will incorporate the following key units:

- Radiation Protection
- Nuclear Criticality Safety
- Waste Management
- Transportation
- D&D Project Management
- Environmental Project Management
- Quality Assurance
- Licensing Support
- Environment, Health and Safety
- Emergency Management
- Planning and Control
- Procurement/Contracts
- Material Control and Accounting (MC&A) of Special Nuclear Material (SNM)
- Contractor Support

2.3 Contractor Support

Management of decommissioning activities will be performed by a combination of Westinghouse personnel and staff augmentation by qualified contractors. Decommissioning activities for this project may be contracted to technically competent and qualified bidder(s). The contractors' management interface directly with the Hematite D&D Project Manager. Hematite personnel will interface, as needed, with the contractors' management and supervisors. Additionally, the contractors' RSO shall interface with the Hematite RSO on matters of radiological protection.

Contractors may be responsible for tasks such as:

- Site characterization
- Equipment removal
- Surface decontamination
- Building demolition (when approved by license amendment)
- Excavation activities (when approved by license amendment)
- Remediation activities (as approved by the license)
- Waste characterization and packaging
- Miscellaneous operations to support decommissioning of the site

The contractors will be bound to comply with all radiation protection and license requirements of the Hematite site. As such, the contractors will conduct work in accordance with this license and Hematite policies. Contractors will be responsible for complying with Westinghouse policies on radiation protection, health and safety, waste management, fundamental nuclear material control and criticality safety.

The D&D Project Manager is responsible for determining reviews of contractor documents. The following minimums are established for reviews:

- Activities involving radiological protection require the review of the Hematite RSO, or designee.
- Activities that concern Environmental Health and Safety require the review of the Manager Environment, Health and Safety, or designee.
- Waste management activities require the review of the Hematite RSO, or designee.
- Activities that affect material control and accountability are required to be reviewed by the Manager Environment, Health and Safety, or designee.
- Activities involving SNM need to be bounded by Nuclear Criticality Safety Analysis.
- Activities affecting quality related items or services shall be reviewed by the QA Manager, or designee.

Acceptance of contractor documents means that the contractor documents are in compliance with SNM-33 and Hematite policies and applicable regulations. Westinghouse Hematite personnel shall perform oversight of the contractors' operations to ensure compliance with SNM-33, Hematite policies, applicable regulations and the contractor requirements. Oversight shall be performed in the following areas: operations, health physics and environment, health and safety.

Site-specific training shall be provided to contractors in accordance with the provisions of Section 2.6 of this license; however, appropriate indoctrination training may be accepted from outside organizations upon approval of their training program by the RSO for fundamentals of radiation and radioactivity, contamination control and ALARA practices. The Manager, Environment,

Health and Safety is responsible for approving contractor training for safety and the Emergency Manager is responsible for approving contractor emergency action programs. These approvals may be designated to qualified individuals.

2.4 Organizational Assignments

Mr. A. Joseph Nardi will act as the Project Oversight Committee (POC) Chairman. Mr. Nardi has a Bachelor of Science degree in Chemical Engineering from The Pennsylvania State University and a Master of Science degree in Nuclear Engineering from Stanford University. Mr. Nardi has worked for Westinghouse Electric Company for 37 years in various positions primarily associated with radiological health. For the past 22 years, he has served as the License Administrator for Westinghouse and is the principal point of contact between Westinghouse and the NRC. Over the past 20 years, he has been involved with decommissioning activities at 11 Westinghouse sites. His experience has covered almost all segments of the nuclear fuel cycle which include uranium mining operation, several uranium and plutonium fuel fabrication facilities, service centers that support nuclear power plant operations, two research reactors, and several research facilities. The decommissioning projects have covered the entire spectrum of radionuclides that are associated with the nuclear fuel cycle. Mr. Nardi has been an active participant in the NRC decommissioning workshops and has played an active role in attempting to influence the regulatory framework for decommissioning. Mr. Nardi is also an active member of the Radiation Safety Committee for two other Broad Scope Licenses. Mr. Nardi's resume is provided at the end of this Chapter.

The experience summaries and qualifications of the RSO can be obtained from the Project Director. Within 30 days of change of the RSO, the licensee must submit to NRC a summary of the RSO's experiences and qualifications for review.

Changes to named individuals in the license will be provided to the NRC within 30 days of the change. Other key units as described in Section 2.2 will be filled by qualified personnel as approved by the Project Director. Each key unit does not need to be managed by a separate individual. Westinghouse employees or contractors may perform unit management. Project units can be grouped and managed in a way that is beneficial to the site operations. The POC will provide advisement on replacement of project personnel.

2.5 Project Oversight Committee

The Project Oversight Committee enables the self-regulation of the project. The goal of the Project Oversight Committee is to promote and continuously improve work place safety on the Hematite D&D Project. The Committee's purpose is to evaluate the effectiveness of and recommend improvements to the Project safety rules, policies, and procedures for accident and illness prevention programs in the workplace and, ensure that written updates and changes to policies and procedures of the safety programs are completed.

The Committee shall provide management oversight and review of operations associated with the Westinghouse FFCF D&D. The Committee shall monitor D&D operations to ensure they are being performed safely and according to regulatory requirements. The Committee shall ensure that appropriate measures are taken to maintain radiation exposures ALARA through administrative and procedural controls, in addition to the design and control of radiological facilities and equipment.

The Project Oversight Committee shall perform an annual review of each of the following:

- Industrial safety trends
- Radiation safety trends
- Environmental protection trends
- Criticality safety practices
- Adequacy of emergency planning and drills
- Effectiveness of ALARA Program
- Effectiveness of Waste Minimization Program
- Abnormal occurrences and accidents

The Committee shall have a minimum of five members chosen to provide administrative and technical competence. The Committee shall consist of the Radiation Safety Officer (RSO), the Chairperson, a Committee Secretary and other management and qualified individuals as appointed by the Project Director.

The Committee shall meet at least quarterly, or more frequently at the discretion of the Committee Chairperson or designated alternate. The Committee shall maintain a written record of the minutes of each meeting.

A Project Oversight Committee Charter shall be maintained that establishes the duties and responsibilities of the Project Oversight Committee. Changes to the charter that do not degrade the intent of the charter can be made by the Chairman.

2.6 Training

A decommissioning training plan shall be developed to define the site-specific training required to safely perform work at the Hematite facility. Site employees and subcontractors shall comply with this training plan. Training shall be established for individuals working in or frequenting restricted areas.

Training will vary from a read-and-sign program to classroom or on-the-job instruction. The extent of training will be commensurate with the degree of hazard. Qualified personnel will provide training whose knowledge of the subject they are teaching exceeds that to be expected of workers completing the training.

The duration of training will vary from a few minutes for visitors, through a few hours for experienced radiation workers, to several days for some workers without prior training in radiological protection and radiation work techniques.

The training program shall be maintained in accordance with Hematite quality assurance requirements. The training program for radiation protection will be approved by the Radiation Safety Officer.

2.6.1 Trainees

Training shall be provided for visitors, general employees, radiation workers and HP technicians. At a minimum, all individuals, including supervisors, likely to exceed 100 mrem in a year shall receive radiation worker training before beginning work. The following minimum training requirements shall be required and provided for in the Training Plan:

Visitor Access Training

Visitor access training shall include general safety, emergency response, radiation controls and security instruction for visitors who will be on site less than 30 days.

General Employee Radiation Training

General Employee Radiation Training (GERT) will be provided to non-radiological workers at the site. GERT shall be required for all General Employees who routinely (greater than 30 days per year) enter the Controlled Area. GERT shall be completed by General Employees prior to unescorted access to the Controlled Area and potential occupational exposure. Additional training beyond GERT shall be required for unescorted access to Radiological Areas.

GERT shall not be required for personnel receiving Radiation Worker Training or HP Technician Training, since those training courses incorporate and extend beyond GERT content. Documentation of successful GERT completion shall be maintained.

GERT will be divided into general training and project-specific training. The general section of the training shall include:

- Risks of exposure to radiation and radioactive materials, including prenatal radiation exposure;
- Basic radiological fundamentals and radiation protection concepts;

- Individual rights and responsibilities as related to implementation of the facility radiation protection program;
- Individual responsibilities for implementing ALARA measures; and
- Individual exposure reports that may be requested.

The project-specific component of GERT shall include the following aspects:

- Project escort and visitor policies;
- Area access and egress requirements including the use of appropriate personal protective equipment (PPE);
- Warning signs and barriers;
- Types and locations of radiation and radioactive material on site;
- Alarm types and responses.

Training for individuals shall communicate basic knowledge of radiation hazards and protective policies.

Radiation Worker Training

Radiation Worker training shall be required for all project personnel, except HPs, whose job assignments involve entry into Radiological Areas. Training shall precede assignment as a Radiation Worker. Individuals who have not completed Radiation Worker training may enter Radiological Areas only under escort and may not perform hands-on work. Case-by-case exemptions may be granted by the RSO for personnel who will be on-site for one month or less and who:

- Are under constant escort by a qualified escort who will assist in donning and doffing of PPE;
- Will perform only light hands-on work;
- Will not require PPE beyond a single set of anti-contamination clothing;
- Will **NOT** wear respirators;
- Will be under continuous HP coverage.

Radiation Workers who wear respiratory protection equipment shall be trained and periodically retrained in the use of appropriate equipment.

Radiation Worker Training shall include generic, project-specific and practical factor components. In addition, Radiation Workers shall also receive pre-natal exposure training. The generic component shall include a more in-depth presentation of the information presented in the GERT generic component, including:

- Radiological and radiation protection fundamentals and concepts, including use of Radiation Work Permits (RWPs) and dosimetry;
- Radioactive contamination control and Radiation Worker responsibilities;
- ALARA principles and practices and individual responsibilities for implementing ALARA measures;
- Use of PPE;
- Risks of exposure to radiation and radioactive material
- 10 CFR Part 20 requirements and limits.
- Individual rights and responsibilities as related to implementation of the radiation protection program.

The project-specific component of Radiation Worker training shall include:

- Sources of radiation, radioactive material and contamination on the project site;
- Project radiation protection policies, procedures and practices including administrative exposure limits;
- Proper response to alarms and off-normal occurrences;
- Project measures to control the spread of radioactive contamination including the use of ventilation, filtration and containment;
- Individual exposure reports that may be requested;
- Responsibilities of Radiation Workers to minimize their exposure and the spread of radioactive contamination.

Specific practical factors that the individual must perform for evaluation shall include:

- Donning/Doffing PPE;
- Review and interpretation of radiological survey maps and/or RWPs;
- Entering and exiting a simulated Radiological Area to perform a task;
- Anticipated response to simulated off-normal situations, such as spills, alarms or faulty radiological control equipment;
- Use of contamination survey instruments for self-monitoring (frisking), including verification of instrument response and source response checks.

Radiological Worker examinations shall verify the knowledge of radiation protection fundamentals possessed by a Radiation Worker, including working knowledge of radiological controls, prior to unsupervised assignment involving radiological exposure.

Health Physics Technician Training

HP training shall be designed to provide suitably experienced personnel with information necessary to effectively meet responsibilities, and verify qualification commensurate with project HP job requirements. Training shall consist of generic, project-specific, and practical factor components.

The generic component of HP Training shall include a more in depth presentation of the same topics as the Radiation Worker Training generic component, plus job-specific topics including the following:

- Instrumentation and dosimetry fundamentals of operation;
- Calculation of Derived Air Concentration (DAC) values from air sample information;
- Standard emergency response practices;
- Evaluation of off-normal conditions and proper standard response;
- Elements of surveillance and control (job coverage).

The project-specific component shall thoroughly familiarize personnel with project radiation protection requirements, policies and procedures, as well as potential radiological hazards. Training topics shall include:

- Review of the project Radiological Protection Plan and associated procedures;
- Review of project emergency procedures;
- Radiological hazards specific to the project including radionuclide distribution, internal exposure hazards and criticality;

- Familiarization with planned project activities with emphasis on radiological controls and ALARA measures to be implemented;

The practical factor component shall thoroughly familiarize personnel with the use of project radiation protection systems and equipment. Aspects shall include those covered in Radiation Worker Training, plus:

- Operation of instruments and equipment;
- Survey performance and documentation;

2.6.2 Frequency

The Hematite Radiation Protection training is scheduled so that each individual is trained in radiation protection before entering a restricted area. In special cases, where a worker or visitor must enter a restricted area prior to completion of the training, a trained and qualified individual will escort the individual.

The Hematite Radiation Protection training includes periodic refresher training, as necessary, to maintain awareness of the need, and each individual's responsibility, for maintaining exposures ALARA and to update and renew each individual's knowledge of appropriate subjects including emergency procedures and response criteria. Refresher training is conducted at intervals not exceeding 12 months with a 30-day grace period.

Meetings, postings, memos or other means of communication will be used, as necessary, to inform workers of important new developments in procedures, equipment, and regulations that have an immediate impact on the radiation protection aspects of their work.

2.6.3 Evaluation

Each worker's knowledge, competency, and understanding will be evaluated with regard to the radiation protection aspects of specific job to be performed. The evaluation consists of a written test with a practical factors session as described in Sections 2.6.1. The worker will receive additional instruction and be retested in any subject in which the worker's performance is deficient.

Qualified workers may elect to take the written test without classroom training. Failure of tests in this situation requires classroom training prior to retesting.

Requalification evaluation will be carried out in conjunction with refresher training. Satisfactory performance by an individual on a requalification evaluation may be substituted for refresher training for that individual. The evaluation will include topics treated in the refresher training.

2.6.4 Programmatic Training

Programmatic training is required training that must be completed within six (6) months of personnel report date. Programmatic Training consists of the following as required by an individual's job and responsibilities:

- Reporting of Defects and Noncompliance
- Quality Assurance
- Workplace Substance Abuse

- Site Safety Awareness

2.6.5 Contractor Training

Contractor training shall meet the requirements of this license and the Hematite Training Plan. Contractor training may be accepted for contractor personnel with review and acceptance of their training program. The RSO shall be responsible for review and acceptance of the radiological training for the contractor.

2.6.6 Training Records

Records of worker radiation protection training will be retained as required by regulatory requirements. Such records shall include:

- The worker's name.
- Inclusive dates for each segment of training or for each different training program.
- A specific description of all training completed satisfactorily, including references to pertinent lesson plans, course outlines, syllabuses, and other subject-specific descriptive information. Specific reference is usually made to such materials by date, edition, issue, etc., applicable to each worker.
- A performance rating for each segment of training or each different training program satisfactorily completed by the worker. This rating normally consists of a pass/fail grade, numerical or letter grade, or a written evaluation.
- The source of the training, i.e., the training facility and its location.
- Name(s) of individual(s) providing the training.

2.7 Policies and Procedures

Policies and procedures shall be established for the project. Policies are upper tier documents that assign responsibilities for compliance with specific requirements; work is not performed to these documents, but they set forth the Project's approach to and responsibilities for compliance and work processes. Procedures are documents that define how the technical requirements stated in policies are implemented. Procedures are mandatory and followed during the work activities. Policies and procedures shall include the following areas:

- D&D Operations
- Environment, Health and Safety
- General Management Information
- Health Physics
- Nuclear Criticality
- QA
- Waste Management (including transportation)

At a minimum, the following documents shall be prepared:

- Training Plan
- Project Oversight Committee Charter
- Project Management Plan
- Health and Safety Plan
- Radiation Protection Plan
- Nuclear Criticality Safety Plan
- Fundamental Nuclear Material Control Plan
- Quality Assurance Program Plan
- Waste Management Plan

Policies and procedures shall undergo a review and approval process by project personnel based on the content of the document or as deemed necessary by the Project Director. Before issuance or revision the following classification of documents require the minimum approvals as specified below:

- Radiation Protection – Project Director and RSO
- Environment, Health and Safety – Project Director and Manager Environment, Health and Safety
- Material Control and Accountability – Project Director and Manager MC&A
- Criticality Control – Project Director and Criticality Manager
- Waste Management – Project Director and Waste Management Manager

In the absence of these specified approvals, another designated individual may provide approval.

Changes to policies and procedures can be made by Hematite provided that the change does not conflict with license requirements nor does it prevent the compliance of applicable NRC regulations. Any changes to policies and procedures cannot degrade the safety or environmental commitments of the license, as determined by the Licensing Manager. Revisions to policies and procedures shall undergo the same level of review as the original issue of the document. Monitoring of changes to policies and procedures shall be by surveillances to ensure compliance with revised procedures. Policies and procedures shall be reviewed bi-annually from the date of

the last revision to ensure applicability to current site activities. Updating of policies and procedures is the responsibility of the document owner.

Major changes to the policies and procedures shall be documented, stored in document control and available for periodic review. This documentation shall include a description of the change, the effective date of the change and the appropriate approvals of the change. Technical changes require justification. Changes to policies and procedures will be implemented by retraining, if necessary, and submitting the policies and procedures in document control for retention and appropriate distribution.

Acceptance or approval of project documents will be by pen-to-paper approval or through the Westinghouse Electronic Document Management System as part of the Westinghouse established records management program. All electronic submissions to NRC must meet NRC's Guidance for Electronic Submissions to the Commission. This guidance is found at <http://www.nrc.gov/site-help/eie/guid-elec-submission.pdf>. All submissions to NRC must meet the requirements of 10 CFR 70.5 (a).

2.8 Quality Assurance

A Hematite Quality Assurance Program Plan (HQAPP) shall be established to define the project constraints necessary to comply with corporate, licensing and regulatory quality assurance (QA) requirements. The HQAPP shall include a description of the management system that shall be implemented to ensure continued compliance with applicable requirements. The HQAPP shall include requirements for the following:

- Quality System
- Document Control
- Records Management
- Surveillance and Audits
- Control of Inspection, Measuring and Test Equipment
- Control of Non-Conforming Items
- Corrective Action

The Hematite quality assurance program is being submitted for review in addition to the procedures that control these seven quality requirements. Changes to the program and procedures can be made under the approval of the Hematite Quality Assurance Manager. Revisions that affect the intent of the program will be provided to the NRC within 30 days of the change for review and approval.

Individuals performing activities affecting quality shall receive appropriate training to familiarize them with the seven quality requirements of this license and the HQAPP. This training shall consist of a combination of classroom training and reading of quality policies and procedures. The training shall be determined by the QA Manager based on the individuals' past experience, education and job description.

2.8.1 Quality System

Activities affecting quality shall be prescribed by and performed in accordance with documented policies, procedures, plans, drawings or a type appropriate to the circumstance. These documents shall include or reference appropriate quantitative or qualitative acceptance criteria for determining that prescribed activities have been satisfactorily accomplished. The documents shall contain enough detail to allow a qualified person within the organization to use them independently. These documents, and their revisions, shall include a review and documented resolution of comments by the QA Manager before issuance.

Westinghouse's corporate requirements have been developed to comply with regulatory, industry and customer quality requirements for items and services provided by Westinghouse operations. Hematite operations comply with the corporate commitment of quality.

2.8.2 Document Control

The preparation, issue, and change of documents that specify quality requirements or prescribe activities affecting quality shall be controlled to ensure that current and correct documents are being employed by those performing the work. Such documents (e.g., policies and procedures), including changes, shall be reviewed for adequacy by and approved for release by authorized personnel.

A system shall be established and implemented for the control of documentation. The system shall assure that current and correct documents are available to project personnel. Policies and procedures shall be prepared and reviewed by qualified individuals. The minimum review for policies and procedures is provided in Section 2.7 of this license. Policies and procedures shall only be retired from use with concurrence from those required to approve the policy or procedure in accordance with this license.

2.8.3 Records Management

A Quality Assurance records system shall be maintained. QA records shall include, but are not limited to, design related records (calculations, drawings, research, development test reports and, design reviews), operating logs, inspection and test records, instructions and procedures, audit reports, personnel qualification(s), quality related procurement data, repair records, maintenance records, dosimetry records, radiological surveys, air sampling results and calibration records. Requirements and responsibilities for record transmittal, distribution, retention, maintenance, and disposition shall be established in approved procedures.

Quality Assurance records shall be retained and protected against damage, loss, or deterioration in accordance with governing implementing procedures and applicable regulatory standards as appropriate, and/or contractual requirements. The Electronic Document Management System (EDMS) shall be the means by which to maintain QA records. This system allows for electronic approval of quality records.

Quality records provided in hard copy shall be protected by using either one of the following storage methods until the document can be rendered electronic:

- (a) two sets of identical records maintained at physically separate, remote and equivalent storage locations, with access control and security that minimizes the risk of damage from fire, flooding and abnormal deterioration; or
- (b) official copies of QA records maintained in approved fireproof cabinet or vault, at a single location.

2.8.4 Surveillance and Audits

Internal and external surveillances and audits (Independent Assessments) of project activities or suppliers shall be planned, scheduled, and performed by personnel qualified in accordance with the requirements of the HQAPP. Audits shall be performed in accordance with written procedures, by personnel who do not have direct responsibility for the activities being audited. Internal audits shall be performed annually or more often, if deemed necessary by the responsible QA Management. Audits shall provide comprehensive, independent verification and evaluation of the implementation of the entire Quality Assurance Program to verify compliance, determine effectiveness, and promote improvement in accordance with applicable regulations, codes or standards. External audits shall be performed triennially, as appropriate.

Audit results and corrective action activities shall be documented in an audit report. Follow-up actions shall be taken for areas found deficient during these audits to verify corrective action implementation and effectiveness. The follow-up actions shall be tracked through completion. Findings from audits and surveillances shall be documented in CAPs to allow trending of nonconforming issues.

Records of audits (e.g., audit plans, written replies, and record of completion of corrective actions) and the qualifications of auditors shall be maintained as Quality Assurance records.

Surveillance and audit activities shall be planned and performed to verify conformance to drawings, procedures and/or specifications for each work operation where necessary to assure quality. Individuals other than those who performed, or directly supervised the activity being surveilled or audited shall perform the surveillance or audit for acceptance. The qualifications of surveillance and audit personnel shall be based on their completed training, experience and demonstrated capability to perform the required inspection functions in accordance with applicable codes, standards, and approved procedures.

Contractors providing quality related items or services shall be audited. The contractors' quality assurance requirements shall be audited against the HQAPP to ensure the intent of the HQAPP is met. Audits shall be performed in accordance with established procedures.

2.8.5 Control of Measuring and Test Equipment

Control systems shall be established and implemented to ensure that tools, gauges, instruments, and other measuring and test devices used that affect or evaluate the quality of activities are controlled, calibrated, and adjusted at specific intervals so that the necessary accuracies are maintained. Measuring and Test Equipment (M&TE) used on the project include radiation detection instrumentation, criticality monitors, air sampling equipment and scales for weighing SNM.

Documented procedures for calibrating M&TE and measurement reference standards will be used. Procedures such as published standard practices, written instructions that accompany purchased equipment, or other acceptable instructions may be used.

Calibration procedures shall contain the following minimum information:

- Identity of the item calibrated
- Calibration equipment and measurement reference standards to be used, including a required parameter, range and accuracies required
- Checks, tests, measurements, and acceptance tolerances of each instrument characteristic being calibrated
- Sequence of operations
- Special instructions, safety precautions, or other information

Calibration frequency shall not exceed one year with a 30 day grace period unless otherwise specified by this license.

Records shall be maintained for each piece of equipment to show that established schedules and procedures for the calibration of M&TE and measurement reference standards have been

followed. The records will contain a history of calibration and other means of control, showing when a calibration is due, conformance or nonconformance to required tolerances before and after adjustments, and any limits on use or corrections to be applied.

2.8.6 Control of Nonconforming Items

The Westinghouse Corrective Action Process (CAPs) shall be used to identify, document, analyze and correct conditions adverse to quality of items and services in accordance with established procedures. Hematite shall pursue a program of continuous improvement using a uniform process for the effective identification, correction and prevention of issues that impact quality. The CAPs will be the primary mechanism for implementing corrective and preventative actions for the Hematite quality assurance program. Employees are responsible for identifying quality issues and supporting their resolution.

Significance of issues will be identified to establish priority for resolution action. Items of low significance may not require resolution but will be identified, recorded and tracked as indicators of emerging trends or precursors of higher significance issues.

2.8.7 Corrective Actions

When significant conditions adverse to quality have been identified and when other methods of obtaining corrective action have failed or have been ineffective, a corrective action (CA) shall be requested. Westinghouse's CAPs program shall be used to track CAs. The procedure for requesting corrective action provides for the following:

- Completion of issue identification in CAPs
- Determination of the cause of the condition
- Identification and implementation of actions to correct the condition and prevent recurrence of similar conditions
- Documentation of the adverse condition, the cause, and the corrective actions taken; and reporting to the appropriate levels of management for review and assessment
- Verification of the implementation of the corrective action

Any member of the project who identifies a condition adverse to quality may initiate an issue to report an occurrence that impacts or has the potential to impact conformance to applicable requirements, safety, efficiency, cost, schedule or any other aspect of business effectiveness. The issue shall be identified with a unique number per the CAPs program. CAPs shall be used to maintain the corrective actions electronically including the actions taken to address the corrective action request.

The progress of an issue affecting quality will be tracked by QA to and verified as complete. The effectiveness of the corrective action shall be verified by surveillance, audit, trend analysis, or other reviews where applicable.

Upon notification or receipt of an issue, the responsible management shall take the necessary actions to bring the adverse condition under control and to investigate the causes of the condition. The Issue Owner of the nonconformance is responsible for verifying the adequacy of the corrective action.

2.9 Investigations and Reporting

Events specified by applicable regulations or license conditions shall be investigated and reported to the NRC. The Licensing Manager shall be responsible for conducting the investigation and documentation of reportable events.

Non-reportable occurrences shall be investigated and documented as appropriate. Such reports shall be available for NRC inspection.

2.10 Periodic Progress Reports

Periodic progress reports shall be submitted to the NRC at a frequency agreed upon by the agency. The progress reports should contain, but are not limited to the following:

- Critical Issues
- Issues of Interest to Regulatory Agencies
- Operational Highlights
- Schedule Information
- Miscellaneous

2.11 Stop Work Authority

All project personnel have stop work authority and are responsible for exercising their authority upon identification of an unsafe or suspected unsafe condition. Stop work declaration requires judgment on the part of the individual. When stop work is invoked, associated personnel are responsible for immediately stopping work on the subject task or stopping as soon as possible after the task is placed in a safe condition.

Stop work may be formal or informal. A formal stop work is required when an unsafe condition exists and adherence to procedures will not correct the condition. An unsafe condition is a condition that, if left uncorrected, could negatively impact the safety of workers, the public, or the environment. Informal stop work is associated with conditions that are not considered unsafe but require correction prior to recommencing work.

When a stop work is initiated, the D&D Project Manager shall determine the requirements necessary for restart. The EH&S Manager shall approve of these requirements. Once the requirements have been instituted, the D&D Project Manager or the Director can issue a restart.

A. Joseph Nardi

Experience Summary

Mr. Nardi has worked for Westinghouse Electric Company for 37 years in various positions primarily associated with radiological health. For the past 24 years, he has served as the License Administrator for Westinghouse and is the principal point of contact between Westinghouse and the NRC.

Current Position

Supervisory Engineer

Mr. Nardi is the Project Oversight Committee Chairman responsible for chairing the POC; designating sub-committees, in writing, with the concurrence of the majority of the safety committee; determining which committee members shall attend each meeting according to the topics to be covered; and, recommending the appointment of committee members.

Previous Responsibilities

Over the past 20 years, Mr. Nardi has been involved with decommissioning activities at 11 Westinghouse sites. His experience has covered almost all segments of the nuclear fuel cycle which include uranium mining operation, several uranium and plutonium fuel fabrication facilities, service centers that support nuclear power plant operations, two research reactors, and several research facilities. The decommissioning projects have covered the entire spectrum of radionuclides that are associated with the nuclear fuel cycle.

Mr. Nardi has been an active participant in the NRC decommissioning workshops and has played an active role in attempting to influence the regulatory framework for decommissioning.

Mr Nardi is also an active member of the Radiation Safety Committee for two other Broad Scope Licenses.

- License Administrator (1980-Present)
Responsible for direct interface between Westinghouse and regulatory agencies for materials licenses and transportation container approvals. Provide direct licensing support to each facility to assure a consistent Westinghouse approach before agencies.
- Corporate Radiation Safety Officer (1983-1989), Wyoming Mineral Corporation (Westinghouse subsidiary)
Responsible for overall radiation protection program and licensing associated with the uranium mining operations at four locations.
- Radiation Safety Officer (1976-1980), Westinghouse Cheswick Site
Responsible for the radiation protection program for all site radiological operations including plutonium fuel fabrication, industrial radiography and a by-product material operation for reactor components.
- Marketing Engineer (1973-1976)
Responsible for competitor analysis, fuel cycle analysis and preparation of technical presentations for customers related to Westinghouse experience, capabilities and informational topics.

- Licensing Engineer (1967-1973)
Engineer for mixed oxide fuel fabrication pilot plant, responsible for licensing, health physics support, and nuclear criticality safety. Participated in design for mixed oxide fuel fabrication facility.

Education Stanford University
 M.S. Nuclear Engineering

The Pennsylvania State University
B. S. Chemical Engineering

The Project Management Organization described in Section 2.2 is depicted in the following organization chart:

Hematite Project Management Organization

