

PD NO. 960393

**POSITION DESCRIPTION**

Name	<u>Gary S. Boles</u>	Social Security Number	<u>[REDACTED]</u>
Position Title	<u>Equipment Performance Spec</u>	Pay Group or Schedule/Grade	<u>PG-08</u>
Location	<u>Chattanooga</u>	Effective Date	<u>9/30/96</u>
Organization Titles:		Incumbent's Signature	<u>[Signature]</u> Gary S. Boles
Group	<u>TVA Nuclear</u>	Supervisor's Signature	<u>[Signature]</u> H. R. Rogers
Operations	<u>Nuclear Operations</u>	HRM/HRO's Signature	<u>[Signature]</u> Donald E. Nixon
Division	<u>Operations Support</u>	Reports to (Title)	<u>Maintenance Support Manager</u>
Department	<u>Maintenance Support</u>		
Section			

**FOR COMPENSATION PLANNING AND ANALYSIS USE ONLY**

POSITION EVALUATION:						EVALUATION DATE: <u>9/11/96</u>			CP&A REVIEWER	
<u>F13</u>	<u>350</u>	<u>E3 (38)</u>	<u>132</u>	<u>D2P</u>	<u>132</u>	<u>614</u>	<u>56-22-22</u>	<u>JB</u>	<u>=</u>	
K-H Slot	K-H Pts	P-S Slot	P-S Pts	Acct Slot	Acct Pts	Total Pts	Profile	Profile		
Approved Job Title: <u>Specialist</u>		Schedule/Pay Grade: <u>PG-08</u>				Job Code: <u>2880</u>		Supervisory Code: <u>N</u>		
Organization Code: _____						Function Code: <u>P44</u>				

**POSITION PURPOSE:**

Manage equipment performance programs such as Equipment History and Trending, Maintenance Rule, System Health, Preventative Maintenance and Predictive maintenance. Serves as lead specialist responsible for providing direction and support to both corporate and site organizations in the functional areas that these programs touch such as maintenance, operations, and engineering.

As Program Manager, serve as lead specialist responsible for overview of NP site material condition and equipment performance management programs that monitor and maintain material condition. Responsible for maintaining thorough understanding of industry goals/expectations for plant material condition. Provides direction and support to both corporate and site organizations in order to maintain and improve reliable operation and comply with regulatory requirements.

**DIMENSIONS:**

Employees Supervised: 0

Budget: 0

DOCKETED  
USNRC

2003 MAR -4 AM 11: 11

Distribution: Original - Human Resources Microrecords Unit, Knoxville  
Copy - Operations Organization (as needed)  
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OFFICE SECRETARY  
RULEMAKING AND  
ADJUDICATIONS STAFF

TVA Exh. 55

PF001264

NUCLEAR REGULATORY COMMISSION

Decree No. 50-390 Official Exh. No. TVASS  
In the matter of TVA  
Staff IDENTIFIED ✓  
Applicant ✓ RECEIVED ✓  
Intervenor REJECTED  
Order WITHDRAWN  
DATE 6/18/62 Witness \_\_\_\_\_  
Clerk BHM

POSITION TITLE: Equipment Performance Specialist

NAME

Gary S. Boleg SSN [REDACTED]  
(First) (Middle) (Last)

PD NO.

960393

EFFECTIVE DATE

9/30/96

**PRINCIPAL ACCOUNTABILITIES:**

Manage the development of a maintenance history trending program (PM & CM) that is standardized in TVAN and optimize equipment performance to improve capacity factors. Improve effectiveness of root cause analysis and corrective actions for equipment failures.

Monitor PM program for effectiveness to maintain equipment and spare parts condition and provides feedback methods both in house and from industry to adjust scope, frequency, methods to control waivers, and key indicators of PMs.

Represent TVAN in industry meetings in the area of plant material condition (INPO, NEI, NRC, EPRI, etc.)

Manage the development of performance measures identified and utilized to monitor material condition, personnel expectations and awareness are heightened to improve material condition, identification of problems are systematically being made and tracked to resolution, and equipment conditions such as aging, obsolescence, and generic failure modes are being considered to anticipate problems.

Monitor or direct improvement plans for key equipment performance areas (long standing equipment problems, obsolete equipment, etc.). Responsible for equipment performance monitoring and testing methods utilized for determining equipment performance.

Management overview of site implementation of maintenance rule and act as corporate owner of program.

Provide management overview of System Health Report including ownership of corporate code and criteria for standardization at all sites.

Assess top system performance problems and maintain/coordinate action improvement plans for increased reliability. Utilize methods to anticipate, prevent, and promptly resolve equipment problems or degradation. Consider criteria such as equipment operates on demand, equipment problems that result in plant impacts (trips, runbacks, ESF actuation, etc.) are minimized, operator work around are minimized, and industry experience is utilized.

Monitor plant material condition indications to ensure they are effective in prioritizing improvements for reliable operation. Coordinate standardization of indicators for TVAN. Expedite equipment preservation methods to protect equipment from environmental degradation such as chemical corrosion, dust contamination, steam erosion, etc.

**MINIMUM QUALIFICATIONS:**

The incumbent must have a B.S. in engineering or related scientific discipline and at least 10 years of experience in the nuclear power industry with at least five years experience in responsible positions related to nuclear power generation. Maintenance management experience is highly desirable.

EF001265

# VACANT POSITION ANNOUNCEMENT

**SUMMARY DESCRIPTION OF DUTIES:**

MANAGE EQUIPMENT PERFORMANCE PROGRAMS SUCH AS EQUIPMENT HISTORY AND TRENDING, MAINTENANCE RULE, SYSTEM HEALTH, PREVENTATIVE MAINTENANCE AND PREDICATIVE MAINTENANCE. SERVES AS LEAD SPECIALIST RESPONSIBLE FOR PROVIDING DIRECTION AND SUPPORT TO BOTH CORPORATE AND SITE ORGANIZATIONS IN THE FUNCTIONAL AREAS THAT THESE PROGRAMS TOUCH SUCH AS MAINTENANCE, OPERATIONS, AND ENGINEERING. SERVES AS LEAD SPECIALIST RESPONSIBLE FOR OVERVIEW OF NP SITE MATERIAL CONDITION AND EQUIPMENT PERFORMANCE MANAGEMENT PROGRAMS THAT MONITOR AND MAINTAIN MATERIAL CONDITION. RESPONSIBLE FOR MAINTAINING THOROUGH UNDERSTANDING OF INDUSTRY GOALS/EXPECTATIONS FOR PLANT MATERIAL CONDITION.

**MINIMUM QUALIFICATIONS:**

INCUMBENT MUST HAVE A B.S. DEGREE IN ENGINEERING OR RELATED SCIENTIFIC DISCIPLINE AND AT LEAST 10 YEARS OF EXPERIENCE IN THE NUCLEAR POWER INDUSTRY WITH AT LEAST FIVE YEARS EXPERIENCE IN RESPONSIBLE POSITIONS RELATED TO NUCLEAR POWER GENERATION. MAINTENANCE MANAGEMENT EXPERIENCE IS HIGHLY DESIRABLE.

TVA-WIDE

MANAGEMENT

<p>TO APPLY - EMPLOYEES GET THE APPROPRIATE EMPLOYEE APPLICATION FOR ANNOUNCED VACANT POSITION FORM AT YOUR PERSONNEL, EMPLOYMENT, OR ADMINISTRATIVE OFFICE. THE FORM TO USE FOR THIS POSITION IS FORM TVA 9826. GETZ AND SEND THE FORM TO:</p> <p>NUCLEAR HUMAN RESOURCES BOOKOUT PLACE 3A-C (X-2344)</p>	<p><b>CLOSING DATE:</b></p> <p>09/09/96</p> <p>APPLICATIONS RECEIVED AFTER CLOSING DATE ARE NOT ENTITLED TO CONSIDERATION, BUT MAY BE CONSIDERED AT TVAS OPTION.</p>
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<p>VA NUCLEAR</p>	<p>WORK LOCATION CHATTANOOGA</p>	
<p>POSITION JC OPS/MAINT SUPPORT SUPERVISOR (H. RICK ROGERS)</p>	<p>POSITION EQUIPMENT PERFORMANCE SPECIALIST</p>	
<p>ANNOUNCING FINAL PAY EVALUATION</p>	<p>SCHEDULE AND GRADE PG 08</p>	<p>ANNOUNCEMENT NO. 11169</p>

AN EQUAL OPPORTUNITY EMPLOYER. SELECTIONS WILL BE MADE ON THE BASIS OF MERIT AND EFFICIENCY AS SET OUT IN THE FEDERAL EMPLOYMENT AND APPLICABLE LAWS PROHIBITING DISCRIMINATION IN FEDERAL EMPLOYMENT.

FF001266

**POSITION DESCRIPTION**

Name	<u>Emmett D. Camp</u>	Social Security Number	<u>[REDACTED]</u>
Position Title	<u>Steam Generator Technology Specialist</u>	Pay Group or Schedule/Grade	<u>PG-7</u>
Location	<u>Chattanooga</u>	Effective Date	<u>9/30/96</u>
Organization Titles:		Incumbent's Signature	<u>Emmett D. Camp</u>
Group	<u>TVA Nuclear</u>	Supervisor's Signature	<u>D. R. Goetcheus</u>
Operations	<u>Nuclear Operations</u>	HRM/HRO's Signature	<u>Donald E. Nif</u>
Division	<u>Operations Support</u>	Reports to (Title)	<u>Steam Generator Technology Manager</u>
Department	<u>Steam Generator Technology</u>		
Section			

**FOR COMPENSATION PLANNING AND ANALYSIS USE ONLY**

POSITION EVALUATION:	EVALUATION DATE: <u>9/6/96</u>	CP&A REVIEWER INITIALS: <u>JB</u>
<u>F12</u> K-H Slot	<u>304</u> K-H Pts	<u>E3 (38)</u> P-S Slot
<u>115</u> P-S Pts	<u>D4C</u> Acct Slot	<u>115</u> Acct Pts
<u>534</u> Total Pts	<u>56-22-22</u> Profile	<u>=</u> Profile
Approved Job Title: <u>SPEC</u>	Schedule/Pay Grade: <u>PG-07</u>	
Organization Code: _____	Job Code: <u>2880</u>	
	Supervisory Code: <u>N</u>	
	Function Code: <u>244</u>	

**POSITION PURPOSE:**

This position manages projects that include equipment development and qualification for testing, maintenance, and repair of steam generators. Also responsible for the management of contractor maintenance, testing and repair services performed on steam generators during plant outages.

**DIMENSIONS:**

Budget - Indirect management of steam generator outage services \$15,000,000

Employees - Outage Supervision: 10 craft  
60 contractor

Distribution: Original - Human Resources Microrecords Unit, Knoxville  
Copy - Operations Organization (as needed)  
Copy - Central Office of Union Having Jurisdiction  
Copy - Employee

POSITION TITLE: Steam Generator Technology Specialist  
NAME \_\_\_\_\_ SSN \_\_\_\_\_  
*(First) (Middle) (Last)*

PD NO. 950397  
EFFECTIVE DATE \_\_\_\_\_

**PRINCIPAL ACCOUNTABILITIES:**

- Manage projects that develop and qualify steam generator testing, maintenance, and repair equipment to TVA and industry specifications.
- 2. Provide management of contractor steam generator testing, maintenance, and repair activities performed during refueling outages.
- 3. Manage projects that develop steam generator alternate plugging criteria strategies for various damage mechanisms including interfacing with the industry and contractors on process and implementation and licensing support.
- 4. Monitor steam generator performance parameters and assess areas needing attention.
- 5. Provide recommendations on problem solution involving steam generator program and outage activities.
- 6. Develop and review site and contractor procedures for steam generator testing, maintenance, and repair activities.

**MINIMUM QUALIFICATIONS:**

The incumbent must have a B.S. degree in engineering or scientific discipline or equivalent related experience and 4-6 year of power generation experience associated with nuclear plant operations, outage services, or engineering.

In addition, 5 years minimum experience related to steam generator testing, maintenance, and repairs.

Must have detailed knowledge of steam generator eddy current testing, including technical specification and industry requirements.

VPA NUMBER: 000001110:

STATUS: RECEIVING APPLICATIONS

GROUP: TVA-WIDE

SCHEDULE AND GRADE: PG 07 NUMBER OF POSITIONS:01

JOB TITLE: SPECIALIST

LOCATION: CHATTANOOGA

ORGANIZATION: TVA NUCLEAR  
NUC OPS/DPS SUPPORT  
MAINTENANCE & TECHNICAL SUPPORT  
(SUPV: D. GOETCHEUS)

POSTING-DATE: 08/13/96

CLOSING-DATE: 08/26/96

DUTIES: MANAGES PROJECTS FOR MAINTENANCE & TECHNICAL SUPPORT FOR THE PURPOSE OF SENIOR MANAGEMENT TECHNICAL/ECONOMIC DECISIONS AND MANAGES STEAM GENERATOR DATA ENSURING ADHERENCE TO TECHNICAL SPECIFICATIONS, INDUSTRY REQUIREMENTS, TRENDS OF DAMAGE MECHANISMS AND DEVELOPS DAMAGE PROGRESSION MODELS. MANAGES PROJECTS THAT DEVELOP DAMAGE PROGRESSION MODELS UTILIZED FOR ALTERNATE REPAIR CRITERIA IN STEAM GENERATORS, MANAGES PROJECTS THAT DEVELOP THERMAL/HYDRAULIC WORK STATION MODELS FOR SON AND VBN STEAM GENERATORS.

MINIMUM QUALIFICATIONS: MUST HAVE A BACHELOR'S DEGREE IN COMPUTER SCIENCE OR BS IN ENGINEERING OR A RELATED SCIENTIFIC DISCIPLINE AND 4-6 YEARS EXPERIENCE ASSOCIATED WITH NUCLEAR PLANT OPERATIONS, MAINTENANCE, OUTAGE SERVICES OR ENGINEERING, IN ADDITION, 2 YEARS MINIMUM EXPERIENCE IN COMPUTERIZED STEAM GENERATOR DATA MANAGEMENT AND TRAINING IN ISIS COMPUTER SOFTWARE SYSTEMS. MUST HAVE DETAILED KNOWLEDGE OF STEAM GENERATOR EDDY CURRENT TESTING TECHNIQUES, DAMAGE MECHANISMS, AND SNT-TC-1A LEVEL 1 ECT CERTIFICATION.

TO APPLY SEND FORM TVA 9824 TO:

NUCLEAR HUMAN RESOURCES  
LOOKOUT PLACE 3A-C (X-2344)

BF001269

VPA NUMBER: 0000011103

STATUS: RECEIVING APPLICATIONS

GROUP: TVA-WIDE

SCHEDULE AND GRADE: PG 07 NUMBER OF POSITIONS:01

JOB TITLE: SPECIALIST

LOCATION: CHATTANOOGA

ORGANIZATION: TVA NUCLEAR  
NUC OPS/DPS SUPPORT  
MAINTENANCE & TECHNICAL SUPPORT  
(SUPV: D. GOETCHEUS)

POSTING-DATE: 08/13/96

CLOSING-DATE: 08/26/96

DUTIES: MANAGES PROJECTS FOR MAINTENANCE & TECHNICAL SUPPORT FOR THE PURPOSE OF SENIOR MANAGEMENT TECHNICAL/ECONOMIC DECISIONS AND MANAGES STEAM GENERATOR DATA ENSURING ADHERENCE TO TECHNICAL SPECIFICATIONS, INDUSTRY REQUIREMENTS, TRENDING OF DAMAGE MECHANISMS AND DEVELOPS DAMAGE PROGRESSION MODELS. MANAGES PROJECTS THAT DEVELOP DAMAGE PROGRESSION MODELS UTILIZED FOR ALTERNATE REPAIR CRITERIA IN STEAM GENERATORS. MANAGES PROJECTS THAT DEVELOP THERMAL/HYDRAULIC WORK STATION MODELS FOR SON AND WBN STEAM GENERATORS.

MINIMUM QUALIFICATIONS: MUST HAVE A BACHELOR'S DEGREE IN COMPUTER SCIENCE OR BS IN ENGINEERING OR A RELATED SCIENTIFIC DISCIPLINE AND 4-6 YEARS EXPERIENCE ASSOCIATED WITH NUCLEAR PLANT OPERATIONS, MAINTENANCE, OUTAGE SERVICES OR ENGINEERING. IN ADDITION, 2 YEARS MINIMUM EXPERIENCE IN COMPUTERIZED STEAM GENERATOR DATA MANAGEMENT AND TRAINING IN ISIS COMPUTER SOFTWARE SYSTEMS. MUST HAVE DETAILED KNOWLEDGE OF STEAM GENERATOR EDDY CURRENT TESTING TECHNIQUES, DAMAGE MECHANISMS, AND SNT-TC-1A LEVEL 1 ECT CERTIFICATION.

TO APPLY SEND FORM TVA 9824 TO:

NUCLEAR HUMAN RESOURCES  
LOOKOUT PLACE 3A-C (X-2344)

BFO01270

**POSITION DESCRIPTION**

PD NO. 960382

Name	<u>E. S. Chandrasekaran</u>	Social Security Number	<u>[REDACTED]</u>
Position Title	<u>Chemistry Program Manager (BWR)</u>	Pay Group or Schedule/Grade	<u>PG-08</u>
Location	<u>Chattanooga</u>	Effective Date	<u>8/5/96</u>
Organization Titles:			
Group	<u>TVA Nuclear</u>	Incumbent's Signature	<u>E. S. Chandrasekaran</u>
Operations	<u>Nuclear Operations</u>	Supervisor's Signature	<u>W. C. McArthur</u>
Division	<u>Corporate Radiological and Chemistry Control</u>	HRM/HRO's Signature	<u>Donald E. Nixon</u>
Department	<u></u>	Reports to (Title)	<u>D. E. Nixon Corporate Radiological and Chemistry Control Manager</u>
Section	<u></u>		

**FOR COMPENSATION PLANNING AND ANALYSIS USE ONLY**

POSITION EVALUATION:	EVALUATION DATE: <u>7/16/96</u>	CP&A REVIEWER INITIALS: <u>JEC</u>						
<u>F13</u> K-H Slot	<u>350</u> K-H Pts	<u>E3 (38)</u> P-S Slot	<u>132</u> P-S Pts	<u>E1P</u> Acct Slot	<u>132</u> Acct Pts	<u>614</u> Total Pts	<u>56-22-22</u> Profile	<u>=</u> Profile
Approved Job Title:	<u>PROGRAM MANAGER</u>	Schedule/Pay Grade:	<u>PG-08</u>					
Organization Code:	<u></u>	Job Code:	<u>2581</u>					
	<u></u>	Supervisory Code:	<u>N</u>					
	<u></u>	Function Code:	<u>L20</u>					

**POSITION PURPOSE:**  
 Provide senior technical direction, expert support, oversight, and Program/Project management in the chemistry programs of the TVAN facilities. Develop programmatic requirements for chemistry management programs. The incumbent serves as the primary liaison between the TVAN sites and TVAN corporate. The incumbent manages the implementation of directives, standards, and policies and regulations at all TVAN sites. The incumbent is the lead individual for ensuring that high standards are set and maintained at both corporate and the TVAN sites. His/her efforts are focused on establishing/maintaining a chemistry program that enhances the safe and reliable operation of TVAN sites.

- DIMENSIONS:**  
 Typical size of projects - \$10M - \$10MM. Annual projects managed - 10  
 Other:
1. Incumbent acts as Manager, Radiological Control and Chemistry, in his absence with the signature authority and control of the budget (\$3 MM) associated with that position.
  2. Serves as Technical Contract Manager establishing, controlling, and maintaining multi-site chemistry services and material contracts. (Material and Services Annual Budget \$10MM)
  3. Serves as Radiological Dose Assessor in the event of a nuclear site emergency.

Distribution: Original - Human Resources Microrecords Unit, Knoxville  
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 Copy - Central Office of Union Having Jurisdiction  
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**BF001271**

POSITION TITLE: Chemistry Program Manager (BWR) PD NO. 960382  
NAME E. S. Chandrasekaran SSN [REDACTED] EFFECTIVE DATE 8/5/96  
(First) (Middle) (Last)

**PRINCIPAL ACCOUNTABILITIES:**

as of Responsibilities:

- BFN (BWR) Chemistry Program
- Primary Chemistry Program & Count Room Support for all TVAN sites
- Radioactive Effluents, ODCM, RARC Support, and Meteorological Procedures review for all TVAN sites
- QA/QC Program Support & Performance for all TVAN sites
- Process Improvements / QITs for all TVAN sites
- Radioanalytical Working Group Management for all TVAN sites
- Multi-Site Technical contract Management such as Raw Water Treatment, Canberra, Off-Site Laboratories Services (TVAN and non-TVAN) for all TVAN sites

Principal Accountabilities :

1. Provide technical and programmatic expertise for implementation of the TVAN chemistry program at individual sites. Provide direction as needed for project manager's managing projects at BFN. Oversee the activities of other personnel assigned support functions for meeting the responsibilities of this position.
2. Function as the TVAN senior technical expert to the sites in the areas of BWR chemistry control, PWR Primary Chemistry, laboratory QA/QC, radioactive effluents, and failed fuel action plans.
3. Function as the TVAN senior technical expert and provide direction in the implementation of such programs as Hydrogen Water Chemistry (HWC) injection, depleted zinc oxide (DZO), noble metal coatings, zebra mussel/clam control and corrosion control in raw service water systems, and closed cooling water chemistry control.
4. Assist Management with interpretation of chemistry policy - review and concur with site procedures and other TVAN documents that may impact the programs. Promote optimum consistency among site programs.
5. Recommend chemistry program goals and specifications that are consistent with best industry practices, and assist with the implementation of actions to achieve them. Direct the performance of site evaluations of the chemistry program to ensure consistency and compliance with established requirements.
6. Direct review and concur with root cause analyses for identified site chemistry program problems, direct the development of corrective action plans, and coordinate the implementation of approved corrective actions.
7. Direct the performance of regulatory and licensing reviews of chemistry issues, recommend TVAN responses or positions, and concur with responses to external organizations.  
Develop and conduct specialized seminars on chemistry technical topics as requested and conduct periodic training related observations/provide recommendations for improvement as necessary.
8. Provide long-term/large scope project support to BFN for major chemistry projects. Provide short-term plant problem response to the sites as requested.
10. Perform long-term data trending and assessment of key PWR (SQN and WBN) primary chemistry and radioactive effluents data.
11. Perform long-term data trending and assessment of key BFN chemistry data. Provide appropriate feedback and corrective action proposals as necessary.
12. Function as a TVAN representative to the EPRI BWR water chemistry committee, BWR Owners Group Chemistry Committee, PWR Primary Chemistry, SWOPI, and appropriate industry & regulatory workshops/conferences/seminars. Coordinate the release of chemistry data to outside organizations as authorized.
13. Serve as a chemistry specialist, dose assessor, or RAC/RAM in the event of a radiological emergency. Remain on call 24 hours a day unless relieved by other appropriate personnel during emergency events.
14. Actively engage in plant tours, personnel interviews, observation feedback and working meetings during routine operations and plant outages. Coordinate with sites for INPO evaluations and responses.
15. Function as team leader provide technical expertise in support of the Quarterly Chemistry Team assessments for TVAN.
16. Chair Quarterly Chemistry Managers meeting, Radioanalytical Working Group for all TVAN sites and ERMI, and serve in the Radiological Assessment Review Committee (RARC) for all TVAN sites.
17. Develop, coordinate research & development project ideas, and coordinate with TVA Technology Advancements (TA) Group for TA and EPRI TC funding approval.
18. Develop multi-site contract technical specifications and act as technical contract manager for applicable contracts such as Raw Water Treatment, CDM system, Canberra, and Off-Site Laboratories Services (TVAN and non-TVAN) for all sites.
19. Act for the Corporate Radiological and Chemistry Control Manager in his/her absence.
20. Provide effective communications of the Corporate Chemistry Program to the TVA nuclear sites.

(TVA 12A[HR 7-91] Page 2 of 3)

· POSITION TITLE: Chemistry Program Manager (BWR) PD NO. 960382  
NAME E. S. Chandrasekaran SSN [REDACTED] EFFECTIVE DATE 8/5/96  
(First) (Middle) (Last)

**MINIMUM QUALIFICATIONS:**

The incumbent should have a bachelor's degree or the equivalent in chemistry, environmental sciences, or chemical engineering, including formal training and experience in management. The incumbent shall have at least eight years of professional experience in applied chemistry, with experience at an operating nuclear power plant preferable. The incumbent should have a detailed knowledge of modern analytical and radioanalytical equipment and methods used for performing all required chemistry analyses at TVAN sites which includes equipment operation and capabilities. He/she must possess a very good knowledge base in the areas of PWR and BWR chemistry control guidelines requirements. An advanced degree and ten years experience at the professional or managerial level are desirable.

Incumbent in this position is subject to rotational assignment.

VPA NUMBER: 0000010702  
STATUS: PROCESSING APPLICATIONS  
GROUP: TVA-WIDE  
SCHEME AND GRADE: PG OR NUMBER OF POSITIONS: 01  
JOB TITLE: PROGRAM MGR. CHEMISTRY (RUR)  
LOCATION: CHATTANOOGA  
ORGANIZATION: TVA NUCLEAR  
NUCLEAR OPERATIONS  
OPERATIONS SUPPORT  
(SUIP); RAD & CHEM CONTROL MGR)

POSTING-DATE: 06/13/96 CLOSING-DATE: 06/25/96

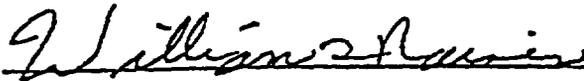
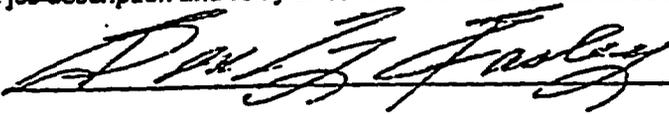
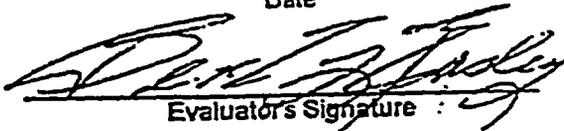
DUTIES: PROVIDE SENIOR TECHNICAL DIRECTION, EXPERT SUPPORT, OVERSIGHT, AND PROGRAM/  
PROJECT MANAGEMENT IN THE CHEMISTRY PROGRAMS OF THE TVA FACILITIES. DEFINE  
PROGRAMMATIC REQUIREMENTS FOR CHEMISTRY MANAGEMENT PROGRAMS. THE INCUMBENT  
SERVES AS THE PRIMARY LIAISON BETWEEN THE TVA SITES AND TVA CORPORATE. THE  
INCUMBENT MANAGES THE IMPLEMENTATION OF DIRECTIVES, STANDARDS, AND POLICIES  
AND REGULATIONS AT ALL TVA SITES. THE INCUMBENT IS THE LEAD FOR CHEMISTRY  
CONTACT FOR ENSURING THAT HIGH STANDARDS ARE SET AND MAINTAINED AT BOTH  
CORPORATE AND THE TVA SITES.

MINIMUM QUALIFICATIONS: INCUMBENT SHOULD HAVE A BACHELOR'S DEGREE OR THE EQUIVALENT IN CHEMISTRY,  
ENVIRONMENTAL SCIENCES, OR CHEMICAL ENGINEERING, INCLUDING FORMAL TRAINING  
AND EXPERIENCE IN MANAGEMENT THE INCUMBENT QUALIFIED AT LEAST EIGHT YEARS  
OF PROFESSIONAL EXPERIENCE IN APPLIED CHEMISTRY WITH EXPERIENCE AT AN  
OPERATING NUCLEAR POWER PLANT PREFERABLE. THE INCUMBENT SHOULD HAVE A  
PROVEN KNOWLEDGE OF MANUAL ANALYTICAL AND RADIOANALYTICAL EQUIPMENT AND  
METHODS USED FOR PERFORMING ALL REQUIRED CHEMISTRY ANALYSES AT TVA SITES.  
INCUMBENT IN THIS POSITION IS SUBJECT TO ROTATIONAL ASSIGNMENT.

TO APPLY SEND FORM TVA 9824 TO:  
NUCLEAR HUMAN RESOURCES  
LOOKOUT PLACE 3A-C (X-2344)  
PENDING FINAL HAY EVALUATION

EF001274

**JOB DESCRIPTION  
Salary Policy  
(Excluding Schedules SF and SG)**

NAME (First, Middle, Last) Robert D. Colvett		SOCIAL SECURITY NO. [REDACTED]	EFFECTIVE DATE September 30, 1996					
OPERATIONS ORGANIZATION Nuclear Operations		DIVISION Operations Support	CODE					
DEPARTMENT Radiological & Chemistry Control		SECTION ERM&I	LOCATION (City or Project) Muscle Shoals, AL					
PRESENT TITLE, SCHEDULE, AND GRADE		REASON FOR ISSUE Organizational Restructuring - New Position						
PROPOSED TITLE, SCHEDULE, AND GRADE Health Physicist, SC-4		POSITION REFERENCE NO.						
I certify that this is an accurate statement of the major duties and responsibilities of this position and that it has been discussed with incumbent.								
SUPERVISOR'S SIGNATURE 		Date Discussed 9/30/96						
TYPE NAME OF SIGNATURE William L. Raines								
I have reviewed the job description and verify that it is in accordance with classification procedures.								
SPO'S SIGNATURE 		Date Reviewed 7/8/96						
This job description is an accurate statement of the duties assigned to me.								
EMPLOYEE'S SIGNATURE  <i>(Signature is required only when employee requests a classification review)</i>		Date Agreed						
CLASSIFICATION GROUP V		Date 7/8/96  Evaluator's Signature						
FACTOR EVALUATION DATA								
Guide Chart	I			II	III	IV- Inside	IV Outside	Total
Keys								
Points								
Approved Title Health Physicist		Job Title Code 1893	Schedule & Grade SC-4					

**DISTRIBUTION:** Original - Human Resources Microrecords Units, Knoxville  
 Copy - Operations Organizations (as needed)  
 Copy - Central Office of Union Having Jurisdiction  
 Copy - Employee 12bh1hp

NAME (As on page 1) Robert D. Colvett	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Health Physicist, SC-4
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DUTIES

Write a brief introductory paragraph summarizing the primary purpose of the job. Follow with a list of typical duties and responsibilities with supporting examples which are performed on a recurring basis.

The incumbent serves as the technical expert for the maintenance and operation of ERM&I data base systems and provides the radiation protection technical support for ERM&I program activities. The incumbent also provides technical oversight for the ERM&I quality assurance program. The incumbent advises the Manager, ERM&I, on technical issues related to radiation protection, computer data base systems and calibration of radiation detection devices. Typical duties include:

Provides the technical expertise for maintaining and operating the computer data base system used to support the ERM&I operations. These data bases are maintained on the ERM&I HP 9000 computer system and include the radioanalytical lab data base(s), the radiological environmental monitoring reporting data base, the RADCON instrument services data base and the MG electronic dosimeter performance monitoring data base. The incumbent applies expert level technical knowledge and experience in radiation protection and computer system design and applications to develop the technical basis for data systems and software and to implement software changes for system enhancement and to correct problems. The incumbent develops procedures for the use of data base systems and software.

Provides the technical direction and support for the ERM&I instrument services provided for TVAN portable radiological monitoring instrumentation. Develops the procedures and processes used by ERM&I in the calibration and repair of radiation survey and monitoring instrumentation. Provides technical support to investigate and resolve problems with calibration and repair processes or the calibration facilities, including the high level well calibration unit. Develops and implements process improvements in the instrument services programs such as the development and implementation of a PC based automated calibration system for electronic dosimeters and a PC based control system for the well calibration unit. Develops the written procedures used in radiation survey instrument calibration and the written procedures covering the use and operation of radiation calibration sources.

The incumbent will serve as the NVLAP technical director and approved signatory for the ERM&I conduct of the NVLAP accredited processes for electronic dosimeters. Reviews and approves quality records including system calibration and MQA data, and personnel qualification, training, and certification. Develops and implements the procedures and processes required for the servicing of electronic dosimeters under the NVLAP accreditation.

Provides oversight and monitoring of ERM&I activities for compliance with applicable quality assurance requirements including ERM&I QA Plan and implementing procedures and TVAN QA standards. Performs ongoing tracking and trending of ERM&I QA performance and provides periodic reports to the Manager, ERM&I. Conducts internal observations and assessments of ERM&I activities for the purpose of evaluating QA program compliance.

Provides the radiation protection technical support for the WARL facility and ERM&I activities. The incumbent is responsible for developing the procedures and processes necessary to ensure the safe use, storage and control of the radiation sources and radioactive materials at the WARL facility. The incumbent provides the ongoing radiation protection technical oversight of ERM&I activities to ensure the radiation safety of the ERM&I staff and to ensure activities comply with the WARL facility NRC radioactive materials licenses. The incumbent will serve as the Radiation Safety Officer designated on the NRC licenses.

Provides the technical direction and oversight for the processes related to calibration, use and reading of TLD badges used in the TVAN radiological environmental monitoring programs. Develops and implements procedures and processes, including computer software used for data reduction and dose calculations, that ensure the measurement quality assurance of the environmental TLD measurements.

Develops and conducts internal training sessions for the ERM&I staff on radiation protection, use of calibration sources, quality assurance program and the use and application of data base systems and software.

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NAME (As on page 1) Robert D. Colvett	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Health Physicist, SC
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**JOB FACTOR DESCRIPTIONS**

**KNOWLEDGE:** Describe the type knowledge required to perform the assigned work. Knowledge may result from experience, formal schooling, self-study, or TVA-sponsored experiences but do not describe in terms of academic achievement or longevity.

Expert level knowledge in computer system design, application and software, including both large systems used for data base support and PCs. Specialized knowledge of Oracle data systems and programming.

Specialized knowledge of the principles and methodology of health physics especially as applied to radiation protection and the calibration and testing of radiation detection instrumentation.

Specialized knowledge of nuclear physics as it applies to the interaction of ionizing radiation with detection, counting, and monitoring equipment.

Expert level knowledge of TLD badges and the equipment and processes used for the calibration and reading of these radiation monitoring devices.

Detail knowledge of the NVLAP accreditation requirements and processes as related to electronic dosimeters.

**CONTINUED ON ATTACHED PAGE**

**SKILL:** Describe the type of skills utilized in applying the above knowledge to the performance of the listed duties.

Ability to apply expertise in computer software and systems in the investigation and resolution of computer application and operation problems.

Ability to develop and implement technical processes and procedures required for the use of both radiation sources and measuring and test equipment in the calibration and servicing of radiation monitoring instrumentation.

Ability to perform quality assurance monitoring and assessment of technical work such as radioanalytical analyses and instrument calibration and servicing.

Ability to apply technical knowledge and experience to the development of written procedures and instructions.

Ability to technically assess and direct work requiring the use of radioactive materials in manner that ensures that the use and control of the radioactive material meets all radiation protection and licensing requirements.

Ability to train others in the use of radioactive sources and electrical measuring and test equipment.

**CONTINUED ON ATTACHED PAGE**

**COMPLEXITY OF WORK:** Provide examples of the judgments required to perform the duties and the basis for the judgment. Judgment (independent decisionmaking)

The incumbent provides the technical expertise for a diverse range of programs and activities including analytical computer systems and software, radiation detection instrument calibration and control and use of radiation sources. The incumbent must apply expert level knowledge in health physics, computer system design and programming as well as quality assurance. The incumbent develops the technical basis for procedures and processes and monitors activities conducted by the ERM&I staff for technical and quality assurance performance. Successful resolution of technical problems or process improvements often involves the combined application of expert level knowledge in radiation detectors, electronics, computer automation and measurement quality assurance.

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NAME (As on page 1) bert D. Colvett	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Health Physicist, SC-4
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**Supervision over Others:** Describe type of supervision, i.e., technical supervision/direction, administrative supervision, or full supervision. Indicate the number, title, schedule, and grade level of those supervised and specify full-time responsibility.

The incumbent is responsible for the technical direction of the technicians performing instrument calibration and repair and is the NVLAP Technical Director for electronic dosimeter processing. The incumbent provides daily technical oversight and review of work conducted in this area. In addition, the incumbent provides technical direction for other ERM&I staff members in the areas of radiation protection and NRC license compliance as well as computer system use and operation.

**Supervisory Controls:** Describe the nature and extent of supervision received by the incumbent. Include the way assignments are made, how instructions are given, whether priorities and deadlines are set, and how work is reviewed.

As the senior technical staff member in the area of health physics and ERM&I computer systems, the incumbent is independently responsible for a broad range of activities. Interaction with management involves broad definitions of organization objectives and deadlines and response to periodic questions on the status of projects. Specific project details are left to the incumbent to develop and implement within the overall project limits.

**Nature of Guidelines:** Describe the specific instructions, procedures, or policies and how they limit the independent action of the incumbent.

The incumbent is expected to exercise considerable latitude in independently performing the duties in the assigned area of responsibility. As the technical expert the incumbent is limited only by TVAN policy, regulations, and the overall Rad-Chem and ERM&I organizational goals and objectives. The incumbent independently plans and coordinates activities in the areas of responsibility to meet the overall organizational aims and objectives.

**Impact of Work:** Describe the consequences of an error and the probability of it going undetected considering the current review process and established guidelines. (Examples should reflect errors in judgment rather than acts of negligence.)

As the technical expert, the incumbent's findings and recommendations will be accepted. Errors in judgment may discredit the organization. Failure to correctly address a technical issue or recognize a potential problem could result to quality assurance findings, NRC violations, and could result in unsafe working conditions for TVAN employees.

**Contacts:** Indicate grade levels of personnel outside immediate work group who are contacted by the incumbent in carrying out the responsibilities of this job. For each type contact, specify whether it is a TVA contact or one outside TVA. Explain the purpose of each contact and how often this contact must be made.

The incumbent continually exchanges information within the ERM&I staff and corporate Rad-Chem (Sr. Manager and below). The incumbent will have frequent (weekly to daily) contacts with site Rad-Chem personnel (Sr. Manager and below). As the technical expert on instrument services, the incumbent will represent ERM&I and TVAN with outside agencies and vendors.

**Working Conditions (General Services Schedule SB only):** Describe any extraordinary physical requirements or unusual physical exertion required by the work assignment. Specify any aspects of the job which require time limitations or use of safety devices.

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HEALTH PHYSICIST, SC-4

**KNOWLEDGE (Continued):**

Detail knowledge of electrical design and theory as applied to radiation protection instrumentation.

Detail knowledge of the radiation protection requirements for control and use of radioactive materials and standards.

Knowledge of the measuring and testing equipment and radiation sources used in the calibration of radiation survey instrumentation.

**SKILL (Continued)**

Ability to train others in the use of computer systems and software.

Ability to communicate effectively both orally and in writing including the preparation and presentation of technical reports.

BF001279

NAME (As on page 1) Robert D. Colvett	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Health Physicist, SC-4
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**MINIMUM QUALIFICATION REQUIREMENTS**

List minimum knowledges, skills, and/or abilities as contained in the Classification Manual

A B.S. degree in Health Physics or a closely related scientific field and a minimum of five years experience in radiation protection measurement applications such as survey instrumentation and dosimetry. Experience with computer system design, programming and application is also required. An advanced degree is desired.

**Evidence of Minimum Qualifications**

Possession of the minimum knowledge, skills, and/or abilities may be shown through experience, training, testing, license requirements, education, and/or a combination of these evidences. Any testing or license requirement listed below is the only acceptable evidence for that knowledge, skill, and/or ability. The education evidence listed below represents the specific minimum acceptable coursework and grade level for the indicated knowledges, if education is to be used as an evidence of qualification. Education evidence may not be applicable for all knowledges, skills, and/or abilities listed in the minimum qualification requirements above.

<u>TEST REQUIREMENTS:</u>  <u>LICENSE REQUIREMENTS:</u>
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	<b><u>EDUCATION</u></b>	
<b><u>KNOWLEDGE</u></b>	<b><u>COURSE</u></b>	<b><u>GRADE LEVEL</u></b>

BF001280

# VACANT POSITION ANNOUNCEMENT

**SUMMARY DESCRIPTION OF DUTIES:**

TECH EXPERT FOR THE MAINTENANCE AND OPERATION OF ERM DATA BASE SYSTEMS AND PROVIDES THE RADIATION PROTECTION TECH SUPPORT FOR ERM PROGRAM ACTIVITIES. TECH OVERSIGHT FOR THE ERM QUALITY ASSURANCE PROGRAM. ADVISES THE MANAGER, ERM, ON TECH ISSUES RELATED TO RADIATION PROTECTION, COMPUTER DATA BASE SYSTEMS AND CALIBRATION OF RADIATION DETECTION DEVICES. DEVELOP THE TECH BASIS FOR DATA SYSTEMS AND SOFTWARE AND TO IMPLEMENT SOFTWARE CHANGES FOR SYSTEM ENHANCEMENT AND TO CORRECT PROBLEMS. DEVELOPS PROCEDURES FOR THE USE OF DATA BASE SYSTEMS AND SOFTWARE. PROVIDES TECH DIRECTION AND SUPPORT FOR THE ERM INSTRUMENT SERVICES PROVIDED FOR TVAN.

**MINIMUM QUALIFICATIONS:**

A B.S. DEGREE IN HEALTH PHYSICS OR A CLOSELY RELATED SCIENTIFIC FIELD AND A MINIMUM OF FIVE YEARS EXPERIENCE IN RADIATION PROTECTION MEASUREMENT APPLICATIONS SUCH AS SURVEY INSTRUMENTATION AND DOSIMETRY. EXPERIENCE WITH COMPUTER SYSTEM DESIGN, PROGRAMMING AND APPLICATION IS ALSO REQUIRED. AN ADVANCED DEGREE IS DESIRED. MUST HAVE EXPERT LEVEL KNOWLEDGE OF THE PRINCIPLES AND METHODOLOGY OF HEALTH PHYSICS ESPECIALLY AS APPLIED TO RADIATION PROTECTION AND THE CALIBRATION AND TESTING OF RADIATION DETECTION INSTRUMENTATION. MUST HAVE EXPERT LEVEL KNOWLEDGE IN COMPUTER SYSTEM DESIGN, APPLICATION AND SOFTWARE INCLUDING ORACLE DATA SYSTEMS AND PROGRAMMING.

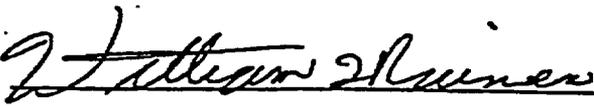
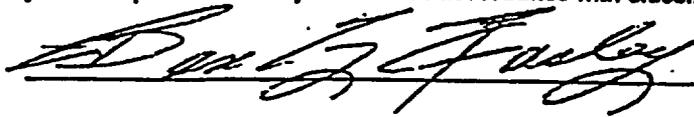
COMPETITIVE AREA WIDE SALARY POLICY

<p>HOW TO APPLY - EMPLOYEES GET THE APPROPRIATE EMPLOYEE APPLICATION FOR ANNOUNCED VACANT POSITION FORM AT YOUR LOCAL PERSONNEL, EMPLOYMENT, OR ADMINISTRATIVE OFFICE. THE FORM TO USE FOR THIS POSITION IS FORM TVA 982C. COMPLETE AND SEND THE FORM TO:</p>	<p><b>CLOSING DATE:</b>  08/13/96</p> <p>APPLICATIONS RECEIVED AFTER CLOSING DATE ARE NOT ENTITLED TO CONSIDERATION, BUT MAY BE CONSIDERED AT TVAS OPTION.</p>
<p>NUCLEAR HUMAN RESOURCES LOOKOUT PLACE 3A-C (X-2344) *CHATT, KNOX, POTC, &amp; MUSCLE SHOALS EMPLOYEES ONLY</p>	

<p>TVA NUCLEAR</p>	<p>WORK LOCATION MUSCLE SHOALS</p>	
<p>OPERATION NUC OPS/OPS SUPPORT</p>	<p>POSITION HEALTH PHYSICIST</p>	
<p>MI MENT (SUPV: WILLIAM RAINES)</p>	<p>SCHEDULE AND GRADE SC 04</p>	<p>ANNOUNCEMENT NO. 11033</p>

TVA IS AN EQUAL OPPORTUNITY EMPLOYER. SELECTIONS WILL BE MADE ON THE BASIS OF MERIT AND EFFICIENCY AS SET OUT IN THE TVA ACT AND APPLICABLE LAWS PROHIBITING DISCRIMINATION IN FEDERAL EMPLOYMENT.

**JOB DESCRIPTION  
Salary Policy  
(Excluding Schedules SF and SG)**

NAME (First, Middle, Last) <b>Monica H. Cross</b>		SOCIAL SECURITY NO. <b>[REDACTED]</b>	EFFECTIVE DATE <b>September 30, 1996</b>					
OPERATIONS ORGANIZATION <b>Nuclear Operations</b>		DIVISION <b>Operations Support</b>	CODE					
DEPARTMENT <b>Radiological &amp; Chemistry Control</b>		SECTION <b>ERM&amp;I</b>	LOCATION (City or Project) <b>Muscle Shoals, AL</b>					
PRESENT TITLE, SCHEDULE, AND GRADE		REASON FOR ISSUE <b>Organizational Restructuring - New Position</b>						
PROPOSED TITLE, SCHEDULE, AND GRADE <b>Chemist, SC-3 (Spectroscopy)</b>		POSITION REFERENCE NO.						
I certify that this is an accurate statement of the major duties and responsibilities of this position and that it has been discussed with incumbent.								
SUPERVISOR'S SIGNATURE 		Date Discussed <b>9/27/96</b>						
TYPE NAME OF SIGNATURE <b>William L. Raines</b>								
I have reviewed the job description and verify that it is in accordance with classification procedures.								
DPO'S SIGNATURE 		Date Reviewed <b>7/8/96</b>						
This job description is an accurate statement of the duties assigned to me.								
EMPLOYEE'S SIGNATURE  <i>(Signature is required only when employee requests a classification review)</i>		Date Agreed						
CLASSIFICATION GROUP <b>III</b>		<b>7/8/96</b> Date  Evaluator's Signature						
FACTOR EVALUATION DATA								
Guide Chart	I			II	III	IV Inside	IV Outside	Total
Keys	B2			B2	B1	B2c	B2b	
Points	280	280	75	55	45	735		
Approved Title <b>Chemist (Spectroscopy &amp; Instrumentation)</b>		Job Title Code <b>0923</b>	Schedule & Grade <b>SC-3</b>					

DISTRIBUTION: Original - Human Resources Microrecords Units, Knoxville  
 Copy - Operations Organizations (as needed)  
 Copy - Central Office of Union Having Jurisdiction  
 Copy - Employee

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NAME (As on page 1) Monica E. Cross	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Chemist, SC-3
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DUTIES

Write a brief introductory paragraph summarizing the primary purpose of the job. Follow with a list of typical duties and responsibilities with supporting examples which are performed on a recurring basis.

The incumbent provides chemistry technical support for the radioanalytical analysis functions of ERM&I and the Western Area Radiological Laboratory (WARL). The incumbent supports the nuclear spectroscopy and counting instrumentation area of the ERM&I lab operations providing the radioanalytical technical support for the analysis of radiological environmental monitoring samples, radiological effluent samples, 10 CFR 61 rad waste characterization samples and samples analyzed for the site RADCON programs. Major duties and responsibilities include:

Provides technical support for the performance of gamma spectroscopy, alpha spectroscopy, liquid scintillation and other nuclear counting analyses. Monitors the in progress status of nuclear spectroscopy and counting performed by the lab analysts and performs the complex spectroscopy and counting operations required for the analyses conducted on nuclear plant operations samples including 10 CFR 61 samples and radiological effluent samples. Coordinates counting of the prepared samples with the chemist responsible for the radiochemical separations steps of the analyses.

Identifies when the nuclear spectroscopy and/or counting process applied for a specific analysis is not producing the required results. Conducts the investigation of the questionable data and adjusts the counting process or develops a procedure modification to produce the desired results. Prepares the technical documentation required for procedure revisions or preauthorized deviations to address unusual sample conditions. In conjunction with other ERM&I chemists, plans and conducts technical investigations to address adverse trends identified by the QC program, develop and implement efficiency improvements or develop a completely new counting procedure to support new radioanalytical services requested by TVAN sites. Prepares the detail written instrumentation operation and quality control procedures required by nuclear quality assurance programs.

Reviews in progress data and final results produced by the counting instrumentation. Identifies when in progress data indicates a potential problem with the counting processes and makes process adjustments. Based on detail knowledge of the purpose of a specific sample and the application of the data, identifies when analytical results are within customer expectations or when the submitting site should be notified of potentially significant result. Prior to notifying the site the incumbent must first make a technical evaluation of the validity of the results. Reviews and approves results generated from gamma and alpha spectroscopy. Prepares written reports of the radioanalytical analysis results for submittal to the site Rad-Chem personnel.

The incumbent is responsible for the performance of the quality control checks, tests and calibrations of the nuclear counting instrumentation. Conducts the quality control measures and interprets the results of the measurements. Develops and implements corrective actions, procedure modifications and revisions to address adverse trends in QC data. Reviews the QC data produced by the lab analysts working in the nuclear instrumentation area of the lab operations.

In coordination with chemists responsible for wet chemistry separations, reviews the data generated by alpha spectroscopy, liquid scintillation, gamma spectroscopy and other nuclear counting techniques and instrumentation. Identifies anomalous results and initiates investigations and research to resolve the data questions. Resolution of the problem may require adjustment of the nuclear counting process or modification of the chemical separation methodology. The varying chemical matrix, changes in radionuclide concentration distribution and the variance in interfering radionuclide concentrations, cause many of the analyses performed in support of plant operations to be chemical research projects. The incumbent provides the technical support to successfully resolve the nuclear spectroscopy or instrumentation application problems and produce the correct analysis results.

The incumbent serves as a technical interface with the site personnel obtaining information on the priority of samples and projections on workloads for special projects or outage support samples. Incumbent responds to site technical inquiries concerning the interpretation of the data.

The incumbent plans and conducts technical training sessions for other lab personnel on nuclear spectroscopy and instrumentation operations and procedures. Conducts qualification and certification observations of lab technicians.

**DUTIES (CONTINUED)**

During a REP drill or exercise, provides technical expertise for the operation of the mobile gamma analysis lab.

**KNOWLEDGE (CONTINUED)**

Must have a thorough knowledge of current EPA and NRC regulations applicable to radiochemical measurements. Must be familiar with accepted practices and methods such as those prescribed by the American Society for Testing Materials, American Public Health Association, and the American Standards Institute. This is especially important in evaluating analytical requirements necessary to meet detection sensitivities required for compliance monitoring.

Must have an excellent knowledge of small computer systems and programming of such systems, particularly as they are applied in accumulation and evaluation of lab data.

Must have a very thorough knowledge of the radiological environmental monitoring programs conducted for TVA nuclear power sites.

Must have a thorough knowledge of the necessary quality assurance activities required to ensure and document the quality of the analyses performed by the lab.

**SKILL (CONTINUED)**

Must be precise in gathering and evaluating data and must be able to review and evaluate data produced by lab analysts.

Must be able to prepare and present technical reports and scientific papers.

Must be fluent both in written and oral communications.

Must be able to handle working relationships tactfully.

Must be able to conduct quality assurance activities associated with the nuclear counting work and must be able to evaluate results from quality control activities.

NAME (As on page 1) Monica H. Cross	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Chemist, SC-3
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**JOB FACTOR DESCRIPTIONS**

**KNOWLEDGE:** Describe the type knowledge required to perform the assigned work. Knowledge may result from experience, formal schooling, self-study, or TVA-sponsored experiences but do not describe in terms of academic achievement or longevity.

Must have detail knowledge in the field of nuclear spectroscopy, nuclear counting instrumentation and the applicable analytical methods. This includes a very thorough knowledge of nuclear decay schemes, the theory of nuclear interactions, and the advanced techniques, theories, and practices applied in the field of radiochemical analysis.

Must have detail technical knowledge of the operation and application of instrumentation used for gamma and alpha spectroscopy, liquid scintillation counting and low background alpha and beta counting.

Must have a working knowledge of the technical processes and methods used for radiochemical separations.

Must have a through knowledge of the algebraic and differential equation principles and techniques required for the development and use of complex calculations used in the resolution of nuclear spectral data and determination of radionuclide concentrations.

Must have a general knowledge of the requirements and processes within the site Rad-Chem Programs and plant operation that generate the samples analyzed by ERM&I.

**CONTINUED**

**SKILL:** Describe the type of skills utilized in applying the above knowledge to the performance of the listed duties.

Must be able to apply the advanced theories and techniques of nuclear spectroscopy in the analysis of environmental radiological monitoring and plant operations samples and in the investigation and development of new analysis methods. Must be able to apply the expertise of nuclear spectrometry in the evaluation of new instrumentation. \_\_\_\_\_

Must be able to design and conduct research and development projects in the field of nuclear spectrometry.

Must be able to operate and train others in the operation of all types of nuclear spectrometry and nuclear counting instrumentation including the computer systems associated with such equipment. Must be able to develop the standardization and calibration techniques necessary to utilize this instrumentation in the analysis of new or unusual sample media.

Must be able to apply the expertise in nuclear decay schemes to identify the radionuclides present in a nuclear spectrum.

**CONTINUED**

**COMPLEXITY OF WORK:** Provide examples of the judgments required to perform the duties and the basis for the judgment. Judgment (independent decisionmaking)

The incumbent is responsible for technical support for the ERM&I nuclear counting operations. The incumbent selects and develops procedures and approaches to meet existing and new requirements, varying or changing the procedures as the requirements change. In the area of nuclear spectrometry method research and development, the incumbent conducts projects independently utilizing his/her judgment as to whether a project is producing the required result.

NAME (As on page 1) Monica H. Cross	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Chemist, SC-3
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**Supervision over Others:** Describe type of supervision, i.e., technical supervision/direction, administrative supervision, or full supervision. Indicate the number, title, schedule, and grade level of those supervised and specify full-time responsibility.

Provides technical direction for lab analysts assigned to the nuclear instrumentation area of the lab.

**Supervisory Controls:** Describe the nature and extent of supervision received by the incumbent. Include the way assignments are made, how instructions are given, whether priorities and deadlines are set, and how work is reviewed.

Overall lab unit direction is provided by the senior chemist and/or the Manager, ERM&I. Program requirements such as quality assurance plan, customer schedules and overall lab workload provide the primary guidance on how the incumbent plans and conducts assignments. Work is generally reviewed only from the aspect of complying with existing requirements in a satisfactory manner. General priorities are established within the overall objectives for the ERM&I operations.

**Nature of Guidelines:** Describe the specific instructions, procedures, or policies and how they limit the independent action of the incumbent.

The incumbent acts independently in determining working details and methods and independently evaluates proposed research projects as to their applicability to TVA needs and conducts research projects based on this evaluation. Will prepare periodic progress reports; otherwise, final report will give results and evaluation of the overall projects.

**Impact of Work:** Describe the consequences of an error and the probability of it going undetected considering the current review process and established guidelines. (Examples should reflect errors in judgment rather than acts of negligence.)

The quantity and quality of work performed by the incumbent bears directly on the TVAN operations. Unreliable or inaccurate information would result in costly repetition of the work and may result in deviation findings by NRC.

**Contacts:** Indicate grade levels of personnel outside immediate work group who are contacted by the incumbent in carrying out the responsibilities of this job. For each type contact, specify whether it is a TVA contact or one outside TVA. Explain the purpose of each contact and how often this contact must be made.

The incumbent may exchange information with other technical personnel within and outside TVA (PG-7 and below) on a weekly basis. Main TVA contacts are within RADCON/Chemistry program area. Outside TVA contacts may be with any number of other agencies (EPS, NRC, ASTM, etc) or commercial firms.

**Working Conditions (General Services Schedule SB only):** Describe any extraordinary physical requirements or unusual physical exertion required by the work assignment. Specify any aspects of the job which require time limitations or use of safety devices.

Work involves the radiochemistry lab operations and requires use of normal lab safety equipment.

NAME (As on page 1)

Monica E. Cross

SOCIAL SECURITY NO.

[REDACTED]

APPROVED TITLE, SCHEDULE, AND  
GRADE Chemist, SC-3

**MINIMUM QUALIFICATION REQUIREMENTS**

List minimum knowledges, skills, and/or abilities as contained in the Classification Manual

A B.S. degree in chemistry with a minimum of 3 years of experience at the SC-2 level in nuclear spectroscopy and nuclear counting instrumentation.

**Evidence of Minimum Qualifications**

Possession of the minimum knowledge, skills, and/or abilities may be shown through experience, training, testing, license requirements, education, and/or a combination of these evidences. Any testing or license requirement listed below is the only acceptable evidence for that knowledge, skill, and/or ability. The education evidence listed below represents the specific minimum acceptable coursework and grade level for the indicated knowledges, if education is to be used as an evidence of qualification. Education evidence may not be applicable for all knowledges, skills, and/or abilities listed in the minimum qualification requirements above.

TEST REQUIREMENTS:

LICENSE REQUIREMENTS:

**EDUCATION**

**KNOWLEDGE**

**COURSE**

**GRADE LEVEL**

VPA NUMBER: 0000011032  
STATUS: PROCESSING APPLICATIONS  
GROUP: COMPETITIVE AREA WIDE  
SCHEDULE AND GRADE: SC 03 NUMBER OF POSITIONS:01  
JOB TITLE: CHEMIST (SPECTROSCOPY)  
LOCATION: MUSCLE SHOALS  
ORGANIZATION: TVA NUCLEAR  
NUC OPS/OPS SUPPORT  
ERMI  
(SUPV: WILLIAM RAINES)  
POSTING-DATE: 07/29/96 CLOSING-DATE: 08/13/96

DUTIES: PROVIDES CHEMISTRY TECH SUPPORT FOR THE RADIOANALYTICAL ANALYSIS FUNCTIONS OF ERMI AND THE WARL. SUPPORTS THE NUCLEAR SPECTROSCOPY AND COUNTING INSTRUMENTATION AREA OF THE ERMI LAB OPERATIONS PROVIDING THE RADIOANALYTICAL TECH SUPPORT FOR THE ANALYSIS OF RADIOLOGICAL ENVIRONMENTAL MONITORING SAMPLES, RADIOLOGICAL EFFLUENT SAMPLES, 10 CFR 61 RAD WASTE CHARACTERIZATION SAMPLES. MONITORS THE IN PROGRESS STATUS OF NUCLEAR SPECTROSCOPY AND COUNTING PERFORMED BY THE LAB ANALYSTS AND PERFORMS THE COMPLEX SPECTROSCOPY AND COUNTING OPERATIONS REQUIRED FOR THE ANALYSES CONDUCTED ON NUCLEAR PLANT OPERATIONS SAMPLES.

MINIMUM QUALIFICATIONS: A B.S. DEGREE IN CHEMISTRY WITH A MINIMUM OF THREE YEARS OF EXPERIENCE AT THE SC-2 LEVEL IN NUCLEAR SPECTROSCOPY AND NUCLEAR COUNTING INSTRUMENTATION. MUST HAVE A DETAIL KNOWLEDGE OF NUCLEAR SPECTROSCOPY, NUCLEAR COUNTING INSTRUMENTATION, APPLICABLE ANALYTICAL METHODS AND NUCLEAR DECAY SCHEMES. MUST HAVE A DETAIL KNOWLEDGE OF THE DESIGN, THEORY AND OPERATION OF STATE OF THE ART NUCLEAR SPECTROSCOPY DETECTORS AND ANALYZER SYSTEMS AS WELL AS LIQUID SCINTILLATION AND ALPHA/BETA COUNTING SYSTEMS. MUST BE ABLE TO APPLY THE ADVANCED THEORIES AND TECHNIQUES OF NUCLEAR SPECTROSCOPY TO PERFORMANCE OF RADIOANALYTICAL ANALYSES.

TO APPLY SEND FORM TVA 9824 TO: NUCLEAR HUMAN RESOURCES  
LOOKOUT PLACE 3A-C (X-2344)  
\*CHATT. KNOX. POTC. & MUSCLE SHOALS EMPLOYEES ONLY

BF001288

**JOB DESCRIPTION  
Salary Policy  
(Excluding Schedules SF and SG)**

NAME (First, Middle, Last) James W. Dillard		SOCIAL SECURITY NO. [REDACTED]	EFFECTIVE DATE September 30, 1996
OPERATIONS ORGANIZATION Nuclear Operations		DIVISION Operations Support	CODE
DEPARTMENT Radiological & Chemistry Control		SECTION ERM&I	LOCATION (City or Project) Muscle Shoals, AL
PRESENT TITLE, SCHEDULE, AND GRADE Chemist, SC-4 (Radiochemistry)		REASON FOR ISSUE Organizational Restructuring - New Position	
PROPOSED TITLE, SCHEDULE, AND GRADE		POSITION REFERENCE NO.	

I certify that this is an accurate statement of the major duties and responsibilities of this position and that it has been discussed with incumbent.

SUPERVISOR'S SIGNATURE William L. Raines 9/27/96  
Date Discussed

TYPE NAME OF SIGNATURE William L. Raines

I have reviewed the job description and verify that it is in accordance with classification procedures.

DPO'S SIGNATURE [Signature] 7/18/96  
Date Reviewed

This job description is an accurate statement of the duties assigned to me.

EMPLOYEE'S SIGNATURE \_\_\_\_\_ Date Agreed \_\_\_\_\_  
*(Signature is required only when employee requests a classification review)*

CLASSIFICATION GROUP							III						
FACTOR EVALUATION DATA													
Guide Chart	I	II	III	IV Inside	IV Outside	Total	<u>7/18/96</u> Date <u>[Signature]</u> Evaluator's Signature						
Keys	B3c	B3c	C3	C2c	C2b								
Points	460	460	245	65	55	1285							
Approved Title Chemist (Radiochemistry)							Job Title Code 0923			Schedule & Grade SC-4			

**DISTRIBUTION:** Original - Human Resources Microrecords Units, Knoxville  
 Copy - Operations Organizations (as needed)  
 Copy - Central Office of Union Having Jurisdiction  
 Copy - Employee 12bsc4b

NAME (As on page 1) James W. Dillard	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Chemist, SC-4
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**DUTIES**

Write a brief introductory paragraph summarizing the primary purpose of the job. Follow with a list of typical duties and responsibilities with supporting examples which are performed on a recurring basis.

The incumbent is the senior chemist for ERM&I wet chemistry separation lab activities providing technical direction for this area of the radioanalytical lab operations and is the technical expert in radiochemical separations. Duties include:

Directs the daily operations of the WARL wet chemistry lab operations. Plans and coordinates the work in this area to support the overall ERM&I radioanalytical service functions required for the radiological environmental monitoring programs conducted for TVAN sites and for sample analyses performed for nuclear site operations. Radioanalytical services include the analyses of 10 CFR 61 samples, radiological effluent samples and samples analyzed for the site RADCON programs.

Reviews and approves all data generated from the radioanalytical analyses of samples collected for radiological environmental monitoring and samples submitted from nuclear plant operations such as 10 CFR 61 waste characterization and radiological effluent monitoring. Reviews in progress chemical results and final radionuclide calculations to identify any anomalous results and correct the mis-identification of radionuclides. Prepares reports of radioanalytical analysis results.

Plans and implements research and development projects in radiochemical separations. Determines the need for new or revised technical methods and procedures and conducts the development and testing of the procedures and methods. Directs other lab staff in the chemical research and development related to radionuclide separation and purification using techniques such as ion exchange; solvent extraction; redox reactions; etc. Develops the written procedures used by ERM&I in the wet chemistry operations of the lab. Provides technical review and concurrence for procedures developed by other members of the lab chemistry staff.

Provides the technical support and direction for the radiochemical isolation and identification phases of the complex radiochemical analyses performed on plant operations samples such as 10 CFR 61 waste characterization or radiological effluents. Due to the variety of chemical matrixes that occur in these samples and the complex mix of radionuclides, analyses of these samples often become research projects requiring testing and modification of technical methods in the process of performing the analysis. Directs others in the performance of these difficult radiochemical analyses.

Identifies the need for and develops new chemical separation techniques. Utilizing expertise in chemical reactions develops a chemical separation routine to separate and purify the radionuclide of interest. Tests the new method making process improvements and then implements a written procedure to put the new method into routine use. Modifies computer calculation programs or develops new programs to produce the final determination of radionuclide concentration and provides for the QA validation of this software.

Plans and directs the quality control (QC) tests and processes required to certify and provide ongoing validation of the radiochemical analysis methods. Develops the written procedures that direct the performance of these QC tests and measurements. Reviews and approves the data generated by the QC processes. Identifies potential problems and develops and implements the corrective action necessary to maintain the quality of the lab results.

Plans, organizes, and coordinates the work of subordinates in the wet chemistry area of lab operations. Reviews and approves completed work and appraises the Manager, ERM&I, on the performance and progress of subordinates.

Prepares and conducts training sessions for the lab staff.

Prepares technical reports and briefings for internal and external distribution and for publication.

NAME (As on page 1) James W. Dillard	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Chemist, SC-4
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**JOB FACTOR DESCRIPTIONS**

**KNOWLEDGE:** Describe the type knowledge required to perform the assigned work. Knowledge may result from experience, formal schooling, self-study, or TVA-sponsored experiences but do not describe in terms of academic achievement or longevity.

Must have a specialist level knowledge of the principles and theories of chemistry especially as applied to the area of radiochemistry.

Must have expert knowledge and understanding of the chemical processes involved in ion exchange, solvent extraction, electro-plating and other chemical separation techniques.

Must have a thorough knowledge of the application and use of the various nuclear spectroscopy methods and nuclear counting instrumentation.

Must have an excellent knowledge of small computer systems and programming of such systems, particularly as they apply to radioanalytical data tabulation, calculations and results reporting.

Must have a detail knowledge of the principles, application and conduct of laboratory quality control programs required to ensure and document the quality of radioanalytical analyses performed by the lab.

CONTINUED ON ATTACHED PAGE

**SKILL:** Describe the type of skills utilized in applying the above knowledge to the performance of the listed duties.

Must be able to apply the advanced theories and techniques of chemistry/radiochemistry in the analysis of environmental radiological monitoring samples and nuclear plant operation samples and in the investigation and development of new analysis methods. Must be able to apply the expertise of chemistry in the evaluation of new analysis techniques.

Must be able to design and conduct research and development projects in the field of radiochemistry and must be able to direct others in the design and performance of research projects.

Must be able to perform and train others in the performance of the complex chemistry processes required for radioanalytical analysis. Must be able to develop the analysis techniques necessary to utilize the methods for new or unusual sample media.

Must be able to apply the expertise in nuclear decay schemes to identify radionuclides present in a nuclear spectrum and identified through the radiochemical separations.

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**COMPLEXITY OF WORK:** Provide examples of the judgments required to perform the duties and the basis for the judgment. Judgment (Independent decisionmaking)

The incumbent is responsible for the ERM&I wet chemistry laboratory. The incumbent selects and develops procedures and approaches to meet existing and new requirements, varying or changing the procedures as the requirements change. In the area of radiochemical analysis method research and development, the incumbent acts independently utilizing his judgment as to whether a project should be undertaken, curtailed or continued. The incumbent has full technical and supervisory responsibility for interpreting, organizing, executing, and coordinating the wet chemistry lab work.

NAME (As on page 1) James W. Dillard	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Chemist, SC-4
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**Supervision over Others:** Describe type of supervision, i.e., technical supervision/direction, administrative supervision, or full supervision. Indicate the number, title, schedule, and grade level of those supervised and specify full-time responsibility.

Directs, coordinates, reviews, and approves the work of the other chemists and lab analysts working in the wet chemistry lab.

**Supervisory Controls:** Describe the nature and extent of supervision received by the incumbent. Include the way assignments are made, how instructions are given, whether priorities and deadlines are set, and how work is reviewed.

The incumbent may consult with the Manager, ERM&I, to determine the limitations of cost, personnel, and equipment, but work is generally reviewed only from the aspect of complying with existing requirements in a satisfactory manner.

**Nature of Guidelines:** Describe the specific instructions, procedures, or policies and how they limit the independent action of the incumbent.

The overall schedule for lab operations is established by program design and site requirements. The incumbent acts independently in determining working details and methods for wet lab operations. Independently evaluates proposed research projects as to their applicability to TVAN needs and prepares research proposals based on this evaluation. Will prepare periodic progress reports; otherwise, the final report will give results and evaluation of research projects.

**Impact of Work:** Describe the consequences of an error and the probability of it going undetected considering the current review process and established guidelines. (Examples should reflect errors in judgment rather than acts of negligence.)

The incumbent is responsible for the final technical review of radioanalytical analysis results produced by the ERM&I lab. Failure to identify and correct errors in the data could result in errors in site reporting and radioactive material control. The quantity and quality of work performed by the incumbent bears directly on the TVAN operations. Unreliable or inaccurate information would result in costly repetition of the work and may result in deviation findings by NRC.

**Contacts:** Indicate grade levels of personnel outside immediate work group who are contacted by the incumbent in carrying out the responsibilities of this job. For each type contact, specify whether it is a TVA contact or one outside TVA. Explain the purpose of each contact and how often this contact must be made.

The incumbent may exchange information with other technical personnel within and outside TVA (PG-10 and below on a weekly to daily basis. Main TVA contacts are with TVAN site personnel. Outside TVA contacts may be with any number of agencies (EPA, NRC, ASTM, etc.) or commercial firms.

**Working Conditions (General Services Schedule SB only):** Describe any extraordinary physical requirements or unusual physical exertion required by the work assignment. Specify any aspects of the job which require time limitations or use of safety devices.

**KNOWLEDGE (continued)**

Must have a very thorough knowledge of the radiological environmental monitoring programs conducted for the TVAN sites and the basis and application of samples collected and analyzed to support the site Rad-Chem programs.

Must have a detail knowledge of nuclear interactions and decay modes and the application of this data to the measurement of radionuclide concentrations.

Must have an excellent knowledge of the complex differential equations used in the calculation of radionuclide concentrations.

Must have expert level knowledge of the requirements and conduct of laboratory quality control programs.

**SKILL (continued)**

Must be able to develop and modify the computer routines used for data reduction in radionuclide concentration calculations. Also must be able to direct others in this type work.

Must be precise in gathering and evaluating data and must be able to review and evaluate data produced by others.

Must be able to prepare and present technical reports and scientific papers.

Must be fluent both in written and oral communications.

Must be able to handle working relationships tactfully.

Must be able to conduct quality assurance activities associated with the radioanalytical lab analyses and must be able to evaluate results for quality control activities.

NAME (As on page 1) James W. Dillard	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Chemist, SC-4
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**MINIMUM QUALIFICATION REQUIREMENTS**

List minimum knowledges, skills, and/or abilities as contained in the Classification Manual

An B.S. degree in chemistry with a minimum of 5 years experience at the SC-3 level in radiochemical separations and analyses is required. An advanced degree in radiochemistry is desired.

**Evidence of Minimum Qualifications**

Possession of the minimum knowledge, skills, and/or abilities may be shown through experience, training, testing, license requirements, education, and/or a combination of these evidences. Any testing or license requirement listed below is the only acceptable evidence for that knowledge, skill, and/or ability. The education evidence listed below represents the specific minimum acceptable coursework and grade level for the indicated knowledges, if education is to be used as an evidence of qualification. Education evidence may not be applicable for all knowledges, skills, and/or abilities listed in the minimum qualification requirements above.

<p><u>TEST REQUIREMENTS:</u></p> <p><u>LICENSE REQUIREMENTS:</u></p>
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<u>KNOWLEDGE</u>	<u>EDUCATION</u> <u>COURSE</u>	<u>GRADE LEVEL</u>
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NAME (As on page 1) Clyde N. Evans	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Engr Associate (Env.), SE-5
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DUTIES

Write a brief introductory paragraph summarizing the primary purpose of the job. Follow with a list of typical duties and responsibilities with supporting examples which are performed on a recurring basis.

Serves as an environmental technician supporting the conduct of the TVAN radiological environmental monitoring programs and ERM&I radioanalytical lab operations. Primary duties and responsibilities include:

Performs radiological environmental monitoring surveys adjacent to and remote from TVA nuclear power plants to conduct the NRC required Radiological Environmental Monitoring Program (REMP) for each site. This includes the collection of all types of environmental samples, putting out and collection of TLDs, evaluating and checking monitoring stations for correct operation. These activities normally require driving several hundred miles per week and at least one night in travel status each week.

Performs the radiation monitoring surveys required for the operation of the WARL facility. Surveys are conducted to assess and document the levels of radioactive contamination present, or the lack of such contamination, in laboratories and instrument service areas of the WARL facility. Surveys assess both direct radiation levels and smearable contamination levels and are required under the facility NRC license to document control of radioactive materials.

Processes TLD badges used for environmental monitoring of direct radiation. Badges are collected from 50-100 sampling locations around each TVAN site. Operates TLD processing instrumentation to read radiation exposure levels on badges collected from the field, calibrate badges and prepare badges for placement in the field. Interfaces data from the badge processing instrumentation with the computer data base system and runs the data reduction programs used to calculate environmental radiation levels from the TLD badge data.

Prepares TLD badges for placement in the field. Packages TLD badges in hangers. Labels badges with sampling location. Prepares the master list for location assignment.

Prepares field collection data sheets for each REMP sample collection run, accurately noting all sample collection times, dates, and conditions which may influence the quality of final results. Precision and technique are necessary in order to comply with NRC regulations and to ensure that final analytical results are meaningful. These field collection data sheets are QA records and establish chain of custody documentation for the samples.

Performs in-field review and evaluation of REMP monitoring station equipment. As necessary prepares equipment trouble reports and notifies TVA Field Engineering Services personnel to obtain repairs.

Performs the data entry log on process for samples collected for the REMP entering all field data into the lab database management system.

As part of the weekly sample collection run, transports RADCON survey instrumentation between the site RADCON groups and the ERM&I instrumentation service unit. Must ensure the timely and careful delivery of calibrated instruments and coordinate instrument exchange with site instrument groups.

NAME (As on page 1) Clyde N. Evans	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Eng. Associate (Env.), SE-5
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**JOB FACTOR DESCRIPTIONS**

**KNOWLEDGE:** Describe the type knowledge required to perform the assigned work. Knowledge may result from experience, formal schooling, self-study, or TVA-sponsored experiences but do not describe in terms of academic achievement or longevity.

Knowledge of the theory and operation of laboratory instrumentation, portable RADCON instrumentation, surveillance equipment, and dosimetric equipment and processes.

Knowledge of the theory and operation of TLD badge processing equipment.

Working level knowledge of ERM&I, RADCON, TVA, and NRC radiation protection procedures and regulations.

Detail knowledge of the procedures and processes used for calibration and testing of TLD badges used for environmental monitoring.

Must have a thorough knowledge and understanding of requirements, design, implementation, and conduct of the REMP for each TVA nuclear site.

**CONTINUED ON ATTACHED PAGE**

**SKILL:** Describe the type of skills utilized in applying the above knowledge to the performance of the listed duties.

Ability to operate, recognize unusual anomalous responses, and troubleshoot radiological monitoring equipment, and radiation source control systems.

Must be able to operate and maintain the instrumentation used for processing environmental TLD badges.

Must be able to organize and plan environmental sampling trips to maintain a required time schedule for sample collection over a large geographical region.

Must be able to plan work to minimize mileage and overtime.

Must have physical and mental dexterity to adapt to unusual situations in the field to ensure quality samples in accordance with necessary schedules.

Must be able to handle contacts with the general public in the field with tact and consideration

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**COMPLEXITY OF WORK:** Provide examples of the judgments required to perform the duties and the basis for the judgment. Judgment (independent decisionmaking)

Radiological environmental surveys are conducted based on the overall program schedule but the incumbent works independently while in the field conducting surveys and must be able to access changing conditions and implement adjustments. The incumbent must utilize experience to evaluate the need for temporary modifications to fit unusual field conditions. The incumbent must recognize what changes can be made and still obtain the required survey sampling results. Temporary in field modifications must be thoroughly documented to support later technical evaluations. Radiation protection surveys of the WARL facility are conducted too comply with established requirements and schedules. The incumbent must be able to select and apply the appropriate survey technique and instrumentation based on the type of radioactive material and purpose of the survey. TLD badge processing requires the operation and maintenance of complex badge reading equipment. Incumbent must be able to identify problems with the equipment and implement appropriate corrective action.

NAME (As on page 1) Clyde N. Evans	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Eng. Associate (Env.), SE-5
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**Supervision over Others:** Describe type of supervision, i.e., technical supervision/direction, administrative supervision, or full supervision. Indicate the number, title, schedule, and grade level of those supervised and specify full-time responsibility.

NONE

**Supervisory Controls:** Describe the nature and extent of supervision received by the incumbent. Include the way assignments are made, how instructions are given, whether priorities and deadlines are set, and how work is reviewed.

General work priority guidance is provided by the supervisor. The overall schedule for REMP field activities and environmental TLD badge processes is provided through the program design. ERM&I procedures provide the necessary instructions on the conduct of work. While in the field performing radiological environmental monitoring surveys, the incumbent works independently without direct supervision.

**Nature of Guidelines:** Describe the specific instructions, procedures, or policies and how they limit the independent action of the incumbent.

ERM&I procedures provide instructions for conduct of radiation monitoring surveys, radiological environmental monitoring surveys, and operation of TLD badge processing instrumentation. The schedule for routine activities is established by the overall REMP program design and radiation protection plan requirements. The incumbent determines the priority of activities to accomplish the overall schedule requirements. The incumbent utilizes experience with the REMP program to make in field adjustments to meet unexpected conditions and ensure that the required surveys are completed on time.

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**Impact of Work:** Describe the consequences of an error and the probability of it going undetected considering the current review process and established guidelines. (Examples should reflect errors in judgment rather than acts of negligence.)

Failure to properly conduct REMP sample collection surveys and maintain the required QA documentation could result in errors in reports filed with the NRC and violations. At a minimum, errors will result in additional work and expense to TVA. Errors in the performance of radiation monitoring surveys could result in unidentified radiation hazards and noncompliance with NRC license requirements.

**Contacts:** Indicate grade levels of personnel outside immediate work group who are contacted by the incumbent in carrying out the responsibilities of this job. For each type contact, specify whether it is a TVA contact or one outside TVA. Explain the purpose of each contact and how often this contact must be made.

Frequent contact with supervision (SC-4 - PG-10) to provide the status of REMP sample collection activities and report on the nature and resolution of problems. Frequent contact with members of the general public such as farmers providing samples for the REMP. Good working relationships must be maintained with these individuals to ensure their continued cooperation.

**Working Conditions (General Services Schedule SB only):** Describe any extraordinary physical requirements or unusual physical exertion required by the work assignment. Specify any aspects of the job which require time limitations or use of safety devices.

Approximately 75 percent of the work is outdoors in all types of weather conditions. The incumbent must drive several hundred miles per week to perform the REMP sample collection surveys. The job requires periods of standing, recurring bending, lifting and walking over rough terrain. Radiation surveys involve handling and exposure to radioactive materials and sources. Proper radiation protection practices must be applied to minimize the hazard.



**KNOWLEDGE (Continued)**

Must have a detail knowledge and understanding of accepted sampling techniques to ensure the integrity and quality environmental samples collected for the REMP. Final analytical results are only as good as the samples taken in the field.

Must have a thorough knowledge of the geographical layout of the environs around each of TVA's nuclear plants such that sampling collection can be conducted and adjustments in routes, schedules, etc., may be made to account for weather conditions, changes sampling locations, etc.

In-depth knowledge of communication methods required for interaction with members of the general public.

Knowledge of trigonometry, algebra, statistics, and mathematics.

Must have a detail knowledge of the QA/QC requirements for the conduct of the REMP and associated lab analysis work and QA/QC requirements for processing environmental TLD badges.

Must have a detail knowledge of the use of the computer based data handling system and the process for data entry associated with this system.

**SKILL (Continued)**

Ability to interpret and evaluate procedures and regulations.

Ability to perform mathematical, algebraic, and trigonometric calculations.

Must be able to keep clear and accurate records. Must be precise and accurate in preparing collection reports, worksheets, etc., the sample chain of custody process.

Ability to select and operate radiation/contamination detection instrumentation which will ensure the most accurate and appropriate results.

Ability to communicate, orally and in writing, with all levels of TVA personnel and those external to TVA. Skill in communication with members of the general public is critical.

Ability to react professionally in an emergency situation.

Must be able to maintain an overview of upcoming needs to ensure proper quantities of supplies, materials, and functioning equipment to carry out monitoring surveys.

Must be able to operate the lab computer data system programs required for sample log-in and sample schedule generation.

Must be able to operate the computer data base system used to calculate environmental radiation levels from TLD badge data.

Must be able to review in progress TLD badge processing data to identify potentially anomalous results.

**NATURE OF GUIDELINES (Continued)**

The incumbent must utilize experience and knowledge of radiation monitoring techniques to select and apply the appropriate technique for various types of radiation surveys.

BF001300

<b>NAME (As on page 1)</b> Clyde N. Evans	<b>SOCIAL SECURITY NO.</b> 	<b>APPROVED TITLE, SCHEDULE, AND GRADE</b> Eng. Associate (Env.), SE-5
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**MINIMUM QUALIFICATION REQUIREMENTS**

List minimum knowledges, skills, and/or abilities as contained in the Classification Manual.

At least five years experience at the SE-4 level in the performance of radiation protection program activities, conduct of radiation monitoring surveys or environmental monitoring activities.

Experience with the operation and maintenance of Panasonic TLD badge processing equipment is required.

A minimum of two years college level training in a physical science is desired.

**Evidence of Minimum Qualifications**

Possession of the minimum knowledge, skills, and/or abilities may be shown through experience, training, testing, license requirements, education, and/or a combination of these evidences. Any testing or license requirement listed below is the only acceptable evidence for that knowledge, skill, and/or ability. The education evidence listed below represents the specific minimum acceptable coursework and grade level for the indicated knowledges, if education is to be used as an evidence of qualification. Education evidence may not be applicable for all knowledges, skills, and/or abilities listed in the minimum qualification requirements above.

<b><u>TEST REQUIREMENTS:</u></b>
<b><u>LICENSE REQUIREMENTS:</u></b>

<u>KNOWLEDGE</u>	<u>EDUCATION</u>	<u>GRADE LEVEL</u>
	<u>COURSE</u>	

VPA NUMBER: 0000011028  
STATUS: PROCESSING APPLICATIONS  
GROUP: COMPETITIVE AREA WIDE  
SCHEDULE AND GRADE: SE 05 NUMBER OF POSITIONS:01  
JOB TITLE: ENGG ASSOC (ENVIRONMENTAL)  
LOCATION: MUSCLE SHOALS  
ORGANIZATION: TVA NUCLEAR  
NUC OPS/DPS SUPPORT  
ERMI  
(SUPV: WILLIAM RAINES)  
POSTING-DATE: 07/29/96 CLOSING-DATE: 08/13/96

DUTIES: ENVIRONMENTAL TECH SUPPORTING THE CONDUCT OF THE TVAN RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAMS AND ERMI RADIOANALYTICAL LAB OPERATIONS. PERFORMS RADIOLOGICAL ENVIRONMENTAL MONITORING SURVEYS ADJACENT TO AND REMOTE FROM TVA NUCLEAR POWER PLANTS. PERFORMS THE RADIATION MONITORING SURVEYS REQUIRED FOR THE OPERATION OF THE WURL FACILITY. PROCESSES TLD BADGES USED FOR ENVIRONMENTAL MONITORING OF DIRECT RADIATION. PREPARES TLD BADGES FOR PLACEMENT IN THE FIELD. PREPARES FIELD COLLECTION DATA SHEETS FOR EACH REMP SAMPLE COLLECTION RUN. PERFORMS IN-FIELD REVIEW AND EVALUATION OF REMP MONITORING STATION EQUIPMENT.

MINIMUM QUALIFICATIONS: COMPLETION OF A MINIMUM OF TWO YEARS COLLEGE LEVEL TRAINING IN A PHYSICAL SCIENCE PLUS 24 MONTHS OF RELATED WORK EXPERIENCE AT THE SE-4 LEVEL OR AT LEAST THREE YEARS EXPERIENCE AT SE-4 LEVEL IN WORK ACTIVITIES RELATED TO THIS POSITION. EXPERIENCE WITH THE OPERATION OF PANASONIC TLD BADGE PROCESSING EQUIPMENT IS REQUIRED. MUST HAVE A THOROUGH KNOWLEDGE OF THE DESIGN AND CONDUCT OF THE RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM FOR EACH TVAN SITE. MUST HAVE A WORKING KNOWLEDGE OF THE THEORY AND OPERATION OF TLD BADGE PROCESSING EQUIPMENT. MUST HAVE A WORKING KNOWLEDGE OF THE REQUIREMENTS AND METHODS USED FOR THE CONDUCT OF RADIATION MONITORING SURVEYS.

TO APPLY SEND FORM TVA 9824 TO: NUCLEAR HUMAN RESOURCES  
LOOKOUT PLACE 3A-C (X-2344)  
\*CHATT. KNOX. POTC. & MUSCLE SHOALS EMPLOYEES ONLY

BF001302

**POSITION DESCRIPTION**

Name	<u>James A. Flanigan</u>	Social Security Number	<u>[REDACTED]</u>
Position Title	<u>Radiological Control Program Manager (Programmatic)</u>	Pay Group or Schedule/Grade	<u>PG-08</u>
Location	<u>Chattanooga</u>	Effective Date	<u>8/5/96</u>
Organization Titles:		Incumbent's Signature	<u>[Signature]</u> J. A. Flanigan
Group	<u>TVA Nuclear</u>	Supervisor's Signature	<u>[Signature]</u> W. C. McArthur
Operations	<u>Nuclear Operations</u>	HRM/HRO's Signature	<u>[Signature]</u> Donald E. Niles
Division	<u>Operations Support</u>	Reports to (Title)	<u>Corporate Radiological and Chemistry Control Manager</u>
Department	<u>Corporate Radiological and Chemistry Control</u>		
Section			

**FOR COMPENSATION PLANNING AND ANALYSIS USE ONLY**

POSITION EVALUATION:	EVALUATION DATE: <u>7/16/96</u>	CP&A REVIEWER INITIALS: <u>JEC</u>
<u>304</u> Slot	<u>E4 (43)</u> P-S Slot	<u>132</u> P-S Pts
<u>304</u> K-H Pts	<u>E1P</u> Acct Slot	<u>132</u> Acct Pts
	<u>568</u> Total Pts	<u>54-23-23</u> Profile
Approved Job Title: <u>PROGRAM MANAGER</u>	Schedule/Pay Grade: <u>PG-08</u>	Job Code: <u>2581</u>
Organization Code: _____	Supervisory Code: <u>N</u>	Function Code: <u>P42</u>

**POSITION PURPOSE:**

Provide technical direction, expert support, and Program Project management supervision in the 1) Personnel Dosimetry, 2) Radiological Records and Record Systems, and 3) radiation injury claim avoidance - successful defense aspects of TVAN's radiation protection program. Develop programmatic requirements and monitor performance in these program areas.

**DIMENSIONS:**

Typical size of projects - \$10M-\$5MM Annual projects managed - 6

**Other**

1. Incumbent acts as Manager Corporate Radiological and Chemistry Control in his absence with the signature authority and control of the budget (\$3MM) associated with that position.
2. Serve as the Authorized Representative for the Ionizing Radiation Dosimetry programs accredited by the National Institute of Standards & Technology. (Physical assets \$6MM, Staff 6, Annual Budget \$600M)
3. Serves as sponsor and directs the activities of the Radiation Exposure System (REXS) Information System support personnel. (Physical assets \$2MM, Staff 6, Annual Budget \$1.5MM)
4. Serves as Radiological Assessment Manager in the event of a nuclear site or transportation emergency. (Staff 12)

Distribution: Original - Human Resources Microrecords Unit, Knoxville  
Copy - Operations Organization (as needed)

**BF001303**

Copy - Central Office of Union Having Jurisdiction  
Copy - Employee

POSITION TITLE: Radiological Control Program Manager  
(Programmatic)  
NAME: James A. Flanigan SSN [REDACTED] PD NO. 960381  
(First) (Middle) (Last) EFFECTIVE DATE 8/5/96

**PRINCIPAL ACCOUNTABILITIES:**

1. Provide expert level direction for programmatic development of A) Personnel Dosimetry, B) Radiological Records and Record Systems, and C) radiation injury claim avoidance - successful defense policies and requirements to ensure TVAN's compliance with Federal Regulations, insurability criteria and to meet or exceed industry consensus standards.
2. Serve as the Authorized Representative for the Ionizing Radiation Dosimetry programs accredited by the National Institute of Standards & Technology as established in 15 CFR 285.
3. Serve as the Chair, Radiation Effects Advisory Group, evaluating and integrating the radiological, medical, legal, and ethical aspects of occupational radiological exposures to personnel. Prepare the responses to radiation-related injury claims.
4. Serve as the interface between TVAN and the Office of the General Counsel on matters relating to radiation injury claims, radiation injury claim avoidance and successful defense.
5. Serve as application owner for the TVA Radiation Exposure Records System and for various TVAN software applications in the RADCON program to ensure that operations, modifications and enhancements meet regulatory requirements and management expectations.
6. Manage the planning, scheduling, implementation and monitoring to completion of radiological control special projects to ensure identified end product is delivered on time and within budget.
7. Consult with site management on the interpretation and implementation of radiological control policy. Analyze site processes, procedures and other documents that may impact responsible program areas.
8. Recommend radiological control goals and protocols that are consistent with best industry practices and assist with the implementation of actions to achieve them.
9. Direct the performance of programs to ensure consistency and compliance with applicable radiological control program requirements and attainment of goals.
10. Direct the development of radiological control training and qualification criteria.
11. Direct the performance of regulatory and licensing reviews of radiological control issues, recommend TVAN responses or positions and concur with responses to external organizations.  
Provide long-term/large-scope project support to the sites for major projects/issues. Provide short term problem response as necessary in the responsible program areas.
12. Compile data, conduct benchmarking, and research positions that support requests for system specification changes, process improvements, work elimination, and engineering design changes in responsible program areas.
13. Perform long-term data evaluation of key radiological control parameters. Provide appropriate feedback and corrective action proposals as necessary.
14. Act for the Manager Corporate Radiological and Chemistry Control in his absence.
15. Serve as the Radiological Assessment Manager or Coordinator in the event of an emergency managing all radiological assessment activities in support of nuclear sites. Support emergency response drills and exercises.
16. Serve as TVA member on industry radiological control technical workgroups and committees to ensure TVAN's interests are represented and to remain aware of industry norms and good practices to encourage their adoption into TVAN programs.
17. Administer multi-site contracts for radiological control services and products. Monitor contacts for technical adequacy and cost effectiveness.

**MINIMUM QUALIFICATIONS:**

The incumbent should have a bachelor's degree or the equivalent in a science or engineering subject including some formal training in radiation protection and radiation injury claim management. The incumbent shall have at least eight years of professional experience in applied radiation protection including radiation injury claim management. At least three years of this experience shall be in professional level applied radiation protection work in a nuclear facility with radiological problems similar to those encountered in nuclear power plants, preferably in a nuclear power plant. Previous experience serving as a nuclear plant's Radiation Control Manager or an advanced degree and ten years' experience at the professional or managerial level are desirable.

Incumbent in this position is subject to rotational assignment.

BF001304

POSITION DESCRIPTION

Name James A. Flanigan

Position Title Program Manager

Location Chattanooga

Organization Titles:

-Group Nuclear Power

Operations Operations Services

Division Technical Programs

Department Radiological Control

Section \_\_\_\_\_

Social Security Number [REDACTED]

Pay Group or Schedule/Grade PG-8

Effective Date 90 10 08

Incumbent's Signature [Signature]

Supervisor's Signature J. A. Flanigan

HRM/HRO's Signature C. G. Hudson

Reports to (Title) Manager, Radiological Control

FOR COMPENSATION PLANNING AND ANALYSIS USE ONLY

PD-90857

Modified: 1/31/92

EVALUATION DATE: 8/21/90

CP&A REVIEWER INITIALS: \_\_\_\_\_

POSITION EVALUATION:

<u>F13</u>	<u>304</u>	<u>E4(43%)</u>	<u>132</u>	<u>EIP</u>	<u>132</u>	<u>568</u>	<u>54-23-23</u>
K-H Slot	K-H Pts	P-S Slot	P-S Pts	Acct Slot	Acct Pts	Total Pts	Profile

POSITION PURPOSE:

Provide technical direction, support, and oversight in the radiological control programs of NP facilities. Develop programmatic requirements for radiological control programs.

DIMENSIONS:

Typical size of projects - 5M-2MM  
 Annual projects managed - 20

Other:

1. Incumbent acts as Manager, Radiological Control in his absence with the signature authority and control of the budget (1.5 MM) associated with that position.
2. Acts as Technical Director of TVA dosimetry accreditation program for the National Institute of Standards & Technology accreditation program.

Distribution: Original - Human Resources Microrecords Unit, Knoxville  
 Copy - Operations Organization (as needed)  
 Copy - Central Office of Union Having Jurisdiction  
 Copy - Employee

BF001305

PRINCIPAL ACCOUNTABILITIES:

1. Supervise senior health physicists working projects at the sites. Oversee the activities of other personnel assigned support functions for meeting the responsibilities of this position.  
Manage the planning, scheduling, implementation and monitoring to completion of Radiological Protection, Radiological Health, and Radioactive Waste Special Projects to ensure identified end product is delivered on time and within budget.
3. Provide expert level direction for programmatic development of radiological control policy and requirements to ensure TVA compliance with Federal regulations and to meet or exceed industry consensus standards. Manage the development of Radiological Control Standards to provide corporate requirements and guidance to sites.
4. Act as Technical Director, if designated by the Manager, Radiological Control, for accreditation of the personnel radiation dosimetry program by the National Institute of Standards & Technology as described in the NVLAP Program Handbook, Personnel Radiation Dosimetry.
5. Assist site management with interpretation of radiological control policy. Review site procedures and other documents that may impact the programs.
6. Recommend radiological control goals and protocols that are consistent with best industry practices and assist with the implementation of actions to achieve them.
7. Assist site management with the development of radiological control organization budgets and staffing plans.
8. Direct the performance of programs to ensure consistency and compliance with radiological control program requirements.
9. Direct the development of radiological control training and qualification criteria.
10. Direct the performance of regulatory and licensing reviews of radiological control issues, recommend TVA responses or positions, and concur with responses to external organizations.
11. Provide long-term/large-scope project support to the sites for major projects. Provide short-term problem response as necessary.
12. Compile data and research positions that support requests for systems specification changes and engineering design changes in the area of radiological control.  
Perform long-term data trending and assessment of key radiological control parameters. Provide appropriate feedback and corrective action proposals as necessary.
14. Assess implementation of radiation protection and radioactive waste requirements and reports results to management.
15. Recommend individuals to fill senior positions in corporate and site radiological control organizations.
16. Act for the Manager, Radiological Control, in his absence.
17. Serve as the Radiological Assessment Manager or Coordinator in the event of an emergency to direct all radiological assessment activities in support of nuclear sites.
18. Serve as TVA member on industry radiological control technical workgroups and committees to ensure TVA's interests are represented and to remain aware of industry norms and good practices to encourage their adoption into TVA programs.
19. Serve as application owner for various software applications in the RADCON program to ensure that modifications and enhancements meet regulatory requirements and management expectations.

NAME James A. Flanigan SSN [REDACTED] EFFECTIVE DATE 90 10 08  
(First) (Middle) (Last)

**MINIMUM QUALIFICATIONS:**

The manager should have a bachelor's degree or the equivalent in a science or engineering subject, including some formal training in radiation protection or radioactive waste management. The manager shall have at least five years of professional experience in applied radiation protection. An advanced degree and eight years experience at the professional or managerial level are desirable.

Note: If the manager is designated as the NVLAP Technical Director for the TVA dosimetry program, the incumbent must be knowledgeable in the design and operation of Panasonic thermoluminescent dosimetry systems, have demonstrated technical competence and supervisory capability to direct the work of professionals and technicians in personnel radiation dosimetry, and have at least four years of professional experience in personnel dosimetry operations. The incumbent shall have received formal training (e.g. TVA two-week Panasonic system or equivalent in TVA's dosimetry systems) or be recognized as a technically competent professional in personnel radiation dosimetry.

STATUS: PROCESSING APPLICATIONS

GROUP: TVA-WIDE

SCHEDULE AND GRADE: PG 08 NUMBER OF POSITIONS: 01

JOB TITLE: PROGRAM MANAGER, RAD CONTROL (PROGRAMMATIC

LOCATION: CHATTANOOGA

ORGANIZATION: TVA NUCLEAR  
NUCLEAR OPERATIONS  
OPERATIONS SUPPORT/RAD & CHEM CONTROL  
(SUPV: RAD & CHEM CONTROL NGR)

POSTING-DATE: 06/13/96

CLOSING-DATE: 06/25/96

DUTIES: PROVIDE TECHNICAL DIRECTION, EXPERT SUPPORT, AND PROGRAM PROJECT MANAGEMENT SUPERVISION IN THE PERSONNEL DOSIMETRY, RADIOLOGICAL RECORDS AND RECORD SYSTEMS, AND RADIATION INJURY CLAIM AVOIDANCE-SUCCESSFUL DEFENSE ASPECTS OF TVAN'S RADIATION PROTECTION PROGRAM. DEVELOP PROGRAMMATIC REQUIREMENTS AND MONITOR PERFORMANCE IN THESE PROGRAM AREAS. SERVE AS CHAIR, RADIATION EFFECTS ADVISORY GROUP, EVALUATING AND INTEGRATING THE RADIOLOGICAL, MEDICAL, LEGAL, AND ETHICAL ASPECTS OF OCCUPATIONAL RADIOLOGICAL EXPOSURES TO PERSONNEL. PREPARE THE RESPONSES TO RADIATION-RELATED INJURY CLAIMS. SERVE AS APPLICATION OWNER FOR THE TVA RADIATION EXPOSURE RECORDS SYSTEM.

MINIMUM QUALIFICATIONS: INCUMBENT SHOULD HAVE A B.S. DEGREE OR THE EQUIVALENT IN A SCIENCE OR ENGINEERING SUBJECT INCLUDING SOME FORMAL TRAINING IN RADIATION PROTECTION AND RADIATION INJURY CLAIM MANAGEMENT. INCUMBENT SHALL HAVE AT LEAST EIGHT YEARS OF PROFESSIONAL EXPERIENCE IN APPLIED RADIATION PROTECTION INCLUDING RADIATION INJURY CLAIM MANAGEMENT. AT LEAST THREE YEARS OF THIS EXPERIENCE SHALL BE IN PROFESSIONAL LEVEL APPLIED RADIATION PROTECTION WORK IN A NUCLEAR FACILITY WITH RADIOLOGICAL PROBLEMS SIMILAR TO THOSE ENCOUNTERED IN NUCLEAR POWER PLANTS. PREFERABLY IN A NUCLEAR PLANT. INCUMBENT IN THIS POSITION IS SUBJECT TO ROTATIONAL ASSIGNMENT.

TO APPLY SEND FORM TVA 9824 TO: NUCLEAR HUMAN RESOURCES  
LOOKOUT PLACE 3A-C (X-2344)  
PENDING FINAL HAY EVALUATION

BF001308

**JOB DESCRIPTION  
Salary Policy  
(Excluding Schedules SF and SG)**

NAME (First, Middle, Last) <b>Charles E. Frederick</b>		SOCIAL SECURITY NO. [REDACTED]		EFFECTIVE DATE <b>September 30, 1996</b>			
OPERATIONS ORGANIZATION <b>Nuclear Operations</b>		DIVISION <b>Operations Support</b>		CODE			
DEPARTMENT <b>Radiological &amp; Chemistry Control</b>		SECTION <b>ERM&amp;I</b>		LOCATION (City or Project) <b>Muscle Shoals, AL</b>			
PRESENT TITLE, SCHEDULE, AND GRADE <b>Chemist, SC-4</b>			REASON FOR ISSUE <b>Organizational Restructuring-New Position</b>				
PROPOSED TITLE, SCHEDULE, AND GRADE <b>Chemist, SC-4 (Spectroscopy)</b>			POSITION REFERENCE NO.				
I certify that this is an accurate statement of the major duties and responsibilities of this position and that it has been discussed with incumbent.							
SUPERVISOR'S SIGNATURE <i>William L. Raines</i>				Date Discussed <b>9/30/96</b>			
TYPE NAME OF SIGNATURE <b>William L. Raines</b>							
I have reviewed the job description and verify that it is in accordance with classification procedures.							
DPO'S SIGNATURE <i>[Signature]</i>				Date Reviewed <b>7/8/96</b>			
This job description is an accurate statement of the duties assigned to me.							
EMPLOYEE'S SIGNATURE _____		(Signature is required only when employee requests a classification review)		Date Agreed _____			
CLASSIFICATION GROUP <b>III</b>							
FACTOR EVALUATION DATA							
Guide Chart	I	II	III	IV Inside	IV Outside	Total	
Keys	B3B	B3b	B2	G2c	G2b		
Points	405	405	130	65	55	1060	
Approved Title <b>Chemist (Spectroscopy &amp; Instrumentation)</b>				Job Title Code <b>0923</b>		Schedule & Grade <b>SC-4</b>	

**DISTRIBUTION:** Original - Human Resources Microrecords Units, Knoxville  
 Copy - Operations Organizations (as needed)  
 Copy - Central Office of Union Having Jurisdiction  
 Copy - Employee 12bsc41

NAME (As on page 1) Charles E. Frederick	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Chemist, SC-4
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**DUTIES**

Write a brief introductory paragraph summarizing the primary purpose of the job. Follow with a list of typical duties and responsibilities with supporting examples which are performed on a recurring basis.

The incumbent is the senior chemist for ERM&I nuclear spectroscopy and counting instrumentation lab activities providing technical direction for this area of the radioanalytical lab operations and is the technical expert in nuclear spectroscopy and counting instrumentation. Duties include:

Directs the daily operations of the WARL counting lab operations. Plans and coordinates the work in this area to support the overall ERM&I radioanalytical service functions required for the radiological environmental monitoring programs conducted for TVAN sites and for sample analyses performed for nuclear site operations. Radioanalytical services include the analyses of 10 CFR 61 samples, radiological effluent samples and samples analyzed for the site RADCON programs.

Reviews and approves all nuclear spectroscopy and nuclear counting results. Reviews complex gamma spectroscopy to identify any anomalous results and correct the misidentification of radionuclides. Prepares reports of radioanalytical analysis results.

Plans and implements research and development projects in nuclear spectroscopy as applied to the analysis of radionuclides. Determines the need for new or revised technical methods and procedures and conducts the development and testing of the procedures and methods. Directs other lab staff in the chemical research and development related to nuclear spectroscopy and other methods of radionuclide identification and measurement using nuclear counting instrumentation such as liquid scintillation; alpha particle detection; low background beta counting; etc. Develops the written procedures used by ERM&I in the nuclear spectroscopy and instrumentation areas of lab operations. Provides technical review and concurrence for procedures developed by other members of the lab chemistry staff.

Provides the technical support and direction for the nuclear spectroscopy and counting phases of the complex radiochemical analyses performed on the plant operations samples such as 10 CFR 61 waste characterizations or radiological effluents. Due to the variety of chemical matrixes that occur in these samples and the complex mix of radionuclides, analyses of these samples often become research projects requiring testing and modification of technical methods in the process of performing the analysis. Directs others in the performance of these difficult radiochemical analyses.

Identifies the need for, selects and installs new nuclear counting instrumentation, including but not limited to spectroscopy detection systems, computer based analyzers, liquid scintillation systems and low background alpha/beta counting systems. Provides the technical expertise to maintain and operate electronics and hardware associated with these systems. Modifies computers programs required for the operations of these systems and the data acquisition or develops new computer programs and provides for the QA validation of this software.

Plans and directs the quality control (QC) tests and processes required to calibrate and validate the nuclear counting instrumentation used in the radioanalytical lab. Develops the written procedures that direct the performance of these QC tests and measurements. Reviews and approves the data generated by the QC processes. Identifies potential problems and develops and implements the corrective action necessary to maintain the quality of the lab results.

Plans, organizes, and coordinates the work of subordinates in the nuclear spectroscopy and instrumentation area of lab operations. Reviews and approves completed work and appraises the Manager, ERM&I, on the performance and progress of subordinates.

Prepares and conducts training sessions for the lab staff.

Prepares technical reports and briefings for internal external distribution and for publication.

Provides the technical support and direction for the maintenance and operation of the REP mobile gamma analysis lab. Staffs the mobile lab during REP drills and exercises.

NAME (As on page 1) Charles E. Frederick	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Chemist, SC-4
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**JOB FACTOR DESCRIPTIONS**

**KNOWLEDGE:** Describe the type knowledge required to perform the assigned work. Knowledge may result from experience, formal schooling, self-study, or TVA-sponsored experiences but do not describe in terms of academic achievement or longevity.

Must have a specialist level knowledge in the field of nuclear spectrometry and the applicable analytical methods. This includes a expert level knowledge of nuclear decay schemes, the theory of nuclear interactions, and the advance techniques, theories and practices applied in the field of nuclear spectrometry.

Must have expert level knowledge of the detectors and instrumentation used in nuclear spectroscopy and radionuclide measurements and detail knowledge in the maintenance and operation of the detectors and instrumentation.

Must have an excellent knowledge of small computer systems and programming of such systems, particularly as they apply in gamma, alpha, and beta spectroscopy analyzers.

Must have a detail knowledge of the complex data reduction computer routines used in resolving nuclear spectrometry, including the knowledge necessary to modify these computer routines.

CONTINUED ON ATTACHED PAGE

**SKILL:** Describe the type of skills utilized in applying the above knowledge to the performance of the listed duties.

Must be able to apply the advanced theories and techniques of nuclear spectroscopy in the analysis of environmental radiological monitoring samples and nuclear plant operations samples and in the investigation and development of new analysis methods. Must be able to apply the expertise of nuclear spectrometry in the evaluation of new instrumentation.

Must be able to design and conduct research and development projects in the field of nuclear spectrometry and must be able to direct others in the design and performance of research projects.

Must be able to operate and train others in the operation of all types of nuclear spectrometry and nuclear counting instrumentation including the computer systems associated with such equipment.

Must be able to develop the standardization and calibration techniques necessary to utilize this instrumentation in the analysis of new or unusual sample media.

Must be able to apply the expertise in nuclear decay schemes to identify radionuclides present in a nuclear spectrum.

CONTINUED ON ATTACHED PAGE

**COMPLEXITY OF WORK:** Provide examples of the judgments required to perform the duties and the basis for the judgment. Judgment (Independent decisionmaking)

The incumbent is responsible for the ERM&I radioanalytical laboratory nuclear spectroscopy and instrumentation area. The incumbent selects and develops procedures and approaches to meet existing and new requirements, varying or changing the procedures as the requirements change. In the area of nuclear spectroscopy method research and development, the incumbent acts independently utilizing his judgment as to whether a project should be undertaken, curtailed or continued. The incumbent has full technical and supervisory responsibility for interpreting, organizing, executing, and coordinating the counting unit work.

NAME (As on page 1) Charles E. Frederick	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Chemist, SC-4
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**Supervision over Others:** Describe type of supervision, i.e., technical supervision/direction, administrative supervision, or full supervision. Indicate the number, title, schedule, and grade level of those supervised and specify full-time responsibility.

Directs, coordinates, reviews, and approves the work of the other chemists and lab analysts working in the nuclear counting area of lab operations.

**Supervisory Controls:** Describe the nature and extent of supervision received by the incumbent. Include the way assignments are made, how instructions are given, whether priorities and deadlines are set, and how work is reviewed.

The incumbent may consult with the Manager, ERM&I, to determine the limitations of cost, personnel, and equipment, but work is generally reviewed only from the aspect of complying with existing requirements in a satisfactory manner.

**Nature of Guidelines:** Describe the specific instructions, procedures, or policies and how they limit the independent action of the incumbent.

The overall schedule for lab operations is established by program design and site requirements. The incumbent acts independently in determining working details and methods for counting lab operations. Independently evaluates proposed research projects as to their applicability to TVAN needs and prepares research proposals based on this evaluation. Will prepare periodic progress reports; otherwise, the final report will give his results and evaluation of his research projects.

**Impact of Work:** Describe the consequences of an error and the probability of it going undetected considering the current review process and established guidelines. (Examples should reflect errors in judgment rather than acts of negligence.)

The incumbent reviews and approves all data generated from the nuclear spectroscopy and instrumentation area of ERM&I lab operations. Results are released directly to the site customer following these reviews. Errors that go undetected could result in the site using or reporting bad data. The quantity and quality of work performed by the incumbent bears directly on the TVAN operations. Unreliable or inaccurate information would result in costly repetition of the work and may result in deviation findings by NRC.

**Contacts:** Indicate grade levels of personnel outside immediate work group who are contacted by the incumbent in carrying out the responsibilities of this job. For each type contact, specify whether it is a TVA contact or one outside TVA. Explain the purpose of each contact and how often this contact must be made.

The incumbent may exchange information with other technical personnel within and outside TVA (PG-10 and below) on a weekly to daily basis. Main TVA contacts are with site personnel. Outside TVA contacts may be with any number of agencies (EPA, NRC, ASTM, etc.) or commercial firms.

**Working Conditions (General Services Schedule SB only):** Describe any extraordinary physical requirements or unusual physical exertion required by the work assignment. Specify any aspects of the job which require time limitations or use of safety devices.

**KNOWLEDGE (continued)**

Must have a very thorough knowledge of the necessary quality assurance activities required to ensure and document the quality of the analyses performed by the nuclear counting area of the radioanalytical lab operations.

Must have a thorough knowledge of analytical chemistry, particularly radioanalytical chemistry and its application to the analysis of environmental monitoring and nuclear plant operations samples.

Must have a very thorough knowledge of the radiological environmental monitoring programs conducted for TVA nuclear power sites and the basis and application of samples collected and analyzed to support site Rad-Chem programs.

Must have a working knowledge of current EPA and NRC regulations. Must be familiar with accepted practices and methods such as those prescribed by the American Society for Testing Materials, American Public Health Association, and the American Standard Institute. This is especially important in the evaluation of analytical requirements necessary to meet detection sensitivities required for compliance monitoring.

**SKILL (continued)**

Must be able to develop and modify the computer routines used for data reduction in nuclear spectrometry. Also must be able to direct others in this type work.

Must be precise in gathering and evaluating data and must be able to review and evaluate data produced by others.

Must be able to prepare and present technical reports and scientific papers.

Must be fluent both in written and oral communications.

Must be able to handle working relationships tactfully.

Must be able to conduct quality assurance activities associated with the nuclear counting work and must be able to evaluate results for quality control activities.

NAME (As on page 1) Charles E. Frederick	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Chemist, SC-4
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**MINIMUM QUALIFICATION REQUIREMENTS**

List minimum knowledges, skills, and/or abilities as contained in the Classification Manual

A B.S. degree in chemistry with a minimum of 5 years experience at the SC-3 level in radiochemistry/nuclear spectrometry is required. An advanced degree in radiochemistry is desired.

**Evidence of Minimum Qualifications**

Possession of the minimum knowledge, skills, and/or abilities may be shown through experience, training, testing, license requirements, education, and/or a combination of these evidences. Any testing or license requirement listed below is the only acceptable evidence for that knowledge, skill, and/or ability. The education evidence listed below represents the specific minimum acceptable coursework and grade level for the indicated knowledges, if education is to be used as an evidence of qualification. Education evidence may not be applicable for all knowledges, skills, and/or abilities listed in the minimum qualification requirements above.

**TEST REQUIREMENTS:**

**LICENSE REQUIREMENTS:**

**EDUCATION**

**KNOWLEDGE**

**COURSE**

**GRADE LEVEL**

VPA NUMBER: 0000011031  
STATUS: PROCESSING APPLICATIONS  
GROUP: COMPETITIVE AREA WIDE  
SCHEDULE AND GRADE: SC 04 NUMBER OF POSITIONS:01  
JOB TITLE: CHEMIST (SPECTROSCOPY & INSTRUMENTATION)  
LOCATION: MUSCLE SHOALS  
ORGANIZATION: TVA NUCLEAR  
NUC DPS/DPS SUPPORT  
ERMI  
(SUPV: WILLIAM RAINES)

POSTING-DATE: 07/29/96 CLOSING-DATE: 08/13/96

DUTIES: INCUMBENT IS SENIOR CHEMIST FOR ERMI NUCLEAR SPECTROSCOPY AND COUNTING INSTRUMENTATION LAB ACTIVITIES PROVIDING TECH DIRECTION FOR THIS AREA OF THE RADIOANALYTICAL LAB OPERATIONS AND IS THE TECH EXPERT IN NUCLEAR SPECTROSCOPY AND COUNTING INSTRUMENTATION. DIRECTS THE DAILY OPERATIONS OF THE WARL COUNTING LAB OPERATIONS. REVIEWS AND APPROVES ALL NUCLEAR SPECTROSCOPY AND NUCLEAR COUNTING RESULTS. PLANS AND IMPLEMENTS RESEARCH AND DEVELOPMENT PROJECTS IN NUCLEAR SPECTROSCOPY AS APPLIED TO THE ANALYSIS OF RADIONUCLIDES. PROVIDES THE TECH SUPPORT AND DIRECTION FOR THE NUCLEAR SPECTROSCOPY AND COUNTING PHASES OF THE COMPLEX RADIOCHEMICAL ANALYSES.

MINIMUM QUALIFICATIONS: A B.S. DEGREE IN CHEMISTRY WITH A MINIMUM OF FIVE YEARS EXPERIENCE AT THE SC-3 LEVEL IN RADIOCHEMISTRY/NUCLEAR SPECTROMETRY IS REQUIRED. AN ADVANCED DEGREE IN RADIOCHEMISTRY IS DESIRED. MUST HAVE EXPERT LEVEL KNOWLEDGE IN NUCLEAR SPECTROSCOPY AND IN THE THEORY, DESIGN AND OPERATION OF THE DETECTORS AND INSTRUMENTATION USED FOR NUCLEAR SPECTROSCOPY MEASUREMENTS. MUST BE ABLE TO APPLY THE ADVANCED THEORIES AND TECHNIQUES OF NUCLEAR SPECTROSCOPY TO THE ANALYSIS OF RADIOLOGICAL ENVIRONMENTAL MONITORING SAMPLES AND NUCLEAR PLANT OPERATIONS SAMPLES AND IN THE RESEARCH AND DEVELOPMENT OF RADIOANALYTICAL ANALYSIS METHODS.

TO APPLY SEND FORM TVA 9824 TO: NUCLEAR HUMAN RESOURCES  
LOOKOUT PLACE 3A-C (X-2344)  
\*CHATT. KNOX, POTC. & MUSCLE SHOALS EMPLOYEES ONLY

BF001315

**POSITION DESCRIPTION**

Name David F. Goetcheus  
 Position Title Steam Generator Technology Manager  
 Location Chattanooga  
 Organization Titles:  
 Group TVA Nuclear  
 Operations Nuclear Operations  
 Division Operations Support  
 Department Steam Generator Technology  
 Section \_\_\_\_\_

Social Security Number [REDACTED]  
 Pay Group or Schedule/Grade PG-SR  
 Effective Date 8/5/96  
 Incumbent's Signature [Signature]  
 Supervisor's Signature [Signature]  
 HRM/HRO's Signature [Signature]  
 Reports to (Title) Ben G. Easley  
Operations Support General Manager

**FOR COMPENSATION PLANNING AND ANALYSIS USE ONLY**

**POSITION EVALUATION:**

EVALUATION DATE: 3/11/96

CP&A REVIEWER INITIALS: cih

<u>F33</u> Slot	<u>528</u> K-H Pts	<u>F4 (50)</u> P-S Slot	<u>264</u> P-S Pts	<u>F2P</u> Acct Slot	<u>304</u> Acct Pts	<u>1096</u> Total Pts	<u>48-24-28</u> Profile	<u>+1</u> Profile
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Approved Job Title: MANAGER  
 Organization Code: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Schedule/Pay Grade: PG-SR  
 Job Code: 2185  
 Supervisory Code: Y  
 Function Code: P44

**POSITION PURPOSE:**

Steam Generator (S/G) technical issues are the number one problem associated with pressurized water reactor (PWR) plants; therefore, TVA has established a dedicated technical group to manage and direct programs that develop steam generator strategic plans and implement steam generator repair, maintenance and testing activities at TVA's PWR nuclear sites ensuring that TVA's nuclear facilities are operated reliably, safely and efficiently in compliance with technical specifications, regulatory commitments, and within the design bases defined in the Final Safety Analysis Report.

**DIMENSIONS:**

Employees:

Management/Professional/Technical	Budget	
Clerical/Technical Support	Payroll	.69mm
Direct	Operating	.08mm
6	Capital	-0-
Contractors/Trades and Labor	Contractor Support	20 mm
<u>80/160</u>	Impact of S/G Strategic plan	750 mm
TOTAL		
<u>86/160</u>		

Distribution: Original - Human Resources Microrecords Unit, Knoxville  
 Copy - Operations Organization (as needed)  
 Copy - Central Office of Union Having Jurisdiction  
 Copy - Employee

**BF001316**

POSITION TITLE: Steam Generator Technology Manager

PD NO. 960387

NAME David F. Goetcheus SSN [REDACTED]

EFFECTIVE DATE 8/5/96

(First) (Middle) (Last)

PRINCIPAL ACCOUNTABILITIES:

1. Responsible for SG integrity programs that are intended to prevent S/G replacement (\$250 million/unit or \$750 million total) and implementation of S/G outage activities. This involves direct interface with TVA executive and Sr. management, NRC officials and industry groups.
2. Manages S/G outages and projects with annual costs of up to \$20 million by establishment of high levels of expertise to technically direct, implement technically complex activities, and develop contingency plans. Manages costs of S/G outage activities that represent up to 50 percent of PWR outage costs.
3. Directs the development long-range steam generator strategic plans that are cost effective and technically adequate to ensure that proper testing, maintenance, repair and replacement are implemented to support optimum unit generation requirements.
4. Directs the investigation and resolution of high visibility, high impact technologically complex problems at the nuclear power facilities.
5. Directs and makes decisions on the resolution of technical problems/issues which impact plant safety, unit reliability, and costs effectiveness of operation.
6. Responsible for programs, guidelines, and standards that are developed of the POWER nuclear sites for compliance and in accordance with all regulatory industry standards.
7. Directs the development of programs to provide contracted support for engineering, maintenance testing and repairs of TVA PWR units' steam generators.
8. Represents TVA, as a recognized industry expert, in industry S/G organizations such as EPRI S/G Group, NEI Working Group and INPO S/G Advisory Group, and functions as industry leader interfacing with NRC.

MINIMUM QUALIFICATIONS:

The incumbent must have broad technical knowledge of nuclear power plant design, operation, maintenance, and management; demonstrated ability to interpret broad policy matters and to provide program direction; demonstrated ability in oral and written communication skills; demonstrated ability to effectively implement, direct, and coordinate diverse professional management activities; and a strong commitment to nuclear safety and quality assurance.

The incumbent must have industry recognized expertise and recognized creditability with NRC, NEI, and EPRI.

The incumbent must have a B.S. degree in engineering or related scientific discipline and 15 years of experience in nuclear power plant design, construction, operation, or quality assurance, including 10 years of experience in PWR Steam Generator Program Management or documented evidence of equivalent demonstrated knowledge, skills, and abilities.

Incumbent in this position is subject to rotational assignment.

**BF001317**

# VACANT POSITION ANNOUNCEMENT

**SUMMARY DESCRIPTION OF DUTIES:**

RESPONSIBLE FOR S/G INTEGRITY PROGRAMS THAT ARE INTENDED TO PREVENT S/G REPLACEMENT AND IMPLEMENTATION OF S/G OUTAGE ACTIVITIES. DIRECTS THE DEVELOPMENT LONG-RANGE STEAM GENERATOR STRATEGIC PLANS THAT ARE COST EFFECTIVE AND TECHNICALLY ADEQUATE TO ENSURE THAT PROPER TESTING, MAINTENANCE, REPAIR AND REPLACEMENT ARE IMPLEMENTED TO SUPPORT OPTIMUM UNIT GENERATION REQUIREMENTS. DIRECTS AND MAKES DECISIONS ON THE RESOLUTION OF TECHNICAL PROBLEMS/ISSUES WHICH IMPACT PLANT SAFETY, UNIT RELIABILITY, AND COST EFFECTIVENESS OF OPERATIONS.

**MINIMUM QUALIFICATIONS:**

MUST HAVE A B.S. DEGREE IN ENGINEERING OR RELATED DISCIPLINE AND 15 YEARS OF EXPERIENCE IN NUCLEAR PLANT DESIGN, CONSTRUCTION, OPERATION, OR QUALITY ASSURANCE, INCLUDING 10 YEARS OF EXPERIENCE IN PWR STEAM GENERATOR PROGRAM MANAGEMENT OR DOCUMENTED EVIDENCE OF EQUIVALENT DEMONSTRATED KNOWLEDGE, SKILLS, AND ABILITIES. MUST HAVE BROAD TECHNICAL KNOWLEDGE OF NUCLEAR POWER PLANT DESIGN, OPERATION, MAINTENANCE, AND MANAGEMENT; DEMONSTRATED ABILITY TO INTERPRET BROAD POLICY MATTERS AND TO PROVIDE PROGRAM DIRECTION. INCUMBENT IN THIS POSITION IS SUBJECT TO ROTATIONAL ASSIGNMENT.

TVA-WIDE

MANAGEMENT

TO APPLY - EMPLOYEES GET THE APPROPRIATE EMPLOYEE APPLICATION FOR ANNOUNCED VACANT POSITION FORM AT YOUR LOCAL PERSONNEL, EMPLOYMENT, OR ADMINISTRATIVE OFFICE. THE FORM TO USE FOR THIS POSITION IS FORM TVA 932C. COMPLETE AND SEND THE FORM TO:

NUCLEAR HUMAN RESOURCES  
 LOCKOUT PLACE 3A-C (X-2344)  
 PENDING FINAL HAY EVALUATION

**CLOSING DATE:**

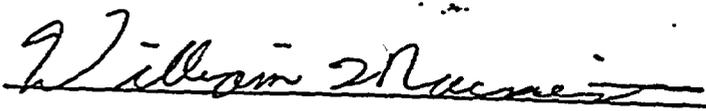
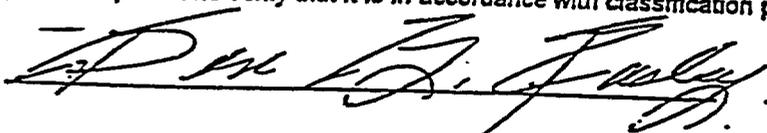
06/25/96

APPLICATIONS RECEIVED AFTER CLOSING DATE ARE NOT ENTITLED TO CONSIDERATION, BUT MAY BE CONSIDERED AT TVAC OPTION.

TVA NUCLEAR		WORK LOCATION CHATTANOOGA
OPERATIONS		POSITION STEAM GENERATOR TECH MANAGER
OPERATIONS SUPPORT		BF001318
MENT	SCHEDULE AND GRADE PG SR	ANNOUNCEMENT NO. 10701
SUPV: T. MCGRATH)		

IS AN EQUAL OPPORTUNITY EMPLOYER. SELECTIONS WILL BE MADE ON THE BASIS OF MERIT AND APPLICABLE LAWS.

**JOB DESCRIPTION  
Salary Policy  
(Excluding Schedules SF and SG)**

NAME (First, Middle, Last) Jscar S. Gossett, Jr.		SOCIAL SECURITY NO. ██████████	EFFECTIVE DATE September 30, 1996			
OPERATIONS ORGANIZATION Nuclear Operations		DIVISION Operations Support	CODE			
DEPARTMENT Radiological & Chemistry Control		SECTION ERM&I	LOCATION (City or Project) Muscle Shoals, AL			
PRESENT TITLE, SCHEDULE, AND GRADE		REASON FOR ISSUE Organizational Restructuring - New Position				
PROPOSED TITLE, SCHEDULE, AND GRADE Radiochem Lab Analyst, SE-5		POSITION REFERENCE NO. -				
I certify that this is an accurate statement of the major duties and responsibilities of this position and that it has been discussed with incumbent.						
SUPERVISOR'S SIGNATURE 		Date Discussed 10/1/96				
TYPE NAME OF SIGNATURE William L. Raines						
I have reviewed the job description and verify that it is in accordance with classification procedures.						
SUPERVISOR'S SIGNATURE 		Date Reviewed 7/8/96				
This job description is an accurate statement of the duties assigned to me.						
EMPLOYEE'S SIGNATURE  <i>(Signature is required only when employee requests a classification review)</i>		Date Agreed				
CLASSIFICATION GROUP IX						
FACTOR EVALUATION DATA						
Guide Chart	I	II	III	IV Inside	IV Outside	Total
Keys	C3	C3a	C2	B1a	A1b	
Points	405	275	80	10	10	780
Approved Title Radiochemical Laboratory Analyst				Job Title Code 2682	Schedule & Grade SE-5	
				Date 7/8/96		Evaluator's Signature 

TRIBUTION: Original - Human Resources Microrecords Units, Knoxville  
 Copy - Operations Organizations (as needed)  
 Copy - Central Office of Union Having Jurisdiction  
 Copy - Employee

NAME (As on page 1) Oscar S. Gossett, Jr.	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Radiochem Lab Analyst, SE-5
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DUTIES

Write a brief introductory paragraph summarizing the primary purpose of the job. Follow with a list of typical duties and responsibilities with supporting examples which are performed on a recurring basis.

Functions as a laboratory technician in the ERM&I radioanalytical lab responsible for the performance of radiochemical analyses of environmental and nuclear plant process samples. The sample types include samples collected for radiological environmental monitoring, radiological effluent monitoring samples, bioassay samples, rad waste characterization samples and samples resulting from the conduct of site RADCON programs. Duties include:

Utilizing the written approved ERM&I procedures, performs separation chemistry used to isolate and collect radionuclides of interest from various sample matrixes. Sample types may include air filters, smears water, soil, milk, vegetation, fish, resin, liquid rad effluents, urine, or other environmental or nuclear plant process sample forms. Chemical separation and concentration techniques include ion exchange, solvent extraction, redox reactions, precipitation and/or electro-plating. Through observation of the in progress chemistry and results at intermediate steps, the incumbent initiates analysis reruns or identifies chemistry problems and reports the problems to the responsible chemist.

In accordance with applicable written procedures, operates nuclear spectroscopy and nuclear counting equipment used in qualitative and quantitative radiochemical analyses. Equipment includes gamma spectroscopy systems, alpha spectroscopy systems, liquid scintillation counters, low background alpha/beta counting systems, beta/gamma coincidence counting systems. Reviews in progress data generated from the counting instrumentation including evaluation of spectrum from the gamma and alpha spectroscopy systems. Initiates recounts, makes instrumentation adjustments or reports anomalous data to the chemist in charge as appropriate.

Performs operational and quality control tests, measurements and calibrations on the detectors and counting system electronics used in the radiochemical analysis processes. Records and completes the QA documentation of these tests, measurements and calibrations. Identifies abnormal results and takes corrective actions consistent with routine equipment operational processes or as instructed in procedures. Equipment that does not respond to the normal corrective action is reported to the responsible chemist.

Performs data tabulations and calculations for the results generated from the radiochemical analyses performed in the lab. This process involves data entry for computer data base calculation programs, use of PC spread sheet calculation programs, executing gamma spectroscopy data reduction programs and hand calculations. Reviews in process data and calculation results to identify calculation errors or anomalous results. Initiates corrective action including repeating the analysis and/or reports anomalous results to the chemist responsible for the specific area of lab operations.

Enters sample information data into the lab data base system. Data entry includes sample collection information, in process data from sample preparation and sample status updates. Executes data base programs such as sample log in, weekly collection schedule, sample composite schedules and special sample log in.

Prepares samples for radiochemical analysis. Preparation processes include weighing, grinding, drying, ashing, packaging in appropriate sample containers, filtering, etc. Prepares the data sheets that are the QA record of the sample preparation phase of the analyses.

Performs sample collection surveys for the radiological environmental monitoring programs for TVAN nuclear plant sites. Based on the weekly schedule, collects samples of water, soil, vegetation, air filters, milk and environmental TLD badges from the sampling locations around each site. Records the field collection information and transports the samples to WARL. As part of the weekly sample collection run, transports portable radiation surveys instruments between the sites and the WARL instrument services facility.

Consistent with level of training and qualifications, staffs positions in the REP mobile gamma screening van or serves as a fixed monitor retriever during REP drills and exercises.

NAME (As on page 1) Oscar S. Gossett, Jr.	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Radiochem Lab Analyst, SE-5
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**JOB FACTOR DESCRIPTIONS**

**KNOWLEDGE:** Describe the type knowledge required to perform the assigned work. Knowledge may result from experience, formal schooling, self-study, or TVA-sponsored experiences but do not describe in terms of academic achievement or longevity.

Must have a detail working level knowledge of operation and use of the nuclear counting instrumentation used in the radioanalytical laboratory including gamma and alpha spectroscopy systems, low background beta counters, liquid scintillation counting systems and beta/gamma coincidence counters.

Must have a detail working level knowledge of the techniques and principles of chemical separations as applied to qualitative and quantitative radioanalytical analyses. Chemical separation methods utilized include ion exchange, solvent extraction, redox reactions, electro-plating, etc.

Must know and understand the interactions of ionizing radiation with matter and how these interactions are used in the radioanalytical laboratory.

Must know and understand the properties and hazards of radioactivity and the proper technique for handling such materials to avoid cross contamination of other samples, contamination of lab work areas and personal exposure.

Continued on page 5

**SKILL:** Describe the type of skills utilized in applying the above knowledge to the performance of the listed duties.

Must be proficient in the application and operation of precise nuclear counting instrumentation such as germanium detectors and associated computer based multichannel analyzers; low background beta counting systems; liquid scintillation systems; etc.

Must be able to perform in progress review of data generated by the nuclear counting instrumentation to evaluate acceptability of the results.

Must be able to execute diagnostic and quality control tests on laboratory equipment and nuclear counting instrumentation.

Continued on page 5.

**COMPLEXITY OF WORK:** Provide examples of the judgments required to perform the duties and the basis for the judgment. Judgment (independent decisionmaking)

Must recognize unusual results associated with the analytical procedures or quality control tests. Identifies malfunctions and initiates corrective actions within the limits allowed by ERM&I procedures. Notifies responsible chemist of corrective action and reports problems not corrected or outside allowable corrective limits provided by procedure. Analyses require application of complex chemical separation techniques and operation of state of the art nuclear counting instrumentation. Incumbent reviews in progress data and must be able to identify anomalous results.

NAME (As on page 1) Oscar S. Gossett, Jr.	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Radiochem Lab Analyst, SE-5
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**Supervision over Others:** Describe type of supervision, i.e., technical supervision/direction, administrative supervision, or full supervision. Indicate the number, title, schedule, and grade level of those supervised and specify full-time responsibility.

May direct other technicians during cross training or during initial training of new employees. No routine supervision responsibilities.

**Supervisory Controls:** Describe the nature and extent of supervision received by the incumbent. Include the way assignments are made, how instructions are given, whether priorities and deadlines are set, and how work is reviewed.

Program design establishes routine sample analyses schedules and turnaround time requirements. Based on the established schedule, the incumbent plans and organizes daily work within assigned area of responsibility. The supervisor or responsible chemist gives specific assignments only when unusual priorities or conditions are to be met.

**Nature of Guidelines:** Describe the specific instructions, procedures, or policies and how they limit the independent action of the incumbent.

The incumbent plans and conducts work in his/her assigned area of responsibility to meet overall organizational goals and schedules. ERM&I procedures provide the written instructions for performing lab analyses but the incumbent must evaluate in process data and chemical results based on experience and knowledge of the process. The incumbent identifies when repeating a chemical separation or recounting a sample is necessary. Correct evaluation and action ensures that timeliness requirements are maintained and unnecessary rework is avoided.

**Impact of Work:** Describe the consequences of an error and the probability of it going undetected considering the current review process and established guidelines. (Examples should reflect errors in judgment rather than acts of negligence.)

Errors not identified by the incumbent can go undetected until final data review. This can impact ERM&I's ability to meet turnaround time requires and result in costly rework including overtime expense.

**Contacts:** Indicate grade levels of personnel outside immediate work group who are contacted by the incumbent in carrying out the responsibilities of this job. For each type contact, specify whether it is a TVA contact or one outside TVA. Explain the purpose of each contact and how often this contact must be made.

Most internal contacts are handled by the responsible chemist. Incumbent has infrequent contacts with site personnel to obtain sample information. While performing sample collection, incumbent has weekly contact with farmers supplying samples for rad environmental monitoring.

**Working Conditions (General Services Schedule SB only):** Describe any extraordinary physical requirements or unusual physical exertion required by the work assignment. Specify any aspects of the job which require time limitations or use of safety devices.

Incumbent usually works standing or sitting on a lab stool. Working with hazardous chemicals, gases, and radioactivity requires the wearing of appropriate safety equipment. Sample collection requires working outside in all types of weather conditions and driving for up to four hours at a time. Lifting and carrying up to 50 pounds may be required.

**KNOWLEDGE: CONTINUED FROM PAGE 3**

Must have detail knowledge of basic chemical laboratory activities such as dilution; weighing; quantitative transfer; filtration; use of test tubes; proper selection and use of lab glassware; use of analytical balances; use of pH meters; etc.

Must know and understand chemical laboratory safety practices such as the handling of common chemicals; gases; flammable, explosive and corrosive materials; mixtures heated to high temperatures; etc.

Must know and understand algebraic formulas and how to follow the complex equations used in the calculation of radionuclide concentrations.

Must have a working level knowledge of PC's and computer systems as related to data entry and program execution.

Must know the types and levels of radionuclides expected in the samples routinely analyzed by the WARL radioanalytical lab.

Must have working level knowledge of the radiological environmental monitoring programs conducted for TVAN sites and the accepted sampling techniques.

Must have a thorough knowledge of the geographical layout of the radiological environmental monitoring locations for each TVAN site such that sample collection can be conducted as scheduled and routes adjusted when necessary.

**SKILLS: CONTINUED FROM PAGE 3**

Must be proficient in all standard chemical laboratory techniques such as dilution; weighing; quantitative transfers; filtration; selection and use of lab glassware; etc.

Must be able to apply the lab techniques necessary for ion exchange and solvent extraction separations and must be able to set up the lab equipment necessary for these chemical methods.

Must be able to follow and apply written technical procedures used in the performance of radioanalytical analyses.

Must be able to carry out multiple tasks concurrently. For example, the analyst may be required to conduct two or more analyses on sets of 10 - 15 samples at the same time or operate 4 to 5 different counting systems simultaneously.

Must be able to accurately assemble laboratory apparatus and equipment and keep track of the disposition of sample material.

Must be able to use computer systems or PC's to run the required data entry, perform calculations, review data and execute various data base programs.

Must be able to construct and interpret graphical information such as control charts, standard addition curves and weight efficiency curves.

Must be able to use hand-held calculators to perform decay corrections, efficiency calculations, and other routine mathematical manipulations.

Must be able to communicate effectively orally, and in writing.

Must be able to keep precise and complete records.

Must be able to organize and plan environmental sampling trips to maintain a required time schedule while minimizing mileage and overtime.

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NAME (As on page 1) Oscar S. Gossett, Jr.	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Radiochem Lab Analyst, SE-5
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**MINIMUM QUALIFICATION REQUIREMENTS**

List minimum knowledges, skills, and/or abilities as contained in the Classification Manual

Completion of basic college level chemistry and algebra (two years) plus 24 months of related work experience at the SE-4 level or at least 3 years experience in a chemical lab at the SE-4 level.

**Evidence of Minimum Qualifications**

Possession of the minimum knowledge, skills, and/or abilities may be shown through experience, training, testing, license requirements, education, and/or a combination of these evidences. Any testing or license requirement listed below is the only acceptable evidence for that knowledge, skill, and/or ability. The education evidence listed below represents the specific minimum acceptable coursework and grade level for the indicated knowledges, if education is to be used as an evidence of qualification. Education evidence may not be applicable for all knowledges, skills, and/or abilities listed in the minimum qualification requirements above.

**TEST REQUIREMENTS:**

**LICENSE REQUIREMENTS:**

<u>KNOWLEDGE</u>	<u>EDUCATION</u> <u>COURSE</u>	<u>GRADE LEVEL</u>
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**JOB DESCRIPTION  
Salary Policy  
(Excluding Schedules SF and SG)**

NAME (First, Middle, Last) Earnest E. Smith		SOCIAL SECURITY NO. [REDACTED]	EFFECTIVE DATE September 30, 1996
OPERATIONS ORGANIZATION Nuclear Operations		DIVISION Operations Support	CODE
DEPARTMENT Radiological & Chemistry Control		SECTION ERM&I	LOCATION (City or Project) Muscle Shoals, AL
PRESENT TITLE, SCHEDULE, AND GRADE		REASON FOR ISSUE Organizational Restructuring - New Position	
PROPOSED TITLE, SCHEDULE, AND GRADE Radiochem Lab Analyst, SE-5		POSITION REFERENCE NO.	

I certify that this is an accurate statement of the major duties and responsibilities of this position and that it has been discussed with incumbent.

SUPERVISOR'S SIGNATURE William L. Raines Date Discussed 9/30/96

TYPE NAME OF SIGNATURE William L. Raines

I have reviewed the job description and verify that it is in accordance with classification procedures.

SCOPE'S SIGNATURE [Signature] Date Reviewed 7/8/96

This job description is an accurate statement of the duties assigned to me.

EMPLOYEE'S SIGNATURE \_\_\_\_\_ Date Agreed \_\_\_\_\_  
*(Signature is required only when employee requests a classification review)*

CLASSIFICATION GROUP IX							<u>7/8/96</u> Date <u>[Signature]</u> Evaluator's Signature
FACTOR EVALUATION DATA							
Guide Chart	I	II	III	IV Inside	IV Outside	Total	
Keys	C3	C3a	C2	B1a	A1b		
Points	405	275	80	10	10	780	
Approved Title Radiochemical Laboratory Analyst							Job Title Code 2682 Schedule & Grade SE-5

DISTRIBUTION: Original - Human Resources Microrecords Units, Knoxville  
 Copy - Operations Organizations (as needed)  
 Copy - Central Office of Union Having Jurisdiction  
 Copy - Employee

NAME (As on page 1) Earnest E. Smith	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Radiochem Lab Analyst, SE-5
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### DUTIES

Write a brief introductory paragraph summarizing the primary purpose of the job. Follow with a list of typical duties and responsibilities with supporting examples which are performed on a recurring basis.

Functions as a laboratory technician in the ERM&I radioanalytical lab responsible for the performance of radiochemical analyses of environmental and nuclear plant process samples. The sample types include samples collected for radiological environmental monitoring, radiological effluent monitoring samples, bioassay samples, rad waste characterization samples and samples resulting from the conduct of site RADCON programs. Duties include:

Utilizing the written approved ERM&I procedures, performs separation chemistry used to isolate and collect radionuclides of interest from various sample matrixes. Sample types may include air filters, smears water, soil, milk, vegetation, fish, resin, liquid rad effluents, urine, or other environmental or nuclear plant process sample forms. Chemical separation and concentration techniques include ion exchange, solvent extraction, redox reactions, precipitation and/or electro-plating. Through observation of the in progress chemistry and results at intermediate steps, the incumbent initiates analysis reruns or identifies chemistry problems and reports the problems to the responsible chemist.

In accordance with applicable written procedures, operates nuclear spectroscopy and nuclear counting equipment used in qualitative and quantitative radiochemical analyses. Equipment includes gamma spectroscopy systems, alpha spectroscopy systems, liquid scintillation counters, low background alpha/beta counting systems, beta/gamma coincidence counting systems. Reviews in progress data generated from the counting instrumentation including evaluation of spectrum from the gamma and alpha spectroscopy systems. Initiates recounts, makes instrumentation adjustments or reports anomalous data to the chemist in charge as appropriate.

Performs operational and quality control tests, measurements and calibrations on the detectors and counting system electronics used in the radiochemical analysis processes. Records and completes the QA documentation of these tests, measurements and calibrations. Identifies abnormal results and takes corrective actions consistent with routine equipment operational processes or as instructed in procedures. Equipment that does not respond to the normal corrective action is reported to the responsible chemist.

Performs data tabulations and calculations for the results generated from the radiochemical analyses performed in the lab. This process involves data entry for computer data base calculation programs, use of PC spread sheet calculation programs, executing gamma spectroscopy data reduction programs and hand calculations. Reviews in process data and calculation results to identify calculation errors or anomalous results. Initiates corrective action including repeating the analysis and/or reports anomalous results to the chemist responsible for the specific area of lab operations.

Enters sample information data into the lab data base system. Data entry includes sample collection information, in process data from sample preparation and sample status updates. Executes data base programs such as sample log in, weekly collection schedule, sample composite schedules and special sample log in.

Prepares samples for radiochemical analysis. Preparation processes include weighing, grinding, drying, ashing, packaging in appropriate sample containers, filtering, etc. Prepares the data sheets that are the QA record of the sample preparation phase of the analyses.

Performs sample collection surveys for the radiological environmental monitoring programs for TVAN nuclear plant sites. Based on the weekly schedule, collects samples of water, soil, vegetation, air filters, milk and environmental TLD badges from the sampling locations around each site. Records the field collection information and transports the samples to WARL. As part of the weekly sample collection run, transports portable radiation surveys instruments between the sites and the WARL instrument services facility.

Consistent with level of training and qualifications, staffs positions in the REP mobile gamma screening van or serves as a fixed monitor retriever during REP drills and exercises.

NAME (As on page 1)	SOCIAL SECURITY NO.	APPROVED TITLE, SCHEDULE, AND GRADE
Earnest E. Smith	[REDACTED]	Radiochem Lab Analyst, SE-5

**JOB FACTOR DESCRIPTIONS**

**KNOWLEDGE:** Describe the type knowledge required to perform the assigned work. Knowledge may result from experience, formal schooling, self-study, or TVA-sponsored experiences but do not describe in terms of academic achievement or longevity.

Must have a detail working level knowledge of operation and use of the nuclear counting instrumentation used in the radioanalytical laboratory including gamma and alpha spectroscopy systems, low background beta counters, liquid scintillation counting systems and beta/gamma coincidence counters.

Must have a detail working level knowledge of the techniques and principles of chemical separations as applied to qualitative and quantitative radioanalytical analyses. Chemical separation methods utilized include ion exchange, solvent extraction, redox reactions, electro-plating, etc.

Must know and understand the Interactions of ionizing radiation with matter and how these interactions are used in the radioanalytical laboratory.

Must know and understand the properties and hazards of radioactivity and the proper technique for handling such materials to avoid cross contamination of other samples, contamination of lab work areas and personal exposure.

Continued on page 6

**SKILL:** Describe the type of skills utilized in applying the above knowledge to the performance of the listed duties.

Must be proficient in the application and operation of precise nuclear counting instrumentation such as germanium detectors and associated computer based multichannel analyzers; low background beta counting systems; liquid scintillation systems; etc.

Must be able to perform in progress review of data generated by the nuclear counting instrumentation to evaluate acceptability of the results.

Must be able to execute diagnostic and quality control tests on laboratory equipment and nuclear counting instrumentation.

Continued on page 5.

**COMPLEXITY OF WORK:** Provide examples of the judgments required to perform the duties and the basis for the judgment. Judgment (independent decisionmaking)

Must recognize unusual results associated with the analytical procedures or quality control tests. Identifies malfunctions and initiates corrective actions within the limits allowed by ERM&I procedures. Notifies responsible chemist of corrective action and reports problems not corrected or outside allowable corrective limits provided by procedure. Analyses require application of complex chemical separation techniques and operation of state of the art nuclear counting instrumentation. Incumbent reviews in progress data and must be able to identify anomalous results.

NAME (As on page 1) Earnest E. Smith	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Radiochem Lab Analyst, SE-5
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**Supervision over Others:** Describe type of supervision, i.e., technical supervision/direction, administrative supervision, or full supervision. Indicate the number, title, schedule, and grade level of those supervised and specify full-time responsibility.

May direct other technicians during cross training or during initial training of new employees. No routine supervision responsibilities.

**Supervisory Controls:** Describe the nature and extent of supervision received by the incumbent. Include the way assignments are made, how instructions are given, whether priorities and deadlines are set, and how work is reviewed.

Program design establishes routine sample analyses schedules and turnaround time requirements. Based on the established schedule, the incumbent plans and organizes daily work within assigned area of responsibility. The supervisor or responsible chemist gives specific assignments only when unusual priorities or conditions are to be met.

**Nature of Guidelines:** Describe the specific instructions, procedures, or policies and how they limit the independent action of the incumbent.

The incumbent plans and conducts work in his/her assigned area of responsibility to meet overall organizational goals and schedules. ERM&I procedures provide the written instructions for performing lab analyses but the incumbent must evaluate in process data and chemical results based on experience and knowledge of the process. The incumbent identifies when repeating a chemical separation or recounting a sample is necessary. Correct evaluation and action ensures that timeliness requirements are maintained and unnecessary rework is avoided.

**Impact of Work:** Describe the consequences of an error and the probability of it going undetected considering the current review process and established guidelines. (Examples should reflect errors in judgment rather than acts of negligence.)

Errors not identified by the incumbent can go undetected until final data review. This can impact ERM&I's ability to meet turnaround time requires and result in costly rework including overtime expense.

**Contacts:** Indicate grade levels of personnel outside immediate work group who are contacted by the incumbent in carrying out the responsibilities of this job. For each type contact, specify whether it is a TVA contact or one outside TVA. Explain the purpose of each contact and how often this contact must be made.

Most internal contacts are handled by the responsible chemist. Incumbent has infrequent contacts with site personnel to obtain sample information. While performing sample collection, incumbent has weekly contact with farmers supplying samples for rad environmental monitoring.

**Working Conditions (General Services Schedule SB only):** Describe any extraordinary physical requirements or unusual physical exertion required by the work assignment. Specify any aspects of the job which require time limitations or use of safety devices.

Incumbent usually works standing or sitting on a lab stool. Working with hazardous chemicals, gases, and radioactivity requires the wearing of appropriate safety equipment. Sample collection requires working outside in all types of weather conditions and driving for up to four hours at a time. Lifting and carrying up to 50 pounds may be required.

**KNOWLEDGE: CONTINUED FROM PAGE 3**

Must have detail knowledge of basic chemical laboratory activities such as dilution; weighing; quantitative transfer; filtration; use of pipettes; proper selection and use of lab glassware; use of analytical balances; use of pH meters; etc.

Must know and understand chemical laboratory safety practices such as the handling of common chemicals; gases; flammal explosive and corrosive materials; mixtures heated to high temperatures; etc.

Must know and understand algebraic formulas and how to follow the complex equations used in the calculation of radionucl concentrations.

Must have a working level knowledge of PC's and computer systems as related to data entry and program execution.

Must know the types and levels of radionuclides expected in the samples routinely analyzed by the WARL radioanalytical lab.

Must have working level knowledge of the radiological environmental monitoring programs conducted for TVAN sites and t accepted sampling techniques.

Must have a thorough knowledge of the geographical layout of the radiological environmental monitoring locations for each TVAN s such that sample collection can be conducted as scheduled and routes adjusted when necessary.

**SKILLS: CONTINUED FROM PAGE 3**

Must be proficient in all standard chemical laboratory techniques such as dilution; weighing; quantitative transfers; filtration; selecti and use of lab glassware; etc.

Must be able to apply the lab techniques necessary for ion exchange and solvent extraction separations and must be able to set t the lab equipment necessary for these chemical methods.

Must be able to follow and apply written technical procedures used in the performance of radioanalytical analyses.

Must be able to carry out multiple tasks concurrently. For example, the analyst may be required to conduct two or more analyses c sets of 10 - 15 samples at the same time or operate 4 to 5 different counting systems simultaneously.

Must be able to accurately assemble laboratory apparatus and equipment and keep track of the disposition of sample material.

Must be able to use computer systems or PC's to run the required data entry, perform calculations, review data and execute variou data base programs.

Must be able to construct and interpret graphical information such as control charts, standard addition curves and weight efficient curves.

Must be able to use hand-held calculators to perform decay corrections, efficiency calculations, and other routine mathematic manipulations.

Must be able to communicate effectively orally, and in writing.

Must be able to keep precise and complete records.

Must be able to organize and plan environmental sampling trips to maintain a required time schedule while minimizing mileage an overtime.

NAME (As on page 1) Earnest E. Smith	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Radiochem Lab Analyst, SE-5
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**MINIMUM QUALIFICATION REQUIREMENTS**

List minimum knowledges, skills, and/or abilities as contained in the Classification Manual

Completion of basic college level chemistry and algebra (two years) plus 24 months of related work experience at the SE-4 level or at least 3 years experience in a chemical lab at the SE-4 level.

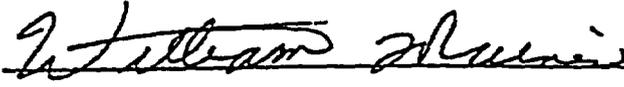
**Evidence of Minimum Qualifications**

Possession of the minimum knowledge, skills, and/or abilities may be shown through experience, training, testing, license requirements, education, and/or a combination of these evidences. Any testing or license requirement listed below is the only acceptable evidence for that knowledge, skill, and/or ability. The education evidence listed below represents the specific minimum acceptable coursework and grade level for the indicated knowledges, if education is to be used as an evidence of qualification. Education evidence may not be applicable for all knowledges, skills, and/or abilities listed in the minimum qualification requirements above.

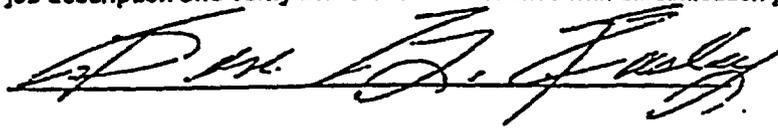
<u>TEST REQUIREMENTS:</u>
<u>LICENSE REQUIREMENTS:</u>

<u>KNOWLEDGE</u>	<u>EDUCATION</u> <u>COURSE</u>	<u>GRADE LEVEL</u>
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**JOB DESCRIPTION  
Salary Policy  
(Excluding Schedules SF and SG)**

NAME (First, Middle, Last) J. Carol Lee		SOCIAL SECURITY NO. [REDACTED]	EFFECTIVE DATE September 30, 1996
OPERATIONS ORGANIZATION Nuclear Operations		DIVISION Operations Support	CODE
DEPARTMENT Radiological & Chemistry Control		SECTION ERM&I	LOCATION (City or Project) Muscle Shoals, AL
PRESENT TITLE, SCHEDULE, AND GRADE		REASON FOR ISSUE Organizational Restructuring - New Position	
PROPOSED TITLE, SCHEDULE, AND GRADE Radiochem Lab Analyst, SE-5		POSITION REFERENCE NO.	
I certify that this is an accurate statement of the major duties and responsibilities of this position and that it has been discussed with incumbent.			
SUPERVISOR'S SIGNATURE 		Date Discussed 9/27/96	
TYPE NAME OF SIGNATURE William L. Raines			

I have reviewed the job description and verify that it is in accordance with classification procedures.

DPO'S SIGNATURE 	Date Reviewed 7/8/96
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This job description is an accurate statement of the duties assigned to me.

EMPLOYEE'S SIGNATURE _____	Date Agreed _____
<i>(Signature is required only when employee requests a classification review)</i>	

CLASSIFICATION GROUP IX							Date 7/8/96  Evaluator's Signature
FACTOR EVALUATION DATA							
Guide Chart	I	II	III	IV Inside	IV Outside	Total	
Keys	C3	C3a	C2	B1a	A1b		
Points	405	275	80	10	10	780	
Approved Title Radiochemical Laboratory Analyst					Job Title Code 2682	Schedule & Grade SE-5	

**DISTRIBUTION:** Original - Human Resources Microrecords Units, Knoxville  
Copy - Operations Organizations (as needed)  
Copy - Central Office of Union Having Jurisdiction  
Copy - Employee

**BF001331**

NAME (As on page 1) Carol Lee	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Radiochem Lab Analyst, SE-5
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DUTIES

Write a brief introductory paragraph summarizing the primary purpose of the job. Follow with a list of typical duties and responsibilities with supporting examples which are performed on a recurring basis.

Functions as a laboratory technician in the ERM&I radioanalytical lab responsible for the performance of radiochemical analyses of environmental and nuclear plant process samples. The sample types include samples collected for radiological environmental monitoring, radiological effluent monitoring samples, bioassay samples, rad waste characterization samples and samples resulting from the conduct of site RADCON programs. Duties include:

Utilizing the written approved ERM&I procedures, performs separation chemistry used to isolate and collect radionuclides of interest from various sample matrixes. Sample types may include air filters, smears water, soil, milk, vegetation, fish, resin, liquid rad effluents, urine, or other environmental or nuclear plant process sample forms. Chemical separation and concentration techniques include ion exchange, solvent extraction, redox reactions, precipitation and/or electro-plating. Through observation of the in progress chemistry and results at intermediate steps, the incumbent initiates analysis reruns or identifies chemistry problems and reports the problems to the responsible chemist.

In accordance with applicable written procedures, operates nuclear spectroscopy and nuclear counting equipment used in qualitative and quantitative radiochemical analyses. Equipment includes gamma spectroscopy systems, alpha spectroscopy systems, liquid scintillation counters, low background alpha/beta counting systems, beta/gamma coincidence counting systems. Reviews in progress data generated from the counting instrumentation including evaluation of spectrum from the gamma and alpha spectroscopy systems. Initiates recounts, makes instrumentation adjustments or reports anomalous data to the chemist in charge as appropriate.

Performs operational and quality control tests, measurements and calibrations on the detectors and counting system electronics used in the radiochemical analysis processes. Records and completes the QA documentation of these tests, measurements and calibrations. Identifies abnormal results and takes corrective actions consistent with routine equipment operational processes or instructed in procedures. Equipment that does not respond to the normal corrective action is reported to the responsible chemist.

Performs data tabulations and calculations for the results generated from the radiochemical analyses performed in the lab. This process involves data entry for computer data base calculation programs, use of PC spread sheet calculation programs, executing gamma spectroscopy data reduction programs and hand calculations. Reviews in process data and calculation results to identify calculation errors or anomalous results. Initiates corrective action including repeating the analysis and/or reports anomalous results to the chemist responsible for the specific area of lab operations.

Enters sample information data into the lab data base system. Data entry includes sample collection information, in process data from sample preparation and sample status updates. Executes data base programs such as sample log in, weekly collection schedule, sample composite schedules and special sample log in.

Prepares samples for radiochemical analysis. Preparation processes include weighing, grinding, drying, ashing, packaging in appropriate sample containers, filtering, etc. Prepares the data sheets that are the QA record of the sample preparation phase of the analyses.

Performs sample collection surveys for the radiological environmental monitoring programs for TVAN nuclear plant sites. Based on the weekly schedule, collects samples of water, soil, vegetation, air filters, milk and environmental TLD badges from the sampling locations around each site. Records the field collection information and transports the samples to WARL. As part of the weekly sample collection run, transports portable radiation surveys instruments between the sites and the WARL instrument services facility.

Consistent with level of training and qualifications, staffs positions in the REP mobile gamma screening van or serves as a fixed monitor retriever during REP drills and exercises.

BF001332

NAME (As on page 1) J. Carol Lee	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Radiochem Lab Analyst, SE-5
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### JOB FACTOR DESCRIPTIONS

**KNOWLEDGE:** Describe the type knowledge required to perform the assigned work. Knowledge may result from experience, formal schooling, self-study, or TVA-sponsored experiences but do not describe in terms of academic achievement or longevity.

Must have a detail working level knowledge of operation and use of the nuclear counting instrumentation used in the radioanalytical laboratory including gamma and alpha spectroscopy systems, low-background beta counters, liquid scintillation counting systems and beta/gamma coincidence counters.

Must have a detail working level knowledge of the techniques and principles of chemical separations as applied to qualitative and quantitative radioanalytical analyses. Chemical separation methods utilized include ion exchange, solvent extraction, redox reactions, electro-plating, etc.

Must know and understand the interactions of ionizing radiation with matter and how these interactions are used in the radioanalytical laboratory.

Must know and understand the properties and hazards of radioactivity and the proper technique for handling such materials to avoid cross contamination of other samples, contamination of lab work areas and personal exposure.

Continued on page 5

**SKILL:** Describe the type of skills utilized in applying the above knowledge to the performance of the listed duties.

Must be proficient in the application and operation of precise nuclear counting instrumentation such as germanium detectors and associated computer based multichannel analyzers; low background beta counting systems; liquid scintillation systems; etc.

Must be able to perform in progress review of data generated by the nuclear counting instrumentation to evaluate acceptability of the results.

Must be able to execute diagnostic and quality control tests on laboratory equipment and nuclear counting instrumentation.

Continued on page 5.

**COMPLEXITY OF WORK:** Provide examples of the judgments required to perform the duties and the basis for the judgment. Judgment (independent decisionmaking)

Must recognize unusual results associated with the analytical procedures or quality control tests. Identifies malfunctions and initiates corrective actions within the limits allowed by ERM&I procedures. Notifies responsible chemist of corrective action and reports problems not corrected or outside allowable corrective limits provided by procedure. Analyses require application of complex chemical separation techniques and operation of state of the art nuclear counting instrumentation. Incumbent reviews in progress data and must be able to identify anomalous results.

BF001333

NAME (As on page 1) Carol Lee	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Radiochem Lab Analyst, SE-5
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**Supervision over Others:** Describe type of supervision, i.e., technical supervision/direction, administrative supervision, or full supervision. Indicate the number, title, schedule, and grade level of those supervised and specify full-time responsibility.

May direct other technicians during cross training or during initial training of new employees. No routine supervision responsibilities.

**Supervisory Controls:** Describe the nature and extent of supervision received by the Incumbent. Include the way assignments are made, how instructions are given, whether priorities and deadlines are set, and how work is reviewed.

Program design establishes routine sample analyses schedules and turnaround time requirements. Based on the established schedule, the incumbent plans and organizes daily work within assigned area of responsibility. The supervisor or responsible chemist gives specific assignments only when unusual priorities or conditions are to be met.

**Nature of Guidelines:** Describe the specific instructions, procedures, or policies and how they limit the independent action of the Incumbent.

The incumbent plans and conducts work in his/her assigned area of responsibility to meet overall organizational goals and schedules. ERM&I procedures provide the written instructions for performing lab analyses but the incumbent must evaluate in process data and chemical results based on experience and knowledge of the process. The incumbent identifies when repeating a chemical separation or recounting a sample is necessary. Correct evaluation and action ensures that timeliness requirements are maintained and unnecessary rework is avoided.

**Impact of Work:** Describe the consequences of an error and the probability of it going undetected considering the current review process and established guidelines. (Examples should reflect errors in judgment rather than acts of negligence.)

Errors not identified by the incumbent can go undetected until final data review. This can impact ERM&I's ability to meet turnaround time requires and result in costly rework including overtime expense.

**Contacts:** Indicate grade levels of personnel outside immediate work group who are contacted by the incumbent in carrying out the responsibilities of this job. For each type contact, specify whether it is a TVA contact or one outside TVA. Explain the purpose of each contact and how often this contact must be made.

Most internal contacts are handled by the responsible chemist. Incumbent has infrequent contacts with site personnel to obtain sample information. While performing sample collection, incumbent has weekly contact with farmers supplying samples for rad environmental monitoring.

**Working Conditions (General Services Schedule SB only):** Describe any extraordinary physical requirements or unusual physical exertion required by the work assignment. Specify any aspects of the job which require time limitations or use of safety devices.

Incumbent usually works standing or sitting on a lab stool. Working with hazardous chemicals, gases, and radioactivity requires the wearing of appropriate safety equipment. Sample collection requires working outside in all types of weather conditions and driving for up to four hours at a time. Lifting and carrying up to 50 pounds may be required.

BF001334

**KNOWLEDGE: CONTINUED FROM PAGE 3**

Must have detail knowledge of basic chemical laboratory activities such as dilution; weighing; quantitative transfer; filtration; use of pipettes; proper selection and use of lab glassware; use of analytical balances; use of pH meters; etc.

Must know and understand chemical laboratory safety practices such as the handling of common chemicals; gases; flammable explosive and corrosive materials; mixtures heated to high temperatures; etc.

Must know and understand algebraic formulas and how to follow the complex equations used in the calculation of radionuclide concentrations.

Must have a working level knowledge of PC's and computer systems as related to data entry and program execution.

Must know the types and levels of radionuclides expected in the samples routinely analyzed by the WARL radioanalytical lab.

Must have working level knowledge of the radiological environmental monitoring programs conducted for TVAN sites and the accepted sampling techniques.

Must have a thorough knowledge of the geographical layout of the radiological environmental monitoring locations for each TVAN site such that sample collection can be conducted as scheduled and routes adjusted when necessary.

**SKILLS: CONTINUED FROM PAGE 3**

Must be proficient in all standard chemical laboratory techniques such as dilution; weighing; quantitative transfers; filtration; selection and use of lab glassware; etc.

Must be able to apply the lab techniques necessary for ion exchange and solvent extraction separations and must be able to set up the lab equipment necessary for these chemical methods.

Must be able to follow and apply written technical procedures used in the performance of radioanalytical analyses.

Must be able to carry out multiple tasks concurrently. For example, the analyst may be required to conduct two or more analyses on sets of 10 - 15 samples at the same time or operate 4 to 5 different counting systems simultaneously.

Must be able to accurately assemble laboratory apparatus and equipment and keep track of the disposition of sample material.

Must be able to use computer systems or PC's to run the required data entry, perform calculations, review data and execute various data base programs.

Must be able to construct and interpret graphical information such as control charts, standard addition curves and weight efficiency curves.

Must be able to use hand-held calculators to perform decay corrections, efficiency calculations, and other routine mathematical manipulations.

Must be able to communicate effectively orally, and in writing.

Must be able to keep precise and complete records.

Must be able to organize and plan environmental sampling trips to maintain a required time schedule while minimizing mileage and overtime.

BF001335

NAME (As on page 1) Carol Lee	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Radiochem Lab Analyst, SE-5
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**MINIMUM QUALIFICATION REQUIREMENTS**

List minimum knowledges, skills, and/or abilities as contained in the Classification Manual

Completion of basic college level chemistry and algebra (two years) plus 24 months of related work experience at the SE-4 level or at least 3 years experience in a chemical lab at the SE-4 level.

**Evidence of Minimum Qualifications**

Possession of the minimum knowledge, skills, and/or abilities may be shown through experience, training, testing, license requirements, education, and/or a combination of these evidences. Any testing or license requirement listed below is the only acceptable evidence for that knowledge, skill, and/or ability. The education evidence listed below represents the specific minimum acceptable coursework and grade level for the indicated knowledges, if education is to be used as an evidence of qualification. Education evidence may not be applicable for all knowledges, skills, and/or abilities listed in the minimum qualification requirements above.

<u>TEST REQUIREMENTS:</u>
<u>LICENSE REQUIREMENTS:</u> —

**EDUCATION**

KNOWLEDGE

COURSE

GRADE LEVEL

BF001336

VPA NUMBER: 0000011027  
STATUS: PROCESSING APPLICATIONS  
GROUP: COMPETITIVE AREA WIDE  
SCHEDULE AND GRADE: SE 05 NUMBER OF POSITIONS:03  
JOB TITLE: RADIOCHEM LAB ANALYST  
LOCATION: MUSCLE SHOALS  
ORGANIZATION: TVA NUCLEAR  
NUC OPS/OPS SUPPORT  
ERMI  
(SUPV: WILLIAM RAINES)  
POSTING-DATE: 07/29/96 CLOSING-DATE: 08/13/96

DUTIES: LABORATORY TECH IN THE ERMI RADIOANALYTICAL LAB RESPONSIBLE FOR THE PERFORMANCE OF RADIOCHEMICAL ANALYSES OF ENVIRONMENTAL AND NUCLEAR PLANT PROCESS SAMPLES. PERFORMS SEPARATION CHEMISTRY USED TO ISOLATE AND COLLECT RADIONUCLIDES OF INTEREST FROM VARIOUS SAMPLE MATRICES. OPERATES NUCLEAR SPECTROSCOPY AND NUCLEAR COUNTING EQUIPMENT USED IN QUALITATIVE AND QUANTITATIVE RADIOCHEMICAL ANALYSES. EQUIPMENT INCLUDES GAMMA SPECTROSCOPY SYSTEMS, ALPHA SPECTROSCOPY SYSTEMS, LIQUID SCINTILLATION COUNTERS. PERFORMS OPERATIONAL AND QUALITY CONTROL TESTS. PERFORMS DATA TABULATIONS AND CALCULATIONS FOR THE RESULTS GENERATED FROM THE RADIOCHEMICAL ANALYSES.

MINIMUM QUALIFICATIONS: COMPLETION OF BASIC COLLEGE LEVEL CHEMISTRY AND ALGEBRA (TWO YEARS) PLUS 24 MONTHS OF RELATED WORK EXPERIENCE AT THE SE-4 LEVEL OR AT LEAST THREE YEARS EXPERIENCE IN A CHEMICAL LAB AT THE SE-4 LEVEL. MUST HAVE A WORKING KNOWLEDGE OF NUCLEAR COUNTING INSTRUMENTATION SUCH AS GAMMA AND ALPHA SPECTROSCOPY SYSTEMS, LIQUID SCINTILLATION SYSTEMS, AND ALPHA/BETA COUNTERS OR A WORKING KNOWLEDGE OF CHEMICAL PROCESSES METHODS USED FOR RADIOCHEMICAL SEPARATIONS SUCH ION EXCHANGE, SOLVENT EXTRACTION AND ELECTROPLATING.

TO APPLY SEND FORM TVA 9824 TO: NUCLEAR HUMAN RESOURCES  
LOOKOUT PLACE 3A-C (X-2344)  
\*CHATT. KNOX. POTC & MUSCLE SHOALS EMPLOYEES ONLY

BF001337

**POSITION DESCRIPTION**

Position Title	<u>Sam L. Harvey III Chemistry Program Manager (PWR)</u>	Social Security Number	<u>[REDACTED]</u>
Location	<u>Chattanooga</u>	Pay Group or Schedule/Grade	<u>PG-08</u>
Organization Titles:		Effective Date	<u>8/5/96</u>
Group	<u>TVA Nuclear</u>	Incumbent's Signature	<u>[Signature]</u> S. L. Harvey
Operations	<u>Nuclear Operations</u>	Supervisor's Signature	<u>[Signature]</u> W. C. McArthur
Division	<u>Operations Support</u>	HRM/HRO's Signature	<u>[Signature]</u> D. E. Nixon
Department	<u>Corporate Radiological and Chemistry Control</u>	Reports to (Title)	<u>Corporate Radiological and Chemistry Control Manager</u>
Section	<u></u>		

**FOR COMPENSATION PLANNING AND ANALYSIS USE ONLY**

POSITION EVALUATION:	EVALUATION DATE: <u>7/16/96</u>	CP&A REVIEWER INITIALS: <u>JEC</u>									
<u>F13</u> K-H Slot	<u>350</u> K-H Pts	<u>E3 (38)</u> P-S Slot	<u>132</u> P-S Pts	<u>E1P</u> Acct Slot	<u>132</u> Acct Pts	<u>614</u> Total Pts	<u>56-22-22</u> Profile	<u>=</u> Profile			
Job Title:	<u>PROGRAM MANAGER</u>	Schedule/Pay Grade:	<u>PG-08</u>	Organization Code:	<u></u>	Job Code:	<u>2581</u>	Supervisory Code:	<u>N</u>	Function Code:	<u>L20</u>

**POSITION PURPOSE:**

Provide senior technical direction, expert support, oversight, and Program/Project management in the chemistry programs of the TVAN facilities. Develop programmatic requirements for chemistry management programs. The incumbent serves as the primary liaison between the TVAN sites and TVAN corporate. The incumbent manages the implementation of directives, standards, and policies and regulations at all TVAN sites. The incumbent is the lead individual for ensuring that high standards are set and maintained at both corporate and the TVAN sites. His/her efforts are focused on establishing/maintaining a chemistry program that enhances the safe and reliable operation of TVAN sites.

**DIMENSIONS:**

Typical size of projects - \$10M - \$10MM. Annual projects managed - 10

Other:

1. Incumbent acts as Manager, Radiological Control and Chemistry, in his absence with the signature authority and control of the budget (\$3MM) associated with that position.
2. Serves as Technical Contract Manager establishing, controlling, and maintaining multi-site chemistry-services and material contracts. (Material and Services Annual Budget \$10MM)
3. Serves as Radiological Dose Assessor in the event of a nuclear site emergency.

Distribution: Original - Human Resources Microrecords Unit, Knoxville  
Copy - Operations Organization (as needed)  
Copy - Central Office of Union Having Jurisdiction  
Copy - Employee

**PRINCIPAL ACCOUNTABILITIES:**

Areas of Responsibilities

- SQN, WBN (PWR) Chemistry Program
  - Secondary Chemistry Program Support for TVAN PWRs
  - Post accident sampling systems
  - Cooling tower chemistry
  - Software control program
  - Analytical Working Group Management for all TVAN sites
  - Multi-Site Technical contract Management such as Ecolochem, Dionex, PASS services for all TVAN sites
1. Provide technical and programmatic expertise for implementation of the TVAN chemistry program at individual sites. Provide direction as needed for project manager's managing projects at SQN and WBN. Oversee the activities of other personnel assigned support functions for meeting the responsibilities of this position.
  2. Function as the TVAN senior technical expert to the sites in the areas of PWR Secondary chemistry control.
  3. Function as the TVAN senior technical expert and provide direction in the implementation of such programs as Molar Ratio Control, Secondary Chemistry Optimization, and zinc injection.
  4. Assist Management with interpretation of chemistry policy - review and concur with site procedures and other TVAN documents that may impact the programs. Promote optimum consistency among site programs.
  5. Recommend chemistry program goals and specifications that are consistent with best industry practices, and assist with the implementation of actions to achieve them. Direct the performance of site evaluations of the chemistry program to ensure consistency and compliance with established requirements.
  6. Direct review and concur with root cause analyses for identified site chemistry program problems, direct the development of corrective action plans, and coordinate the implementation of approved corrective actions.
  7. Direct the performance of regulatory and licensing reviews of chemistry issues, recommend TVAN responses or positions, and concur with responses to external organizations.
  8. Develop and conduct specialized seminars on chemistry technical topics as requested and conduct periodic training related observations/provide recommendations for improvements as necessary.
  9. Provide long-term/large scope project support to WBN and SQN for major chemistry projects. Provide short-term plant problem response to the sites as requested.
  10. Perform long-term data trending and assessment of key WBN and SQN Secondary chemistry data. Provide appropriate feedback and corrective action proposals as necessary. Prepare an annual WBN and SQN chemistry report with review and concurrence with site staffs and issue.  
Function as a TVAN representative to the EPRI PWR water chemistry committee, PWR Owners Group Chemistry Committee, and appropriate industry and regulatory workshops/conferences/seminars. Coordinate the release of chemistry data to outside organizations as authorized
  12. Serve as a Chemistry specialist, does assessor, or RAC/RAM in the event of a radiological emergency. Remain on call 24 hours a day unless relieved by other appropriate personnel during emergency events.
  13. Actively engage in plant tours, personnel interviews, observation feedback and working meetings during routine operations and plant outages. Coordinate with sites for INPO evaluations and responses.
  14. Function as team leader and provide technical expertise in support of the Quarterly Chemistry Team assessments for TVAN sites.
  15. Chair Analytical Working Group for all TVAN sites and ERMI.
  16. Develop multi-site contract technical specifications and act as technical contract manager for applicable contracts such as makeup water, Dionex services, PASS services, bulk chemicals for all sites.
  17. Act for the Corporate Radiological Control Manager in his/her absence.
  18. Provide effective communications of the Corporate Chemistry Program to the TVA nuclear sites.

**MINIMUM QUALIFICATIONS:**

The incumbent should have a bachelor's degree or the equivalent in chemistry, environmental sciences, or chemical engineering, including formal training and experience in management. The incumbent shall have at least eight years of professional experience in applied chemistry, with experience at an operating nuclear power plant preferable. The incumbent should have a detailed knowledge of modern analytical and radioanalytical equipment and methods used for performing all required chemistry analyses at TVAN sites which includes equipment operation and capabilities. He/she must possess a very good knowledge base in the areas of PWR and BWR chemistry control guidelines requirements. An advanced degree and ten years experience at the professional or managerial level are desirable.

Incumbent in this position is subject to rotational assignment.

MINIMUM QUALIFICATION REQUIREMENTS (continued)

VPA NUMBER: 0000010703  
STATUS: PROCESSING APPLICATIONS  
GROUP: TVA-WIDE  
SCHEDULE AND GRADE: PG 08 NUMBER OF POSITIONS: 01  
JOB TITLE: PROGRAM MGR. CHEMISTRY (PWR)  
LOCATION: CHATTANOOGA  
ORGANIZATION: TVA NUCLEAR  
NUCLEAR OPERATIONS  
OPERATIONS SUPPORT  
(SUPV: RAD & CHEM CONTROL MGR)  
POSTING-DATE: 06/13/96 CLOSING-DATE: 06/25/96

DUTIES: PROVIDE SENIOR TECHNICAL DIRECTION, EXPERT SUPPORT, SUPERVISORY AND PROGRAM/PROJECT MANAGEMENT IN THE CHEMISTRY PROGRAMS OF THE TVA FACILITIES. DEVELOP PROGRAMMATIC REQUIREMENTS FOR CHEMISTRY MANAGEMENT PROGRAMS. THE INCUMBENT SERVES AS THE PRIMARY LIAISON BETWEEN THE TVA SITES AND TVA CORPORATE. THE INCUMBENT MANAGES THE IMPLEMENTATION OF DIRECTIVES, STANDARDS, AND POLICIES AND REGULATIONS AT ALL TVA SITES. THE INCUMBENT IS THE PWR CHEMISTRY CONTACT FOR ENSURING THAT HIGH STANDARDS ARE SET AND MAINTAINED AT BOTH CORPORATE AND THE TVA SITES.

MINIMUM QUALIFICATIONS: INCUMBENT SHOULD HAVE A B.S. DEGREE OR THE EQUIVALENT IN CHEMISTRY, ENVIRONMENTAL SCIENCES, OR CHEMICAL ENGINEERING, INCLUDING FORMAL TRAINING AND EXPERIENCE IN MANAGEMENT. THE INCUMBENT SHALL HAVE AT LEAST EIGHT YEARS OF PROFESSIONAL EXPERIENCE IN APPLIED CHEMISTRY, WITH EXPERIENCE AT AN OPERATING NUCLEAR POWER PLANT PREFERABLE. INCUMBENT SHOULD HAVE A SUFFICIENT KNOWLEDGE OF MODERN ANALYTICAL AND RADIOANALYTICAL EQUIPMENT AND METHODS USED FOR PERFORMING ALL REQUIRED CHEMISTRY ANALYSES AT TVA SITES WHICH INCLUDES EQUIPMENT OPERATION AND CAPABILITIES. INCUMBENT IN THIS POSITION IS SUBJECT TO ROTATIONAL ASSIGNMENT.

TO APPLY SEND FORM TVA 9824 TO:

HUMAN RESOURCES  
1000 RIVER PLACE 3A-C (X-2344)  
PENDING FINAL HAY EVALUATION

PF001341

POSITION DESCRIPTION

Name \_\_\_\_\_

Social Security Number \_\_\_\_\_

Position Title Outage Program Manager

Pay Group or Schedule/Grade PG- 10/9

Dick Felt

Location Chattanooga

Effective Date \_\_\_\_\_

Organization Titles:

Group TVA Nuclear

Incumbent's Signature \_\_\_\_\_

Operations Nuclear Operations

Supervisor's Signature \_\_\_\_\_

Division Operations Support

HRM/HRO's Signature \_\_\_\_\_

Department Operations, Outage & Fire Prot

Reports to (Title) \_\_\_\_\_

Section \_\_\_\_\_

FOR COMPENSATION PLANNING AND ANALYSIS USE ONLY

POSITION EVALUATION:

EVALUATION DATE: \_\_\_\_\_

CP&A REVIEWER INITIALS: \_\_\_\_\_

K-H Slot	K-H Pts	P-S Slot	P-S Pts	Acct Slot	Acct Pts	Total Pts	Profile

POSITION PURPOSE:

Establish and implement outage programs for all nuclear sites which exceed the standards of excellence established for the nuclear power industry. Implement a systematic approach to productivity improvement using objective methods. Provide programmatic and technical direction for outage activities to meet TVAN goals for safe, reliable, cost effective operation.

DIMENSIONS:

Employees:  
Site Interface 3

Budget:  
Directly impacts TVAN outage budgets \$20-60M/yr

Distribution: Original - Human Resources Microrecords Unit, Knoxville  
Copy - Operations Organization (as needed)  
Copy - Central Office of Union Having Jurisdiction  
Copy - Employee

# VACANT POSITION ANNOUNCEMENT

**SUMMARY DESCRIPTION OF DUTIES:**

PROVIDE PROGRAMMATIC AND TECHNICAL DIRECTION OF THE DEVELOPMENT, IMPLEMENTATION, AND MAINTENANCE OF THE NUCLEAR POWER-WIDE OUTAGE MANAGEMENT PROGRAM IN ORDER TO MAXIMIZE PLANT OPERATION SAFETY, RELIABILITY, AND AVAILABILITY. ENSURE THAT SYSTEMS AND PROGRAMS ARE IN PLACE TO ALLOW FOR THE PERFORMANCE OF NUCLEAR PLANT OUTAGES EFFECTIVELY AND WITHIN SCHEDULE AND BUDGET & TO MINIMIZE THE DOWNTIME RESULTING FROM EMERGENT OUTAGES. PROVIDE OVERSIGHT OF AND/OR ASSISTANCE FOR THE ESTABLISHMENT, COORDINATION, AND MAINTENANCE OF OUTAGE MANAGEMENT ORGANIZATION AND ADMINISTRATION, PLANNING, SCHEDULING, WORK CONTROL, OPERATIONAL CONSIDERATIONS, EXPERIENCE USE, BUDGET.

**MINIMUM QUALIFICATIONS:**

MUST HAVE A BACHELOR'S DEGREE IN ENGINEERING, SCIENTIFIC-RELATED DISCIPLINE OR EQUIVALENT RELATED EXPERIENCE. HOLD OR HAVE HELD AN SRO LICENSE OR CERTIFICATION IS DESIRABLE. IN ADDITION, SIX TO EIGHT YEARS OF RESPONSIBLE NUCLEAR POWER EXPERIENCE IN AREAS SUCH AS MAINTENANCE, OPERATIONS, ENGINEERING, TECHNICAL SUPPORT, QUALITY ASSURANCE, CONSTRUCTION, OF WHICH A MINIMUM OF TWO YEARS IS NUCLEAR EXPERIENCE; TWO YEARS SUPERVISORY EXPERIENCE IS REQUIRED. MAINTAIN REQUIREMENTS FOR NUCLEAR PLANT UNESCORTED ACCESS. INCUMBENT IN THIS POSITION IS SUBJECT TO ROTATIONAL ASSIGNMENT.

TVA-WIDE

MANAGEMENT

<p>TO APPLY - EMPLOYEES GET THE APPROPRIATE EMPLOYEE APPLICATION FOR ANNOUNCED VACANT POSITION FORM AT YOUR PERSONNEL, EMPLOYMENT, OR ADMINISTRATIVE OFFICE. THE FORM TO USE FOR THIS POSITION IS FORM TVA 9426. FILL OUT AND SEND THE FORM TO:</p> <p>NUCLEAR HUMAN RESOURCES LOOKOUT PLACE 5A-C (X-2344)</p>	<p><b>CLOSING DATE:</b> 09/23/96</p> <p>APPLICATIONS RECEIVED AFTER CLOSING DATE ARE NOT ENTITLED TO CONSIDERATION, BUT MAY BE CONSIDERED AT TVAS OPTION.</p>
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<p>DEPARTMENT: TVA NUCLEAR</p>	<p>WORK LOCATION: CHATTANOOGA</p>	
<p>TITLE: OPS/OPS, OUTAGE &amp; FIRE PROTECTION SUPERVISOR: T. MCGRATH</p>	<p>POSITION: OUTAGE PROGRAM MANAGER</p>	
<p>STATUS: PENDING FINAL HAY EVALUATION</p>	<p>SCHEDULE AND GRADE: PG 09/10</p>	<p>ANNOUNCEMENT NO.: 11256</p>

AN EQUAL OPPORTUNITY EMPLOYER. SELECTIONS WILL BE MADE ON THE BASIS OF MERIT AND EFFICIENCY AS SET OUT IN THE

BF001343

TOTAL P.03

POSITION DESCRIPTION

Employee Name	<u>Regis M. Nicoll</u>	Social Security Number	<u>[REDACTED]</u>
Position Title	<u>Radiological Control Program Manager (Technical Support)</u>	Pay Group or Schedule/Grade	<u>PG-08</u>
Location	<u>Chattanooga</u>	Effective Date	<u>8/5/96</u>
Organization Titles:		Incumbent's Signature	<u>[Signature]</u> R. M. Nicoll
Group	<u>TVA Nuclear</u>	Supervisor's Signature	<u>[Signature]</u> W. C. McArthur
Operations	<u>Nuclear Operations</u>	HRM/HRO's Signature	<u>[Signature]</u> Donald E. Nif
Division	<u>Operations Support</u>	Reports to (Title)	<u>Corporate Radiological and Chemistry Control Manager</u>
Department	<u>Corporate Radiological and Chemistry Control</u>		
Section			

FOR COMPENSATION PLANNING AND ANALYSIS USE ONLY

POSITION EVALUATION:	EVALUATION DATE: <u>7/16/96</u>	CP&A REVIEWER INITIALS: <u>JEC</u>						
<u>F13</u> K-H Slot	<u>304</u> K-H Pts	<u>E4 (43)</u> P-S Slot	<u>132</u> P-S Pts	<u>E1P</u> Acct Slot	<u>132</u> Acct Pts	<u>568</u> Total Pts	<u>54-23-23</u> Profile	<u>=</u> Profile
Proposed Job Title:	<u>PROGRAM MANAGER</u>		Schedule/Pay Grade:		<u>PG-08</u>			
Organization Code:	_____		Job Code:		<u>2581</u>			
	_____		Supervisory Code:		<u>N</u>			
	_____		Function Code:		<u>P42</u>			

POSITION PURPOSE:

Provide technical direction, expert support, and Program/Project management supervision in the radiological control programs of TVAN facilities, with emphasis in the areas of radiation protection, ALARA, radiological assessment, and radiation monitoring. Develop programmatic requirements for radiological control programs.

DIMENSIONS:

Typical size of projects - \$10M - \$5 MM. Annual projects managed - 15  
Other:

1. Incumbent acts as Manager, Corporate Radiological and Chemistry Control, in his absence with signature authority and control of the budget (\$3 MM).
2. Serves as Technical Contract Manager establishing, controlling, and maintaining multi-site radwaste management services and material contracts. (Material and Services Annual Budget \$12MM)
3. Serves as Radiological Assessment Manager in the event of a nuclear site or transportation emergency. (Staff 12)

Distribution: Original - Human Resources Microrecords Unit, Knoxville  
Copy - Operations Organization (as needed)  
Copy - Central Office of Union Having Jurisdiction  
Copy - Employee

POSITION TITLE: Radiological Control Program Manager  
(Technical Support) PD NO. 960380  
NAME: Regis M. Nicoll SSN [REDACTED] EFFECTIVE DATE 8/5/90  
(First) (Middle) (Last)

**PRINCIPAL ACCOUNTABILITIES:**

- Provide expert level technical support and program direction, with emphasis on the areas of radiation protection, ALARA, radiological assessment, and radiation monitoring.
- Act as sponsor of corporate radiological control standards and procedures.
- Act as primary corporate interface with site RADCON managers, addressing programmatic and multi-site issues.
- Provide expert support and planning for site RADCON outage activities.
- Provide technical direction and expert support for TVAN REP dose assessment codes and methodologies.
- Manage the planning, scheduling, implementation, and monitoring to completion of Radiological Protection and Radiological Health Special Projects to ensure identified end product is delivered on time and within budget.
- Provide expert level direction for programmatic development of radiological control policy and requirements to ensure TVAN compliance with Federal regulations and to meet or exceed industry consensus standards. Manage the development of Radiological Control Standards to provide corporate requirements and guidance to sites.
- Analyze site RADCON processes, procedures, and practices for effectiveness and cost-efficiency.
- Recommend radiological control goals and protocols that are consistent with best industry practices and assist with the implementation of actions to achieve them.
- Direct the performance of programs to ensure consistency and compliance with radiological control program requirements and attainment of goals.
- Direct the development of radiological control training and qualification criteria.
- Direct the performance of regulatory and licensing reviews of radiological control issues, recommend TVAN responses or positions and concur with responses to external organizations.
- Provide long-term/large-scope project support to the sites for major projects/issues. Provide short-term problem response as necessary.
- Compile data, conduct benchmarking, and research positions that support requests for system specification changes, process improvements, work elimination, and engineering design changes in the area of radiological control.
- Perform long-term data evaluation of key radiological control parameters. Provide appropriate feedback and corrective action proposals as necessary.
- Act for the Manager, Radiological Control and Chemistry, in his absence.
- Serve as the Radiological Assessment Manager or Coordinator in the event of an emergency, managing all radiological assessment activities in support of nuclear sites. Support emergency response drills and exercises.
- Serve as TVA member on industry radiological control technical workgroups and committees to ensure TVAN's interests are represented and to remain aware of industry norms and good practices to encourage their adoption into TVAN programs.
- Serve as application owner for various TVAN software applications in the RADCON program to ensure that modifications and enhancements meet regulatory requirements and management expectations.
- Administer multi-site contracts for radiological control services and products.

**MINIMUM QUALIFICATIONS:**

Incumbent should have a bachelor's degree or the equivalent in a science or engineering subject, including some formal training in radiation protection and certification by the ABHP. The incumbent shall have at least six years of professional experience in radiation protection. An advanced degree and eight years' experience at the professional or managerial level are desirable.

Incumbent in this position is subject to rotational assignment.

STATUS: PROCESSING APPLICATIONS

GROUP: TVA-WIDE

SCHEDULE AND GRADE: PG OB NUMBER OF POSITIONS: 01.

JOB TITLE: PROGRAM MGR. RAD CONTROL (TECH SUPPORT)

LOCATION: CHATTANOOGA

ORGANIZATION: TVA NUCLEAR  
NUCLEAR OPERATIONS  
OPERATIONS SUPPORT  
(SUPV: RAD & CHEM CONTROL MGR)

POSTING-DATE: 06/13/96

CLOSING-DATE: 06/25/96

DUTIES: PROVIDE TECHNICAL DIRECTION, EXPERT SUPPORT, AND PROGRAM/PROJECT MANAGEMENT SUPERVISION IN THE RADIOLOGICAL CONTROL PROGRAMS OF TVAN FACILITIES. WITH EMPHASIS IN THE AREAS OF RADIATION PROTECTION, ALARA, RADIOLOGICAL ASSESSMENT, AND RADIATION MONITORING. DEVELOP TECHNICAL REQUIREMENTS FOR RADIOLOGICAL CONTROL PROGRAMS. PROVIDE EXPERT SUPPORT AND PLANNING FOR SITE RADCON OUTAGE ACTIVITIES. MANAGE THE PLANNING, SCHEDULING, IMPLEMENTATION, AND MONITORING TO COMPLETION OF RADIOLOGICAL PROTECTION AND RADIOLOGICAL HEALTH SPECIAL PROJECTS TO ENSURE IDENTIFIED END PRODUCT IS DELIVERED ON TIME AND WITHIN BUDGET.

MINIMUM QUALIFICATIONS: SHOULD HAVE B.S. DEGREE OR THE EQUIVALENT IN A SCIENCE OR ENGINEERING SUBJECT, INCLUDING SOME FORMAL TRAINING IN RADIATION PROTECTION AND CERTIFICATION BY THE ABHP. INCUMBENT SHALL HAVE AT LEAST SIX YEARS OF PROFESSIONAL EXPERIENCE IN APPLIED RADIATION PROTECTION. AN ADVANCED DEGREE AND EIGHT YEARS' EXPERIENCE AT THE PROFESSIONAL OR MANAGERIAL LEVEL ARE DESIRABLE. INCUMBENT IN THIS POSITION IS SUBJECT TO ROTATIONAL ASSIGNMENT.

BF001346

TO APPLY :

TRK TVA 9024 TO:

NUCLEAR HUMAN RESOURCES

PD NO. 960384

POSITION DESCRIPTION

Name: Lenon J. Riales, III Social Security Number: [REDACTED]

Position Title: Radwaste/Environmental Protection Program Manager Pay Group or Schedule/Grade: PG-08

Location: Chattanooga Effective Date: 8/5/96

Organization Titles:

Group: TVA Nuclear Incumbent's Signature: Lenon J. Riales 4-25-97

Operations: Nuclear Operations Supervisor's Signature: L. J. Riales  
W. C. McArthur

Division: Corporate Radiological and Chemistry Control HRM/HRO's Signature: W. C. McArthur  
Donald E. Nixon

Department: \_\_\_\_\_ Reports to (Title): D. E. Nixon  
Corporate Radiological and Chemistry Control Manager

Section: \_\_\_\_\_

FOR COMPENSATION PLANNING AND ANALYSIS USE ONLY

POSITION EVALUATION: EVALUATION DATE: 7/16/96 CP&A REVIEWER INITIALS: JEC

<u>F13</u>	<u>350</u>	<u>E3 (38)</u>	<u>132</u>	<u>E1P</u>	<u>132</u>	<u>614</u>	<u>56-22-22</u>	<u>=</u>
K-H Slot	K-H Pts	P-S Slot	P-S Pts	Acct Slot	Acct Pts	Total Pts	Profile	Profile

Assigned Job Title: PROGRAM MANAGER Schedule/Pay Grade: PG-08

Organization Code: \_\_\_\_\_ Job Code: 2581

Supervisory Code: N

Function Code: L20

POSITION PURPOSE:

Provide technical direction, expert support, and Program/Project management in the low-level radioactive waste and environmental protection programs for TVAN facilities. Develop programmatic requirements for the radioactive waste management and environmental protection programs. Ensure effective direction is provided to the sites on low-level radwaste management and environmental protection issues.

DIMENSIONS:

Typical size of projects - \$10M-\$5MM Annual projects managed - 10

Other

Incumbent acts as Corporate Radiological and Chemistry Control Manager in his absence with the signature authority and control of the budget (\$3MM).

Serves as the Technical Contract Manager establishing, controlling, and maintaining multi-site radwaste management services and material contracts. (annual Material and Services Annual Budget \$12MM).

Serves as Radiological Assessment Manager in the event of a nuclear site or transportation emergency. (Staff 12)

- Distribution:
- Original - Human Resources Microrecords Unit, Knoxville
  - Copy - Operations Organization (as needed)
  - Copy - Central Office of Union Having Jurisdiction
  - Copy - Employee

POSITION TITLE: Radwaste/Environmental Protection  
Program Manager  
NAME Lenon J. Riales, II SSN [REDACTED] PD NO. 960384  
(First) (Middle) (Last) EFFECTIVE DATE 8/5/96

**GENERAL ACCOUNTABILITIES:**

Manage the planning, scheduling, implementation, and monitoring to completion of Low-Level Radioactive Waste Management, Radioactive Material Transportation, and Environmental Protection Special Projects to ensure identified end product is delivered on time and within budget.

Act as sponsor of corporate low-level radwaste management and radioactive material transportation standards and procedures, such as the TVAN Radioactive Material Shipment Manual.

Provide expert-level direction for programmatic development of radioactive waste management and environmental protection policy and requirements to ensure TVAN compliance with Federal regulations and to meet or exceed industry consensus standards. Manage the development of Radioactive Material Transportation Standards to provide corporate requirements and guidance to sites.

Provide direction and strategies for TVA Nuclear efforts to work with the Southeast Compact to develop a low-level radwaste disposal facility and/or alternatives.

Serve as application owner for various TVAN software applications in the environmental protection and low-level radwaste management programs to ensure that operations, modifications and enhancements meet regulatory requirements and management expectations.

Administer multi-site contracts for low-level radioactive waste management and radioactive material transportation services and products. Monitor contracts for technical adequacy and cost effectiveness.

Analyze site processes, procedures, and other documents that may impact the Low-Level Radioactive Waste Management and Environmental Protection programs.

Recommend site low-level radioactive waste and contaminated area goals and protocols that are consistent with best industry practices and assist with the implementation of actions to achieve them.

Direct the performance of programs to ensure consistency and compliance with Low-Level Radioactive Waste and Environmental Protection Program requirements and attainment of goals.

Direct the development of radioactive material transportation training and qualification criteria.

Direct the performance of regulatory and licensing reviews of radioactive waste management, radioactive material transportation, and environmental protection issues, recommend TVAN responses or positions, and concur with responses to external organizations.

Provide long-term/large-scope project support to the sites of major projects/issues. Provide short-term problem response as necessary.

Compile data, conduct benchmarking, and research positions that support requests for system specification changes, process improvements, work elimination, and engineering design changes in the areas of radioactive waste management and environmental protection.

Perform long-term data evaluation of key radioactive waste management and environmental protection parameters. Provide appropriate feedback and corrective action proposals as necessary.

Act for the Corporate Radiological and Chemistry Control Manager in his absence with signature authority and control of the budget.

Serves as the Radiological Assessment Manager or Coordinator in the event of an emergency managing all radiological assessment activities in support of nuclear sites. Support emergency response drills and exercises.

Serve as TVA member on industry radwaste management and environmental protection technical workgroups and committees to ensure TVAN's interests are represented and to remain aware of industry norms and good practices to encourage their adoption into TVAN programs.

Assist in carrying out site-specific environmental permitting tasks, such as NPDES, NEPA, underground storage tanks, asbestos, landfill/disposal, stormwater, and material storage.

Assist the sites in the performance of environmental program self assessments, as requested. Ensure the effective communications of the Corporate Environmental Control Program to the nuclear plant sites and serve as the TVAN alternate representative to the Environmental Implementation Committee (EIC) and other committees as required.

**NUM QUALIFICATIONS:**

Incumbent should have a bachelor's degree or the equivalent in a science or engineering subject, including formal training in radioactive waste management and environmental compliance. The incumbent shall have at least six years of professional experience in radioactive waste management or environmental protection. An advanced degree and eight years' experience at the professional or managerial level are desirable. Training and qualification as a radioactive material shipper under NRC and DOT regulations is desirable. Training in environmental waste classification and handling is desirable.

Incumbent in this position is subject to rotational assignment.

VPA NUMBER: 000001070?

STATUS: PROCESSING APPLICATIONS

GROUP: TVA-WIDE

SCHEDULE AND GRADE: PG .08 NUMBER OF POSITIONS:01

JOB TITLE: PROGRAM MGR. RADWASTE/ENVIRON PROT

LOCATION: CHATTANOOGA

ORGANIZATION: TVA NUCLEAR  
NUCLEAR OPERATIONS  
OPERATIONS SUPPORT/RAD & CHEM CONTROL  
(SUPV: RAD & CHEM CONTROL MGR)

POSTING-DATE: 06/13/96

CLOSING-DATE: 06/25/96

DUTIES: PROVIDE TECHNICAL DIRECTION, EXPERT SUPPORT, AND PROGRAM/PROJECT MANAGEMENT IN THE LOW-LEVEL RADIOACTIVE WASTE AND ENVIRONMENTAL PROTECTION PROGRAMS FOR TVAN FACILITIES. DEVELOP PROGRAMMATIC REQUIREMENTS FOR THE RADIOACTIVE WASTE MANAGEMENT AND ENVIRONMENTAL PROTECTION PROGRAMS. ENSURE EFFECTIVE DIRECTION IS PROVIDED TO THE SITES ON LOW-LEVEL RADWASTE MANAGEMENT AND ENVIRONMENTAL PROTECTION ISSUES. SERVES AS APPLICATION OWNER FOR VARIOUS TVAN SOFTWARE APPLICATION IN THE ENVIRONMENTAL PROTECTION AND LOW-LEVEL RADWASTE MANAGEMENT PROGRAMS TO ENSURE THAT OPERATIONS, MODIFICATIONS AND ENHANCEMENTS MEET REGULATORY REQUIREMENTS AND MANAGEMENT EXPECTATIONS.

MINIMUM QUALIFICATIONS: SHOULD HAVE B.S. DEGREE OR THE EQUIVALENT IN A SCIENCE OR ENGINEERING SUBJECT, INCLUDING FORMAL TRAINING IN RADIOACTIVE WASTE MANAGEMENT AND ENVIRONMENTAL COMPLIANCE. INCUMBENT SHALL HAVE AT LEAST SIX YEARS OF PROFESSIONAL EXPERIENCE IN RADIOACTIVE WASTE MANAGEMENT OR ENVIRONMENTAL PROTECTION. TRAINING AND QUALIFICATION AS RADIOACTIVE MATERIAL SHIPPER UNDER NRC AND DOT REGULATIONS IS DESIRABLE. TRAINING IN ENVIRONMENTAL WASTE CLASSIFICATION AND HANDLING IS DESIRED. INCUMBENT IN THIS POSITION IS SUBJECT TO ROTATIONAL ASSIGNMENT.

TO APPLY SEND FORM TVA 9824 TO:

NUCLEAR HUMAN RESOURCES  
LOOKOUT PLACE 3A-C (X-2344)  
PENDING FINAL HAY EVALUATION

EF001349

**JOB DESCRIPTION  
Salary Policy  
(Excluding Schedules SF and SG)**

NAME (First, Middle, Last) Diane Ricks		SOCIAL SECURITY NO. [REDACTED]	EFFECTIVE DATE September 30, 1996
OPERATIONS ORGANIZATION Nuclear Operations		DIVISION Operations Support	CODE
DEPARTMENT Radiological & Chemistry Control		SECTION ERM&I	LOCATION (City or Project) Muscle Shoals, AL
PRESENT TITLE, SCHEDULE, AND GRADE Chemist, SC-3 (Radiochemistry)		REASON FOR ISSUE Organizational Restructuring - New Position	
PROPOSED TITLE, SCHEDULE, AND GRADE		POSITION REFERENCE NO.	

I certify that this is an accurate statement of the major duties and responsibilities of this position and that it has been discussed with incumbent.

SUPERVISOR'S SIGNATURE

*William L. Raines*

9/27/96  
Date Discussed

TYPE NAME OF SIGNATURE

William L. Raines

I have reviewed the job description and verify that it is in accordance with classification procedures.

SIGNATURE

*Don E. Jolley*

7/18/96  
Date Reviewed

This job description is an accurate statement of the duties assigned to me.

EMPLOYEE'S SIGNATURE

(Signature is required only when employee requests a classification review)

Date Agreed

CLASSIFICATION GROUP III							<p align="center">7/8/96 Date</p> <p align="center"><i>Don E. Jolley</i> Evaluator's Signature</p>	
FACTOR EVALUATION DATA								
Guide Chart	I	II	III	IV Inside	IV Outside	Total		
Keys	B2	-B2	B1	B2c	B2b			
Points	280	280	75	55	45	735		
Approved Title	Chemist (Radiochemistry)						Job Title Code	Schedule & Grade
							0923	SC-3

**DISTRIBUTION:** Original - Human Resources Microrecords Units, Knoxville  
Copy - Operations Organizations (as needed)  
Copy - Central Office of Union Having Jurisdiction  
Copy - Employee

NAME (As on page 1) M. Diane Ricks	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE Chemist, SC-3
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DUTIES

Write a brief introductory paragraph summarizing the primary purpose of the job. Follow with a list of typical duties and responsibilities with supporting examples which are performed on a recurring basis.

The incumbent provides chemistry technical support for the radioanalytical analysis functions of ERM&I and the Western Area Radiological Laboratory (WARL). The incumbent supports the wet chemistry area of the ERM&I lab operations providing the radioanalytical technical support for the analysis of radiological environmental monitoring samples, radiological effluent samples, 10 CFR 61 rad waste characterization samples and samples analyzed for the site RADCON programs. Major duties and responsibilities include:

Provides technical support for complex radiochemical separations that include ion exchange, solvent extraction and electroplating techniques. Monitors the in progress status of lab analyses performed by the lab analysts and performs the complex chemistry required for the analyses conducted on nuclear plant operations samples including 10 CFR 61 samples and radiological effluent samples. Determines when the radiochemical separation process is adequately isolated and purified the radionuclides of interest and then coordinates counting of the prepared samples with the chemist responsible for nuclear spectroscopy and instrumentation.

Identifies when the chemical process applied for a specific analysis is not producing the required results. Conducts the investigation of the chemical processes involved and develops a procedure modification that will produce the desired results. Prepares the technical documentation required for procedure revisions or preauthorized deviations to address unusual sample conditions. In conjunction with other ERM&I chemists, plans and conducts technical investigations to address adverse trends identified by the QC program, develop and implement efficiency improvements or develop a completely new radiochemical procedure to support new radioanalytical services requested by TVAN sites. Prepares the detail written radiochemical analysis procedures required by nuclear quality assurance programs.

Reviews in progress data and final results produced by the laboratory. Identifies when in progress data indicates a potential problem with the chemical separation processes and makes process adjustments. Based on detail knowledge of the purpose of a specific sample and the application of the data, identifies when analytical results are within customer expectations or when a potential problem may need to be brought to the attention of the site. Prepares written reports of the radioanalytical analysis results for submission to the site Rad-Chem personnel in the absence of the responsible lead chemist.

In coordination with chemists responsible for nuclear counting and spectroscopy, reviews the data generated by alpha spectroscopy, liquid scintillation, gamma spectroscopy and other nuclear counting techniques and instrumentation. Identifies anomalous results and initiates investigations and research to resolve the data questions. Resolution of the problem may require adjustment of the nuclear counting process or modification of the chemical separation methodology. The varying chemical matrix, changes in radionuclide concentration distribution and the variance in interfering radionuclide concentrations, cause many of analyses performed in support of plant operations to be chemical research projects. The incumbent provides the technical support to successfully resolve the chemical problems and produce the correct analysis results.

The incumbent plans and conducts technical training sessions for other lab personnel on chemistry techniques and procedures. Conducts qualification and certification observations of the lab technicians.

BF001351

**KNOWLEDGE (CONTINUED):**

Must have a thorough knowledge of current EPA and NRC regulations applicable to radiochemical measurements. Must be familiar with accepted practices and methods such as those prescribed by the American Society for Testing Materials, American Public Health Association, and the American Standards Institute. This is especially important in evaluating analytical requirements necessary to meet detection sensitivities required for compliance monitoring.

Must have an excellent knowledge of small computer systems and programming of such systems, particularly as they are applied in accumulation and evaluation of lab data.

Must have a very thorough knowledge of the radiological environmental monitoring programs conducted for TVA nuclear power sites.

Must have a thorough knowledge of the necessary quality assurance activities required to ensure and document the quality of the analyses performed by the lab.

**SKILL (CONTINUED)**

Must be able to prepare and present technical reports and scientific papers.

Must be fluent both in written and oral communications.

Must be able to handle working relationships tactfully.

Must be able to conduct quality assurance activities associated with the lab analysis work and must be able to evaluate results from quality control activities.

PF001352

NAME (As on page 1) M. DIANE RICKS	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE CHEMIST, SC-3
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**JOB FACTOR DESCRIPTIONS**

**KNOWLEDGE:** Describe the type knowledge required to perform the assigned work. Knowledge may result from experience, formal schooling, self-study, or TVA-sponsored experiences but do not describe in terms of academic achievement or longevity.

Must have detail knowledge in the field of radiochemistry and the applicable analytical methods. This includes a very thorough knowledge of nuclear decay schemes, the theory of nuclear interactions, and the advanced techniques, theories, and practices applied in the field of radiochemical analysis.

Must have detail technical knowledge of the chemical processes and reactions associated with chemical separation techniques such as ion exchange; solvent extraction; redox reactions; electro-plating; etc.

Must have a working knowledge of the technical processes and instrumentation used for nuclear spectroscopy and radionuclide measurements.

Must have through knowledge of the algebraic and differential equation principles and techniques required for the development and use of complex calculations used in the resolution of nuclear spectral data and determination of radionuclide concentrations.

Must have a general knowledge of the requirements and processes within the site Rad-Chem Programs and plant operations that generate the samples analyzed by ERM&I.

CONTINUED

**SKILL:** Describe the type of skills utilized in applying the above knowledge to the performance of the listed duties.

Must be able to apply the advanced theories and techniques of radiochemistry in the analysis of samples and in the investigation and development of new analysis methods. Must be able to apply the expertise of radiochemistry in the evaluation of new analysis methods.

Must be able to design and conduct research and development projects in the field of radiochemistry and must be able to direct others in the design and performance of research projects.

Must be able to perform and train others in the performance of the most complex radiochemical procedures such as transuranic alpha analysis and liquid scintillation analysis for Sr-89,90, Fe-55, etc.

Must be able to apply the expertise in nuclear decay schemes to identify the radionuclides present in all types of environmental samples and nuclear plant operations.

Must be precise in gathering and evaluating data and must be able to review and evaluate data produced by others.

CONTINUED

**COMPLEXITY OF WORK:** Provide examples of the judgments required to perform the duties and the basis for the judgment. Judgment (independent decisionmaking)

The incumbent is responsible for chemical technical support for the ERM&I wet chemistry lab operations. The incumbent selects and develops procedures and approaches to meet existing and new requirements, varying or changing the procedures as the requirements change. In the area of radiochemical research and development, the incumbent conducts projects independently utilizing his/her judgment as to whether a project is producing the required result.

PF001353

NAME (As on page 1) M. DIANE RICKS	SOCIAL SECURITY NO. [REDACTED]	APPROVED TITLE, SCHEDULE, AND GRADE CHEMIST, SC-3
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**Supervision over Others:** Describe type of supervision, i.e., technical supervision/direction, administrative supervision, or full supervision. Indicate the number, title, schedule, and grade level of those supervised and specify full-time responsibility.

-Provides technical direction for lab analysts assigned to assist the Incumbent.

**Supervisory Controls:** Describe the nature and extent of supervision received by the Incumbent. Include the way assignments are made, how instructions are given, whether priorities and deadlines are set, and how work is reviewed.

Overall lab unit direction is provided by the senior chemist and/or the Manager, ERM&I. Program requirements such as quality assurance plans, customer schedules and overall lab workload provide the primary guidance on how the incumbent plans and conducts assignments. Work is generally reviewed only from the aspect of complying with existing requirements in a satisfactory manner. General priorities are established within the overall objectives for the ERM&I operations.

**Nature of Guidelines:** Describe the specific instructions, procedures, or policies and how they limit the independent action of the Incumbent.

The incumbent acts independently in determining working details and methods and independently evaluates proposed research projects as to their applicability to TVA needs and conducts research projects based on this evaluation. Will prepare periodic progress reports; otherwise, final report will give results and evaluation of the overall project.

**Impact of Work:** Describe the consequences of an error and the probability of it going undetected considering the current review process and established guidelines. (Examples should reflect errors in judgment rather than acts of negligence.)

The quantity and quality of work performed by the incumbent bears directly on the TVAN operations. Unreliable or inaccurate information would result in costly repetition of the work and may result in deviation findings by NRC.

**Contacts:** Indicate grade levels of personnel outside immediate work group who are contacted by the incumbent in carrying out the responsibilities of this job. For each type contact, specify whether it is a TVA contact or one outside TVA. Explain the purpose of each contact and how often this contact must be made.

The incumbent may exchange information with other technical personnel within and outside TVA (PG-10 and below) on a weekly basis. Main TVA contacts are within the RADCON/Chemistry program area. Outside TVA contacts may be with any number of other agencies (EPS, NRC, ASTM, etc) or commercial firms.

**Working Conditions (General Services Schedule SB only):** Describe any extraordinary physical requirements or unusual physical exertion required by the work assignment. Specify any aspects of the job which require time limitations or use of safety devices.

Work involves the radiochemistry lab operations and requires use of normal lab safety equipment.

NAME (As on page 1)	SOCIAL SECURITY NO.	APPROVED TITLE, SCHEDULE, AND GRADE
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**MINIMUM QUALIFICATION REQUIREMENTS**

List minimum knowledges, skills, and/or abilities as contained in the Classification Manual

A B.S. degree in chemistry with a minimum of 3 years of experience at the SC-2 level in radiochemistry.

**Evidence of Minimum Qualifications**

Possession of the minimum knowledge, skills, and/or abilities may be shown through experience, training, testing, license requirements, education, and/or a combination of these evidences. Any testing or license requirement listed below is the only acceptable evidence for that knowledge, skill, and/or ability. The education evidence listed below represents the specific minimum acceptable coursework and grade level for the indicated knowledges, if education is to be used as an evidence of qualification. Education evidence may not be applicable for all knowledges, skills, and/or abilities listed in the minimum qualification requirements above.

**TEST REQUIREMENTS:**

**LICENSE REQUIREMENTS:**

<u>KNOWLEDGE</u>	<u>EDUCATION</u> <u>COURSE</u>	<u>GRADE LEVEL</u>
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BF001355

VPA NUMBER: 0000011030

STATUS: PROCESSING APPLICATIONS

GROUP: COMPETITIVE AREA WIDE

SCHEDULE AND GRADE: SC 03 NUMBER OF POSITIONS:01

JOB TITLE: CHEMIST (RADIOCHEMISTRY)

LOCATION: MUSCLE SHOALS

ORGANIZATION: TVA NUCLEAR  
NUC OPS/OPS SUPPORT  
ERMI  
(SUPV: WILLIAM RAINES)

POSTING-DATE: 07/29/96

CLOSING-DATE: 08/13/96

DUTIES:

PROVIDES CHEMISTRY TECHNICAL SUPPORT FOR THE RADIOANALYTICAL ANALYSIS FUNCTIONS OF ERMI AND THE WESTERN AREA RADIOLOGICAL LABORATORY (WARL). INCUMBENT SUPPORTS THE WET CHEMISTRY AREA OF THE ERMI LAB OPERATIONS PROVIDING THE RADIOANALYTICAL TECH SUPPORT FOR THE ANALYSIS OF RADIOLOGICAL ENVIRONMENTAL MONITORING SAMPLES, RADIOLOGICAL EFFLUENT SAMPLES, 10 CFR 61 RAD WASTE CHARACTERIZATION SAMPLES AND SAMPLES ANALYZED FOR THE SITE RADCON PROGRAMS. PROVIDES TECH SUPPORT FOR COMPLEX RADIOCHEMICAL SEPARATIONS THAT INCLUDE ION EXCHANGE, SOLVENT EXTRACTION AND ELECTROPLATING TECHNIQUES. MONITORS THE IN PROGRESS STATUS OF LAB ANALYSES.

MINIMUM QUALIFICATIONS:

A B.S. DEGREE IN CHEMISTRY WITH A MINIMUM OF THREE YEARS OF EXPERIENCE AT THE SC-2 LEVEL IN RADIOCHEMISTRY. MUST HAVE DETAIL KNOWLEDGE IN RADIOCHEMISTRY AND APPLICABLE ANALYTICAL CHEMISTRY METHODS INCLUDING NUCLEAR DECAY SCHEMES. MUST HAVE DETAIL KNOWLEDGE OF THE THEORIES AND TECHNIQUES OF CHEMICAL PROCESSES APPLIED TO RADIOCHEMICAL SEPARATIONS SUCH AS ION EXCHANGE, SOLVENT EXTRACTION AND ELECTROPLATING. MUST BE ABLE TO APPLY THE ADVANCED THEORIES AND TECHNIQUES OF RADIOCHEMICAL SEPARATIONS TO THE PERFORMANCE OF RADIOANALYTICAL ANALYSES.

TO APPLY SEND FORM TVA 9824 TO:

NUCLEAR HUMAN RESOURCES

LOOKOUT PLACE 3A-C (X-2344)

\*CHATT. KNOX, POTC. & MUSCLE SHOALS EMPLOYEES ONLY

6

5

BF001356

**POSITION DESCRIPTION**

PD NO. 960377

Name Heyward R. Rogers Social Security Number [REDACTED]  
 Position Title Maintenance Support Manager Pay Group or Schedule/Grade PG-11  
 Location Chattanooga Effective Date 8-5-96  
 Organization Titles:  
 Group TVA Nuclear Incumbent's Signature Heyward R. Rogers  
 Operations Nuclear Operations Supervisor's Signature Thomas J. McGrath  
 Division Operations Support HRM/HRO's Signature Ben G. Easley  
 Department Maintenance Support Reports to Operations Support General Manager  
 Section \_\_\_\_\_

**FOR COMPENSATION PLANNING AND ANALYSIS USE ONLY**

POSITION EVALUATION: EVALUATION DATE: 7/16/96 CP&A REVIEWER INITIALS: JEC  

<u>F23</u>	<u>480</u>	<u>E4 (43)</u>	<u>200</u>	<u>E2P</u>	<u>230</u>	<u>890</u>	<u>52-22-26</u>	<u>+1</u>
K-H Slot	K-H Pts	P-S Slot	P-S Pts	Acct Slot	Acct Pts	Total Pts	Profile	Profile

Approved Job Title: MANAGER Schedule/Pay Grade: PG-11  
 Organization Code: \_\_\_\_\_ Job Code: 2186  
 Supervisory Code: Y  
 Function Code: P44

**POSITION PURPOSE:**

Provide management and overview of programs to provide standards, expertise, and support of site maintenance and modifications, valve, pump, large electric motor, and turbine-generator programs at the nuclear sites to ensure TVAN's nuclear facilities are in compliance with Technical Specifications, INPO Guidelines, and design basis as defined in the Final Safety Analysis Reports and operate in a safe, reliable and cost effective manner. Support responsibilities include development and standardization of methods and processes for maintenance and modification programs, equipment maintenance and repair, and technical support of nuclear site program and equipment maintenance issues.

**DIMENSIONS:**

Employees:  
 Management/Professional/Technical  
 Clerical/Technical Support  
 Trades and Labor  
 Total 9  
 Budget:  
 Payroll 910K  
 Operating 97K  
 Total 1,007K

Distribution: Original - Human Resources Microrecords Unit, Knoxville  
 Copy - Operations Organization (as needed)  
 Copy - Central Office of Union Having Jurisdiction  
 Copy - Employee

BF001357

POSITION TITLE: Maintenance Support Manager PD NO. 960377  
NAME \_\_\_\_\_ SSN \_\_\_\_\_ EFFECTIVE DATE \_\_\_\_\_  
(First) (Middle) (Last)

**PRINCIPAL ACCOUNTABILITIES:**

1. Oversees the development of maintenance and modifications programs, processes and methods, and ensures consistent application at the nuclear power facilities. Ensures performance of periodic assessment and evaluations to assist in improvements to reliable operation of each unit.
2. Directs development and maintenance of long-range strategic plans for critical equipment such as instruments and controls, valves, pumps, large electric motors, and turbine-generator to ensure that proper testing, maintenance, repairs, and replacements or modifications are implemented to support optimum unit generation requirements.
3. Provides expertise and field support at TVA nuclear power plants for critical equipment such as valves, pumps, large electric motors, and turbine-generators for non-routine maintenance repair.
4. Directs the investigation and resolution of high visibility, high impact technical problems in the maintenance and modification functional area.
5. Develops and directs corporate support of TVA nuclear facilities in the areas of maintenance and modifications, valves, pumps, large electric motors, and turbine-generators to provide outage support, program/special project managers, event managers, and maintenance and modification issue resolution.
6. Manage the identification of training needs for the maintenance and modifications functional area and assist in the development and implementation of training for nuclear site maintenance and modification personnel.
7. Represent or provide representation for TVA on industry committees and in workshops and seminars that will ensure TVA is in line with current industry trends.

**MINIMUM QUALIFICATIONS:**

The incumbent must have broad technical knowledge of nuclear power plant design, operation, maintenance, and management; demonstrated ability to interpret broad policy matters and to provide program direction; demonstrated ability in oral and written communication skills; demonstrated ability to effectively implement, direct, and coordinate diverse professional management activities; and a strong commitment to nuclear safety and quality assurance.

The incumbent must have a B.S. degree in engineering or related scientific discipline and at least 10 years of experience in the nuclear power industry with at least five years experience in responsible positions related to nuclear power generation. Must have at least five years management/supervision experience in nuclear power generation.

Incumbent in this position is subject to rotational assignment.

VPA NUMBER: 000001071-

STATUS: PROCESSING APPLICATIONS

GROUP: TVA-WIDE

SCHEDULE AND GRADE: PG 11 NUMBER OF POSITIONS:01

JOB TITLE: MAINTENANCE SUPPORT MANAGER

LOCATION: CHATTANOOGA

ORGANIZATION: TVA NUCLEAR  
NUCLEAR OPERATIONS  
OPERATIONS SUPPORT  
(SUPV: T. MCGRATH)

POSTING-DATE: 06/13/96

CLOSING-DATE: 06/25/96

DUTIES: PROVIDE MANAGEMENT AND OVERVIEW OF PROGRAMS TO PROVIDE STANDARDS, EXPERTISE, AND SUPPORT OF SITE MAINTENANCE AND MODIFICATIONS, VALVE, PUMP, LARGE ELECTRIC MOTOR, AND TURBINE-GENERATOR PROGRAMS AT THE NUCLEAR SITES TO ENSURE TVA'S NUCLEAR FACILITIES ARE IN COMPLIANCE WITH TECHNICAL SPECIFICATIONS, INPD GUIDELINES, AND DESIGN BASIS AS DEFINED IN THE FINAL SAFETY ANALYSIS REPORTS AND OPERATE IN A SAFE, RELIABLE AND COST EFFECTIVE MANNER. SUPPORT RESPONSIBILITIES INCLUDE DEVELOPMENT AND STANDARDIZATION OF METHODS AND PROCESSES FOR MAINTENANCE AND MODIFICATION PROGRAMS, EQUIPMENT MAINTENANCE AND REPAIR, AND TECHNICAL SUPPORT OF NUCLEAR SITE PROGRAM AND EQUIPMENT.

MINIMUM QUALIFICATIONS: MUST HAVE BROAD TECHNICAL KNOWLEDGE OF NUCLEAR POWER PLANT DESIGN, OPERATIONS, MAINTENANCE, AND MANAGEMENT; DEMONSTRATED ABILITY TO INTERPRET BROAD POLICY MATTERS AND TO PROVIDE PROGRAM DIRECTION. INCUMBENT MUST HAVE A B.S. DEGREE IN ENGINEERING OR RELATED SCIENTIFIC DISCIPLINE AND AT LEAST 10 YEARS OF EXPERIENCE IN THE NUCLEAR POWER INDUSTRY WITH AT LEAST FIVE YEARS EXPERIENCE IN RESPONSIBLE POSITIONS RELATED TO NUCLEAR POWER GENERATION. MUST HAVE AT LEAST FIVE YEARS MANAGEMENT/SUPERVISION EXPERIENCE IN NUCLEAR POWER GENERATION. INCUMBENT IN THIS POSITION IS SUBJECT TO ROTATIONAL ASSIGNMENT.

TO APPLY SEND FORM TVA 9824 TO: NUCLEAR HUMAN RESOURCES  
LOOKOUT PLACE 3A-C (X-2344)  
PENDING FINAL PAY EVALUATION

BFC01359

**POSITION DESCRIPTION**

Name	<u>David H. Tullis, Jr.</u>	Social Security Number	<u>[REDACTED]</u>
Position Title	<u>Mechanical Maintenance Specialist</u>	Pay Group or Schedule/Grade	<u>PG-08</u>
Location	<u>Chattanooga</u>	Effective Date	<u>9/30/96</u>
Organization Titles:		Incumbent's Signature	<u>David H Tullis</u> D. H. Tullis
Group	<u>TVA Nuclear</u>	Supervisor's Signature	<u>Howard Rogers</u> H. R. Rogers
Operations	<u>Nuclear Operations</u>	HRM/HRO's Signature	<u>Donald E. [unclear]</u>
Division	<u>Operations Support</u>	Reports to (Title)	<u>Maintenance Support Manager</u>
Department	<u>Maintenance Support</u>		
Section	<u></u>		

**FOR COMPENSATION PLANNING AND ANALYSIS USE ONLY**

POSITION EVALUATION:	EVALUATION DATE: <u>7/16/96</u>	CP&A REVIEWER INITIALS: <u>JEC</u>
<u>F13</u> K-H Slot	<u>350</u> K-H Pts	<u>E3 (38)</u> P-S Slot
<u>132</u> P-S Pts	<u>D2P</u> Acct Slot	<u>132</u> Acct Pts
<u>614</u> Total Pts	<u>56-22-22</u> Profile	<u>=</u> Profile
Approved Job Title: <u>SPECIALIST</u>	Schedule/Pay Grade: <u>PG-08</u>	
Organization Code: <u></u>	Job Code: <u>2880</u>	
	Supervisory Code: <u>N</u>	
	Function Code: <u>P44</u>	

**POSITION PURPOSE:**

Manage mechanical maintenance programs by the development and and maintenance of standardized programs, processes, and methods, technical support of onsite programs, and equipment maintenance issues. Serves as lead specialist responsible for the maintenance planning and technical programs and the integration of all supporting scheduling, engineering, technical support, and operations programs needed to manage maintenance work. Responsible for providing direction and support to both corporate organizations and site maintenance in implementing heat exchanger/SWS equipment maintenance programs meeting or exceeding industry standards. This position ensures that mechanical maintenance standards maintain and improve reliable and efficient generation to meet system needs, comply with regulatory (NRC, INPO, Insurance) requirements, and implement mechanical programs meeting or exceeding industry standards..

**DIMENSIONS:**

Employees Supervised: 0

Budget: 0

Distribution: Original - Human Resources Microrecords Unit, Knoxville  
 Copy - Operations Organization (as needed)  
 Copy - Central Office of Union Having Jurisdiction  
 Copy - Employees

BF001360

POSITION TITLE: Mechanical Maintenance Specialist

NAME

David H. Tullis, Jr. SSN

*(First) (Middle) (Last)*

PD NO.

860378

EFFECTIVE DATE

9/30/96

**PRINCIPAL ACCOUNTABILITIES:**

1. Manage the mechanical maintenance programs by defining, developing, and updating maintenance standards and other program requirements to ensure consistent mechanical maintenance programs are implemented and maintained.
2. Monitor performance to ensure mechanical maintenance programs' requirements are being satisfied and that necessary improvements in the design, maintenance, and operation of the equipment are being addressed.
3. Facilitate maintenance process standardization and reengineering to enhance maintenance programs through analysis of process and plant performance.
4. Represent TVAN to Information Systems and outside vendors concerning development and enhancement of computerized maintenance management systems including making recommendation for budget planning purposes and making decisions about specific use of the budgeted funds.
5. Interface with plant senior management, as well as industry work groups, vendors, and suppliers of services in gathering information for solving complex and generic mechanical maintenance issues.
6. Evaluate the adequacy of mechanical maintenance programs using INPO guidelines as requested. Perform or direct programmatic assessments in assigned maintenance areas to promote consistency among nuclear sites and to ensure compliance with TVAA and regulatory requirements.
7. Serve as the Heat Exchanger/SWS Program Manager for TVA nuclear facility staff personnel in the areas of special assistance for troubleshooting equipment reliability problem, failure analysis and root cause determination, repair or rework methods and procedures, and correction action plans.
8. Monitor or direct the monitoring of heat exchanger/SWS equipment performance to identify areas needing attention.
9. As applicable, direct the oversight of nuclear maintenance contracts, contractors, Power Service Shops personnel, and other TVA support organizations performing maintenance and testing on mechanical equipment.
10. Participate in emergency drills and provide maintenance support for the Central Emergency Control Center Staff as requested.
11. Review or direct the review of nuclear experience reports, NRC Information Notices, and NRC Generic Letters to provide recommendations for licensing actions or corrective/preventive measures.

**MINIMUM QUALIFICATIONS:**

B.S. degree in engineering, scientific discipline or equivalent with ten year's experience in the nuclear power industry, including five years' experience in engineering design, construction, operation, or maintenance of nuclear power plants. Must have demonstrated maintenance expertise on mechanical systems. Maintenance management experience is highly desirable.

Incumbent in this position is subject to rotational assignment.

BF001361

VPA NUMBER: 0000010713

STATUS: PROCESSING APPLICATIONS

GROUP: TVA-WIDE

SCHEDULE AND GRADE: PG 08 NUMBER OF POSITIONS:01

JOB TITLE: MECHANICAL MAINTENANCE SPECIALIST

LOCATION: CHATTANOOGA

ORGANIZATION: TVA NUCLEAR  
NUCLEAR OPERATIONS  
OPERATIONS SERVICES  
(SUPV: MAINT SUPPORT MGR)

POSTING-DATE: 06/13/96

CLOSING-DATE: 06/25/96

DUTIES: MANAGE MECHANICAL MAINTENANCE PROGRAMS BY THE DEVELOPMENT AND MAINTENANCE OF STANDARDIZED PROGRAMS, PROCESSES, AND METHODS, TECHNICAL SUPPORT OF ONSITE PROGRAMS, AND EQUIPMENT MAINTENANCE ISSUES. SERVES AS LEAD SPECIALIST RESPONSIBLE FOR THE MAINTENANCE PLANNING AND TECHNICAL PROGRAMS AND THE INTEGRATION OF ALL SUPPORTING SCHEDULING, ENGINEERING, TECHNICAL SUPPORT, AND OPERATIONS PROGRAMS NEEDED TO MANAGE MAINTENANCE WORK. RESPONSIBLE FOR PROVIDING DIRECTION AND SUPPORT TO BOTH CORPORATE ORGANIZATIONS AND SITE MAINTENANCE IN IMPLEMENTING HEAT EXCHANGER/SWS EQUIPMENT MAINTENANCE PROGRAMS MEETING OR EXCEEDING INDUSTRY STANDARDS.

MINIMUM QUALIFICATIONS: MUST HAVE B.S. DEGREE IN ENGINEERING, SCIENTIFIC DISCIPLINE OR EQUIVALENT WITH TEN YEARS' EXPERIENCE IN THE NUCLEAR POWER INDUSTRY, INCLUDING FIVE YEARS' EXPERIENCE IN ENGINEERING DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE OF NUCLEAR POWER PLANTS. MUST HAVE DEMONSTRATED MAINTENANCE EXPERTISE ON MECHANICAL SYSTEMS. MAINTENANCE MANAGEMENT EXPERIENCE IS HIGHLY DESIRABLE. INCUMBENT IN THIS POSITION IS SUBJECT TO ROTATIONAL ASSIGNMENT.

TO APPLY SEND FORK TVA 9824 TO:

NUCLEAR HUMAN RESOURCES  
LOOKOUT PLACE 3A-C (X-2344)  
PENDING FINAL PAY EVALUATION

BF001362