


Approved By T. E. Tynan	Vogtle Electric Generating Plant 	Procedure Number Rev 00256-C 7.1
Date Approved 06/28/2005	RADIOACTIVE WASTE MINIMIZATION PROGRAM	Page Number 1 of 9

PRB REVIEW REQUIRED

RADIOACTIVE WASTE MINIMIZATION PROGRAM

PROCEDURE USAGE REQUIREMENTS-	SECTIONS
Continuous Use: Procedure must be open and readily available at the work location. Follow procedure step by step unless otherwise directed.	
Reference Use: Procedure or applicable section(s) available at the work location for ready reference by person performing steps.	
Information Use: Available on plant site for reference as needed.	ALL

Approved By T. E. Tynan	Vogle Electric Generating Plant 	Procedure Number Rev 00256-C 7.1
Date Approved 06/28/2005	RADIOACTIVE WASTE MINIMIZATION PROGRAM	Page Number 2 of 9

1.0 **PURPOSE**

This procedure establishes the responsibilities, methods, and work practices for the radioactive waste volume minimization program at VEGP. The objectives of the program are to minimize: (1986307614, 1986207614)

- a. The volume of solid and liquid radioactive waste generated.
- b. The number of contaminated areas.
- c. The amount of contaminated tools and equipment.

2.0 **DEFINITIONS**

RADIATION CONTROLLED AREA (RCA)

Any area which contains or potentially contains radiation, contamination, or radioactive materials in quantities or levels sufficient to require posting of protective measures.


3.0 **RESPONSIBILITIES**

3.1 **PLANT OPERATIONS ASSISTANT GENERAL MANAGER**

- 3.1.1 Establishes and maintains the radioactive waste volume minimization program.
- 3.1.2 Establishes goals for solid and liquid radioactive waste reduction.
- 3.1.3 Assigns specific responsibilities for the implementation of the program.
- 3.1.4 Dedicates personnel to ensure proper attention and review of the program.

3.2 **DEPARTMENT MANAGERS**

- 3.2.1 Consider and include radioactive waste volume reduction methods in work planning and coordination activities.
- 3.2.2 Review, as appropriate, plant instructions or procedures associated with the implementation of the radioactive waste volume reduction program.
- 3.2.3 Ensure departmental personnel receive training in radioactive waste reduction, decontamination methods and work practices prior to working in Radiation Controlled Areas.

Approved By T. E. Tynan	Vogtle Electric Generating Plant 	Procedure Number Rev 00256-C 7.1
Date Approved 06/28/2005	RADIOACTIVE WASTE MINIMIZATION PROGRAM	Page Number 3 of 9

3.2.4 Periodically check materials entering the RCA to prevent the entry of unnecessary disposable materials.

3.2.5 Conduct plant tours, adhering to the frequency and requirements of Procedure 00254-C, "Foreign Material Exclusion And Plant Housekeeping Programs," to ensure compliance with the program. Ensure that all leaks in area of responsibility are properly contained and that a Work Order has been written and/or the leak has been reported to the Shift Supervisor.

3.2.6 Facilities Group

3.2.6.1 Collects and transfers trash and laundry from collection locations to the interim storage area as needed.

3.2.6.2 Ensures trash, laundry and reusable item receptacles are properly identified (by signs and/or color coding) and placed throughout the plant as needed.

3.2.6.3 Ensures that only approved decontamination methods and permissible chemicals are used.

3.2.6.4 Evaluate the generation of additional radwaste and additional exposure to personnel against the limits of reduced personnel exposure and contamination levels when prescribing methods and extent of decontamination efforts.

3.3 HEALTH PHYSICS MANAGER

The Health Physics Manager is responsible for ensuring the following groups perform the indicated functions.


3.3.1 Health Physics Section

3.3.1.1 Surveys all materials prior to removal from the RCA.

3.3.1.2 Ensures that radioactive materials are packaged in a manner which precludes the spread of contamination.

3.3.1.3 Labels containers of radioactive materials with the contents, radiation and contamination levels and the initials of the surveyor.


3.3.1.4 Routinely performs and reviews contamination surveys to determine area contamination levels and to monitor the radiological conditions of contaminated areas.

Approved By T. E. Tynan	Vogtle Electric Generating Plant 	Procedure Number Rev 00256-C 7.1
Date Approved 06/28/2005	RADIOACTIVE WASTE MINIMIZATION PROGRAM	Page Number 4 of 9

- 3.3.1.5 Assigns priorities for decontamination based upon area entry frequency, equipment usage, contamination levels, and planned work activities in the area.
- 3.3.1.6 Identifies tools and equipment with fixed contamination by spraying them with hot magenta paint.
- 3.3.1.7 Requires the use of containment devices where practical to prevent the spread of contamination.
- 3.3.1.8 Designates criteria for color-coding and labeling receptacles for clean and contaminated trash, laundry, and reusable items.
- 3.3.1.9 Designates and establishes laydown and/or storage areas for liquid (wet) and/or bulky contaminated items.
- 3.3.1.10 Implements a sorting and monitoring program to separate contaminated from non-contaminated material and recover reusable items.
- 3.3.1.11 Establishes a program to monitor and trend solid radioactive waste.
- 3.3.1.12 Maintains an on-going program to investigate processing methods and techniques that will result in the improved processing and volume reduction of radioactive waste.
- 3.3.1.13 Establishes stringent demineralizer and filter change-out criteria for low flow, high radiation level, and high differential pressure.
- 3.3.1.14 Establishes program to track Work Orders for leaking components to ensure timely corrective action is taken.
- 3.3.1.15 Provides guidance to plant personnel regarding appropriate waste-minimizing work practices.

3.4 TEAM LEADER/ASSISTANT TEAM LEADER

The Team Leader/Assistant Team Leader ensures the Performance Team work planner reviews WOs before starting work; establishes a list of tasks to be performed (valve packing, pump repair, etc.) and a list of minimum equipment/parts required to perform the tasks to prevent carrying unnecessary equipment into the RCA.

Approved By T. E. Tynan	Vogtle Electric Generating Plant 	Procedure Number Rev 00256-C 7.1
Date Approved 06/28/2005	RADIOACTIVE WASTE MINIMIZATION PROGRAM	Page Number 5 of 9

3.5 PLANT TRAINING AND EMERGENCY PREPAREDNESS MANAGER


The Plant Training and Emergency Preparedness Manager ensures the following:

- 3.5.1 Personnel are instructed in radioactive waste minimization methods and good radiological work practices in General Employee Training and Radiation Worker Training classes.
- 3.5.2 Personnel awareness of the VEGP radioactive waste minimization program and emphasizes each individual's responsibilities for making the program effective.

3.6 OPERATIONS MANAGER

The Operations Manager ensures the following:

- 3.6.1 Radioactive waste processing equipment is operated in a safe and efficient manner.
- 3.6.2 An on-going program is maintained to investigate processing methods and techniques that will result in the improved processing and volume reduction of radioactive waste.
- 3.6.3 Stringent demineralizer and filter change-out criteria are established for low flow, high radiation level, and high differential pressure.
- 3.6.4 Where possible, leaking components are isolated until proper corrective action can be taken.
- 3.6.5 Guidance is provided to plant personnel regarding appropriate waste-minimizing work practices.

Approved By T. E. Tynan	Vogtle Electric Generating Plant 	Procedure Number Rev 00256-C 7.1
Date Approved 06/28/2005	RADIOACTIVE WASTE MINIMIZATION PROGRAM	Page Number 6 of 9

3.7 PLANT PERSONNEL

Radioactive waste volume minimization is the responsibility of all personnel.


- 3.7.1 Observe all instructions and procedures pertaining to radioactive waste minimization methods and work practices.
- 3.7.2 Report leaking components to personnel in the Control Room or Health Physics and, where practical take steps to contain the leak.
- 3.7.3 No one should bring unnecessary disposable material into the RCA.
- 3.7.4 Each individual is responsible for removal of all tools, equipment and trash brought into the work area by them or their work group per Procedure 00254-C.
- 3.7.5 Personnel contaminating an area, due to negligence on the workers' part, shall be held responsible for the decontamination of the area.

4.0 PROCEDURE

4.1 MATERIAL CONTROL METHODS

The following practices should be implemented to control the volume of radioactive waste generated in the RCA.

- 4.1.1 Unpack material to the extent practicable prior to transport into the RCA. Only the packaging required for protection or cleanliness concerns should be left on the materials.
- 4.1.2 Take into the RCA only those tools and supplies necessary to perform a specific task.
- 4.1.3 Retain tools and equipment previously used in contaminated areas in the Hot Tool Room for use in other contaminated areas to prevent the need for contaminating clean tools and equipment.
- 4.1.4 Restrict the use of disposable protective clothing in contaminated areas.
- 4.1.5 Perform work in clean areas prior to entry into the RCA whenever practicable. Prefabrication should be maximized in order to decrease the volume of contaminated material produced.


Approved By T. E. Tynan	Vogtle Electric Generating Plant 	Procedure Number Rev 00256-C 7.1
Date Approved 06/28/2005	RADIOACTIVE WASTE MINIMIZATION PROGRAM	Page Number 7 of 9

- 4.1.6 Avoid the use of porous materials which are difficult to decontaminate and/or release from the RCA.
- 4.1.7 Wrap tools and equipment, where practical, to preclude need for decontamination efforts.
- 4.1.8 Use only the quantity of material necessary for wrapping or bagging contaminated materials.
- 4.1.9 Verify the radiological condition of materials being removed from the RCA prior to their disposal.
- 4.1.10 Limit the number of points of access of material into RCA.

4.2 WASTE COLLECTION AND SEGREGATION METHODS

The following methods should be implemented to facilitate the collection and subsequent segregation of radioactive wastes from clean wastes.

- 4.2.1 Provide separate color-coded and labeled containers for the collection of contaminated material, clean material, and reusable items.
- 4.2.2 Have all waste material and laundry generated at control points monitored prior to removal from the area to separate highly contaminated material from material with little contamination.
- 4.2.3 Label tools and equipment for decon or re-use in a manner by which they can be easily identified.
- 4.2.4 Make provisions for the proper handling and removal of contaminated or potentially contaminated equipment from the job site prior to commencing work.
- 4.2.5 Provide "Clean Trash" receptacles at entrances to the RCA to help minimize the amount of clean materials entering the RCA.
- 4.2.6 Aerosol cans, paint cans, wet mop heads and other wet trash generated in Radiation Controlled Areas are not to be disposed of in yellow drums. These items will be bagged separately and deposited in a storage area designated by HP Supervision for proper disposal.

Approved By T. E. Tynan	Vogtle Electric Generating Plant 	Procedure Number Rev 00256-C 7.1
Date Approved 06/28/2005	RADIOACTIVE WASTE MINIMIZATION PROGRAM	Page Number 8 of 9

4.3 CONTAMINATION CONTROL METHODS


- 4.3.1 Determine the source of contamination and take steps to correct the cause prior to performing extensive decontamination.
- 4.3.2 Where necessary, implement a program of periodic decontamination of high use areas.
- 4.3.3 Use containment devices, where practicable, to prevent the spread of contamination.
- 4.3.4 Pre-plan work and practice good housekeeping when working in contaminated areas.
- 4.3.5 Report potential or actual sources of contamination to Health Physics or to the control room.

4.4 LIQUID RADWASTE MINIMIZATION METHODS

- 4.4.1 Isolate and drain systems prior to breaching.
- 4.4.2 Use the smallest volume of liquid practical for flushing components or equipment.
- 4.4.3 Follow posted instructions on drains, valves, and vents, etc.
- 4.4.4 Report leaking components to personnel in Health Physics and the Control Room, and, where possible, take steps to contain the leak.
- 4.4.5 Do not use floor drains for discarding solvents and oils.
- 4.4.6 Report any accumulation of water on the floor of the Auxiliary Fuel Handling, Radwaste or Containment buildings to Health Physics or Control Room personnel.

4.5 WASTE SORTING AND MONITORING METHODS

- 4.5.1 Have all material monitored by Health Physics personnel prior to its removal from the RCA.
- 4.5.2 Sort waste into "contaminated" and "clean" containers to minimize the volume of radioactive waste which must be processed.

Approved By T. E. Tynan	Vogtle Electric Generating Plant 	Procedure Number Rev 00256-C 7.1
Date Approved 06/28/2005	RADIOACTIVE WASTE MINIMIZATION PROGRAM	Page Number 9 of 9

5.0 **REFERENCES**

- 5.1 INPO Good Practice No. 82-001-OEN-09, Sept. 1982, "Low Level Radioactive Waste Management"
- 5.2 Procedure 00254-C, "Foreign Material Exclusion And Plant Housekeeping Programs"

5.3 **COMMITMENTS, AND ACTION ITEMS**

5.3.1 **Commitments**

1986307614

5.3.2 **Action Items**

1986207614

END OF PROCEDURE TEXT