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**VERIFICATION INVESTIGATION REVISED SECTION 24.0**  
SWMU 71, Flash Burn Parts Area (Draft)  
Task Order No. 4  
Radford Army Ammunition Plant, Virginia

Prepared for:

U.S. Army Environmental Center  
Aberdeen Proving Ground, Maryland 21010-5401  
Contract No. DAAA15-90-D-0015

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 **DAMES & MOORE**  
2807 N. Parham Road, Suite 114, Richmond, VA 23294

August 19, 1994

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Revised Section 24.0  
SWMU 71, Flash Burn Parts Area

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Radford Army Ammunition Plant, Virginia

Submitted to:

Commander, U.S. Army Environmental Center  
Aberdeen Proving Ground, Maryland 21010-5401

Contract No. DAAA15-90-D-0015

Prepared by:

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## LIST OF ACRONYMS AND ABBREVIATIONS

AEC	U.S. Army Environmental Center
EPA	U.S. Environmental Protection Agency
gm	Gram
HBN	Health Based Number
IRDMIS	Installation Restoration Data Management Information System
MCL	Maximum Contaminant Level
mg/l	Milligrams per liter
msl	Mean sea level
NG	Nitroglycerin
PQL	Practical Quantitation Limit
QA	Quality Assurance
QC	Quality Control
RAAP	Radford Army Ammunition Plant
RAGS	Risk Assessment Guideline for Superfund
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
SVOC	Semivolatile Organic Compound
SWMU	Solid Waste Management Unit
TAL	Target Analyte List
TCLP	Toxicity Characteristic Leaching Procedure
TPH	Total Petroleum Hydrocarbons
ug/g	Micrograms per gram
USACE	U.S. Army Corps of Engineers
USAEHA	U.S. Army Environmental Hygiene Agency
USATHAMA	U.S. Army Toxic and Hazardous Materials Agency
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey
VaDOH	Virginia Department of Health
VDEQ	Virginia Department of Environmental Quality
VHMR	Virginia Hazardous Waste Management Regulations
VI	Verification Investigation
VPI&SU	Virginia Polytechnic Institute and State University
VDWM	Virginia Department of Waste Management

## 24.0 VERIFICATION INVESTIGATION OF SWMU 71, FLASH BURN PARTS AREA

### 24.1 SWMU 71 BACKGROUND AND INVESTIGATION PROGRAM (Revised)

This report is a revision of the Radford Army Ammunition Plant (RAAP) Verification Investigation (VI) Section 24.0, which presented the results of investigations conducted at Solid Waste Management Unit (SWMU) 71, Flash Burn Parts Area in the final draft VI report dated October 29, 1992. The additional studies conducted at SWMU 71 in 1993 which resulted in this revised section were authorized by the U.S. Army Environmental Center (AEC) under Contract No. DAAA15-90-D-0015, Task Order 4. The scope of the additional studies was developed following a review of the final draft VI report by AEC and upon comments on the report by the U.S. Environmental Protection Agency (EPA) and the Virginia Department of Environmental Quality (VDEQ).

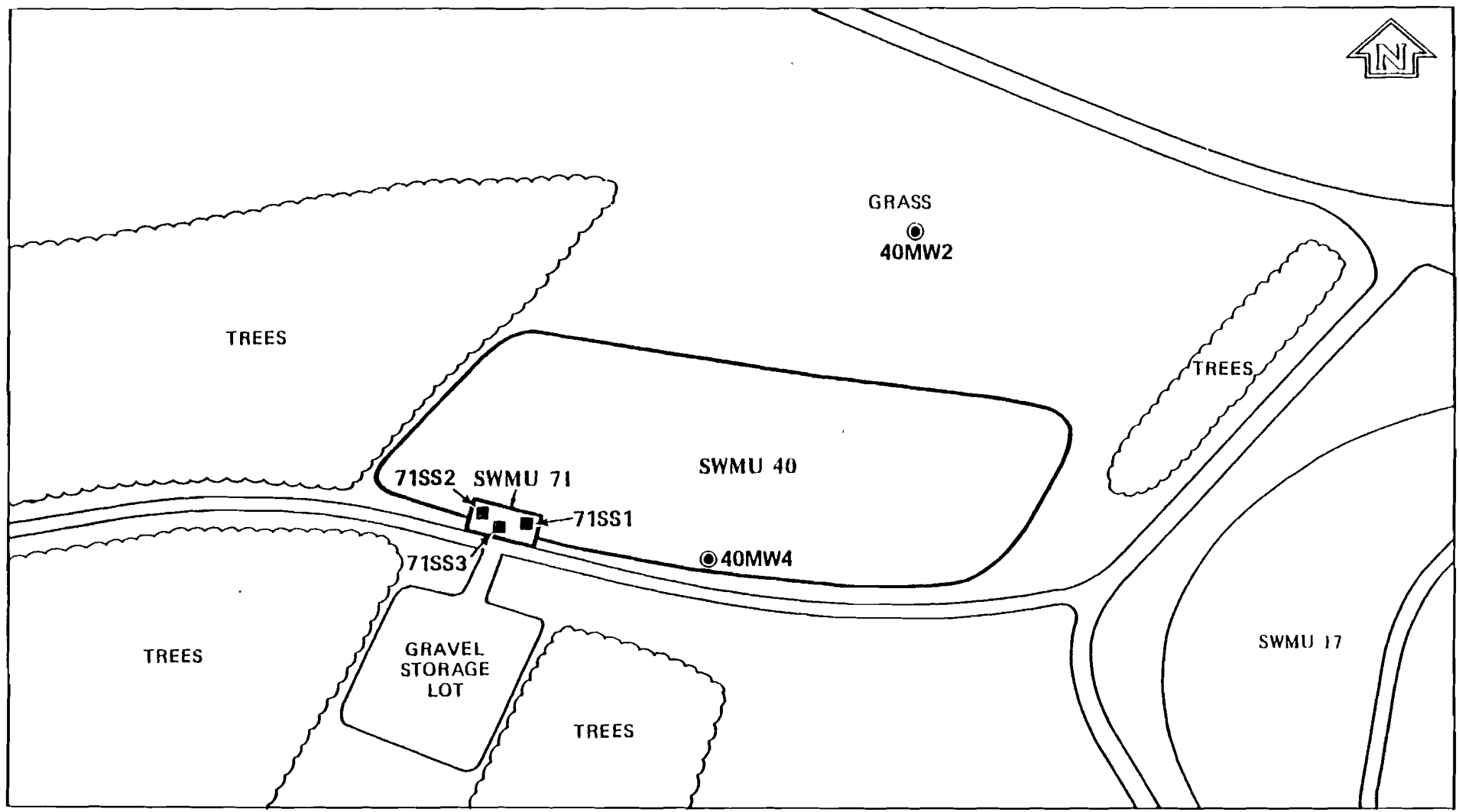
The additional data has resulted in revised text in several subsections and these revised subsections have had (revised) appended to the subsection title. Table 24-2 and Figure 24-2 have been added to this revised section report to present the data collected in 1993. Table 24-1 and Figure 24-1 have been reproduced as presented in the 1992 VI Report. This revised section report is not intended to be a stand alone document; all background information about RAAP and the overall VI program is presented in the final draft VI Report. Appendix A to this report presents the chemical data acquired for the VI program and Appendix B presents supporting information referenced from the final draft VI Report.

#### 24.1.1 SWMU History

The inactive Flash Burn Parts Area (SWMU 71) is located in the south-central portion of the Main Manufacturing Area, in the southwest corner of the Sanitary Landfill (NG Area) (SWMU 40) (Figure 24-1). It consists of an open, hard packed, gravel area, about 25 feet by 50 feet in size, where metal process pipes potentially contaminated with propellant were flash burned from about 1962 to 1982. The pipes were then reused or sold for scrap. Reportedly, oil soaked straw was used on occasion to create the burning environment for decontamination.



24-2



**LEGEND:**

- Soil Sample
- Monitoring Well

**FIGURE 24-1**  
**LOCATION MAP**  
**SWMU 71 – FLASH BURN PARTS AREA**  
**RADFORD ARMY AMMUNITION PLANT, VIRGINIA**





















































































































