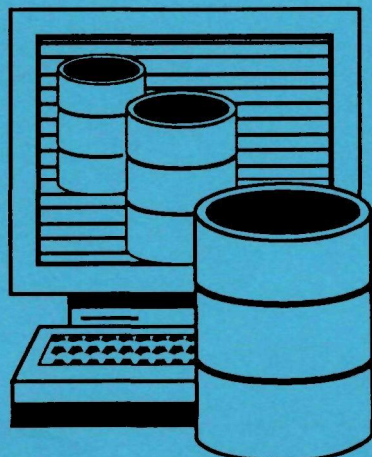United States
Environmental Protection
Agency

Office of
Solid Waste
Washington, DC 20460

September 1989

&EPA

NATIONAL IMPLEMENTATION:

AN EXECUTIVE SUMMARY

RCRIS

RESOURCE CONSERVATION AND
RECOVERY INFORMATION
SYSTEM (RCRIS)

NATIONAL

IMPLEMENTATION:

AN EXECUTIVE SUMMARY

OFFICE OF SOLID WASTE
U.S. ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

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RCRIS

NATIONAL IMPLEMENTATION:

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THE GOAL:

RCRIS OPERATIONAL NATIONWIDE BY 1992

Results from the 1989 pilot test have confirmed that RCRIS has immense potential for organizing the massive files of RCRA data across the country. Formally known as the Resource Conservation and Recovery Information System, RCRIS is EPA's latest tool for monitoring the nation's hazardous waste handlers while continuing to respect States' autonomy in controlling them. The system has been designed for ease of operation and flexibility, and has been fine-tuned through pilot testing in Region IV (Atlanta, Georgia) and four States - Florida, Georgia, Kentucky and Mississippi.

The goal now is to implement RCRIS in every Region and State by the end of FY 1992. EPA's August 1989 RCRIS National Framework for Implementation calls for all 10 Regions and 39 States to implement RCRIS by the end of FY 1990; for all States to be reporting in RCRIS format by the end of FY 1991; and for all States to become full RCRIS implementers by the end of FY 1992. This schedule was developed cooperatively by EPA and the States. It will be updated quarterly to reflect any necessary changes agreed to by EPA and the States.

RCRIS is replacing the Hazardous Waste Data Management System (HWDMS). During the first two years of RCRIS implementation, both systems will be operational. Plans include the continuation of parallel operations of both RCRIS and HWDMS, where necessary, until the end of FY 1991. The data stored in HWDMS will be archived by the end of FY 1991.

THE BENEFITS OF PARTICIPATION:
COMPREHENSIVE MANAGEMENT OF RCRA INFORMATION

Managers working with RCRIS will be able to gather, track, and analyze RCRA information:

3   **Easily:** RCRIS is user friendly and employs sensible, recognizable data elements.

3   **Flexibly:** RCRIS has been designed to allow for necessary modification, now and in the future.

3   **Distinctively:** States and Regions can choose the hardware and software options that match their current needs.

3   **Accurately:** When users "own" the data they work with, accuracy automatically becomes a personal goal.

3   **Knowledgeably:** RCRIS users can get access to information in other related EPA data bases.

The diverse needs of users at EPA Headquarters, Regions, and States have all been analyzed and answered in one system. RCRIS provides a way to satisfy both individual and shared information processing requirements. Indeed, RCRIS was designed to reflect the prized goal of partnership between EPA and the States in managing RCRA-permitted waste handlers.

The States, as hands-on management partners, have particular data needs that are unique to their operations. EPA Regions and Headquarters, as overseers and quality control partners, have their own information requirements. Often, the same data elements serve both purposes. RCRIS development has helped foster and strengthen the State/EPA partnership. While analyzing and discussing RCRA information needs together, RCRA managers across the country evolved a deeper understanding of one anothers' roles and responsibilities.

The Features:

Something For Every RCRA Manager

"Two-Domain" Concept Satisfies Dual Information Needs

The two-domain design on which RCRIS is founded makes possible a data-sharing partnership that meets the individual and common information needs of all RCRA managers.

The two domains of RCRIS are the Implementer Domain and the Oversight Domain. These domains, or sets of data elements, are not distinct and separate. The Oversight domain is actually a subset of the Implementer domain.

- **Hands-On Managers Use the Implementer Domain.** This domain is designed to collect, enter, track and report day-to-day RCRIS information. It deals with such activities as handler identification, permitting, inspections, and enforcement actions. Both States and EPA Regions will use the RCRIS implementer functions.

- **RCRA Oversight Managers Use the Oversight Domain.** This domain is designed to track and report the management information required to review RCRA program performance and to develop budgeting and program management strategies. EPA Headquarters and Regions will use the RCRIS oversight functions. States can also use these functions for State-level oversight activities.

RCRIS Was Designed for Compatibility

Because RCRA managers indicated a need to employ several different hardware/software configurations, RCRIS designers gave considerable thought to making the system optimally compatible with different system architectures. Written in FOCUS—a single database language—RCRIS:

3

- Runs on IBM-compatible mainframes *and* PCs.

- Can be installed simply on most IBM or IBM-compatible hardware.

- Allows small programs to continue manual record keeping and paper reporting.

- Accommodates other systems. States committed to non-IBM hardware or non-RCRIS software can develop their own software program that "translates" their data into RCRIS format for monthly transfers of data to EPA Regional offices.

SIX BASIC MODULES TRACK A BROAD RANGE OF INFORMATION

RCRIS tracks a wide range of information related to facilities that generate, transport, and/or treat, store, and dispose of hazardous waste. This information is under RCRIS' six major modules, or applications (see Figure 1):

- **Handler Identification (HID).** Tracks and maintains descriptive information on regulated hazardous waste facilities, generators, and transporters.

- **Permitting, Closure, Post-Closure (PMT/CL/PC).** Tracks information on the status of permit applications for hazardous waste facilities.

- **Compliance Monitoring & Enforcement (CM&E).** Tracks and maintains data on inspections, violations, enforcement actions, and return to compliance.

- **Corrective Action (CA).** Supports the permit-writing and program-enforcement coordination necessary for an effective corrective action program.

- **Program Management (PM).** Supports the State, Regional, and national management and evaluation needs of the RCRA program.

- **Facility Management Planning (FMP).** Supports the development and analysis of facility management plans.
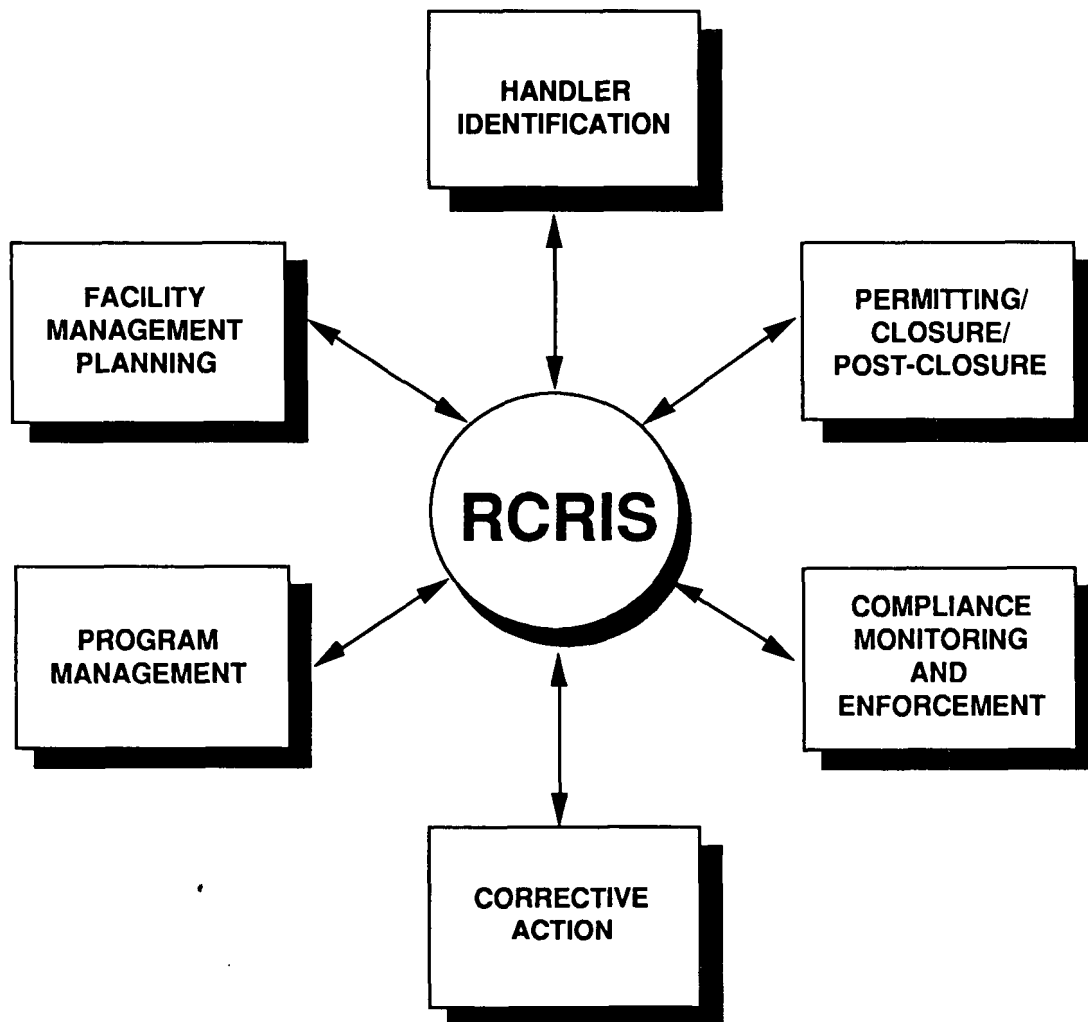
FIGURE 1

Among the many functions built into RCRIS to support the six modules are the Data Assessment and Database Administration functions.

- **Data Assessment (DA)** Provides automated software controls to ensure the accuracy of data and to generate audit or exception reports to ensure data quality and data integrity.

- **Database Administration (DBA)** Allows the RCRIS database administrator in each State and Region to maintain the integrity and status of the entire system.

FY 1989 ACCOMPLISHMENTS:

TESTED AND READY TO GO

The RCRIS project has made a great deal of progress in the past year. The Pilot Software was completed in March 1989. The RCRIS Pilot was conducted in Region IV over three months. Kentucky tested the manual (paper reporting) method; Mississippi piloted RCRIS on the PC; Georgia tested RCRIS on the Regional Logical Mainframe; and Florida piloted the RCRIS "translator" software, which converts State data to RCRIS format. The EPA Region IV Office tested RCRIS on their Regional Logical Mainframe.

Participants were asked to evaluate the entire RCRIS system, including both software and support systems. Their responses pinpointed four areas where efforts should be concentrated in preparation for national implementation:

- Response time of software
- System "bugs"
- Training and documentation
- Telecommunications

Based upon the pilot results, the RCRIS team set to work on modifying the software, revising both the documentation and training materials, and redesigning the training framework. The modifications and revisions have been completed and RCRIS is now ready for national implementation.

THE GROUNDWORK:

GETTING READY FOR RCRIS

To prepare for RCRIS implementation, States and Regions will:

- Clean up their HWDMS data;

- Choose a hardware/software configuration;

- Determine parameters for converting HWDMS data to RCRIS;

- Prepare the Memoranda of Understanding between each Region and State, including the Implementer of Record (IOR) assignments;

- Install RCRIS on the equipment they have chosen;

- Convert data to RCRIS format;

- Reconcile the converted data.

THE FUTURE:

WORKINGTOWARD NATIONAL IMPLEMENTATION BY 1992

Training

EPA Headquarters has developed training plans which support both initial implementation and long-range operation. A week-long RCRIS Training Program will be conducted in each Region during Fiscal Year 1990. Trainers will instruct RCRA staff on each module and other RCRIS functions.

After the initial year of implementation, EPA Headquarters plans to offer two training sessions to each Region per year. This training is designed to re-enforce the original training, introduce new aspects of RCRIS and train newly added personnel. RCRIS training will also be offered at RCRIS and RCRA related conferences. In addition, EPA Headquarters will sponsor an annual meeting of RCRIS users employing translator software in Washington, D.C.

User Support

User support is essential to success and has been made a key function of the National Implementation Strategy. In addition to supporting a toll-free RCRIS User Hotline, EPA Headquarters will sponsor national user group meetings twice each year. The toll-free User Hotline number is 1-800-767-RCRI.

Configuration Management

A configuration management process has been developed to encourage continued Regional and State input into future operations and modifications of RCRIS. The RCRIS configuration management process will be undertaken as follows:

- A representative **Configuration Management Board** will review programmatic and technical issues and make preliminary decisions about modifying and enhancing RCRIS.

- With input from other users, **Workgroups** will evaluate and recommend changes and enhancements to RCRIS.

- Bi-annual National **User Group Meetings** will foster communications between RCRIS partners and provide a forum for raising issues and suggesting RCRIS modifications and enhancements.

- The **Technical Manager and Staff** will manage the User Support Hotline, distribute issues to appropriate workgroups, communicate results and recommendations to users, and facilitate the activities of the Configuration Management Board.