United States
Environmental Protection
Agency

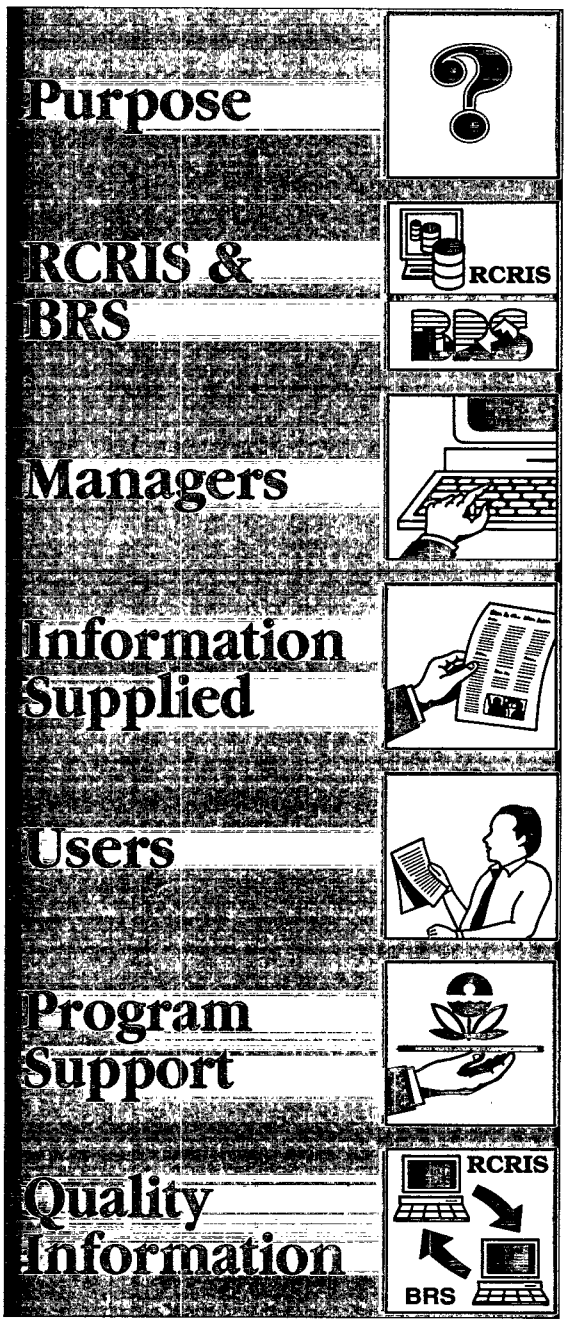
Office of Solid Waste and
Emergency Response
(OS - 312)

EPA530-S-92-001
January 1992

EPA

RCRA Hazardous Waste

Information Management Executive Summary



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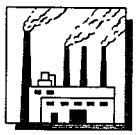
Did you know. . . **The numbers and types of handlers regulated under RCRA Subtitle C.**

4,300
Treatment, Storage, and Disposal Facilities (TSDFs)

A facility that treats, stores, or disposes of hazardous waste. (Examples: incinerators, landfills)



15,350
Large Quantity Generators

A generator that generates 1,000 kilograms (or more) of hazardous waste in a calendar month, or 1 kilogram (or more) of acutely hazardous waste in a calendar month. (Example: chemical manufacturing plant)

210,900
Small Quantity Generators

A generator that generates less than 1,000 kilograms of hazardous waste in a calendar month, or less than 1 kilogram of acutely hazardous waste in a calendar month. (Example: a dry cleaner)

19,700
Transporters

A person engaged in the off-site transportation of hazardous waste by air, rail, highway, or water.

Approximately 2,300 TSDFs also generate large quantities of hazardous waste. Numbers valid as of June 1991.

OSW Information Management Systems Purpose

The 1976 Resource Conservation and Recovery Act (RCRA), as amended by the 1984 Hazardous and Solid Waste Amendments (HSWA), directs the Environmental Protection Agency (EPA) to establish and administer a national program for the safe management of solid and hazardous waste. The goals of RCRA are:

- to protect human health and the environment;
- to conserve energy and natural resources; and,
- to reduce or eliminate the generation of hazardous waste as expeditiously as possible.

Subtitle C of RCRA establishes the regulatory framework for managing the generation, transportation, treatment, storage, and disposal of hazardous waste.

The EPA Office of Solid Waste (OSW) manages two major national information systems to support the RCRA Subtitle C program: the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS).

OSW Information Management Systems Purpose

Did you know . . .

	RCRIS	BRS
Software:	FOCUS®	FOCUS®
Platforms:		
Implementer:	Personal Computer, Mainframe	Personal Computer, Mainframe
National Oversight:	EPA Mainframe	EPA Mainframe
Design:	**Comprised of six primary modules:** Handler Identification Permitting/Closure/Post-Closure Compliance Monitoring & Enforcement Corrective Action Program Management Facility Management Planning	**Comprised of four primary modules:** Data Entry Data Assessment Reporting Process Administration

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RCRIS

The Resource Conservation and Recovery Information System (RCRIS) is a national program management and inventory system of RCRA hazardous waste handlers.

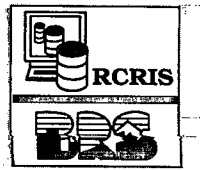
Handlers can be characterized as fitting one or more of the following categories: treatment, storage, and disposal facilities (TSDFs), large quantity generators (LQG), small quantity generators (SQG), and transporters.

RCRIS captures identification and location data for all handlers and a wide range of information on TSDFs regarding permit/closure status, compliance with Federal and State regulations, and cleanup activities.

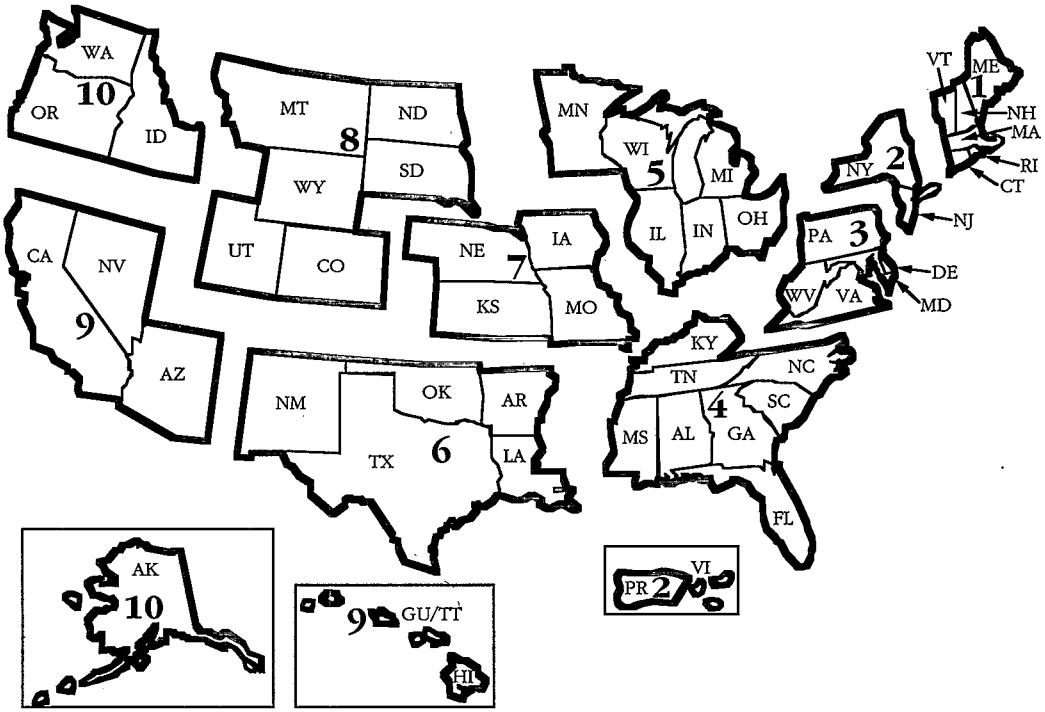
BRS

The Biennial Reporting System (BRS) is a national system that collects data on the generation, management, and minimization of hazardous waste. BRS captures detailed data on the generation of hazardous waste from large quantity generators and data on waste management practices from treatment, storage, and disposal facilities. These data are collected every other year and provide the ability to perform trend analyses.

What are RCRIS & BRS?



States and EPA Regions



Who are the Data Managers?

RCRIS and BRS data management responsibilities are shared between the States and EPA Regional Offices and reflect the partnership that exists between the States and EPA for the administration of the RCRA program. States and Regions are responsible for:

- Reviewing all forms submitted by the regulated community (e.g., Notification of Regulated Waste Activity Form, Biennial Report's Hazardous Waste Report Form) for accuracy and completeness.
- Assigning identification numbers that uniquely identify handlers in both RCRIS and BRS.
- Entering the information into RCRIS and BRS. The information may then be combined to provide a complete view of RCRA Subtitle C activities.
- Assuring data quality through a combination of manual and automated validation procedures.

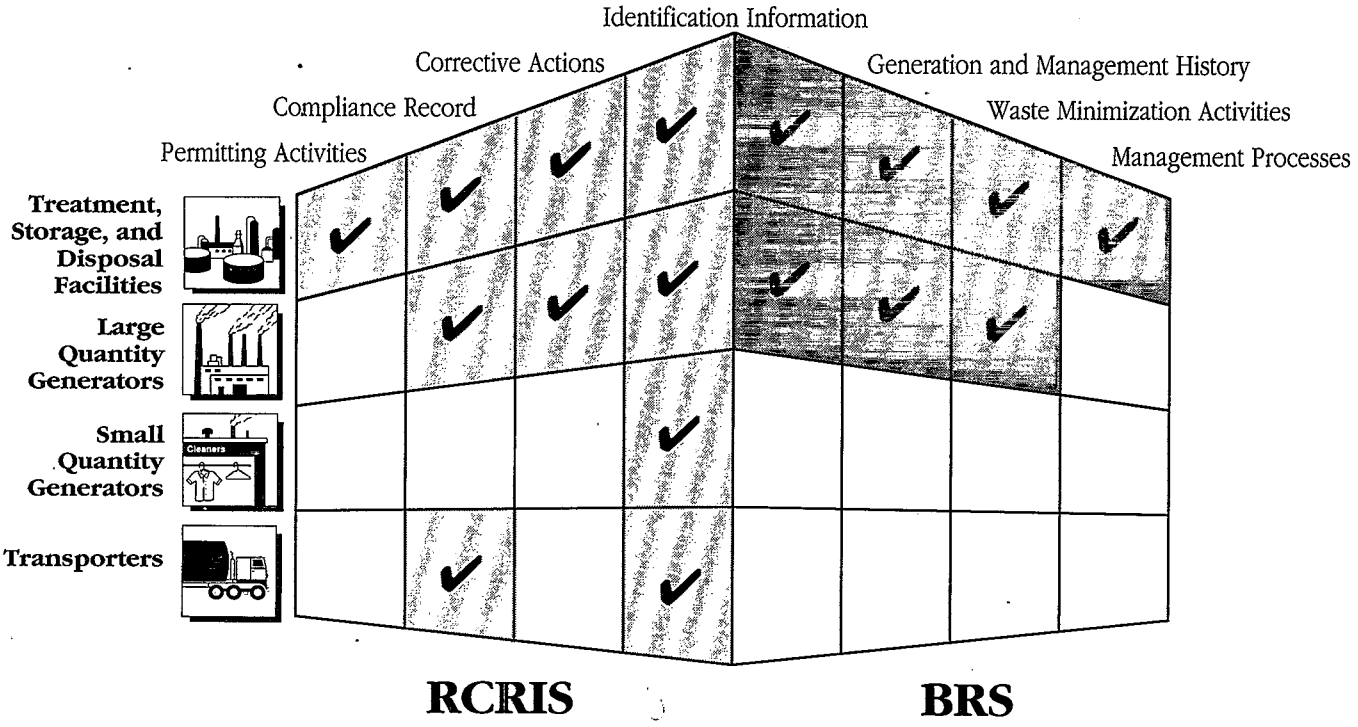
In addition to processing information submitted by hazardous waste handlers, the State and Regional Offices are responsible for regularly updating RCRIS to reflect the status of permitting, closure, post-closure, compliance, and corrective action activities.

EPA Headquarters provides oversight, guidance, and system support. Furthermore, although Headquarters does not directly enter data into the systems, it shares data management responsibility for creating and maintaining the integrity of the national RCRIS and BRS databases.

The States, EPA Regions, and Headquarters jointly share the responsibility for identifying and approving enhancements to the RCRIS and BRS software.

Who are the Data Managers?

RCRIS/BRS Sources of Information



What Information is Supplied?

To achieve "cradle-to-grave" waste-tracking capability, information is supplied by hazardous waste handlers and RCRA permitting and compliance program personnel.

Notification
All hazardous waste handlers are required to notify EPA of their existence by submitting identification information on the Federal Notification of Regulated Waste Activity Form (EPA form 8700-12) or a State equivalent form. This form provides the States and EPA with basic information on handler identification (e.g., name, address, owner), specific hazardous waste activities, and wastes handled.

Permit Application
Treatment, storage, and disposal facilities (TSDFs) are also required to complete and submit Part A (EPA form 8700-23) and Part B of the Hazardous Waste Permit application. The Part A form summarizes the specific types of treatment, storage, and/or disposal activities for which the facility is seeking a permit. Part B of the permit application provides the States and EPA with the detailed information necessary to ensure that the facility has adequate plans for safe construction, operation, and eventual closure. Part B includes items such as a design plan, financial assurance information, and a closure plan. Land disposal facilities must also include a plan for post-closure care and groundwater monitoring.

Permitting Status
Permitting staff in the State and Regional Offices provide data concerning the adequacy and status of a facility's permit application. This information includes a determination on the completeness of the Part B information, completion dates for the major milestones in the permitting process (e.g., public notice), and the final approval or denial of the permit.

Compliance Status
State and Regional compliance staff provide information about the completion of inspections, the existence of violations of RCRA or State regulations, and enforcement activities that are being taken against hazardous waste handlers to ensure compliance with the regulations.

Corrective Action Activities
Though RCRA historically has been a prevention program, a corrective action program has evolved to address the cleanup of hazardous waste releases at RCRA-regulated sites. As part of the program, State and EPA provide data on the requirements imposed to address releases of hazardous waste. Facilities provide States and EPA with data on their corrective actions undertaken.

Hazardous Waste Report Form
TSDFs and Large Quantity Generators are further required to submit information biennially on the quantity and types of wastes generated, waste management practices, and waste minimization efforts. This information is supplied on the Biennial Report's Hazardous Waste Report Form (EPA form 8700-13A/B) or State equivalent forms.

What Information is Supplied?

• Private Individuals • Federal Agencies • Environmental Consultants • Law Firms • Foreign Countries • Congress • Newspaper Reporters • County Governments • School Systems • Foreign Companies • Trade Associations • Special Interest Groups • Petroleum Industry • Universities • General Accounting Office • Chemical Manufacturing Companies • Non-Profit Organizations • College Students • Other EPA Offices • Waste Management Firms • Publishers •

Who are the Information Users?

Government, the public, and industry all need and use information from RCRIS and BRS. Only State environmental offices and EPA have direct, on-line access to the systems. However, others can and do receive information from RCRIS and BRS.

Government

All levels of government utilize the information from RCRIS and BRS. Government users include Federal agencies, Congress, and State and local governments. The following are examples of how the data are used by government organizations.

> EPA Headquarters and Regional RCRA program offices use RCRIS and BRS information to monitor and report on the progress of the RCRA program. For example, the Permits and State Programs Division uses RCRIS to report the number of RCRA permits issued annually.

> The Securities and Exchange Commission requests RCRIS data on corrective action activities on a quarterly basis to assess potential corporate liability.

> Congress and EPA use the information contained in RCRIS and BRS to monitor the effectiveness of the RCRA Program. Similarly, State legislative bodies use RCRIS and BRS data to review the effectiveness of State hazardous waste programs.

The Public

The public generally receives information from RCRIS and BRS through either the Freedom of Information Act (FOIA) request process or by acquiring the information from the National Technical Information Service (NTIS). Examples of recent requests from the public follow.

> An environmental interest group requested a report on the permitting status of all hazardous waste incinerators.

> Law firms frequently request information on specific locations prior to the purchase or sale of a business.

> A college student who needed help with a research paper requested information on the permitting status of hazardous waste landfills.

Industry

Industry also receives information through the FOIA process or from NTIS. The following are examples of some recent requests.

> An industry that has developed an innovative technology for treating the types of wastes generated at boilers and industrial furnaces requested a list of those facilities.

> A magazine publisher trying to solicit subscriptions to a specialized journal requested a list of all hazardous waste generators and transporters.

> A firm interested in performing research on methods of treating and disposing of specific hazardous wastes requested a report on the quantities of those wastes generated in the country.

Office of Solid Waste

Mission Statement

The mission of the Office
contribute to the Agency's
health and the environme
waste management progra
resources, prevent future
up problems from past pr

To carry out our mission,

- establish national envir
  policies, and regulation
- develop an effective pa
  States, and local gover
  program;
- encourage the particip
  environmental groups, and government in all
  program activities; and
- educate all sectors of society in our shared
  responsibilities for reducing and managing wastes.

Our office is composed of an interdisciplinary team of dedicated environmental professionals who work together to meet the challenges of carrying out this mission. As a team we commit ourselves to creating a positive, challenging, and healthy working environment, and to promoting professional growth and self improvement.

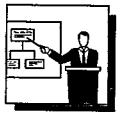
To carry out our mission, we:

- **establish national environmental goals, policies, and regulations;**
- **develop an effective partnership with the Regions, States, and local governments to implement the program;**
- **encourage the participation of the public, industry, environmental groups, and government in all program activities; and**
- **educate all sectors of society in our shared responsibilities for reducing and managing wastes.**

RCRIS & BRS Provide Program Support

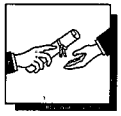
RCRIS and BRS are an integral part of OSW's management of the RCRA program. The following are examples of the programmatic, regulatory, analytical, monitoring, and reporting functions supported by these two systems.

Program Management



RCRIS and BRS provide the information necessary for effective program management at the State, Regional, and National levels. RCRIS provides the managers with information that allows them to review the progress that has been made in the permitting, compliance, and corrective action programs. For example, managers in the permitting program are interested in tracking the progress of facilities that enter the RCRA-regulated community because of new regulations through the facilities' interim status to the final permit issuance or denial. BRS provides managers with information about the progress being made on other RCRA initiatives such as waste minimization.

Development of New Regulations



The RCRA program continues to change in response to Congressional mandates and as new information about hazardous wastes and their impact on the environment is discovered. A substantial body of regulations already govern the generation, treatment, storage, disposal, and transportation of specific hazardous wastes. The analysis of existing regulations and development of new ones depends upon a solid understanding of the current and prospective regulated communities. Regulation writers need current information on amounts of waste by type and characteristic waste management practices. RCRIS provides information on regulated handlers by type of activities (e.g., land disposal facilities, incinerators). BRS provides key information on wastes generated, and can offer information on trends in waste generation and handling across Biennial Reporting cycles.

Environmental Indicators of Program Progress

Increasingly, EPA's programs are being asked to look beyond the functions they perform to the ultimate desired effect on the environment (such as cleaner air and water). Consequently, OSW is in the process of developing a set of environmental messages and indicators for better assessing the environmental impact of the RCRA program in the areas of waste minimization, safe management, and corrective action.

The data in RCRIS and BRS provide a baseline of program management and environmental data to support measurement of progress on these primary environmental indicators. RCRIS and BRS data will be used to analyze and report on threats to human health and the environment posed by hazardous waste.

Resource Allocation

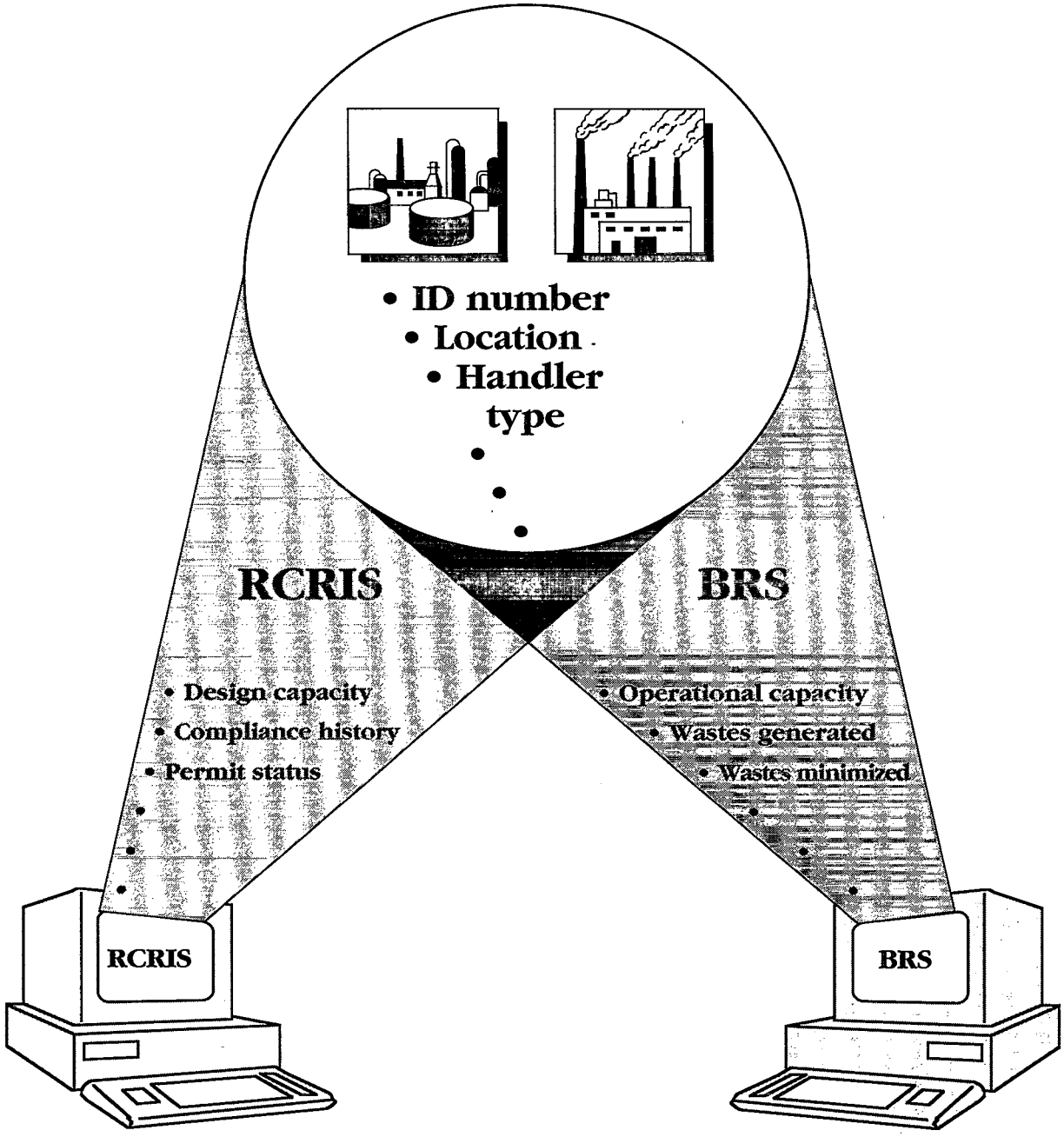
RCRA Program Managers use RCRIS to gauge how well the program is doing relative to program goals (e.g., annual targets), and can obtain reports that depict the program's accomplishments on key measures of interest to the Administrator and other audiences. This information in turn supports determination of resource allocations to the States and EPA Regions.

Superfund Amendments Reauthorization Act (SARA) Capacity Analyses

States are required to assure that there is adequate capacity to properly handle the hazardous wastes generated in their State. In order to do this, States need information on waste generation, waste imports, waste exports, and waste management utilization and capacity, as well as available capacity in other States. BRS has been designed, in part, to assist States in this analysis.

RCRIS & BRS Provide Program Support?

RCRIS and BRS:
A Broader Look at TSD's and LQG's



RCRIS and BRS Comparison

RCRIS and BRS are complementary. Though RCRIS and BRS contain information on all RCRA-regulated TSDFs and LQGs, most of the data tracked in each of the systems is different:

- RCRIS primarily characterizes facility status, regulated activities, and compliance histories.
- BRS focuses on waste types, waste quantities generated, wastes managed, wastes minimized, and management processes.

Integrating the unique data from each system allows a more comprehensive view of TSDFs and LQGs than would be available from either system alone.

System Integration

RCRIS and BRS are integrated systems. Data can be readily retrieved and combined because both systems:

- use a common facility identification number,
- were developed with the same software, and
- were designed to be compatible.

Consequently, program managers are able to improve the data quality in each system and gain greater utility from both.

Data Quality Improved

RCRIS and BRS data can be compared to help ensure the quality of the data in both systems. For example, a comparison report run on data from both systems could be used to identify hazardous waste handlers that have activity indicators (e.g., LQG, TSDF) that are not consistent between the two databases. This report could then be used to identify:

- TSDFs or LQGs that failed to submit their Biennial Reporting data.
- Handlers whose current activity status is not accurately reflected in RCRIS.

The reconciliation of discrepancies helps to ensure consistent and accurate reporting on the number and characteristics of TSDFs and LQGs.

Enhanced Utility

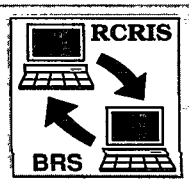
RCRIS and BRS data are combined to aid managers in achieving program goals. For example, a combined report can be run to identify and prioritize hazardous waste generators for inspection. Generators selected by inspection date in RCRIS are sorted by waste characteristic and quantity data in BRS to provide a targeted inspection listing.

Quality Information and RCRA Program Success

RCRIS and BRS provide the States and EPA with an effective tool for managing the day-to-day program activities carried out at RCRA-regulated hazardous waste sites and the overall RCRA Subtitle C program.

Accurate data, effectively utilized, provide the quality information that is essential to the RCRA program. RCRIS and BRS work together to contribute quality information necessary to the success of RCRA program monitoring and evaluation.

System Integration Provides Quality Information?



For more information . . .

To obtain additional information about the topics covered in this document you can contact:

RCRIS User Support **1-800-767-7274**

The RCRIS Helpline supports RCRIS application users with system operations including data entry, data transfer, and system enhancements.

BRS User Support **1-800-876-0352**

The BRS Helpline supports BRS application users with system operations including data entry, data assessment and reporting functions.

BRS Forms Support **1-800-283-8489**

The BRS Forms Helpline provides assistance in the completion of the Biennial Report's Hazardous Waste Report Form (EPA Form 8700-13A/B).

RCRA/Superfund Hotline **1-800-424-9346**

Questions regarding RCRA regulations and policy are handled by the RCRA/Superfund Hotline. The Hotline also serves as a referral point for document availability.

Freedom of Information Act (FOIA) Office **phone: 1-202-260-4048**
fax: 1-202-260-0295

The EPA FOIA office is the clearinghouse for all public requests of information pertaining to EPA programs, including RCRA.

National Technical Information Service (NTIS) 1-**703-487-4650**

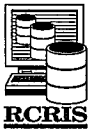
NTIS offers IBM-compatible magnetic tapes of the RCRIS National Database and copies of the National Biennial RCRA Hazardous Waste Reports.

The following are the NTIS order numbers:

RCRIS Extract Tape	PB 91 592 001
1985 National Biennial Report	Volume I: National Summary PB 89 187 645
	Volume II: State Detail Data PB 89 187 652
1987 National Biennial Report	PB 91 220 293

RCRIS

RCRIS User Support 1-800-767-7274
RCRA/Superfund Hotline 1-800-424-9346
FOIA office (phone) 1-202-260-4048
(fax) 1-202-260-0295
NTIS 1-703-487-4650



BRS

BRS User Support 1-800-876-0352
BRS Forms Support 1-800-283-8489
RCRA/Superfund Hotline 1-800-424-9346
FOIA office (phone) 1-202-260-4048
(fax) 1-202-260 0295
NTIS 1-703-487-4650

The following is a list of selected RCRIS and BRS documents . . .

RCRIS Documentation

RCRIS Reports Library
RCRIS User Guide (data entry)
RCRIS Merged Database Administrator Guide
RCRIS Quick Reference Guide
RCRIS Data Element Dictionary
RCRIS Technical Guide
RCRIS Structure Charts

BRS Documentation

BRS Reports Library
BRS User Guide
BRS Architecture
BRS Data Element Dictionary
BRS Electronic Reporting Guide
BRS Translator Guide
BRS Structure Chart