

**1986 NATIONAL SCREENING SURVEY OF HAZARDOUS  
WASTE TREATMENT, STORAGE, DISPOSAL, AND RECYCLING  
FACILITIES**

**SUMMARY OF RESULTS  
FOR TSDR FACILITIES ACTIVE IN 1985**

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## INTRODUCTION

This report summarizes the results of the 1986 National Screening Survey of Hazardous Waste Treatment, Storage, Disposal, and Recycling facilities. The Office of Solid Waste (OSW) of the U.S. Environmental Protection Agency (EPA) conducted this screening survey as part of an extensive effort to improve OSW's data on hazardous waste facilities.

The primary objective of the 1986 National Screening Survey was to collect sufficient data from every treatment, storage, disposal, and recycling (TSDR) facility in the country so that EPA could select a statistically valid sample of TSDR facilities for a detailed followup survey. Additional goals included the following:

- ° Determine the current addresses and contacts for the nation's TSDR facilities.
- ° Estimate the total quantities of hazardous waste managed at TSDR facilities during 1985.
- ° Identify hazardous waste TSDR processes, their commercial availability, and the general waste types managed at each TSDR facility.

OSW conducted this survey for use in regulatory decision making. We have not attempted to inspect facilities to verify information. However, we did conduct extensive follow-up to clarify and resolve inconsistent responses. We continue to revise the survey database as we get better information.

## FINDINGS

There were approximately 3,000 TSDR facilities that identified themselves as active in 1985. This is somewhat fewer than the number (4,500-5,000) of active facilities in OSW's Hazardous Waste Data Management System (HWDMS). This difference is due to several factors, including:

- ° Some facilities have closed, particularly land disposal facilities that were required to submit permit applications and certifications that they were in compliance with ground-water monitoring and financial assurance certifications by November 8, 1985.
- ° Some facilities are generators rather than TSDR facilities.
- ° Some facilities do not actually handle hazardous waste, or the waste they handle has been delisted.
- ° Some facilities have ceased managing hazardous waste, but have not gone through formal closure.

Approximately 430 facilities indicate they are still placing hazardous waste in their land disposal units. This is fewer than those who have formally applied to continue land disposal operations (around 525 facilities), but generally agrees with the number OSW expects to pursue final permits.

Facilities reported that they manage 247 million metric tons of hazardous waste in units regulated under RCRA. This differs from previous estimates. OSW's last major survey of treatment, storage, and disposal facilities was conducted in 1982. Using that survey, we estimated that a total of 264 million metric tons of hazardous waste was managed in regulated units at treatment, storage, and disposal facilities in 1981. The National Screening Survey estimate of 247 million metric tons should not be compared to the 1981 estimate. There have been major changes in how hazardous waste is generated and managed since 1981. In addition, the questions asked and individuals responding have changed.

Treatment, Storage, Disposal, and Recycling Facilities reported that they manage an additional 322 million metric tons of hazardous waste in units that are exempt from RCRA permitting requirements. The majority of this waste is wastewater treated in tanks that are regulated under the Clean Water Act; however, it does include some waste going to solvent recovery and reuse as fuel. There is no estimate for this quantity of waste managed in exempt units from the 1981 survey because facilities were specifically asked to exclude this quantity from their estimates. Thus, we can not draw conclusions as to whether the quantities of hazardous waste are increasing or decreasing from this survey.

The National Screening Survey should provide us with better estimates than previous data collection efforts because it is more current and it is based on a census rather than a sample of facilities.

#### QUESTIONS ASKED

Appendix A includes a copy of the screening survey. Question 1 asks for the current facility operating status; Questions 2 through 5 ask for various types of hazardous waste quantities; and, Question 6 asks for process and waste type information. All TSDR facilities were also asked to indicate in Question 6 whether or not they offered each hazardous waste management process on a commercial basis.

## RESULTS PRESENTED IN THIS REPORT

The data in Tables 1 through 13 are based only on treatment, storage, disposal, and recycling facilities that were active during 1985. Consequently, some facilities are included because they operated in 1985 even though they have since closed.

All the waste quantities shown are for hazardous waste only. Respondents were asked to categorize various types of hazardous waste in the following ways:

- ° We asked respondents to report wastes that are hazardous under Federal and State regulations separately. Some States have declared additional wastes (not hazardous under Federal regulations) to be hazardous in that State. Unless designated as "Hazardous under State regulations" or "Hazardous under Federal regulations", all quantities reported here include both types of hazardous waste.
- ° We requested data on both RCRA permitted units and units not permitted under RCRA used to manage hazardous waste. "RCRA permitted units" include those for which a RCRA permit is required (although they may have interim status currently). "Units not permitted under RCRA" include those managing hazardous waste but not subject to RCRA permitting requirements such as wastewater treatment in tanks (subject to regulation under the Clean Water Act), solvent recovery, and reuse of waste as fuel.
- ° We asked facilities to designate whether each process was commercially available. For purposes of the screening survey, "commercially available" means the service is provided for a fee or other remuneration to firms under a different ownership than the TSDR facility. Commercial hazardous waste treatment, disposal, storage, or recycling does not have to be the primary activity at a facility for an operation or unit to be considered "commercially available". All facilities fall into one of three groups:
  1. All processes are commercially available but the facility may also generate hazardous waste onsite.
  2. No processes are commercially available; handles no waste commercially.
  3. Some processes are commercially available and some are not. The facility also generates hazardous waste onsite.

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**TABLE 1. QUANTITY OF HAZARDOUS WASTE MANAGED  
BY ACTIVE FACILITIES DURING 1985**  
MILLION METRIC TONS (MMT)

REGULATION	RCRA PERMITTED UNITS	UNITS EXEMPT FROM RCRA PERMITTING REQUIREMENTS <sup>1</sup>
HAZARDOUS UNDER STATE REGULATIONS	4	92
HAZARDOUS UNDER FEDERAL REGULATIONS	243	230
<b>TOTAL</b>	<b>247</b>	<b>322</b>

<sup>1</sup>These units include wastewater treatment in tanks which is regulated under the Clean Water Act, solvent recovery, and reuse of waste as fuel. The majority of this waste is wastewater

**TABLE 2. QUANTITY OF HAZARDOUS WASTE MANAGED BY  
ACTIVE FACILITIES DURING 1985, BY EPA REGION**  
MILLION METRIC TONS

EPA REGION	RCRA PERMITTED UNITS	UNITS EXEMPT FROM RCRA PERMITTING REQUIREMENTS <sup>1</sup>
1	2	5
2	45	20
3	15	56
4	55	24
5	61	68
6	58	91
7	2	4
8	1	3
9	4	39
10	1	10
TOTAL	247	322

NOTE: Quantities may not sum to total due to rounding.

<sup>1</sup>These units include wastewater treatment in tanks which is regulated under the Clean Water Act, solvent recovery, and reuse of waste as fuel. The majority of this waste is wastewater

**TABLE 3. QUANTITY OF HAZARDOUS WASTE MANAGED  
BY ACTIVE FACILITIES DURING 1985, BY COMMERCIAL  
AVAILABILITY OF PROCESSES**  
MILLION METRIC TONS (MMT)

TYPE OF FACILITY	RCRA PERMITTED UNITS	UNITS EXEMPT FROM RCRA PERMITTING REQUIREMENTS <sup>1</sup>
ALL FACILITIES	247	322
FACILITIES WITH AT LEAST ONE COMMERCIAL PROCESS	57	10
FACILITIES WHERE ALL PROCESS OFFERED COMMERCIALY	8	3
FACILITIES WITH NO COMMERCIAL PROCESSES	190	313

<sup>1</sup>These units include wastewater treatment in tanks which is regulated under the Clean Water Act, solvent recovery, and reuse of waste as fuel. The majority of this waste is wastewater



**TABLE 4. QUANTITY OF HAZARDOUS WASTE MANAGED  
BY ACTIVE FACILITIES DURING 1985, BY TYPE OF PROCESS  
MILLION METRIC TONS (MMT)**

<b>PROCESS</b>	<b>HAZARDOUS UNDER FEDERAL REGULATIONS</b>	<b>HAZARDOUS UNDER STATE REGULATIONS</b>
TREATED	205	3
STORED	99	1
DISPOSED	32	1
TREATED IN UNITS EXEMPT FROM RCRA PERMITTING REQUIREMENTS	182	85
RECYCLED IN UNITS EXEMPT FROM RCRA PERMITTING REQUIREMENTS	43	14

**TABLE 5. NUMBER OF ACTIVE FACILITIES DURING 1985, BY EPA REGION**

<b>EPA REGION</b>	<b>TOTAL FACILITIES</b>	<b>COMMERCIAL FACILITIES</b>
1	207	40
2	343	50
3	271	46
4	432	90
5	756	148
6	388	51
7	147	27
8	84	8
9	260	54
10	71	14
<b>TOTAL</b>	<b>2959</b>	<b>528</b>

NOTE: COMMERCIAL FACILITIES INCLUDE THOSE WITH AT LEAST ONE COMMERCIAL TREATMENT, DISPOSAL, STORAGE OR RECOVERY PROCESS

**TABLE 6. NUMBER OF ACTIVE FACILITIES DURING 1985, BY TYPE  
OF TECHNOLOGY**

<b>TECHNOLOGY</b>	<b>ALL FACILITIES</b>	<b>COMMERCIAL FACILITIES</b>
<b>TREATMENT</b>	1,596	205
<b>STORAGE</b>	2,585	400
<b>LAND DISPOSAL</b>	433	58
<b>RECYCLING</b>	846	220

NOTE:1. SOME FACILITIES MAY HAVE MORE THAN ONE PROCESS.

2. WE ARE INVESTIGATING THE DIFFERENCE BETWEEN THE SURVEY RESULTS AND HWDMS  
MOST OF THE DIFFERENCES IS DUE TO FACILITIES DISCONTINUING OPERATIONS.

**TABLE 7. DISTRIBUTION OF ACTIVE FACILITIES BY QUANTITY  
MANAGED IN RCRA PERMITTED UNITS DURING 1985**

<b>QUANTITY MANAGED</b>	<b>NUMBER OF ACTIVE FACILITIES</b>
<100 MT/YR	1,080
100-1000 MT/YR	878
>1000-250,000 MT/YR	916
>250,000-500,000 MT/YR	30
>500,000-1,000,000 MT/YR	26
>1,000,000-5,000,000 MT/YR	23
>5,000,000 MT/YR	6
<b>TOTAL</b>	<b>2959</b>

**TABLE 8. NUMBER OF ACTIVE FACILITIES DURING 1985 WITH  
TREATMENT PROCESSES**

<b>PROCESS</b>	<b>ALL FACILITIES</b>	<b>COMMERCIAL FACILITIES</b>
<b>INCINERATION</b>	189	18 <sup>1</sup>
<b>BIOLOGICAL WASTEWATER TREATMENT</b>	150	16
<b>STEAM STRIPPING</b>	45	11
<b>OTHER WASTEWATER TREATMENT</b>	948	86
<b>SOLIDIFICATION</b>	211	84
<b>TREATMENT IMPOUNDMENT</b>	149	15
<b>OTHER TREATMENT</b>	556	106

**NOTE: SOME FACILITIES HAVE MORE THAN ONE PROCESS.**

<sup>1</sup>May include some planned incinerators.

**TABLE 9. NUMBER OF ACTIVE FACILITIES DURING 1985 WITH STORAGE PROCESSES**

<b>PROCESS</b>	<b>ALL FACILITIES</b>	<b>COMMERCIAL FACILITIES</b>
<b>STORAGE IMPOUNDMENT</b>	<b>222</b>	<b>178</b>
<b>WASTE PILE</b>	<b>55</b>	<b>12</b>
<b>OTHER STORAGE (CONTAINER &amp; TANK)</b>	<b>2,585</b>	<b>400</b>

NOTE: SOME FACILITIES MAY HAVE MORE THAN ONE PROCESS

**TABLE 10. NUMBER OF ACTIVE FACILITIES DURING 1985 WITH  
LAND DISPOSAL PROCESSES**

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<b>PROCESS</b>	<b>ALL FACILITIES</b>	<b>COMMERCIAL FACILITIES</b>
UNDERGROUND INJECTION	79	11
DISPOSAL IMPOUNDMENT	49	10
LANDFILL	101	33
LAND TREATMENT	71	5
WASTEPILE	56	12
STORAGE IMPOUNDMENT	222	17
TREATMENT IMPOUNDMENT	149	15

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NOTE: SOME FACILITIES MAY HAVE MORE THAN ONE PROCESS.

**TABLE 11. NUMBER OF ACTIVE FACILITIES DURING 1985 WITH  
RECYCLING PROCESSES**

<b>PROCESS</b>	<b>ALL FACILITIES</b>	<b>COMMERCIAL FACILITIES</b>
<b>SOLVENT RECOVERY</b>	<b>447</b>	<b>131</b>
<b>REUSE AS FUEL</b>	<b>279</b>	<b>47</b>
<b>OTHER RECYCLING</b>	<b>327</b>	<b>104</b>

NOTE: SOME FACILITIES MAY HAVE MORE THAN ONE PROCESS.



**TABLE 12. QUANTITY OF HAZARDOUS WASTE MANAGED DURING  
1985 BY THE 50 LARGEST ACTIVE FACILITIES USING RCRA  
PERMITTED UNITS  
MILLION METRIC TONS (MMT)**

<b>TOP 100 FACILITIES</b>	<b>REGULATED VOLUME</b>
TOP 10	158 MMT
2nd DECILE	27 MMT
3rd DECILE	14 MMT
4th DECILE	9 MMT
5th DECILE	7 MMT
TOTAL ALL OTHER FACILITIES	32 MMT
TOTAL-ALL FACILITIES	247 MMT

**TABLE 13. - QUANTITY OF HAZARDOUS WASTE MANAGED DURING  
1985 BY ACTIVE FACILITIES AT WHICH ALL PROCESSES ARE  
COMMERCIALY AVAILABLE  
MILLION METRIC TONS (MMT)**

FACILITIES	ALL FACILITIES	COMMERCIAL FACILITIES
RCRA PERMITTED UNITS	247 MMT	7 MMT
UNITS EXEMPT FROM RCRA PERMITTING REQUIREMENTS	322 MMT	3 MMT

**APPENDIX A**  
**SCREENING SURVEY**



## 1986 National Screening Survey of Hazardous Waste Treatment, Storage, Disposal, and Recycling Facilities

### Introduction

The Office of Solid Waste (OSW) of the U.S. Environmental Protection Agency (EPA) is conducting a survey of U.S. hazardous waste treatment, storage, disposal, and recycling facilities. EPA has retained the Research Triangle Institute (RTI) as its survey contractor. Section 3007 of the Resource Conservation and Recovery Act (RCRA) requires your participation in this survey. Please complete and return this questionnaire booklet within 30 days of receiving it.

This survey is being conducted to gather information on the nation's capacity to treat, store, dispose, and recycle hazardous waste. This information will be used to assess the availability of alternatives to land disposal for the waste types scheduled for upcoming land disposal restrictions under the Hazardous and Solid Waste Amendments of 1984 (HSWA). The survey results will also support analyses of future regulatory actions.

EPA is conducting this survey in two parts—a screening survey of all hazardous waste treatment, storage, disposal, and recycling facilities (both onsite and commercial) and a detailed survey of a sample of these facilities. This is the first part, the screening survey questionnaire.

We have identified the facility listed on the label below as a hazardous waste treatment, storage, disposal, or recycling facility for purposes of this survey. We would therefore like this facility to provide the information requested in the brief questionnaire on the following pages.

### What Is This Screening Survey Questionnaire?

This screening survey questionnaire asks for information that will be used to identify and characterize hazardous waste facilities and to determine the size and composition of the sample for the detailed survey. Your timely and accurate responses to this questionnaire will help us reduce the number of facilities required to respond to the detailed questionnaire.

### Who Should Complete the Questionnaire?

This questionnaire should be completed by the person who is most knowledgeable of the hazardous waste treatment, storage, disposal, and recycling operations at this facility. All facilities receiving this questionnaire should complete and return it. Even if operations have temporarily or permanently ceased or if no hazardous waste is treated, stored, disposed, or recycled at this facility, we need your response indicating that this is the case in order to update our records and to get a clearer picture of hazardous waste facilities in the United States.

### How Do I Complete the Questionnaire?

This screening questionnaire booklet contains seven questions. The instructions contain all the information, including definitions of key terms, that you may need to answer the questions. When you have completed the questionnaire and signed and dated the Certification Statement at the end, enclose the questionnaire booklet in the pre-addressed, postage-paid envelope, and drop it in the mail. If you did not receive—or have misplaced—the postage-paid envelope, call the RTI SURVEY HELPLINE (1-800-334-8571) between 9 a.m. and 4 p.m. eastern standard time (EST) and ask for Hall Ashmore.

### What If I Manage Hazardous Waste Facilities at More Than One Location?

If you manage hazardous waste treatment, storage, disposal, or recycling facilities at more than one location, you must complete a screening questionnaire for each of them. Please make sure you have received a questionnaire for each facility you manage. If you have received the wrong number of questionnaires—either too many or too few—call the RTI SURVEY HELPLINE (1-800-334-8571) between 9 a.m. and 4 p.m. EST and ask for Hall Ashmore.

### What If This Facility Does Not Treat, Store, Dispose, or Recycle Hazardous Waste?

Even if this facility no longer treats, stores, disposes, or recycles hazardous waste, or never has, please complete and return this questionnaire. The questionnaire instructions explain which questions to answer; the information you provide on your status as a facility that does not treat, store, dispose, or recycle hazardous waste is important for our analyses.

This questionnaire applies only to the facility listed on this label. Refer to this label for questions on potential future survey-related contacts.

(RTI will place  
facility label here)

## Definitions

*The following definitions have been developed for this survey and apply throughout this questionnaire.*

**IMPORTANT NOTE:** *Treatment, storage, and disposal in surface impoundments and storage in waste piles are among the operations that will be prohibited by the land disposal restrictions under HSWA. For this survey, however, report quantities of hazardous waste treated, stored, or disposed in surface impoundments or stored in waste piles under the appropriate treatment, storage, or disposal categories. Do not report them all under disposal.*

**Commercially Available** Any hazardous waste treatment, storage, disposal, or recycling operation or unit is considered "commercially available" if it is generally offered to other parties NOT UNDER THE SAME OWNERSHIP as this facility. Commercially available operations or units are usually offered for a fee or other remuneration. However, commercially available operations or units INCLUDE those used to recycle (reuse, reclaim, or recover) hazardous waste that has been purchased. Any operation or unit offered ONLY to other parties UNDER THE SAME OWNERSHIP as this facility is NOT considered commercially available. Commercial hazardous waste treatment, storage, disposal, or recycling does not have to be the primary activity at a facility for an operation or unit to be considered "commercially available."

**Disposal** Injecting, dumping, or placing of hazardous waste into or onto any land. For this survey, report only on the following disposal operations: landfills, disposal surface impoundments, land treatment, and injection wells.

**Hazardous Waste** Any waste, including wastewater, defined as hazardous by any federal or state regulation.

**Hazardous Waste Operations** Activities conducted in onsite hazardous waste units to treat, store, dispose, or recycle hazardous waste. DOES NOT INCLUDE shipping waste offsite for treatment, storage, disposal, or recycling at another facility.

**RCRA** The Resource Conservation and Recovery Act of 1976—the federal statute that regulates the treatment, storage, and disposal of hazardous waste. Some states have RCRA statutes as well.

**Recycling** Any reuse, reclamation, or recovery activity conducted in a unit exempt from RCRA permitting requirements to recover material or energy resources from hazardous waste. NOTE: For this survey, some activities that you may commonly call "recycling" should be reported as "treatment" if they are conducted in units regulated under RCRA. See the IMPORTANT NOTE on the top of page 5 for a list of the recycling operations that we would like you to report as exempt from RCRA permitting requirements.

**Storage** The holding of hazardous waste for a temporary period, at the end of which it is treated, disposed, recycled, or stored elsewhere. For this survey, we want you to report two kinds of activities as storage of hazardous waste: (1) the accumulation of hazardous waste in tanks or containers under the federal RCRA 90-day rule and (2) other hazardous waste storage under RCRA. In addition, waste piles are considered storage units.

**Treatment** Any activity designed to change the character or composition of any hazardous waste so as to render it nonhazardous or less hazardous; safer to transport, store, or dispose; amenable for recovery; or reduced in volume. Include quantities of hazardous waste incinerated as treatment in units regulated under RCRA. For this survey, we ask you to report two types of treatment: (1) that conducted in units regulated under RCRA and (2) that conducted in units exempt from RCRA permitting requirements. See the IMPORTANT NOTE at the top of page 5 for a list of treatment units that we would like you to report as exempt from RCRA permitting requirements.

**Units Exempt From RCRA Permitting Requirements** Hazardous waste treatment or recycling operations that do not require permits under RCRA. See the IMPORTANT NOTE at the top of page 5 for a list of operations that we would like you to report as exempt from RCRA permitting requirements. NOTE: Any storage conducted prior to an exempt process is regulated and should be reported as such.



If you need help, call the RTI Survey Helpline (1-800-334-8571) between 9 a.m. and 4 p.m. eastern standard time (EST). Ask for Hall Ashmore.

## Questionnaire

**IMPORTANT:** *Read the definitions of key terms provided on the previous page. Also, read all the instructions (in italics) for each question before answering the question.*

**1. Which of the following best describes the status of the hazardous waste operations at this facility?**

*CIRCLE THE ONE CODE that best describes the current status of hazardous waste operations at this facility. Circle 01 even if operations at this facility have temporarily ceased due to seasonal fluctuations or other reasons. Circle 05 (a) if this facility has not treated, stored, disposed, or recycled hazardous waste since November 19, 1980, when hazardous waste became regulated under RCRA, or (b) if this facility generates, but does not treat, store (except under the federal RCRA 90-day rule), dispose, or recycle hazardous waste.*

- 01** This facility currently treats, stores, disposes, or recycles hazardous waste. *(Read the IMPORTANT NOTE below and then go to Question 2.)*
- 02** This facility is planned or under construction and has not yet opened. *(Read the IMPORTANT NOTE below and then go to Question 2.)*
- 03** At one time this facility treated, stored, disposed, or recycled hazardous waste, but it has ceased ALL such hazardous waste operations and has closed ALL its hazardous waste treatment, storage, disposal, and recycling units. *(Skip to Question 7.)*
- 04** This facility is either (a) a permitted facility that has notified the EPA Regional Administrator that it plans to close ALL its hazardous waste treatment, storage, disposal, or recycling units or (b) an interim status facility that has submitted a closure plan for ALL its hazardous waste treatment, storage, disposal, or recycling units. *(Read the IMPORTANT NOTE below and then go to Question 2.)*
- 05** This facility has not treated, stored, disposed, or recycled hazardous waste since November 19, 1980, when hazardous waste became regulated under RCRA. *(Skip to Question 7.)*

**IMPORTANT NOTE:** *Read this before answering Questions 2, 3, 4, 5, and 6.*

The quantities you report in Questions 2, 3, 4, and 5 and your responses to the matrix in Question 6 should reflect the following items:

- Incineration should be reported as a treatment operation.
- Waste piles should be reported as a storage operation.
- Recycling (reuse, reclamation, or recovery) in REGULATED units should be reported as treatment.
- Recycling (reuse, reclamation, or recovery) in EXEMPT units should be reported as recycling.
- Waste defined as hazardous by the state in which it is generated should be considered hazardous even if it is not defined as hazardous by the state in which it is treated, stored, disposed, or recycled.
- Do not report anywhere in this questionnaire any quantity of nonhazardous waste, even if treated, stored, disposed, or recycled as if it were hazardous.
- Do not report anywhere in this questionnaire any quantity of waste treated in a totally enclosed treatment unit—a treatment unit directly connected to an industrial production process and from which no hazardous waste is released into the environment during treatment.
- Although polychlorinated biphenyls (PCBs) are regulated under the Toxic Substances Control Act, report PCB waste as federal RCRA hazardous waste for this survey.

2. How much waste defined as hazardous by federal or state regulations was TREATED, STORED, OR DISPOSED onsite at this facility during 1985 in units REGULATED UNDER RCRA? What percentage of that waste quantity was waste defined as hazardous by federal RCRA regulations? (Enter a waste quantity in either tons or gallons, circle the appropriate unit of measure, and enter a percentage.)

Report here the TOTAL quantity of waste defined as hazardous by federal or state regulations that entered one or more of this facility's treatment, storage, or disposal units REGULATED UNDER RCRA during 1985. REPORT ONLY ONCE any quantity of hazardous waste that entered more than one type of operation. For example, hazardous waste that was both treated and stored should be reported only ONCE. Similarly, hazardous waste that was treated more than once should be reported only ONCE. Enter zero if no federal or state hazardous waste was treated, stored, or disposed in units REGULATED UNDER RCRA onsite at this facility during 1985.

TOTAL quantity of federal or state hazardous waste TREATED, STORED, OR DISPOSED onsite during 1985 in units REGULATED UNDER RCRA (If none, enter zero.)	Units of measure (Circle one.)		Percentage of waste defined as hazardous by federal RCRA regulations (If none, enter zero.)
	Tons	Gallons	
<input type="text"/>	<input type="text"/> 01	<input type="text"/> 02	<input type="text"/> <input type="text"/> %

3. How much waste defined as hazardous by federal or state regulations was (a) TREATED, (b) STORED, or (c) DISPOSED onsite at this facility during 1985 in units REGULATED UNDER RCRA? (As indicated in the answer space below, report (i) the quantity accumulated in tanks or containers under the federal RCRA 90-day rule and (ii) the quantity stored in other units REGULATED UNDER RCRA. In addition, what percentage of each of these 1985 waste quantities was waste defined as hazardous by federal RCRA regulations? (Enter the waste quantities in either tons or gallons, circle the appropriate unit of measure, and enter the percentages.)

Report here the quantities of waste defined as hazardous by federal or state regulations that entered this facility's treatment units, storage units, or disposal units REGULATED UNDER RCRA during 1985. Enter a zero quantity for any type of hazardous waste operation not onsite.

REPORT ALL HAZARDOUS WASTE THAT ENTERED TREATMENT, STORAGE, OR DISPOSAL OPERATIONS, whether or not it previously or subsequently entered another of those operations. For example, hazardous waste that was both treated and disposed onsite at this facility during 1985 in units REGULATED UNDER RCRA should be reported TWICE—both in (a) "Treated onsite" and in (c) "Disposed onsite." However, hazardous waste that entered more than one type of unit under a single type of hazardous waste operation should be reported only ONCE. For example, hazardous waste that was treated twice—e.g., incineration followed by solidification of residuals—should be reported only ONCE, in (a) "Treated onsite."

Type of hazardous waste operation	Quantity of federal or state hazardous waste TREATED, STORED, OR DISPOSED onsite during 1985 in units REGULATED UNDER RCRA (If none, enter zero.)	Units of measure (Circle one.)		Percentage of waste defined as hazardous by federal RCRA regulations (If none, enter zero.)
		Tons	Gallons	
a. TREATED onsite	<input type="text"/>	<input type="text"/> 01	<input type="text"/> 02	<input type="text"/> <input type="text"/> %
b. STORED onsite				
i. Federal RCRA 90-day rule	<input type="text"/>	<input type="text"/> 01	<input type="text"/> 02	<input type="text"/> <input type="text"/> %
ii. Other RCRA-regulated storage	<input type="text"/>	<input type="text"/> 01	<input type="text"/> 02	<input type="text"/> <input type="text"/> %
c. DISPOSED onsite	<input type="text"/>	<input type="text"/> 01	<input type="text"/> 02	<input type="text"/> <input type="text"/> %

**IMPORTANT NOTE: Read this before answering Questions 4 and 5.**

Report quantities of hazardous waste treated or recycled in the following units as exempt from RCRA permitting requirements:

- **TREATMENT**
  - Elementary neutralization
  - Wastewater treatment in tanks that are regulated under the Clean Water Act.
- **RECYCLING**
  - Solvent recovery (distillation, fractionation, steam stripping)
  - Reuse of hazardous waste as fuel in boilers and industrial furnaces (NOTE: Incineration is treatment in a RCRA-regulated unit.)
  - Any recycling operation that does NOT involve putting hazardous waste onto land.

DO NOT report the following quantities of hazardous waste as exempt from RCRA permitting requirements:

- Any hazardous waste quantities that are exempt for other reasons. DO NOT REPORT these waste quantities anywhere on this questionnaire.
- Any hazardous waste quantity treated or recycled in units exempt from RCRA if it was previously TREATED in a unit that is regulated under RCRA.
- Any hazardous waste treated or recycled in a totally enclosed treatment facility—a unit directly connected to an industrial production process and from which there is no release of hazardous waste into the environment during treatment.
- Any quantity of nonhazardous waste. DO NOT REPORT nonhazardous waste anywhere on this questionnaire.

NOTE: Storage before recycling is a regulated activity and should be reported as such.

4. How much waste defined as hazardous by federal or state regulations was TREATED OR RECYCLED onsite at this facility during 1985 in units EXEMPT FROM RCRA? What percentage of that waste quantity was waste defined as hazardous by federal RCRA regulations? (Enter a waste quantity in either tons or gallons, circle the appropriate unit of measure, and enter a percentage.)

Report here the TOTAL quantity of waste defined as hazardous by federal or state regulations that entered one or more of this facility's treatment or recycling units EXEMPT FROM RCRA during 1985. REPORT ONLY ONCE any quantity of hazardous waste that entered more than one type of operation. For example, hazardous waste that was both treated and recycled should be reported only ONCE. Similarly, hazardous waste that was treated more than once should be reported only ONCE. Enter zero if no federal or state hazardous waste was TREATED OR RECYCLED in units EXEMPT FROM RCRA onsite at this facility during 1985.

TOTAL quantity of federal or state hazardous waste TREATED OR RECYCLED onsite during 1985 in units EXEMPT FROM RCRA (If none, enter zero.)	Units of measure (Circle one.)		Percentage of waste defined as hazardous by federal RCRA regulations (If none, enter zero.)
	Tons	Gallons	
<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	01	02	<input type="text"/> <input type="text"/> <input type="text"/> %

5. How much waste defined as hazardous under federal or state regulations was (a) TREATED or (b) RECYCLED onsite at this facility during 1985 in units EXEMPT FROM RCRA? In addition, what percentage of each of these 1985 waste quantities was waste defined as hazardous by federal RCRA regulations? (Enter the waste quantities in either tons or gallons, circle the appropriate unit of measure, and enter the percentages.)

Report here the individual quantities of waste defined as hazardous by federal or state regulations that entered this facility's treatment units or recycling units EXEMPT FROM RCRA during 1985. Enter a zero quantity for any type of hazardous waste operation not onsite.

REPORT ALL HAZARDOUS WASTE THAT ENTERED TREATMENT OR RECYCLING OPERATIONS, whether or not it previously or subsequently entered the other type of operation. For example, hazardous waste that was both treated and recycled onsite at this facility during 1985 in units EXEMPT FROM RCRA should be reported TWICE—both in (a) "Treated onsite" and in (b) "Recycled onsite." However, hazardous waste that entered more than one unit under a single type of hazardous waste operation should be reported only ONCE. For example, hazardous waste that underwent both cyanide destruction and lime precipitation should be reported only ONCE, in (a) "Treated onsite."

Type of hazardous waste operation	Quantity of federal or state hazardous waste TREATED OR RECYCLED onsite during 1985 in units EXEMPT FROM RCRA (If none, enter zero.)	Units of measure (Circle one.)		Percentage of waste defined as hazardous by federal RCRA regulations (If none, enter zero.)
		Tons	Gallons	
a. TREATED onsite	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	01	02	<input type="text"/> <input type="text"/> <input type="text"/> %
b. RECYCLED onsite	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	01	02	<input type="text"/> <input type="text"/> <input type="text"/> %



6. Indicate the types of hazardous waste treatment, storage, disposal, and recycling units that are onsite at this facility and the types of hazardous waste that can be treated, stored, disposed, or recycled with each.

- Circle codes 01 through 08 in the first row (a) of the matrix to indicate the types of hazardous waste that cannot be treated, stored, disposed, or recycled in any type of unit onsite at this facility.
- Opposite each type of hazardous waste unit listed down the left-hand side of the matrix (rows b through q), circle codes 01 through 08 to indicate the types of hazardous waste that can be treated, stored, disposed, or recycled in each type of unit that is onsite, that has a permit or interim status (where necessary), and that is operational at this facility.
- For each type of unit, circle 09 if there is no unit onsite at this facility, if it is not permitted or interim status (where necessary), or if it is not operational.
- Circle either 10 (YES) or 11 (NO) for each type of onsite unit to indicate whether or not this facility's units are "commercially available."

NOTE: See the definition of "commercially available" on page 2. In addition, "operational" units should include those that are temporarily not operational due to repairs, maintenance, or low demand.

Type of hazardous waste unit	Which of the following types of RCRA-hazardous waste currently are treated, stored, disposed, or recycled onsite at this facility using each type of hazardous waste unit?* (Circle all that apply.)								No units of this type onsite	Are onsite units of this type commercially available?	
	Acidic corrosives (pH < 2)	Metals	Cyanides	Solvents	PCBs	Dioxins	Other halo-generated organics	Other hazardous waste		Yes	No
a. No waste of this type can be treated, stored, disposed, or recycled at this facility	01	02	03	04	05	06	07	08			
<b>Treatment Operations</b>											
b. Liquids incineration	01	02	03	04	05	06	07	08	09	10	11
c. Solids incineration	01	02	03	04	05	06	07	08	09	10	11
d. Wastewater treatment <sup>†</sup>											
i. Biological treatment	01	02	03	04	05	06	07	08	09	10	11
ii. Steam stripping <sup>§</sup>	01	02	03	04	05	06	07	08	09	10	11
iii. Other	01	02	03	04	05	06	07	08	09	10	11
e. Solidification**	01	02	03	04	05	06	07	08	09	10	11
f. Treatment impoundment	01	02	03	04	05	06	07	08	09	10	11
g. Other treatment <sup>‡</sup>	01	02	03	04	05	06	07	08	09	10	11
<b>Storage Operations</b>											
h. Storage impoundment	01	02	03	04	05	06	07	08	09	10	11
i. Waste pile	01	02	03	04	05	06	07	08	09	10	11
j. Other storage	01	02	03	04	05	06	07	08	09	10	11
<b>Disposal Operations</b>											
k. Underground injection	01	02	03	04	05	06	07	08	09	10	11
l. Disposal impoundment	01	02	03	04	05	06	07	08	09	10	11
m. Landfill	01	02	03	04	05	06	07	08	09	10	11
n. Land treatment	01	02	03	04	05	06	07	08	09	10	11
<b>Recycling Operations</b>											
o. Solvent recovery <sup>§§</sup>	01	02	03	04	05	06	07	08	09	10	11
p. Reuse as fuel	01	02	03	04	05	06	07	08	09	10	11
q. Other recycling	01	02	03	04	05	06	07	08	09	10	11

\* These compounds exist in most wastes at very low concentrations. Provide information on them based on what each treatment, storage, disposal, and recycling unit onsite at this facility is "typically" designed to take.

† If this facility's wastewater treatment system includes a treatment impoundment, also circle all the applicable codes opposite treatment impoundment.

§ For this survey, "steam stripping" as a treatment operation is the removal of organic contaminants from a waste using direct or indirect contact steam for the primary purpose of complying with publicly owned treatment works (POTW) or National Pollutant Discharge Elimination System (NPDES) wastewater discharge limitations.

\*\* For this survey, "solidification" includes units sometimes referred to as "fixation" or "stabilization" units.

‡ If the "other treatment" occurs in a treatment impoundment, also circle all the applicable codes opposite treatment impoundment.

§§ For this survey, "solvent recovery" is the removal of organic constituents from waste for the primary purpose of recovering the organic component for reuse. As defined here, "solvent recovery" includes units that are sometimes referred to as "batch distillation" or "fractionation" units. Steam stripping is sometimes used for solvent recovery and should be noted separately from steam stripping as a treatment operation.