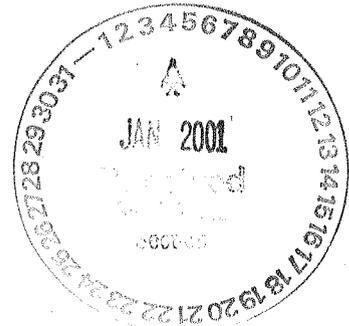


Making  ur mark for you.  
BLUE RIDGE PAPER PRODUCTS INC.

Received 7-3-2000

June 28, 2000

Mr. James Patterson  
Waste Management Specialist  
North Carolina Department of Environment and  
Natural Resources  
Division of Solid Waste  
59 Woodfin Place  
Asheville, North Carolina 28802



Re: 10-Year Solid Waste Management Plan Update – FY 2009/2010

Dear Mr. Patterson:

Per North Carolina House Bill 859, Section 130A-309.09D©, the owner of an industrial solid waste facility must develop a 10-year waste management plan, update it every three years, and provide a report on the implementation of the plan by August 1 of each year. The initial plan was submitted to you July 14, 1997. A comprehensive plan update was completed July 29, 1999.

The purpose of this report is to describe the plan implementation and to update the report as it was submitted on July 29, 1999. The attached document has been revised to reflect the Blue Ridge Paper Products Solid Waste Management Plan through fiscal year 2009/2010.

Should you have any questions regarding the plan, please call me at 828-646-2028.

Sincerely,

  
Jim Giaque

Attachment  
File:lfpln00

Copy: Derric Brown  
Bob Williams

**BLUE RIDGE PAPER PRODUCTS INC  
CANTON MILL**

**SOLID WASTE MANAGEMENT PLAN**

**JULY 1, 1996 – JUNE 30, 2010**

<b>Table of Contents</b>		<b>Page</b>
<b>Introduction</b>		1
<b><u>Part I.</u></b>	<b>Geographic Area and Solid Waste Stream Evaluation</b>	<b>2</b>
	Geographic Area	2
	Waste Stream Evaluation	2
	Paper and Board Production	2
	Process Waste Generation	3
	Asbestos-Containing Material Generation	3
	Non-Process Waste Generation	4
	Hazardous Waste Generation	4
	Total Waste Generation	5
<b><u>Part II.</u></b>	<b>Waste Reduction Initiatives</b>	<b>6</b>
	Source Reduction, Recycling, Reuse & Energy Recovery	6
	Process Waste Management	6
	Recycling, Reuse and Energy Recovery Management	6
<b><u>Part III.</u></b>	<b>Summary</b>	<b>8</b>

<b>APPENDIX</b>		<b>PAGE</b>
<b>Appendix A</b>	General Location Map of Blue Ridge Paper Products Inc, Canton Mill and Landfill Number 6	A-1
<b>Appendix B</b>	Canton Mill Non-Process Solid Waste Program	B-1

## INTRODUCTION

Blue Ridge Paper Products Inc., Canton facility, is a pulp and paper mill that manufactures uncoated paper and bleached paperboard. The Canton Mill was purchased from Champion International Corporation on May 14, 1999. The Canton Mill employs approximately 1,200 people and operates three uncoated paper machines and one paperboard machine around the clock. The four machines produce over 500,000 tons of paper and board each year.

This Solid Waste Management Plan was prepared in accordance with North Carolina General Statute 130A-309.09D (c), as amended in 1996 by the North Carolina General Assembly in HB859. These amendments provide for the owner of an industrial waste landfill to establish a waste management plan with the following components:

1. A waste reduction goal established by the generator.
2. Options for the management and reduction of wastes evaluated by the generator.
3. A waste management strategy, including plans for waste reduction and waste disposal, for the 10-year period covered by the plan.

Through implementation of this comprehensive solid waste management plan, as well as updates that will follow every three years, the Canton Mill provides for the management of solid waste for the next 10 years. The long-range vision of the Canton Mill is to develop and maintain a comprehensive waste management program that provides the necessary disposal capacity, waste collection and transport services, efficient collection and marketing of recyclable materials, and on-going waste reduction capability. Included is improved solid waste cost management in an on-going effort to facilitate the mill's goal of achieving financial viability as a low-cost producer into the 21st Century.

Since 1991, impressive strides have been met at the mill in solid waste reduction. The Canton Mill Modernization Project (CMP), completed in 1994 at a cost of \$330 million, puts the mill on the cutting edge of pollution prevention technology in North America. As a result of this and other mill programs since fiscal year 1989/90 (July 31, 1989 through June 30, 1990), process solid waste generation at the mill has been reduced significantly. Process solid waste was reduced approximately 187,000 tons from 1989/90 to 1998/99, a 43% reduction. Work continues to further enhance in-mill process waste minimization. In-mill recycling of non-process waste streams is dependent upon highly volatile local markets for these materials.

Specific Canton Mill goals for waste management and waste minimization include:

1. To minimize the production of process waste streams (wastewater treatment plant sludge, lime mud, flyash and woodwaste).
2. To further develop an efficient non-process waste stream recycling program.
3. To continue to develop an informed-workplace regarding waste management issues.
4. To increase the efficiency and cost-effectiveness of the solid waste programs.

**PART I**

**GEOGRAPHIC AREA AND SOLID WASTE STREAM EVALUATION**

**GEOGRAPHIC AREA**

This plan provides only for the solid waste streams generated by the Canton Pulp & Paper Mill of Blue Ridge Paper Products Inc., located in Canton, North Carolina, Haywood County. The Canton Mill is located approximately 14 miles west of Asheville, North Carolina. The location of the mill and its associated Blue Ridge Paper Products-owned landfill (Landfill No. 6, Permit No. 44-06), is shown on the map in Appendix A.

**WASTE STREAM EVALUATION**

Four basic types of wastes are generated at the Canton Mill:

**Process Wastes**, including wastewater treatment sludge, lime mud, flyash and woodwaste (note that only process wastes are received at the Canton Mill Landfill No.6);

**Hazardous Wastes**, including paint waste and parts washer degreasers;

**Construction and Demolition Wastes**, including inert bricks, blocks, concrete and wood;

**General Trash**, including office waste and non-recyclables.

Note that many of the materials recycled in the mill, including paper and container board are salvaged and sorted from the general trash waste stream. Some of these materials are recycled through local recycling vendors, as markets allow (discussed below and in Appendix B). Other materials such as clean, unmarketable paper (broke and trimmings), wood fines and polyethylene from depoly, are reused in the process or burned for energy recovery. Recyclable metals are mainly generated from construction and demolition activities, as well as mill maintenance. When appropriate, inert construction and demolition debris have been disposed in a Beneficial Fill in cooperation with Haywood County.

**PAPER AND PAPERBOARD PRODUCTION**

For this study, the basis of Canton Mill waste generation is the annual mill production of paper and board products. Table 1 shows the rate of production by fiscal year from FY 1991-92 through FY 1998-99. The fiscal year estimates are based upon calendar year paper and board production. It should be noted that production has remained consistent throughout the period, with total production exceeding 500,000 tons each year. A slight decrease in production is noticeable in FY 1992-93 due to Canton Modernization Project (CMP) construction activities.

**Table 1 - Canton Mill Paper and Board Production  
Fiscal Year 1991-92 Through Fiscal Year 1998-99 - Tons**

<u>Fiscal Year</u>	<u>Paper and Board Production - Tons</u>
1991-92	569,583
1992-93	520,113
1993-94	514,640
1994-95	558,462
1995-96	548,357
1996-97	551,245
1997-98	567,631
1998-99	578,542

## **PROCESS WASTE GENERATION**

The vast majority of the wastes generated at the Canton Mill are the Process Wastes listed below. These are the waste materials generated through the wood-handling, pulp-making, chemical-recovery and paper-making production processes. These wastes are disposed in the Canton Mill industrial landfill, North Carolina Solid Waste Management Permit No. 44-06. The landfill (Landfill No. 6) is wholly owned, operated and managed by Blue Ridge Paper Products. Wastes are delivered to the landfill from the mill site by truck on a daily basis. A summary of process waste disposal at Landfill No. 6 from FY 1989-90 through FY 1997-98 is shown in Table 2.

**Table 2 - Estimated Process Waste Disposal by Type  
Fiscal Year 1989-90 Through Fiscal Year 1998-99  
Canton Mill Landfill No. 6 (Permit No. 44-06)**

<b>Fiscal Year</b>	<b>WWTP Sludge (Tons)</b>	<b>Lime Mud (Tons)</b>	<b>Boiler Flyash (Tons)</b>	<b>Boiler Cinders (Tons)</b>	<b>Wood Waste (Tons)</b>	<b>Total (Tons)</b>
1989-90	225,916	116,560	72,066	8,940	6,315	429,797
1990-91	230,038	93,775	68,085	7,020	5,670	404,538
1991-92	220,343	96,959	63,727	6,668	1,992	389,689
1992-93	221,599	89,326	60,052	5,475	3,447	379,899
1993-94	149,746	110,092	53,379	6,420	8,596	328,233
1994-95	135,650	88,962	60,944	9,906	7,848	303,310
1995-96	132,935	117,553	71,148	11,943	12,095	345,674
1996-97	142,866	109,810	65,636	10,195	15,428	343,935
1997-98	117,139	99,697	65,880	9,893	19,406	312,015
1998-99	99,620	73,561	60,719	5,701	2,719	242,652

## **ASBESTOS CONTAINING MATERIAL GENERATION**

In addition to the above waste streams, Landfill No. 6 is also permitted to receive for disposal asbestos-containing material (ACM) removed from roofing, pipe insulation, siding and related activities at the mill. The dedicated asbestos disposal area was permitted by the Division of Solid Waste Management on September 27, 1990. Although records are not available for ACM disposal prior to May 1992, a summary of disposal since that time is provided in Table 3. Increases in ACM disposed typically coincide with capital projects, such as the CMP, or work to replace transite siding.

**Table 3 - Total ACM Disposed at Canton Mill Landfill No. 6  
Fiscal Year 1991-92 Through Fiscal Year 1998-99**

<b>Fiscal Year</b>	<b>Total Delivered</b>	
	<b>Pounds</b>	<b>Tons</b>
1991-92	54,100	27
1992-93	379,970	190
1993-94	230,100	115
1994-95	79,240	40
1995-96	339,233	170
1996-97	488,880	244
1997-98	88,440	44
1998-99	86,660	43

No other wastes are permitted for disposal at the Canton Mill No. 6 Landfill. All other waste streams are disposed via the Haywood County Waste Management System, by contractor, reused within the mill, or are recycled.

**NON-PROCESS WASTE GENERATION**

It is estimated that in FY 1991/92, 4% of the total waste stream (process wastes, etc.) consisted of deliveries to the municipal (town of Canton) landfill. The Town of Canton Landfill closed in April of 1994. Since that time, pallets/wood and construction and demolition (C&D) waste have been delivered to the Haywood County Wood Waste Landfill. Regular trash has been taken to the Haywood County Materials Recovery Facility (MRF) for subsequent processing and disposal at the Haywood County White Oak Landfill.

In addition to the above, metal is recycled. Container board, waste white paper (from the paper-making process), and office paper was recycled or disposed at the Haywood County Landfill in FY 1998/99, dependent upon markets for recyclables. A summary of the Canton Mill recycling program is provided in Appendix B. Please note that this information is available by calendar year only. Because these materials were recycled and used in a Beneficial Fill, the tonnage is excluded from the Non-Process Waste Generation.

Given the above, it is estimated that the following volumes of non-process wastes (wastes not disposed in the Canton Mill No. 6 Landfill, including pallets/wood, C&D material and regular trash) were generated by fiscal year.

**Table 4 - Estimated Canton Mill Total Non-process Waste Generation  
Fiscal Year 1991-92 Through Fiscal Year 1998-99**

<b>Fiscal Year</b>	<b>Tons</b>
1991-92	18,050
1992-93	22,650
1993-94	11,859
1994-95	1,938
1995-96	1,563
1996-97	1,522
1997-98	1,614
1998-99	2,152

The significant decrease of approximately 88% (Base year 1991-92) in the non-process waste landfill disposal is due to the completion of the CMP construction and demolition, and the implementation of the recycling program within the mill in 1994.

**HAZARDOUS WASTE GENERATION**

Hazardous wastes are also generated at the Canton Mill and disposed in compliance with Resource Conservation and Recovery Act (RCRA) standards. Hazardous wastes generated at the mill include paint solvents, spent parts washer degreasers, surplus laboratory and process chemicals, and electrical or instrument components. The amount of hazardous waste disposed by fiscal year is shown in Table 5, below.

**Table 5 - Canton Mill Hazard Waste Disposal  
Fiscal Year 1991-92 Through Fiscal Year 1998-99**

Fiscal Year	Total Disposed	
	Pounds	Tons
1991-92	25,426	12.7
1992-93	22,030	11.0
1993-94	22,272	11.1
1994-95	47,640	23.8
1995-96	16,665	8.3
1996-97	18,981	9.5
1997-98	24,871	12.4
1998-99	14,343	7.2

**TOTAL WASTE GENERATION**

Total waste disposed by fiscal year, including process, non-process, and hazardous wastes is provided in Table 6.

**Table 6 - Canton Mill Total Estimated Waste Generation  
Fiscal Year 1991-92 Through 1998-99**

Fiscal Year	Process	Tons Disposed			Total
		Non-Process	ACM	Hazardous	
1991-92	389,689	18,050	27	13	407,779
1992-93	379,879	22,650	190	11	402,730
1993-94	328,233	11,859	115	11	340,218
1994-95	303,310	1,938	40	24	305,312
1995-96	345,674	1,563	170	8	347,415
1996-97	343,935	1,664	244	10	345,711
1997-98	312,015	1,814	44	12	313,685
1998-99	242,652	2,152	43	7	244,854

When compared to the pre-CMP basis year FY 1989-90, a 43% reduction in process wastes has been realized. The generation rate of all mill waste streams has been reduced by capital programs where resource utilization and waste generation were integral components. For example, the CMP (1993) resulted in the production of over 30% less wastewater treatment plant sludge than previously generated.

These aspects of the Canton Mill waste management program will be discussed further in the sections below.

## PART II

### WASTE REDUCTION INITIATIVES

As discussed in the Introduction and detailed in Part I, above, it is the Canton Mill's goal to continue to incorporate into its process the means to reduce the generation of waste at the source. Further waste generation reduction will come from diversions from the various waste streams as a result of recycling efforts, beneficial fills, and by-product use.

Waste reduction rates are calculated for the baseline year 1991-92 through fiscal year 1998-99 as shown in Table 7, below.

**Table 7 - Waste Disposal Rates  
FY 1991-92 Through FY 1998-99**

<b>Fiscal Year</b>	<b>Paper and Board Production - Tons</b>	<b>Total Waste Disposal - Tons</b>	<b>Disposal Rate Per Ton of Production</b>
Baseline year			
1991-92	569,583	407,752	0.716
1992-93	520,113	402,540	0.774
1993-94	514,640	340,103	0.661
1994-95	558,462	305,272	0.547
1995-96	548,357	347,245	0.633
1996-97	551,245	345,711	0.627
1997-98	567,631	313,685	0.553
1998-99	578,542	244,854	0.423

### SOURCE REDUCTION, RECYCLING, REUSE AND ENERGY RECOVERY

#### **Process Waste Management**

At present, greater than 99% of the total waste generated in the Canton Mill consists of process wastes. To date, only major changes to the production process involving capital investment or system retirement have significantly affected the Canton Mill disposal rate. Beyond the source reduction benefits of the Canton Modernization Project, multiple process waste reduction projects have been evaluated, although, to date, none have progressed beyond the conceptual phase. Improvements to the No.19 Paper Machine in the Fall of 1997 resulted in significant reductions to the mill sewer fiber losses, which are reflected in the lower WWTP sludge tonnage in 1997-98 and thereafter.

#### **Recycling, Reuse and Energy Recovery Management**

It is evident from the Canton Mill waste generation history detailed above that continuous source reduction progress is being made with both, process and non-process waste streams. Although not significant by comparison to the tonnage of process wastes disposed at Landfill No. 6, the social and practical importance of the recycling program cannot be overstated. A large portion of in-mill non-process waste is now recycled, reused in the process, or used for energy production, and as a result, a great deal of landfill space, as well as natural resources, is saved. Included are paper broke and trim, wood dust, screen rejects, cores and deploy materials, and mixed metals. Office paper and other materials are recycled as markets allow. Soft markets have reduced the volume of materials recycled since 1997. By weight, 17% of non-process wastes were recycled in 1999.

Further, efficiency and source reduction is planned for the recycling program as the system is expanded throughout the mill and more recyclables captured. Table 8, below, shows the estimated tonnage of waste materials reused in the Canton Mill paper production process, burned for energy recovery, recycled, or used for beneficial fill.

**Table 8 - Total Estimated Tons of Waste Materials Reused in the Canton Mill Process for Paper Production and Energy Recovery, Commercially Recycled, or Used for Beneficial Fill**

	Calcarb <sup>1/</sup>	Broke & Trim <sup>2/</sup>	Wood Dust/ Screen Rejects Cores & Depoly <sup>3/</sup>	Mixed Metal	Container Board	Paper Broke	Office Paper	Beneficial Fill
1991	0	72,200	23,360	NA	---	---	---	---
1992	0	85,402	22,265	NA	---	---	---	---
1993	0	78,564	23,360	NA	---	---	---	---
1994	0	83,595	22,265	874	33	1,002	4	---
1995	1,757	70,423	22,265	1,724	58	728	83	---
1996	2,727	73,031	22,265	5,358 <sup>4/</sup>	63	918	50	17,740
1997	2,289	82,294	22,265	1,277	7	103	9	503
1998	1,364	82,852	22,265	673	---	---	---	---
1999	0	74,280	22,265	498	---	---	---	---

<sup>1/</sup> Marketed agricultural liming product

<sup>2/</sup> Paper reused in the paper making process

<sup>3/</sup> Burned for energy recovery – Dry Tons. Department Estimate.

<sup>4/</sup> Recycled via local recycling firms or by contractor. In 1996, 4,100 tons of metal were recycled by contractor, and 1,258 tons recycled through a local recycler.

NA – Not available

Although not available on a fiscal year basis, the totals in Table 8, above, represent the annual volume of wastes that are diverted from the BRPP landfill or the Haywood County White Oak Landfill. In addition, these materials have maintained a useful life as agricultural lime, fill material, recycling raw material, or energy. No materials are burned without energy recovery, thus lessening our dependence on coal.

Opportunities exist to further reduce the in-mill, non-process waste streams, including the recycling of paper baling wire and additional wooden pallets. In addition, project-based wastes handled by contractors represent an opportunity for increased sorting and recycling prior to disposal.

### PART III

#### SUMMARY

For the purpose of this report, it has been assumed that mill production levels for pulp, paper, paper board, chemical recovery, and energy generation remain relatively constant through the next decade. Likewise, the resultant waste generation and associated waste management described in this document, including recycled materials, beneficial fill disposal, source reduction of process and non-process wastes, and the on-going investigation for further process waste reduction and beneficial reuse, will continue.

To date, greater than 40% of the mass of in-process waste streams has been reduced, and non-process waste streams have been reduced by 88%, illustrating Blue Ridge Paper Product's commitment to solid waste reduction. Given the waste-handling and minimization programs defined herein, the Canton Mill anticipates that the rate of waste generation through June 30, 2010 will remain relatively constant. Waste generation at the Canton mill is heavily dependent upon process waste volume. Further significant decreases to the rate of process waste generation will be dependent upon capital investment at the mill or from other projects. Given the May 1999 acquisition of the Canton Mill by Blue Ridge Paper Products, and the uncertainty of future capital investment, no particular plans are in place at this time to reduce solid waste generation.

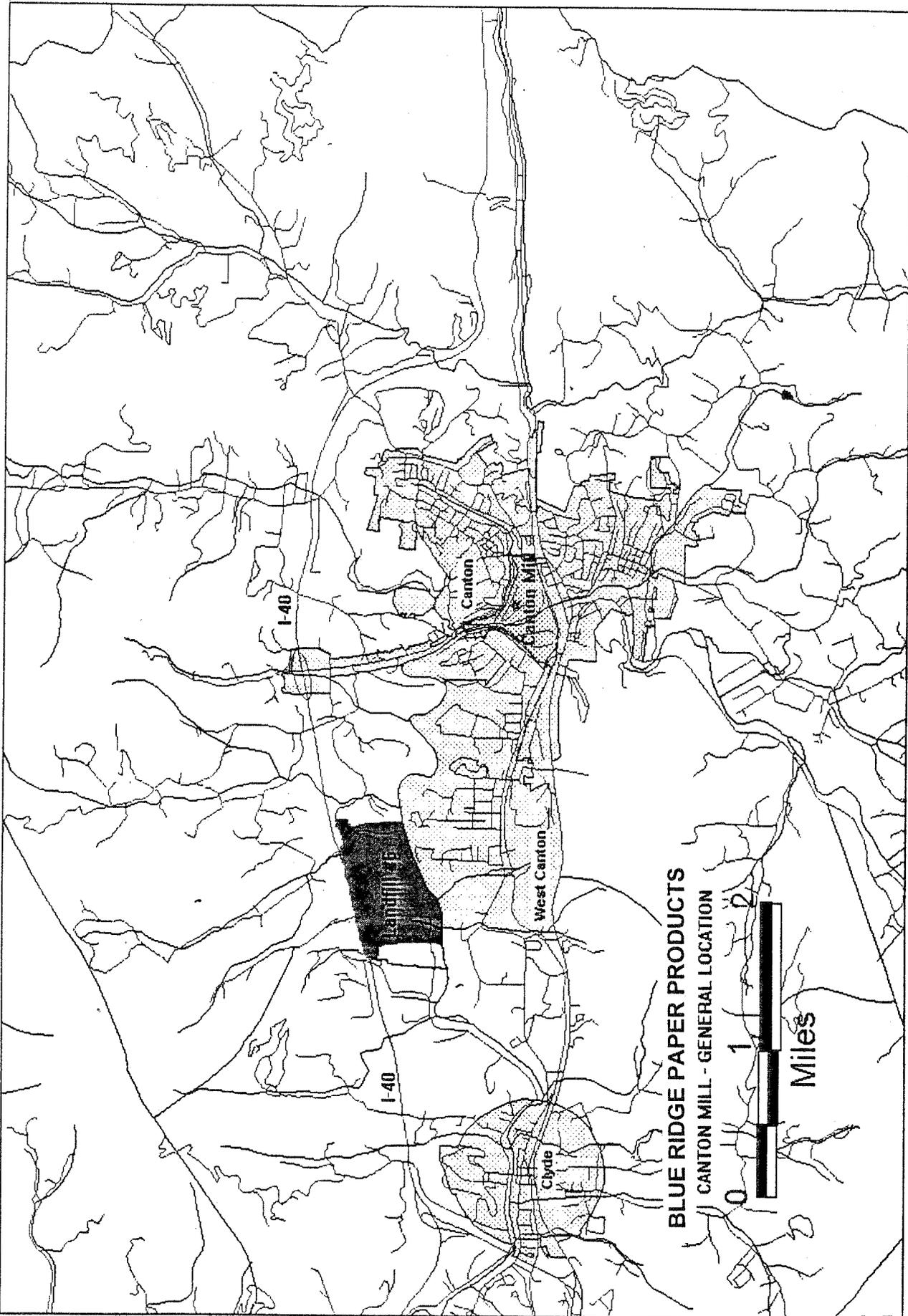
The following table (Table 9) summarizes Canton Mill waste reduction through fiscal year 2005-10.

**Table 9 - Targeted Waste Reduction, FY 2000-04 and FY 2005-10**

	<b>Base Year FY 1991-92</b>	<b>FY 1998-99</b>	<b>FY 2000-04</b>	<b>FY 2005-10</b>
Production or Anticipated Production of Paper & Board	569,583	578,542	565,000	565,000
Targeted Disposal Rate Per Ton of Production	0.716	0.423	0.500	0.500
Total Waste Disposed, Waste Disposal Goal	407,752	244,854	282,500	282,500
% Reduction from Baseline	---	-40.0%	-30.7%	-30.7%

Waste generation is monitored regularly so that annual updates to the waste management system are possible. An updated plan will be completed every three years and made available to the Solid Waste Section, with reports outlining the plan implementation completed by August 1 of each year. Any significant revisions to the Canton Mill capital plan for the years 2000-2010 will be represented in future waste reduction goal annual updates.

# APPENDIX A



**BLUE RIDGE PAPER PRODUCTS**

CANTON MILL - GENERAL LOCATION

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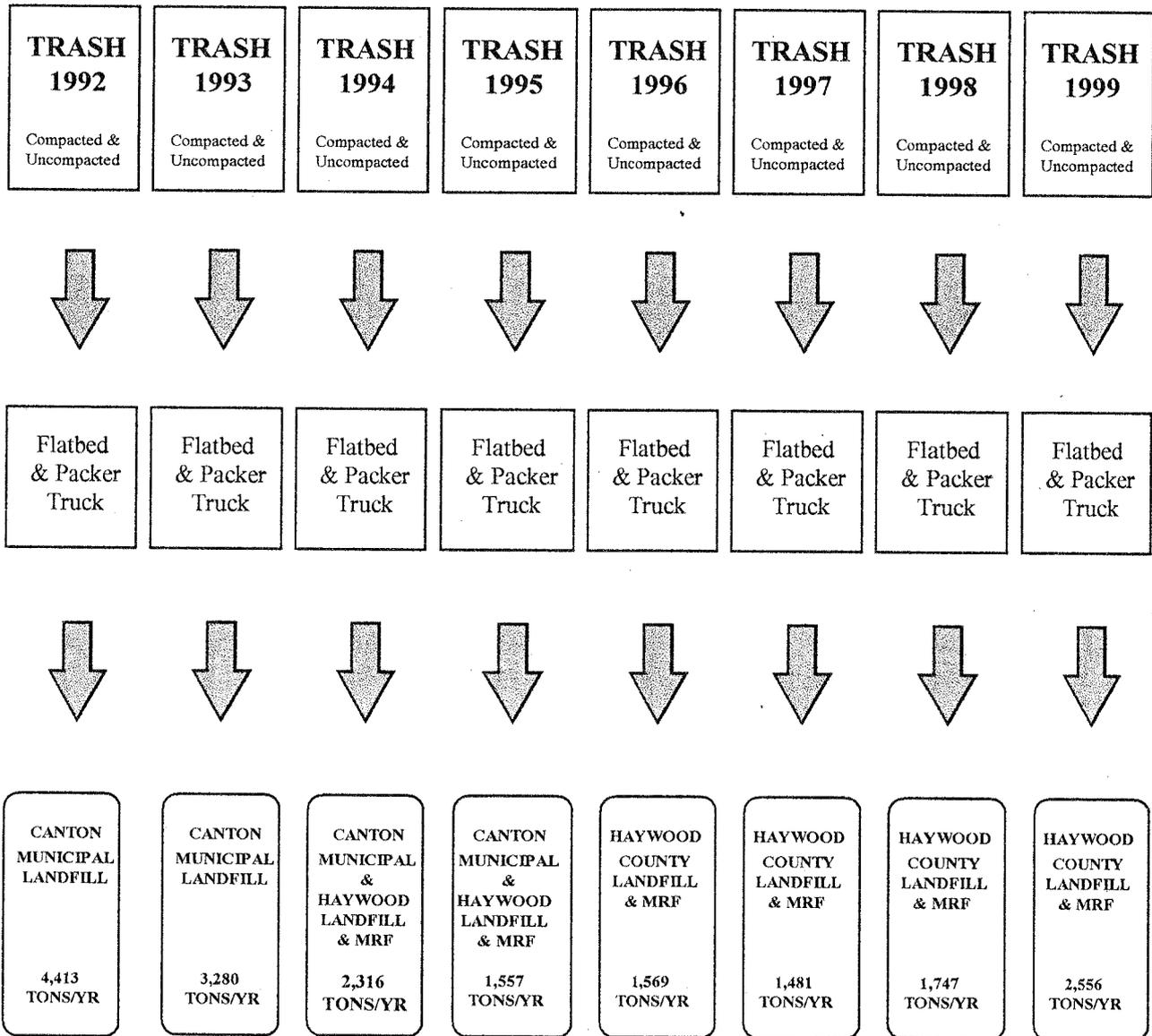
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# APPENDIX B

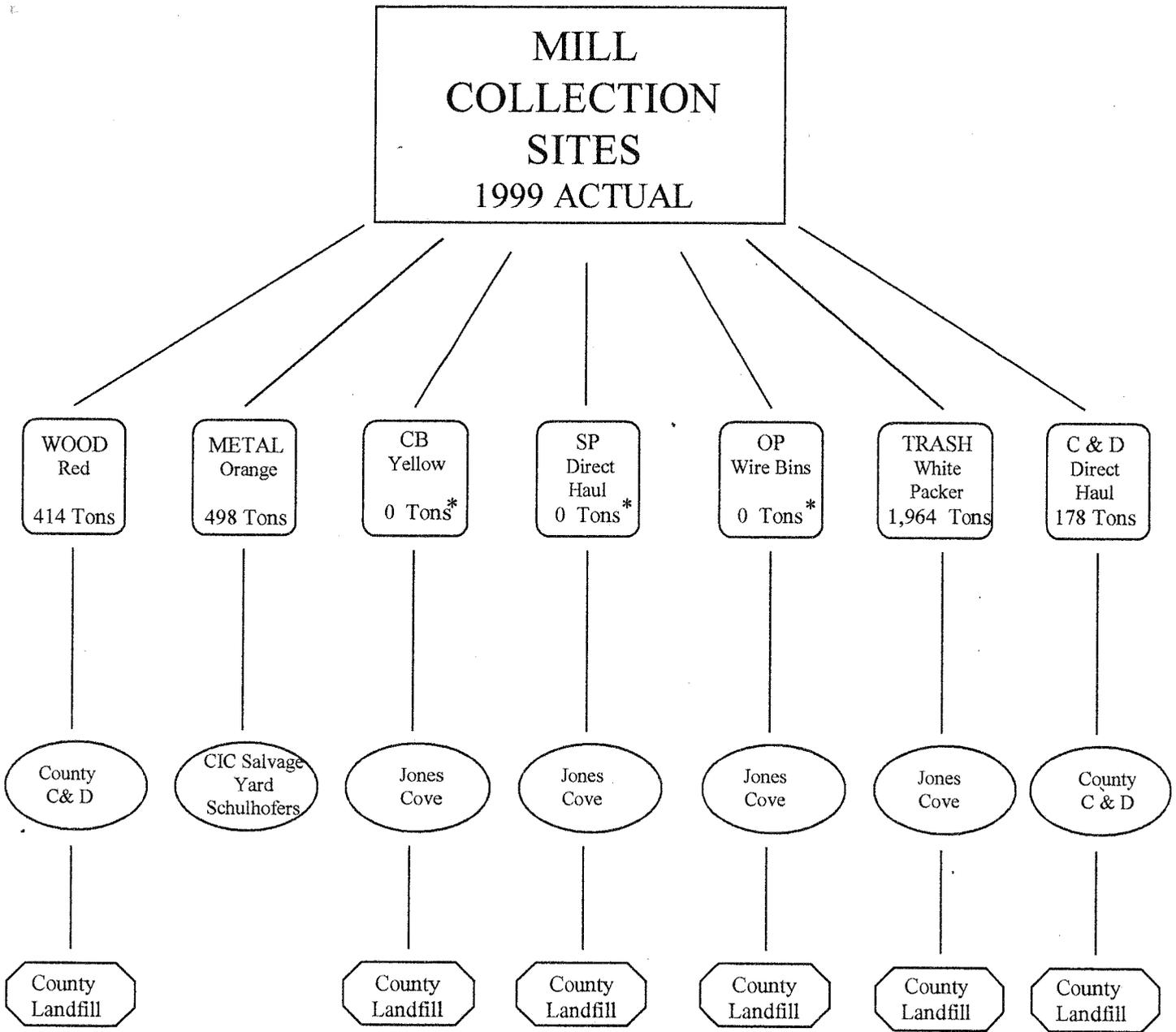
**SOLID WASTE  
MANAGEMENT  
PROGRAM  
1999**

*BLUE RIDGE PAPER PRODUCTS, INC.  
CANTON MILL*

# IN-MILL SOLID WASTE PROGRAM -TRASH 1992 - 1999



# BLUE RIDGE PAPER PRODUCTS, INC. - CANTON MILL NON-PROCESS SOLID WASTE PROGRAM



C & D = Construction and Demolition Waste

OP = Office Paper

CB = Cardboard

SP = Scrap Paper

Wood = Pallets + Clean Wood

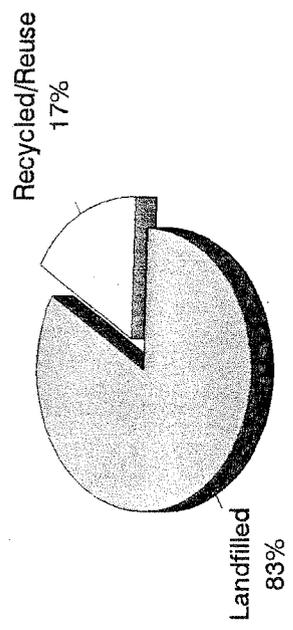
Red, Orange, Yellow and White represent the color of each bin by material type.

Schulhofers and Jones Cove are recycling destinations.

\* Paper waste products, including cardboard, office paper and other scrap paper, were disposed in county landfill due to lack of recycling markets in the region.

# 1999 - DISPOSAL BY FINAL DESTINATION & SOURCE CANTON MILL - TONS

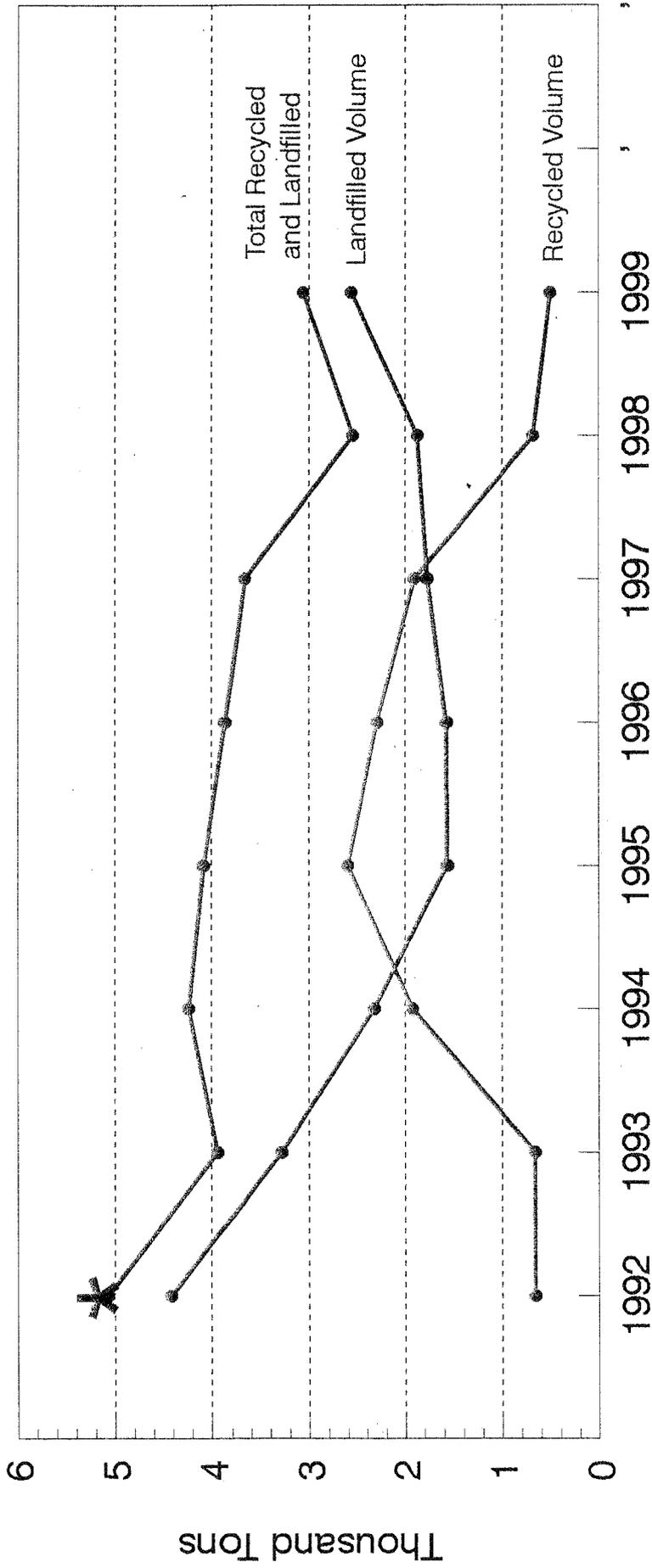
Destination	Contract Rolloffs (TONS)	Canton Mill (TONS)	Total (TONS)	%
Landfilled	272	2,556	2,828	83%
Recycled/Reuse	--	498	498	15%
Beneficial Fill	--	--	0	0%
Ash Hopper Demolition - Recycled	--	75	75	2%
<b>Total Tons</b>	<b>272</b>	<b>3,129</b>	<b>3,401</b>	
	8%	92%		



# 1999 - DISPOSAL BY WASTE TYPE AND SOURCE CANTON MILL - TONS

Source	Wood (TONS)	C & D Beneficial (TONS)	C & D Landfill (TONS)	Trash (TONS)	Metal (TONS)	Paper (TONS)	Total (TONS)	%
Contract Rolloffs	--	--	--	272	--	--	272	8%
Canton Mill	414	--	178	1,964	498	0	3,054	90%
Ash Hopper Demolition - Contract	--	--	--	--	75	--	75	2%
<b>Total Recycle / Beneficial Fill</b>	<b>--</b>	<b>0</b>	<b>--</b>	<b>--</b>	<b>573</b>	<b>0</b>	<b>573</b>	<b>17%</b>
<b>Total Landfilled</b>	<b>414</b>	<b>--</b>	<b>178</b>	<b>2,236</b>	<b>--</b>	<b>--</b>	<b>2,828</b>	<b>83%</b>
<b>TOTAL TONS</b>	<b>414</b>	<b>0</b>	<b>178</b>	<b>2,236</b>	<b>573</b>	<b>0</b>	<b>3,401</b>	<b>100%</b>
	12%	0%	5%	66%	17%	0%	100%	

# 1992 - 1999 TOTAL SOLID WASTE LANDFILLED & RECYCLED CANTON MILL



- Total Recycled and Landfilled
- Landfilled Volume
- Recycled Volume

\* = Estimated      0 = Actual

# CANTON MILL NON-PROCESS SOLID WASTE COUNTY LANDFILL DISPOSAL

1992 - 1999

