



BLUE RIDGE
PAPER PRODUCTS INC.

*Received
7/18/02*

June 17, 2002

Mr. James Patterson
Waste Management Specialist
North Carolina Department of Environment and
Natural Resources
Division of Solid Waste
852 Merriman Avenue
Asheville, North Carolina 28804



Re: 10-Year Solid Waste Management Plan Update – FY 2011/2012

Dear Mr. Patterson:

Per North Carolina House Bill 859, Section 130A-309.09D(c), 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 July 14, 1997.

The purpose of this report is to describe plan implementation and to update the report as it was submitted on June 20, 2001. The attached document has been revised to reflect the Blue Ridge Paper Products Solid Waste Management Plan through fiscal year 2011/2012. Since June 30, 2001, significant strides have been made to reduce the volume of hazardous waste generation, and increase the in-mill recycling rate. This progress will be detailed in the fiscal year 2001/2002 plan.

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

Sincerely,


Jim Giaouque

Attachment
File:lfpln02

Copy: Derric Brown
Bob Williams

175 Main Street • P.O. Box 4000
Canton, North Carolina 28716
Phone: 828-646-6700 • Fax: 828-646-6892

Raising Your Expectations

**BLUE RIDGE PAPER PRODUCTS INC
CANTON MILL**

SOLID WASTE MANAGEMENT PLAN

AUGUST 1, 2002 – JUNE 30, 2012

Table of Contents		Page
Introduction		1
<u>Part I.</u>	Geographic Area and Solid Waste Stream Evaluation	2
	Geographic Area	2
	Waste Stream Evaluation	2
	Paper and Board Production	2
	Process Waste Generation	3
	Asbestos-Containing Material Generation	4
	Non-Process Waste Generation	4
	Hazardous Waste Generation	5
	Total Waste Generation	6
<u>Part II.</u>	Waste Reduction Initiatives	7
	Source Reduction, Recycling, Reuse & Energy Recovery	7
	Process Waste Management	7
	Recycling, Reuse and Energy Recovery Management	7
<u>Part III.</u>	Summary	9

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

INTRODUCTION

Blue Ridge Paper Products Inc.'s, 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 1,100 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 paperboard 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.

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 175,000 tons from 1989/90 to 2000/01, a 40.7% 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 and regional 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, cinders, 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

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

Process Wastes, including wastewater treatment sludge, lime mud, flyash, cinders 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;

Recyclable Materials, including metal, various grades of paper, wood, cardboard, etc.;

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 1989-90 through FY 2000-01. 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 1989-90 Through Fiscal Year 2000-01 - Tons**

Fiscal Year	Paper and Board Production – Tons
1989-90	579,935
1990-91	572,696
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
1999-00	562,807
2000-01	540,030

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 2000-01 is shown in Table 2.

**Table 2 - Estimated Process Waste Disposal by Type
Fiscal Year 1989-90 Through Fiscal Year 2000-01
Canton Mill Landfill No. 6 (Permit No. 44-06)**

Fiscal Year	WWTP Sludge (Tons)	Lime Mud (Tons)	Boiler Flyash (Tons)	Boiler Cinders (Tons)	Wood Waste (Tons)	Total (Tons)
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
1999-00	106,188	86,036	59,806	6,060	641	258,731
2000-01	110,707	82,931	53,620	6,344	1,224	254,826

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 operations and maintenance 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 2000-01**

	<u>Total Delivered</u>	
Fiscal Year	Pounds	Tons
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
1999-00	155,560	78
2000-01	17,240	9

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 were recycled or disposed at the Haywood County Landfill in FY 2000-01, 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. Based on the above information, 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 2000-01**

Fiscal Year	Tons
1991-92	18,050
1992-93	22,650
1993-94	11,859
1994-95	1,938
1995-96	1,563
1996-97	1,608
1997-98	1,756
1998-99	2,348
1999-00	2,096
2000-01	1,422

The significant decrease of approximately 92% (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 Hazardous Waste Disposal
Fiscal Year 1991-92 Through Fiscal Year 2000-01**

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
1999-00	13,611	6.8
2000-01	12,828	6.4

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 2000-01**

Fiscal Year	Tons Disposed				Total
	Process	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	1,608	244	10	345,747
1997-98	312,015	1,756	44	12	313,827
1998-99	242,652	2,348	43	7	245,050
1999-00	258,731	2,096	78	7	260,912
2000-01	254,826	1,422	9	6	256,263

When compared to the pre-CMP basis year FY 1989-90, a 40.7% 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 2000-01 as shown in Table 7, below.

**Table 7 - Waste Disposal Rates
FY 1991-92 Through FY 2000-01**

Fiscal Year	Paper and Board Production - Tons	Total Waste Disposal - Tons	Disposal Rate Per Ton of Production
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	345,797	0.627
1997-98	567,631	313,827	0.554
1998-99	578,542	245,050	0.423
1999-00	562,807	260,912	0.464
2000-01	540,030	256,263	0.475

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, 40% of non-process wastes were recycled in 2001.

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 ^{1/}	Broke & Trim ^{2/}	Wood Dust/ Screen Rejects Cores & Depoly ^{3/}	Mixed Metal	Container Board	Paper Broke	Office Paper	Beneficial Fill
1991	---	72,200	20,259	NA	---	---	---	---
1992	---	85,402	21,516	NA	---	---	---	---
1993	---	78,564	55,158	NA	---	---	---	---
1994	---	83,595	38,779	874	33	1,002	4	---
1995	1,757	70,423	42,942	1,724	58	728	83	---
1996	2,727	73,031	72,687	5,358	63	918	50	17,740
1997	2,289	82,294	139,911	1,277	7	103	9	503
1998	1,364	82,852	143,684	673	---	---	---	---
1999	---	74,280	79,991	498	---	---	---	---
2000	---	86,782	49,195	587	46	378	---	---
2001	---	84,460	31,589	429	---	551	---	---

^{1/} Marketed agricultural liming product

^{2/} Paper reused in the paper making process

^{3/} Burned for energy recovery – Dry Tons.

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 beneficial purpose 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 92%, 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, 2012 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 process solid waste generation.

The following table (Table 9) summarizes Canton Mill waste reduction through fiscal year 20011-12.

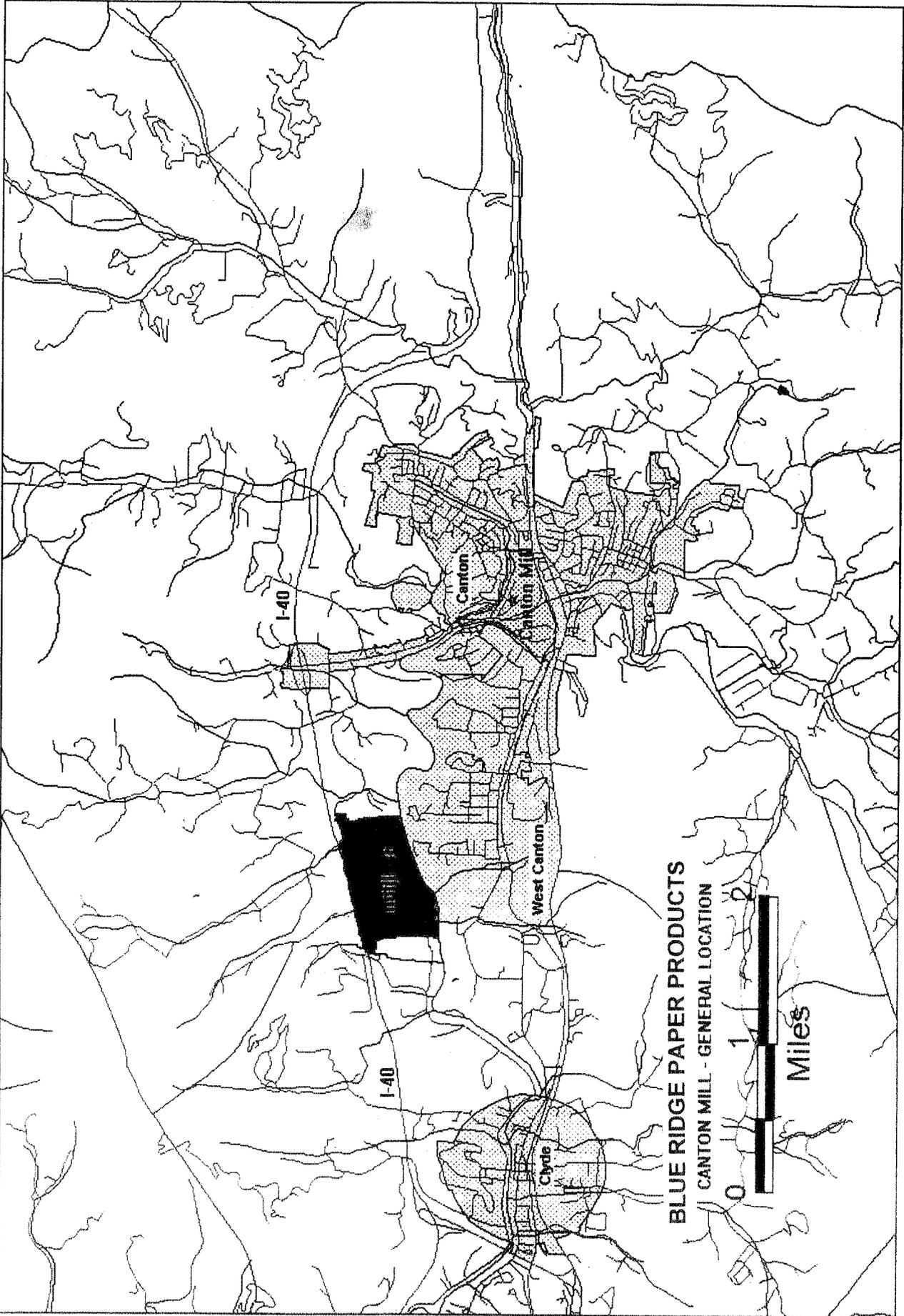
Table 9 - Targeted Waste Reduction, FY 2002-06 and FY 2007-12

	Base Year			
	FY 1991-92	FY 2000-01	FY 2002-06	FY 2007-12
	Actual Tons	Actual Tons	Targeted Tons	Targeted Tons
Production or Anticipated Production of Paper & Board	569,583	540,030	565,000	565,000
Targeted Disposal Rate Per Ton of Production	0.716	0.475	0.500	0.500
Total Waste Disposed, Waste Disposal Goal	407,752	256,263	282,500	282,500
% Reduction from Baseline	---	-37.2%	-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 2002-2012 will be represented in future waste reduction goal annual updates.

APPENDIX A

APPENDIX B



BLUE RIDGE PAPER PRODUCTS

CANTON MILL - GENERAL LOCATION

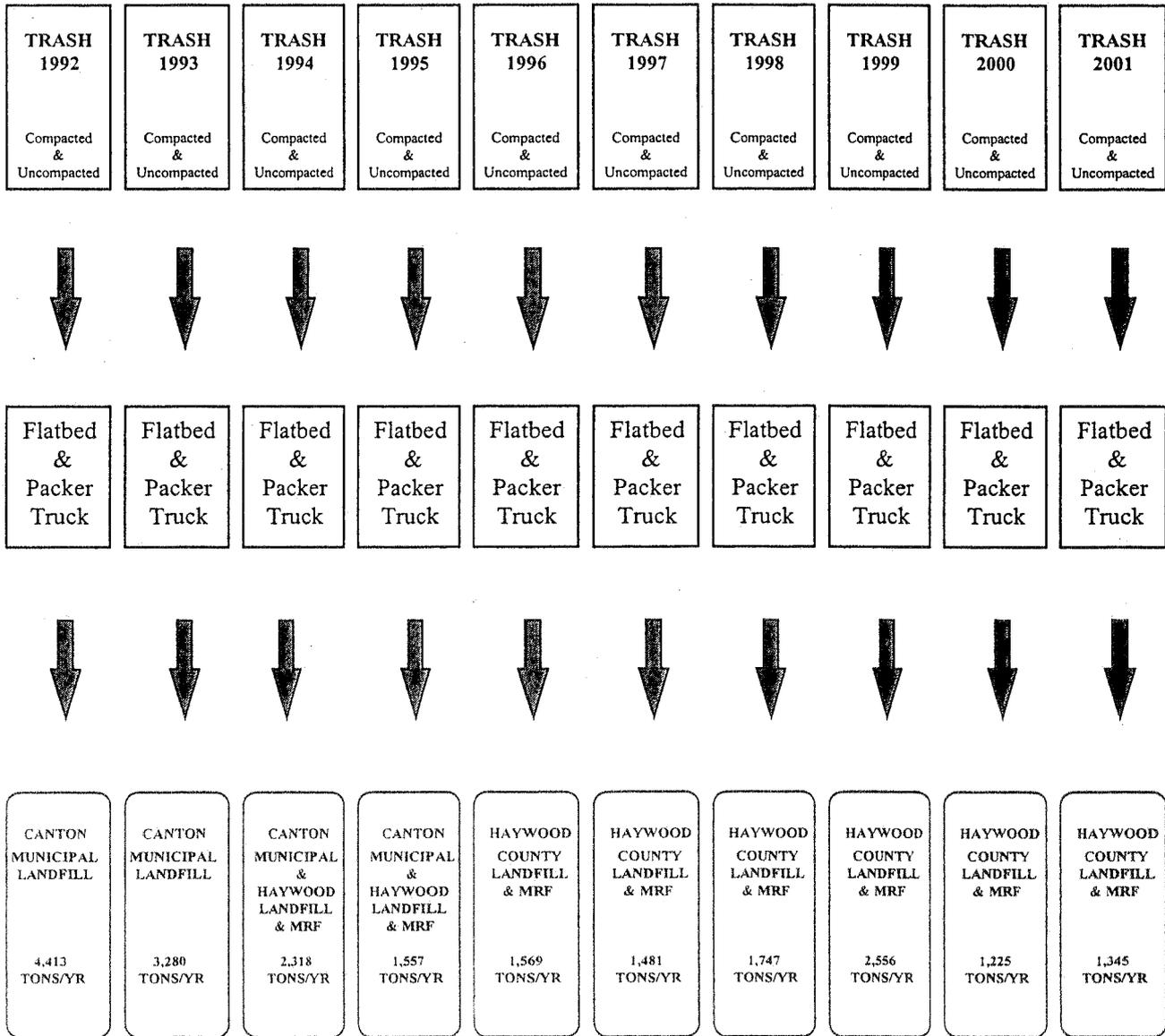


Miles

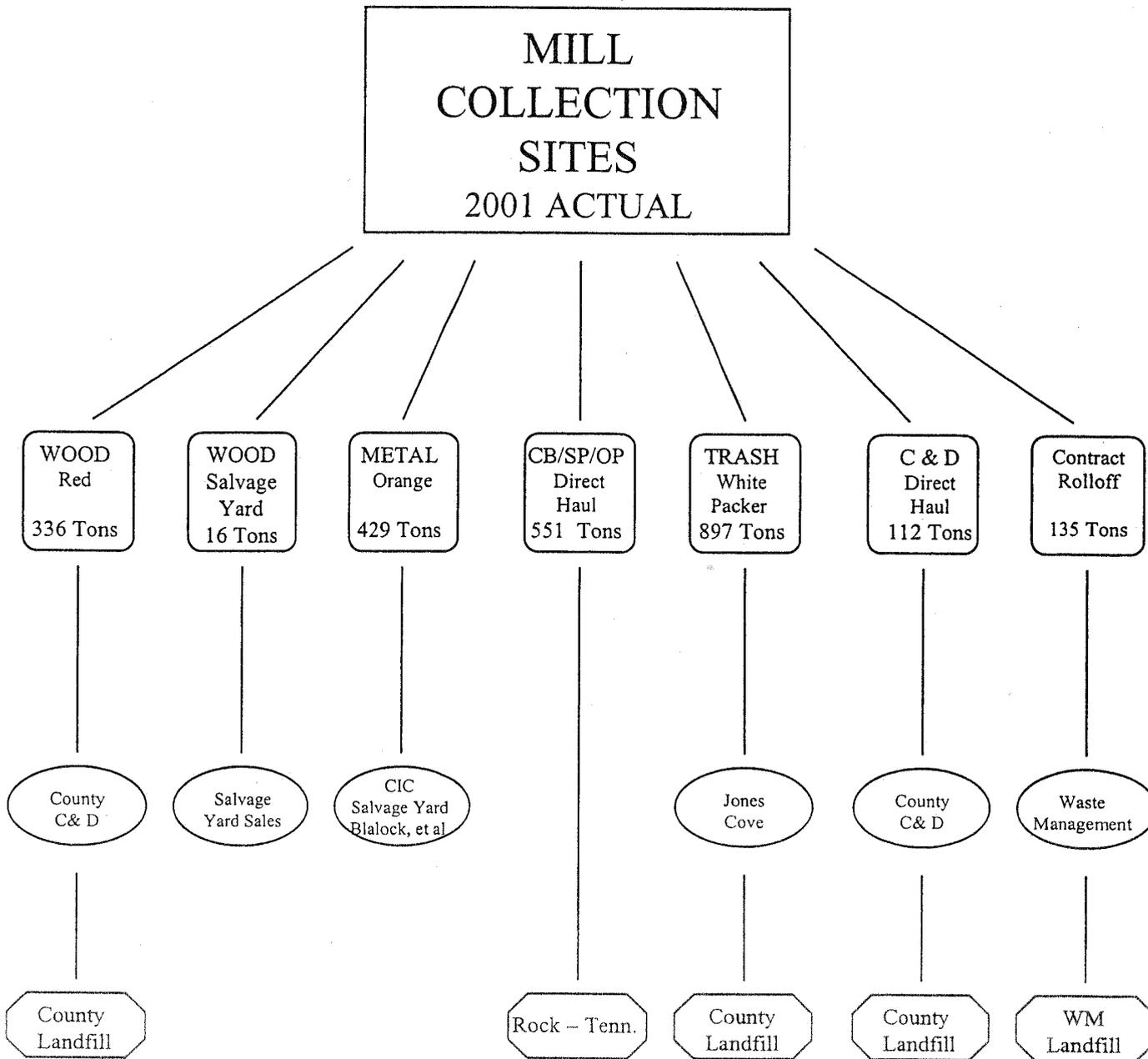
**SOLID WASTE
MANAGEMENT
PROGRAM
2001**

*BLUE RIDGE PAPER PRODUCTS INC.
CANTON MILL*

IN-MILL SOLID WASTE PROGRAM -TRASH 1992 - 2001



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

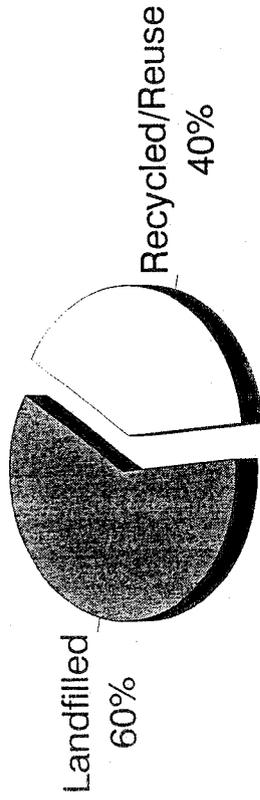
Wood = Pallets + Clean Wood

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

Jones Cove is the Haywood County Materials Recycling Facility (MRF).

2001 - DISPOSAL BY FINAL DESTINATION & SOURCE CANTON MILL - TONS

<u>Destination</u>	Contract Rolloffs (TONS)	Canton Mill (TONS)	<u>Total</u> (TONS)	%
Landfilled	135	1,345	1,480	60%
Recycled/Reuse	--	996	996	40%
Beneficial Fill	--	0	0	0%
Total Tons	135	2,341	2,476	



2001 - DISPOSAL BY WASTE TYPE AND SOURCE CANTON MILL - TONS

<u>Source</u>	C & D		Trash (TONS)	Metal (TONS)	Paper (TONS)	Total (TONS)	%
	Wood (TONS)	Beneficial (TONS)					
Contract Rolloffs	--	--	135	--	--	135	5%
Canton Mill	352	112	897	429	551	2,341	95%
Total Recycle / Beneficial Fill	16	--	--	429	551	996	40%
Total Landfilled	336	112	1,032	--	--	1,480	60%
TOTAL TONS	352	0	1,032	429	551	2,476	100%
	14%	0%	42%	17%	22%	100%	

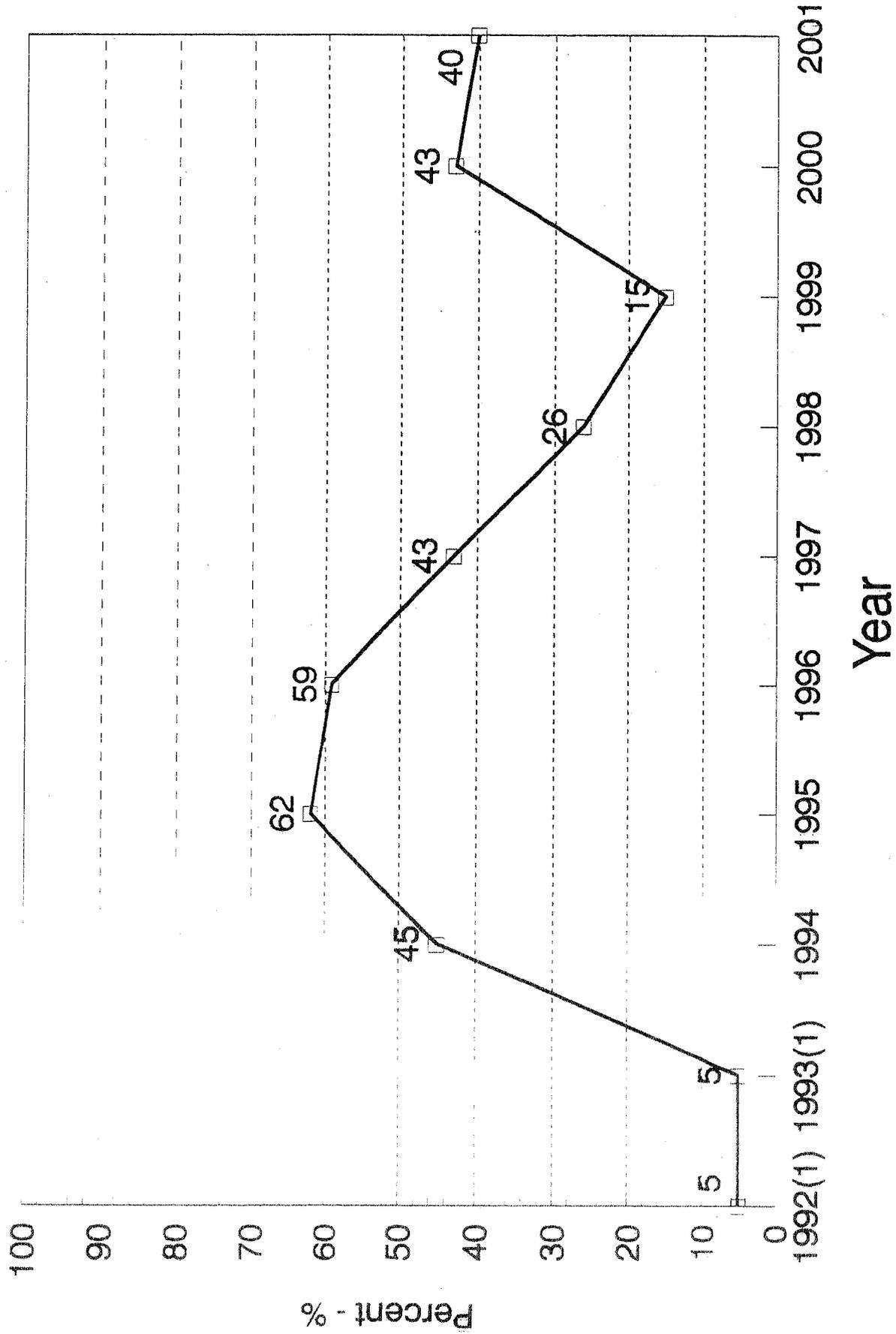
1992 - 2001 TOTAL SOLID WASTE LANDFILLED & RECYCLED CANTON MILL



- Total Recycled and Landfilled
- Landfilled Volume
- Recycled Volume

* = Estimated

PERCENT OF TOTAL NON-PROCESS WASTE RECYCLED - BY WEIGHT



(1) Estimated Salvage Yard material only - Recycling program initiated in 1994.

CANTON MILL NON-PROCESS SOLID WASTE DISPOSED IN COUNTY LANDFILL

1992 - 2001

