



North Carolina Department of Environment and Natural Resources

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Division of Waste Management

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July 26, 2012

Jim Giauque  
Blue Ridge Paper Products Inc.  
PO box 4000  
Canton, NC 28716

SUBJECT: Solid Waste Management Plan Three Year Update  
Blue Ridge Paper Products Inc., Haywood County  
Permit #44-06-INDUS

Dear Mr. Giauque:

The Solid Waste Section has completed the compliance review of the 10-year comprehensive solid waste management plan update for Blue Ridge Paper Products Inc. which covers FY 2011-2022 in accordance with General Statute 130A-309.09D.

At this time the plan is considered complete. If you have any questions, please contact me by telephone at (828) 299-4700 or e-mail [andrea.keller@ncdenr.gov](mailto:andrea.keller@ncdenr.gov).

Sincerely,

Environmental Senior Specialist  
Solid Waste Section

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**BLUE RIDGE PAPER PRODUCTS INC  
CANTON MILL**

**SOLID WASTE MANAGEMENT PLAN**

**AUGUST 1, 2011 – JUNE 30, 2022**

<b>Table of Contents</b>		<b>Page</b>
<b>Executive Summary</b>		1
General Components		1
Goal		2
Planning Elements, as Applicable		2
<b>Introduction</b>		4
<b><u>Part I.</u></b>	<b>Geographic Area and Solid Waste Stream Evaluation</b>	6
	Geographic Area	6
	Waste Stream Evaluation	6
	Paper and Board Production	6
	Process Waste Generation	7
	Asbestos-Containing Material Generation	8
	Non-Process Waste Generation	9
	Hazardous Waste Generation	10
	Total Waste Generation	11
<b><u>Part II.</u></b>	<b>Waste Reduction Initiatives</b>	12
	Source Reduction, Recycling, Reuse & Energy Recovery	12
	Process Waste Management	12
	Recycling, Reuse and Energy Recovery Management	13
<b><u>Part III.</u></b>	<b>Summary &amp; Targeted Waste Reduction</b>	15

<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

## **Executive Summary**

### **General Components**

- 10-year time frame – The 10 year solid waste plan described in detail in the following pages covers the period from August 1, 2011 through June 30, 2022, updating the plan previously submitted in 2009. The generation of the various waste streams is detailed in Part I of the report.
- Good faith effort to achieve North Carolina waste reduction goal – Continuous effort has been placed upon the reuse and minimization of both process and non-process wastes generated by the mill. The vast bulk of wastes produced by the Blue Ridge Paper Products Inc., dba Evergreen Packaging, Canton Mill (Canton Mill), are process-related wastes, and, as a result, the volume generated is a direct function of the pulp and paper production levels.
- Comply with State comprehensive solid waste management plan – Mill process engineering and environmental personnel are tasked with the goal of constantly evaluating strategies and technologies for improving the efficiency of operations, which can result in improved waste generation. Improvements can be made through:
  - Incorporation of new technologies
  - Major capital projects
  - Normal process system maintenance

Positive strides continue to be made in the recycling of non-process wastes, with a total of 83% by weight recycled in 2011.

- Process descriptions – Waste generation processes are described in Part I of the report.
- Solid waste management cost description – The costs associated with waste generation and management are not detailed in the report.

- Private enterprise facilities and other resources – Process wastes are managed through delivery and disposal at the Canton Mill’s company-owned landfill #6 (Permit #44-06). Non-process recyclables are reused in the mill or are recycled via private companies. Non-recyclables are disposed at the Haywood County Landfill or by private waste-management companies.

## Goal

- Per unit waste reduction goal – This report compares the waste reduction goal to Canton Mill paper and paperboard production (as apposed to a municipal per-capita statistic).
- 10-year waste reduction goal -- Waste reduction goals are established for the 10-year period and provided in Part III. The targeted disposal rate per ton of production is 0.500 tons of process and non-process waste per ton of paper and paper board production. The actual rate for FY 2010-11 was 0.605 tons of waste per ton of production.
- Waste management strategy – As noted above, no significant capital projects are planned that would reduce process waste generation. Significant strides have been made reducing the generation of non-process wastes. In FY 2010-11 the mill generated 94% less non-process waste than during the base year FY 1991-92 due to source reduction and recycling. The mill will continue the strategy of improving production efficiency throughout the planning horizon of this report.

## Planning Elements (as applicable)

- Reduction at the source – Source reduction of process wastes is a function of the mill’s capital equipment and production capability. Large outlays of capital are required to significantly reduce the generation of waste per unit of production. No significant capital improvements are planned at this time. Note, however that maintenance projects are ongoing throughout the mill, which enhance the mill’s waste generation efficiency.
- Recycling and reuse – A full description of the Canton Mill’s recycling and reuse of non-process materials is provided within the report, as well as Appendix B.

- Disposal capacity – Process wastes are delivered to the Canton Mill Number 6 Landfill. As of February 26, 2012, the date of the most recent flyover survey, the landfill had developed and permitted space of approximately 705,000 cubic yards. It is projected that the landfill's undeveloped/un-permitted space is approximately 4,060,000 cubic yards. At the current process generation rate, the landfill capacity will be reached in the year 2031.
- Special waste – no municipal-type or other special wastes are generated by the mill. All wastes are discussed within the report.
- Purchasing Recycled Products – The Canton Mill does not purchase post-consumer recycled products for use in the production process, *per se*. Certain grades of market pulp with recycled fiber, however, are used to produce paper product grades that require a recycled content by the customer.

## **INTRODUCTION**

Blue Ridge Paper Products Inc, dba Evergreen Packaging's (BRPP) 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. On July 31, 2007, BRPP was purchased by Rank Corporation, and is presently a division of Evergreen Packaging. The parent company of the Canton Mill remains Blue Ridge Holding Corporation, based in Memphis, Tennessee. The Canton Mill employs approximately 950 people and operates three uncoated paper machines and one paperboard machine around the clock. The four machines produce approximately 600,000 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 (owner).
2. Evaluation of options for the management and reduction of wastes.
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 generation was reduced by approximately 92,000 tons from 1989/90 to 2007/08, a 21.4% reduction. This is due primarily to capital improvements that have improved the efficiency of the pulp and paper making process. Note, however, that slight increases in mill production since 2004-05 have resulted in greater generation of process wastes. 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.

Several studies were initiated in 2008 to evaluate the feasibility of process waste alternative uses, including the land application of wastewater treatment plant sludge, and the use of lime as an agricultural liming product. It was concluded that the land application of sludge was not feasible due to insufficient availability of land meeting regulatory criteria within an economic haul distance. The agricultural use of lime was also limited by land availability and the economies of hauling to regional markets. Studies continue to evaluate measures to minimize the generation of process wastes within mill operations.

It should be recognized that the Canton Mill is an industrial complex that employs the sulfate pulping process to create bleached wood fiber for the manufacturer of various grades of bleached paper and paperboard products. Inherent in this process is the generation of waste

water treatment plant sludge, excess lime, boiler fly ash, cinders, and wood waste. These process wastes comprise over 99% of the total wastes generated by the mill, and are totally dependent upon the mill production rate.

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

1. Minimize the production of process waste streams (wastewater treatment plant sludge, lime mud, flyash, cinders, and woodwaste).
2. Further develop an efficient non-process waste stream recycling program.
3. Continue to develop an informed-workplace regarding waste management issues.
4. 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., dba Evergreen Packaging, 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) are 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 and asbestos containing material (ACM) are permitted to be received at the Canton Mill Landfill No.6);

**Hazardous Wastes**, including paint waste and laboratory waste;

**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 or national recycling vendors, as markets allow (discussed below and in Appendix B). Other materials such as clean, unmarketable paper (broke and trimmings), and wood fines, are reused in the process or burned for energy recovery. Polyethylene generated in the Depoly process, is also recycled through a national vendor. For the purpose of this report, other materials such as turpentine, and some "broke" paper (paper not sellable for its intended end use due to defects or damage) are considered by-products of the process, sold to outside markets, and not reported as waste materials. 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, or with private individuals.

## **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 2010-11. 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 can be seen in FY 1992-93 and FY 1993-94 due to Canton Modernization Project (CMP) construction activities.

**Table 1 - Canton Mill Paper and Board Production  
Fiscal Year 1989-90 Through Fiscal Year 2010-11 - Tons**

**Paper and Board**

<b>Fiscal Year</b>	<b>Production – Tons</b>
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
2001-02	561,271
2002-03	577,219
2003-04	566,646
2004-05	573,285
2005-06	598,426
2006-07	599,206
2007-08	590,257
2008-09	586,812
2009-10	591,959
2010-11	604,501

### **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. Each of these materials 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 history at Landfill No. 6 from FY 1989-90 through FY 2010-11 is shown in Table 2.

**Table 2 - Estimated Process Waste Disposal by Type  
Fiscal Year 1989-90 Through Fiscal Year 2010-11  
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
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
2001-02	101,603	79,090	51,812	5,756	0	237,261
2002-03	103,972	96,772	40,434	6,753	192	248,123
2003-04	106,346	104,516	42,504	6,382	2,476	262,224
2004-05	109,992	109,065	50,509	5,599	3,016	278,181
2005-06	115,281	120,492	62,110	6,274	357	304,514
2006-07	119,448	136,924	51,769	7,030	1,154	316,325
2007-08	127,640	144,761	53,565	9,439	2,618	338,023
2008-09	177,506	175,542	58,005	8,982	3,108	423,143
2009-10	169,524	156,903	55,074	7,572	4,946	394,019
2010-11	150,238	146,694	57,039	6,097	4,421	364,489

**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, and siding derived from 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, or work to replace roofing, pipe insulation, or transite siding.

**Table 3 - Total ACM Disposed at Canton Mill Landfill No. 6  
Fiscal Year 1991-92 Through Fiscal Year 2010-11**

Fiscal Year	<u>Total Delivered</u>	
	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
2001-02	67,540	34
2002-03	16,120	8
2003-04	87,060	44
2004-05	86,126	43
2005-06	272,840	136
2006-07	6,020	3
2007-08	18,960	9
2008-09	27,200	14
2009-10	13,217	7

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. After that time, pallets/wood and construction and demolition (C&D) waste were delivered to the Haywood County Wood Waste Landfill. The Haywood County Wood Waste Landfill closed in late 2002, at which time non-recyclable wood, pallets, and C & D waste were delivered to the Haywood County White Oak Landfill. Regular trash is 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. Containerboard, waste white paper (from the paper-making process), and office paper were primarily recycled, or disposed at the Haywood County Landfill in FY 2010-11, dependent upon the condition of the material. The total volume of non-process wastes delivered to the White Oak Landfill has continued to decline, due primarily to an increase in the volume of paper products removed from the general mill waste stream and recycled, or re-used in the mill papermaking process.

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 2010-11**

<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	1,608
1997-98	1,756
1998-99	2,348
1999-00	2,096
2000-01	1,422
2001-02	1,329
2002-03	1,134
2003-04	1,129
2004-05	2,308
2005-06	1,328

2006-07	1,126
2007-08	1,679
2008-09	1,467
2009-10	1,155
2010-11	1,028

FY 2010-11 non-process waste volume generated is only 5.7% of the amount generated in base year 1991-92 due to the continued implementation of the recycling program begun in 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 primarily include paint solvents, paint waste solids, 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 2010-11**

<b>Fiscal Year</b>	<b>Total Disposed</b>	
	<b>Pounds</b>	<b>Tons</b>
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
2001-02	9,651	4.8
2002-03	1,029	0.5
2003-04	1,958	1.0
2004-05	1,048	0.5
2005-06	860	0.4
2006-07	1,055	0.5
2007-08	17,468	8.7
2008-09	2,195	1.1
2009-10	1,886	0.9
2010-11	2,005	1.0

It is anticipated that painting and laboratory wastes will generally be the largest component of hazardous waste in the future, the volume of which will be driven by architectural painting/coating requirements. The increase for 2007-08 was due to a one-time generation of off-specification used oil from the cleaning of several bulk used oil storage tanks.

## **TOTAL WASTE GENERATION**

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

**Table 6 - Canton Mill Total Estimated Waste Generation  
Fiscal Year 1991-92 Through 2010-11**

<b>Fiscal Year</b>	<b>Tons Disposed</b>				<b>Total</b>
	<b>Process</b>	<b>Non-Process</b>	<b>ACM</b>	<b>Hazardous</b>	
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
2001-02	237,261	1,329	34	5	238,629
2002-03	248,123	1,134	8	1	249,266
2003-04	262,224	1,110	44	1	263,396
2004-05	278,181	2,308	43	1	280,533
2005-06	304,514	1,328	136	1	305,979
2006-07	316,325	1,126	3	1	317,455
2007-08	338,023	1,679	9	9	339,720
2008-09	423,143	1,467	14	1	424,625
2009-10	394,019	1,155	7	1	395,182
2010-11	364,489	1,028	13	1	365,531

When compared to the basis year FY 1991-92, a 10% reduction in Canton Mill waste generation has been realized in FY 2010-11. Capital programs have reduced the generation rate of all mill waste streams where resource utilization and waste generation were integral components. For example, the CMP (1993) resulted in a greater than 30% reduction in the production of wastewater treatment plant sludge than previously generated, and significant fiber loss reductions were realized by the Number 19 Paper Machine rebuild in 1999, as reflected in the lower WWTP sludge tonnage in 1997-98 and thereafter.

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 waste generation 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 2010-11 as shown in Table 7, below.

**Table 7 - Waste Disposal Rates  
FY 1991-92 Through FY 2010-11**

<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	345,797	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
2001-02	561,271	238,603	0.425
2002-03	577,219	249,266	0.432
2003-04	566,646	263,396	0.465
2004-05	573,285	280,533	0.489
2005-06	598,426	305,979	0.511
2006-07	599,206	317,455	0.530
2007-08	590,257	339,720	0.576
2008-09	586,812	424,625	0.724
2009-10	591,959	395,182	0.668
2010-11	604,501	365,531	0.605

**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 Canton Mill capital improvement programs discussed above, multiple process waste reduction projects have been evaluated, although, to date, none have progressed beyond the conceptual phase.

**Recycling, Reuse and Energy Recovery Management**

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 large volume of public and private landfill space, as well as natural resource use, is saved. Included are paper broke and trim, wood dust, screen rejects, cores and deploy materials, and mixed metals. Capital improvements in the Depoly process have helped reclaim fiber for reuse in paper production, as is evidenced by the Broke & Trim total for 2003 through 2011 (Table 8). Office paper and other materials are recycled through a contract agreement with a recycler. By weight, 83% of non-process wastes were recycled in 2011.

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	---	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	---	---
2002	---	99,479	30,895	518	31	766	59	---
2003	---	96,851	47,371	532	---	748	---	136
2004	---	90,526	46,525	679	47	873	10	68
2005	---	103,200	42,955	590	212	2,064	---	84
2006	---	101,136	47,602	370	---	913	---	63
2007	---	110,163	47,918	547	---	560	---	89
2008	---	109,914	44,421	912	6	688	---	157
2009	---	99,577	29,543	584	204	684	542	220

2010	---	95,271	38,475	901	93	498	551	---
2011	---	95,032	50,032	819	1	3,667	---	105

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

<sup>2/</sup> Paper reused in the paper making process as apposed to being sold outside or landfilled.

<sup>3/</sup> Burned for energy recovery – Dry Tons. Excludes depoly after 2001, which is now sold to outside vendors.

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 on site 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 market pulp baling wire and additional wooden pallets. In addition, project-based wastes handled by contractors represent an opportunity for increased sorting and recycling and less co-mingling of waste prior to disposal.

### **PART III**

#### **SUMMARY & TARGETED WASTE REDUCTION**

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.

Based upon FY 2010-11, the annual generation of in-process waste streams has been reduced by approximately 10%, and non-process waste streams have been reduced by approximately 94% since FY 1991-92, 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, 2022 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.

The following table (Table 9) summarizes Canton Mill waste reduction goals through fiscal year 2021-22.

**Table 9 - Targeted Waste Reduction, FY 2012-16 and FY 2017-22**

	<b>Base Year FY 1991-92 Actual Tons</b>	<b>FY 2010-11 Actual Tons</b>	<b>FY 2012-16 Targeted Tons</b>	<b>FY 2017-22 Targeted Tons</b>
Production or Anticipated Production of Paper & Board	569,583	604,501	590,000	590,000
Targeted Disposal Rate Per Ton of Production	0.716	0.605	0.500	0.500
Total Waste Disposed, Waste Disposal Goal	407,752	365,531	295,000	295,000
% Reduction from Baseline	---	-10.4%	-27.7%	-27.7%

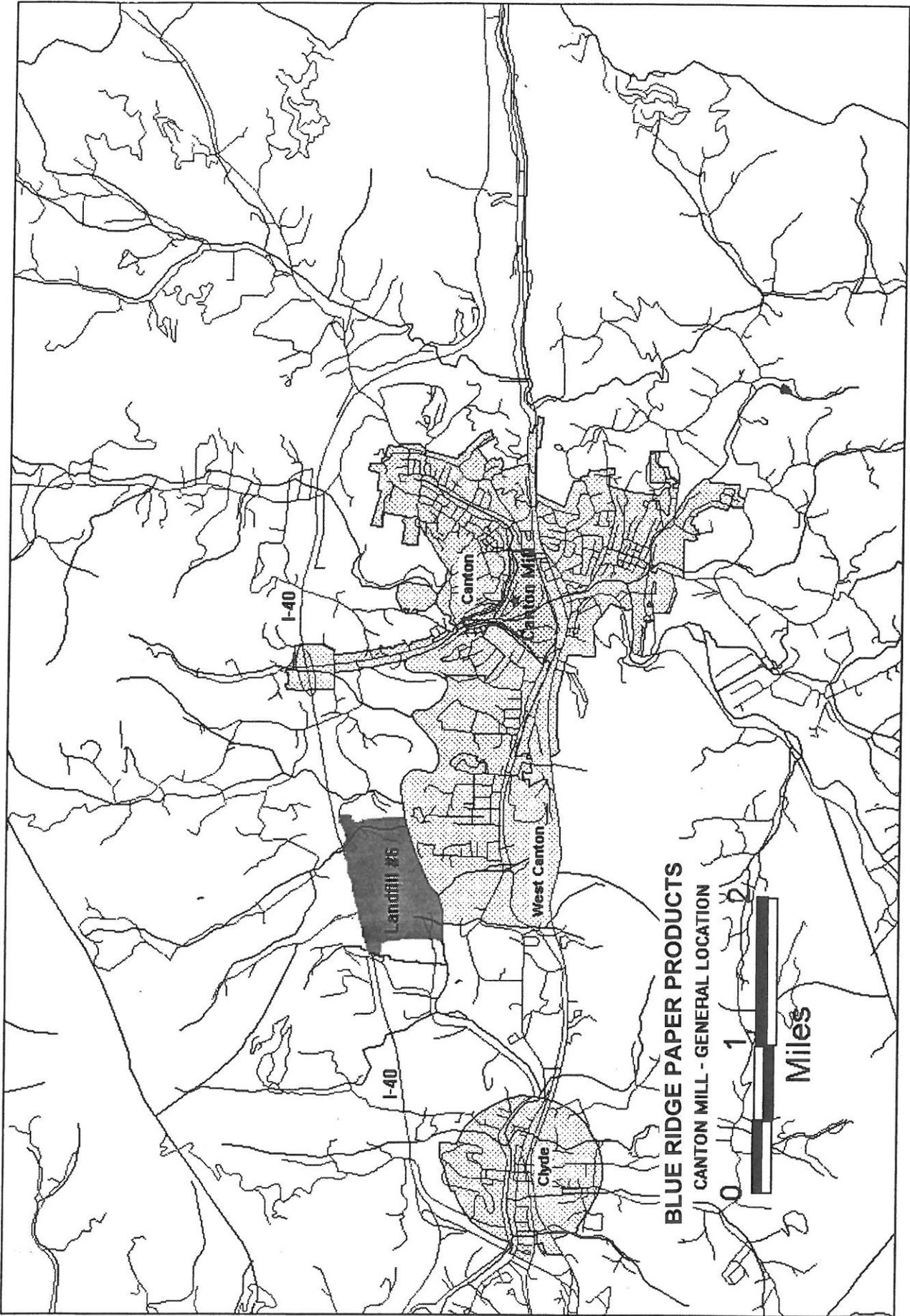
Waste generation is monitored regularly so that annual updates to the waste management system are possible. An updated plan will be completed every three years and made available to the Solid Waste Section, with reports outlining the plan implementation completed by August 1 of each year. Any significant revisions to the Canton Mill capital plan for the years 2012-2022 will be represented in future waste reduction goal annual updates.

# APPENDIX A

A-1

# APPENDIX B

**B-1**



**BLUE RIDGE PAPER PRODUCTS**

| CANTON MILL - GENERAL LOCATION

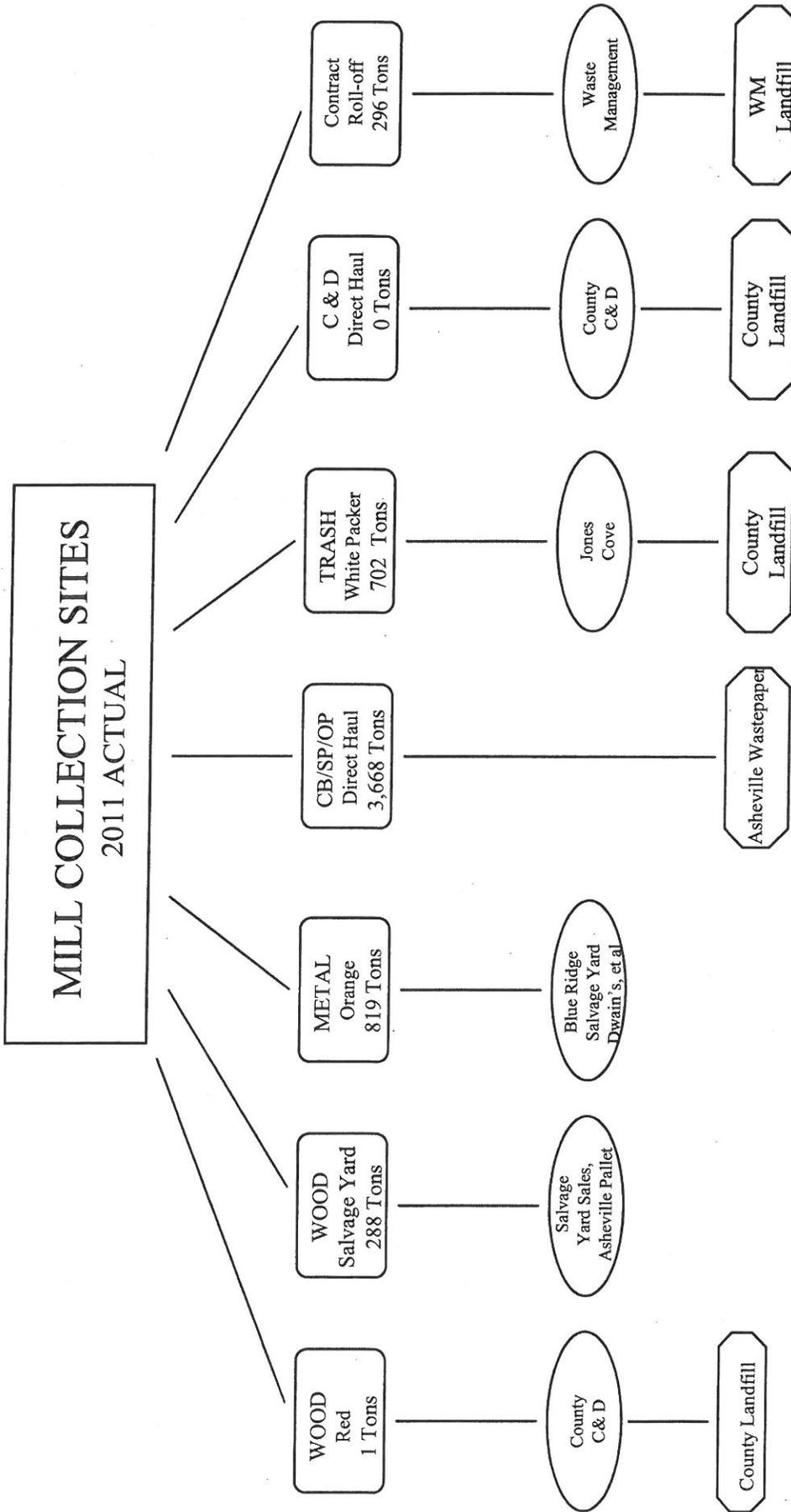


Miles

**SOLID WASTE  
MANAGEMENT  
PROGRAM  
2011**

*BLUE RIDGE PAPER PRODUCTS INC  
CANTON MILL*

# 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).

# 1994 - 2011 NON-PROCESS Solid Waste Summary (TONS)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>RECYCLED</b>																		
Metal	874	1724	1256	1126	673	498	587	429	518	532	679	590	370	547	912	594	901	819
Pallets / Wood							30	16	22	67	60	456	517	324	320	320	320	288
Cardboard	33	58	63	7			46		31	*	47	212	*	*	6	204	93	1
Paper Broke	1002	728	918	103			378	551	766	748	873	2064	913	560	688	684	498	3667
Office Paper	4	83	50	9					59	*	10					542	551	
<b>TOTAL RECYCLED</b>	<b>1913</b>	<b>2593</b>	<b>2287</b>	<b>1245</b>	<b>673</b>	<b>498</b>	<b>1041</b>	<b>996</b>	<b>1396</b>	<b>1347</b>	<b>1669</b>	<b>3322</b>	<b>1800</b>	<b>1431</b>	<b>1926</b>	<b>2344</b>	<b>2363</b>	<b>4775</b>

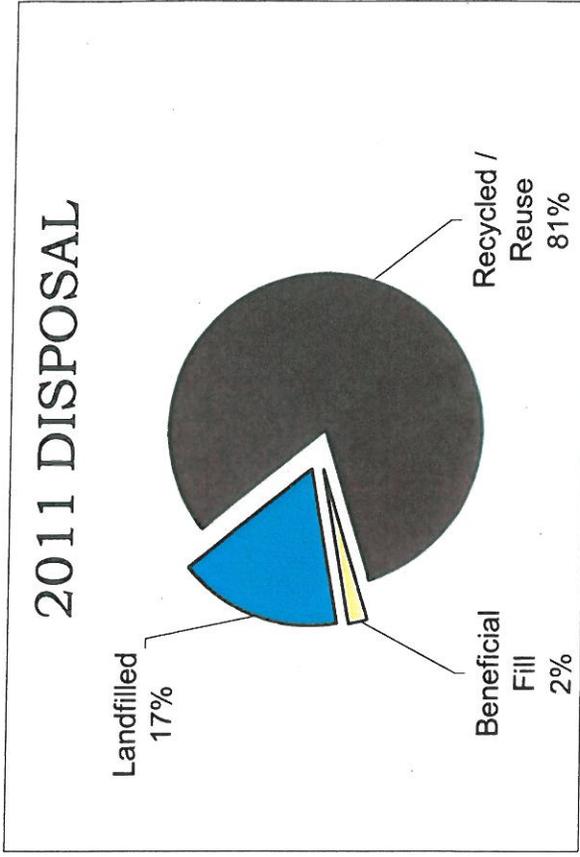
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>LANDFILLED</b>																		
Pallets / Wood	434	623	569	381	342	414	252	336	262	136	97	47	136	73	11	7	1	8
C & D	160	214	234	163	112	178	115	112	72	52	38	11	41	12	18			
Packer Trash - Regular	754	720	766	937	1293	1964	858	897	666	692	658	694	655	741	1318	909	751	702
- Flood											512							
Town of Canton Trash	970																	
Roll-off Trash - Regular				165	120	272	139	135	177	210	336	390	291	300	332	341	298	296
- Flood											467							
<b>TOTAL LANDFILLED - Regular</b>	<b>2318</b>	<b>1557</b>	<b>1569</b>	<b>1646</b>	<b>1867</b>	<b>2828</b>	<b>1364</b>	<b>1480</b>	<b>1177</b>	<b>1090</b>	<b>1129</b>	<b>1142</b>	<b>1123</b>	<b>1126</b>	<b>1679</b>	<b>1257</b>	<b>1050</b>	<b>1006</b>
- Flood											979							
<b>GRAND TOTAL</b>	<b>4,231</b>	<b>4,150</b>	<b>3,856</b>	<b>2,891</b>	<b>2,540</b>	<b>3,326</b>	<b>2,405</b>	<b>2,476</b>	<b>2,573</b>	<b>2,437</b>	<b>3,777</b>	<b>4,464</b>	<b>2,923</b>	<b>2,557</b>	<b>3,605</b>	<b>3,601</b>	<b>3,413</b>	<b>5,781</b>
% RECYCLED	45%	62%	59%	43%	26%	15%	43%	40%	54%	55%	44%	74%	62%	56%	53%	65%	69%	83%

\* Included with Paper Broke

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>Beneficial Fill</b>																		
			17,740	503						136	68	84	63	89	157	220		105

## 2011 - DISPOSAL BY FINAL DESTINATION & SOURCE CANTON MILL - TONS

<u>Destination</u>	<u>Contract Rolloffs</u> (TONS)	<u>Canton Mill</u> (TONS)	<u>Total</u> (TONS)	
Landfilled	296	710	1,006	17%
Recycled/Reuse	--	4,775	4,775	81%
Beneficial Fill	--	105	105	2%
<b>Total Tons</b>	<b>296</b>	<b>5,590</b>	<b>5,886</b>	



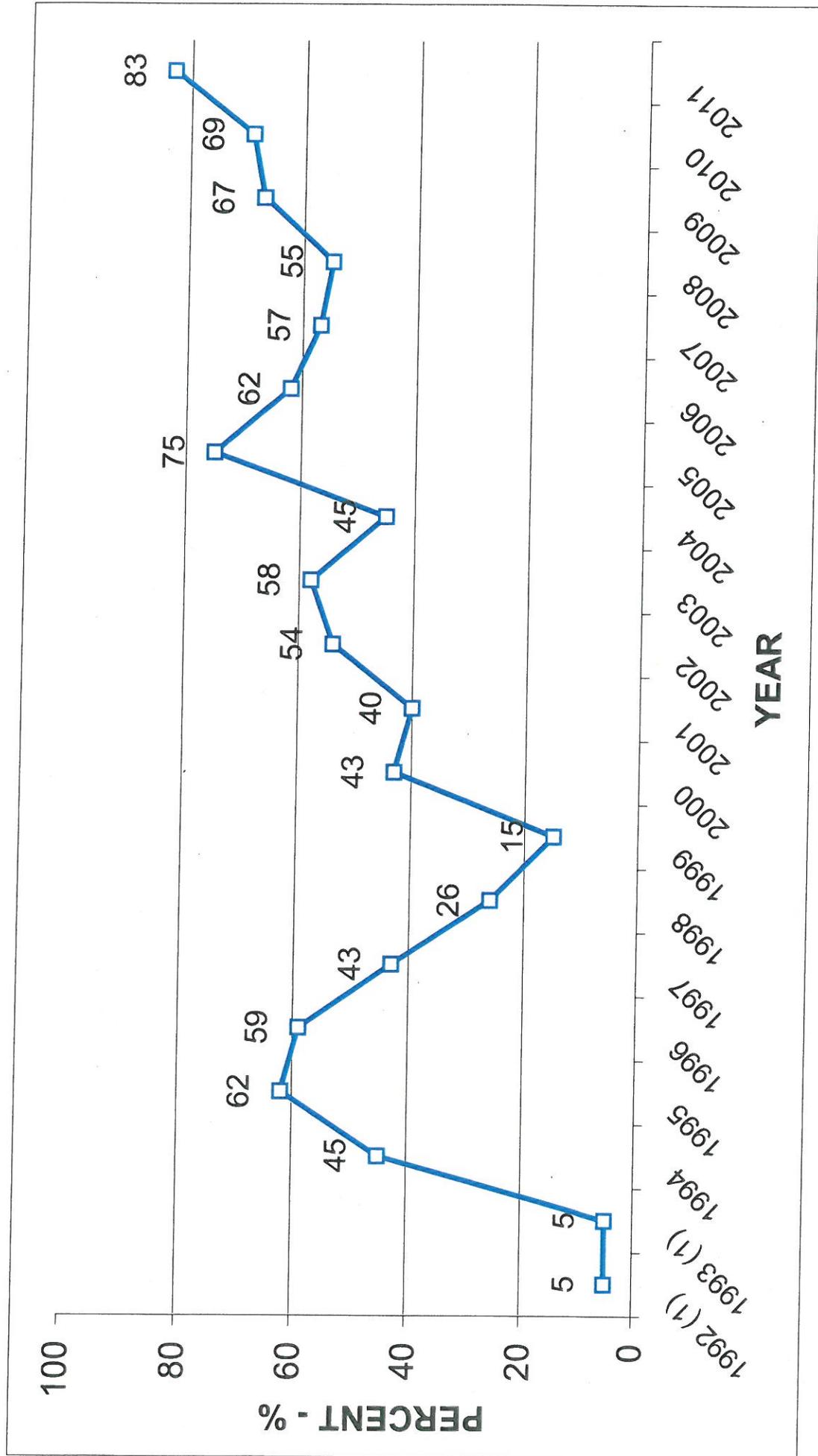
## 2011 - DISPOSAL BY WASTE TYPE AND SOURCE CANTON MILL - TONS

<u>By Source Within Mill</u>	<u>Wood</u> (TONS)	<u>C &amp; D</u>		<u>Trash</u> (TONS)	<u>Metal</u> (TONS)	<u>Paper</u> (TONS)	<u>Total</u> (TONS)	<u>%</u>
		<u>Beneficial</u> (TONS)	<u>Landfill</u> (TONS)					
Contract Rolloffs	--	--	--	296	--	--	296	5%
Canton Mill	296	105	--	702	819	3,668	5,590	95%
<b>Total Recycle / Beneficial Fill</b>	<b>288</b>	<b>105</b>	<b>--</b>	<b>--</b>	<b>819</b>	<b>3,668</b>	<b>4,880</b>	<b>83%</b>
<b>Total Landfilled</b>	<b>8</b>	<b>--</b>	<b>--</b>	<b>998</b>	<b>--</b>	<b>--</b>	<b>1,006</b>	<b>17%</b>
<b>TOTAL TONS</b>	<b>296</b>	<b>105</b>	<b>--</b>	<b>998</b>	<b>819</b>	<b>3,668</b>	<b>5,886</b>	<b>100%</b>
	<b>5%</b>	<b>2%</b>	<b>0%</b>	<b>17%</b>	<b>14%</b>	<b>62%</b>	<b>100%</b>	

### By Destination

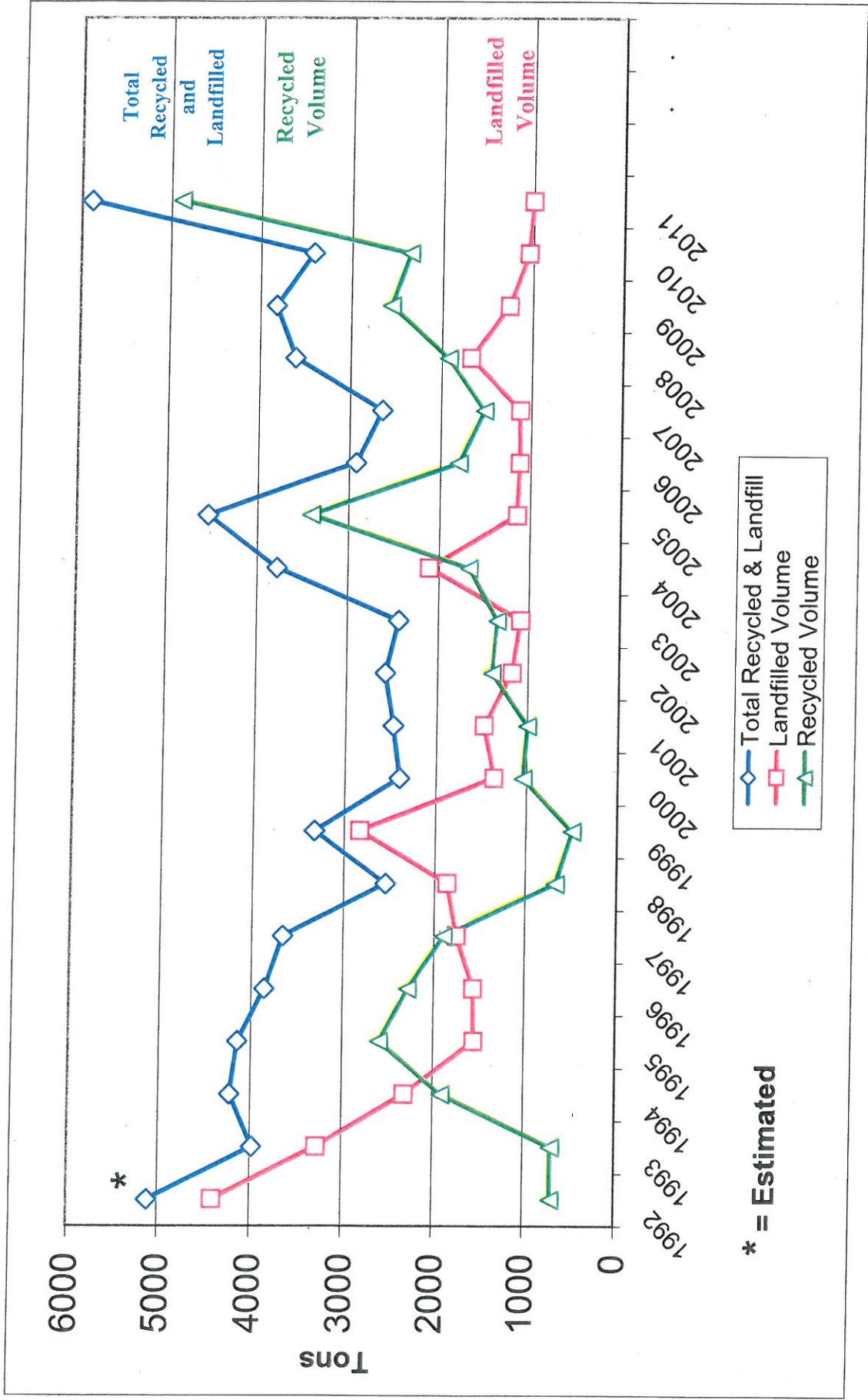
<u>By Destination</u>	<u>Wood</u> (TONS)	<u>C &amp; D</u>	<u>Trash</u> (TONS)	<u>Metal</u> (TONS)	<u>Paper</u> (TONS)	<u>Total</u> (TONS)	<u>%</u>
Total Recycle / Beneficial Fill	288	105	--	819	3,668	4,880	83%
Total Landfilled	8	--	998	--	--	1,006	17%
<b>TOTAL TONS</b>	<b>296</b>	<b>105</b>	<b>998</b>	<b>819</b>	<b>3,668</b>	<b>5,886</b>	<b>100%</b>
	<b>5%</b>	<b>2%</b>	<b>17%</b>	<b>14%</b>	<b>62%</b>	<b>100%</b>	

# PERCENT OF TOTAL NON-PROCESS WASTE RECYCLED OR REUSED BY WEIGHT

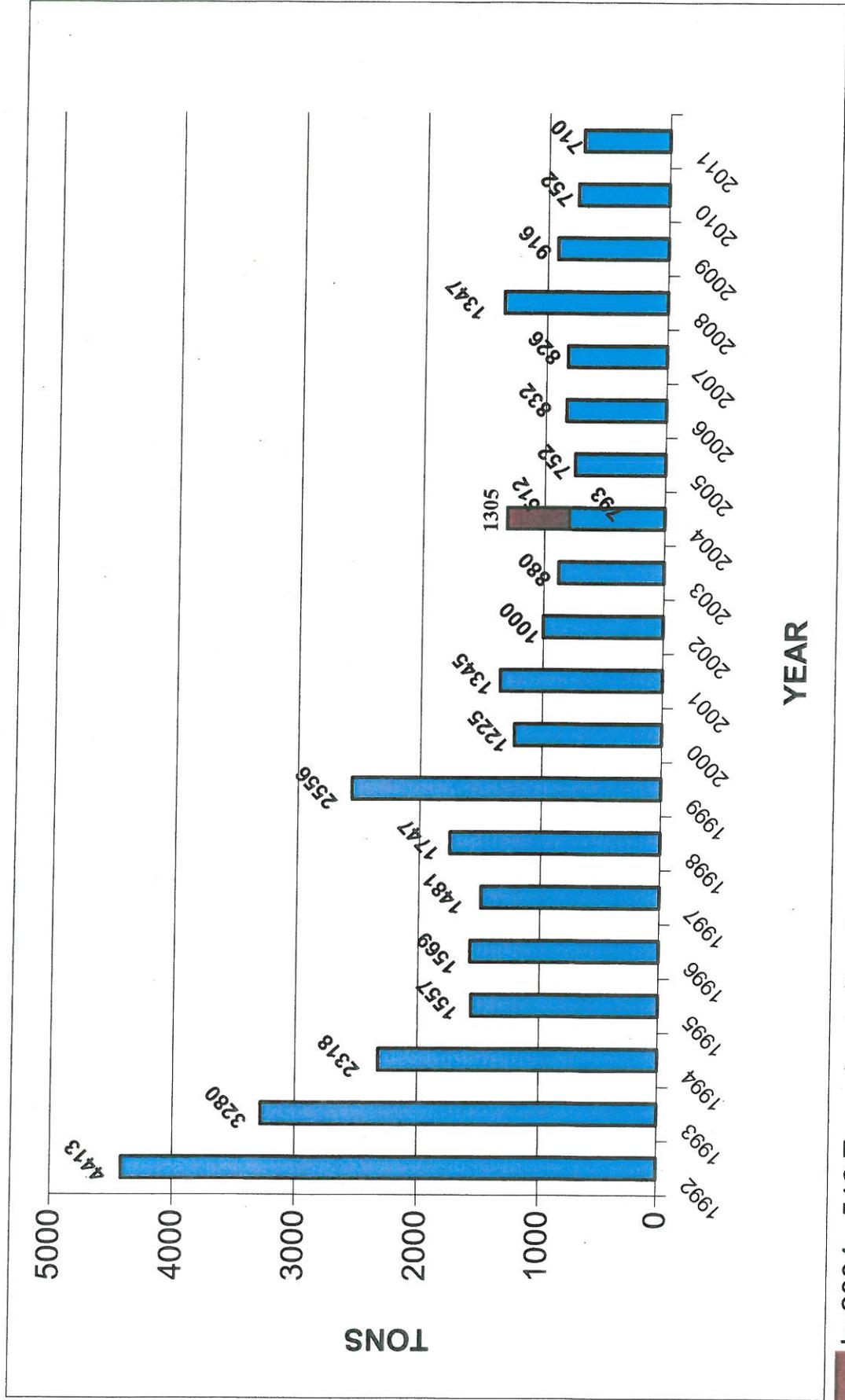


(1) Estimated Salvage Yard material only - Recycling program initiated in 1994.

# 1992 - 2011 TOTAL NON-PROCESS SOLID WASTE LANDFILLED & RECYCLED CANTON MILL

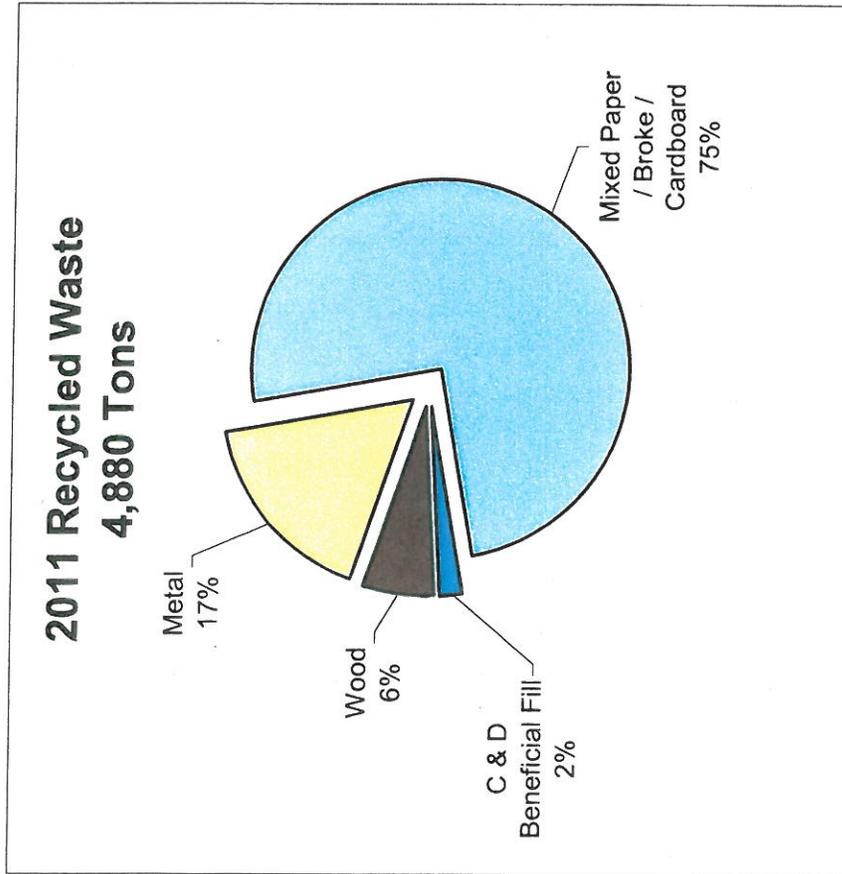


# CANTON MILL NON-PROCESS SOLID WASTE DISPOSED IN COUNTY LANDFILL 1992 - 2011



In 2004 - 512 Tons due to flood.

# Mill Recycling Program Non-process Waste



83 % recycled in 2011

