

**REPORT OF THE  
VIRGINIA DEPARTMENT OF FORESTRY ON**

**Forest Products  
Economic Initiatives  
Plan For The  
Commonwealth Of Virginia**

**TO THE GOVERNOR AND  
THE GENERAL ASSEMBLY OF VIRGINIA**



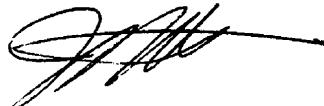
**HOUSE DOCUMENT NO. 6**

**COMMONWEALTH OF VIRGINIA  
RICHMOND  
1993**

The Honorable L. Douglas Wilder  
Governor of Virginia and  
The General Assembly of Virginia

The report transmitted herewith is pursuant to House Joint Resolution No. 68 of the 1992 Session of the General Assembly of Virginia. The Resolution requested the Department of Forestry to promote Virginia's forestry products industries through certain programs and initiatives and submit the report to the House Appropriations Committee and the Senate Finance Committee prior to the 1993 Session of the General Assembly.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'J.W. Garner', with a long horizontal flourish extending to the right.

J.W. Garner  
State Forester

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## **Executive Summary**

Pursuant to the 1992 House Joint Resolution No. 68, the Virginia Department of Forestry was requested "to promote Virginia's Forestry products industries through certain programs and initiatives."

In cooperation with other state agencies, as mentioned in the resolution, three specific initiatives were examined:

1. Exploring and promoting additional markets for pine pulpwood and chips.
2. Promoting the use of wood residues by creating linkages between residue producers and industries using residues in their manufacturing process.
3. Promoting interest in producing hardwood dimension products.

Working with other state agencies and private industries, the following actions were taken to accomplish the resolutions requests:

1. A list of all producers of pine pulpwood and chips was obtained for Virginia. A list of all users of pine pulpwood and chips was obtained from Georgia, North Carolina, South Carolina, and Virginia. Each list will be sent to buyers and suppliers respectively so additional markets are available for each. An International Market Planning study on the feasibility of exporting pine chips will be accomplished and available in early 1993.
2. Wood residues producers and buyers were identified and respective lists will be mailed to each to provide market contacts for them.
3. Three educational seminars will be held to stimulate interest in the production of dimension products. This should produce a value added product from lumber processed in the state.
4. All materials, data, and information produced will be made available to all public/private agencies and individuals for the purpose of promoting better use of the state's timber resource.

## **Recommendations**

1. Develop value added seminars for other wood products, which would include promotional and economic development material.

**Estimated Funding Need ----\$20,000**

2. Produce a video(s) showing how to manufacture hardwood dimension.

**Estimated Cost -----\$15,000**

3. Produce a manual on manufacturing hardwood dimension.

**Estimated Cost (1,000 copies) -----\$10,000**

## **Preface**

House Joint Resolution No. 68 (see Appendix A) requested the Virginia Department of Forestry to promote Virginia's forestry products industries through certain programs and initiatives. The resolution was generated by recommendations set forth in the Report of The A. L. Philpott Southside Economic Development Commission, House Document No. 45 (Ref. 1).

Resolution No. 68 requested the Department of Forestry to promote forestry industries in the Commonwealth by:

1. Exploring, in conjunction with the Department of Economic Development, additional markets for pine pulpwood and chips.
2. Coordinating a project with other state agencies and private sector organizations that will result in linkages between industries producing wood and industries using wood residues in their manufacturing processes.
3. Together with the Department of Economic Development and Virginia Polytechnic Institute and State University, establishing an educational program in hardwood dimension products to stimulate interest among existing forest products industries.

Each part of the resolution will be examined as a separate entity and recommendations or solutions will be given.

## **Wood Industry Situation in Virginia**

The wood manufacturing industry is a large, complex, diversified and important business in Virginia (ref. 2, 3, and Appendix B). The industry contributes over \$4 billion annually to the state's economy and accounts for one of every six manufacturing jobs. The industry employs about 66,000 people in seven pulpmills, 360 sawmills, 10 veneer plants, 145 furniture and cabinet operations, and over 500 other secondary manufacturing operations. Over 1,000 logging operations deliver timber to the processing plants. The industry annually purchases about \$150,000,000 of timber from landowners to harvest and process into products.

## **Timber Supply and Marketing Forest Products**

Virginia has 15,447,550 acres of available commercial forestland. (Appendix C, Table I). Approximately 95% of timber harvesting occurs on privately-owned timberland (Ref. 4, Table 22). The timber is sold and moves into the free market and trade arena generally unencumbered by government or state regulations. When the timber is harvested it is cut

into products for the highest value. The primary products include veneer logs, stave logs (white oak only), sawmill logs, posts, poles, pilings, handle factory logs (ash and hickory), pulpwood and charcoal. Supply and demand determine the price of these products.

Cost of transportation limits the distance some wood products can be delivered profitably. Pulpwood (both roundwood and chips) and wood residues are two products generally constrained by this condition. As supply and demand changes, opportunities may arise to transport products longer distances.

With knowledge of the above information, the three parts of the resolution were examined and discussed with other agencies, and plans were formulated to accomplish the resolution.

### **Findings and Actions Taken**

1. **Exploring, in conjunction with the Department of Economic Development, additional markets for pine pulpwood and chips.**

The Department of Forestry, in conjunction with the Department of Economic Development, examined the market situation as to present and past use and additional supply that might be drawn on if demand increases (Appendix C & D).

The pine timber resource was analyzed to see if the supply side could handle additional markets. Appendix C, Table III shows a summary of the present timber resource in Virginia (Source: from Ref. 3). Pine growing stock (trees 5.0" diameter breast height and greater) shows a surplus of annual growth over drain of 65,000,000 cubic feet or 928,571 standard cords. This suggests additional pine could be harvested if the demand is there in the market place.

An average of 1,078,000 cords of pine pulpwood per year was harvested from 1980-1990. The last two years averaged 1,251,000 cords. An excess supply of wood caused many producers to be on quota for extended periods of time. Round pulpwood producers experienced this situation more frequently than the chip suppliers (sawmills).

Chips, bark and sawdust are by-products of the sawmilling operation. A sawmill seldom stops production of its primary product due to the absence of a market for the residue. Usually the mills can stockpile residues until they can be marketed. Also, sawmills will rarely operate just to produce residues, even if demand is high. The costs of operation and holding solid wood products in inventory are too expensive for sawmills to produce only residues. In Virginia, chips now account for about 35-39% of the pulpmills' demands.

## Actions Taken

- A. A list of all buyers of pulpwood and chips will be mailed to all producers in Virginia. This will give the producers/suppliers the opportunity to seek additional markets.
  - B. The Virginia Forest Products Directory and Loggers List will be mailed to all buyers listed in Appendix F, giving them access to all producers.
  - C. The Department of Forestry, Department of Economic Development, and Department of Agriculture and Consumer Services will coordinate an International Market Planning Study to examine the export potential of pine chips. The Department of Economic Development will arrange for the study with one of the state universities. The Department of Forestry and Virginia Department of Agriculture and Consumer Services will provide guidance for the study team. The cost will be approximately \$900. Results of the study will be available in early 1993. Actions needed as a result of the chip study will be taken and a supplemental report given in early 1993.
  - D. All resource data and information developed will be maintained and used by state agencies to promote the use of the resource when making contact with present users and potential manufacturers interested in locating a new plant in Virginia.
  - E. All information generated will be available to overseas offices of DED, VADACS and Port Authority to assist any promotional work or answer inquiries about Virginia's timber resource, wood products industry, and/or the business climate in the state.
2. Coordinating a project with other state agencies and private sector organizations that will result in linkages between industries producing wood residues and industries using wood residues in their manufacturing processes.

Wood residue is defined as residue from manufacturing operations and wood not used during the harvesting operation (logging residues).

When sawtimber and pulpwood are processed into primary products, a large percentage of the raw material ends up as wood residues or by-products of the operations (Appendix E). A total of over 5 million green tons of wood residues are produced each year (Appendix E, Table II). During the harvesting operation, approximately 3 million tons remains as logging residue (unused portions of the trees cut, and small standing trees).



Wood residue can be used as pulp material, animal bedding, poultry litter, mulch, wood pellets, particleboard, wood flour, sweeping compounds, and molded products, and can be mixed with cement for various construction uses, and burned for energy.

Wood residues have become an important element in Virginia's wood manufacturing business. Some operations, such as particleboard and mulch plants, depend entirely on wood residues for their product. Residues purchased for manufacturing provide an estimated \$75,000,000 for the producers yearly.

The Department of Forestry has, periodically since the early 1970's, surveyed the industry for residues produced and used (Appendix E, Table I and Table III). The latest survey (1989) indicated that 96% of residues produced from primary operations were being used annually. A few areas of the state did show higher unused percentages due to distance from existing markets. During most years, there are periods when the market does not absorb all the supply. Generally this is a relatively short-term situation.

### **Actions Taken**

- A. Lists of users and purchasers of wood residues were obtained from plants in North Carolina, South Carolina, Georgia, and Virginia (Appendix F).
  - B. A new revised list of Virginia residue producers was produced in 1992.
  - C. The buyers list will be mailed to the suppliers (Ref.#4), and a list of the suppliers will be mailed to the buyers (Appendix F), so that as markets change, both parties will be able to contact the other.
  - D. The suppliers and buyers lists will be given to other state agencies and organizations that may have an interest and be able to assist the industry in some way.
3. Together with the Department of Economic Development and Virginia Polytechnic Institute and State University, establishing an educational program in hardwood dimension products to stimulate interest among existing forest products industries.

Hardwood dimension is lumber manufactured to various sizes in rough, semifinished or finished parts for the manufacture of furniture, cabinets, and other items.

An analysis of the hardwood dimension industry found it to be an integral part of the hardwood industry in the U. S. (Ref. 5). The latest U. S. Bureau of Census data indicates the hardwood dimension industry in the United States employed a total of 28,300 people and shipped approximately \$1.74 billion worth of hardwood dimension in 1990. This represented a 3% decline from 1989 shipments of \$1.79 billion. The domestic market will continue to be the main market for a high percentage of production and sales, but the

export market continues to increase. Predicted sales increases involve companies actively exporting dimension products. Virginia has several companies that produce hardwood dimension (Ref. 4). Most of the production is sold to domestic markets or used internally by the company, while some is exported.

Virginia harvests approximately 700 million board feet of hardwood sawtimber annually. Approximately 600 million board feet of the production is lumber, with the remaining consisting of veneer, cross ties, and logs sold out of state. Large volumes of the lumber are sold as rough green and dried stock and shipped outside of Virginia for various uses.

### **Action Taken**

- A. The Department of Forestry, Department of Economic Development and Virginia Polytechnic Institute and State University will cooperate to produce three educational seminars in 1992 on hardwood dimension. The programs will be designed to present data and information to individuals or firms that may be interested in manufacturing dimension.

The seminars will be held at the following locations:

- 1. Marion, VA 11/10-11/1992
- 2. Martinsville, VA 11/17-18/1992
- 3. Richmond, VA 12/08-09/1992

### **Recommendations**

The following recommendations for additional educational efforts are suggested to enhance and promote hardwood dimension and other value added wood products that would create additional jobs and revenue for Virginia.

- A. Develop value added seminars for other wood products, which would include promotional and economic development material.

**--Estimated need----\$20,000**

- B. Produce video(s) showing the necessary steps needed in the manufacturing process of dimension.

**--Cost of videos----\$15,000**

- C. Produce a manual on hardwood dimension showing pertinent data and information needed to start a dimension business.

**--Cost to produce 1,000 manuals---\$10,000**

All materials, data, and information produced from 1992 seminars and future endeavors will be made available to all public and private agencies and individuals for the purpose of education and increasing value added products in Virginia.

## **REFERENCES**

- (1) A.L. Philpot Southside Economic Development Commission, House Document No. 45
- (2) Virginia's Forests - Our Common Wealth - Virginia Department of Forestry
- (3) Forest Statistics for Virginia 1992 - by Tony G. Johnson, USES, Asheville, NC
- (4) Virginia Forest Products Industrial Directory - 1992
- (5) Virginia Loggers - 1992
- (6) Resource Guide for Hardwood Dimension Manufacturers for Mountain Association for Community Economic Development - Berea Kentucky, by Steven V. Lawser, National Hardwood Dimension Manufacturer's Association.

LD0476168

HOUSE JOINT RESOLUTION NO. 68

Offered January 17, 1992

Requesting the Department of Forestry to promote Virginia's forestry products industry through certain programs and initiatives.

Patrons—Councill, Abbitt, Armstrong, Bennett, Clement and Crouch

Referred to the Committee on Rules

WHEREAS, forestry contributes over \$5.2 billion annually to Virginia's economy and is a vital component of regional and statewide development; and

WHEREAS, the economic impact, permanence, and growth potential of forest-based industries warrant special consideration in developing strategies for regional growth and economic prosperity; and

WHEREAS, the A. L. Philpott Southside Economic Development Commission, through its Task Force on Agriculture, Forestry, and Natural Resources, has determined that forestry industries play a critical role in the economic development of Southside Virginia and the Commonwealth; and

WHEREAS, the Commonwealth's rich mixture of hardwood and softwood timber offers a significant resource for the promotion of forestry industries processing or producing materials as diverse as pulpwood, structural and industrial timbers, particle board, veneers, sawdust, bark, and other wood products; and

WHEREAS, initiatives to promote alternative uses for wood products and to assist existing forestry enterprises will enhance not only the development of those regions rich in timber resources, but also the Commonwealth as a whole; and

WHEREAS, the care, management, and preservation of the Commonwealth's forest resources are entrusted to the State Forester, the Board of Forestry, and the Department of Forestry; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the Department of Forestry be requested to promote forestry industries in the Commonwealth by (i) exploring, in conjunction with the Department of Economic Development, additional markets for pine pulpwood and chips; (ii) coordinating a project with other state agencies and private sector organizations that will result in linkages between industries producing wood residue and industries using wood residues in their manufacturing processes; and (iii) together with the Department of Economic Development and Virginia Polytechnic Institute and State University, establishing an educational program in hardwood dimension products to stimulate interest among existing forest products industries. The Department shall report its progress on these initiatives to the House Appropriations Committee and the Senate Finance Committee prior to the 1993 Session of the General Assembly.

Official Use By Clerks			
Agreed to By		Agreed to By The Senate	
The House of Delegates			
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with amendment	<input type="checkbox"/>	with amendment	<input type="checkbox"/>
substitute	<input type="checkbox"/>	substitute	<input type="checkbox"/>
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Date: _____		Date: _____	
_____		_____	
Clerk of the House of Delegates		Clerk of the Senate	

## **Appendix B**

### **FOREST RESOURCE INFORMATION FOR VIRGINIA**

The state encompasses about 24,409,849 acres, of which 16,026,874 are forestland (65.6%). Approximately 15.4 million acres of the forestland are designated as commercial timberland, with most of the remaining acres in parks, wilderness areas, etc.

The state has a history of harvesting timber from early colonial days to the present. In 1991, approximately 1.165 billion board feet of sawtimber and 2.625 million cords of pulpwood were harvested. Approximately 95% came from privately-owned forests.

This harvested timber had a stumpage value of \$150,317,362. Once the timber is processed and goes through the utilization and marketing chain, the state's economy is improved \$4.27 billion (value added) annually. Wood industry manufacturing employment is about 66,200. Additionally, 53,000 jobs are created in support and service of the forest operations and manufacturing plants.

Wages and salaries are estimated to be \$1.3 billion for the manufacturing jobs and \$530 million for the additional support jobs created.

The forests are also important for hunting, fishing, recreation, providing clean water, purifying the air, and a place to "get away from it all." A monetary value cannot be placed on some of the virtues of the forest. However, it is estimated that some of these attributes are worth another \$1.5 billion to the people of Virginia and its economy.

The standing timber resource has an estimated stumpage value of \$9.5 billion and, if converted to products on today's market, would conservatively impact the economy by \$270.4 billion dollars! This, of course, will not happen, but it does show the tremendous value of the forests in the state.

Commercial Forest Area	15,447,500 acres
National Forest (10%)	1,468,126 acres
Other Public Area (3%)	515,160 acres
Forest Industry (10%)	1,554,763 acres
Privately Owned (77%)	11,909,501 acres

## Appendix B continued...

Landowners Receipts for 1991 Timber Harvest	\$150,317,362
Value Added 1991 (total impact to Virginia's economy)	\$4,270,516,254
Standing Timber Value (using 1991 area values)	\$9,517,540,903
Value Added (if all timber used--1990 prices)	\$270,393,337,054
Manufacturing Jobs	66,200
Additional Support Jobs	53,000
Estimated Wages and Salaries	\$1,313,969,220
Value of Other Forest Amenities (fishing, hunting, clean water, etc.)	\$1,545,926,884

### Manufacturing Plants

Sawmills	360	Wood Treating	32
Furniture	75	Veneer	10
Pulpmill	7	Other	342
Cabinets	70	Log Homes	5
Paper Products	24	Millwork	32
Compositeboard	7	Waferboard	1
OSB	1	Logging Operations	<u>1,087</u>
		Total	2,081

Appendix C

TABLE I

AREA OF LAND AND TIMBER IN VIRGINIA - 1992

	<u>Acres</u>
All Land	25,409,849
Forestland	16,026,874
-Timberland <sup>(1)</sup>	15,447,550
-Woodland <sup>(2)</sup>	47,344
-Reserved <sup>(3)</sup>	531,980

- (1) Commercial timber harvest occurs on these lands  
 (2) Non-productive forest land  
 (3) Parks, wilderness, wildlife preserves, etc.

TABLE II

TIMBERLAND OWNERSHIP IN VIRGINIA

	<u>Acres</u>	<u>%</u>
National Forests	1,468,126	9.5
Other Public	515,160	.3
Forest Industry	1,554,763	10.1
Other Private	11,909,501	77.1
All Ownerships	15,447,550	

TABLE III

VIRGINIA'S TIMBER RESOURCE - 1992

(Growing Stock - Million Cubic Feet)

	Softwood	Soft Hardwood	Hard Hardwood	Total
Inventory	6,647	7,126	12,712	26,485
Growth	317	228	304	849
Drain	252	139	207	598



## Appendix D

### PINE PULPWOOD HARVESTED IN VIRGINIA 1980-1990 (Standard Cords)

<u>Year</u>	<u>Roundwood</u>	<u>Chips From Sawmills</u>
1980	1,064,883	519,800
1981	959,849	510,500
1982	1,069,327	520,000
1983	1,056,828	467,300
1984	1,207,815	496,900
1985	952,344	709,000
1986	999,107	664,300
1987	971,748	737,700
1988	1,007,500	741,900
1989	1,237,951	741,100
1990	1,265,200	761,300

Appendix E

**TABLE 1**  
**Used and Unused Residues**  
**From Primary Manufacturing Plants in Virginia**

	<u>1965</u>	<u>1970</u>	<u>1974</u>	<u>1976</u>	<u>1980</u>	<u>1984</u>	<u>1887</u>	<u>1989</u>
Used (%)	47	66	76	79	89	92	93	96
Unused (%)	53	34	24	21	11	8	6	4

**TABLE II**  
**Virginia - 1989**  
**Residues Produced From Primary**  
**Manufacturing Plants by Survey Unit**

Unit	Used	%	Unused	%	Total	% of State Total
Coastal Plain	2477954	(99.7)	8728	(.3)	2486682	(48)
So. Piedmont	1068050	(97)	30476	(3)	1098526	(21)
No. Piedmont	453596	(99)	5244	(1)	458840	(9)
No. Mountain	578373	(99.6)	2490	(.4)	580863	(11)
So. Mountain	<u>380146</u>	(68)	<u>175559</u>	(32)	<u>555705</u>	(11)
Totals	4958119		222497		5180616	
	(96%)		(4%)			

**TABLE III**  
**Virginia - 1989**  
**Disposal of Residue at**  
**Primary Wood-using Plants**

Use of Residues	<u>Bark</u>	<u>Course*</u>	<u>Sawdust</u>	<u>Shavings</u>	<u>Total</u>	<u>%</u>
Fiber Products	0	1749525	39288	27951	1816764	35
Particle/Flake Bd.	0	26319	119806	103546	249671	5
Sawn Product	0	72119	0	0	72119	1
Industrial Fuel	874623	79047	913066	13383	1880119	36
Domestic Fuel	23337	88075	18742	0	130154	2
Miscellaneous	560987	31487	171395	45424	800293	16
Not Used	<u>41959</u>	<u>2114793</u>	<u>1374613</u>	<u>190304</u>	<u>5180616</u>	

\*Course: Slabs, edgings, and end trims.

Appendix E - (Continued)

TABLE IV  
**Output of Residues From  
 Industrial Timber Products  
 in Virginia**

	BARK		COURSE		SAWDUST		SHAVING		TOTAL	
	<u>Used</u>	<u>Unused</u>	<u>Used</u>	<u>Unused</u>	<u>Used</u>	<u>Unused</u>	<u>Used</u>	<u>Unused</u>	<u>Residue</u>	<u>%</u>
-----GREEN TONS-----										
Sawlogs	587620	40236	1828881	67018	1184418	111692	190303	8	3980176	77
Veneer	46441	703	181835	1132	66313	581	0	0	297005	6
Composite BD.	61275	0	0	0	0	0	0	0	61275	1
Pulpwood	725150	0	0	0	0	0	0	0	725150	14
Poles	55460	235	6020	0	0	0	0	0	61715	1
Post	2210	4	390	4	51	0	0	0	2659 (<1)	
Other	<u>10791</u>	<u>781</u>	<u>29445</u>	<u>67</u>	<u>1524</u>	<u>27</u>	<u>0</u>	<u>0</u>	<u>52635</u>	1
Total	1458947	41959	2046571	68221	1262306	112300	190303	8	5180615	

## Appendix F

### Virginia

#### **Pulpwood and Wood Residue Users**

<b>Bear Island Paper Co.</b> POB 2119 Ashland, VA 23005 Don August (804) 227-3394	Pine Roundwood & Sawmill Chips - Pulpmill
<b>Bennett Mineral Co.</b> POB 28 Walkerton, VA 23177 Neil Upshur (804)769-3045	Pine and Hardwood Sawdust-Fuel
<b>Champion Wood Products</b> POB 580 Roanoke Rapids, NC 27870 Mona Baird (804) 848-0058	Pine Roundwood & Sawmill Chips - Pulpmill Hardwood Sawdust - Fuel
<b>Chesapeake Corp.</b> West Point, VA 23181 Fayette Wiatt (804) 843-5478	Pine and Hardwood Roundwood & Sawmill Chips - Pulpmill Pine and Hardwood Sawdust - Fuel Pine and Hardwood Whole - Tree Chips - Fuel
<b>Glatfelter Pulpwood Co.</b> POB 868 Fredericksburg, VA 22401 Tom Reeder (804) 373-9431	Pine and Hardwood Roundwood & Sawmill Chips - Pulpmill
<b>Masonite Corp.</b> Particle Bd. Div. POB 232 Stuart, VA 24171 Leon Holt (703) 694-7151	Pine Shavings - Particleboard
<b>Masonite Corp.</b> Particle Bd. Div. POB 378 Waverly, VA 23890 Walter Smith (804) 834-2201	Pine Shavings and Sawdust - Particleboard

**Georgia Pacific Corp.**  
Big Island, VA 24526  
Jim Hileman  
(804) 299-5911

Hardwood Roundwood & Chips - Pulpmill  
Pine Chips Fuel  
Pine and Hardwood Sawdust & Bark for Fuel

**Stone Container Corp.**  
POB 1009  
Hopewell, VA 23860  
(804) 541-9766

Pine Roundwood & Sawmill Chips - Pulpmill  
Pine and Hardwood Sawdust & Bark for Fuel  
Whole-Tree Chips for Fuel

**Union Camp Corp.**  
Franklin, VA 23851  
John Shotwell  
(804) 569-4672

Pine and Hardwood Roundwood, Sawmill Chips & Whole-Tree  
Chips for Pine Sawmill Sawdust - Particleboard  
Hardwood Sawmill Sawdust - Pulpmill  
Pine and Hardwood Shavings - Particleboard

**Virginia Fibre Corp.**  
Box 339  
Amherst, VA 24521  
Rhett Mazingo  
(804) 933-8643

Hardwood Roundwood & Sawmill Chips - Pulpmill

**Westvaco Corp.**  
Covington, VA 24426  
Ed Matics  
(703) 969-5453

Pine & Hardwood Roundwood & Sawmill Chips - Pulpmill  
Hardwood Sawdust - Activated Charcoal

**Georgia Pacific Corp.**  
Drawer 250  
South Boston, VA 24592  
(804) 572-4971

Pine & Hardwood Sawmill & Whole-Tree-Chips - Particleboard  
Pine & Yellow Poplar Sawdust - Particleboard

**Georgia Pacific Corp.**  
Allen Rd.  
Jarratt, VA 23867  
Lynwood Canady  
(804) 535-8541

Pine and Hardwood Chips - Building Materials

**Wood Fiber Ind. Inc.**  
Box 3327  
Danville, VA 24543  
J G Hurt  
(804) 797-1321

Pine and Hardwood Bark - Fuel

**Multi Trade Group Inc**  
POB 717  
Ridgeway, VA 24148  
Ed Brammer  
(703) 632-4071

Pine and Hardwood Sawdust, Whole-Tree Chips, Hogged Wood  
for Fuel

**Huffman Litter Service** Pine & Hardwood Sawdust and Shavings - Poultry Litter  
Rt. 5, Box 338  
Harrisonburg, VA 22801  
Elizabeth Atkins  
(703) 434-0832

**Atkins Litter Service** Pine & Hardwood Sawdust and Shavings - Poultry Litter  
Rt. 11, Box 35  
Harrisonburg, VA 22801  
Elizabeth Atkins  
(703) 434-0832

**H & W Litter Service** Pine & Hardwood Sawdust and Shavings - Poultry Litter  
Rt. 4, Box 155  
Harrisonburg, VA 22801  
(703) 867-5022

**American Wood Fibers Inc** Pine Sawdust and Shavings  
8245 Dorsey Run Rd.  
Jessup, MD 20794  
Frank Faehner  
(301) 498-6100

**Modular Energy Corp.** Pine and Hardwood Hogged Material for Wood Pellets  
Rt. 2, Box 389-2  
Bealton, VA 22712  
Chuck Limbach  
(703) 439-1482

**Forest Products Inc.** Pine & Hardwood Bark - Mulch  
POB G  
Pittsville, MD 21850  
Richard Davis Gemmgr  
(301) 835-8331

**Cellin Mfg. Company** Yellow Poplar Chips for Insulation  
POB 38  
Culpeper, VA 22701  
(703) 825-8000

**Triwood Inc.** Pine & Hardwood Sawdust and Shavings - Particleboard  
POB 626  
Bassett, VA 24055  
David Hazelwood  
(703) 956-3171

<p><b>Foltz Poultry Bedding</b>  RFD 1 Box 27  Mathias, WV 26812  (304) 897-5266</p>	<p>Pine &amp; Hardwood Sawdust and Shavings - Particleboard</p>
<p><b>Agri-Bedding Corp.</b>  POB 277  Broadway, VA 22815  (703) 896-5201</p>	<p>Pine and Hardwood Shavings - Poultry Litter</p>
<p><b>Southland Products  of Virginia Inc.</b>  Rt. 1, Box 186  Skipwith, VA 23968  (804) 458-7500</p>	<p>Pine and Hardwood Bark - Bagged Mulch</p>
<p><b>Earthworks</b>  POB 78  Trevilians, VA 23170  (703) 967-1333</p>	<p>Pine and Hardwood Bark - Bagged Mulch</p>
<p><b>James River Limestone Inc.</b>  Rt. 2, Box 194  Troy, VA 22974  (804) 589-3964</p>	<p>Pine &amp; Hardwood Bark - Bagged Mulch</p>
<p><b>Doswell Products Inc.</b>  POB 147  Doswell, VA 23047  (804) 798-3920</p>	<p>Pine and Hardwood Bark - Bagged Mulch</p>
<p><b>Hyponex Corp.</b>  POB 67  Lawrenceville, VA 23868  (804) 848-2722</p>	<p>Pine &amp; Hardwood Bark - Bagged Mulch</p>
<p><b>Norfleet Products</b>  703 Central Rd.  Fredericksburg, VA 22401  (703) 373-9481</p>	<p>Pine and Hardwood Bark - Bagged Mulch</p>
<p><b>Summit Corp.</b>  POB 280  Wakefield, VA 23888  (804) 834-3968</p>	<p>Pine and Hardwood Bark - Bagged Mulch</p>

**Pioneer Southern Inc.**  
POB 706  
Pioneer Dr.  
Suffolk, VA 23434

Pine and Hardwood Bark - Bagged Mulch

**Sonny Land Mulch Co.**  
POB 352  
Abingdon, VA 24210  
(703) 628-2353

Hardwood Bark - Bulk Mulch

**Hollybrook Sawdust & Mulch Inc.**  
Rt. 1, Box 129  
Willis, VA 24380

Pine & Hardwood Sawdust & Bark - Bulk Mulch

**Georgia Pacific Corp.**  
Box 309  
Skippers, VA 23879  
Mr. Lynwood Canada  
(804) 634-3300

Pine & Soft Hardwood Roundwood for Oriented Strand Board

**Louisiana-Pacific Corp.**  
Box 227  
Dungannon, VA 24245  
Mr. Mark Eden  
(703) 467-2812

Soft Hardwood for Oriented Wafer Board

**Southern VA Mulch**  
Rt. 1, Box 7  
Alberta, VA 23821  
(804) 949-7244

Pine & Hardwood Bark - Bulk Mulch



North Carolina

**Pulpwood and Wood Residues Users**

<b>Abitibi-Price Corp.</b> POB 98 Roaring River, NC 28669 (919) 696-3410	Hardwood and Chips - Pulpmill Sawdust and Bark - Fuel
<b>Celotex Corp.</b> POB 2086 Goldsboro, NC 27530 (919) 736-7520	
<b>Champion International Corp.</b> POB 580 Roanoke Rapids, NC 27870	Pine and Hardwood Roundwood and Chips - Pulpmill Sawdust and Bark - Fuel Whole Tree Chips - Fuel
<b>Champion International Corp.</b> Canton, NC 28716 (704) 646-2000	Hardwood and Pine Roundwood and Chips - Pulpmill Sawdust and Bark - Fuel
<b>Federal Paper Board Co.</b> Riegelwood, NC 28456 (919) 655-2211	Hardwood and Pine Roundwood and Chips - Pulpmill Sawdust, Bark and W.T. Chips - Fuel
<b>Georgia Pacific Corp.</b> POB 348 Conway, NC 27820 (919) 585-1323	Sawmill Chips and Sawdust for Hardboard
<b>Weyerhaeuser Paper Co.</b> POB 1391 New Bern, NC 28560 (919) 633-7100	Hardwood Roundwood and Chips for Pulpwood Sawdust, Bark and W. T. Chips for Fuel
<b>Weyerhaeuser Paper Co.</b> POB 787 Plymouth, NC 27962	Pine Roundwood and Chips for Pulpmill Sawdust Bark and W. T. Chips for Fuel
<b>Masonite</b> POB 369 Springhose, NC 27882 (919) 459-3141	Pine Roundwood and Sawmill Chips - MDF

**Weyerhaeuser**  
POB 290  
Moncure, NC  
(919) 542-2128

**Pine and Hardwood**  
**Sawdust and Shavings - Particleboard**

**Weyerhaeuser**  
Elkin, NC

**Pine and Soft Hardwood Roundwood for OSB**

**Georgia Pacific Corp.**  
POB 308  
Dudley, NC 28333  
(919) 736-4385

**Pine and Soft Hardwood**  
**Roundwood for OSB**  
**Red Cedar Roundwood for**  
**Closet Liner Board**

**Jackson Paper Co.**  
Silva, NC

**Sawdust and Bark for Fuel**

South Carolina

**Pulpwood and Wood Residues Users**

<b>Bowater Inc.</b> Carolina Division POB 7 Catawba, SC 29704-0007 (803) 329-6600	Hardwood and Pine Roundwood and Chips for Pulpmill
<b>International Paper</b> Pulp & Paper & Georgetown Mill Georgetown, SC 29440 (803) 546-6111	Pine and Hardwood Roundwood and Chips for Pulpmill
<b>Sonoco Products Co.</b> N. Second St. Hartsville, SC (803) 383-7000	Hardwood Roundwood for Pulpmill
<b>Stone Container Corp.</b> Florence Mill POB 100544 Florence, SC 29501-0544 (803) 662-0313	Hardwood and Pine Roundwood for Pulpmill
<b>Union Camp Corp.</b> POB B Eastover, SC 29044	Hardwood Roundwood and Chips for Pulpmill
<b>Westvaco Corp.</b> POB 2941105 North Charleston, SC 29411-2905 (803) 745-3000	Pine Roundwood and Chips for Pulpmill
<b>Willamette Industries, Inc.</b> Box 636 Bennettsville, SC 29512 (803) 479-3002	Hardwood and Pine Roundwood for Pulpmill Hardwood Chips for Fiberboard
<b>Georgia Pacific Corp.</b> Box 125 Russellville, SC 29476	Pine Shavings for Particleboard Plant
<b>Georgia Pacific Corp.</b> Highway 453 Holly Hill, SC 29059 (803) 496-5022	Pine Chips for Medium Density Fiberboard

Georgia

**Pulpwood and Wood Residues Users**

**Weyerhaeuser Forest Products Co.**  
Quitman Hwy  
Adel, GA 31620  
(912) 896-2215

Sawdust and Shavings for Particleboard

**Temple-Inland Corp.**  
Particleboard Div.  
POB 369  
Thomson, GA 30824  
(404) 595-5721

Sawdust and Shavings for Particleboard

**Georgia Pacific Corp.**  
Eastern Wood Products  
Mfg. & Div.  
POB 187  
Vienna, GA 31092  
(912) 268-4151

Shavings for Particleboard

**Louisiana Pacific Corp.**  
Southern Div.  
3075 Commerce Rd.  
POB 8087  
Athens, GA 30607  
(404) 546-8116

Pine and Soft Hardwood Roundwood for Oriented Waferboard

**Huber Corp.**  
Timber and Mineral Div.  
Highway 334  
Commerce, GA 30529  
(704) 597-9280

Pine and Soft Hardwood Roundwood for OSB

**Langboard Inc.**  
POB 837  
Quitman, GA 31643-0837  
(912) 263-8943

Pine Roundwood for OSB

**Georgia Pacific Corp.**  
Box 310  
Monticello, GA 31064  
(404) 468-8811

Shavings and Sawdust for Particleboard

**Augusta Newsprint Co.**  
POB 427  
Augusta, GA 30913  
(404) 798-3440

Pine & Hardwood bark for Fuel

**Federal Paperboard Co.**  
Augusta Operations  
Box 1425  
Augusta, GA 30913  
(404) 798-5711

Pine & Hardwood Roundwood and Chips for Pulpmill

**Georgia Pacific Corp.**  
Pulp & Bleached Board Div.  
POB 1438  
Brunswick, GA 31521  
(912) 265-5780

Pine & Hardwood Roundwood and Chips for Pulpmill

**Georgia Pacific Corp.**  
Cedar Springs Operations  
POB 44  
Cedar Springs, GA 31732  
(912) 372-5541

Pine & Hardwood Roundwood and Chips for Pulpmill  
Pine & Hardwood Bark for Fuel

**Gilman Paper Co.**  
POB 878  
St. Marys, GA 31588  
(912) 882-4241

Pine & Hardwood Roundwood and Chips for Pulpmill  
Pine & Hardwood Bark for Fuel

**Inland-Rome Inc.**  
Linerboard Mill  
POB 1551  
Rome, GA 30161  
(404) 232-0851

Pine & Hardwood Roundwood and Chips for Pulpmill  
Pine & Hardwood Bark for Fuel

**Interstate Paper Corp.**  
Riceboro Mill  
Riceboro, GA 31323  
(912) 884-3371

Pine Roundwood and Chips for Papermill  
Pine & Hardwood Bark for Fuel

**ITT Rayonier Inc.**  
Jessup Division  
POB 2070  
Jessup, GA 31545  
(912) 427-5000

Pine Roundwood and Chips for Papermill  
Pine & Hardwood Bark for Fuel

**Macon Kraft Inc.**  
POB 3215  
Macon, GA 31298  
(912) 788-6160

Pine Roundwood and Chips for Papermill  
Pine & Hardwood Bark for Fuel

**Proctor & Gamble Cellulose Co.**  
Flint River Operations  
POB 238  
Oglethorpe, GA 31068  
(912) 472-2527

Pine Roundwood and Chips for Papermill  
Pine & Hardwood Sawdust and Bark for Fuel

**Stone Savannah River**  
Pulp and Paper Corp.  
Paperboard & Paper Div.  
POB 548  
Savannah, GA 31402  
(912) 964-1271

Pine Roundwood and Chips for Papermill  
Pine & Hardwood Sawdust and Bark for Fuel

**Union Camp Corp.**  
POB 570  
Savannah, GA 31402  
(912) 238-6000

Pine Roundwood and Chips for Papermill  
Pine & Hardwood Sawdust and Bark for Fuel