

Purchasing - Bids, Proposals
and Specifications
Contents

INTRODUCTION	1
BID PRICING	2
GENERAL SPECIFICATIONS	3
CONTRACTOR SPECIFICATIONS	4
EQUIPMENT AND PERSONNEL TO BE USED	5
RECYCLING INFORMATION	6
RECYCLABLES TO BE COLLECTED	7
COMMODITY MARKETS	8
SCHEDULE OF EVENTS	9
APPENDICES	10
A. Bidders Check List	
B. Certificate of Good Standing	
C. Certificate of Insurance	
D. Bid Bond	
E. Annual Report	
F. Bulletins to Bid	

Reviewed 03/05
J. Charlson
R.W.

**CITY OF SOUTH PITTSBURG,
TENNESSEE**

**QUALIFICATIONS FOR
SOLID WASTE COLLECTION AND
DISPOSAL PROGRAM
AND/OR RECYCLING PROGRAM**



**BROWNING-FERRIS INDUSTRIES
OF TENNESSEE, INC.**

INTRODUCTION



Chattanooga District

February 25, 1994

Mr. Anthony Scally
City Administrator
City of South Pittsburg
P.O. Box 705
204 West Third Street
South Pittsburg, TN 37380

Dear Sir:

On behalf of Browning-Ferris Industries of Tennessee, Inc. (BFI), we are pleased to submit this bid to South Pittsburg for collection, transportation, disposal and processing of solid waste and recyclables.

BFI has been serving the solid waste needs of the citizens and businesses of the area for over 30 years. Our company not only collects and disposes in Marion County, but also handles solid waste services for municipalities around the world. BFI has over 30,000 employees in 590 location around the world that are dedicated to quality service while continuing to develop innovative waste handling methods.

BFI is a recognized leader in the area of collection and recycling. Locally, BFI services 6,200 commercial customers and 48,000 residential customers.

Highlights of our proposal for service for South Pittsburg include:

- 1) Collection and disposal of all residential and small commercial municipal solid waste on a once-per-week basis; and
- 2) Residential curbside collection, processing, and marketing of recyclables on a weekly basis.

We at BFI feel that our bid for service will help the citizens of South Pittsburg have a cleaner environment. We look forward to working together as a partner with you and other city officials of South Pittsburg. If you have any questions about our bid, please call me. We welcome the opportunity to show you one of our programs in action. Please call me so I can arrange this.

Sincerely,

A handwritten signature in blue ink that reads 'Larry Angel'.

Larry Angel
Marketing Manager

EXECUTIVE SUMMARY

Browning-Ferris Industries of Tennessee, Inc. (BFI), is pleased to submit this proposal in response to the City's "Request for Bid Proposals for Residential Solid Waste Collection and Disposal, and/or Recycling Collection." Browning-Ferris Industries, Inc., a Southwest based corporation, is one of the largest waste service companies in the world. It operates in nearly 590 locations with approximately 30,000 employees. Browning-Ferris Industries, Inc., is the parent company of Browning-Ferris Industries of Tennessee, Inc. (BFI).

BFI has a history of providing reliable service to the citizens and communities of Marion County. Today we operate districts throughout the state of Tennessee, providing both collection, processing, and disposal services for municipal, commercial, and industrial solid wastes. In the greater Marion County area, BFI provides not only these solid waste services, but also medical waste collection and recycling operations. Because of this stability and long-term involvement in the State and Marion County area, together with our years of proven experience in the solid waste industry and support of our parent company, we believe we can provide exceptional collection services for the City per the terms of the City's Request for Proposal.

Nationally, Browning-Ferris Industries, Inc., is a leader in recycling, including commercial recycling programs, recycling programs for landfills, recycling buy-back centers, recycleries, and residential curbside recycling programs. We currently provide service to over 3,800,000 residential households with curbside recycling and are operating or constructing over 86 recycleries to process these materials. Our experience has expanded to include yard waste collection and composting programs to help communities meet solid waste reduction goals.

In the BFI response we present our Prior Relevant Experience and Technical Operations and Management Experience. This includes the qualifications and experience of BFI in Tennessee, as well as that of Browning-Ferris Industries nationwide.

The BFI response also contains our comments concerning the General Provisions, and Technical, Operational, and Financial Requirements in the City's Request for Proposal. BFI's technical and operational controls are designed and implemented to ensure the proper sanitary, environmental, and legal disposal of municipal solid waste. Our financial stability and strength is supported by the resources of our parent company, Browning-Ferris Industries, Inc., which had revenues in 1992 of approximately \$3.3 billion.

This proposal is submitted in order that The City of South Pittsburg may consider establishing with BFI a final operations contract. This proposal is contingent upon execution of a mutually agreeable contract as contemplated by the City's Request for Proposal.

**CITY OF SOUTH PITTSBURG,
TENNESSEE**

**QUALIFICATIONS FOR
SOLID WASTE COLLECTION AND
DISPOSAL PROGRAM
AND/OR RECYCLING PROGRAM**



**BROWNING-FERRIS INDUSTRIES
OF TENNESSEE, INC.**

BID PRICING

CITY OF SOUTH PITTSBURG, TENNESSEE

CONTRACT BID FORM

CONTRACTOR'S PROPOSAL

SOLID WASTE/RECYCLE COLLECTION AND DISPOSAL SERVICE

In compliance with the Invitation for Bids, dated February 2, 1994, the undersigned bidder:

Browning-Ferris Industries of Tennessee, Inc.
a corporation organized and existing under the laws of the State of:

_____ a partnership consisting of:

_____ an individual trading as:

of the City of Chattanooga in the State of Tennessee

agrees that if this bid is accepted as hereinafter provided, he/she/it will, except to the extent otherwise specifically provided in the Contract Documents, to furnish all labor, materials, supplies, tools, plant and equipment necessary to perform all work described in the Contract attached to said Invitation for Bids in strict accordance with the terms and provisions of this Contract consisting of the documents listed in *ARTICLE II, Section J, of the Contract and made a part hereof.

If written notice of award is received within 100 hundred (100) calendar days after opening of bids, the bidder agrees to execute said Contract and furnish to the City of South Pittsburg within ten (10) days after receipt of said notice of award, the executed Contract, together with the Performance Bond and Insurance Certificates required herein.

* Addendum from pre-bid conference, word changes.

CONTRACT BID FORM (Continued)

The City will be bidding various service levels and alternatives for solid waste collection and disposal and recycling programs. The individual bids for the large size containers described in Section A below shall stand on their own merit as the City may select to contract for some, all, or none of the container sizes included therein.

Option No. 1:

<u>Container</u>	<u>Estimated Locations</u>	<u>Estimated Services/Wk</u>	<u>Base Unit Price Per Service</u>
8 Cu. Yd Dumpster	8	2 times/wk	\$ <u>18.24</u>
8 Cu. Yd Dumpster	12	3 times/wk	\$ <u>16.75</u>
1 - 5 Cans	134	2 times/wk	\$ <u>4.55</u>

Option No. 2:

Residential Service/Recycle Options

Estimated Locations: 1,418

	<u>Base Unit Price Home/Month</u>
a. Curb/alley, twice-a-week refuse collection	\$ <u>8.85</u>
b. Curb/alley, once-a-week refuse collection	\$ <u>5.90</u>
c. Curb/alley, once-a-week recycle and once-a-week refuse collection (2 total), all recycling revenues to Contractor	\$ <u>7.72</u>
d. Curb/alley, once-a-week recycle, all recycling revenues to Contractor	\$ <u>1.82</u>
e. Public education on recycle program.	\$ <u>2,000.00</u>
	<u>Lump Sum Total</u>
f. Recycle Dropoff Center only, <i>*Contractor pulling roll off boxes of recyclables, all recycling revenue to Contractor. Recycle Center will be staffed by city. *Drop point for recyclables will be within a fifty mile radius of the city.</i>	\$ <u>180.00</u>
	<u>Per *Haul</u>

**Addendum pre-bid conference.*

TIPPING FEES:

The Bidder should understand that tipping fees are considered a part of the bid and should be included in unit costs.

*Option No. 3:

A.

<u>Container</u>	<u>Estimated Locations</u>	<u>Estimated Services/Wk</u>	<u>Base Unit Price Per Service</u>
8 Cu. Yd Dumpster	8	2 times/wk	\$ <u>11.04</u>
8 Cu. Yd Dumpster	12	3 times/wk	\$ <u>9.55</u>
1 - 5 Cans	134	2 times/wk	\$ <u>3.71</u>

B.

Residential Service/Recycle Options

Estimated Locations: 1,418

	<u>Base Unit Price Home/Month</u>
1. Curb/alley, twice-a-week refuse collection	\$ <u>6.91</u>
2. Curb/alley, once-a-week refuse collection	\$ <u>3.96</u>
3. Curb/alley, once-a-week recycle and once-a-week refuse collection (2 total), all recycling revenues to Contractor	\$ <u>5.78</u>
4. Curb/alley, once-a-week recycle, all recycling revenues to Contractor	\$ <u>1.82</u>
5. Public education on recycle program.	\$ <u>4,000.00</u>
	<u>Lump Sum Total</u>
6. Recycle Dropoff Center only, *Contractor pulling roll off boxes of recyclables, all recycling revenue to Contractor. Recycle Center will be staffed by city. *Drop point for recyclables will be within a fifty mile radius of the city.	\$ <u>180.00</u>
	<u>Per *Haul</u>

*Addendum pre-bid conference.

TIPPING FEES:

The tipping fees for Option 3 will be paid by the city directly to the disposal facilities.

By: [Signature] Title: District Manager

Business Name: Browning-Ferris Industries of Tennessee, Inc.

Business Address: 1018 East 38th Street Chattanooga, TN 37407

Business Telephone Number: 615/867-4650 Date: 2/25/94

NOTE: In accordance with Paragraph 10 of the Invitation to Bid and Instructions to Bidders, a Bid Bond in the amount of \$ 22,000.00 is attached.

CONTRACT BID FORM (Continued)

ALTERNATE *

The City will be bidding various service levels and alternatives for solid waste collection and disposal and recycling programs. The individual bids for the large size containers described in Section A below shall stand on their own merit as the City may select to contract for some, all, or none of the container sizes included therein.

Option No. 1:

<u>Container</u>	<u>Estimated Locations</u>	<u>Estimated Services/Wk</u>	<u>Base Unit Price Per Service</u>
8 Cu. Yd Dumpster	8	2 times/wk	\$ <u>18.24</u>
8 Cu. Yd Dumpster	12	3 times/wk	\$ <u>16.75</u>
1 - 5 Cans	134	2 times/wk	\$ <u>4.55</u>

Option No. 2:

Residential Service/Recycle Options

Estimated Locations: 1,418

	<u>Base Unit Price Home/Month</u>
a. Curb/alley, twice-a-week refuse collection	\$ <u>8.74</u>
b. Curb/alley, once-a-week refuse collection	\$ <u>5.28</u>
c. Curb/alley, once-a-week recycle and once-a-week refuse collection (2 total), all recycling revenues to Contractor	\$ <u>6.99</u>
d. Curb/alley, once-a-week recycle, all recycling revenues to Contractor	\$ <u>1.71</u>
e. Public education on recycle program.	\$ <u>4,000.00</u>
	<u>Lump Sum Total</u>
f. Recycle Dropoff Center only, *Contractor pulling roll off boxes of recyclables, all recycling revenue to Contractor. Recycle Center will be staffed by city. *Drop point for recyclables will be within a fifty mile radius of the city.	\$ <u>180.00</u>
	<u>Per *Haul</u>

**Addendum pre-bid conference.*

TIPPING FEES:

The Bidder should understand that tipping fees are considered a part of the bid and should be included in unit costs.

* Alternate Bid assumes BFI is awarded contracts for both Jasper and South Pittsburg.

*Option No. 3:

A.

<u>Container</u>	<u>Estimated Locations</u>	<u>Estimated Services/Wk</u>	<u>ALTERNATE* Base Unit Price Per Service</u>
8 Cu. Yd Dumpster	8	2 times/wk	\$ <u>11.04</u>
8 Cu. Yd Dumpster	12	3 times/wk	\$ <u>9.55</u>
1 - 5 Cans	134	2 times/wk	\$ <u>3.71</u>

B.

Residential Service/Recycle Options

Estimated Locations: 1,418

	<u>Base Unit Price Home/Month</u>
1. Curb/alley, twice-a-week refuse collection	\$ <u>6.80</u>
2. Curb/alley, once-a-week refuse collection	\$ <u>3.34</u>
3. Curb/alley, once-a-week recycle and once-a-week refuse collection (2 total), all recycling revenues to Contractor	\$ <u>5.16</u>
4. Curb/alley, once-a-week recycle, all recycling revenues to Contractor	\$ <u>1.82</u>
5. Public education on recycle program.	\$ <u>4,000.00</u>
	<u>Lump Sum Total</u>
6. Recycle Dropoff Center only, *Contractor pulling roll off boxes of recyclables, all recycling revenue to Contractor. Recycle Center will be staffed by city. *Drop point for recyclables will be within a fifty mile radius of the city.	\$ <u>180.00</u>
	<u>Per *Haul</u>

*Addendum pre-bid conference.

TIPPING FEES:

The tipping fees for Option 3 will be paid by the city directly to the disposal facilities.

By: _____ Title: District Manager

Business Name: Browning-Ferris Industries of Tennessee, Inc.

Business Address: 1018 East 38th Street Chattanooga, TN 37407

Business Telephone Number: 615/867-4550 Date: 2/25/94

NOTE: In accordance with Paragraph 10 of the Invitation to Bid and Instructions to Bidders, a Bid Bond in the amount of \$ 22,000.00 is attached.

* Alternate Bid assumes BFI is awarded contracts for both Jasper and South Pittsburg.

**CITY OF SOUTH PITTSBURG,
TENNESSEE**

**QUALIFICATIONS FOR
SOLID WASTE COLLECTION AND
DISPOSAL PROGRAM
AND/OR RECYCLING PROGRAM**



**BROWNING-FERRIS INDUSTRIES
OF TENNESSEE, INC.**

**GENERAL
SPECIFICATIONS**

CITY OF SOUTH PITTSBURG

INVITATION TO BID AND INSTRUCTIONS TO BIDDERS

ADDENDUM

Date: February 14, 1994

SOLID WASTE/RECYCLE COLLECTION AND DISPOSAL SERVICE

1. INVITATION:

- a. Sealed bids will be received by the City of South Pittsburg until 10:00 A.M., Central Time, Friday, February 25, 1994, then publicly opened at the office of the City Administrator, City of South Pittsburg, Tennessee, for the furnishing of all labor, materials, work and services described in the specifications and contract hereto attached in strict accordance with the terms and provisions of the specifications and contract consisting of all documents listed in **ARTICLE II, Section J*, of the contract and made a part thereof.
- b. The bids must be filled out and submitted on the Contract Bid Forms provided. Each bid proposal form must be completed in full, in ink or typewritten, in both words and figures. Illegibility of any form in the proposal may be sufficient cause for the rejection of the proposal by the City of South Pittsburg. Additional copies of the bid proposal form may be obtained from the City upon request.
- c. The bids shall be submitted on or before the time set for the opening of bids. Bids received after the time, postmark notwithstanding, **shall* not be considered.

2. DISCREPANCIES:

Should any bidder find any discrepancies in, or omission from, the specifications or other contract documents or should the bidder be in doubt as to their meaning, he shall at once notify the City Administrator, City of South Pittsburg, Tennessee, and obtain an interpretation or clarification prior to submitting his bid. Every request for such an interpretation and clarification shall be made in writing to the City Administrator. Any interpretation or clarification given in accordance with this provision shall be in writing.

3. SITE INSPECTION:

Before submitting the bid, each bidder should inspect the area of the proposed work to arrive at a clear understanding of the conditions under which the work is to be done.

4. BULLETIN DURING BIDDING:

The bidder may, during the bidding period, be advised by bulletins (which term includes addenda to the specifications) of additions, deletions, or

**Addendum from pre-bid conference, word changes.*

alterations in any of the documents forming a part of this Contract. All such changes shall be included in the work covered by the bid and shall become a part of the Contract. The bidder shall state in his bid the number and title of all bulletins which he has received.

5. PRICES:

The bidder shall submit unit prices as indicated in the Contract Bid Form. The estimated quantities listed in the Contract Bid Form are for the purpose of comparison and evaluation of bids.

6. WITHDRAWAL OF BIDS:

Bids may be withdrawn on written or telegraphic request received from bidders prior to the time fixed for opening. No bidder may withdraw his bid within one hundred (100) days after the actual time of the bid opening.

7. REJECTION OF BIDS:

The City reserves the right to accept or reject any bid. Also we reserve the right to accept a bid containing variations from these specifications if the proposal so merits.

8. PLANT - EQUIPMENT - EXPERIENCE - PERSONNEL:

Each bidder shall furnish a statement of whether or not he is now or ever has been engaged in any work similar to that covered by the specifications herein, the years in which such work was performed and the manner of its execution, and giving such other information as will tend to show the bidder's ability to carry out the required work. Each bidder shall furnish a list of the plant, equipment, and personnel proposed for use of the proposed work. Each bidder shall describe the method or methods to be used in the prosecution of the required work. The bidder shall have available or shall agree to have available under his control sufficient plant, equipment and personnel to complete the proposed work within the specified time.

9. BIDDERS INTERESTED IN MORE THAN ONE BID:

If more than one bid is offered by any one party, by or in the name of his/her/its or their clerk, partner, or other person, all such bids will be rejected. A party who has quoted prices to a bidder is not thereby disqualified from quoting prices to other bidders or from submitting a bid directly for the work.

10. BONDS:

A bid bond by an established and acceptable surety, in a penal sum of not less than 10% of the bid price, will be required with each bid. The bond shall be accompanied by a certificate of the surety company certifying that the agent who executed the bond was authorized to bind the surety company as of the date of the bond. Failure to furnish the above described bond will cause the bid not to be read or otherwise considered. Payment and Performance Bond must be furnished by the successful bidder as otherwise provided in the Contract Documents. The Bid Bond and Payment and Performance Bond shall be issued by a surety company licensed to do business in the State of Tennessee.

11. INSURANCE:

The successful bidder will be required to maintain Worker's Compensation, General Liability, Automobile Liability, Public Liability and Property Damage Insurance as provided in the Contract Documents.

12. AWARD OF CONTRACTS:

- a. The City of South Pittsburg will make the award as soon as practicable to the lowest responsible bidder, price and other factors considered, provided it is reasonable and it is to the best interest of the City of South Pittsburg, and provided further, the City does not reject all bids. The City reserves the right to award the residential refuse collection, recycling and commercial refuse collection to different bidders.
- b. The bidder awarded the Contract will be required to execute the Form of Contract accompanying this invitation.
- c. The contractor must show evidence he is qualified and licensed to do business in the City of South Pittsburg as a licensed private hauler.

13. A prebid conference is scheduled in the office of the City Administrator, at 10:00 A.M., Central Standard Time, on Wednesday, February 9, 1994.

14. BIDS:

Envelope containing bids must be sealed, marked and addressed as follows:

From: Bidder's Name
Bidder's Address

To: City Administrator
City of South Pittsburg
P. O. Box 705
South Pittsburg, Tennessee 37380

(Mark in lower left corner) Sealed Bid for "Solid Waste/Recycle Collection and Disposal Contract, South Pittsburg, Tennessee," to be opened 10:00 A.M. Central Standard Time, February 25, 1994.

Bidder must supply three (3) copies of his/her bid and all pertinent documents.

BIDDER'S CHECK LIST

YES	NO	
_____	_____	Contract Bid Form completed and attached
_____	_____	Bid Bond Form completed and attached
_____	_____	Statements included showing bidder's ability and method to be used as required in Section 8 of the Invitation to Bid and instructions to bidders

List amendments and/or addenda received.

CONTRACT

This Contract entered into this _____ day of _____, 19____, by and between the CITY OF SOUTH PITTSBURG, a municipal corporation, hereinafter called the "CITY" and _____, a _____, hereinafter called the "CONTRACTOR."

WITNESSETH:

In consideration of the mutual promises of the parties hereto, they do agree as follows:

ARTICLE I - Scope of this Contract

The work to be done consists of furnishing all supervision, labor, tools, equipment and materials, supplies and services to perform all work and services necessary to satisfactorily collect all refuse from locations within the City of South Pittsburg, Tennessee, collect and transport refuse to the disposal location and perform all other work or services incidental to refuse collection and transportation services in strict accordance with the terms and provisions of this Contract. Furthermore, if selected by the City, the work to be done will include furnishing all labor, tools, equipment and materials, supplies and services necessary to implement a weekly curbside collection service for recyclable materials to be collected, processed and marketed.

The work shall be commenced on the _____ day of _____, 19____, or at such earlier time as hereinafter provided, and shall be completed on the _____ day of _____, 19____, unless extended or terminated sooner in accordance with the terms of this Contract.

In performance of this Contract, The Contractor binds himself to the CITY to comply fully with all provisions, undertakings and obligations hereinafter set forth.

ARTICLE II - Definitions

Whenever the following terms occur in this Contract, the interpretation shall have the meaning hereinafter given.

- A. APARTMENT COMPLEX - Apartment complexes or condominium with more than six (6) units shall be considered commercial units.
- B. BAGS - Plastic sacks designed to store Refuse with sufficient wall strength to maintain physical integrity when lifted by top. Total weight of bag and its contents shall not exceed 50 lbs.
- C. BULKY WASTE - Stoves, refrigerators, water tanks, washing machines, furniture and other waste materials other than Construction Debris, Dead Animals, Hazardous Waste or Stable Matter with weights or volumes greater than those allowed for containers.
- D. BUNDLE - Tree, shrub and brush trimmings or newspapers and magazines securely tied together forming an easily handled package not exceeding four feet in length or seventy (70) lbs in weight, no component part being larger than 5" in diameter.
- E. CITY - City of South Pittsburg, Tennessee.

- F. COMMERCIAL PRODUCER - An occupant of a commercial unit who generates refuse.
- G. COMMERCIAL REFUSE - This term shall refer to commercial refuse to be collected and disposed of pursuant to this contract unless the context otherwise requires.
- H. COMMERCIAL UNIT - All premises, locations or entities, public or private, requiring refuse collection within the corporate limits of the City, not a Residential Unit.
- I. CONSTRUCTION DEBRIS - Waste building materials resulting from construction, remodeling, repair or demolition operations, specifically excluding dirt and rock.
- J. CONTRACT DOCUMENTS - Contractor's Proposal, General Specifications, the Contract Performance Bond and any addenda or changes to the foregoing documents agreed to by the City and the Contractor.
- K. CONTRACTOR
- L. DEAD ANIMALS - Animals or portions thereof * that have expired from any cause, except those slaughtered or killed for human use.
- M. DISPOSAL SITE - A Refuse depository including but not limited to sanitary landfills, transfer stations, incinerators, materials recycling facilities and waste processing/separation centers licensed, permitted or approved to receive for processing or final disposal of Refuse and Dead Animals by all governmental bodies and agencies having jurisdiction and requiring such licenses, permits or approvals.
- N. GARBAGE - Every accumulation of waste (animal, vegetable and/or other matter) that results from the preparation, processing, consumption, dealing in, handling, packing, canning, storage, transportation, decay or decomposition of meats, fish, fowl, birds, fruits, grains or other animal or vegetable matter (including, but not by way of limitation, used tin cans and other food containers; and all putrescible or easily decomposable waste animal or vegetable matter which is likely to attract flies or rodents); except (in all cases) any matter included in the definition of Bulky Waste, Construction Debris, Dead Animals, Hazardous Waste, Rubbish or Stable Matter.
- O. HAZARDOUS WASTE - Any chemical, compound, mixture, substance or article which is designated by the United States Environmental Protection Agency or appropriate agency of the State to be "hazardous" as that term is defined by or pursuant to Federal or State Law.
- P. PRODUCER - An occupant of a Residential or Commercial Unit who generates Refuse.
- Q. REFUSE - This term shall refer to Residential Refuse and Bulky Waste, Construction Debris and Stable Matter generated at a Residential Unit unless the context otherwise requires.
- R. RESIDENTIAL REFUSE - All garbage generated by a Producer at a Residential Unit.
- S. RESIDENTIAL UNIT - A dwelling within the corporate limits of the City occupied by a person or group of persons comprising not more than six families. A Residential Unit shall be deemed occupied when either water

**Addendum from pre-bid conference, word deletion.*

or domestic light and power services are being supplied thereto. A condominium dwelling, or an apartment complex whether of single or multi-level construction, consisting of six or less contiguous or separate single-family dwelling units, shall be treated as a Residential Unit, except that each single-family dwelling within any such Residential Unit shall be billed separately as a Residential Unit.

- T. RUBBISH - All waste wood, wood products, tree trimmings, grass cuttings, dead plants, weeds, leaves, dead trees or branches thereof, chips, shavings, sawdust, printed matter, paper, pasteboard, rags, straw, used and discarded mattresses, used and discarded clothing, used and discarded shoes and boots, combustible waste pulp and other products such as are used for packaging, or wrapping crockery and glass, ashes, cinders, floor sweepings, glass, mineral or metallic substances, and any and all other waste materials not included in the definition of Bulky Waste, Construction Debris, Dead Animals, Garbage, Hazardous Waste or Stable Matter.
- U. SPECIAL COMMERCIAL CONTAINER - Shall mean and include any roll-off or compactor type container constructed for solid waste which must be transported to the sanitary landfill for service.
- V. SPECIAL CONTAINER - Shall mean and include a dumpster-type container having a capacity of not less than two (2) cubic yards nor more than eight (8) cubic yards which is serviced at the location of use. The container shall be so constructed that it can be handled by the equipment used for collection, as well as being watertight and having a tight-fitting cover or closure. Special containers shall be vermin-proof, including drain plug. The Contractor shall be required to service all customer-owned special containers in use as of the effective date of this Contract; provided, however, that the Contractor, at his expense, may substitute another type of special container.
- W. SPECIAL WASTE RECEPTACLE - Shall mean and include any square or round type storage container with a special cover and removable inner container. At the option of the City or the owners of private property, "special waste receptacles" may be replaced with "standard containers."
- X. STANDARD CONTAINER - A receptacle with a capacity of greater than 20 gallons but less than 35 gallons constructed of plastic, metal or fiberglass, having handles of adequate strength for lifting and having a tight fitting lid capable of preventing entrance into the container by vectors. The mouth of a container shall have a diameter greater than or equal to that of the base. The weight of a Container and its contents shall not exceed 50 pounds.

ARTICLE III - A. Commercial Refuse Collection

(1) All refuse shall be collected from standard containers, special containers, special commercial containers, or special waste receptacles. The Contractor may collect refuse from front loading commercial dumpsters and from any other design dumpster units mutually agreed upon by the City and the Contractor. In addition, bundles and plastic bags will be collected from standard container locations. The Contractor shall publish a notice in a newspaper of general circulation in the City and approved by the City setting forth the schedule of collection.

(2) All standard containers, special containers, special commercial containers, and special waste receptacles as defined in this Contract will be furnished by the owners of private property except as may be provided in the recycling program. However, this does not prohibit the Contractor from

reaching a mutually satisfactory agreement with the City or the owners of the private properties to provide containers of all types.

(3) Before moving loaded special containers the Contractor shall tightly close and latch lids and doors to eliminate spillage. The loaded units shall be completely emptied of all refuse and returned to the original locations from which they were removed. Container lids shall be closed after dumping. The fact that the access to the container may be blocked will not relieve the Contractor from the responsibility for servicing the unit. The City and/or the owners of private properties will maintain **in* passable and usable condition adequate access drives for removal and service of the containers.

(4) In the case of standard containers, extra care must be taken in the loading and transporting of the refuse to eliminate spillage. Standard containers shall be handled in a workmanlike manner and shall not be thrown down carelessly thereby causing damage to the containers or lids. Lids shall be replaced on each container by the Contractor after emptying refuse.

(5) Before moving loaded special commercial containers, the Contractor shall make sure that a curtain has been tied down over the open end of the compactor container in order to eliminate spillage during transport to the sanitary landfill. The loaded units shall be completely emptied of all refuse and returned to the original locations from which they were removed. The fact that the access to the containers may be blocked shall not relieve the Contractor from the responsibility of servicing the unit. The City and/or the owners of private properties will maintain in passable and usable condition adequate access drives for removal and replacement of the containers. Vehicles shall not be parked in such a manner as to prevent a safe line of sight around the vehicle. When it becomes impossible to park in a manner that a safe line of sight cannot be maintained, a flagman will be provided.

(6) The Contractor shall conduct his operation so as to interfere as little as possible with the public use of roads, walks and entrances to houses, and shall, at his own expense, make such approved temporary provisions as are required to maintain at least one lane of traffic.

(7) All operations of the Contractor upon the premises of the City shall be confined to areas authorized by the City. No unauthorized or unwarranted entry, passage through, or storage or disposal of materials shall be made upon the City's or privately owned premises. The Contractor shall hold and save the City free and harmless from liability of any nature or kind arising from any use, trespass or damage occasioned by his operation on premises **of* third **parties*.

ARTICLE IV - Residential Collection/Recycle Program

Bidders have been required to bid different levels of residential service depending on the level of service selected, the following provisions shall be applicable:

A. Curb/Alley Refuse Service, Once and Twice Per Week: Service shall consist of providing refuse collection and disposal both once and twice a week at the curb/alley. The day of collection at any given location must be consistent from week to week and must be in accordance with a plan submitted by the Contractor to and approved by the City Administrator. **An alternate work schedule may be undertaken only upon approval of the City.*

**Addendum pre-bid conference, word changes and deletions.*

B. Once-a-Week Curb/Alley Recycling Pickup, Once-a-Week Refuse Collection: Service shall consist of providing once-a-week curbside recycling pickup and once-a-week refuse collection and disposal, both at the curb. The day of recycle pickup and refuse collection/disposal must be consistent from week to week and must be in accordance with a plan submitted by the Contractor to and approved by the City Administrator.

C. Once-a-Week Curb/Alley Recycling Pickup: Service shall consist of providing once-a-week curbside recycling pickup at the curb/alley. The day of recycle pickup must be consistent from week to week and must be in accordance with a plan submitted by the Contractor to and approved by the City Administrator.

D. Location of Containers, Bags & Bundles For Collection: Each container, bag and bundle shall be placed at curbside for collection. Curbside refers to that portion of right-of-way fronting the residential dwelling and adjacent to paved or traveled City Roadways (including alleys). Containers, Bags and Bundles shall be placed as close to the roadway as practicable without interfering with or endangering the movement of vehicles or pedestrians. When construction work is being performed in the right-of-way, containers, bags, and bundles shall be placed as close as practicable to an access point for the collection vehicle. Contractor may decline to collect any container, bag and bundle not so placed or any Residential Refuse not in a container or bag. Provided, however, that Contractor shall provide collection of containers, bags and bundles at a mutually-agreed on-premises location if contractor is provided with a satisfactory release by the owner of a Residential Unit.

Supplementary information on the recycle program and requirements is contained in the Special Provisions, Specifications for Curbside Recycling appended hereto as Appendix 1.

At the time of execution of this Contract, the City shall give written notice to the Contractor of the selection of the level of service required. At any time during the term of this Contract if the City gives the Contractor at least six months written notice prior to any succeeding July 1, the City shall have the option of selecting any alternative level of service bid by the Contractor.

ARTICLE V - Operation

A. Hours of Operation - Collection of Refuse shall not start before 6:00 a.m. or continue after 6:00 p.m. on the same day. Exceptions to collection hours shall be effected only upon the mutual agreement of the City and the Contractor, or when the Contractor reasonably determines that an exception is necessary in order to complete collection on an existing collection route due to unusual circumstances.

B. Routes of Collection - Collection routes shall be established by the Contractor. Contractor shall submit a map designating the collection routes to the City for their approval. The Contractor shall publish at its expense at least once during each calendar year, a map of such collection routes in the newspapers published in the immediate area. The published map shall be of such size to clearly show all pertinent information. The Contractor may from time to time propose to the City for approval, changes in routes or days of collection. Upon the City's approval of the proposed changes, the Contractor shall promptly give written or published notice to the affected Residential Units at least seven (7) days in advance of such changes.

C. Holidays - The following shall be holidays for purposes of this Contract.

New Year's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

Contractor may decide to observe any or all of the above mentioned holidays by suspension of collection service on the holiday, but such decision in no manner relieves Contractor of his obligation to provide collection service at least once per week.

D. Complaints - All complaints shall be made directly to the Contractor and shall be given prompt and courteous attention within one working day. In the case of alleged missed scheduled collections, the Contractor shall investigate and, if such allegations are verified, shall arrange for the collection of the Refuse not collected within 24 hours after the complaint is received. Contractor shall maintain a record of complaints and action taken, and make such records available to the City upon request.

E. Collection Equipment - The Contractor shall provide an adequate number of vehicles for regular collection services. All vehicles and other equipment shall be kept in good repair, appearance, and in a sanitary condition at all times. Each vehicle shall have clearly visible on each side the identity and telephone number of the Contractor.

F. Office - The Contractor shall maintain an office or such other facilities within the local telephone service area through which he can be contacted. It shall be equipped with sufficient telephones and shall have a responsible person in charge from 6:00 a.m. to 6:00 p.m. Monday through Friday. Contractor's present address and phone number is

G. Hauling - All refuse hauled by the Contractor shall be so contained, tied or enclosed that leaking, spilling or blowing are prevented.

H. Disposal - All refuse collected for disposal by the Contractor shall be hauled to a **State-permitted* Disposal Site, and the Disposal Site charge shall be the sole responsibility of the Contractor.

I. Notification - The Contractor shall notify all Producers about complaint procedures, regulations, and day(s) for scheduled refuse collection.

J. Point of Contact - All dealings, contacts, etc., between the Contractor and the City shall be directed by the Contractor to the City Administrator and by the City to the Contractor's District Manager at

K. Notification to City - The Contractor shall require the personnel operating its equipment to notify the City of non-collectible items they see during the course of a collection route. Such notification shall be provided immediately upon the sighting of such non-collectible items.

L. Reporting Requirements - The Contractor **shall* be required to keep records and submit reports to comply with the City's reporting requirements. These reports **shall* serve as a means to appraise the City of the status of collection activities. The Contractor **shall* also be required to provide

**Addendum pre-bid conference, word changes and additions.*

weight receipts for all materials taken to a disposal site. Reporting requirements include:

(1) Monthly Project Reports: The Contractor shall submit monthly project reports for the length of the Contract period commencing upon final approval of the Contract. These reports *shall be due within five (5) working days from the end of the period being reported. At a minimum, the reports shall include on a per route basis:

- a. Summaries of tonnage collected.
- b. Average weight per stop per month.

(2) Quarterly Project Status Report: The Contractor shall provide quarterly project status reports. These reports shall be due within fifteen (15) days of the close of the quarter being reported. At a minimum, the reports shall include on a per route basis and cumulative City basis:

- a. Summaries of tonnage collected.
- b. Average weight per stop per month.

(3) Annual Reports: The Contractor shall provide year-end annual reports for each year the project is in operation. These reports *shall be due within sixty (60) days of the end of the reporting year. At minimum, the report shall include on a per route basis:

- a. Summaries of tonnage collected.
- b. Average weight per stop per month.

ARTICLE VI - Compliance With Laws

The Contractor shall conduct operations under this Contract in compliance with all applicable laws; provided, however, that the General Specifications shall govern the obligations of the Contractor where there exists conflicting ordinances of the City on the matters covered by this Contract.

ARTICLE VII - Effective Date

This Contract shall be effective upon the execution of the Contract and performance of such Contract shall begin on _____.

ARTICLE VIII - Nondiscrimination

The Contractor shall not discriminate against any person because of race, sex, age, creed, color, religion or national origin, and shall otherwise comply with all applicable anti-discrimination provisions of state and federal laws, rules and regulations and shall hold harmless and indemnify the City, its officers, officials, agents and employees for any failure to so comply.

ARTICLE IX - Minimum Wage to be Paid

The Contractor shall pay without deduction or rebate, unless expressly authorized by law, not less than the minimum wage established by Federal or

**Addendum pre-bid conference, word change.*

State law, or municipal regulation, during the term of this Contract to all persons employed by him and by any subcontractor in the furnishing of work, labor, or services in the performance of this Contract.

The Contractor further agrees that for any breach or violation of the foregoing stipulation, he shall be liable to the City for liquidated damages a sum equal to the amount of any underpayment of wages due to any employee engaged in the performance of this Contract, which sum may be withheld from any amounts due on this Contract or the same may be recovered in a suit brought by the City Attorney in the name of the City and shall be in addition to damages for any other breach of this Contract.

The Contractor agrees that the City Administrator may examine his books and records or the books and records of any subcontractor to ascertain the rate of wages paid to any person employed by either of them in the furnishing of work, labor or services in the performance of this Contract.

ARTICLE X - Indemnity

The Contractor **shall* indemnify, hold harmless, and exempt the City, its officers, agents, servants, and employees from and against any and all suits, actions, legal proceedings, claims, demands, damages, costs, expenses, fines and attorneys' fees resulting from injury to person or damage to property arising out of work done in the performance of this Contract. The Contractor **shall* also indemnify and hold harmless the City from and against any and all suits, actions, legal proceedings, claims, demands, damages, costs, expenses, fines and attorneys' fees resulting from violations of state or federal environmental laws pertaining to solid waste collection and disposal.

ARTICLE XI - Licenses and Taxes

The Contractor shall obtain all licenses and permits (other than the license and permit granted by the Contract) and promptly pay all taxes required by the City, or other governmental entities.

ARTICLE XII - Term

The Contract shall be for a five (5) year period beginning upon the execution of the Contract and ending five (5) years thereafter. The initial five (5) year term of this Contract shall automatically be extended for successive additional five (5) year terms, unless either party notifies the other party in writing, not less than one hundred twenty (120) days prior to the expiration of the initial five (5) year term or of any successive five (5) year term of its intentions to terminate this Contract or of its intentions to renew this Contract for a term of one (1) year only. Any such written notice shall be served by certified or registered mail, return receipt requested.

ARTICLE XIII - Insurance

The Contractor shall at all times during the Contract maintain in full force and effect Worker's Compensation, Employer's Liability, Bodily Injury Liability, Property Damage Liability, Automobile Bodily Injury Liability, Automobile Property Damage Liability, Excess Umbrella Liability, including contractual liability coverage for the provisions of ARTICLE V - P. All insurance shall be by insurers and for policy limits acceptable to the City

**Addendum pre-bid conference, word changes.*

and before commencement of work hereunder the Contractor agrees to furnish the City certificates of insurance or other evidence satisfactory to the City to the effect that such insurance has been procured and is in force.

The liability policy or policies shall name the City of South Pittsburgh an additional insured and shall contain the following express obligation:

"This is to certify that the policies of insurance described herein have been issued to the insured for whom this certificate is executed and are in force at this time. In the event of cancellation or material change in a policy affecting the certificate holder thirty (30) days prior written notice will be given the certificate holder."

For the purpose of the Contract, the Contractor shall carry the following types of insurance in at least the limits specified below:

<u>COVERAGES</u>	<u>LIMITS OF LIABILITY</u>
Worker's Compensation	Statutory
Employer's Liability	\$ 500,000
Bodily Injury Liability Except Automobile	\$ 500,000 each occurrence \$1,000,000 aggregate
Property Damage Liability Except Automobile	\$ 500,000 each occurrence \$ 500,000 aggregate
Automobile Bodily Injury Liability	\$ 500,000 each person \$1,000,000 each occurrence
Automobile Property Damage Liability	\$ 500,000 each occurrence
Excess Umbrella Liability	\$10,000,000 each occurrence

ARTICLE XIV - Bond

A. Performance Bond

(1) The Contractor **shall* be required to furnish a performance bond for the faithful performance of this Contract, said bond to be executed on payment and performance bond form satisfactory to the City in form and substance. The payment and performance bond **shall* be furnished annually by the contractor for each year of the contract or renewal term and shall guarantee performance of this Contract and payment for all materials and labor by the Contractor. The amount of the bond for the first year shall be equal to the unit bid price times the agreed upon unit count. The amount of the payment and performance bond for each of the following twelve (12) months periods shall equal 100% of the amount paid to the Contractor by the City during the twelve (12) months period immediately preceding such period.

(2) Premium for the bond(s) described above shall be paid by the Contractor. A certificate from the surety showing that the bond premiums are paid in full shall accompany the bond.

**Addendum pre-bid conference, word changes.*

(3) The surety on the bond shall be a duly authorized corporate surety company authorized to do business in the State.

B. Power of Attorney - Attorneys-in-fact who sign performance bonds or Contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.

ARTICLE XV - Basis and Method of Payment

A. Rates

(1) For collection services required to be performed pursuant to ARTICLE III, the charges shall not exceed the rates as fixed by the Contract Documents, as adjusted in accordance with ARTICLE XV - B.

(2) The refuse collection charges provided by ARTICLE XV - A (1) shall include all disposal and related costs.

(3) Contractor may, at its option, elect to acquire bags from a supplier of its choice and attempt to market such bags to residential units; however, this option in no way interferes with the right of each owner or occupant of a residential unit to obtain bags from another source.

B. Modification to Rates

(1) The fees which may be charged by the Contractor for the second and subsequent years of the term hereof shall be adjusted upward or downward to reflect changes in the cost of operations, as reflected by fluctuations in the Consumer Price Index for Urban Wage Earners and Clerical Workers (all items) and the Consumer Price Index for Urban Wage Earners and Clerical Workers, Expenditures Category "Gasoline," both as published by the U.S. Department of Labor, Bureau of Labor Statistics. As of the last month of the first year of the Contract and every year thereafter (the "Rate Modification Date"), the fees shall be increased or decreased for the ensuing yearly period in the percentage amount equal to 90 percent of the net percentage change of the All Items Index plus 10 percent of the net percentage change of the Gasoline Index. All percentage changes are to be computed as the difference between the index value for the first full month prior to the commencement of the Contract and the index value for the Rate Modification Date divided by the index value for the first full month prior to the commencement of the Contract. However, no annual rate increase resulting from the use of this formula shall exceed four (4) percent per year.

(2) As soon as possible after a Rate Modification Date, the Contractor shall send to City a comparative statement setting out for both the All Items Index and the Gasoline Index (i) the index value on the first full month prior to the commencement of the Contract; (ii) the index value on the Rate Modification Date preceding the date of the statement; (iii) the net percentage change; (iv) the composite percentage change equal to 90 percent of the net percentage change in the All Items Index plus 10 percent of the net percentage change in the Gasoline Index; and (v) the increase (not exceeding four (4) percent annually) or decrease in the fees which may be charged by the Contractor. On the next billing date after the receipt of the comparative statement, the City shall pay to the Contractor or the Contractor shall credit to the City, as the case may be, a lump sum equal to any increase or decrease applicable to that portion of the current period which has elapsed and, thereafter, the fees charged by the Contractor shall be modified to reflect any change until a different comparative statement is received by the City.

(3) In addition to the above, the Contractor may petition the City at any time for additional rate and price adjustments at reasonable times on the

basis of unusual changes in its cost of operations, such as revised laws, ordinances, or regulations; changes in location of disposal sites or changes in disposal charges; an increase in the number of residential units as set forth in Section C of this ARTICLE such as City growth or annexation; and for other reasons. If the City denies a petition of the Contractor for an increase in price per residential unit to permit a pass through of direct charges by others to the Contractor (such as disposal site charges), the Contractor shall have the right to terminate this Contract upon one (1) year's written notice to the City.

C. Unit Count - A new unit count shall be established prior to the beginning of this Contract and will remain constant for one year. At the end of the first year and each subsequent year, the unit count shall be increased or decreased based upon the preceding year's number of building permits or demolition permits that have been issued by the City for residential units as defined in ARTICLE II, Section N.

The new unit count shall be an actual counting of all residential units and small commercial units within the City as defined in ARTICLE II, Section N, less fifteen (15) units as an allowance for vacancies.

D. Contractor Billings to City - The Contractor shall bill the City for services rendered within ten (10) days following the end of the month and the City shall pay the Contractor on or before the 20th day following the end of such month. Such billing and payment shall be based on the price rates and schedules set forth in the Contract. The Contractor shall be entitled to payment for services rendered regardless of whether or not the City collects from the customer for such services.

ARTICLE XVI - Transferability of Contract

No assignment of the Contract or any right accruing under this Contract shall be made in whole or in part by the Contractor without the express written consent of the City, which consent shall not be unreasonably withheld; in the event of any assignment, the assignee shall assume the liability of the Contractor, but the Contractor shall not be released from its liability under this Contract without the written consent of the City.

ARTICLE XVII - Contract not a Franchise

It is the understanding and intention of the parties hereto that this agreement shall constitute a contract for the collection and disposal of refuse; that said Contract shall not constitute a franchise; nor shall the same be deemed or construed as such.

ARTICLE XVIII - Default of Contract

Should the Contractor abandon, delay unnecessarily in the performance of, or in any manner refuse or fail to comply with any of the terms of his Contract, or neglect or refuse to comply with the instructions of the City Administrator relative thereto, the City Administrator shall notify the Contractor, in writing, of such abandonment, delay, refusal, failure or neglect and direct him to comply with all provisions of the Contract. A copy of such written notice is to be mailed to the surety on the Performance Bond and delivered to the surety. The **Board of Mayor and Commissioners* shall hear the matter at open session within ten (10) days after receipt of such written notice from the City Administrator and shall, not less than five (5) days

**Addendum pre-bid conference, word changes.*

prior to the date of such hearing, notify the Contractor and the surety on the Performance Bond of the date and place thereof. The Contractor agrees to be present at such hearing and show cause why he has abandoned, delayed, refused, failed or neglected to comply with the terms of the Contract.

Should the Contractor fail to appear or fail to show cause why he has abandoned, delayed, refused, failed or neglected to comply with the terms of the Contract, to the satisfaction of the City Administrator, the City may, declare a default of the Contract and notify the Contractor and the surety on the Performance Bond of such declaration of default, or the City may take such other action as he may deem advisable.

Upon such declaration of default, all payments due the Contractor shall be retained by the City and applied to the completion of the Contract and to damages suffered and expense incurred by the City by reason of such default, unless the surety on the Performance Bond shall assume the Contract, in which event all payments remaining due the Contractor at the time of default, less amounts due the City from the Contractor and less all sums due the City for damages suffered and expense incurred by reason of such default shall be due and payable to such surety. Thereafter, such surety shall receive monthly payments equal to those that would have been paid the Contractor had such Contractor continued to perform the contract.

If such surety fails to exercise such option, the City may complete the Contract or any part thereof, either by day labor or by re-letting a Contract for the same, and the City shall have the right to take possession of and use any or all of the vehicles, materials, equipment, facilities and property of every kind provided by the Contractor for the performance of this Contract, and to procure other vehicles, equipment and facilities necessary for the completion of the same, and to charge the cost of same to the Contractor, together with the cost incident thereto.

In the event the City completes the Contract at a lesser cost than would have been payable to the Contractor under such Contract if the same had been fulfilled by said Contractor, then the City shall retain such difference. Should such cost to the City be greater, the Contractor shall be liable for and pay the amount of such excess to the City.

Should the Contractor fail at any time to perform all or any part of the Contract for a period of more than seventy-two hours, for whatever cause or reason other than force majeure the City may at such time or any time thereafter, take possession of all the Contractor's equipment, vehicles, and facilities, and employ such force as it may deem advisable to continue the work; and the cost of all labor, materials and equipment necessary for such work shall be paid by the City out of monies then due or to become due the Contractor under and by virtue of the Contract for the work herein specified.

ARTICLE XIX - Final Payment

Upon completion of the work under this Contract and before final payment, the Contractor must furnish evidence to satisfy the City that all suppliers of materials used and all labor and other employees working for the Contractor pursuant to this Contract have been fully paid. Upon final payment, the City is to be released from all liability whatever growing out of the Contract.

ARTICLE XX - Administration

The administration and enforcement of this Contract shall be the responsibility of the City Administrator or his designated representative, or representatives. It shall be the responsibility of the City Administrator to see that refuse service customers are provided with complete information about the service.

The City Administrator shall recommend for adoption by the Board of Mayor and Commissioners, in resolution form, any rules or regulations required to enforce or carry out the terms and conditions of this Contract.

ARTICLE XXI - Contract Amendments

It is the intention and agreement of the parties of this Contract that all legal provisions of law that are required to be inserted herein, shall be and are inserted herein. However, if by mistake or otherwise, some such provision is not herein inserted or is not inserted in proper form, upon the application of either party, the Contract shall be amended so as to strictly comply with the law without prejudice to the right of either party hereunder.

ARTICLE XXII - Contract Conditions

This Contract is entered into subject to the following conditions:

- (a) The Contractor shall procure and keep in full force and effect throughout the term of this Contract all of the insurance policies specified in, and required by ARTICLE XIII of this Contract.
- (b) The Contractor shall not be liable for failure to wholly perform his duties if such failure is caused by a catastrophe, riot, war, strike, fire, accident, act of God or other similar or different contingency beyond the reasonable control of the Contractor; provided, however, that under this Contract because of strike, fire or accident the non-performance shall not extend for more than seventy-two (72) hours during any such occurrence.
- (c) In the event that any provision or portion thereof of this Contract shall be found to be invalid or unenforceable, then such provision or portion thereof shall be reformed in accordance with the applicable laws. This invalidity or unenforceability of any provision or portion of this Contract shall not affect the validity or enforceability of any other provision or portion of this Contract.

IN WITNESS WHEREOF, WE, the contracting parties, by our duly authorized agents, hereto affix our signatures and seals at _____, as of this _____ day of _____, 19__.

ATTEST:

CITY OF SOUTH PITTSBURG
A Municipal Corporation of Marion
County, Tennessee

BY _____
(Mayor)

SEAL OF THE CITY OF SOUTH PITTSBURG,
TENNESSEE and _____
(City Clerk)

ATTEST:

BY _____
(Contractor)

APPENDIX I

SPECIAL PROVISIONS

SPECIFICATIONS FOR CURBSIDE RECYCLING

Purpose and Introduction

The recycling program, if selected as a service option by the City, will involve implementation of a weekly curbside collection service within the City limits for recyclable materials to be collected, processed and marketed. Alternatively, the program may consist of a recycle drop off center only or some combination thereof.

Actual curbside collection of recyclables is scheduled to begin on or about _____, 19__ . This lead time is designed to allow the Contractor time to order and modify collection vehicles and processing equipment, obtain any permits or licenses that may be required, and to coordinate collection with public awareness activities which will begin approximately sixty (60) days before the start of actual collection.

The City is now seeking the services of a qualified firm or firms to collect, process, and broker recyclable materials recovered from residential dwellings, as defined in ARTICLE II, Section N, of the Contract (approximately 1,400 units). The City will assist the Contractor in providing public awareness activities to promote participation. The Contractor will be expected to take the lead in promoting the program and to cooperate fully with the City in its efforts.

Qualifications of Contractor

The City shall require submission with the proposal of supporting data regarding the qualifications of the Contractor in order to determine whether the Contractor is a qualified, responsible Contractor. The Contractor will be required to furnish the following information:

A. Satisfactory evidence that the Contractor has been in existence as a going concern in excess of three (3) years and possesses not less than three (3) years' actual operating experience as a going concern in secondary materials management or solid waste management.

B. Satisfactory evidence that the Contractor's experience as a going concern in municipal services or private business derives from operations of comparable size to that contemplated by this proposal. Details shall include length of other contracts, name and size of municipality, nature of service provided, and the name of the contact person at the municipality in question.

C. Evidence that the Contractor is in good standing in the State of Tennessee, and in the case of a corporation, organized under the laws of any other state. Evidence that the Contractor is licensed to do business in the State of Tennessee and the City of South Pittsburg or a sworn statement that *it will take all necessary action to become so licensed if its proposal is accepted.

**Addendum pre-bid conference, word change.*

D. A detailed inventory of the Contractor's equipment available for use on the Contract. This inventory should include a detailed listing of the Contractor's equipment and all accessories by type, model, year of manufacture, and anticipated remaining useful life as of the date of the inventory. All new equipment to be acquired to accomplish this Contract must be available within ten (10) days of the commencement of operations. Delivery guarantees by manufactures shall be included with the bid proposal.

E. The names and resumes of the principal officers, partners, and/or officials. The name(s) and resume(s) of the individual(s) who will be considered in responsible charge of the City contract.

F. Such additional information as will satisfy the City that the Contractor is adequately prepared to fulfill the Contract.

Disqualification of Contractors

Although not intended to be an exhaustive list of causes for disqualification, any one or more of the following causes, among others, may be considered sufficient for disqualification of a Contractor and the rejection of this proposal:

A. Lack of competency as revealed by either experience or equipment statements as submitted, or other sources or documents.

B. Lack of responsibility, as shown by past work judged from the standpoint of workmanship.

C. Default on any previous performance contracts within the past ten (10) years.

Scope of Responsibilities (or Detailed Specifications) - Curbside/Alley Recycle Program

The Contractor **shall* provide the following services:

A. Collect and remove all separated recyclables from the curb/alley once each week (regardless of weather conditions) from all single-family homes and all residential complexes that receive garbage collection service from the City of South Pittsburg. This would include special schedules for holidays observed by the City of South Pittsburg. (See ARTICLE V - C of Contract.)

B. Recyclable materials to be collected **shall* include, but not be limited to, newspaper, glass, aluminum and steel cans, and plastic bottles. The Contractor **shall* also provide a container for each residential dwelling, 14-gallon minimum size, to be used by the resident for sorting recyclable materials. Type, size and design shall be approved by the City. Residents may be required to pay for or replace any lost container, or container damaged by the resident's misuse.

C. Transport the recovered recyclable materials to a central processing site and retain responsibility for the brokering of these materials to their respective markets.

D. The Contractor shall, within the City of South Pittsburg at a location approved by the City, provide an area and opportunity for public drop off of recyclables including, but not limited to, steel cans, newspaper, glass containers, mixed plastic, and aluminum cans. The Contractor shall obtain all permits necessary to operate such a site.

**Addendum pre-bid conference, word changes.*

E. Furnish at its own cost all the labor and associated costs required to perform these operations of the curbside collection * and transportation to markets, if applicable.

F. Two (2) months prior to actual collection, the City will work with the Contractor to develop a public awareness campaign to promote the City's recycling program. It is expected that the Contractor will work closely and meet frequently with City staff regarding the public awareness program.

G. The Contractor shall establish a local office or facility through which *contact can be made pursuant to ARTICLE V - F, of the Contract.

H. The Contractor shall receive and respond to all complaints regarding services provided under this Contract. Any complaints received by the City will be directed to the Contractor's office. The Contractor shall respond within twenty-four (24) hours, excluding Saturday or Sunday. A penalty of Ten (\$10.00) Dollars will be charged the Contractor for failure to respond to legitimate citizen complaints concerning service or for the third or successive legitimate complaint at the same location.

Reporting Requirements

The recycling Contractor will be required to keep records and submit reports to comply with the City's reporting requirements. These reports will serve as a means to appraise the City of the status of recycling activities. The Contractor *shall also be required to provide weight receipts for all materials brokered by the Contractor for materials collected in the program. Reporting requirements include:

A. Monthly Project Reports: The recycling Contractor shall submit monthly project reports for the length of the Contract period commencing upon final approval of the Contract. These reports shall be due within five (5) working days from the end of the period being reported. At a minimum, the reports shall include:

1. Summaries of tonnage of all materials recovered, by material.
2. Summaries by tons of all materials sold, by material.
3. Material market prices and where brokered.
4. Resident participation rates by neighborhood in terms of weekly and monthly set-out counts with a description of the methods used to determine these rates.
5. Description of progress in meeting the implementation schedule, including any problems encountered and how they were resolved.

B. Quarterly Project Status Report: The recycling Contractor shall provide quarterly project status reports. These reports shall be due within fifteen (15) days of the close of the quarter being reported. At a minimum, the reports shall include:

1. Summary of all program costs and revenues, tonnage recovered by material and participation rates by neighborhood.
2. Progress in meeting the implementation schedule.

**Addendum pre-bid conference, deletions and word changes.*

3. Detailed data to allow analysis of collection and processing efficiencies.

4. Discussion of problems and successful experiences in program operation.

C. Annual Reports: The Contractor shall provide year-end annual reports for each year the project is in operation. These reports will be due within sixty (60) days of the end of the reporting year. At minimum, the report shall include:

1. A collated summary of the detailed revenue information contained in the quarterly reports, and also summarize the participation rates by neighborhood and recovered material weights.

2. A summary of public awareness activities and their impact on participation and recovered tons.

3. A summary of successes and problems and measures taken to resolve problems.

4. Revised implementation schedule for the succeeding years of operation.

Proposal Forms and Information

At a minimum, each firm should include the following information in its proposal:

A. A list of key personnel who will be involved in the operation and management of this project. Include functions and resumes of each person listed.

B. A description of similar work experience and the names and phone numbers of contact persons (references).

C. Proposed subcontractors, if appropriate.

D. A detailed description of services to be provided which demonstrates understanding of the scope of services necessary. This description should include the scope of recyclable materials to be collected, and labor and equipment requirements necessary to completely operate the curbside collection components of the recycling program.

E. Additional services that may be required but not included in the Request for Proposal.

F. A list of markets or market commitments for which the Contractor presently has agreements for selling materials collected.

G. Identity of all necessary start-up activities, significant project milestones, and completion dates.

All other provisions of the Contract not having application exclusively to refuse collection by their terms shall be applicable to the curbside recycle program and/or recycle center.

**CITY OF SOUTH PITTSBURG,
TENNESSEE**

**QUALIFICATIONS FOR
SOLID WASTE COLLECTION AND
DISPOSAL PROGRAM
AND/OR RECYCLING PROGRAM**



**BROWNING-FERRIS INDUSTRIES
OF TENNESSEE, INC.**

**CONTRACTOR
SPECIFICATIONS**

COMPANY OVERVIEW

II. Company Overview

- A. Number of Years in Business**
- B. Specialized Experience and Technical Competence**
- C. Number of Employees**
- D. Current Contracts and Billings**
- E. Office Location and Primary Point of Contact**
- F. Insurance Coverage**
- G. Subcontractors**



CORPORATE HISTORY

In the last few months of 1969, Browning-Ferris Industries was on the threshold of a program that would result in the acquisition by the end of 1973 of more than 150 privately owned, local waste service businesses throughout the United States, Canada and Puerto Rico. In the aggregate, these businesses represented approximately one and a half percent of the estimated 10,000 independent waste service companies operating in the U.S. at the time. Together, however, these acquired businesses became the nucleus of an international, \$3 billion, New York Stock Exchange company: Browning-Ferris Industries, Inc., headquartered in Houston, Texas.

Browning-Ferris Industries now provides waste collection services through approximately 600 operating locations throughout the United States, Canada, and Puerto Rico, as well as Australia, Hong Kong, Italy, New Zealand, South America, The Netherlands, Spain, The United Kingdom and Venezuela. Today, the company employs over 26,000 people, utilizes approximately 8,500 collection vehicles, and owns or manages over 100 sanitary landfills. For the 12 months ending September 30, 1990, revenues reached \$2,970 million. BFI has approximately 153 million shares outstanding with approximately 21,000 stockholders of record. It is considered today as one of the world's leading waste services companies.

BFI evolved from a small residential waste collection firm, American Refuse Systems, Inc., (ARS) that was founded in 1967 with a single truck providing garbage collection service to a Houston subdivision. American Refuse Systems in 1969 acquired a controlling interest in Browning-Ferris Machinery Company, a distributor of heavy construction equipment, changed its name to Browning-Ferris Industries and used the company as the base for a nationwide waste services firm.

Raising the expansion capital necessary for a nationwide firm through private investors had its limitations. The machinery company, however, possessed several key advantages that would make initiation of ARS' expansion plans possible. Browning-Ferris Machinery Company was an old, established regional business, publicly held, with its common stock traded in the over-the-counter market. In 1969, the plan to build a nationwide waste services firm was initiated when Browning-Ferris Industries made its first acquisition—the solid waste collection and disposal operations of ARS that had by then become a successful business in the Houston area. From this initial entry into

the waste services business, BFI's plan to develop a nationwide waste services organization was implemented over the next four years by a highly successful acquisition program.

In October 1970, Patterson Waste Control, Inc., located in Memphis, Houston Disposal Services, Inc., based in Houston, and Waste Control of Puerto Rico, Inc., located in San Juan, were acquired. The president and majority owner of these three companies was Harry J. Phillips. One of the most experienced and respected men in the waste industry, Phillips joined BFI as president and chief operating officer. Phillips brought to BFI the ability to integrate the business operations of the various companies that had been acquired previously, and the ability to manage their operations.

Other companies BFI acquired included many owned and operated by some of the long-established, highly respected names in the waste services industry. Many of BFI's current regional vice presidents and district managers came from the management ranks of these companies.

By 1973, annual revenues had increased to approximately \$300 million, making BFI the largest waste services company in the world. And by the beginning of the Eighties, BFI's revenues were more than one-half billion dollars.

Solid Waste

Despite the numerous changes in the waste services industry in recent years, solid waste—the traditional trash and garbage that formed the content of old city dumps—continues to be the mainstay of business for BFI and other firms in the industry. Of the millions of tons of waste materials handled by BFI each year, the bulk consists of ordinary materials discarded by householders and businesses.

BFI has helped to make the open dump virtually nonexistent in the United States by developing modern landfilling techniques to dispose of these substances in a manner that is both environmentally safe and aesthetically pleasing.

Sites for BFI landfills are selected under a rigorous procedure that includes geologic assessments of the subsurface features of the land, measures to protect against pollution, and evaluations of the effects of each site on nearby communities.



Corporate Address: Browning-Ferris Industries, Inc.
Browning-Ferris Building
757 N. Eldridge
Post Office Box 3151
Houston, Texas 77253
Telephone: 713/870-8100
Fax: 713/870-7182

Company Overview

Browning-Ferris Industries, Inc. is one of the largest publicly held companies whose subsidiaries and affiliates collect, transport, treat and dispose of commercial, residential, municipal and industrial solid waste. The company is also involved in recycling, resource recovery facilities, and medical waste services, as well as providing waste services in several foreign countries.

Browning-Ferris is headquartered in Houston, Texas. The company's subsidiaries and affiliates operate in approximately 590 operating districts in the United States, Australia, Canada, Hong Kong, Italy, the Netherlands, New Zealand, Puerto Rico, Spain, United Kingdom and Venezuela.

Operating Data (numbers are approximate):

Employees	29,400
Solid Waste Trucks, Including Collection and Transfer Vehicles	9,400
Commercial and Industrial Accounts	699,000
Municipal Contracts (Solid Waste Collection)	990
Residential Accounts	6,900,000
Recycling Curbside Collection Programs	600
Households Served	3,100,000
Recycleries	86
Medical Waste Accounts	80,000
Medical Waste Treatment Facilities	23
Owned or Operated Sanitary Landfills	115
Transfer Stations	77
Total Locations Where Solid Waste is Collected	360
Units of Landfill Equipment, such as Compactors, Scrapers, Dozers, etc.	970
Steel Containers	840,900
Tons of Solid Waste Disposed of Annually at BFI Landfills	27 million tons

Financial Data for 12 months ended 3/31 93 (unaudited):

Revenues:	\$ 3.4 billion
Pretax Profits:	\$327.5 million
Net Income:	\$199.8 million
Cash Flows From Operating Activities	\$640.6 million
Total Assets:	\$ 4.1 billion

Common Stock: Browning-Ferris Industries, Inc. common stock is traded under the symbol BFI on the New York Stock Exchange, Inc., the Midwest Stock Exchange, the Pacific Stock Exchange and the International Stock Exchange of the United Kingdom and Republic of Ireland Ltd.

For additional data, contact:

Corporate Communications Department
Browning-Ferris Industries
713/870-8100



The Look of a Leader

Browning-Ferris Industries, Inc. (BFI) is one of the world's largest publicly-held waste service companies. BFI's primary business is collecting, processing and disposing of waste, as effectively and economically as possible. Operations are conducted in a manner that is compatible with the protection of the environment and conservation of natural resources.

The company's leadership role is the result of three important elements: 1) The creation of a professional systems approach to waste handling. 2) The development of competent, experienced, concerned personnel. 3) The building of a worldwide network of professionally managed operations.

BFI and its subsidiaries and affiliates employ thousands of people worldwide, serving commercial, industrial, governmental and residential customers through operating locations in North and South America, Australia, Hong Kong, Italy, the Netherlands, New Zealand, Spain and the United Kingdom.

The BFI approach to waste control provides an improved, more efficient way of meeting customer needs. BFI identifies the waste handling problem... determines the best solution... and provides the necessary equipment, technology and personnel to ensure dependable, economical service.

Commercial/Industrial Collection

BFI serves shops, hospitals, apartments, airports, restaurants, manufacturing plants, shopping centers, schools and other institutions and businesses with waste collection systems utilizing on-site containers. Container types and sizes, and frequency of waste collection are tailored to each customer's individual needs. Front-end loader systems, rear-end loader systems, side-loader systems, roll-off systems and stationery compactor systems provide alternatives to meet every service situation.

Residential Collection

In setting up a residential solid waste collection program, BFI matches labor and equipment to the specific population, geography and waste generating characteristics of the area. Curbside collection and back-door pickup are the two most frequently provided services. Rear-end-

loader or side-loader systems and support equipment are chosen to provide efficient, rapid collection and reliability. This BFI service may be provided under contract with municipal governments, subdivisions, or directly to homeowners.

Recycling

As an industry leader in waste collection and disposal, and as a pioneer in America's efforts to recycle reusable materials, BFI has developed successful RecycleNOW® recycling programs that include residential curbside collection, recycling centers, commercial collection and programs for landfills. All have two purposes—return valuable secondary materials as raw material for industry, and reduce the amount of waste material that is sent to landfills.

The company has hands-on experience in designing and implementing successful neighborhood-oriented recycling activities through its multi-material curbside programs and yard waste curbside programs.

Resource Conservation Services (RCS), a wholly-owned subsidiary of BFI, helps communities recover sludges, yard and food wastes, and wood and coal ash through organic waste recycling programs. The BFI Tire Recyclers group provides scrap tire collection, stockpile abatement and processing programs customized to meet local recycling goals.

BFI can also help a community implement any combination of three types of recycling centers: RecycleNOW Buy-Back Centers, RecycleNOW Drop-off Centers and the BFI Recyclery™.

Solid Waste Disposal

Millions of tons of solid waste are disposed of annually by BFI at company owned and/or operated sanitary landfills throughout North America. The sanitary landfill method, pioneered by BFI, is currently the most economically feasible and environmentally compatible alternative for solid waste disposal. Thoughtfully engineered BFI sanitary landfills are valuable assets to the areas they serve during their operation. Upon completion, they can be converted to recreational and other types of open areas.

LOCAL DISTRICT OFFICE

BFI has been operating in the Southeast Tennessee marketplace since 1971, at which time it purchased Chattanooga Disposal, Incorporated. We have our District office based in Chattanooga, with satellite offices in Cleveland and Rome, GA.

Management/Supervision	12
Sales	11
Accounting/Clerical	10
Residential Collection	42
Commercial Collection	50
Recycling	15
Maintenance and Repair	14
Street Sweeping	3
Medical Waste	<u>5</u>
TOTAL EMPLOYEES	<u>162</u>

RECENT CONTRACTS

**City of Cleveland
Residential and Commercial
Solid Waste Collection
11,000 Homes and
600 Businesses**

**City of Cleveland
Residential Curbside
Recycling Collection
11,000 Homes**

**Fort Oglethorpe
Residential Curbside
Recycling Collection
1,700 Homes**

**City of Red Bank
Residential Solid Waste
and Recycling
4,400 Homes**

**City of Dalton
Residential Curbside
Recycling Collection
6,000 Homes**

**Town of Lookout Mountain, TN
Residential Curbside
Recycling Collection
800 Homes**

**City of Dayton
Residential Curbside
Recycling Collection
2,500 Homes**

**Town of Lookout Mountain, GA
Residential Curbside
Recycling Collection
700 Homes**

OFFICE LOCATION AND PRIMARY POINT-OF-CONTACT

**Browning-Ferris Industries of Tennessee, Inc.
1018 East 38th Street
Chattanooga, TN 37407**

(615) 867-4650

**Jack Jenkins
District Manager**

SUBCONTRACTORS

No subcontractors will be used for the collection and/or processing of the City of South Pittsburg's waste or recycling material.

**BFI EXPERIENCE IN MUNICIPAL
SERVICES AND PRIVATE BUSINESS
DERIVED FROM OPERATIONS OF
COMPARABLE SIZE TO THAT
CONTEMPLATED BY THE CITY OF
SOUTH PITTSBURG PROPOSAL**

BFI BACKGROUND

Browning-Ferris Industries, Inc. (BFI) has rapidly grown into one of the largest U.S. publicly-held companies in the waste services industry. The company maintains its corporate headquarters in Houston, Texas, and its subsidiaries and affiliates employ some 29,400 persons in approximately 590 operating locations in the United States, Australia, Canada, Hong Kong, Italy, Kuwait, the Netherlands, New Zealand, Puerto Rico, Spain, United Kingdom and Venezuela.

BFI's primary business is the collection and disposal of solid wastes for residential, municipal, commercial and industrial customers. Worldwide, the company has approximately 5.8 million residential accounts, 984 municipal contracts and over 736,000 commercial accounts. BFI owns and/or operates 116 sanitary landfills.

At September, 1992, the company had total assets of \$4.1 billion and produced a net profit of \$176 million on revenues of \$3.3 billion.

EARLY HISTORY

BFI evolved from a small residential waste collection firm, American Refuse Systems, Inc., that was founded in 1967 with a single truck providing garbage collection service to a Houston subdivision. American Refuse Systems in 1969 acquired a controlling interest in Browning-Ferris Machinery Company, a distributor of heavy construction equipment, changed its name to Browning-Ferris Industries and used the company as the base for a nationwide waste service firm.

BFI in 1969 launched an expansion program by making its first acquisition of a waste collection firm, and by the end of fiscal 1970 had made a total of 16 such acquisitions. Rapid expansion continued through 1976, with many of the owners and operators of the acquired companies becoming regional vice presidents and managers for BFI.

SOLID WASTE

Despite the numerous changes in the waste services industry in recent years, solid waste continues to be the mainstay of business for BFI and other firms in the industry. Of the millions of tons of waste materials handled by BFI each year, the bulk consists of ordinary materials discarded by households and businesses.

BFI has helped to make the open dump virtually nonexistent in the United States by developing modern landfilling techniques to dispose of these substances in a manner that is both environmentally safe and aesthetically pleasing.

Sites for BFI landfills are selected under a rigorous procedure that includes geologic assessment of the subsurface features of the land, measures to protect against pollution, and the effects of each site on nearby communities.

RESOURCE RECOVERY

BFI, together with Air Products and Chemicals, Inc., of Allentown, Pennsylvania, established the American REF-FUEL Company in 1984 to market waste-to-energy facilities to utilize the proven mass-burning technology of the West German firm, Deutsche Babcock Anlagen, for which BFI is the exclusive licensee in North America. This technology recovers energy through the mass burning of solid waste and is used successfully in over 50 cities in Europe and Asia. Access to this technology permits American REF-FUEL to design, construct and operate plants for municipalities to convert the combustible portions of solid waste to steam and/or electricity. Our flagship facility opened in May of this year in Hempstead, New York, and currently handles 2300 tons per day of solid waste. Many other plants are in the design or permitting stages.

RECYCLING

BFI has been involved in various aspects of the recovery of secondary, post-consumer materials for recycling since the early 1970s. The company operated a recovery center in Houston, Texas that processed about a third of the municipally-collected waste from the city. In 1972 the company acquired Consolidated Fibers, Inc., a leading secondary fibers marketing firm, and in the late 1970s the company began a ten-year management contract under the Ministry of the Environment for Canada's Ontario province for a resource recovery plant to extract recyclable materials from the waste stream.

In 1988 BFI served about 45,000 households with curbside collection of post-consumer recyclable materials. By 1992 the company was under more than 400 contracts to provide these services to 3.5 million households. Curbside collection programs are only a part of BFI's recycling activities. The company also operates buy-back centers, recycleries, yard waste composting programs, used oil collection programs, and other recovery operations to remove recyclable materials from the waste stream.

MEDICAL WASTE SERVICES

BFI offers medical waste collection, treatment and disposal services in a market area that covers 42 states, three Canadian provinces, and Puerto Rico. Medical Waste Systems owns, operates or leases the capacity of 25 processing sites, including 18 incineration facilities, two autoclave facilities where steam sterilization takes place, and three facilities where both incineration and autoclave sterilization occur.

COMMITTED TO QUALITY

BFI has moved from an early strategy of primary expansion through acquisitions, toward greater emphasis on growth through increased services and operations in foreign markets.

The company has modernized the disposal sites and facilities it acquired in past years, and designs all new disposal sites to include the most modern design features and technology in the waste service industry.

In summary, BFI's business practices and corporate policies are formulated with the goal of making the Earth a clean and safer place.

BROWNING-FERRIS INDUSTRIES, INC.

Browning-Ferris Industries, Inc., parent company to Browning-Ferris, Inc. is incorporated under the laws of the State of Delaware.

Browning-Ferris Industries, Inc. is one of the largest publicly-held companies whose subsidiaries and affiliates collect, transport, treat and dispose of commercial, residential and municipal solid waste. The company is also involved in recycling, resource recovery facilities, municipal and commercial sweeping operations, medical waste services, and portable rest room services, as well as providing waste services in several foreign countries.

BFI is headquartered in Houston, Texas. The company's subsidiaries and affiliates operate in approximately 590 locations serving communities in the United States, Australia, Canada, Hong Kong, Italy, Kuwait, the Netherlands, New Zealand, Puerto Rico, Spain, United Kingdom, and Venezuela.

Operating Data (numbers are approximate):

Employees	29,400
Solid Waste Trucks, Including Collection and Transfer Vehicles	9,400
Commercial and Industrial Accounts	699,000
Municipal Contracts (Solid Waste Collection)	960
Residential Accounts	6,900,000
Recycling Curbside Collection Programs Households Served	3,500,000
Owned or Operated Sanitary Landfills	116
Transfer Stations	76
Total Locations Where Solid Waste is Collected	360
Units of Landfill Equipment, such as Compactors, Scrapers, Dozers, etc.	970
Steel Containers	840,900
Tons of Solid Waste Disposed of Annually at BFI Landfills	26 million tons

PRIOR RELEVANT EXPERIENCE

SOLID WASTE MANAGEMENT EXPERIENCE

RESIDENTIAL COLLECTION SERVICES

In setting up a residential waste collection program, BFI begins by making a thorough and detailed analysis of refuse collection needs. The manpower and equipment are matched to the specific population, geography, and waste generating characteristics of the area. Routing alternatives as well as the types and frequency of collection service, are planned based on street layout, population centers, and local requirements. Curbside collection and back-door pick up are the two most frequently contracted service types. Vehicles and support equipment are chosen to provide efficient, rapid collection of refuse, and reliability in hauling the waste to the area disposal site. BFI's reliable residential waste collection services provides approximately 15 percent of the company's 1992 revenues.

COMMERCIAL/INDUSTRIAL COLLECTION SERVICES

BFI provides commercial and industrial solid waste collection services to approximately 736,000 business, commercial and industrial waste collection services are provided under one-to-three year service agreements. Prices for collection services are determined by the volume, weight and type of waste collected, frequency of collection, cost of disposal, amount and type of equipment furnished to the customer, and competitive conditions. In providing these services, BFI uses specially-equipped collection compaction trucks. These compaction vehicles (front-end loader, side-loader and rear-loader) are the mainstay of BFI's commercial collection truck fleet. This equipment, along with roll-off trucks, is utilized for industrial waste collection service. The front-end loader truck for example with its hydraulically operated "fork-like" arms and compaction body, when combined with the wide variety of steel containers available for use with this collection system, permits BFI to tailor the collection system to suit the customer's particular needs. Commercial and industrial solid waste collection accounted for 54% of BFI's 1992 revenues.

TRANSFER STATION

BFI operates 76 solid waste transfer stations, at which it processes solid waste for removal to more distant final disposal sites. Transfer stations are conveniently located facilities at which waste collection vehicles discharge their low volume solid waste loads for reloading into large volume transfer vans for more efficient transportation to distant disposal sites.

RESOURCE AND ENERGY RECOVERY

BFI has always been involved with several technologies for the recovery of resources and energy from solid wastes. A Houston subsidiary of BFI, Resource Recovery Inc., spent several years testing and evaluating a program involving recovery of aluminum scrap from solid waste. The same company also experimented with the recovery of paper, fibers, glass, and various metals in the mid 1970's, and also with the use of processed waste as a fuel.

In 1980, BFI became the exclusive North American licensee for the "DBA" waste-to-energy system developed in Germany and used in Europe and elsewhere abroad for producing steam and/or electricity by burning solid wastes. This waste-to-energy system has been successfully incorporated in over 50 district heating and power plants throughout the world with capacities ranging from 250 tons per day to over 3,000 tons per day. This technology is currently marketed by American REF-FUEL Company under a joint marketing agreement between BFI and Air Products and Chemicals, Inc.

MEDICAL WASTE SYSTEMS

BFI's Medical Waste Systems has become the largest provider of medical waste services in the country. Today, BFI medical waste collection activities are conducted from 85 locations, and the collected wastes are treated in 24 regional facilities serving over 61,800 customers with four treatment sites under construction, including the first commercial autoclave in New York and eight others with permits pending. BFI Medical Waste Systems utilizes steam sterilization and incineration, as appropriate, to treat infectious waste. These wastes are collected from over 1,400 customers ranging from major hospitals to clinics and professional buildings, transported to regional medical waste treatment facilities using dedicated containers, and subsequently destroyed. The sterilized residue from the autoclaves and the ash residue from the incinerators is inert, and is disposed of by landfilling.

PROJECT PLAN

Browning-Ferris Industries exercises strict cost controls on all projects from start-of-construction through facility operation. As noted previously, bids are solicited and evaluated for cost, experience and scheduling for both equipment and facility operation. This solicitation and evaluation assures that BFI and the local authority (if not owned by BFI) receives value for the project cost. BFI uses the standard American Institute of Architects (AIA) Masterspec Division of Work and Bid Document format. This automatically requires supporting information on all applications for payment and tracks in scope accumulated project costs as well as any change orders duly authorized for inclusion into the contract.

BFI Engineering Services uses several sources for its estimate of project cost before bids are accepted:

1. Industry standard estimating methods such as Means or Dodge table of costs;
2. Experience gained from similar projects;
3. Budgetary estimates from potential equipment suppliers.

All three methods have been written into computer programs to provide uniformity and consistency of cost estimates within minimum time. Depending upon amount of confidence in the estimates, some contingency will always be provided to assure against cost overruns.

RESEARCH ACTIVITIES

BFI is a leading contributor and developer in advancing the state-of-the-art in its field. The company has pioneered several new pieces of equipment, innovative technology, and advanced practices.

WASTE COLLECTION

In 1973, BFI began evaluating the operating performance of various trucks to determine design limitations and identify specific design improvements. The company's equipment specialists found that most waste collection vehicles were essentially standard commercial trucks not designed for optimum performance in the waste services business. The frequent stops and starts, uncertain terrain and other difficult working conditions inherent in waste collection operations resulted in abnormally high maintenance costs and less-than-maximum vehicle efficiency. From this study, BFI developed new waste collection vehicle design specifications for truck manufactures. A truck chassis tailored to BFI's specific requirements evolved, and a prototype was produced in 1974.

CLIENT LIST

CLIENT LIST

The following page is a partial list of cities currently being served by BFI. Additionally, we have included a list of cities, contact persons, addresses and telephone numbers in order to facilitate any due diligent research the Town might choose to complete regarding the quality of BFI's relationships with the municipalities we serve.

MUNICIPAL CONTRACTS AND REFERENCE CONTACTS

**City of Cleveland
Residential and Commercial
Solid Waste Collection
11,000 Homes and
600 Businesses**

**Mr. Richard Lyles
Director of Public Works
City of Cleveland
P.O. Box 1519
Cleveland, TN 37364-1519
(615) 559-3335**

**City of Cleveland
Residential Curbside
Recycling Collection
11,000 Homes**

**Mr. Larry Sills
Solid Waste Coordinator
City of Cleveland
P.O. Box 1519
Cleveland, TN 37364-1519
(615) 559-3335**

**Fort Oglethorpe
Residential Curbside
Recycling Collection
1,700 Homes**

**Mr. Martin Bailey
City Manager
City of Fort Oglethorpe
201 Forrest Road
Fort Oglethorpe, GA 30741
(706) 866-2544**

**City of Red Bank
Residential Solid Waste
and Recycling
4,400 Homes**

**Mr. Jerry Robinson
City Manager
City of Red Bank
3117 Dayton Blvd.
Red Bank, TN 37415
(615) 877-1103**

**City of Dalton
Residential Curbside
Recycling Collection
6,000 Homes**

**Mr. Butch Sanders
City Administrator
City of Dalton
114 North Pentz
Dalton, GA 30722
(706) 278-9500**

**Town of Lookout Mountain, TN
Residential Curbside
Recycling Collection
800 Homes**

**Mr. Bill Ezell
City Manager
Town of Lookout Mountain
P.O. Box 111
Lookout Mtn., TN
(615) 821-1226**

**City of Dayton
Residential Curbside
Recycling Collection
2,500 Homes**

**Town of Lookout Mountain, GA
Residential Curbside
Recycling Collection
700 Homes**

**Mr. Frank Welch
City Manager
City of Dayton
P.O. Box 226
Dayton, TN 37321
(615) 775-1817**

**Mr. Charles Suttle
City Manager
Town of Lookout Mountain
1214 Lula Lake Road
Lookout Mtn., GA
(706) 820-1586**

MAJOR CITIES THAT CONTRACT FOR WASTE SERVICES

MSA Rank* Population	City	Service
(1) 8,589,930	Los Angeles, CA Long Beach, CA	Los Angeles - transfer station Long Beach - recycling collection and processing
(2) 8,527,970	New York City	Sludge disposal
(3) 6,224,750	Chicago, IL	Recycling processing
(4) 4,873,080	Philadelphia, PA	Solid waste disposal and recycling processing
(5) 4,346,210	Detroit, MI	Private vendor runs waste-to-energy program
(6) 3,676,520	Washington, DC	Old newspaper processing
(7) 3,277,080	Houston, TX	Solid waste and recycling collection, processing, disposal and street sweeping
(8) 2,828,970	Boston, MA	Solid waste collection and disposal and street sweeping

* MSA Rank and Population in 1991

MUNICIPALITIES WITH BFI AS FIRST MSW CONTRACTOR

<u>MUNICIPALITY</u>	<u>STATE</u>
Grove Hill	AL
Clarke County	AL
Lake Wales	FL
Waltham	MA
Lowell	MA
Arlington	MA
Milan	MI
St. Clair Shores	MI
East Pointe	MI
Charlotte	NC
Bessemer City	NC
Olean	NY
Schenectady	NY
Parma	OH
Morrow	OH
South Euclid	OH
Youngstown	OH
Bratenahl	OH
Garfield Heights	OH
Ajax	ONTARIO
New Castle	ONTARIO
West Chester	PA
Carolina	PR
Manchester	TN
Somerville	TN
Martin	TN
Knoxville	TN
Seagoville	TX
Victoria	TX
San Benito	TX
Hopewell	VA
Colonial Heights	VA
Morgantown	WV

**BROWNING-FERRIS INDUSTRIES
MUNICIPAL SOLID WASTE COLLECTION CONTRACTS
OF MUNICIPALITIES OF MUNICIPALITIES GREATER THAN 20,000 HOMES**

REGION	CITY/STATE	DIST. #	#HOMES	START DATE
CN	Kelowna, BC	549	22,250	01-Apr-85
CN	Kitchener, ON	372	43,156	01-Feb-89
CN	Edmonton, AB	370	24,873	08-Nov-89
CN	Burlington, ON	273	40,200	01-Aug-90
CN	Halifax, NC	434	26,000	01-Jan-91
CN	Aylmer, QB	114	29,300	01-Jun-91
CN	York, ON	285	49,612	01-Jul-92
MW	Peoria, IL	533	36,785	01-Jun-85
MW	Evansville, IN	490	42,000	01-Mar-89
MW	Indianapolis, IN	390	23,943	01-Feb-90
MW	Aurora, IL	137	28,000	01-Jul-91
NO	Youngstown, OH	360	22,000	01-Jan-88
NO	St. Clair Shores, MI	476	27,931	01-Nov-88
NO	Quincy, MA	420	23,683	01-Jan-90
NO	Parma, OH	250	29,000	01-Oct-90
NO	Boston, MA (4 districts)	420	72,075	01-Jul-91
NO	Providence, RI	743	56,000	01-Aug-91
NO	Amherst, NY	122	30,966	01-Jan-92
NO	Paterson, NJ	465	49,000	01-Apr-93
SA	Prince George Co.,	196	23,559	01-Aug-78
SA	Jacksonville, FL	293	46,763	01-Oct-79
SA	Ponce, PR	777	55,000	01-Mar-87
SA	Arecibo, PR	777	35,000	01-Aug-88
SA	Gainesville, FL	297	23,500	01-May-89
SA	Cape Coral, FL	295	28,303	01-Jun-89
SA	Polk Co., FL	464	36,443	01-Oct-89
SO	Knoxville, TN	404	45,618	04-Jun-84
SO	Dallas, TX	619	55,300	01-Apr-88
SO	Acadia Parish, LA	732	20,216	01-Apr-88
SO	W. Jefferson Parish, LA	278	49,371	01-Jun-88
SO	E. Jefferson Parish, LA	278	61,173	01-Jul-89
SO	Houston, TX	865	31,000	01-Jul-89
SO	Nashville, TN	160	27,800	01-Jan-91
SO	Harrison Co., MS	325	20,000	01-Oct-91
WE	Boise, ID	335	38,950	01-Oct-80
WE	Chandler, AZ	119	24,374	01-Jun-89
WE	Firestone, CA	121	25,565	30-Jun-90
WE	San Jose, CA (yard waste)	153	73,092	01-Sep-91

BFI CASE STUDIES: FIRST TIME CONTRACTING OUT

Region	District	Municipality	Contact	Title	Phone
CN	Eastern Lakes Solid Waste #612 Tony Quaresma	Ajax, Ontario	Frank Hull	Director of Public Works	416/683-4550
CN	Eastern Lakes Solid Waste #612 Tony Quaresma	Newcastle, Ontario	Don Patterson	Manager of Operations, Public Works	416/263-2291
NO	Detroit Solid Waste #180 Bill Bell	East Pointe, Michigan	Harvey Curley Wes McAlister Earnie Shears	Mayor City Manager Director Public Works	313/445-5016
SA	Richmond Solid Waste #343 Chuck Houck	Colonial Heights, Virginia	John Mitchell	Asst. City Manager	804/520-9265
SA	Richmond solid Waste #343 Chuck Houck	Hopewell, Virginia	Hank Wilde	Director of Public Works	804/541-2294
SA	Lakeland Solid Waste #464 Brooke Meares	Lake Wales, Florida	Dale May Ernest Tyler Judy Delmar	Public Works Director, City Manager, Assistant City Manager.	813/676-2533
SO	Middle Tennessee Solid Waste #160 Mike Russell	Manchester, Tennessee	Alec Garland	City Attorney	615/728-0413
SO	Dallas Solid Waste #619 Len Lyons	Seagoville, Texas	Neil Wooley	Mayor	214/287-3277

CASE STUDY: CONTRACTING OUT

AJAX, ONTARIO

Municipality:	Ajax, Region of Durham, Ontario
Population:	55,000
Number of Customers:	6425 homes
Contracted Services:	BFI provides residential solid waste collection once per week. The bag limit is eight per household; all yard wastes are collected under a separate contract.
Municipality Has Contracted for Waste Services Since:	July 1, 1988
BFI Contact:	Tony Quaresma, District Manager, Browning-Ferris Industries Ltd. 416/427-6506
Contract Background:	BFI began servicing 4000 homes in the northern section of Ajax in July 1988. The number of homes covered under the collection contract has since increased to 6425 as the Town has expanded. BFI now services 30% of the residents in the municipality with one 31-yard rear loader and two employees. The remaining 70% of the population is serviced by the Town's waste collection program.
Municipality Contact:	Frank Hull Deputy Director of Public Works 416/683-4550
Municipality Comments:	The estimated savings from contracted waste collection is \$150,000 annually. After BFI began servicing northern Ajax, the municipality was able to sell two of its five garbage packers and redirect its waste collection employees to other growing areas of the Town.

CASE STUDY: CONTRACTING OUT NEWCASTLE, ONTARIO

Municipality:	Newcastle, Region of Durham, Ontario
Population:	48,500
Number of Customers:	16,300 homes
Contracted Services:	BFI provides residential solid waste collection once per week. The bag limit is five per household.
Municipality Has Contracted for Waste Services Since:	January 1, 1989
BFI Contact:	Tony Quaresma, District Manager, Browning-Ferris Industries Ltd. 416/619-6506
Contract Background:	BFI serviced rural areas of Newcastle on a subscription basis from 1987 through 1988. Under terms of the 1989 contract, BFI provides collection services to both rural and urban neighborhoods in Newcastle. The Company operates four 31-yard rear loaders; each vehicle is manned by two driver/helpers.
Municipality Contact:	Don Patterson Manager of Operations, Public Works Department 416/263-2291
Municipality Comments:	The estimated savings from contracted waste collection is \$205,000 annually. Town representatives assert that BFI provides more extensive, efficient service than the Town was capable of providing prior to contracting out: BFI services over 500 miles of road throughout Newcastle and is able to collect waste from rural areas that had never had garbage collection prior to 1987. The Town is now able to escape the bother and cost of annual cleanups because BFI offers weekly Take-All Collection for its 16,000 stops. Under the program, BFI collects mattresses, furniture and white goods that normally aren't covered under a standard service contract.

CASE STUDY: CONTRACTING OUT EAST POINTE, MICHIGAN

Municipality:	East Pointe, MI
Population:	38,300 (Source: 1991 Business Control Atlas)
Number of Customers:	12,694 Homes; 195 Commercial (hand stops); 17 Churches and Schools (front load containers)
Contracted Services:	BFI provides solid waste collection once per week and annual "clean up" collection. East Pointe is a member of the South Macomb Disposal Authority (SMDA), which owns and operates a transfer station. All of East Pointe's solid waste goes to this transfer station and is then transported by BFI-operated transfer trailers to one of BFI's sanitary landfills.
Municipality Has Contracted for Waste Services Since:	July 1, 1985
BFI Contact:	Bill Bell, District Manager, Browning-Ferris Industries of Michigan, Inc. 313/729-8200
Contract Background:	BFI started collection in July of 1985. The following equipment was purchased from the City by BFI to ease the service transfer: 11 rear load collection vehicles (20 and 25 cubic yard vehicles); 136 two-yard rear load commercial waste containers; and 60 one-yard rear load commercial waste containers. City employees were given the first opportunity to apply for jobs under the service contract.
Municipality Contact:	Harvey Curley, Mayor Wes McAlister, City Manager Earnie Shears, Director of Public Works 313/445-5016
Municipality Comments:	The municipality estimates that its annual savings from contracting waste collection services is \$116,102 (in 1991 dollars; 5% inflation rate since July 1985 was assumed). This savings is an estimate based on finding City jobs for all solid waste workers who may not have worked for BFI. The savings would have been greater had those workers left the City workforce.

CASE STUDY: CONTRACTING OUT COLONIAL HEIGHTS, VIRGINIA

Municipality:	Colonial Heights, VA
Population:	16,064
Number of Customers:	6445 Homes
Contracted Services:	BFI provides residential solid waste collection twice per week. Commercial service in the City is open to competition.
Municipality Has Contracted for Waste Services Since:	1981
BFI Contact:	Chuck Houck, Operations Manager, Browning-Ferris Industries of South Atlantic, Inc. 804/788-8126
Contract Background:	In 1982, the City of Colonial Heights decided to contract out for solid waste collection service. BFI successfully bid and now services the contract with three 25-yard rear load trucks and seven employees compared to the City's 5 trucks and 15 employees. BFI won rebids for the contract in 1986 and 1992. The current contract also contains a renewal option.
Municipality Contact:	John Mitchell Assistant City Manager 804/520-9265
Municipality Comments:	The municipality has decided to contract with BFI for another five years at this writing and will begin disposing of all waste at BFI's landfill in July 1992. In addition to saving the City money, the BFI contract has relieved the City of the time-consuming responsibility of dealing with citizen inquiries.

CASE STUDY: CONTRACTING OUT HOPEWELL, VIRGINIA

Municipality:	Hopewell, VA
Population:	23,100
Number of Customers:	8434 homes
Contracted Services:	BFI provides residential solid waste collection once per week using mobile toters supplied by the City. Commercial service is open to competition.
Municipality Has Contracted for Waste Services Since:	1982
BFI Contact:	Chuck Houck, Operations Manager, Browning-Ferris Industries of South Atlantic, Inc. 804/788-8126
Contract Background:	In 1982, BFI won the bid to provide Hopewell's residential and commercial solid waste collection services. BFI also won bids for renegotiated contracts in 1987 and 1992. Under the 1992 contract, commercial waste service is open to competition.
Municipality Contact:	Hank Wilde Director of Public Works 804/541-2294
Municipality Comments:	The City's previous contractor was Wasteco Inc., a Charlottesville, VA company. The municipality's primary reasons for selecting BFI included quality of service and a contract option to collect "manageable wastes" that a City brush crew previously handled. The brush crew alone, in addition to being inefficient, cost Hopewell \$50,000 annually in salaries and vehicle maintenance.

CASE STUDY: CONTRACTING OUT LAKE WALES, FLORIDA

Municipality:	Lake Wales, FL
Population:	10,000 (Source: Lake Wales Chamber of Commerce)
Number of Customers:	2541 homes; 262 commercial accounts (hand stops)
Contracted Services:	BFI provides residential solid waste and containerized trash collection twice per week. BFI also services commercial front load and rear load customers at least twice per week. Yard wastes are collected twice per month. In addition, BFI performed two city-wide clean ups during the first month of operation.
Municipality Has Contracted for Waste Services Since:	August 1, 1991
BFI Contact:	Brooke Meares, District Manager, Browning-Ferris Industries of Florida, Inc. 813/666-2273
Contract Background:	City Commission staff members selected BFI over five other potential haulers based on overall evaluations of bid packages. To meet the needs of Lake Wales, BFI purchased two 25-yard and two 20-yard residential trucks, three boom trucks and trailers and 200 rear load commercial containers. All City of Lake Wales Sanitation Department employees were offered employment after onset of the contract. BFI also operates a permanent local office in Lake Wales to ensure quick response to service questions.
Municipality Contact:	Dale May, Public Works Director Ernest Tyler, City Manager Judy Delmar, Assistant City Manager 813/676-2533
Municipality Comments:	The City estimates that it will save \$22,190 annually by contracting its waste collection. The exact savings will be computed from annual city audit data available in December 1992. BFI has offered containers and collection service for City clean up efforts and has donated funds to the City of Lake Wales park restoration program.

CASE STUDY: CONTRACTING OUT MANCHESTER, TENNESSEE

Municipality:	Manchester, TN
Population:	10,000 (approximately)
Number of Customers:	2880 homes; 350 commercial accounts (front-end loaders); 8 industrial customers (roll-off trucks)
Contracted Services:	BFI provides residential solid waste collection once per week and commercial and industrial collection on an as needed basis. Waste is transported to the BFI Middle Point landfill in Murfreesboro, TN for disposal.
Municipality Has Contracted for Waste Services Since:	January 1989
BFI Contact:	Mike Russel, District Manager, Browning-Ferris Industries of Tennessee, Inc. 615/728-8138
Contract Background:	BFI successfully bid for Manchester's waste services in 1988, began to collect waste under contract in January of 1989 and renegotiated the contract for an extended period in 1992. Under the contract, BFI purchased two front-end loaders, two sideloaders (for residential collection) and the City's supply of residential 90-gallon carts.
Municipality Contact:	Alec Garland City Attorney 615/728-0413
Municipality Comments:	The City of Manchester decided to contract out for waste collection services after the municipal landfill closed in 1988. Although the City was unable to compute cost savings, the spokesperson did state that the municipality is satisfied with the service provided by BFI.

CASE STUDY: CONTRACTING OUT SEAGOVILLE, TEXAS

Municipality:	Seagoville, TX
Population:	8970
Number of Customers:	2400 residential and commercial handload customers; 125 container customers
Contracted Services:	BFI provides residential solid waste collection twice per week and commercial collection one to six times per week, depending on customer requirements.
Municipality Has Contracted for Waste Services Since:	March 1992
BFI Contact:	Len Lyons, District Business Development Manager, Browning-Ferris, Inc. 214/225-8151
Contract Background:	Prior to March 1992, the City of Seagoville was facing escalating labor, equipment and landfill costs. Under terms of the contract, BFI purchased four pieces of equipment from the City: two front-load trucks and two rear-load trucks. BFI hired three employees including one municipal employee to handle the additional routes.
Municipality Contact:	Neil Wooley Mayor 214/287-3277
Municipality Comments:	The City of Seagoville attests that BFI provides faster, more consistent service than the municipality was able to provide. Since BFI has handled the waste collection service, the City has been able to reduce municipal budgets for equipment, maintenance and manpower. Seagoville was previously operating its residential and commercial routes with eight employees, two residential vehicles, one front-end loader and one backup truck.

TRAINING

TRAINING

Our firm and continuing policy is that all employees will be adequately trained to perform their jobs in a safe, efficient and productive manner. When our employees fully understand how their jobs are to be performed, and if, during the process of learning, they are informed and cautioned about potential job hazards and the necessary safety procedures associated with their tasks, it is our experience that the probability of employees committing unsafe acts which may result in injury or property damage is greatly reduced. Committing an unsafe act in the name of efficiency or productivity is a matter for supervisory correction, discipline and/or retraining. However, committing an unsafe or incorrect act due to inadequate or lack of quality training can be a direct reflection on company management and supervision. BFI's philosophy is to train employees to do their jobs properly, which means doing them safely.

BFI has established and continues to maintain a leadership position in the area of safety. Our approach to training is to integrate safety and hazard awareness into every training activity. BFI believes that no training program is complete unless, and until, it addresses all known potential hazards to personnel and property. Instruction must include hazard awareness coupled with safe and efficient job procedures. Training is a continuing process! Regular meetings will be used to reinforce previous instructions and update all employees on new techniques and policies in order to maintain the highest level of performance.

All supervisory and management personnel will attend and participate in regular training sessions specifically designed to maintain the highest level of management performance. These meetings will be conducted by technically-competent professional personnel. BFI has a comprehensive library of films, slide sets, and audio visual aids which will be used as information tools during the initial training process. Posters, brochures and safety bulletins will also be used to assist in demonstrating the safe procedures to be practiced by all employees in order to establish and maintain an efficient and safe operation. In addition, BFI retains the services of professional organizations experienced and highly-respected in the field of solid waste training program development. These organizations can assist in the creation and design of additional training materials. Also, BFI is a Corporate Member of both the National Safety Council and the Inter-American Safety Council. Both of these organizations have an extensive amount of training and resource materials available for use. A qualified Safety and Training Program, as noted earlier, will ensure a commitment to a trained, safe and efficient work force in the Marion County Landfill. Our Safety Committee will be formed to regularly review compliance with established safety and training procedures. Recommendations for improvement or changes as they may relate to safety and training will be brought to the attention of the District Manager.

The following outline for training and indoctrination of employees is included in order to provide the City of South Pittsburg with information regarding the degree to which BFI has thought out its operational strategy and comprehensiveness should be awarded the contract:

General Orientation and Equipment Operation

- Orientation to Company
- Orientation to Contract Requirements
- Orientation to Equipment Operations
- Orientation to Chassis and Body (Components, Controls, Size, Maneuverability)
- Pre-Trip and Post Trip Equipment Check Procedures
- Rules and Procedures Regarding Maintenance Facilities (Check-in, Check-out, Parking, Fueling, etc.)
- Orientation to Routing Systems
- Procedures at Landfills
- Operating Rules
- Proper Backing Procedures
- Defensive Driving Techniques
- Procedures to Follow in the Event of an Accident
- Emergency Procedures for Fires, Equipment Breakdown, etc.
- Inclement Weather Procedures
- Bulky Waste Handling
- Providing Professional Service
- Orientation to the Tennessee Department of Environment and Conservation
- Orientation to Loudon County and the State of Tennessee

Personal Injury Prevention

- Potential Hazards Awareness about Solid Waste Handling
- Handling Customer Containers
- Chemicals in Waste
- Proper Lifting Procedures
- Avoiding Slips and Falls
- Riding In/On Vehicles
- Clothing and Personal Protective Equipment (hand, foot, eye, head protection)
- Inclement Weather Procedures
- Handling of Flammable/Hazardous Materials
- Avoiding Slips and Falls
- Procedures to Follow in Case of Injury
- Lifting and Your Back

General and Shop Safety

- Orientation to Company
- Orientation to Contract Requirements
- Orientation to Chassis/Body
- Orientation to General Shop Safety (potential hazard identification, housekeeping, tools, parts, flammable materials storage, fire prevention, etc.) Rules and Procedures at Facility
- Emergency Procedures (e.g., fires)
- Driving Instructions for Road Service Personnel (including emergency procedures for disabled equipment on route)
- Use of Shop Tools and Equipment (jacks, hoists, ladders, flammable products, fire extinguisher, etc.)
- Procedures for Welding, Cutting and Brazing
- Procedures to Follow in Event of Vehicle Accident

All Personnel

All employees are provided an orientation as to BFI's requirement inasmuch as each one must:

- Report to work at the required time;
- Notify their immediate supervisor, prior to their regular scheduled starting time, if they are ill or will be late;
- Present and maintain a neat appearance;
- Perform one's duty in a productive and efficient manner;
- Be courteous to the public;
- Be aware of and follow all safety rules and policies in accordance with company's safety policies;
- Follow and adhere to all general company policies;
- Follow and adhere to the training practices, once trained of the company and one's position;
- Comply with all government laws and ordinances while performing one's work;
- Not use alcoholic beverages while working; and
- Not use drugs.

**CITY OF SOUTH PITTSBURG,
TENNESSEE**

**QUALIFICATIONS FOR
SOLID WASTE COLLECTION AND
DISPOSAL PROGRAM
AND/OR RECYCLING PROGRAM**



**BROWNING-FERRIS INDUSTRIES
OF TENNESSEE, INC.**

**EQUIPMENT AND
PERSONNEL TO BE USED**

OVERVIEW

BFI is an organization of approximately 29,400 people, assembled into an integrated team of worldwide professionals providing waste management and cleaning services. BFI's management team is organized into three levels: Corporate, Regional and District.

CORPORATE MANAGEMENT

BFI's corporate headquarters office in Houston, Texas, is staffed with individuals of proven ability and experience whose responsibilities are to assist the performance of the firm's operations and to enhance business growth opportunities. The expertise reflected in BFI's corporate management team includes accounting, data processing, employee relations, engineering, financing, legal, management development, marketing and sales, operations administration, public relations, risk management and loss control, safety training, and technical evaluation services.

REGIONAL MANAGEMENT

BFI's North America solid waste subsidiaries are organized for management purposes into nine geographic regions. The operating management structure is decentralized in these highly autonomous geographic regions. Regional vice presidents are responsible for all operating and financial objectives established for their respective regions and assist the district managers, responsible for local district operations of the subsidiaries, primarily through the development and approval of capital budgets, profit, pricing and corporate development plans, and through the coordination of the activities of those operations within each region. An international subsidiary is responsible for operations outside of North America.

Within each BFI region, the Regional Vice President is the chief management official. Regional Vice Presidents, aided by regional operations, maintenance, sales, accounting and marketing staffs, closely monitor monthly operating performance in their assigned geographic areas and coordinate development and implementation of longer range plans. Regional Vice Presidents have full authority to manage their region within a framework of corporate objectives, operating guidelines, and administrative policies. BFI's regional management is responsible for adhering to corporate-approved plans encompassing capital expenditures, project development, and sales and profit performance. Corporate headquarters staff provides technical assistance and advise as required in the execution of these plans.

DISTRICT MANAGEMENT

Each BFI district serves one or more municipalities. District managers are responsible for local district operations of the subsidiaries, primarily through the development and approval of capital budgets, profit, pricing, and corporate development plans, and through the coordination of the activities of these operations within each region.

BFI's operational services are provided by BFI's district personnel, organized and directed by the district manager. Directing the operations of a BFI district requires leadership, exceptional

managerial skills, and an intense desire to succeed. A typical BFI district includes a district manager, district accountant, landfill manager, maintenance manager, operations manager, sales manager, salespeople, safety manager, dispatcher, supervisor, foreman, equipment operator, truck drivers, route helpers, shop personnel, mechanics, compliance manager, and other trained specialists.

MANAGEMENT TEAM RESUMÉS

**PRIMARY POINTS-OF-CONTACTS
SOUTHEAST TENNESSEE**

BFI - DIVISION SUPPORT STAFF

**DISTRICT MANAGER
CHATTANOOGA, TN**

JACK JENKINS

EDUCATION:

Middle Tennessee

EXPERIENCE:

1994 - Present
District Manager
Browning-Ferris, Inc.
Chattanooga, TN

1992 - 1992
District Manager
Browning-Ferris, Inc.
Birmingham, AL

1990-1992
District Manager
Browning-Ferris, Inc.
Atlanta, GA

1982-1990
District Manager
Browning-Ferris, Inc.
Anniston, AL

1981-1982
Assistant District Manager
Browning-Ferris, Inc.
Memphis, TN

1980-1981
District Manager
Browning-Ferris, Inc.
Fort Lauderdale, FL

1970-1979
Sales Representative
Brown-Ferris, Inc.
Chattanooga, TN

PERSONAL:

Single

BFI - DIVISION SUPPORT STAFF

**DIVISION MARKETING MANAGER LARRY ANGEL
TENNESSEE DIVISION**

EDUCATION:

University of Tennessee
B.S. Accounting

EXPERIENCE:

1993 - Present
Division Marketing Manager
Browning-Ferris, Inc.
Chattanooga, TN

1991 - 1993
District Market Development
Browning-Ferris, Inc.
Chattanooga, TN

1989-1991
Sales Manager
Browning-Ferris, Inc.
Chattanooga, TN

1985-1989
Operations Manager
Browning-Ferris, Inc.
Chattanooga, TN

PERSONAL:

Married

BFI - DIVISION SUPPORT STAFF

**OPERATIONS MANAGER
CHATTANOOGA DISTRICT**

BRENT BARNES

EDUCATION:

University of Tennessee
at Chattanooga

EXPERIENCE:

1989 - Present
Customer Service Manager
Browning-Ferris, Inc.
Chattanooga, TN

1987 - 1989
Operations Manager
Browning-Ferris, Inc.
Rome, GA

1984-1987
Dispatch
Browning-Ferris, Inc.
Chattanooga, TN

PERSONAL:

Married

REGIONAL SUPPORT TEAM

Detailed description of REGIONAL SUPPORT TEAM, stating name, address, and telephone number.

Enclosed is a list of all REGIONAL SUPPORT TEAM members address and telephone number. Any additional information may be found in Section V.

J. Fred Snyder Regional Vice President Southern Region	Browning-Ferris, Inc. 580 Westlake Park Blvd. Suite 1000 P.O. Box 79622 Houston, Texas 77279-9622	713/870-8111
Steve Jacobs Landfill Operations Manager Southern Region	Browning-Ferris, Inc. 580 Westlake Park Blvd. Suite 1000 P.O. Box 79622 Houston, Texas 77279-9622	713/870-8111
Bill Davis Operations Manager Southern Region	Browning-Ferris, Inc. 580 Westlake Park Blvd. Suite 1000 P.O. Box 79622 Houston, Texas 77279-9622	713/870-8111
Donna Griffin Management Development & Training Southern Region	Browning-Ferris, Inc. 580 Westlake Park Blvd. Suite 1000 P.O. Box 79622 Houston, Texas 77279-9622	713/870-8111
Tad Phillips Manager Recycling Systems Southern Region	Browning-Ferris, Inc. 580 Westlake Park Blvd. Suite 1000 P.O. Box 79622 Houston, Texas 77279-9622	713/870-8111
John Daichendt Regional Controller Southern Region	Browning-Ferris, Inc. 580 Westlake Park Blvd. Suite 1000 P.O. Box 79622 Houston, Texas 77279-9622	713/870-8111

Ann Hodge
Director Government &
Community Relations
Southern Region

Browning-Ferris, Inc.
580 Westlake Park Blvd.
Suite 1000
P.O. Box 79622
Houston, Texas 77279-9622

713/870-8111

Tom Wright
Business Development
Manager
Southern Region

Browning-Ferris, Inc.
580 Westlake Park Blvd.
Suite 1000
P.O. Box 79622
Houston, Texas 77279-9622

713/870-8111

Glenn Youngblood
Division Landfill Manager
Middle Tennessee Division

Browning-Ferris Industries
of Tennessee, Inc.
P.O. Box 2426
Murfreesboro, Tennessee 37130

615/896-2075

BFI - SOUTHERN REGION SUPPORT STAFF

REGIONAL VICE PRESIDENT SOUTHERN REGION:

J. FRED SNYDER

EDUCATION:

University of South Carolina
B.S. in Marketing

EXPERIENCE:

6/93 - Present
Regional Vice President - Southern Region
Browning-Ferris, Inc.
Houston, TX

1989 - 6/93
Regional Vice President - Atlantic Region
Browning-Ferris, Inc.
Baltimore, MD

1986 - 1989
District Manager
Washington/Maryland Metro District
Browning-Ferris, Inc.
Capitol Heights, MD

1978 - 1986
District Manager
Williamsburg District
Browning-Ferris, Inc.
Williamsburg, VA

12/76 - 1978
District Manager
Lumberton District
Brenner Industries (acquired by BFI in 1978)
Lumberton, NC

1/76 - 12/77
Sales Representative
Columbia Container Division
Brenner Industries
Columbia, SC

PERSONAL:

Married

BFI - SOUTHERN REGION SUPPORT STAFF

**DIVISIONAL VICE PRESIDENT -
REGIONAL CONTROLLER:**

JOHN DAICHENDT

EDUCATION:

Assumption University of Windsor
B.A. - Communications

Certified Public Accountant - Michigan

Chartered Accountant - Ontario

Michigan Association of C.P.A.'s

American Institute of C.P.A.'s

Ontario Institute of C.P.A.'s

Canadian Institute of C.A.'s

National Association of Accountants

EXPERIENCE:

6/93 - Present

Divisional Vice President - Regional Controller
Southern Region
Browning-Ferris, Inc.
Houston, TX

1975 - 6/93

Divisional Vice President - Regional Controller
Atlantic Region
Browning-Ferris, Inc.
Baltimore, MD

1971 - 1975

Corporate Controller
Multiplex Home Corporation

1967 - 1971

Controller and Director
Thompson-Brown Company

1960 - 1967

Audit Manager
Price Waterhouse and Company

PERSONAL:

Married

BFI - SOUTHERN REGION SUPPORT STAFF

REGIONAL COUNSEL:

GARY VAN ROOYAN

EDUCATION:

University of Iowa
J.D.
1975

EXPERIENCE:

6/93 - Present
Regional Counsel - Southern Region
Browning-Ferris, Inc.
Houston, TX

1986 - 6/93
Regional Counsel - Atlantic Region
Browning-Ferris, Inc.
Baltimore, MD

1980 - 1981
Staff Attorney
Cooper Industries

1975 - 1980
Private Practice

PERSONAL:

Married

BFI - SOUTHERN REGION SUPPORT STAFF

**MANAGER LANDFILL
DEVELOPMENT:**

JAMES HARE

EDUCATION:

1971 - 1973; 1975 - 1976
Southwest Texas State University
B.S. Chemistry
1974 - 1975
University of Texas

EXPERIENCE:

3/91 - Present
Manager, Landfill Development
Browning-Ferris, Inc.
Houston, Texas

11/89 to 3/91
Landfill Market Development
Browning-Ferris, Inc.
Houston, Texas

6/89 to 11/89
Manager, Landfill Sales
Browning-Ferris, Inc.
Austin, Texas

2/88 to 6/89
Landfill Sales Representative
Browning-Ferris, Inc.
Oklahoma City, Oklahoma

1987 to 1988
President
Data Telecom, Inc.
Austin, Texas

1985 to 1987
Contracts Manager
Trojan Drilling, Inc.
Giddings, Texas

1980 - 1985
Field Sales Engineer
Tretolite Division
Giddings, Texas

PERSONAL:

Married
Three (3) Children

BFI - SOUTHERN REGION SUPPORT STAFF

**MANAGEMENT DEVELOPMENT
& TRAINING MANAGER:**

DONNA GRIFFIN

EDUCATION:

1981 Graduate School
University of Texas
HSC

1979 BS
Florida State University

EXPERIENCE:

6/92 to Present
Management Development & Training Manager
Browning-Ferris, Inc.

11/91 to 6/92
Consultant
Browning-Ferris, Inc.

1986 to 1987
Trainer
Coca Cola Foods

1984 to 1986
Trainer
University of Texas HSC

1981 to 1984
Faculty Associate
University of Texas HSC

1979 to 1981
Rehabilitation Counselor
Lighthouse For The Blind
Palm Beach, Florida

PERSONAL:

Married
Two (2) Children

BFI - SOUTHERN REGION SUPPORT STAFF

**MANAGER-LANDFILL
OPERATIONS:**

STEVE JACOBS

EDUCATION:

Graduated in 1978 from Emory and Henry
College, Emory, Virginia
B.S. in Business and Economics

EXPERIENCE:

1/90 to Present
Landfill Operations Manger
Browning-Ferris, Inc.
Houston, Texas

6/85 to 1/90
Vice President/District Manager
CECOS International, Inc.
Livingston, Louisiana

4/81 to 6/85
Corporate Landfill Operations
Browning-Ferris, Inc.
Houston, Texas

10/78 to 4/81
Site Manager - Evansville Landfill
Browning-Ferris, Inc.
Evansville, Indiana

6/78 to 10/78
Heavy Equipment Operator
Browning-Ferris, Inc.
Atlanta, Georgia

PERSONAL:

Married
Two (2) Children

BFI - SOUTHERN REGION SUPPORT STAFF

**DIRECTOR, GOVERNMENT &
COMMUNITY RELATIONS:**

ANN HODGE

EDUCATION:

1973 - 1977
UCLA (Political Science)

EXPERIENCE:

7/85 to Present
Director, Government & Community Relations
Browning-Ferris, Inc.

8/83 to 7/85
Paralegal
Mayor, Day & Caldwell
Houston, Texas

7/82 to 7/83
Technical Writer
GAI California, Inc.
Houston, Texas

2/82 to 7/82
Paralegal
Manatt, Phelps, Rothenburg & Tenney, Atty
Los Angeles, California

1/70 to 1/71
Legal Secretary
Whittaker Corporation
Los Angeles, California

11/69 to 1/70
Legal Secretary
Melvin & Baron, Atty
Los Angeles, California

5/68 to 11/69
Executive Secretary
McDonnell Douglas Corporation
Los Angeles, California

PERSONAL:

Married
One (1) Child

BFI - SOUTHERN REGION SUPPORT STAFF

**MANAGER
BUSINESS DEVELOPMENT:**

TOM WRIGHT

EDUCATION:

The University of Texas
BBA - Accounting
1965

EXPERIENCE:

10/90 - Present
Manager, Business Development
Browning-Ferris, Inc.
Houston, Texas

1988 - 1990
District Manager
BFI - Central Texas District
Temple, Texas

1983 - 1988
Executive Vice President
Texas Banc & Trust
Temple, Texas

1978 - 1983
Executive V.P. and CFO
First Southwest Equities Corp.
Temple, Texas

1970 to 1978
Acquisition Group
Browning-Ferris Industries, Inc.
Houston, Texas

PERSONAL:

Married
Two (2) Children

BFI - SOUTHERN REGION SUPPORT STAFF

**DISTRICT MANAGER
CENTRAL TEXAS:**

TODD STRONG

EDUCATION:

MBA
University of Houston
1984

Bachelor of Science
Trevecca College
1980

EXPERIENCE:

1/91 - Present
District Manager
Browning-Ferris, Inc.
Austin, Texas

1989 - 1991
Assistant District Manager
Browning-Ferris, Inc.
New Orleans, LA

1987 - 1989
Market Development
Browning-Ferris, Inc.
Houston, TX

PERSONAL:

Married

PRIMARY EQUIPMENT AND PERSONNEL

GARBAGE COLLECTION

- (1) Ford LN8000 with Heil Formula 5000 body with a 20-cubic yard capacity - 2 man crew**

RECYCLING COLLECTION

- (1) Ford LN6000 with Dempster 33-cubic yard capacity - 1 man crew**

RECYCLING EQUIPMENT

- (1,600) 18-gallon plastic bins**

BACK-UP EQUIPMENT

GARBAGE

- (18) Fords and Macks with 20-cubic yard bodies, consisting of Heils and Dempsters - average remaining useful life of 4 years, 5 months.**

RECYCLING

- (8) Internationals with Dempster bodies - average remaining useful life of 5 years, 8 months.**

**CITY OF SOUTH PITTSBURG,
TENNESSEE**

**QUALIFICATIONS FOR
SOLID WASTE COLLECTION AND
DISPOSAL PROGRAM
AND/OR RECYCLING PROGRAM**



**BROWNING-FERRIS INDUSTRIES
OF TENNESSEE, INC.**

**RECYCLING
INFORMATION**

RECYCLING OPERATIONS

BFI will furnish 18-gallon bins and deliver them to each home in the city prior to the start of the program. Along with the bin will be a packet of information specifying what materials will be accepted and what will not, the day they will receive service, bin stickers, and NAPCOR brochures.

Once per week the residents will set their 18-gallon bins full of recyclables at the curb and the compartmentalized truck will stop and the driver will empty the bins and sort the materials at the curb. If there are unacceptable items in the bin, the driver will leave the material (contaminants) in the bin with a tag so noting the type of contaminant. When the route is completed, the driver will transport the recyclables to Chattanooga to our processing facility. There the commodities will be further separated and processed to be ready to ship to market where they will be sold. On a monthly basis, reports will be generated and delivered to the City Administrator detailing rates of participation, pounds by category, and the percentage of weight reduction.

These trucks are a one-man operation and so configures to where the operator drives from the right side of the vehicle.

PROCESSING CENTER AND MARKETING OF RECYCLABLES

BFI currently has a permitted recyclery at 1018 East 38th Street in Chattanooga. The 5 acre site is improved with an 18,000 square foot office, warehouse and processing area. This facility will serve as a processing facility for selected loads of high-grade paper, old corrugated containers, glass, plastic, aluminum, tin, and newsprint.

BFI's vehicles will enter this facility and proceed to the scale before backing into the unloading area. Tonnage numbers will be available to Jasper for amounts of material recycled each month. Quality control personnel will divert the particular item specified for baling. The remaining materials are dropped into holding containers located under the sorting line, and baled at a later time. Once the materials are baled, the will be moved to the storage area. A dock area allows for truck transportation capabilities.

Personnel at this facility will include bailer and conveyor operators, quality control personnel, and office personnel. This facility is equipped with an educational viewing room.

Nothing gets recycled just by pulling it out of the waste stream. It is only when this material is returned to commerce that recycling is accomplished. Recycling is demand driven, not supply driven. When a city enacts a recycling program, it also enters into the commodities market. The sale of recyclable materials, which are production commodities, can be compared to the sale of agricultural commodities in the fact that there are profitable years and unprofitable years. As more and more cities across the United States initiate recycling programs and businesses recycle to decrease disposal costs, the market will become complicated by the addition of suppliers. As a result, the law of supply and demand will take effect. The greater the supply on the market, the more difficult it is to find buyers.

At our Corporate office in Houston, our Materials Marketing Group have their offices. These individuals are brokers and each has their own territory where they visit the mills and sell the commodities which BFI removed from the waste stream.

BFI would retain any profits received, because at the present time prices are very low on recyclables. This causes our baling and handling costs to absorb the profits from the recyclables.

**CITY OF SOUTH PITTSBURG,
TENNESSEE**

**QUALIFICATIONS FOR
SOLID WASTE COLLECTION AND
DISPOSAL PROGRAM
AND/OR RECYCLING PROGRAM**



**BROWNING-FERRIS INDUSTRIES
OF TENNESSEE, INC.**

**RECYCLABLES TO BE
COLLECTED**

RECYCLABLES TO BE COLLECTED

The following items will be collected at the curbside on a once-per-week basis:

- 1) Newspaper ^{with} all inserts;**
- 2) Aluminum and tin cans;**
- 3) Type I and II plastics (food and beverage containers); and**
- 4) Clear, green, and brown glass (food and beverage containers).**

**CITY OF SOUTH PITTSBURG,
TENNESSEE**

**QUALIFICATIONS FOR
SOLID WASTE COLLECTION AND
DISPOSAL PROGRAM
AND/OR RECYCLING PROGRAM**



**BROWNING-FERRIS INDUSTRIES
OF TENNESSEE, INC.**

COMMODITY MARKETS

COMMODITY MARKETS

As is typical when dealing in the commodities market, there are wide swings in value and the companies to whom the products are sold vary at any given time. A representative listing of the buyers of the types of recyclables collected in this program would be as follows:

<u>Commodity</u>	<u>Buyer</u>
Newsprint	Chattanooga Paperboard
Aluminum	Alcoa
Glass	Owens Brockway
Tin	Birmingham Tube
PET Plastic	Image Carpets
HDPE Plastic	Plastics Recycling

**CITY OF SOUTH PITTSBURG,
TENNESSEE**

**QUALIFICATIONS FOR
SOLID WASTE COLLECTION AND
DISPOSAL PROGRAM
AND/OR RECYCLING PROGRAM**



**BROWNING-FERRIS INDUSTRIES
OF TENNESSEE, INC.**

SCHEDULE OF EVENTS

MULTI-MEDIA CAMPAIGN

BFI PUBLIC EDUCATION PROGRAMS

A major factor in the success of any recycling program is enthusiastic, continuous public support and participation. To achieve this goal, people must understand recycling's importance to the community, how to recycle properly and the significance of their individual participation in the program. A strategically prepared and properly executed public education program is essential to motivating residents to recycle on the household level.

All of BFI's public education programs are flexible. Experience has taught us that while basic communications goals are the same from community to community, specific issues must be addressed on a personalized basis. What BFI offers you is a communications "tool kit" of proven elements, adaptable to your local situation.

The BFI Public Education Partnership

To ensure an effective public education program, BFI works with your community's recycling coordinator as partners in developing a communications program that is tailored to your needs and that can help you achieve your waste reduction goals. Each element of the program is governed by your community's demographics: lifestyles, economic and education levels, population distribution and density, and other factors that influence personal behavior.

Through the use of "user-friendly" printed materials and traditional communications media, such as newspaper, radio, television, direct mail and outdoor billboards, we can help you reach, instruct and motivate members of your community. The added value of public relations offered through this partnership can help you gain favorable publicity for your program with the media and your community members with conferences, recycling demonstrations and special events.

Please bear in mind that these are not theoretical program elements. They are proven methods for creating awareness of, excitement about, and participation in your recycling program.

Getting Your Message Out

Our most successful public education programs communicate with two main audiences:

- **Adults and young adults**, including the general public, civic leaders, civic organizations and the media
- **School-age children**

To communicate with **adults and young adults**, BFI recommends a strategically-timed, multi-level program. Although developing specific details will require further discussions of your goals, we have included a list of general avenues for communicating messages about your recycling program:

- A "kick-off" event that generates publicity and excitement while promoting a positive attitude toward the recycling program;
- Press conferences at which city officials, civic leaders and prominent business leaders are present;
- Planned media events with photo opportunities;
- Individual demonstrations of the recycling trucks at key locations around the city;
- A telephone hotline number that individuals can call for information about the program;
- Presentations by BFI to citizen groups, service organizations and neighborhood associations;
- The use of print and electronic media where appropriate; and
- Information packets delivered with the recycling bins that review the importance of recycling, identify which materials are recyclable and explain how to prepare material for recycling.

BFI has discovered that communicating with **school-age children** is a highly effective way to promote a recycling program while generating excitement about it. As educators have pointed out, children's minds are like thirsty sponges waiting to soak up information. That quality, combined with their natural idealism, makes them highly receptive to your recycling message, a message they will take into their homes and encourage other family members to follow.

Because it is important to reach children with appropriate communications, BFI has developed the Mobius program, which includes a full-course curriculum complete with teacher aids, geared for children in grades four through six. The curriculum encompasses the core subjects taught in grade school: math, science, social studies and language arts. BFI can provide a complete Mobius curriculum for each teacher who chooses to participate in your area. A comprehensive teach in-service training program is also available. A fact sheet describing the program is on the following page.

BFI, through our District Recycling Coordinator, will assist other grades in establishing programs tailored to their educational level. Activities can include demonstrations of the recycling vehicles, talks about preparing materials and tours of the local recycling facility.



Mobius[®] Fact Sheet

THE PURPOSE OF THE MOBIUS PROGRAM

The overall purpose of the Mobius Program is to help children become better environmental citizens by teaching them the importance of an integrated system for managing waste. The most current information available on all the major methods for managing the waste stream, from landfills to waste-to-energy to composting are included in the comprehensive Mobius Curriculum, with special emphasis on The 3 Rs: Reduce, Reuse and Recycle.

WHY THE MOBIUS PROGRAM WAS DEVELOPED

In the 1980s, Browning-Ferris Industries' districts, throughout North America, and its corporate office in Houston were receiving an increasing number of calls from environmentalists, civic and community organizations, schools and their teachers, requesting information about the environment. Clearly, there was, and continues to be, a growing interest in environmental issues and a real need for a strong environmental education program concerning waste issues.

HOW THE MOBIUS PROGRAM WAS DEVELOPED

In 1988, BFI began an intense two-year process of development that included working with the help of educators, community leaders, environmental specialists and BFI representatives from across North America. Their input was invaluable and resulted in a Curriculum, now in its second edition, that is teacher-driven and recognized for its integrity.

WHAT THE MOBIUS PROGRAM INCLUDES

1. A full-scale curriculum: Browning-Ferris Industries' Mobius Curriculum: Understanding the Waste Cycle. Designed for grades four through six, it contains six chapters and 13 lessons, a glossary, bibliography, listing of additional resources, and worksheet packet.

The Curriculum can be used in its entirety as a recycling/solid waste unit, or can be integrated into the teacher's current curriculum. Although there is substantial interest from science teachers, lessons in the Curriculum are also being used in all the current subject areas including math, social studies, language arts and fine arts.

2. The Mobius Fun Book: a coloring and activity book for children which introduces

recycling concepts in a fun, understandable way for young children. It targets students in kindergarten through third grade.

3. The Mobius mascot, a life-sized character whose costume is composed of the major recycling elements. Schools may contact their local BFI District Office for information on the availability of Mobius for personal appearances.

4. The Mobius Program Support System: A toll-free Hotline (1-800-BFI-8100) for scheduling field trips to local BFI recycleries and landfills, or arranging for speakers for classrooms, assemblies or local community events. A comprehensive teacher in-service training program is also available.

For additional data, contact:

Browning-Ferris Industries, Inc.
Corporate Communications Department
757 N. Eldridge • Post Office Box 3151 • Houston, Texas 77253
Telephone: 713/870-8100 • Fax: 713/870-7182

BFI MOBIUS RECYCLING CURRICULUM REFERENCES

School System	City & State	Mobius In School Since	Scope of Use	District Name (#)	District Mgr. Phone #	School Contact Address & Phone #
Duval County	Jacksonville, FL	1991	125 Classrooms	Jacksonville #293	Brad Gardner (904) 731-3440	Mary Hackenberg Supervisor Science & Environmental Studies 1701 Prudential Dr. Jacksonville, FL 32207 (904) 390-2129
Orange County Chapel Hill Carrboro	Chapel Hill, NC	1990	12 Elementary Schools	Raleigh #457	Randall Essick (919) 231-8201	Wendy McGee Recycling Coordinator Orange Regional Recycling Program 306 N. Columbia Street Chapel Hill, NC 27516 (919) 968-2788
Huntsville	Huntsville, AL	1991	17 Elementary Schools	Huntsville #426	Al Risher (205) 837-2670	Karen Schoening Recycling Coordinator Huntsville Solid Waste Disposal Authority P.O. Box 2619 Huntsville, AL 35804-2619 (205) 880-6054
Wichita	Wichita, KS	1990	50 Elementary Schools	Wichita #154	Jim Spencer (316) 838-4290	Joe Hoover Research Analyst Unified School District (#259) 3850 N. Hydraulic Wichita, KS 67219 (316) 833-2239

MOBIUS® CURRICULUM

General Information & Key Selling Points

- The Mobius® Program is teacher-driven. BFI worked closely with teachers in all states of development to ensure that the materials are easy-to-use, up-to-date, and meaningful.
- We were careful to make the program objective and not a BFI commercial. Our reward comes from being associated with a high-quality educational program about business.
- We invested over \$250,000 (over a two and a half year period) in research, development and creation of the program.
- An independent research firm has estimated that, for a school district to develop a similar program on its own, it would cost approximately \$175,000.
- Grades 4-6 were selected for the curriculum because research showed that these were impressionable years when the habits of a lifetime are formed.
- Lessons are designed to be "teacher-friendly" and fit well into existing curriculum requirements by incorporating all core subjects: science, social studies, math and language arts, as well as fine arts. Leadership, teamwork and communication are stressed throughout.
- The curriculum is being used in over 10,000 classrooms throughout North America.
- We have received calls on the hotline from every state, as well as Canada and Puerto Rico. Calls run the gamut from requests for area-specific recycling information (these are referred to the district), tours of landfills or Recycleries®, to general information for school projects and term papers.

A comprehensive District Guide to the Mobius Program is available through Tish Penn at the Corporate Office. A Table of Contents is attached. Please feel free to contact Tish at 713/870-7456 for additional information or help in getting the program started in your district.

Table of Contents

1. An Introduction to BFI's Mobius Program	An overview of the Program: what it is and why it was developed
2. Educator Testimonials	What educators say about Mobius
3. The Mobius Elementary School Presentation	Suitable for school assemblies, classroom visits or for classes that visit your district. Includes a complete script with accompanying slides.
4. The Mobius Educator/Teacher Presentation	Suitable for programs for teachers, school administrators and other educators. Includes a complete script with accompanying slides.
5. The Mobius Civic/Municipal/Sales Presentation	Suitable for civic organizations, government entities, or any program aimed at adults. (The slides are the same as those for the Educator presentation.) The scripts contain the same basic information but vary slightly as they are intended for different audiences.
6. Sample Bid Proposals	Examples for including Mobius in municipal bid proposals.
7. Teacher In-Service Training Program	A comprehensive in-service training program on the Mobius Curriculum, which is suitable for teacher workshops. Includes a slide presentation on how waste is managed; what the Mobius Curriculum includes; activity-based lessons that demonstrate how the Mobius Program can be incorporated into existing curriculum. (Includes script and accompanying slides.)

INTRODUCTION



District Guide to the Mobius Program

8. Media Relations: Making the Most of Mobius with the Media

Publicity opportunities

Types of media to contact

Sample news release, news advisory, public service announcement

Possible story angles for local media

A checklist for presentations and special events

Examples of Mobius publicity

Mobius fact sheet

9. Resources

The Mobius Costume: how to order; rules and general information; inventory and dressing instructions

The Corporate Brochures Program: what, where and how to order

Ad Specialty Items: what, where and how to order

Decals: what, where and how to order

Mobius and the Municipal Bid

"When we were given the opportunity to bid on the city of Richardson's curbside collection contract, we contacted school district officials and let them know about the Mobius Program. As a result, we received a letter of endorsement from the school district's elementary science specialist, which we then included in our bid proposal.

"I strongly recommend that districts present the curriculum to school officials even before the bid is made, so that they can obtain similar letters of endorsement to include in the bid package."

Jon Farley
District Manager

CASE HISTORIES

In the case histories featured in your Mobius District Guide, you've learned how other districts have taken the initiative and "made the most of Mobius" in their communities. For integrating the Mobius Program into solid waste and recycling sales presentations, to using the Mobius mascot for school appearances and kick-off events for new contracts, to enhancing a district's image this sound, environmental education program is proving itself to be a powerful value-added service for BFI.

Districts report that the Mobius Program is especially helpful when it is included as the educational component for municipal bid proposals, not just for recycling contracts but also solid waste. The following is an example of the Mobius sections in a municipal bid proposal for Richardson, Texas. This may serve as a source of ideas for you as you develop your own Mobius municipal bid component.

RICHARDSON, TEXAS BID

PUBLICITY CAMPAIGN (Contractor's Participation)

A major factor in the success of any recycling program is enthusiastic, continuous public support and participation. To achieve this goal, people must understand recycling's importance to the community, how to recycle properly and the significance of their individual participation in the program. A strategically prepared and properly executed public education program is essential to motivating residents to recycle at the household level.

All of BFI's public education programs are flexible. Experience has taught us that while basic communications goals are the same from community to community, specific issues must be addressed on a personalized basis. What BFI offers you is a communications "tool kit" or proven elements, adaptable to your local situation.

This section will provide BFI's response to the City's Addendum #1, Item Number 2, II-Contractor's Participation. The enclosed pamphlet, The BFI Municipal Partnership: Recycling and Materials Processing, provides examples of effective newspaper articles and other promotional brochures that have proven to draw interest in other cities. The City of Richardson's recycling promotional program will be personalized to best reflect the goals of the City of Richardson and its citizens. BFI's public relations department in our Houston-based corporate office is also standing by to assist the City in their recycling campaign.

The BFI Public Education Partnership

To ensure an effective public education program, BFI and the City of Richardson will work together as partners in developing a communications program that is tailored to the City's needs and one that can help you achieve your participation goals. Each element of the program is governed by your community's demographics: lifestyles, economic and education levels, population distribution and density, and other factors that influence personal behavior.

Through the use of "user-friendly" printed materials and traditional communications media, such as newspaper, radio, television, direct mail, bill stuffers and outdoor billboards, we can help you reach, instruct and motivate members of your community. In addition, recycling articles may be published in the City of Richardson's newsletter, the "Richardson Today". The added value of public relations offered through this partnership can help you gain favorable publicity for your program with the media and your community members with press conferences, recycling demonstrations and special events.

Please bear in mind that these are not theoretical program elements. They are proven methods for creating awareness of, excitement about, and participation in your recycling program.

Getting Your Message Out

Our most successful public education programs communicate with two main audiences:

1. Adults and young adults, including the general public, civic leaders, civic organizations, and the media; and
2. School age children.

In communicating with adults and young adults, BFI recommends a strategically-timed, multi-level program. Although developing specific details will require further discussion of your goals, we have included a list of general avenues for communicating messages about your recycling program:

- A "kick-off" event that generates publicity and excitement while promoting a positive attitude toward the recycling program
- Press conferences at which city officials, civic leaders and prominent business leaders are present
- Planned media "events" at which there will be photo opportunities for the media
- Individual demonstrations of the recycling trucks at key locations around the City
- A telephone "hotline" number which individuals can call for information about the program
- Presentations by BFI to citizen groups, service organizations and neighborhood associations
- The use of print and electronic media where appropriate
- Information packets, detailing which materials are recyclable, how to prepare materials for recycling, and the importance of recycling available for the participants
- Tours of our BFI Recyclery in Plano, Texas

BFI has discovered that communicating with school-age children is a highly effective way of promoting a recycling program while generating excitement about it. As educators have pointed out, children's minds are like thirsty sponges waiting to soak up information. That quality, combined with their natural idealism, makes them highly receptive to your recycling message, a message they will take into their homes and encourage other family members to follow.

Because it is important to reach children with appropriate communications, BFI has developed our highly acclaimed school curriculum, the Mobius® Program, which teaches children about how the world around them is impacted by the waste we produce and how each of them can make a positive difference. An outline of the kit is included in this section. As the successful bidder, we will provide this program to the City at no cost.

As an outgoing commitment throughout the term of the contract, BFI shall provide up to \$75,000 to be spent on public awareness, education and promotion of the City's recycling program. All special promotion ideas, public education and information released by BFI shall be reviewed by the City prior to release.

- A. During the initial term of the recycling program, BFI shall act as joint host at a minimum of three (3) public meetings organized by the City.
- B. Included in this section are several brochures which demonstrate our public education program.
- C. Jon Farley, Operations Manager, will be the designated staff representative assigned to work directly with the City of Richardson. In the event Mr. Farley is not available, Randi Smith, Municipal Marketing Representative or Bob Pickens, Area Manager for Business Development - Southwest Region may be contacted.
- D. Jon Farley, Operations Manager, (214) 422-2341
Mr. Farley has been with BFI for 5 years, and has a total of 15 years experience in the solid waste industry. He is a graduate of the University of Texas at Austin with a degree in Finance. He has served on a variety of Recycling Boards and Committees with educational institutions and industry trade groups.

Randi Smith, Municipal Marketing Representative, (214) 422-2341

Ms. Smith has been with BFI for 1-1/2 years as a Marketing Representative, recently coming to the North Dallas district. She is a graduate of Kent State University holding a degree in Business Administration.

Bob Pickens, Area Manager for Business Development-Southwest Region, (214) 225-8151

Mr. Pickens has been with BFI for 4 years as an Area Manager for Business Development serving the North Dallas, Texas, Arkansas and Oklahoma areas. He is a graduate of Stephen F. Austin State University holding a degree in Business Management and Psychology.

Richardson Independent School District



March 16, 1992

John Hays
BFI
4200 14th Street
Plano, TX 75074

Dear Mr. Hays:

Thank you for allowing me to preview the MOBIUS Curriculum: "Understanding the Waste Cycle" for grades 4 - 6. Today's children are becoming more and more aware of the growing needs for recycling. They are interested in their world and want to help. This curriculum will instill in our students those recycling habits which will last their entire life and will also impact their parents' recycling habits.

In addition to focusing on the recycling theme, this curriculum includes and emphasizes the other "R's"--reduce and reuse. These two areas are perhaps where students need the most education. The activities are of high interest, can easily be integrated into science, social studies, and math, and will fit the state's essential elements for those subjects. In addition, little or no additional materials are needed for the exercises.

Another strong aspect of the curriculum are the discussion questions. They include higher level thinking questions which are being emphasized in most classrooms. These questions ask students to think critically about one of today's most important problems.

Again thank you for allowing me to preview these materials. I know the teachers will be anxious to try out this program.

Sincerely,

A handwritten signature in cursive script that reads "Janice Clevenger".

Janice Clevenger
Elementary Science Specialist
Richardson Independent School District

PROPOSED TOWN OF TISBURY/OAK BLUFFS

EDUCATIONAL PROGRAM

Designed By: BFI's Northern Region

**Contact: Bruce Stanas
BFI Municipal Service Manager
Boston, MA
(617) 265-0500**

PUBLIC AWARENESS AND EDUCATION COMPONENT

The public awareness and education component of this proposal is designed to support Tisbury/Oak Bluff's curbside recycling initiative. Following is a plan that includes a comprehensive strategy to assist in the success of your program. All BFI public awareness campaigns are tailor-made to conform to the individual city's needs. However, we have found that a successful program depends on the enthusiasm of the local community and a combination of the following is necessary to achieve a high level of program participation and waste reduction.

The Current Situation

The opportunity facing most communities is one of awareness (of recycling, education (how to do it) and motivation (why we should do it). BFI and Town Officials must take the Tisbury/Oak Bluffs general public from a low level (of awareness, education and motivation) to a level that ensures high waste reduction from the very beginning of the program.

Strategy

The strategy that BFI recommends has three goals: create awareness of the recycling program with the citizens of Tisbury/Oak Bluffs, educate them about the recycling process, and motivate them to participate in the program.

The initial awareness campaign is crucial because most people will make their decisions about recycling early on in the program. We cannot "wear down" people's resistance to recycling over a long period of time. We must make them want to recycle, and we must do so in a timely, positive fashion.

To accomplish our goals, BFI recommends the use of an upbeat theme line, for example, **"THE BIN IS IN, TISBURY/OAK BLUFFS!"** in order to set the mood for recycling as the "in" thing to do -- for the environment and for our future. This theme also echoes our corporate program.

Tactics

To execute this strategy, BFI will use several media in order to influence as many people as possible in the shortest amount of time.

- Special events aimed at school children
- Press events to announce specific components of the overall program
- A series of newspaper ads
- Radio spots tailored to program developments
- Educational material distributed with the recycling bins

**START-UP ACTIVITIES FOR
CURBSIDE RECYCLING**

Timing

Timing is important in a program such as the one BFI proposes. Starting too early may confuse residents. Starting too late does not allow enough time to adequately prepare materials. Therefore, the following timetable allows for two months from beginning to the actual kick-off of the program.

It has been proven that the most successful programs are those in which the citizens of a community feel they have actively made the program theirs. All of our publications, advertisements, educational activities, and press events will focus on Tisbury/Oak Bluff's recycling efforts and boost local residents. BFI will have its logo on materials along with the Town's, however, the credit for the program will go to the local residents.

The "**Countdown To Recycling**" is a combination of the above ideas that BFI has successfully instituted in other communities. They are proven suggestions. BFI also welcomes any suggestions and additions local organizations and civic leaders may have in the structuring of this program.

COUNTDOWN TO RECYCLING

WEEK EIGHT - Preview of Public Education Program at Town Council meeting/press conference

The ideal situation would be to unveil this program at a regularly scheduled council meeting covered by the local press. All elements of the program would be revealed (i.e. ad series, media used, special events, materials in bin, demonstration of what materials are recyclable, and how to prepare them for recycling). Informational kits would be available for all members of the council, solid waste/recycling advisory board and press.

The Chairperson of the council meeting can name the Recycling Coordinator for this program, if he/she so chooses. He or she can act as the pivot person to coordinate some of the activities, especially those with the schools. Each week that person can update the Town officials and can organize volunteers to assist in public awareness.

This is the time to announce the contest in the local junior high school for students to design a "recycling logo" specifically for Tishbury/Oak Bluffs. This logo will be used on all promotional material along with the BFI RecycleNow logo, including bin brochures, newspaper ads and banners. The contest will run for two weeks.

WEEK SEVEN - In House Preparation of Bin Flyer & Selection Process for Recycling Logo

BFI will prepare script for the bin brochure based on the terms of the contract. Final copy will be reviewed by the Chairman of the Town Council meeting or his designee and the Recycling Coordinator. A sample copy is attached.

Judges for the logo contest should be selected by the Town. BFI recommends that a Town official, a high school art teacher and a member of the solid waste/recycling advisory board be the judges.

BFI will work with the local director of the Department of Public Works to select locations throughout the Town for the placement of banners advertising the recycling program. Banners will have the newly selected logo on one end, the Town seal on the other end and either the slogan "THE BIN IS IN - RecycleNow" or "TISBURY/OAK BLUFFS RECYCLES" on it. Initial artwork will begin. Signs can be doubled sided.

WEEK SIX - Selection of Recycling Logo

On Monday of this week, contest entries should be in and judges should review the logos. By the end of the week, contest winners should be announced. BFI will give savings bonds to the three top finishers - \$100 to first place, \$50 to second and \$25 to third.

BFI will prepare artwork from the logo and process the banners and bin brochures.

WEEK FIVE - Introduction of MOBIUS Curriculum to the Elementary Schools

BFI has discovered that communicating with school-age children is a highly effective way of promoting a recycling program while generating excitement about it. As educators have pointed out, children's minds are like thirsty sponges awaiting to soak up information. That quality, combined with their natural idealism, makes them highly receptive to your recycling message, a message they will take into their homes and encourage other family members to follow.

Because it is important to reach children with appropriate communications, BFI has developed an award winning program for children in grade school, the Mobius® Program, which includes the following:

- A full-scale curriculum for grades 4-6: Browning-Ferris Industries' Mobius® Curriculum: Understanding the Waste Cycle. In six chapters, the curriculum covers an integrated approach to the management of solid waste and includes complete teacher background information which is reinforced with hands-on activities, a glossary, bibliography, listing of additional resources, and worksheet packet.
- The Mobius® Fun Book: a coloring and activity book for children which introduces recycling concepts in a fun, understandable way for your children. It is directed at students in kindergarten through third grade.
- The Mobius® mascot: a life-sized character whose costume is composed of the major recycling elements. Personal appearances will be arranged through your local BFI office.
- The Mobius® Support System: a toll-free Hotline for up-to-date information and statistics about solid waste, recycling and additional resources.

To kick off the program at the school, BFI personnel will be available to give an assembly presentation about the waste cycle and recycling. This presentation targets grades K-6, and includes a visit from the Mobius® mascot. A Curriculum will be donated to each elementary school (teachers in grades 4-6), and fun books will be distributed to each student in grades K-3.

A comprehensive in-service training workshop for teachers, based on the Mobius® program is also available.

WEEK FOUR - Begin Ad Campaign

BFI will run "WE'RE READY TO RECYCLE TISBURY/OAK BLUFFS! ARE YOU?" full page ad in the local paper. This ad announces the upcoming program and informs citizens of the proper way to prepare for recycling. See attached examples of the three ads to be placed.

BFI will also begin the first radio spot with the same theme. Again, the purpose of this ad is to make the public aware of the program. See attached examples of radio spots to be used.

BFI will begin to hold orientation meetings for the Department of Public Works officials and employees, Town officials, and Town Hall employees, and the recycling advisory board members. Experience shows that these three groups will receive the most questions regarding daily activities. Presentations will include which materials are acceptable, how to prepare them for recycling and a demonstration of the recycling truck operations.

A Recycling HOTLINE can be established. BFI suggests the last four digits to spell out the word BINS. Volunteers from the recycling advisory committee can answer the phones. BFI will assist in their training.

WEEK THREE - Preparation for Bin Delivery & Kick-off

BFI will begin to organize bin delivery to residents this week. The first bin can be delivered by a Town official to set up a press/photo opportunity.

The second in a series of ads will run in the local papers announcing "**THE BIN IS IN, TISBURY/OAK BLUFFS!**". Radio spots will be changed to reinforce theme. Script on both cases will reinforce the goals of the program.

Working with the Town, BFI will begin to hang the banners throughout the Town announcing the program.

WEEK TWO - Poster Contest Awards Given & Bins Delivered

Elementary students' posters are displayed at the local library, Town Hall or appropriate public building. A reception is held for the parents to come and see the drawings. A \$25 savings bond will be awarded to the student from each participating school for the best poster.

Volunteers can begin to receive materials to distribute. Radio ads will continue announcing the program.

WEEK ONE - Final Preparation

This last week should be used to clean up any loose ends that may be outstanding. Deliver bins to homes that say they did not get one. Arrange for press to cover the kick-off day. Check on availability of local officials for a press kit on the day of the start-up.

Depending on weekly newspaper delivery dates, place the third ad in the papers - "**RECYCLING STARTS MONDAY, TISBURY/OAK BLUFFS!**". Run the ad in local papers the day the program begins.

On the Saturday before the actual start-up day, volunteers can distribute brochures to shoppers at the local supermarkets. This brochure should be the same one delivered in the bins to stress continuity.

PROGRAM START - Kickoff and Start Collection

Kickoff program at Town Hall or on route at first home to be collected. Local and state officials will be invited, as well as the press. Active community recycling patrons can work with BFI and the Town to prepare for this event. BFI can provide guest appearances from mascots, Biffy Bear, and Mobius, as well as promotional materials.

On the actual start-up day, a photo session should be planned with the Chairman of the Town Council, other local officials, recycling coordinator, etc. This is a chance for credit to be distributed to all the hardworking citizens who helped make the program a success.

ADDITIONAL MATERIAL

Information Kits should consist of:

- * Countdown to recycling with exact dates in place
- * Fact sheets on logo contests for students
- * Fact sheets on details of BFI program operations
- * Town maps showing areas collected each day
- * Media schedule of photo opportunities and story opportunities

OTHER AREAS TO EXPLORE

- * Newspaper: for feature stories
- * Grocery Stores: for print on bags, flyers for bags, shelf signs
- * Radio: availability of local officials/BFI on talk/call-in programs (this has proven very effective)
- * TV: availability of local programming on cable stations for local official/BFI on magazine-format show
- * Tours and open house of BFI Recyclery
- * Inserts in local mailings

The Mobius™ Curriculum: Reaching the Recyclers of Tomorrow



For most adults, recycling is something new, a change in the way we handle our garbage. But for school-age children, it will be a part of their lives that they will carry into adulthood. In order to teach these recyclers of tomorrow more about the solid waste situation and the benefits of recycling, BFI has developed the Mobius curriculum.

Mobius is a friendly little character who's the star of this recycling and environmental education curriculum for elementary school children in grades four through six. Mobius and

his curriculum focus on the New Three Rs: Reduce, Reuse and Recycle — the key activities in managing solid waste. The curriculum addresses the subjects of science, mathematics and social studies, and can be used as part of a teaching plan or taught as a separate course.

Mobius was originally created by a fourth-grade student in Edmonton, Alberta, Canada, as the result of a contest sponsored by BFI. Students in five communities in the U.S. and Canada participated in the Mobius

Contest which taught the general principles of recycling and finished with the mascot-drawing contest. A graphic artist refined Mobius to the form you see here.



Mobius was named after the Mobius strip, the international symbol for the environmental cycle. The strip was named for its inventor, Augustus F. Mobius (1790-1868), a German mathematician who discovered the interesting properties of this continuous strip made with a single twist.



Cleaning Up Our Act



All About Browning-Ferris Industries' MOBIUS® Program

THE RECYCLE CYCLE



MOBIUS[®] The Fun Book

Aimed at
kindergarten
through
third
grade, the
MOBIUS[®]

Fun Book includes
coloring activities, puzzles, and
poems that teach and reinforce the New
Three Rs. The Fun Book is available in
multiple quantities to provide students
with their own copies.

Why BFI?

Waste disposal technology is changing and evolving rapidly. Research is continually providing new ways to treat, dispose of, and recycle solid waste. Because BFI is a leader in the waste services business, the company is able to provide cutting-edge methods and data on recycling, sanitary landfill operation, incineration, and organic composting to teachers and students. Statistics used in the MOBIUS[®] Curriculum come from two major sources: the most recent surveys conducted by the United States Environmental Protection Agency (U.S. EPA), published in July 1990; and from the major industry trade group, the National Solid Wastes Management Association (NSWMA).

MOBIUS[®] The Support Services

MOBIUS[®] is more than
learning about garbage.
It's a program that can
help teachers in many

ways. By calling the
MOBIUS[®] toll-free Hotline
(1-800-BFI-8100) teachers
can get answers to questions,

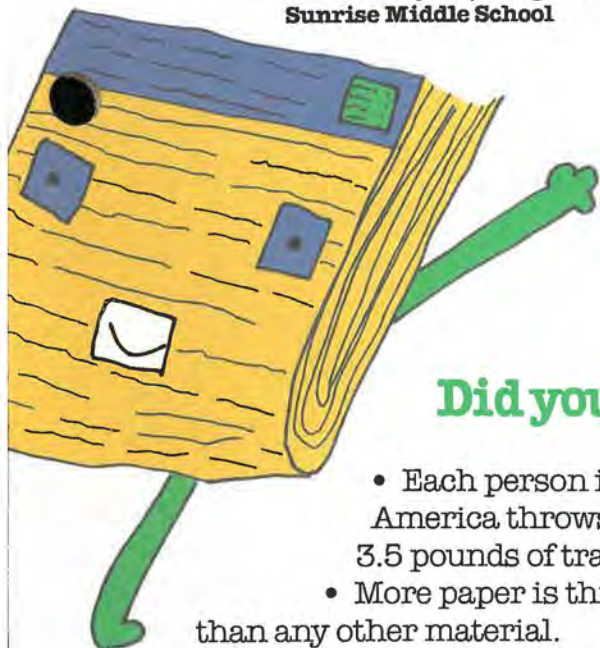
additional information and materials, and can arrange for special activities, such as school field trips to BFI. Professional researchers in BFI's corporate library answer the calls and can provide the most up-to-date information and statistics about waste disposal, the names of BFI contact people around North America, and schedule appearances by the life-sized MOBIUS[®] costumed character. Also available is a comprehensive in-service training program on solid waste & recycling.

Browning-Ferris Industries, Inc.
757 N. Eldridge
Houston, Texas 77079
(713) 870-8100

"We br

By calling
MOBIUS[®] c
ances at, sc
be arrange

Sandra Crayton, 6th grade
Sunrise Middle School



Did you know...

- Each person in North America throws away about 3.5 pounds of trash a day.
- More paper is thrown away than any other material.
- Almost 35 billion aluminum cans are thrown away each year, rather than recycled.



Bring good things to life...!

How? The MOBIUS® can even come to life! A life-sized named character is available for scheduled appearances, parades, community events, etc. Scheduling can be done by calling the BFI corporate library at 1-800-BFI-8100.

MOBIUS® Makes the Grade! What teachers are saying...

A+

"We need to add this as a unit to do right by it. It's a great book, easy to use and adapt. The class excitedly explored many other aspects of recycling and have now banned plastic cups in the teachers' lounge."

Linda Field;
Spring Branch School District;
Houston, Texas

"I think all the material is great, it gets right to the point and makes a statement that (the student will) understand. I will have lots of fun implementing this material."

Meta Stearns;
director of Clean Campuses for the Coastal Bend;
Corpus Christi, Texas

"As a teacher resource, this unit is excellent."

Dianne Bischof and Sandra Omelchuk;
Centennial Elementary School;
Edmonton, Alberta, Canada

"I really like the note to parents at the beginning. It is important for them to know what their child is studying at school."

Terri Ek;
Brimfield Elementary School;
Brimfield, Ohio



BFI's CEO Bill Ruckelshaus awards MOBIUS® Contest winner Scott Anderson and Centennial School librarian Annabelle Bourgoin, both of Edmonton, Canada, for taking part in the MOBIUS® Contest.

Where Did MOBIUS® Come From?

The name Mobius comes from an eighteenth century mathematician, Augustus F. Mobius, who developed a continuous loop with only one side – now recognized as the recycling industry's familiar triangular arrows. The MOBIUS® character is the result of a contest run by BFI, which asked children to draw a character to match the name. The winning entry was drawn by Scott Anderson, then a fourth grade student from Edmonton, Alberta, Canada, and refined by a professional graphic artist.

We use our Recycling Bin a lot.
-Brent

I will try to buy things that can be Recycled.
-Robin

If we don't Recycle, our cities will fill up with garbage.
-Scott

I have learned a lot about Recycling in School. I will recycle now.
-Christine

TWEET!

What kids are saying...

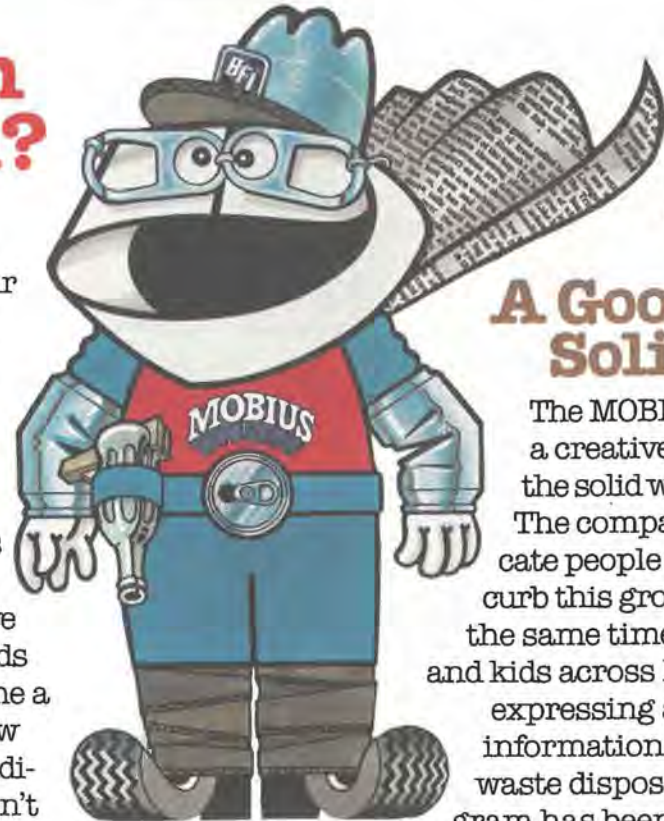


What on Earth?

Earth is a big place. In fact, our world is so big that for a long time people felt they couldn't possibly have much of an impact on the environment. However, as populations have grown and communication systems have linked even the farthest ends of our planet, it has become a "small world." People now agree that what each individual does – and doesn't do – can make a big difference in our day-to-day life. So when it comes to how we all handle the by-products of our lifestyle – our trash – we are rapidly learning to *clean up our act* to create an environment we can live with in the future.

Recycling! It's Automatic!

Browning-Ferris Industries (BFI) has developed the MOBIUS® Program to teach children about how the world around them is impacted by the waste we produce and how each of them can make a positive difference. Specifically, the program will help these future environmentalists develop good recycling and environmental habits. The program consists of a curriculum entitled *Browning-Ferris Industries' MOBIUS® Curriculum: Understanding the Waste Cycle* for grades four through six; a *MOBIUS® Fun Book* of educational puzzles and activities for children in kindergarten through third grade; and support service provided by BFI, including a toll-free 800 number to answer questions and provide additional resources, access to local-area speakers, and a life-sized MOBIUS® costumed character. Also available for teachers is a comprehensive in-service training program on solid waste and recycling.



A Good, Solid Start

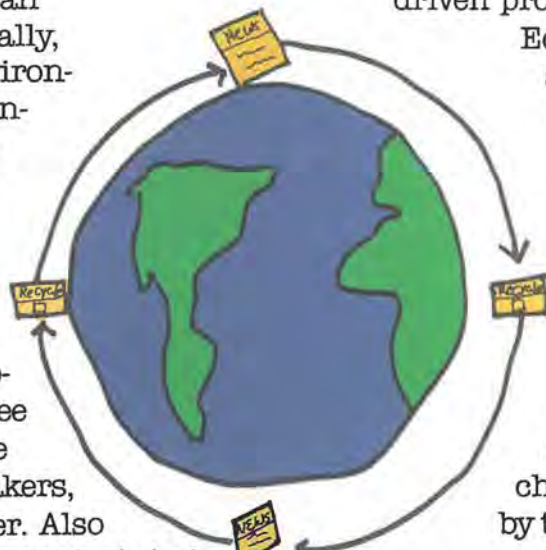
The MOBIUS® Program began as a creative approach to address the solid waste disposal problem. The company saw a need to educate people on how they can help curb this growing predicament. At the same time, teachers, parents, and kids across North America were expressing a need for up-to-date information about recycling and waste disposal. The MOBIUS® Program has been carefully developed to meet these needs. By educating grade

school children about recycling habits and environmental awareness, BFI hopes youngsters will influence parents and continue these habits. The future depends on young people understanding the need for an integrated solid waste disposal system.

"Teach Your Children Well..."

BFI's MOBIUS® Program was developed with the help of teachers, environmental educators, and BFI representatives from across North America. Teachers and communities provided ideas and comments each step of the way, to ensure a teacher-driven program with integrity.

Educators then tested and evaluated the MOBIUS® Curriculum's first edition in classrooms in the United States and Canada. The Second Edition was completed in September 1990 and incorporates many comments, suggestions, and changes recommended by teachers.



Leah Pedersen, 6th grade
Lanier Middle School

"In order to be a good recycler, we have to buy recycled and supply recycled."

Fee, Fi, Fo, Fum: What's in this Curriculum?

Overall, the MOBIUS® Curriculum focuses on the New Three Rs: Reduce, Reuse, and Recycle. These are the keys to the sound management of solid waste. The new three Rs help students understand the waste stream and guide them in becoming part of the solution to the waste disposal problem.

The curriculum includes the following:

- six chapters and 13 lessons
- one or two group activities per chapter
- instructions on how to coordinate a school or community recycling program
- toll-free 800 number support from BFI's corporate library staff
- pre- and post-quizzes to measure information learned
- a worksheet packet containing puzzles and games related to recycling and the environment
- one page of MOBIUS® stickers
- a complete glossary of terms
- notes and bibliographic information
- resources to find additional information
- printed entirely on recycled paper.

The MOBIUS® Curriculum addresses such subjects as science, social studies, history, dramatic arts, mathematics, reading comprehension, vocabulary, interpersonal communication, problem solving, listening skills, etc. Lessons are flexible enough to be used successively or integrated into a teacher's existing curriculum structure, while activities reinforce skills learned. Chapter six helps teachers and students coordinate a school or community recycling program.

