

ADVANCED ENVIRONMENTAL RECYCLING TECHNOLOGIES INC

Form S-3/A

July 24, 2008

**Table of Contents**

**As filed with the Securities and Exchange Commission on July 24, 2008**

**Registration No. 333 - 147679**

**SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

**Amendment No. 3**

**to**

**Form S-3**

**REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933**

**ADVANCED ENVIRONMENTAL RECYCLING TECHNOLOGIES, INC.**

(Exact name of registrant as specified in its charter)

**Delaware**

(State or other jurisdiction of incorporation or organization)

**71-0675758**

(I.R.S. Employer Identification No.)

**914 N. Jefferson Street, Post Office Box 1237  
Springdale, Arkansas 72765**

**(479) 756-7400**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**Joe G. Brooks  
Advanced Environmental Recycling  
Technologies, Inc.**

**914 N. Jefferson Street, Post Office Box 1237  
Springdale, Arkansas 72765  
(479) 756-7400**

(Name, address, including zip code, and telephone number including area code, of agent for service)

*Copies to:*

**J. Patrick Ryan**

**Akin, Gump, Strauss, Hauer & Feld, L.L.P.**

**300 Convent Street, Suite 1600**

**San Antonio, Texas 78205**

**(210) 281-7000**

**(210) 224-2035 (fax)**

**Approximate date of commencement of proposed sale to the public:** From time to time after this registration statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of earlier effective registration statement for the same offering.  \_\_\_\_\_

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.  \_\_\_\_\_

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

**The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act or until this Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.**

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company   
(Do not check if a smaller reporting company)

---

**Table of Contents**

**The information in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not an offer to buy these securities in any state where the offer or sale is not permitted.**

**SUBJECT TO COMPLETION, DATED JULY 24, 2008.  
11,669,700 Shares  
Advanced Environmental Recycling Technologies, Inc.  
Class A Common Stock**

This prospectus relates to the public offering of an aggregate of 11,669,700 shares of Class A common stock, par value \$.01 per share, which may be offered and sold from time to time by the selling stockholders of Advanced Environmental Recycling Technologies, Inc. named in this prospectus. Of these shares, subject to certain limitations, up to 3,787,880 shares of common stock are issuable upon exercise of currently outstanding warrants and up to 7,881,820 shares of common stock are issuable upon conversion of 788,182 currently outstanding and convertible shares of Series D convertible preferred stock, including shares of common stock issuable upon conversion of up to 30,606 shares of Series D preferred stock issued as pay-in-kind dividends upon the Series D preferred stock for the first two quarters following the initial issuance of Series D preferred stock. The selling stockholders acquired the shares of Series D preferred stock and warrants which are convertible into or exercisable for the common stock offered in this prospectus in private equity purchases or acquisitions. We are registering the offer and sale of the shares of common stock to satisfy registration rights we have granted. The shares of common stock are being registered to permit the selling stockholders to sell the shares from time to time in the public market. The stockholders may sell the shares through ordinary brokerage transactions, directly to market makers of our shares, or through any other means described in the section entitled *Plan of Distribution* beginning on page 12 of this prospectus. We cannot assure you that the selling stockholders will sell all or any portion of the shares offered in this prospectus. We are not selling any shares of common stock under this prospectus and will not receive any of the proceeds from the sale of shares of common stock offered pursuant to this prospectus. However, we will receive payments upon the exercise of any of the warrants, which are exercisable for up to 3,787,880 shares of our common stock at an exercise price of \$1.38 per share.

We have paid the expenses of preparing this prospectus and the related registration expenses.

Our common stock is traded on the Nasdaq Capital Market ( NASDAQ ) under the symbol AERT. The closing sales price for our common stock on July 18, 2008 was \$0.60 per share. Our principal office is located at 914 N. Jefferson Street, Springdale, Arkansas 72764, and our telephone number is 479.756.7400.

**The common stock offered hereby involves a high degree of risk**

**See *Risk Factors* beginning on page 3.**

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.**

The date of this prospectus is \_\_\_\_\_, 2008.

**TABLE OF CONTENTS**

	<b>Page</b>
<u>OUR BUSINESS</u>	1
<u>RISK FACTORS</u>	3
<u>SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS</u>	7
<u>USE OF PROCEEDS</u>	8
<u>SELLING STOCKHOLDERS</u>	8
<u>DESCRIPTION OF SECURITIES</u>	10
<u>PLAN OF DISTRIBUTION</u>	12
<u>LEGAL MATTERS</u>	13
<u>EXPERTS</u>	13
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	14
<u>Consent of Tullius Taylor Sartain &amp; Sartain LLP</u>	

**Table of Contents**

**OUR BUSINESS**

**Summary**

Advanced Environmental Recycling Technologies, Inc. (AERT), founded in 1988, develops, manufactures, and markets composite building materials that are used in place of traditional wood or plastic products for exterior applications in building and remodeling homes and for certain other industrial or commercial building purposes. AERT decking products are sold primarily under the trade names ChoiceDek and MoistureShield and offer an attractive wood grain appearance in multiple styles and colors. Our products are made primarily from approximately equal amounts of waste wood fiber, which have been cleaned, sized and reprocessed, and recycled polyethylene plastics which have been cleaned, processed, and reformulated utilizing patented and proprietary technologies developed and commercialized by the Company. Our products have been extensively tested, and are sold by leading national companies such as the Weyerhaeuser Company (Weyerhaeuser), Lowe's Companies, Inc. (Lowe's) and Therma-Tru Corporation. Since inception, we have sold over \$537 million of products into the North American marketplace. Our products are primarily used in renovation and remodeling by consumers, homebuilders, and contractors as a low maintenance, exterior green building alternative for decking, railing, and trim products. The majority of our business (72%) is in decking, railing accessories, and trim products through ChoiceDek for the Home Improvement Warehouse (HIW) market. Our door component segment comprises 6% of our business. In 2006, we launched our MoistureShield decking line into the non-HIW market targeted towards professional contractors and large deck builders. In 2007, we expanded MoistureShield distribution via a growing network of regional distributors. As of December 31, 2007 we had 14 distributors covering approximately 70% of the United States and Canada. The ChoiceDek product was carried nationwide by Lowe's Home Improvement warehouses and distributed by Weyerhaeuser as of December 31, 2007. We also began field testing a new line of fencing in 2007.

In the fall of 2007, we retained a national advertising and marketing agency to help us expand sales and distribution and to initiate a nationwide green-building brand awareness campaign for our MoistureShield product line. It is our plan to seek additional sales for our decking products through a combination of increased and expanded distribution throughout North America, conversion of builders and contractors from other products, and international sales via export. In 2007, we initiated our first sales of \$18,000 to a new distributor in the Peoples Republic of China and received the Award for Innovation at the Beijing Builder's Show. We plan to increase our green building marketing focus in 2008.

**Intellectual Property**

As of December 31, 2007 AERT held 14 United States Patents, including U.S. Patent 5759680 on its extruded composite product. The company also sought additional patent protection in 2007, and has additional patents currently pending in regard to its recycled plastics technologies, processes, and procedures. We maintain restricted access to our facilities and require confidentiality and non-disclosure agreements.

**Facilities**

We operate two extrusion facilities and a plastics recycling facility in Springdale, Arkansas, and a plastic recycling, warehouse, and reload complex in Lowell, Arkansas. We also maintain a wood processing and back up facility in Junction, Texas. The Texas facility is our oldest and least efficient facility is being prepared for a new product concept in 2008, and is not needed for extrusion production unless and until product demand increases substantially. We recently announced construction of an additional plastics recycling facility in Watts, Oklahoma. Our corporate offices are located at 914 N. Jefferson St, Springdale, Arkansas, 72765, our telephone number is 479-756-7400, and our internet address is [www.aert.com](http://www.aert.com).

**AERT Mission Statement**

Our goal is to be the leader in plastic recycling, wood/plastic extrusion technology, and the building products we make through customer satisfaction, sales growth, associate development, and earnings while building shareholder value.

**Green Building Products**

We currently sell our ChoiceDek-branded decking products in the HIW market through Weyerhaeuser to Lowe's. This market segment primarily focuses on the do-it-yourself (DIY) market in which homeowners buy, build, and install their own decks. ChoiceDek has been sold in Lowe's exclusively from 2001 until 2007. ChoiceDek is

currently stocked in 1500+ Lowe's stores in the U.S. and Canada. The current ChoiceDek product offering for 2008 consists of three colors: grey, woodtone, and redwood with matching trim boards and accessories. In addition two decking products representing a tropical hardwood look, spicewood and driftwood, are also available via special order. ChoiceDek is promoted through in-store displays and an ongoing print and marketing campaign that targets the residential decking market. We maintain a nationwide sales and customer service group consisting of 36 associates. Lowe's also conducts national print and television ads for the products it carries. The loss of Lowe's as a customer of AERT products would have a severe adverse affect on the company.

*MoistureShield Decking.* In October 2004, we began production of our new MoistureShield brand line of decking products, which consists of four colors and two tropical hardwood colors under our Rainforest Collection with a distinct wood-like embossed surface pattern. MoistureShield decking is currently sold to select primary distributors, who re-sell it to

## **Table of Contents**

lumber dealers and contractor yards for sale to local deck builders and home builders. MoistureShield decking sales represented about 19% of total Company sales in 2007, up from 9% in 2006, during which we had limited production capacity available to serve that market. The MoistureShield decking line allows us to diversify our customer base. In 2008 we will be presenting additional decking and handrail products to offer a complete line to this customer segment, as we move to expand MoistureShield into nationwide distribution. In addition, the DIY market is also serviced by the Home Depot, as well as several smaller regional chains. Our decking products are not currently carried in Home Depot and the ChoiceDek brand is currently owned by Weyerhaeuser and is exclusive to Lowe's.

*Privacy Fencing Systems.* In January 2007, we announced our newest product, LifeCycle Fencing. We estimate the privacy fence market to be \$5.5 billion annual sales with metal products comprising 63% of the market and wood/other products at 37%. We believe there is a substantial market for an aesthetically pleasing fence product that will serve for twenty years or more, which we expect LifeCycle Fencing to do. In fact, we intend to certify LifeCycle Fencing for use in hurricane-prone regions of the U.S. where its strength and durability could give it a clear competitive advantage over other, less durable, fencing products. We began test marketing LifeCycle Fencing with several large fencing contractors in 2007 and intend to launch this product line in the second half of 2008.

*Door Component Products.* We sell our MoistureShield industrial products to door manufacturers for use as component parts in products. For example, we manufacture door rails built into doors by Therma-Tru Corporation. In marketing, we emphasize the value-added feature of the MoistureShield composite product, which, unlike competing wood products, can be engineered to incorporate certain desired end-product characteristics that save our customers time and expense. Customers also avoid the need for chemical treatments to their final product, which are often otherwise necessary to prevent rot and sustain durability. The durability of our MoistureShield composite components allows our customers to extend the lifetime or warranties of their products while reducing or eliminating warranty claims costs.

Therma-Tru purchases approximately 80% of our industrial products. The loss of this customer would negatively impact sales and earnings. We are unable to predict the future size of the markets for MoistureShield industrial products; however, we believe that the national door and window, commercial and residential trim, and residential decking material markets are large and growing and will allow us to diversify our customer base over time as we add production capacity and focus on additional opportunities.

## **Marketing and Sales**

*General Market Strategy.* We have manufactured wood plastic composite products since 1988. Our products are designed for applications where we can add the greatest value and address market needs, i.e. for external applications where wood is prone to rot and/or requires substantial yearly maintenance in the form of staining or water sealing. Though we believe there are many possible applications for our wood/plastic composite technology, we have focused our resources and personnel on outdoor decking and handrail components, door and exterior trim components, and soon outdoor fencing, which in our view represent the most attractive market opportunities at this time. Within our chosen markets, we are constantly working to develop and improve strong customer relationships.

*Exterior Trim and Fascia Products.* We have marketed an exterior trim and fascia system under the trade names MoistureShield Trim and MoistureShield CornerLoc. Several national homebuilders have been specifying and using the product. We believe this product line has significant growth potential as a green alternative to PVC and wood trims to be distributed and sold in conjunction with our MoistureShield distributors. This product line is currently being redesigned to be sold as an extruded product, eliminating the additional manufacturing steps of milling and priming, although some limited product quantities are still being sold. A full product launch for this product line is scheduled for the second part of 2008.

*Sales and Customer Service.* We provide sales support and customer service through our own marketing department, through outside commissioned representatives with an affiliated entity, through Weyerhaeuser, and through training programs for our customers and their sales associates. We also promote our decking products through interactive displays at national, regional, and local home and lawn and garden shows, as well as through in-store displays. Our in-house sales and customer support team is focused on serving commercial decking contractors and customers and supporting the sales professionals at our regional building products distributor customers as well as Weyerhaeuser and Lowe's. Information and customer service are provided through the websites [www.choicedek.com](http://www.choicedek.com)



and [www.moistureshield.com](http://www.moistureshield.com), and through a national toll-free customer assistance telephone number, 1-800-951-5117. We also use independent, outside sales representatives in some markets to serve door, window, and decking customers.

**Table of Contents**

**RISK FACTORS**

Our business is subject to a number of risks, including but not limited to the following:

**Risks Related to Operating Our Business**

***The demand for our products is influenced by general economic conditions and may be adversely affected by general economic downturns or declines in construction activity.***

Our products are sold in the home improvement and new home construction markets. These markets are subject to significant fluctuations in activity and periodic downturns caused by general economic conditions, as has been the case since mid-2006, which contributed substantially to the decline in our revenues from \$98 million in 2006 to \$82 million in 2007 and to the resulting net losses we experienced in 2007. Slowdowns in the economy or construction activity may result in a reduction of the demand for our products and adversely affect our profitability. A worsening of the current economic climate, including further deterioration of the credit markets and/or consumer confidence, will negatively impact the Company's sales and profitability.

***The loss of one or more of our key customers could cause a substantial reduction in our revenues and profits.***

We could be materially adversely affected if we were to lose one or more of our large existing customers. Our principal customer for our decking material is Weyerhaeuser, which accounted for 75% and 81% of our sales in 2007 and 2006, respectively. A few large door and window construction companies have historically purchased substantially all of our industrial component products. A loss of any one of our large customers would adversely affect our sales and profitability.

***We may be unable to secure an adequate quantity of quality raw materials at economical prices.***

Our products are constructed primarily from scrap wood fiber and scrap polyethylene. The markets for such scrap materials are dynamic. The global demand for these materials has increased significantly and we expect demand to continue to increase. The largest component of our raw material costs is scrap polyethylene. The price that we must pay for these materials is related to the market prices of natural gas and petroleum, which have been rising and volatile in recent years. Our future profitability is contingent on us being able to manage raw material costs under these circumstances.

***Weather***

Sales of decking and accessories are subject to weather and seasonality trends associated with outdoor construction. Our current product mix is sold year round but experiences significant higher retail sales during the second and third quarters which run from April through September. Thus, adverse or bad weather during the first or fourth quarters could result in a negative impact on sales.

***High fuel prices***

Near record gasoline and diesel prices may reduce consumers' disposable income unless driving is curtailed, substitutions are made, or fuel prices retreat. This may substantially reduce funds available for home improvement or remodeling.

***We are highly leveraged and if we are unable to comply with certain debt covenants, our financial position and operations could be adversely affected.***

Our \$24.7 million outstanding bond agreements, including our 2003 bonds and our \$13.5 million of new bond indebtedness incurred in December 2007 for the development of a new facility in Oklahoma, contain certain financial covenants. The 2003 bonds included the following covenants at December 31, 2007: (1) a current ratio of not less than 1.00 to 1.00, (2) that not more than 10% of accounts payable be in excess of 75 days past the invoice date, (3) that not more than 20% of accounts receivable be in excess of 90 days past the invoice or billing date (unless contested in good faith or written off), (4) a requirement that we maintain a long-term debt service coverage ratio for the preceding four quarters of at least 2.00 to 1.00 and (5) a debt-to-equity ratio of not more than 3.00 to 1.00 as of any year-end. Our 2007 bonds have substantially the same covenants as our 2003 bonds, except that the accounts payable percentage is 20% and the debt service coverage ratio requirement is 1.5 to 1 through December 31, 2008, and moves to 2 to 1 beginning with the quarter ended March 31, 2009. We were not in compliance with the accounts payable and debt service coverage ratio covenants at December 31, 2007; however, the debt service coverage covenant was waived by the bondholder as of December 31, 2007 through, and including, March 31, 2008, and the accounts payable covenant was waived by the bondholder as of December 31, 2007 through, and including, December 31, 2008.

In June 2008, the Company renewed its \$15.0 million bank line of credit through September 15, 2008. The revolving credit facility includes covenants substantially similar to those under our 2003 bond agreements and customary restrictions on dividends and the incurrence of additional debt or liens, among other matters. The bank waived any past noncompliance with those covenants in connection with a September 2007 renewal through June 2008.

There is no assurance that we will be able to comply with these debt covenants in the future, or that the bondholder or bank lender will waive or modify the covenants in the future. If we are unable to comply with any of the covenants or obtain a waiver or modification of the covenants in the future, except the debt service coverage covenant, then the bond debt, in the

**Table of Contents**

amount of \$24.7 million at December 31, 2007, or bank loan, in the amount of \$12.3 million at December 31, 2007, could immediately become due and payable, the bondholder or bank lender could foreclose on the property used to secure the debt, which consists of substantially all of our material operating assets, and the bondholder could claim our revenues pledged as part of the bond agreement. If we are unable to comply with the debt service covenant, then we could be required to retain a consultant to make recommendations to increase the debt service coverage ratio to required levels, and to follow those recommendations. We believe it is likely that we will require further waivers of the debt service coverage covenant. Though there is a risk we will require further waivers of the accounts payable covenant, we believe future compliance with that covenant is likely.

***If we do not effectively manage our growth, our business resources may become strained and our results of operations may be adversely affected.***

Though our sales decreased \$15.6 million in 2007, we increased our sales by \$10.5 million in 2006, \$23.7 million in 2005 and \$20.1 million in 2004. Our products have seen significant growth, and our customers have significant established expansion plans. We expect significant future growth. This growth may provide challenges to our organization and may strain our management and operations. We expect to expand our manufacturing capabilities and to automate while we continue to become more efficient with our facilities. Our ability to effectively manage growth depends on our success in attracting and retaining highly qualified personnel and our ability to finance and implement additional production equipment and manufacturing facilities. We may be unable to accurately predict the amount of time or resources that will be required to effectively manage any anticipated or unanticipated growth in our business. We may not be able to attract, hire and retain sufficient personnel or acquire and implement sufficient manufacturing capacity to meet our needs. If we cannot scale our business appropriately, maintain control over expenses, or otherwise adapt to anticipated and unanticipated growth, our business resources may become strained, we may not be able to deliver products in a timely manner and our results of operations may be adversely affected.

***Our growth is limited by the availability of human capital resources.***

Future profitable growth will require us to recruit and retain qualified associates. We have recently hired a new President and named a new Vice President of Operations, both of whom have significant prior industry experience; however, we compete with many larger companies in the labor market, many of whom offer more attractive compensation packages than we are able to economically provide. Though we have adopted equity compensation plans to aid in our efforts to recruit and retain qualified associates, our compensation offerings may not be as attractive as our competitors' and the accounting treatment for such equity plans results in a reduction in our earnings.

***We have recently been sued by plaintiffs alleging defects in our decking products***

We have recently been sued by two separate groups seeking class action status and alleging defects in our decking products that make them susceptible to mold or mildew growth. The suits have been combined, and the parties have notified the court that a memorandum of understanding had been reached in regard to a compromise and settlement. A formal settlement agreement is in the process of being negotiated and finalized and will be filed with the court upon finalization. It is contemplated that the Company will self-administer a claim resolution process whereby various forms of relief will be offered to deck owners who file a claim within six months, with an annual cost limitation of \$2 million in 2008, \$2.75 million in 2009, \$2.75 million in 2010, and if necessary, \$2 million per year thereafter until the claim resolution process is completed. In addition, the Company will pay notice costs estimated to be \$750,000 and will pay plaintiffs' attorney fees totaling \$1.75 million over 2008 and 2009.

***Fire disruptions may adversely affect our ability to operate our business.***

Our raw materials and manufacturing processes involve a greater than average risk of fire loss or disruption. Through the Company's history, we have experienced several fires, some of which severely disrupted our manufacturing operations. There was an accidental fire at our Junction, Texas facility in March 2003, which caused substantial damage and temporarily shut down plant operations and there was a fire at our Springdale South facility in Arkansas on May 21, 2008 that caused a two week shutdown of an extrusion line at that facility. Although we have increased security and increased fire protection equipment at our facilities, another major fire could occur and materially adversely affect our operations.

***Our strategy of using recycled plastic and waste wood to create a competitive cost advantage involves significant risks, the occurrence of which may materially adversely affect our profitability.***

Our business strategy is to provide an environmentally friendly product at a competitive price. To achieve our business objectives we must recycle plastic and process waste wood on a cost-effective basis and efficiently convert these materials into high-quality finished goods. This strategy involves significant risks, including the risks that:

Our profitability may be materially diminished. The intrinsic variability of our raw material sources can result in considerable reduction in our operating rates and yields, which may more than offset any savings we realize from the purchase price of the materials.

We may not produce a sustainable return on investment. Because our production model requires backward integration in plastic recycling operations, as well as customized solutions for material preparation, compounding and extrusion, our model is significantly more capital intensive on a per-unit-basis than the models of our typical competitors. Our plants must convert our raw materials at high rates and net yields to generate the profit margins and cash flows necessary to sustain our business.

## **Table of Contents**

We may be limited in the markets in which we can effectively compete. Successfully expanding our business beyond decking would require applying our formulation and process technology to increasingly more challenging applications, such as high-end railing systems and fencing. The greater complexity and tighter design tolerances of such profiles require a level of process control that is more stringent than the level involved in deck board production. Our raw materials and process technology may not permit us to develop new applications on a cost-effective basis.

### ***Environmental regulation exposes us to potential liability for response costs and damages to natural resources.***

We are subject to federal, state, and local environmental laws and regulations. The environmental laws and regulations applicable to our operations establish air quality standards for emissions from our manufacturing operations, govern the disposal of solid waste, and regulate wastewater and storm water discharge. As is the case with manufacturers in general, we may be held liable for response costs and damages to natural resources if a release or threat of release of hazardous materials occurs on or from our properties or any associated offsite disposal location, or if contamination from prior activities is discovered at any properties we own or operate.

### ***Identification of certain weaknesses in our internal controls.***

Our management identified three material weaknesses in our internal control over financial reporting as of December 31, 2007, two of which were also cited weaknesses in our internal controls as of December 31, 2006. Management concluded that the Company did not have an adequate process in place to assess potential impairment of fixed assets, that the Company's inventory costing system was not adequately documented nor were there adequate procedures for an independent review of the costing analysis to ensure completeness and accuracy of the calculated costs, all of which were rated as weaknesses last year and which we have been in the process of remediating. Additionally, at the entity level, the Company has not properly allocated resources to ensure that necessary internal controls are implemented and followed throughout the Company. We are in the process of remediating the weaknesses in our internal controls; however, there can be no assurance at this time that our remediation plans and the actions we take will effectively remediate the material weaknesses.

### ***Maintaining product innovation at competitive costs***

With ever increasing competition and with an increasing number of new products entering the marketplace, we must maintain the quality and performance of our products while constantly addressing the needs of our customers in the marketplace. This involves offering a broader selection of high quality products on a routine basis, while being able to maintain acceptable manufacturing rates and yields at competitive costs. If we can not maintain acceptable manufacturing costs in producing new products in a timely manner, our costs may be higher. This could impede our introduction of new products and negatively affect our profitability.

### ***Maintaining product quality and performance at acceptable costs***

Our ability to grow and continue to gain market share is dependent on our ability to maintain the quality and performance of our products at reasonable costs. We have invested heavily in technology and infrastructure since inception to process and reformulate recycled materials in to high quality building products. However, if we should experience any negative problems or perceptions with product quality, it could have a negative impact on net sales. We were recently sued in federal district court in Washington in regard to an alleged surface cleaning defect with one of our product lines.

### ***Lack of Product Diversification***

Our current product lines are based exclusively on our wood/plastic composite formulas and manufacturing process for AERT composite products. With an increasing number of PVC and other non wood alternatives entering the marketplace, any market shift away from wood/plastic composites in general could have a reduced or negative impact on our sales growth.

### ***Risks Related to Financing Our Business***

#### ***Our indebtedness could adversely affect our ability to compete and produce net income***

As of December 31, 2007 we had \$49 million of total indebtedness. This will require a substantial portion of our cash flow to be used for interest and debt repayment. If we cannot attain substantial improvements in operating efficiencies and cost reductions, our ability to generate net income will be greatly impaired.

#### ***We may be unable to extend or replace our existing line of credit.***

The Company has recently extended its existing line of credit for up to \$12 million until September 15, 2008 while a larger credit facility is being finalized with larger financial institutions. The additional financing is expected to total approximately \$50 million, and will include both a secured line of credit and subordinated debt to fund its anticipated needs for the next year. There can be no assurance that the Company will be successful in completing its financing plans. If the Company is unsuccessful, additional equity capital may be required; however, there is no assurance that the Company will be successful in acquiring equity financing or that equity financing can be acquired on terms acceptable to the Company.

***We may have insufficient working capital to achieve our growth objectives.***

At December 31, 2007, we had a working capital surplus of \$2,226,615 and at December 31, 2006, we had a working capital deficit of \$3,466,130. The prior year's working capital deficit was the result of losses from operations, our decision to finance capital projects with cash generated from operations, and our need to fund rapid growth in sales. Our current positive working capital is attributable to new preferred equity and bond financings we completed in the fourth quarter of 2007, aggregating \$23.5 million. There is no assurance that we will be able to maintain a working capital surplus.

**Table of Contents**

***We will likely need to raise additional capital in the future. If we need additional funding, but fail to obtain it, we may not be able to adequately develop and commercialize our products or improve or expand our operations.***

We may need to raise additional outside financial resources in the future to effectively compete in the composite building materials marketplace, finance increased inventories, execute our current and future business plans and/or further develop and commercialize our current and future product offerings. Inability to raise sufficient outside capital would likely materially adversely impact our business, operations and profitability.

***Our failure to maintain Nasdaq listing requirements could cause our common stock to be delisted.***

We have failed to satisfy the Nasdaq minimum closing bid price of \$1.00 per share and could be subject to Nasdaq delisting procedures if such noncompliance is not rectified on or before December 15, 2008. If the stock price does not increase to \$1.00 or more for at least 10 consecutive trading days to re-establish compliance with Nasdaq's listing requirement prior to that date, we intend to effectuate a reverse stock split. We have submitted for stockholder approval at a meeting scheduled for July 24, 2008 a potential reverse stock split at a ratio to be determined by the board of directors between one-to-two and one-to-five.

The loss of our Nasdaq listing would likely reduce trading activity in our common stock and make it more difficult for stockholders to sell their shares, and the threat of such a result could have a negative or dampening effect on our trading activity until such matter is resolved. Any decreased trading activity and added difficulty in trading our stock could have a negative impact on our stock price. In addition, failure to maintain our Nasdaq listing, or to then be listed on the OTC Bulletin Board, would also result in the Series D preferred stockholders having an option to require us to redeem all of the outstanding Series D preferred stock at a price equal to 120% of its stated value plus accrued dividends. The redemption amount is payable at our option in either Class A common stock (valued at the lower of the then applicable conversion price or an average price based upon the 30 trading days preceding the redemption) or cash.

***We have incurred liquidated damages payable to the selling stockholders pursuant to the Registration Rights Agreement.***

We have incurred liquidated damages payable to the selling stockholders pursuant to the Registration Rights Agreement as a result of the failure to have caused the registration statement related to the shares offered hereby to be effective by February 29, 2008. The delay resulted from our inability to complete the registration process by February 14, 2008, at which point under applicable SEC rules it became necessary for us to provide our 2007 audited financial statements, which became available only upon the subsequent completion of our Annual Report on Form 10-K. Through June 30, 2008, \$463,000 has accrued for such liquidated damages, and additional liquidated damages will accrue at the rate of 1% per month of the \$10 million Series D Preferred Stock investment until the registration statement is declared effective.

***We currently have a significant number of derivative equity securities outstanding, the conversion of which could adversely impact the market price of our Class A common stock and our ability to obtain additional needed outside capital.***

The conversion of a significant number of our outstanding derivative securities into Class A common stock could adversely affect the market price of the stock. At December 31, 2007, there were warrants outstanding for 3,787,880 shares of Class A common stock at an exercise price of \$1.38, shares of Series D convertible preferred stock convertible into 7,575,760 shares of Class A common stock (disregarding contractual restrictions that prevent any one of the holders of such warrants and convertible preferred stock from acquiring more than 4.99% of the outstanding equity except upon at least 61 days prior notice, and disregarding additional shares of common stock that may be issued as paid-in-kind dividends on the Series D preferred stock), options outstanding for 1,521,500 shares of Class A common stock at an average exercise price of \$1.59, and 502,633 restricted stock awards subject to issuance without additional consideration upon satisfaction of vesting conditions. The issuance, exercise or conversion of a material amount of such securities will result in a dilution in interest for our other security holders. The convertible securities, whether converted into stock or not, could impair our ability to obtain additional capital because of the potential for dilution. Also, the holders of such securities may be expected to exercise their rights at a time when we would in all likelihood be able to obtain needed capital through a new offering of our securities on terms more favorable than those provided by the outstanding securities.



***If we raise additional funding, the terms of such transactions may cause dilution to existing shareholders or contain terms that are not favorable to us.***

We may seek to raise additional funding through private placements or public offerings of our equity or debt securities. We cannot be certain that additional funding will be available on acceptable terms, or at all. To the extent that we raise additional funds by issuing equity securities, our shareholders may experience significant dilution. Any debt financing, if available, may involve restrictive covenants, such as limitations on our ability to incur additional indebtedness and operating restrictions that could adversely impact our ability to conduct our business. Furthermore, any new equity or debt securities may have rights, preferences and privileges senior to those of our existing equity holders.

## **Table of Contents**

### ***Covenants in our bond agreements could restrict our ability to borrow, which could impair our ability to execute our business plan.***

Certain covenants in our bond agreements restrict the types and amounts of additional indebtedness that we may incur, including a requirement that, with certain exceptions, we may only incur additional indebtedness to the extent it would satisfy a debt incurrence coverage ratio of 250% of income before interest, taxes, depreciation and amortization to debt service. Those restrictions could inhibit our ability to execute our business plan, including the improvement and expansion of our operations and facilities. Additionally, our ability to secure adequate working capital to support our day-to-day operations as we grow could be limited by the covenants in our bond agreements.

### ***Management may be in a position to control the Company.***

Directors and officers of the Company currently own approximately 36% of the outstanding Class A common stock and stock representing approximately 43% of the combined voting power of the Class A and Class B common stock, including approximately 32% of the Class A common stock and 40% of the combined voting power which are owned by members of the Brooks family.

### **Risks Related to Our Intellectual Property**

#### ***Our proprietary rights may not adequately protect our technologies or products.***

Our commercial success will depend, in part, on our ability to obtain patents and maintain adequate protection for our technologies and products. We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our proprietary technologies and products are covered by valid and enforceable patents or are effectively maintained as unpatented proprietary technology. If we do not adequately protect our intellectual property, competitors may be able to use our technologies and erode or negate any competitive advantage we may have, which could harm our business and ability to achieve profitability. Our ability to maintain and solidify our proprietary position for our products will depend on our success in obtaining effective claims and enforcing those claims once granted.

We also rely on trade secrets to protect some of our technology, especially where we do not believe patent protection is appropriate or obtainable. However, trade secrets are difficult to maintain. While we use reasonable efforts to protect our trade secrets, our employees, consultants, contractors or other advisors may unintentionally or willfully disclose our proprietary information to competitors. Enforcement of claims that a third party has illegally obtained and is using trade secrets is expensive, time consuming and uncertain. In addition, non-U.S. courts are sometimes less willing than U.S. courts to protect trade secrets. If our competitors independently develop equivalent knowledge, methods and know-how, we would not be able to assert our trade secrets against them and our business could be harmed.

### **SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS**

Some of the statements contained in this prospectus include forward-looking statements. These forward-looking statements can be identified by the use of words such as anticipate, believe, estimate, may, intend, expect, should, seeks or other similar expressions. Forward-looking statements are based largely on our expectations and involve inherent risks and uncertainties including certain risks described in this prospectus. When considering those forward-looking statements, you should keep in mind the risks, uncertainties and other cautionary statements made in this prospectus. You should not place undue reliance on any forward-looking statement, which speaks only as of the date made. Some factors which may affect the accuracy of the forward-looking statements apply generally to the real estate industry, while other factors apply directly to us. Any number of important factors which could cause actual results to differ materially from those in the forward-looking statements include:

The foregoing discussion contains certain estimates, predictions, projections and other forward-looking statements (within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934) that involve various risks and uncertainties. While these forward-looking statements, and any assumptions upon which they are based, are made in good faith and reflect management's current judgment regarding the direction of the business, actual results will almost always vary, sometimes materially, from any estimates, predictions, projections, or other future performance suggested herein. Some important factors (but not necessarily all factors) that could affect the sales volumes, growth strategies, future profitability and operating results, or that otherwise could cause actual results to differ materially from those expressed in any forward-looking statement

include the following:

market, political or other forces affecting the pricing and availability of plastics and other raw materials,

accidents or other unscheduled shutdowns affecting us, our suppliers or their customers plants, machinery, or equipment,

competition from products and services offered by other enterprises,

7

---

**Table of Contents**

our ability to refinance short-term indebtedness,

state and federal environmental, economic, safety and other policies and regulations, any changes therein, and any legal or regulatory delays or other factors beyond our control,

execution of planned capital projects,

weather conditions affecting our operations or the areas in which our products are marketed, and

adverse rulings, judgments, or settlements in litigation or other legal matters.

We undertake no obligation to publicly release the result of any revisions to any such forward-looking statements that may be made to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.

Many of these factors are beyond our control. For a discussion of factors that could cause actual results to differ, please see the discussion in the section of this prospectus entitled Risk Factors.

**USE OF PROCEEDS**

We will not receive any of the proceeds from the sale of the shares of common stock by the selling stockholders. All proceeds from the sale of shares of common stock will be solely for the accounts of the selling stockholders. We will, receive proceeds from the issuance of shares upon exercise of the warrants described in this prospectus, which we will use for general corporate purposes.

**SELLING STOCKHOLDERS**

The following table provides information regarding the selling stockholders and the number of shares of common stock they are offering, which includes shares issuable upon the conversion of Series D preferred stock and the exercise of warrants to purchase shares of common stock held by the selling stockholder. Under the rules of the SEC, beneficial ownership includes shares over which the indicated beneficial owner exercises voting or investment power. Shares of Class A Common Stock subject to warrants that are currently exercisable or will become exercisable within 60 days are deemed outstanding for computing the percentage ownership of the person holding the warrants but are not deemed outstanding for computing the percentage ownership for any other person. The stockholders acquired the shares of Series D preferred stock and the warrants to which this prospectus relates from us in a private placement. In connection with the private placement, we entered into purchase agreements whereby we issued 757,576 shares of Series D preferred stock and warrants to purchase an additional 3,787,879 shares of our Class A common stock. In addition, this prospectus covers the resale of 306,060 additional shares of Class A common stock issuable upon conversion of 30,606 additional shares of Series D Preferred Stock which were issued to the selling stockholders as pay-in-kind dividends upon the Series D preferred stock on January 30 and April 30, 2008. Pursuant to the purchase agreements we executed, we agreed to file the registration statement, of which this prospectus forms a part, with the SEC covering the resale of the offered shares.

**Table of Contents**

We are registering the shares to permit the stockholders and their pledgees, donees, transferees and other successors-in-interest that receive such shares from a stockholder as a gift, partnership distribution or other non-sale related transfer after the date of this prospectus to resell the shares when and as they deem appropriate. The following table sets forth:

the name of the selling stockholders,

the number and percent of shares of our common stock that the stockholders beneficially owned prior to the offering for resale of the shares under this prospectus,

the number of shares of our common stock that may be offered for resale for the account of the stockholders under this prospectus, and

the number and percent of shares of our common stock to be beneficially owned by the stockholders after the offering of the shares (assuming all of the offered resale shares are sold by the stockholders).

The number of shares in the column "Number of Shares Being Offered" represents all of the shares that each stockholder may offer under this prospectus that may be acquired by such selling stockholder upon conversion of Series D preferred stock or upon exercise of the warrants currently held by such selling stockholder, including certain additional shares of common stock specified in the footnotes for each such selling stockholder. We do not know how long the stockholders will hold the shares before selling them or how many shares they will sell, and we currently have no agreements, arrangements or understandings with any of the stockholders regarding the sale of any of the resale shares, except that under certain circumstances, none of the selling stockholders are entitled to hold common stock and exercisable securities to the extent that the selling stockholder would beneficially own more than 4.99% of our total outstanding common stock. Therefore, the number of shares listed and which a selling stockholder may sell in connection with this prospectus may exceed the number of shares such selling stockholder may be deemed to beneficially own as determined under Section 13(d) of the Exchange Act. We have had no relationship with any of the selling stockholders, except in connection with the private placement as set forth herein. The shares offered by this prospectus may be offered from time to time by the stockholders listed below.

This table is prepared solely based on information supplied to us by the listed stockholders and assumes the sale of all of the resale shares. The applicable percentages of beneficial ownership are based on an aggregate of 46,314,250 shares of our Class A Common Stock issued and outstanding on July 21, 2008, adjusted as may be required by rules promulgated by the SEC.

Stockholders	Shares Beneficially Owned Prior to Offering		Number of Shares Being Offered	Shares Beneficially Owned After Offering <sup>(1)</sup>	
	Number	Percent		Number	Percent
Pierce Diversified Strategy Master Fund LLC, Ena	116,685	*%	116,685 <sup>(2)</sup>		
Enable Opportunity Partners LP	284,281	*%	284,281 <sup>(3)</sup>		
Enable Growth Partners LP	1,983,851	3.35%	1,983,851 <sup>(4)</sup>		
The Quercus Trust	2,310,517	4.99%	4,667,874 <sup>(5)</sup>		
Fort Mason Master, LP	2,310,517	4.99%	4,383,608 <sup>(6)</sup>		
Fort Mason Partners, LP	2,310,517	4.99%	233,401 <sup>(7)</sup>		

\* Less than 1%

(1) We do not know when or in what amounts a

selling stockholder may offer shares for sale. The selling stockholders may choose not to sell any or all of the shares offered by this prospectus. Because the selling stockholders may offer all or some of the shares pursuant to this offering, and because there are currently no agreements, arrangements or understanding with respect to the sale of any of the shares, we cannot estimate the number of the shares that will be held by the selling stockholders after completion of the offering. However, for purposes of this table, we have assumed that, after completion of the offering, none of the shares covered by this prospectus will be held by the selling stockholders.

- (2) The number of shares offered

by the selling stockholder is comprised of (A) 78,810 shares issuable upon conversion of 7,881.0 shares of Series D preferred stock held by the selling stockholder and (B) 37,875 shares issuable upon exercise of warrants held by the selling stockholder. Enable Capital Management, LLC is the manager of Pierce Diversified Strategy Master Fund LLC, Ena, and Mitch Levine is the managing member of Enable Capital Management, LLC, which in turn is the general partner of Enable Opportunity Partners LP and of Enable Growth Partners LP, and in such capacities Mr. Levine exercises sole voting and investment authority with respect to the shares beneficially owned by each

such selling  
stockholder.  
Enable Capital  
Management,  
LLC and  
Mr. Levine each  
disclaim  
beneficial  
ownership of  
shares  
beneficially  
owned by the  
selling  
stockholders,  
except to the  
extent of its or  
his pecuniary  
interest therein,  
if any, and  
Pierce  
Diversified  
Strategy Master  
Fund LLC, Ena,  
Enable  
Opportunity  
Partners, LP and  
Enable Growth  
Partners LP  
each disclaim  
beneficial  
ownership of  
the shares  
beneficially  
owned by the  
others.



**Table of Contents**

- (3) The number of shares offered by the selling stockholder is comprised of (A) 192,006 shares issuable upon conversion of 19,200.6 shares of Series D preferred stock held by the selling stockholder and (B) 92,275 shares issuable upon exercise of warrants held by the selling stockholder. Enable Capital Management, LLC is the manager of Pierce Diversified Strategy Master Fund LLC, Ena, and Mitch Levine is the managing member of Enable Capital Management, LLC, which is in turn the general partner of Enable Opportunity Partners LP and of Enable Growth Partners LP, and in such capacities Mr. Levine exercises sole voting and investment authority with

respect to the  
shares  
beneficially  
owned by each  
such selling  
stockholder.  
Enable Capital  
Management,  
LLC and  
Mr. Levine each  
disclaim  
beneficial  
ownership of  
shares  
beneficially  
owned by the  
selling  
stockholders,  
except to the  
extent of its or  
his pecuniary  
interest therein,  
if any, and  
Pierce  
Diversified  
Strategy Master  
Fund LLC, Ena,  
Enable  
Opportunity  
Partners, LP and  
Enable Growth  
Partners LP  
each disclaim  
beneficial  
ownership of  
the shares  
beneficially  
owned by the  
others.

- (4) The number of  
shares offered  
by the selling  
stockholder is  
comprised of  
(A) 1,339,911  
shares issuable  
upon conversion  
of 133,991.1  
shares of  
Series D

preferred stock held by the selling stockholder and (B) 643,940 shares issuable upon exercise of warrants held by the selling stockholder. Enable Capital Management, LLC is the manager of Pierce Diversified Strategy Master Fund LLC, Ena, and Mitch Levine is the managing member of Enable Capital Management, LLC, which in turn is the general partner of Enable Opportunity Partners LP and of Enable Growth Partners LP, and in such capacities Mr. Levine exercise sole voting and investment authority with respect to the shares beneficially owned by each such selling stockholder. Enable Capital Management, LLC and Mr. Levine each disclaim beneficial ownership of

shares  
beneficially  
owned by the  
selling  
stockholders,  
except to the  
extent of its or  
his pecuniary  
interest therein,  
if any, and  
Pierce  
Diversified  
Strategy Master  
Fund LLC, Ena,  
Enable  
Opportunity  
Partners, LP and  
Enable Growth  
Partners LP  
each disclaim  
beneficial  
ownership of  
the shares  
beneficially  
owned by the  
others.

- (5) The number of  
shares offered  
by the selling  
stockholder is  
comprised of  
(A) 3,152,724  
shares issuable  
upon conversion  
of 315,272.4  
shares of  
Series D  
preferred stock  
held by the  
selling  
stockholder and  
(B) 1,515,150  
shares issuable  
upon exercise of  
warrants held by  
the selling  
stockholder.  
The terms of the  
Series D  
preferred stock

and the warrants held by this selling stockholder provide that the selling stockholder may not convert shares of Series D preferred stock, or exercise warrants, if, after giving effect to such conversion or exercise, the selling stockholder, together with its affiliates, would beneficially own more than 4.99% of the outstanding shares of our common stock. The Shares Beneficially Owned Prior to Offering column in the table reflects the application of this limitation based on the number of shares of our common stock issued and outstanding as of July 21, 2008. The Number of Shares Being Offered column and the preceding information in this footnote indicate the total

number of  
shares  
beneficially  
owned without  
giving effect to  
this limitation.  
The foregoing  
beneficial  
ownership  
limitation may  
be waived by  
such selling  
stockholder, at  
its election,  
upon not less  
than 61 days  
prior notice to  
us. David  
Gelbaum and  
Monica Chavez  
Gelbaum are the  
trustees of  
Quercus Trust  
and in such  
capacity  
exercise shared  
voting and  
investment  
authority with  
respect to the  
shares  
beneficially  
owned by such  
selling  
stockholder.  
Mr. Gelbaum  
and  
Ms. Gelbaum  
disclaim  
beneficial  
ownership of  
shares  
beneficially  
owned by the  
selling  
stockholder,  
except to the  
extent of his or  
her respective  
pecuniary  
interest therein.

- (6) The number of shares offered by the selling stockholder is comprised of (A) 2,960,728 shares issuable upon conversion of 296,072.8 shares of Series D preferred stock held by the selling stockholder and (B) 1,422,880 shares issuable upon exercise of warrants held by the selling stockholders. The terms of the Series D preferred stock and the warrants held by this selling stockholder provide that the selling stockholder may not convert shares of Series D preferred stock, or exercise warrants, if, after giving effect to such conversion or exercise, the selling stockholder, together with its affiliates, would beneficially own more than 4.99% of the outstanding shares of our

common stock.  
The Shares  
Beneficially  
Owned Prior to  
Offering column  
in the table  
reflects the  
attribution for  
beneficial  
ownership  
purposes of  
shares owned by  
both such  
stockholder and  
its affiliate Fort  
Mason Partners,  
LP and the  
application of  
the foregoing  
beneficial  
ownership  
limitation based  
on the number  
of shares of our  
common stock  
issued and  
outstanding as  
of July 21,  
2008. The  
Number of  
Shares Being  
Offered column  
and the  
preceding  
information in  
this footnote  
indicate the total  
number of  
shares  
beneficially  
owned without  
giving effect to  
this limitation.  
The foregoing  
beneficial  
ownership  
limitation may  
be waived by  
such selling  
stockholder, at  
its election,



upon not less than 61 days prior notice to us. Fort Mason Capital, LLC is the general partner of Fort Mason Master, LP and of Fort Mason Partners, LP and Daniel German is the sole managing member of Fort Mason Capital, LLC and, in such capacities, Fort Mason Capital, LLC and Mr. German exercise sole voting and investment authority with respect to the shares beneficially owned by each such selling stockholder. Fort Mason Capital, LLC and Mr. German each disclaim beneficial ownership of the shares beneficially owned by the selling stockholder, except to the extent of its or his pecuniary interest therein, if any, and Fort Mason Master, LP and Fort Mason Partners, LP each disclaim

beneficial  
ownership of  
the shares  
beneficially  
owned by the  
other.

- (7) The number of shares offered by the selling stockholder is comprised of (A) 192,006 shares issuable upon conversion of 19,200.6 shares of Series D preferred stock held by the selling stockholder and (B) 92,275 shares issuable upon exercise of warrants held by the selling stockholders. The terms of the Series D preferred stock and the warrants held by this selling stockholder provide that the selling stockholder may not convert shares of Series D preferred stock, or exercise warrants, if, after giving effect to such conversion or exercise, the selling stockholder, together with its

affiliates, would beneficially own more than 4.99% of the outstanding shares of our common stock. The Shares Beneficially Owned Prior to Offering column in the table reflects the attribution for beneficial ownership purposes of shares owned by both such stockholder and its affiliate Fort Mason Master, LP and the application of the foregoing beneficial ownership limitation based on the number of shares of our common stock issued and outstanding as of July 21, 2008. The Number of Shares Being Offered column and the preceding information in this footnote indicate the total number of shares beneficially owned without giving effect to this information. The foregoing beneficial

ownership  
limitation may  
be waived by  
such selling  
stockholder, at  
its election,  
upon not less  
than 61 days  
prior notice to  
us. Fort Mason  
Capital, LLC is  
the general  
partner of Fort  
Mason Master,  
LP and of Fort  
Mason Partners,  
LP and Daniel  
German is the  
sole managing  
member of Fort  
Mason Capital,  
LLC and, in  
such capacities,  
Fort Mason  
Capital LLC  
and Mr. German  
exercise sole  
voting and  
investment  
authority with  
respect to the  
shares  
beneficially  
owned by each  
such selling  
stockholder.  
Fort Mason  
Capital, LLC  
and Mr. German  
each disclaim  
beneficial  
ownership of  
the shares  
beneficially  
owned by the  
selling  
stockholder,  
except to the  
extent of its or  
his pecuniary  
interest therein,

if any, and Fort  
Mason Master,  
LP and Fort  
Mason  
Partners,LP  
each disclaim  
beneficial  
ownership of  
the shares  
beneficially  
owned by the  
other.

#### **DESCRIPTION OF SECURITIES**

Our authorized capital stock consists of 75,000,000 shares of Class A common stock, \$.01 par value, 7,500,000 shares of Class B common stock, \$.01 par value, and 5,000,000 shares of preferred stock, \$1.00 par value.

*Description Of Class A Common Stock.* The holders of shares of Class A common stock are entitled to receive dividends out of legally available funds when and in such amounts as the board of directors may from time to time determine. Each share of Class A common stock entitles the holder to one vote on all matters submitted to a vote of our stockholders. Upon liquidation or dissolution, holders of Class A common stock are entitled to share equally with holders of Class B common stock in our assets legally available for distribution to stockholders after satisfaction of claims of creditors and liquidation preferences of preferred stock. Shares of Class A common stock are not redeemable and have no preemptive, conversion or cumulative voting rights. American Stock Transfer & Trust Company serves as transfer agent for our Class A common stock.

**Table of Contents**

*Description Of Class B Common Stock.* Each share of our Class B common stock will convert at any time at the option of the holder into one share of our Class A common stock. Each share of Class B common stock will convert automatically into one share of Class A common stock upon its sale or transfer to any person other than another holder of Class B common stock, and upon the death of the holder if not transferred by request or inheritance to another holder of our Class B common stock. The Class B common stock is identical in all other respects to our Class A common stock except that on every matter submitted to a vote of our stockholders each share of Class A common stock entitles the registered holder to one vote, while each share of Class B common stock entitles the registered holder to five votes. Upon liquidation or dissolution, holders of Class B common stock are entitled to share equally with holders of Class A common stock in our assets legally available for distribution to stockholders after satisfaction of any claims of creditors and liquidation preferences of preferred stock. Shares of Class B common stock are not redeemable and have no preemptive, conversion or cumulative voting rights. The holders of Class B common stock have entered into a right of first refusal agreement among themselves granting such stockholders a right to purchase Class B common stock on a proportionate basis from any Class B stockholder desiring to sell such shares.

*Description Of Preferred Stock.* All previously outstanding shares of Series A, B and C Preferred Stock have now been converted to Class A common stock or otherwise repurchased or retired.

On October 29, 2007, the Company sold for \$10 million cash (i) an aggregate 757,576 shares of a newly established Series D Convertible Preferred Stock, convertible into the Company's Class A Common Stock, initially at a conversion price of \$1.32, and (ii) accompanying five-year warrants to acquire an aggregate of 3,787,880 shares of Class A common stock at an initial exercise price of \$1.38.

The Series D preferred stock has an 8% cumulative dividend rate. For the first two quarters following the closing, the Company may pay dividends in additional shares of Series D preferred stock, and intends to do so. Beginning in the third quarter following the closing, dividends may be paid in either cash or in shares of common stock, at the option of the Company. Upon any liquidation, dissolution or winding up of the Company, the holders of the Series D preferred stock are entitled to receive a liquidation preference equal to two times the original purchase price plus all accrued but unpaid dividends. In addition to separate protective voting rights as to certain customary matters, the holders of the Series D preferred stock will be entitled to vote on an as-converted basis together with the holders of the Company's common stock on all other matters submitted to a vote of the Company's stockholders, with a number of votes equal to the lesser of (i) the number of shares of common stock into which the Series D preferred stock could then be converted and (ii) the number of shares of common stock into which the Series D preferred stock would be convertible if the conversion price on the record date for the vote or consent of stockholders is deemed to be \$1.2725.

Beginning 18 months after closing, the Company may cause a mandatory conversion of the Series D preferred stock if there is a currently effective resale registration statement and the closing price of the Company's common stock for the preceding 20-trading day period has been at least 200% of the conversion price and the average daily trading volume for such period has been at least 100,000 shares.

The preferred shares are subject to a full ratchet anti-dilution adjustment during the initial two-year period following closing in the event, with certain customary exceptions, that the Company issues additional equity securities at a lower per share price, and thereafter are subject to a weighted average anti-dilution adjustment in such circumstances.

The Company intends to seek before July 2008 such stockholder approval as may be required under NASDAQ Capital Market rules for the issuance of underlying common shares upon conversion or exercise, to the extent any such anti-dilution adjustments could cause the issuance of in excess of 19.99% of the currently outstanding number of shares of the Company's common stock at a price below the prevailing price on the date of original issuance. The Company has undertaken not to make any issuances of securities that would cause an anti-dilution adjustment to the Series D preferred stock or warrants unless such stockholder approval has been first obtained. The preferred share designation and the warrants contain a blocker provision prohibiting the conversion of the preferred shares or the exercise of the warrants if as a result an investor or its affiliates would beneficially own in excess of 4.99% of the Company's outstanding common stock. The blocker provision may be waived by the investor upon 61 days prior written notice.

In the event of certain mergers, consolidations or other business combinations to which the Company is a party, the holders of the Series D preferred stock will be entitled at their option to have such preferred stock redeemed at 100% of its stated value plus accrued dividends. In the event of certain specified triggering events such as a lapse of the registration statement, suspension of its listing, deregistration under the Exchange Act, completion of a going private transaction, failure to comply with certain conversion procedures and timing, or breaches of the Company's representations, covenants and other obligations to the investors, the holders of the Series D preferred stock will be entitled at their option to have such

**Table of Contents**

preferred stock redeemed at 120% of the stated value plus accrued dividends. In the event holders elect such a redemption in the case of a major transaction or triggering event, the Company has the option to make the redemption payment in either cash or stock, valued at the lesser of the conversion price or the then-current 30-day volume-weighted average price of the common stock. Also in the event of such a merger, consolidation or business combination, the Company will have the option to redeem the Series D preferred stock at an amount equal to the liquidation preference plus any accrued and unpaid dividends and liquidated damages, if any.

The investors were granted a right of first offer during the 12 months following closing with respect to any proposed issuance by the Company, with certain customary exceptions, of common stock or other debt or equity securities convertible, exercisable or exchangeable for the Company's common stock. The Company agreed not to issue variable-priced equity or variable-priced equity linked securities while the Series D preferred stock remains outstanding.

*Warrants.* In connection with the issuance of the Series D preferred stock, on October 29, 2007, the Company also issued warrants to acquire an aggregate of 3,787,880 shares of Class A common stock at an initial exercise price of \$1.38 per share. The warrants are exercisable, in whole or in part, upon payment of the exercise price in cash or, at the holder's election, by a cashless exercise pursuant to which the holder will receive shares of common stock with an aggregate value equal to the aggregate difference between the current market value of the shares underlying the warrants being exercised and the aggregate exercise price of such warrants. The warrants may be exercised at any time, in whole or in part, prior to the close of business on October 29, 2012; provided, however, the preferred share designation and the warrants contain a blocker provision prohibiting the conversion of the preferred shares or the exercise of the warrants if as a result an investor or its affiliates would beneficially own in excess of 4.99% of the Company's outstanding common stock. The blocker provision may be waived by the investor upon 61 days prior written notice.

The warrants are subject to a full ratchet anti-dilution adjustment during the initial two-year period following closing in the event, with certain customary exceptions, that the Company issues additional equity securities at a lower per share price, and thereafter are subject to a weighted average anti-dilution adjustment in such circumstances.

**PLAN OF DISTRIBUTION**

The selling stockholders and any of their pledgees, donees, assignees and successors-in-interest may, from time to time, sell any or all of their shares of common stock being offered under this prospectus on any stock exchange, market or trading facility on which shares of our common stock are traded or in private transactions. These sales may be at fixed or negotiated prices. The selling stockholders may use any one or more of the following methods when disposing of shares:

ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers,

block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction,

purchases by a broker-dealer as principal and resales by the broker-dealer for its account,

an exchange distribution in accordance with the rules of the applicable exchange,

privately negotiated transactions,

to cover short sales made after the date that the registration statement of which this prospectus is a part is declared effective by the Commission,

broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share,

a combination of any of these methods of sale, and



any other method permitted pursuant to applicable law.

The shares may also be sold under Rule 144 under the Securities Act of 1933, as amended ( Securities Act ), if available, rather than under this prospectus. The selling stockholders have the sole and absolute discretion not to accept any purchase offer or make any sale of shares if they deem the purchase price to be unsatisfactory at any particular time.

**Table of Contents**

The selling stockholders may pledge their shares to their brokers under the margin provisions of customer agreements. If a selling stockholder defaults on a margin loan, the broker may, from time to time, offer and sell the pledged shares.

Broker-dealers engaged by the selling stockholders may arrange for other broker-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholders (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated, which commissions as to a particular broker or dealer may be in excess of customary commissions to the extent permitted by applicable law.

If sales of shares offered under this prospectus are made to broker-dealers as principals, we would be required to file a post-effective amendment to the registration statement of which this prospectus is a part. In the post-effective amendment, we would be required to disclose the names of any participating broker-dealers and the compensation arrangements relating to such sales.

The selling stockholders and any broker-dealers or agents that are involved in selling the shares offered under this prospectus may be deemed to be underwriters within the meaning of the Securities Act in connection with these sales. Commissions received by these broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Any broker-dealers or agents that are deemed to be underwriters may not sell shares offered under this prospectus unless and until we set forth the names of the underwriters and the material details of their underwriting arrangements in a supplement to this prospectus or, if required, in a replacement prospectus included in a post-effective amendment to the registration statement of which this prospectus is a part.

The selling stockholders and any other persons participating in the sale or distribution of the shares offered under this prospectus will be subject to applicable provisions of the Exchange Act, and the rules and regulations under that act, including Regulation M. These provisions may restrict activities of, and limit the timing of purchases and sales of any of the shares by, the selling stockholders or any other person. Furthermore, under Regulation M, persons engaged in a distribution of securities are prohibited from simultaneously engaging in market making and other activities with respect to those securities for a specified period of time prior to the commencement of such distributions, subject to specified exceptions or exemptions. All of these limitations may affect the marketability of the shares.

If any of the shares of common stock offered for sale pursuant to this prospectus are transferred other than pursuant to a sale under this prospectus, then subsequent holders could not use this prospectus until a post-effective amendment or prospectus supplement is filed, naming such holders. We offer no assurance as to whether any of the selling stockholders will sell all or any portion of the shares offered under this prospectus.

We have agreed to pay all fees and expenses we incur incident to the registration of the shares being offered under this prospectus. However, each selling stockholder and purchaser is responsible for paying any discounts, commissions and similar selling expenses they incur.

We and the selling stockholders have agreed to indemnify one another against certain losses, damages and liabilities arising in connection with this prospectus, including liabilities under the Securities Act.

**LEGAL MATTERS**

Akin Gump Strauss Hauer & Feld, LLP, San Antonio, TX, has provided us an opinion relating to the validity of the Class A common stock offered by this prospectus.

**EXPERTS**

The financial statements and management's assessment of the effectiveness of internal control over the financial reporting (which is included in Management's Report on Internal Control Over Financial Reporting) incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2007 have been so incorporated in reliance on the report of Tullius Taylor Sartain & Sartain LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

**Table of Contents**

**WHERE YOU CAN FIND MORE INFORMATION**

This prospectus is part of a registration statement we filed with the SEC. You should rely only on the information contained in this prospectus or incorporated by reference. We have not authorized anyone else to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus is accurate as of any date other than the date on the front page of this prospectus, regardless of the time of delivery of this prospectus or any sale of common stock.

We file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read, without charge, and copy the documents we file at the SEC's public reference rooms in Washington, D.C., at 100 F Street, N.E., Washington, D.C. 20549. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for further information on the public reference rooms. Our SEC filings are also available to the public at no cost from the SEC's website at <http://www.sec.gov>.

We incorporate by reference the filed documents listed below, except as superseded, supplemented or modified by this prospectus, and any future filings we will make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act"):

our Annual Report on Form 10-K for the fiscal year ended December 31, 2007, as amended by Form 10-K/A filed on April 30, 2008,

our Current Report on Form 8-K filed on April 8, 2008,

our Quarterly Report on Form 10-Q for the quarter ended March 31, 2008 filed on May 12, 2008, and

the description of our capital stock contained in our registration statement on Form S-1 initially filed with the SEC on August 24, 1989.

The reports and other documents that we file after the date of this prospectus will update, supplement and supersede the information in this prospectus. You may request and obtain a copy of these filings, at no cost, by writing or telephoning us at the following address or phone number:

Joe G. Brooks, Chairman of the Board  
Advanced Environmental Recycling Technologies, Inc.  
914 N. Jefferson Street  
Springdale, Arkansas 72764  
(501) 756-7400

14

---

**Table of Contents**

**PART II**  
**INFORMATION NOT REQUIRED IN PROSPECTUS**

**ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION**

The expenses payable in connection with the sale of the Class A Common Stock offered in this registration statement are as follows:

Securities and Exchange Commission registration fee	\$ 339.95
Legal fees and expenses	\$35,000.00
Accounting fees and expenses	3,000.00
Miscellaneous	1,000.00
Total	\$ 39,339.95

All expenses are estimated except for the SEC registration fee.

**ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS.**

Section 145 of the Delaware General Corporation Law permits the Registrant to indemnify directors, officers, employees or agents against judgments, fines, amounts paid in settlement, and reasonable costs, expenses and counsel fees paid or incurred in connection with any proceeding, other than an action by or in the right of the Registrant, to which such director, officer or employee or his legal representative may be a party, provided such director, officer or employee shall have acted in good faith and shall have reasonably believed (a) in the case of a civil proceeding, that his conduct was in or not opposed to the best interests of the Registrant, or (b) in the case of a criminal proceeding, that he had no reasonable cause to believe his conduct was unlawful. In connection with an action by or in the right of the Registrant against a director, officer, employee or agent, the Registrant has the power to indemnify such director, officer, employee or agent for reasonable expenses incurred in connection with such suit (a) if such person acted in good faith and in a manner not opposed to the best interest of the Registrant, and (b) if found liable to the Registrant, only if ordered by a court of law. Section 145 provides that such section is not exclusive of any other indemnification rights granted by the Registrant to directors, officers, employees or agents.

The Certificate of Incorporation of the Registrant provides for mandatory indemnification of directors, officers and employees to the fullest extent permitted by Section 145, unless the Registrant proves that the person seeking indemnification did not meet the standard set forth above. The Certificate permits the Registrant to indemnify agents to the extent authorized from time to time by the Board of Directors. The right to indemnification is a contract right and includes the right to be paid by the Registrant the expenses incurred in defending any such proceeding in advance of our final disposition, provided that the indemnitee undertakes to repay all amounts so advanced if it is ultimately determined that such indemnitee is not entitled to be indemnified for such expenses.

The Certificate of Incorporation of the Registrant also contains a provision eliminating the liability of a director to the Registrant or our stockholders for monetary damages for breach of fiduciary duty as a director, other than liability for (a) breach of the director's duty of loyalty to the Corporation or our stockholders, (b) acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (c) unlawful payment of a dividend or unlawful stock purchase or redemption, or (d) any transaction from which the director derived an improper personal benefit.

Inasmuch as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling the Company as set forth in the foregoing provisions, or otherwise, the Company has been informed that, in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Company of expenses incurred or paid by a director, officer or controlling person of the Company in the successful defense of any action, suit or proceeding) is asserted by any such director, officer or controlling person in connection with the securities being registered, the Company will, unless in the opinion of our counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by us is against public policy as expressed in the Securities Act

and will be governed by the final adjudication of such issue.

II-1

---

**Table of Contents**

**ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES**

<b>Exhibit Number</b>	<b>Exhibit</b>
3.1(1)	Certificate of Incorporation, including Certificates of Amendment filed June 12, 1989 and August 22, 1989
3.2(2)	Certificate of Amendment to Certificate of Incorporation filed October 12, 1999
3.3(3)	Certificate of Designation for Series D Preferred Stock
3.4(1)	Amended and Restated Bylaws
4.1(1)	Specimen Stock Certificate
4.2(3)	Form of Warrant between registrant and purchasers named therein dated October 29, 2007
5.1(4)	Opinion of Akin Gump Strauss Hauer & Feld, LLP
10.1(3)	Series D Preferred Stock Purchase Agreement by and among Advanced Environmental Recycling Technologies, Inc. and the purchasers set forth on the signature pages thereto.
10.2(3)	Registration Rights Agreement
23.1*	Consent of Tullius Taylor Sartain & Sartain LLP
23.1(4)	Consent of Akin Gump Strauss Hauer & Feld, LLP (contained in Exhibit 5.1)
24.1(4)	Power of Attorney (see signature page to this Registration Statement on Form S-3.)

\* Filed herewith.

(1) Incorporated by reference to the Registrant's Registration Statement on Form S-1, as amended, filed with the Commission on June 28, 1989 (No. 33-29595).

(2) Incorporated by reference to the Registrant's Registration Statement on Form

S-3, as amended,  
filed with the  
Commission on  
December 29,  
1999  
(No. 333-93763).

(3) Incorporated by  
reference to the  
Registrant's Current  
Report on  
Form 8-K, filed  
with the  
Commission on  
November 1, 2007

(4) Filed previously on  
November 28,  
2007 as an exhibit  
to this Registration  
Statement on  
Form S-3  
(No. 333-147679).

**ITEM 17. UNDERTAKINGS.**

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price, set forth in the Calculation of Registration Fee table in the effective registration statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement; *provided, however*, that the information required to be included in a post-effective amendment by paragraphs (a)(1)(i) and (a)(1)(ii) above may be contained in periodic reports filed with or furnished to the Commission by the Company pursuant to Section 13 or 15(d) of the Exchange Act that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

**Table of Contents**

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Company pursuant to the provisions described above, or otherwise, the Company has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. If a claim for indemnification against such liabilities (other than the payment by the Company of expenses incurred or paid by a director, officer or controlling person of the Company in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Company will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.



**Table of Contents****SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, the Company certifies that it has reasonable grounds to believe that it meets all the requirements for filing on Form S-3 and has duly caused this Amendment No. 3 to Registration Statement on Form S-3 to be signed on our behalf by the undersigned, thereunto duly authorized, in the City of Springdale, State of Arkansas, on July 24, 2008.

ADVANCED ENVIRONMENTAL RECYCLING  
TECHNOLOGIES, INC.  
(Registrant)

/s/ Joe G. Brooks

JOE G. BROOKS  
Chairman of the Board and  
Chief Executive Officer  
(Principal Executive Officer)

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Name	Title	Date
/s/ Joe G. Brooks		
Joe G. Brooks	Chairman of the Board and Chief Executive Officer (Principal Executive Officer)	July 24, 2008
/s/ Stephen W. Brooks		
Stephen W. Brooks	Vice-Chairman of the Board and Chief Operating Officer	July 24, 2008
/s/ Eric Barnes		
Eric Barnes	Controller and Chief Accounting Officer (Principal Accounting Officer and acting Principal Financial Officer)	July 24, 2008
*/s/ Sal Miwa		
Sal Miwa	Director	July 24, 2008
*/s/ Marjorie S. Brooks		
Marjorie S. Brooks	Secretary, treasurer and director	July 24, 2008
*/s/ Jerry B. Burkett		
Jerry B. Burkett	Director	July 24, 2008
*/s/ Michael M. Tull		
Michael M. Tull	Director	July 24, 2008
*/s/ Melinda Davis		
Melinda Davis	Director	July 24, 2008
*/s/ Jim Robason		
Jim Robason	Director	July 24, 2008

*s/ Edward P. Carda	Director	July 24, 2008
Edward P. Carda		
*s/ Tim W. Kizer	Director	July 24, 2008
Tim W. Kizer		
*s/ Peter S. Lau	Director	July 24, 2008
Peter S. Lau		

\* By: /s/ Joe G. Brooks

Joe G. Brooks, Attorney-in-Fact

II-4