UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

APPLIANCE RECYCLING CENTERS OF AMERICA, INC.

(Exact name of Registrant as specified in its charter)

Minnesota

(State or other jurisdiction of incorporation or organization)

41-1454591 (I.R.S. Employer Identification No.)

7400 Excelsior Boulevard Minneapolis, MN 55426-4517 (952) 930-9000

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

Edward R. (Jack) Cameron President and Chairman of the Board Appliance Recycling Centers of America, Inc. 7400 Excelsior Boulevard Minneapolis, Minnesota 55426-4517 (952) 930-9000

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

Copies to:

Eric O. Madson, Esq. Robins, Kaplan, Miller & Ciresi L.L.P. 2800 LaSalle Plaza 800 LaSalle Avenue Minneapolis, Minnesota 55402-2015 (612) 349-8500

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

CALCULATION OF REGISTRATION FEE						
Large accelerated filer Non-accelerated filer		(Do not check if a smaller reporting company)	Accelerated filer Smaller Reporting Company	\boxtimes		
ndicate 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. Large accelerated filer Accelerated filer						
f 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:						
f 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: \Box						
f 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:						
2	f 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 egistration statement number of the earlier effective registration statement for the same offering:					
fany 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 ecurities offered only in connection with dividend or interest reinvestment plans, check the following box:						
f the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box 🗆						

Title of Each Class of Securities to be Registered	Amount To Be Registered	M Aş	roposed aximum ggregate Price er Share	Max Aggi	posed cimum regate ng Price		Amount Of Registration Fee
Common Stock	915,000 (1)(2)	S	3.59(3)	\$	3.284.850	S	234.21

- (1) All shares offered for resale by the selling shareholders.
- (2) Also includes an indeterminate number of shares of our common stock as may be issuable in the event of stock splits, stock dividends or similar transactions in accordance with Rule 416 under the Securities Act of 1933, as amended.
- (3) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c). Such price is based upon the average of the high and low prices of our common stock as reported on the NASDAQ Capital Market on May 3, 2010.

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 of 1933, as amended, or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

Table of Contents

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. THE SELLING SHAREHOLDERS MAY NOT SELL THESE SECURITIES UNTIL THE SECURITIES AND EXCHANGE COMMISSION DECLARES OUR REGISTRATION STATEMENT EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND IT IS NOT SOLICITING AN OFFER TO BUY THESE SECURITIES IN ANY JURISDICTION WHERE THE OFFER OR SALE IS NOT PERMITTED.

SUBJECT TO COMPLETION, DATED MAY 6, 2010.

APPLIANCE RECYCLING CENTERS OF AMERICA, INC.

915,000 Shares of Common Stock

This prospectus relates to resale by the shareholders listed in this prospectus of up to 915,000 shares of our common stock that we previously issued to the selling shareholders in private transactions.

The selling shareholders may offer their shares of common stock from time to time in the open market, in privately negotiated transactions, in an underwritten offering, or a combination of methods. They may offer the shares at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at negotiated prices. The selling shareholders may engage brokers or dealers who may receive commissions or discounts from the selling shareholders. Any broker-dealer acquiring the common stock from the selling shareholders may sell these securities in normal market-making activities, through other brokers on a principal or agency basis, in negotiated transactions, to its customers or through a combination of methods. See "Plan of Distribution" beginning on page 13. We will bear all of the expenses and fees incurred in registering the shares offered by this prospectus.

Our common stock is traded on the NASDAQ Capital Market under the symbol "ARCI." The last reported sale price for our common stock on the NASDAQ Capital Market on May 4, 2010 was \$3.78 per share. You are urged to obtain current market quotations for our common stock.

INVESTING IN OUR COMMON STOCK INVOLVES A HIGH DEGREE OF RISK. SEE "RISK FACTORS" BEGINNING ON PAGE 5 FOR A DISCUSSION OF CERTAIN RISKS ASSOCIATED WITH INVESTING IN OUR STOCK.

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 , 2010.

Table of Contents

TABLE OF CONTENTS

Page

About This Prospectus	2
Forward-Looking Statements	2
Prospectus Summary	3
tisk Factors	5
<u>Use of Proceeds</u>	10
telling Securities Holders	10
<u>Plan of Distribution</u>	13
uegal Matters	15
Experts	15
Disclosure of Commission Position on Indemnification for Securities Act Liabilities	15
Vhere You Can Find More Information	15
ncorporation of Certain Information by Reference	16

ABOUT THIS PROSPECTUS

You should rely only on the information contained in, or incorporated by reference into, this prospectus. We have notauthorized any other person to provide you with different information. The selling shareholders are not offering to sell, nor seeking offers to buy, these securities in any state where the offer or sale is not permitted. The information contained in this prospectus is current as of the date on the front cover, but the information may have changed since that date.

FORWARD-LOOKING STATEMENTS

This prospectus and other documents that are and will be incorporated by reference into this prospectus contain statements that involve expectations, plans or intentions, including those relating to our business, financial results, strategies and prospects. These statements are forward looking and involve risks and uncertainties. You can identify these statements by the fact that they do not relate strictly to historic or current facts or by discussions that involve risks and uncertainties. The forward-looking statements use terms such as "anticipates," "believes," "estimates," "expects," "intends," "plans," "seeks," "predicts," "projects," "strives," "potential," "objective," "may," "could," "should," "would," "will" or similar expressions relating to future operating or financial performance. Factors that may cause our actual results, performance, financial condition or achievements to differ materially from those expected or implied in any forward-looking statements include but are not limited to:

- · the ability of our recently formed joint venture to establish and successfully operate the regional processing center;
- our continued ability to purchase product from Whirlpool, General Electric and Electrolux at acceptable prices for sale in our ApplianceSmart Factory Outlets;
- our ability to obtain new contracts and continue existing contracts for appliance recycling and replacement programs with utility companies and other third parties;
- · the ability of our individual retail stores to meet planned revenue levels;
- the speed at which our individual retail stores reach profitability, if at all;
- · our ability to keep costs and expenses at or below expected levels; and
- · the continued availability of our current line of credit.

The forward-looking statements are based on our beliefs, assumptions and expectations of future events taking into account the information currently available to us, and are

2

Table of Contents

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus or incorporated by reference into this prospectus. Because it is a summary, it does not contain all of the information that you should consider before deciding to invest in our securities. You should read this entire prospectus carefully, including the section entitled "Risk Factors" and the consolidated financial statements and related notes included in our Annual Report on Form 10-K for the fiscal year ended January 2, 2010, filed with the Securities and Exchange Commission ("SEC") on March 18, 2010. As used in this prospectus, unless context otherwise requires, the words "we," "us," "our," "the Company" and "ARCA" refer to Appliance Recycling Centers of America, Inc. and all of our operating subsidiaries.

Appliance Recycling Centers of America, Inc.

We are in the business of selling new major household appliances through a chain of Company-owned factory outlet stores under the name ApplianceSmar®. We also provide turnkey appliance recycling and replacement services for electric utilities and other sponsors of energy efficiency programs.

We are a leading retailer and recycler of major household appliances and generate revenues from (a) retail sales of appliances at our ApplianceSmaft Factory Outlets, (b) fees charged for collecting and recycling appliances for utilities and other sponsors of energy efficiency programs, (c) fees charged for recycling and replacing old refrigerators with new energy efficient models for low-income housing programs sponsored by electric utilities, and (d) selling byproduct materials from appliances that we recycle, including appliances collected through our ApplianceSmart Factory Outlets.

As of April 30, 2010, we were operating nineteen factory outlet stores under the name ApplianceSmart: six in the Minneapolis/St. Paul, Minnesota market; one in Rochester, Minnesota; four in the Columbus, Ohio market; six in the Atlanta, Georgia market; and two in the San Antonio, Texas market. We are a major household appliance retailer with two main channels: new, in-the-box product and new, out-of-the-box product, which we call special-buy appliances. These special-buy household appliances, primarily those manufactured by Whirlpool, General Electric and Electrolux, include close-outs, factory overruns, floor samples, returned or exchanged items, and scratch-and-dent units. One example of this type of special-buy product involves manufacturer redesign, in which a current model is updated to include a few new features and is then assigned a new model number. Because the manufacturer ships only the latest models to retailers, a large quantity of the older model remains in the manufacturer's inventory. Special-buy appliances typically are not integrated into manufacturers' normal distribution channels and require a different method of management.

We contract with electric utility companies to provide turnkey appliance recycling and replacement services to support their energy conservation efforts. The contracts usually have terms of one to four years, with provisions for renewal at the option of the utility. Under some contracts, we manage all aspects of the program, including advertising. Under other contracts, we provide only specified services, such as collection and recycling. Our contracts with electric utility customers prohibit us from repairing and selling appliances we receive through their programs. Because the intent of the programs is to conserve electricity, we have instituted tracking and auditing procedures to assure our customers that those appliances do not return to use. Since 1989, we have provided services to more than 150 utilities throughout the U.S. and Canada. We currently operate nine Regional Processing Centers ("RPCs"), which are located in Minnesota, California, Texas, Illinois, Colorado, Washington, North Canada.

3

Table of Contents

On October 21, 2009, we entered into an Appliance Sales and Recycling Agreement (the "Agreement") with General Electric Company ("GE") acting through its GE Consumer & Industrial business. Under the Agreement, GE will sell all of its recyclable appliances generated in the northeastern United States to us, and we will collect, process and recycle such recyclable appliances. The Agreement requires that we will only recycle, and will not sell for re-use or resale, the recyclable appliances purchased from GE. We have established an RPC in Philadelphia at which the recyclable appliances will be processed. The term of the Agreement is for a period of six years from the first date of collection of recyclable appliances.

To establish and operate the Philadelphia RPC, we entered into a Joint Venture Agreement with 4301 Operations, LLC. 4301 Operations, LLC has substantial experience in the recycling of major household appliances and is contributing their existing business to the joint venture. Under the Joint Venture Agreement, the parties formed a new entity known as ARCA Advanced Processing, LLC ("AAP"); each party is a 50% owner of AAP. If additional RPCs are established, AAP will establish the next two RPCs and will have a right of first refusal to establish subsequent RPCs. AAP commenced operations in February 2010.

AAP will purchase and install UNTHA Recycling Technology ("URT") equipment, enhancing the capabilities of the RPC. We are the exclusive distributor of URT equipment for North America. AAP will seek debt financing to purchase the URT equipment.

ARCA® and ApplianceSmart® are our registered trademarks and service marks. This prospectus also contains trademarks and service marks belonging to other entities.

Office Location

Appliance Recycling Centers of America, Inc. was incorporated in Minnesota in 1983, although through our predecessors we commenced the appliance retail and recycling business in 1976. Our principal executive offices are located at 7400 Excelsior Boulevard, Minneapolis, Minnesota 55426 and our telephone number is (952) 930-9000. Our Internet sites are located at www.arcainc.com and www.appliancesmart.com. The information contained in our Internet sites is not a part of this prospectus.

Risks Affecting the Company

Our business is subject to numerous risks as discussed more fully in the section entitled "Risk Factors" immediately following this Summary. In particular, we depend on the continued supply of product from major appliance manufacturers to sell in our ApplianceSmart Factory Outlets and contracts with electric utility companies for replacing and recycling appliances. Our future results will also be affected by our ability to execute our growth strategy profitably in new and existing markets, the effect of competition in our industry, the effects of the economy and the effects of governmental regulation. If our business continues to grow, the growth may place strains on our systems and management team. In addition, if we are not able to access additional capital, our ability to expand our business may be impaired.

The Offering

Trading symbol (NASDAQ Capital Market)

We will not receive any proceeds from the sale of the shares offered pursuant to this prospectus.

ARCI

4

Table of Contents

RISK FACTORS

An investment in our common stock involves a high degree of risk. You should carefully consider the risks described below with respect to an investment in our shares. If any of the following risks actually occur, our business, financial condition, operating results or cash provided by operations could be materially harmed. As a result, the trading price of our common stock could decline, and you might lose all or part of your investment. When evaluating an investment in our common stock, you should also refer to the other information contained elsewhere in this prospectus or incorporated by reference into this prospectus, including our consolidated financial statements and related notes included in our Annual Report on Form 10-K for the fiscal year ended January 2, 2010, filed with the SEC on March 18, 2010.

Risks Relating to Our Business

Our strategy of opening new retail stores may result in net losses.

Our growth strategy has included opening new retail stores; however, we have no plans to open additional stores in 2010. We evaluate demographic, economic and financial information in considering a new store location. We look primarily in markets where we currently have operations to benefit from additional operational and marketing efficiencies of scale. New stores take time to become profitable; we cannot assure you that any individual current or future store will attain or maintain projected profitability. We incurred a loss from continuing operations of \$3.3 million or \$0.73 per share in fiscal 2009 compared to income from continuing operations of \$1.9 million or \$0.41 per share in fiscal 2008. Also, in fiscal year 2008 we incurred a loss from discontinued operations of \$1.5 million or \$0.33 per share. We have historically experienced improvement in our retail segment as our stores have become established. Our operating loss from the retail segment was \$4.2 million in fiscal 2009 compared to operating income of \$0.8 million in fiscal 2008. This decline was the result of opening new factory outlets and an economic slowdown. Our full financial information is set out in the consolidated financial statements and related notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for the fiscal year ended January 2, 2010.

Most of our revenues are derived from retail sales. However, we expect recycling revenues as a percentage of total revenues will continue to rise in the future.

Most of our revenues are derived from retail sales of appliances at our ApplianceSmart Factory Outlet stores. We currently operate nineteen ApplianceSmart Factory Outlet stores. Retail revenues have lower profit margins than recycling revenues. While we believe that our future economic results will be heavily dependent on our retail stores, we have seen a renewed interest in recycling and replacement programs and are pursuing opportunities with providers of energy efficiency services. In fiscal years 2009 and 2008, approximately 74% and 69%, respectively, of our revenues were from retail sales. We believe that recycling revenues will grow faster than retail revenues as we continue to add new recycling contracts.

We currently purchase product for resale from a limited number of suppliers.

We purchase inventory for resale from three main suppliers. While we believe that our relationships with our vendors are strong, the loss of one of these suppliers could have a negative impact on the amount and mix of product that we would be able to offer for sale, which could adversely affect our revenues and profitability.

5

Table of Contents

Our revenues from recycling contracts decreased in 2009 due a planned reduction in one of our contracts, along with a decrease in scrap metal prices. Future revenues from this source are very difficult to project.

In the past, our business was dependent largely upon our ability to obtain new contracts and continue existing contracts for appliance recycling services with utility companies. Contracts with these entities generally have initial terms of one to four years, with renewal options and early termination clauses. The recycling and byproducts portion of our business decreased to 26% from 31% of total revenues for fiscal years 2009 and 2008, respectively. This decrease in fiscal 2009 compared to fiscal 2008 was partially due to a planned reduction in one of our contracts and a decrease in scrap metal prices. Although we have experienced an increase in the number of utility companies requesting bids for upcoming appliance recycling programs, we are still dependent on certain customers for a large portion of our revenues. Generally, recycling revenues have a higher gross profit than retail revenues.

Three of our major utility customers, Southern California Edison Company, Ontario Power Authority and Southern California Public Power Authority, collectively accounted for approximately 17% and 23% of our total revenues for 2009 and 2008, respectively. The loss or material reduction of business from any of these major customers could adversely affect our net revenues and profitability. However, we believe we will continue to add new recycling contracts in 2010 and beyond.

We cannot assure you that our existing recycling contracts will continue, existing customers will continue to use our services at current levels or we will be successful in obtaining new recycling contracts.

Our revenues from recycling contracts are subject to seasonal fluctuations and are dependent on the utilities' advertising and promotional activities for contracts in which we do not provide advertising services.

In our business with utility companies, we experience seasonal fluctuations that impact our operating results. Our recycling revenues are generally higher during the second and third calendar quarters and lower in the first and fourth calendar quarters, due largely to the promotional activity schedules over which we have no control in advertising programs managed by the utilities. Our staff communicates client-driven advertising activities internally in an effort to achieve an operational balance. We expect that we will continue to experience such seasonal fluctuations in recycling revenues. We experience less seasonal fluctuation in our retail business.

The joint venture we have formed does not have an operating history upon which it can be evaluated. It may never achieve profitable operations.

We have formed a 50/50 joint venture, ARCA Advanced Processing, LLC, to operate the initial RPC under our contract with GE. AAP was formed on February 10, 2010, and commenced operations the same day. AAP is subject to all of the risks associated with a new venture, including the potential for unanticipated expenses, difficulties and delays frequently encountered in connection with the start-up of new businesses, and the competitive environment in which AAP will operate. There is no assurance that AAP will achieve profitable operations. Each additional RPC that may be established in the future will also be subject to the risks associated with a new venture.

6

Table of Contents

prices for such materials may vary significantly. If market prices for such materials are less than projected, AAP may be unable to achieve profitable operations.

The volume of appliances under the contract with GE is not guaranteed. The contract with GE is terminable on 60-day notice if a material breach occurs and is not cured.

The operations of AAP and the initial RPC will be materially dependent on the volume of appliances from GE. However, GE has not guaranteed any specific volume of appliances under the contract. The RPC has the capacity to handle significant volume in addition to the volume from GE, and AAP intends to seek recyclable appliances from other sources. The contract with GE is for a period of six years from the first date of collection of recyclable appliances from GE's northeast delivery area, but may be terminated earlier by either party if the other party is in material breach of the contract and does not cure the breach within sixty (60) days after receiving written notice from the other party. A delay in installing the URT system could result in a material breach of the contract by us.

We may need new capital to fully execute our growth strategy.

Our growth strategy involves securing and maintaining contracts to provide comprehensive, integrated appliance recycling services and developing a chain of retail stores, although no additional stores are planned for 2010. This commitment will require a significant continuing investment in capital equipment and leasehold improvements and could require additional investment in real estate.

Our total capital requirements will depend, among the other things discussed in this prospectus or in documents incorporated by reference into this prospectus, on the number of RPCs and the number and size of retail stores operating during 2010. Currently, we have nineteen retail stores and nine RPCs in operation. If our revenues are lower than anticipated, our expenses are higher than anticipated or our current line of credit cannot be maintained, we will require additional capital to finance our operations. In addition, we may need to provide additional capital to AAP to establish and fund its operation. Even if we are able to maintain our current line of credit, we may need additional equity or other capital in the future. Sources of additional financing, if needed in the future, may include further debt financing or the sale of equity (including the issuance of preferred stock) or other securities. We cannot assure you that any additional sources of financing or new capital will be available to us, available to us, available to us, available to represent the terms of our current debt. In addition, if we sell additional equity to raise funds, all outstanding shares of common stock will be diluted.

A decline in general economic conditions has led to reduced consumer demand for our products and has had an adverse effect on our liquidity and profitability.

Since purchases of our merchandise are dependent upon discretionary spending by our retail customers, our financial performance is sensitive to changes in overall economic conditions that affect consumer spending. Consumer spending habits are affected by, among other things, prevailing economic conditions, levels of employment, salaries and wage rates, gasoline prices, consumer confidence, and consumer perception of economic conditions. A slowdown in the United States economy and uncertainty as to the economic outlook reduced discretionary spending or caused a shift in consumer discretionary spending to other products during fiscal year 2009. These factors may likely cause us to delay or slow our expansion plans, may result in reduced sales and potentially result in excess inventories in 2010. This may, in turn, lead to increased merchandise markdowns and related costs associated with higher levels of inventory that could adversely affect our liquidity and profitability in 2010.

•

Table of Contents

Our market share may be adversely impacted at any time by a significant number of competitors.

Competition for our retail stores comes primarily from retailers of new and special-buy appliances. Each of our locations will compete not only with local and national chains of new-appliance retailers, many of whom have been in business longer than we have and who may have significantly greater financial resources, but will also be required to compete with numerous independently owned retailers of used appliances. A number of our retail operations have been opened within the past 24 months; therefore, we cannot assure you that we will be able to compete effectively in any such market.

Many factors, including existing and proposed governmental regulation, may affect competition in the appliance recycling and replacement side of our business. We generally compete with two or three companies based in the geographic area to be served, and they generally offer some of the services we provide. We expect our primary competition for contracts with existing or new customers to come from entrepreneurs entering the appliance recycling business, energy management consultants, current recycling companies, major waste hauling companies, scrap metal processors and new- and used-appliance dealers. In addition, some of our customers, such as utility companies, may operate appliance recycling programs internally rather than contracting with us or other third parties. We cannot assure you that we will be able to compete profitably in any of our chosen markets.

Changes in governmental regulations relating to our recycling business could increase our costs of operations and adversely affect our business.

Our appliance recycling centers are subject to various federal, state and local laws, regulations and licensing requirements related to providing turnkey services for energy efficiency programs. These requirements may vary by market location and include, for example, laws concerning the management of hazardous materials and the 1990 Amendments to the Clean Air Act, which require us to recapture CFC refrigerants from appliances to prevent their release into the atmosphere.

We have registered our centers with the EPA as hazardous waste generators and have obtained required licenses from appropriate state and local authorities. We have agreements with approved and licensed hazardous waste companies for transportation and recycling or disposal of hazardous materials generated through our recycling processes. As is the case with all companies handling hazardous materials, under some circumstances we may be subject to contingent liability. We believe we are in compliance with all government regulations regarding the handling of hazardous materials, and we have environmental insurance to mitigate the impact of any potential contingent liability.

Our lender has the right to demand payment in full of the borrowings under our line of credit at any time. If it were to do so, we would not be able to pursue our growth strategy and our operations would be severely limited unless and until new financing was obtained.

We have an \$18.0 million line of credit, based on the loan amendment dated February 5, 2008, with a stated maturity date of December 31, 2010. The line of credit also provides that the lender may demand payment in full of the entire outstanding balance of the loan at any time. Except for the one property we own, substantially all assets have been pledged to secure payments under the line. The line requires that we meet certain financial covenants, provides payment penalties for noncompliance and prepayment, limits the amount of other debt we can incur, limits the amount of spending on fixed assets, and limits payments of dividends. On March 1, 2010, borrowings of \$10.6 million were outstanding under the line of credit, and we had unused borrowing capacity of \$0.8 million. As of January 2, 2010, we were not in compliance with certain financial covenants and received a waiver from our lender. On March 10, 2010, the interest rate on the line increased to 6.75% (the greater of prime plus 3.50 percentage points or 6.75%). In 2010, we plan to renegotiate and extend our line of credit although there is no assurance the line will be extended.

Table of Contents

We may not be able to operate successfully if we lose key personnel, are unable to hire qualified personnel or experience turnover of our management team.

We believe our operations are materially dependent upon the continued services of our present management. The loss of services of one or more members of present management, including Edward R. (Jack) Cameron, our founder, Chairman of the Board and current CEO, could adversely affect our business. We do not have employment contracts with present management. We maintain key person life insurance on Mr. Cameron in the amount of \$1.0 million.

We have been engaged as a plaintiff in litigation surrounding intellectual property issues and have had a claim of infringement in a second law suit dismissed.

In December 2004, we filed suit in the U.S. District Court for the Central District of California alleging that JACO Environmental, Inc. ("JACO") and one of our former consultants fraudulently obtained U.S. Patent No. 6,732,416 in May 2004 covering appliance recycling methods and systems which were originally developed by us beginning in 1987 and used in serving more than forty-five electric utility appliance recycling programs up to the time the suit was filed. We sought an injunction to prevent JACO from claiming that it obtained a valid patent on appliance recycling processes that we believe is based on methods and processes we invented. In addition, we asked the Court to find that the patent obtained by JACO is unenforceable due to inequitable conduct before the United States Patent Office. We also asked the Court for unspecified damages related to charges that JACO, in using the patent to promote its services, engaged in unfair competition and false and misleading advertising under federal and California statutes. The defendants in the case did not assert any counterclaims against ARCA.

In September 2005, we received a legally binding document in which JACO stated it would not sue us or any of our customers for violating the JACO patent.

In January 2009, the Court granted JACO a summary judgment with respect to ARCA's claims of unfair competition and false and misleading advertising. The ruling was made by the same judge who had earlier denied summary judgment to the defendants. Even though the Court's ruling had no impact on ARCA's method of recycling or ability to conduct existing and future business, we filed an appeal with the Ninth Circuit Court of Appeals in California in February 2009 seeking to have the court set aside the summary judgment. Our appeal was argued before the Ninth Circuit Court of Appeals on April 9, 2010, and on May 4, 2010, the Court entered an order affirming the summary judgment granted to JACO.

On October 24, 2006, JACO and SEG Umwelt-Service/Basis of Mettlach, Germany (SEG) filed a patent infringement lawsuit in Federal Court in San Francisco against us. The suit claimed that we had been using refrigerator recycling systems and processes covered by two U.S. patents issued to SEG and exclusively licensed to JACO. JACO and SEG sought an undisclosed amount in damages, in addition to an injunction barring us from continuing to use and market the systems and processes upon which we allegedly infringed. This suit was subsequently dismissed following a transfer of the case to Los Angeles upon the motion of ARCA.

9

Table of Contents

Risks Relating to Our Common Stock

If an active trading market for our common stock does not develop, the value and liquidity of your investment in our common stock could be adversely affected.

The trading volumes in our common stock on the NASDAQ Capital Market are highly variable. At any given time, there may be only a limited market for any shares of common stock that you purchase. Sales of substantial amounts of common stock into the public market at the same time could adversely affect the market price of our common stock.

Our principal shareholders own a large percentage of our voting stock, which will allow them to control substantially all matters requiring shareholder approval.

Currently, Jack Cameron, Chairman and Chief Executive Officer, beneficially owns approximately 6.4% of our common stock. Our officers and directors together beneficially hold approximately 8.8% of our common stock. Perkins Capital Management, Inc. and Medallion Capital, Inc. beneficially own approximately 14.4% and 9.0%, respectively, of our outstanding common stock. Because of such ownership, the Company's management and principal shareholders may be able to significantly affect its corporate decisions, including the election of the Board of Directors.

USE OF PROCEEDS

We will not receive any proceeds from the sale of the shares offered pursuant to this prospectus. The selling shareholders will receive all of the proceeds from the sale of the shares of common stock offered by this prospectus.

The selling shareholders will pay any expenses incurred by the selling shareholders for brokerage, accounting, tax or legal services or any other expenses incurred by the selling shareholders in disposing of the shares. We will bear all other costs, fees and expenses incurred in effecting the registration of the shares covered by this prospectus, including all registration and filing fees and fees and expenses of our counsel and our accountants.

SELLING SECURITIES HOLDERS

The shares of common stock covered by this prospectus are 915,000 shares of our common stock that we previously issued to the selling shareholders in private transactions. The 915,000 shares covered by this prospectus represent approximately 16.7% of our outstanding shares of common stock as of April 26, 2010.

The following table sets forth the names of the selling shareholders, the aggregate number of shares of common stock beneficially owned by each selling shareholder as of April 26, 2010, the number of shares that may be offered pursuant to this prospectus, and the number of shares to be owned by each selling shareholder after the sale of the common stock under this prospectus. The selling shareholders may sell all, some or none of the shares of common stock they are offering, and may sell shares of our common stock otherwise than pursuant to this prospectus. The table below assumes that each selling shareholder sells all of the shares offered by it in offerings pursuant to this prospectus, and does not acquire any additional shares. We are unable to determine the exact number of shares that will actually be sold or when or if these sales will occur. When we refer to the selling shareholders in this prospectus, we mean

10

Table of Contents

the individuals and entities listed in the table below, as well as their donees, pledgees, transferees or other successors-in-interest.

Unless otherwise stated below in the footnotes, to our knowledge, no selling shareholder nor any affiliate of such shareholder (i) has held any position or office with, been

employed by or otherwise has had any material relationship with us or our affiliates during the three years prior to the date of this prospectus; or (ii) is a broker-dealer or an affiliate of a broker-dealer. Based on information provided to us, none of the selling shareholders that are affiliates of broker-dealers, if any, purchased shares of our common stock outside the ordinary course of business or, at the time of their acquisition of shares of our common stock, had any agreements, understandings or arrangements with any other persons, directly or indirectly, to dispose of the shares.

Except as indicated in the footnotes to this table, the persons named in the table have sole voting and investment control with respect to all shares of our common stock shown as beneficially owned by them. We may amend or supplement this prospectus from time to time in the future to update or change this list and shares which may be resold.

	Shares of Common Stock Beneficially Owned Prior to Offering (1)		Number of Shares of Common Stock Being Offered	Shares of Common Stock to be Beneficially Owned After Offering (2)	
Name of Selling Shareholder	Number	Percentage	Number	Number	Percentage
Berenholz Capital Growth LLC (3)	67,800	1.2%	50,000	17,800	*
Michael E. Cahr	65,000	1.2%	65,000	0	*
Myron Cohn & Martin Cohn, JT TEN (4)	83,210	1.5%	50,000	33,210	*
Daniel Greenberg (5)	61,500	1.1%	40,000	21,500	*
William M. Hitchcock	50,000	*	50,000	0	*
Investment Strategies Fund LP (6)	50,000	*	50,000	0	*
Levy Harkins & Co., Inc. Profit Sharing Plan (7)	33,034	*	25,000	8,034	*
Edwin A. Levy	107,992	2.0%	50,000	57,992	1.1%
John W. Pagnucco	165,847	3.0%	50,000	115,847	2.1%
Pyramid Partners, L.P. (8)	300,000	5.5%	50,000	250,000	4.6%
Sandra F. Pessin (9)	492,940	9.0%	200,000	292,940	5.3%
St. Albans Global Management, LLLP (10)	170,000	3.1%	170,000	0	*
Barry Neal Wish	65,000	1.2%	65,000	0	*

^{*}Less than one percent.

(1) Beneficial ownership is determined under Section 13(d) of the Securities Exchange Act of 1934 and generally includes voting or investment power with respect to securities and includes any securities that grant the selling shareholder the right to acquire common stock within 60 days of April 26, 2010. There were 5,492,777 shares of common stock outstanding as of April 26, 2010.

11

Table of Contents

- (2) Assumes the sale of all shares of common stock offered by this prospectus.
- (3) Harris Berenholz is the managing member and sole owner of Berenholz Capital Growth LLC and exercises voting and investment powers with respect to these shares.
- (4) Myron Cohn is an associated person of Stifel, Nicolaus & Co., Inc., a broker dealer. Myron Cohn and Martin Cohn are brothers. Their beneficial ownership includes 13,210 shares owned by Myron Cohn, 20,000 shares owned by Martin Cohn, and 50,000 shares (the shares offered by this prospectus) owned as joint tenants. Myron Cohn and Martin Cohn each disclaim beneficial ownership of the shares held by the other.
- (5) Mr. Greenberg's shares are held in a revocable trust established by Mr. Greenberg. Mr. Greenberg is the trustee and exercises voting and investment powers with respect to these shares.
- (6) Matthew Shefler is the managing member of Investment Strategies Fund LP and in such capacity exercises voting and investment powers with respect to the shares held by this selling shareholder. Mr. Shefler disclaims beneficial ownership of the shares owned by Investment Strategies Fund LP except to the extent of his pecuniary interest in such shares
- (7) Michael Harkins is the trustee of the Levy Harkins & Co. Profit Sharing Plan and in such capacity exercises voting and investment powers with respect to the shares held by this selling shareholder. Mr. Harkins disclaims beneficial ownership of the shares owned by the Levy Harkins & Co. Profit Sharing Plan except to the extent of his pecuniary interest in such shares.
- (8) Perkins Capital Management, Inc., a registered investment advisor, exercises voting and investment authority over the shares held by Pyramid Partners, LP. Perkins Capital Management, Inc. disclaims beneficial ownership of such shares.
- (9) Ms. Pessin's beneficial ownership includes 201,800 shares of common stock held by her husband, Norman H. Pessin. Ms. Pessin does notexercise voting or investment powers with respect to the shares held by Mr. Pessin and disclaims beneficial ownership of such shares. None of the shares held by Mr. Pessin are being offered by this propectus.
- (10) Paul A. Novelly II is the general partner of St. Albans Global Management LLLP and exercises voting and investment powers with respect to the shares held by this selling shareholder. Mr. Novelly disclaims beneficial ownership of the shares owned by St. Albans Global Management LLLP except to the extent of his pecuniary interest in such shares.

The registration statement to which this prospectus relates is being filed pursuant to agreements we entered into with the selling shareholders, whereby we agreed to file a registration statement to cover the shares of our common stock acquired by the selling shareholders. We have agreed to keep the registration statement effective, subject to applicable rules and regulations, until the earlier of (1) such time as all of the shares covered by this prospectus have been disposed of pursuant to and in accordance with the registration statement or (2) the date on which the shares may be sold without restriction pursuant to Rule 144 of the Securities Act of 1933, as amended (the "Securities

Table of Contents

PLAN OF DISTRIBUTION

We are registering the shares of common stock offered for sale by this prospectus on behalf of the selling shareholders. The selling shareholders and any of their donees, pledgees, transferees or other successors-in-interest may, from time to time, sell any or all of their shares of common stock on the NASDAQ Capital Market or any other stock exchange, market or trading facility on which the shares are traded or in private transactions. These sales may be at fixed or negotiated prices. A selling shareholder may use any one or more of the following methods when selling 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 resale by the broker-dealer for its account;
- privately negotiated transactions;
- · settlement of short sales entered into after the date of this prospectus;
- transactions in which broker-dealers agree with the selling shareholders to sell a specified number of such shares at a stipulated price per share;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- · any other method permitted pursuant to applicable law.

The selling shareholders may also sell shares under Rule 144 under the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the selling shareholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling shareholders (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated. Each selling shareholder does not expect these commissions and discounts relating to its sales of shares to exceed what is customary in the types of transactions involved.

In connection with the sale of our common stock or interests therein, the selling shareholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling shareholders may also sell shares of our common stock short and deliver these securities to close out their short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling shareholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

13

Table of Contents

The selling shareholders and any broker-dealers or agents that are involved in selling the shares may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such 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. Each selling shareholder has informed us that it does not have any agreement or understanding, directly or indirectly, with any person to distribute the common stock.

We are required to pay certain fees and expenses incurred by us incident to the registration of the shares. We have agreed to indemnify the selling shareholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

Because selling shareholders may be deemed to be "underwriters" within the meaning of the Securities Act, they will be subject to the prospectus delivery requirements of the Securities Act including Rule 172 thereunder. In addition, any securities covered by this prospectus which qualify for sale pursuant to Rule 144 under the Securities Act may be sold under Rule 144 rather than under this prospectus. There is no underwriter or coordinating broker acting in connection with the proposed sale of the shares by the selling shareholders.

Under applicable rules and regulations under the Securities Exchange Act of 1934, any person engaged in the distribution of the resale shares may not simultaneously engage in market making activities with respect to our common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the selling shareholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of shares of our common stock by the selling shareholders or any other person. We will make copies of this prospectus available to the selling shareholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

14

Table of Contents

LEGAL MATTERS

Robins, Kaplan, Miller & Ciresi L.L.P., Minneapolis, Minnesota, will pass upon the validity of the shares of common stock offered by this prospectus and other legal matters for us.

The consolidated financial statements as of January 2, 2010 and January 3, 2009, and the consolidated statements of operations, shareholders' equity and comprehensive loss, and cash flows for the fiscal years then ended, have been incorporated herein by reference in reliance upon the report of Baker Tilly Virchow Krause, LLP, an independent registered public accounting firm, as incorporated by reference herein, given their authority as experts in accounting and auditing.

DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Our bylaws provide for indemnification of our directors and officers to the fullest extent permitted by law. Insofar as indemnification for liabilities under the Securities Act may be permitted to directors, officers or controlling persons of the Company pursuant to our Articles of Incorporation, bylaws and the Minnesota Business Corporation Act, 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.

WHERE YOU CAN FIND MORE INFORMATION

We file electronically with the Securities and Exchange Commission our annual reports on Form 10-K, quarterly interim reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act"). We make available on or through our website, free of charge, copies of these reports as soon as reasonably practicable after we electronically file or furnish them to the SEC. Our website can be found at www.arcainc.com. You may also request a copy of these filings, at no cost, by writing or telephoning us. Any requests should be directed to:

Appliance Recycling Centers of America, Inc. Attention: Peter P. Hausback, Chief Financial Officer 7400 Excelsior Boulevard Minneapolis, Minnesota 55426-4517 (952) 930-9000

You may read and copy any document we file at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the Public Reference Room. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including Appliance Recycling Centers of American, Inc. The SEC's Internet site can be found at www.sec.gov.

15

Table of Contents

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" in this prospectus the information contained in other documents filed separately with the SEC. This means that we can disclose important information to you by referring you to other documents filed with the SEC that contain such information. The information incorporated by reference is an important part of this prospectus. Information disclosed in documents that we file later with the SEC will automatically add to, update and change information previously disclosed. If there is additional information in a later filed document or a conflict or inconsistency between information in this prospectus or a prospectus supplement and information incorporated by reference from a later filed document, you should rely on the information in the later dated document.

We are incorporating by reference into this prospectus the documents listed below:

- · our Annual Report on Form 10-K for the fiscal year ended January 2, 2010;
- our Proxy Statement for our 2010 Annual Meeting of Shareholders scheduled to be held on May 13, 2010;
- · our Current Report on Form 8-K filed on April 8, 2010;
- the description of our common stock contained in our registration statement on Form S-2 (Registration No. 333-123005) filed with the SEC on February 25, 2005 (as amended by Amendment No. 1 filed on April 15, 2005, Amendment No. 2 filed on April 19, 2005, and Amendment No. 3 filed on April 21, 2005), including any amendments or reports filed for the purpose of updating such description in which there is described the terms, rights and provisions applicable to our common stock;
- · all documents that we file under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of the initial filing of the Registration Statement and prior to the effectiveness of the Registration Statement; and
- · all documents that we file under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus and before the termination of any offering of securities under this prospectus.

We do not incorporate by reference any information furnished pursuant to Items 2.02 or 7.01 of Form 8-K in any future filings, unless specifically stated otherwise in such filings. Any statement contained in a document incorporated by reference in this prospectus shall be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus, any prospectus supplement or in any other subsequently filed document which is incorporated by reference modifies or supersedes such statement.

Our SEC file number for the documents incorporated by reference in this prospectus is 000-19621.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, without charge upon written or oral request, a copy of any or all of the documents that are incorporated by reference into this prospectus but not delivered with the prospectus, including exhibits which are specifically incorporated by reference into such documents. Requests should be directed to:

Appliance Recycling Centers of America, Inc. Attention: Peter P. Hausback, Chief Financial Officer 7400 Excelsior Boulevard Minneapolis, Minnesota 55426-4517 (952) 930-9000

915,000 Shares

APPLIANCE RECYCLING CENTERS OF AMERICA, INC.

Common Stock



, 2010

Table of Contents

PART II INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

Expenses in connection with the sale and distribution of the shares of our common stock being registered hereunder (except any underwriting discounts and commissions and expenses incurred by the selling shareholders for brokerage, accounting, tax or legal services or any other expenses incurred by the selling shareholders in disposing of the shares) are set forth below. All of the amounts shown are estimated except the Securities and Exchange Commission registration fee.

SEC registration fee	\$ 234.21
Legal fees and expenses	15,000.00
Accounting fees and expenses	5,000.00
Printing and engraving expenses	1,000.00
Transfer agent fees and expenses	1,000.00
Miscellaneous expenses	2,765.79
Total	\$ 25,000.00

Item 15. Indemnification of Directors and Officers

Section 302A.521, subd. 2, of the Minnesota Statutes requires that we indemnify a person made or threatened to be made a party to a proceeding by reason of the former or present official capacity of the person with respect to our company, against judgments, penalties, fines, including, without limitation, excise taxes assessed against the person with respect to an employee benefit plan, settlements, and reasonable expenses, including attorneys' fees and disbursements, incurred by the person in connection with the proceeding with respect to the same acts or omissions if such person (i) has not been indemnified by another organization or employee benefit plan for the same judgments, penalties or fines, (ii) acted in good faith, (iii) received no improper personal benefit, and statutory procedure has been followed in the case of any conflict of interest by a director, (iv) in the case of a criminal proceeding, had no reasonable cause to believe the conduct was unlawful, and (v) in the case of acts or omissions occurring in the person's performance in the official capacity of director or, for a person not a director, in the official capacity of officer, board committee member or employee, reasonably believed that the conduct was in the best interests of our company, or, in the case of performance by one of our directors, officers or employees involving service as a director, partner, trustee, employee or agent of another organization or employee benefit plan, reasonably believed that the conduct was not opposed to the best interests of our company. In addition, Section 302A.521, subd. 3, requires payment by us, upon written request, of reasonable expenses in advance of final disposition of the proceeding in certain instances. A decision as to required indemnification is to be made by a disinterested majority of our board of directors present at a meeting at which a disinterested quorum is present, or by a designated committee of the board, by special legal counsel, by the shareholders or by a court.

Our bylaws provide that we shall indemnify each of our directors, officers and employees to the fullest extent permissible by Minnesota Statute, as detailed above. We also maintain a director and officer liability insurance policy to cover us, our directors and our officers against certain liabilities.

In addition, the securities purchase agreements we entered into with the selling shareholders obligate us to indemnify such shareholders against any loss, claim, damage or liability arising out of or based on any untrue statement, or alleged untrue statement, of any material fact contained in this registration statement (including the prospectus, financial statements and schedules, and all other documents filed as a part

II-1

Table of Contents

thereof), or any omission, or alleged omission, of a material fact required to be stated or necessary to make the statements contained herein not misleading.

Item 16. Exhibits

Exhibit No.	Description
5.1*	Opinion of Robins, Kaplan, Miller & Ciresi L.L.P.
23.1*	Consent of Baker Tilly Virchow Krause, LLP.
23.2*	Consent of Robins, Kaplan, Miller & Ciresi L.L.P. (included in Exhibit 5.1 hereto).

24.1* Power of Attorney (included in signature page to this registration statement).

*Filed herewith.

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 of 1933;

(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 together, represent a fundamental change in the information in the registration statement; and

(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;

the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of this registration statement;

provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in

- (2) that, for the purpose of determining any liability under the Securities Act of 1933, 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; and
- (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.

II-2

Table of Contents

- (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 that is incorporated by reference in this registration statement shall be deemed to be a new registration statement relating to the securities offering therein, and the offering of such securities at that time shall be deemed to be an initial *bona fide* offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the provisions described under Item 15 above, or otherwise, the registrant has been advised 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 registrant of expenses incurred or paid by a director, officer or controlling person of the registrant 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 registrant 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.

II-3

Table of Contents

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that is has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Minneapolis, State of Minnesota, on May 6, 2010.

APPLIANCE RECYCLING CENTERS OF AMERICA, INC.

By /s/ Edward R. (Jack) Cameron
Edward R. (Jack) Cameron
President, Chief Executive Officer and Chairman of the Board

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints EDWARD R. (JACK) CAMERON and PETER P. HAUSBACK, and each of them, his or her true and lawful attorneys-in-fact and agents, each acting alone, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any or all amendments (including post-effective amendments) to the Registration Statement on Form S-3 and to file the same, with all exhibits thereto, and other documents in connection therewith, with the SEC, granting unto said attorneys-in-fact and agents, each acting alone, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, each acting alone, or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities indicated on May 6, 2010.

Signature	Title		
/s/ Edward R. (Jack) Cameron Edward R. (Jack) Cameron	Chairman of the Board, President and Chief Executive Officer		
/s/ Peter P. Hausback	Executive Vice President, Chief Financial		

Peter P. Hausback	Officer and Principal Accounting Officer
/s/ Duane S. Carlson	Director
Duane S. Carlson	
/s/ Thomas F. Hunt, Jr. Thomas F. Hunt, Jr.	Director
/s/ Glynnis A. Jones	Director
Glynnis A. Jones	
/s/ Morgan J. Wolf Morgan J. Wolf	Director
Morgan J. Won	
	II-4

ROBINS, KAPLAN, MILLER & CIRESI L.L.P. 2800 LaSalle Plaza 800 LaSalle Avenue Minneapolis, MN 55402-2015

May 6, 2010

Appliance Recycling Centers of America, Inc. 7400 Excelsior Blvd.
Minneapolis, MN 55426-4517

Re: Registration Statement on Form S-3 915,000 shares of Common Stock

Ladies and Gentlemen:

We have acted as legal counsel for Appliance Recycling Centers of America, Inc. (the "Company") in connection with the preparation and filing of a Registration Statement on Form S-3 (the "Registration Statement") relating to the registration under the Securities Act of 1933, as amended, of the sale of an aggregate of 915,000 shares (the "Shares") of common stock, without par value (the "Common Stock"), of the Company, all of which Shares are to be sold by selling stockholders (the "Selling Stockholders"). The Shares were issued to the Selling Stockholders by the Company in private transactions (the "Private Transactions").

In connection therewith, we have examined (a) the Articles of Incorporation and Bylaws of the Company, both as amended to date; (b) the corporate proceedings of the Company relative to its organization and to the authorization and issuance of the Shares in the Private Transactions; and (c) the Registration Statement and the Prospectus included as a part thereof (the "Prospectus"). In addition to such examination, we have reviewed such other proceedings, documents and records and have ascertained or verified such additional facts as we deem necessary or appropriate for purposes of this opinion.

Based upon the foregoing, we are of the opinion that:

- 1. The Company has been legally incorporated and is validly existing under the laws of the State of Minnesota.
- 2. The Shares have been validly issued and are fully paid and non-assessable.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to the reference to our firm under the caption "Legal Matters" in the Prospectus.

Sincerely,

ROBINS, KAPLAN, MILLER & CIRESI L.L.P.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-3 of our reports datedMarch 17, 2010, relating to the consolidated financial statements and financial statement schedule of Appliance Recycling Centers of America, Inc. and Subsidiaries, appearing in the Annual Report on Form 10-K of Appliance Recycling Centers of America, Inc. and Subsidiaries for the fiscal year ended January 2, 2010, and to the reference to us under the heading "Experts" in the Prospectus, which is part of this Registration Statement.

/s/ BAKER TILLY VIRCHOW KRAUSE, LLP

Minneapolis, Minnesota May 6, 2010