

ADA-ES INC  
Form 10-K  
March 14, 2008

**United States**

**SECURITIES AND EXCHANGE COMMISSION**

**Washington, D.C. 20549**

**FORM 10-K**

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)**

**OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2007

Commission File Number: 000-50216

**ADA-ES, Inc.**

(Name of registrant as specified in its charter)

**Colorado**  
(State of incorporation)

**84-1457385**  
(IRS Employer Identification No.)

**8100 SouthPark Way, Unit B, Littleton, Colorado**  
(Address of principal executive offices)

**80120-4527**  
(Zip Code)

(Registrant's telephone number, including area code): (303) 734-1727

Securities registered under Section 12(b) of the Exchange Act:

<b>Title of each class</b>	<b>Name of each exchange on which registered</b>
Common Stock, no par value	NASDAQ Capital Market
Securities registered under Section 12(g) of the Exchange Act: None	

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.  Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Exchange Act.  Yes  No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the past 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.  Yes  No

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Indicate by check mark if disclosure of delinquent filers in response to Item 405 of Regulation S-K is not contained here, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.  Yes  No

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 definition of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act.

Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller Reporting Company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act.)  Yes  No

The aggregate market value of the voting common stock held by non-affiliates as of June 29, 2007 was \$120,692,000

As of March 7, 2008, there were outstanding 5,688,635 shares of the common stock, no par value.

### **DOCUMENTS INCORPORATED BY REFERENCE:**

In Part III of this Annual Report on Form 10-K, portions of the registrant's definitive proxy statement for the 2008 Annual Meeting of Shareholders, currently scheduled to be held on June 18, 2008, are incorporated by reference.

**PART I**

**Item 1. Business**  
**Abbreviations We Use in this Report**

ADA-ES, the Company, we, us, or our refer to ADA-ES, Inc., a Colorado corporation, and its consolidated subsidiaries. Other abbreviations use in this Report include:

AC = activated carbon

ACI = activated carbon injection

ADA-249M = our patented slag viscosity modifying compound

CAMR = Clean Air Mercury Rule

DOE = United States Department of Energy

EPA = United States Environmental Protection Agency

EPRI = the Electric Power Research Institute

ESP = electrostatic precipitator

FGC = flue gas conditioning

MEC = mercury emission control

PAC = powdered activated carbon

PRB = Powder River Basin (a particular area of the Western United States)

RC = Refined Coal (coal treated with our patented pre-combustion additive chemical)

**Business Purpose and Strategy**

Incorporated in Colorado in 1997, ADA-ES, Inc. develops and implements proprietary environmental technology and provides specialty chemicals that enable coal-fueled power plants to enhance existing air pollution control equipment, maximize capacity and improve operating efficiencies. We currently serve the emerging market for mercury emission controls ( MEC ) through the supply of powdered activated carbon

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injection ( ACI ) systems, mercury measurement instrumentation, and related services. ADA-ES became a stand-alone public company through a spin-off from its parent company, Earth Sciences, Inc. in September 2003. We have four wholly-owned subsidiaries called ADA Environmental Solutions, LLC, Red River Environmental Products, LLC, Bowman Environmental Products, LLC, Underwood Environmental Products, LLC and a 50% interest in a Colorado limited liability company called Clean Coal Solutions, LLC ( Clean Coal ), through which all of our business is carried out.

Our approach to technology development, implementation and commercialization involves taking technology to full-scale as quickly as we can, and testing and improving the technology under actual power plant operating conditions. The most significant benefit of this method is that we begin working early and closely with power companies to optimize the technology to meet their specific needs. For example, while some other companies develop mercury control technologies in the isolation of a laboratory without feedback from users, we work on full-scale mercury control systems that are installed on plants operated by several of the largest power companies in North America. We assist electric utility companies to remain competitive while meeting environmental regulations.

Our major activities include sales of equipment, field testing and services related to the emerging market for mercury emission control for coal-fired boilers used in electric generation, development and marketing of our refined coal technology in the Clean Coal joint venture ( JV ) with NexGen Refined Coal, LLC, an affiliate of NexGen Resources Corporation ( NexGen ), development of a new Greenfield facility for the manufacture of activated carbon ( AC ), development of interim sources of AC to supply to utility customers until such time as our AC manufacturing facility is operational, the sale of flue gas conditioning ( FGC ) equipment and chemicals, and other chemicals and technologies for coal-fired boilers.

## Overview of the Last Five Years

During our last five fiscal years, we have (a) substantially increased our MEC business through government and industry funded field demonstration contract work and various commercial activities; (b) been instrumental in the commercialization of ACI equipment systems; (c) advanced our plans to develop a Greenfield AC manufacturing facility in the United States; (d) entered into a joint venture in 2006 with NexGen to develop and market our refined coal technology, with our proprietary CyClean pre-combustion additive chemical; (e) continued in the FGC business through the sale of chemicals and services; and (f) provided other chemicals and technologies to users of coal-fired boilers.

Thus far in 2008, we have (a) continued work on 20 ACI systems which we expect to be completed at various times from 2008 through 2010; (b) continued work on government and industry-supported contracts for field testing, installation and evaluation of mercury emission control systems at several sites; (c) continued to supply FGC chemicals to several plants and began preparations to demonstrate FGC technology at an additional plant; (d) continued development and marketing of our refined coal technology through our JV with NexGen; (e) continued to pursue development of a new AC manufacturing facility; and (f) implemented plans that we expect will allow us to supply AC to customers beginning in 2008, such that we will be able to supply AC prior to our new AC manufacturing facility becoming operational, which we hope will be early in 2010.

## Financial Information for Industry Segments

We have two reportable segments: MEC and FGC and other. Financial information concerning these reportable segments can be found in the Financial Statements filed as a part of this Report, in Footnotes 1 Summary of Nature of Operations and Significant Accounting Policies and 11 Business Segment Information, and that information is incorporated by reference here.

## Our Business in Detail

### Market for Our Products and Services

The primary drivers for many of our products and services are environmental regulations and the deregulation of the utility industry. Environmental regulations, such as the 1990 Clean Air Act Amendments, various state regulations and permitting requirements for new coal-fired power plants are requiring utilities to reduce emission of pollutants, such as sulfur dioxide, nitrogen oxides, and mercury. We are a key supplier of equipment, services and AC to the market that first began in 2005 when the Clean Air Mercury Rule ( CAMR ) was adopted and that is developing rapidly as a result of the regulatory environment. We are attempting to position ourselves to become a key supplier of AC to that market.

Our business plan is based upon providing technologies for the existing 1,100 coal-fired power plants that provide 325 GWs of electricity, or roughly 50% of the U.S. demand, according to a 2007 National Coal Council report. The best estimates of energy experts indicate a need of an additional 300-500 GW of new capacity in the next 25-30 years. A 2007 National Coal Council report estimates that United States reserves will be capable of serving demand for the next 250 years. However, the nation's existing coal-fired power plants emit approximately 48 tons of mercury per year, which has been recognized as a significant health risk. In 1999, a DOE study predicted that the estimated cost to control these emissions will be \$2 billion to \$6 billion annually. Regulations currently exist that require new coal-fired plants to control mercury emissions. There are as many as 45 new coal-fired power plants in the United States under various stages of development, all of which have requirements for mercury emission control.

The coal-fired power industry has been under increased scrutiny over environmental issues during the last year, especially related to mercury emissions, as well as the impact of carbon dioxide emissions on climate change. In response to protests by environmental groups, various state officials rejected a number of permits for new coal-fired plants in 2007. We expect this adversarial climate to increase the market for our products and services. With new portfolio standards for increased use of renewable energy sources and requirements for reduction of greenhouse gases limiting the permitting of new coal-based plants, the dependence on the existing fleet for baseline power increases. To continue operating even as environmental regulations become more stringent, these older plants will require the use of retrofit technologies to address conventional pollutants such as SO<sub>2</sub>, NO<sub>x</sub>, and particulates and for the first time pollutants such as mercury and carbon dioxide. Therefore, the current trends toward cleaner energy create a growing market for ADA's existing and developing innovative technologies.

Following widespread disappointment and legal challenges to CAMR, in November 2005, the State and Territorial Air Pollution Program Administrators and the Association of Local Air Pollution Control Officials (STAPPA/ALAPCO), the two national associations of air pollution control agencies throughout the United States, developed a model rule entitled "Mercury from Power Plants: A Model Rule for States and Localities" in response to concern that CAMR was inconsistent with the requirements of the Clean Air Act and would not result in adequate reductions in emissions of mercury from coal-fired power plants to protect public health. The STAPPA/ALAPCO model rule provides state and local governments with the tools needed to obtain reductions in mercury emissions necessary to meet the requirements of the Clean Air Act. Specifically, the model describes two options for state and local governments that wish to develop utility mercury rules that are more protective of public health and the environment than EPA's regulation and contains model rule language for both. The phased timing proposed in the model rule allows power generators to consider mercury specific control technologies, or alternatively, control technologies that reduce mercury as an added benefit when reducing other air pollution emissions. The model rule provides compliance options using two phases: (a) the use of annual rolling averages and (b) averaging of emissions across sources at a facility. This may provide the flexibility to reduce the likelihood of any threat on a source's ability to continue to generate power. As compared with either maximum achievable control technology (MACT) regulation, or CAMR, we believe the STAPPA/ALAPCO model rule better reflects the capabilities of mercury emission control technologies that are commercially available today and gives power generators options in selecting the most cost effective approach for each plant.

In response to the uncertainty created by the challenges to CAMR, several states have entered into consent decrees requiring mercury control stricter than CAMR, and have passed, or are expected to pass, legislation requiring such control. As of March 2008, 14 states have mercury emission control rules and 13 additional states are considering regulations more stringent than CAMR.

A dozen States and several environmental groups had previously sued the EPA alleging that the process that resulted in the relatively lenient CAMR violated the Clean Air Act and that CAMR was therefore invalid. In February 2008, the United States Court of Appeals for the District of Columbia Circuit ruled in favor of the plaintiffs in that case, holding that the EPA violated the Clean Air Act in the process it used to enact CAMR, and that CAMR was therefore invalid. The Court's ruling remands the matter to the EPA for further proceedings, and in the interim, has generated some short-term uncertainty among utilities as to what they will be required to do to reduce mercury emissions. However, we believe that the likely result will be that either EPA will adopt stricter mercury emission control rules in 2008 or Congress will enact new legislation requiring stricter mercury emission control within the next year or two.

The regulatory issues surrounding mercury control have created confusion for the investment community because of the complicated patchwork quilt of state regulations, separate rules for new plants, and the constant flux of federal regulation. Although a straight forward single-regulation-driven market may make the investment decision more clear, the complexity of the different requirements has actually been a strategic advantage for us. Unlike other suppliers of activated carbon, we have been extensively involved in the policy process at national and state levels for the past eight years and we have intimate connections with our coal-fired power customers gained from 30 years of serving this market. This inside knowledge enabled us to accurately predict that this market was going to develop and make early decisions to position the company to take advantage of these events.

The coal burning electric power generation industry is also impacted by the ongoing deregulation process of the utility business. Historically, public utilities have been permitted to pass on capital and operating costs to customers through rate adjustments. With deregulation, however, utility companies face competitive challenges requiring them to better control capital spending and operating costs. These changes increase the need for cost-effective retrofit technologies that can be used to enhance existing plant equipment to meet the more stringent emission limits while burning less expensive coals. We have entered this market with (1) mercury control technology that effectively reduces mercury emissions over a broad range of plant configurations and coal types, (2) our proprietary chemical conditioner that offers both technical and economic advantages over the hazardous chemicals that have been and continue to be in use, (3) products, such as CyClean, our proprietary pre-combustion additive, that provide utilities flexibility in choosing the grade of fuel they can burn and (4) research and development of technologies aimed at the capture and conversion of carbon dioxide emissions. We have established ourselves as a leader in the mercury control market, having received 16 new orders for commercial mercury control systems in 2007, and letter of intent to proceed on two additional systems thus far in 2008. Our systems have been demonstrated to be effective in mercury control, even in difficult applications, and have also been shown to be cost effective, in many cases reducing the costs associated with mercury control to less than 20% of initial cost estimates.

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## Government and Industry-Supported Contracts

The United States Department of Energy (DOE) issues solicitations from time to time for various development and demonstration projects. DOE solicitations range in subject matter, and we submit bids for those solicitations that fit our mission, strategic plan and capabilities. The bids include a proposed statement of work, and DOE then negotiates a final contract with the successful bidder to perform the specified work. The contracts with the DOE are known as Cooperative Agreements and are considered financial assistance awards. We are currently a participant in five such agreements and participate with another three organizations as a subcontractor. Generally, the agreements cover the development and/or demonstration of air pollution control technologies for coal-fired power generating plants. The work may involve designing and fabricating equipment, installing the equipment at power plants, testing the equipment, preparing economic studies, and preparing various reports. We have one DOE contract on which we are acting as a subcontractor on a project to develop and demonstrate a novel process to capture carbon dioxide from coal-fired power plants. We expect this project to last for approximately three years. The deliverables required by the agreements include various technical and financial reports that we submit on a prescribed schedule. The agreements require us to perform the negotiated scope of work, which includes testing/demonstrating various air pollution control technologies. The agreements with the DOE provide that any inventions we create as a result of the work become our property and we retain the rights to commercialize any products we develop under the contracts.

The agreements with DOE generally require industry cost share, which is considered a key component to the viability of the project and which may take the form of cash contributions and/or in-kind contributions of material and services. The industry cost share percentages on the mercury control projects in which we are involved range from 25% to 50%. Typically, the utility host site for the demonstration project provides a considerable amount of the cost share with other interested industry partners also providing funding, either individually or through EPRI (the Electric Power Research Institute). To the extent that the required cost share is not provided by industry partners or EPRI, we provide the balance by reducing the revenues we would otherwise recognize on the work performed. We expect the power industry's interest in these demonstration projects to continue to grow.

We currently participate in DOE and industry contracts totaling \$23.7 million, of which \$12.9 million represents contracts directly with DOE. We recognized revenues in 2007, 2006 and 2005 from these DOE and industry-funded contracts totaling \$7.2 million, \$7.0 million and \$4.3 million, respectively, which comprised 37%, 45% and 39% of our total revenues for those respective periods. Of these amounts, \$3.3 million, \$3.7 million and \$2.3 million in 2007, 2006 and 2005, respectively, were revenues directly from DOE. These contracts are subject to audit and potential adjustment as to amounts already received. Adjustments mandated by government audits have not materially impacted our revenues in the past; however, government audits for the years 2002 through 2007 have not yet been finalized. These contracts are also subject to annual appropriation of funds by Congress, and although continued funding is considered probable, we cannot be certain that the government will continue to approve funding for these contracts in future budgets or at similar levels. In 2007, the DOE decreased its commitment on one of our contracts by \$800,000, which resulted in us reducing the scope of work performed related to the project. We are not aware of any further DOE plans to reduce funding on projects currently under contract. However, DOE has not committed funds of approximately \$600,000 on two of our existing DOE contracts. We expect DOE funding for future mercury control projects to decline as the mercury control market matures. However, we expect funding from utilities for mercury control evaluation and testing to increase to meet state and local regulations, and that DOE may fund other projects related to our business, including projects aimed at carbon dioxide emissions control. Assuming no further changes in funding, we expect future revenues from current DOE contracts in progress to amount to \$5.4 million, of which we expect to recognize approximately \$3.0 million in 2008.

## Commercial Mercury Emissions Control

During 2007, we signed additional contracts for 16 ACI systems for mercury emission control, and thus far in 2008, we have commenced work on two additional ACI systems under notices to proceed, with the expectation that the final contracts will be signed within the next month. We recognize revenue on these agreements on the percentage of completion method. The uncompleted portion of outstanding contracts at December 31, 2007, represents \$11.3 million in gross revenue. We expect to complete and recognize about \$6.1 million of this revenue in 2008, with the remainder in 2009 and 2010. If we are unable to meet certain delivery obligations under the contracts, except for failures to do so beyond our control, we may be liable for liquidated damages. Since the market for commercial systems commenced in 2005, we have met all of the delivery milestones under our contracts, and we expect that we will continue to be able to do so. If a customer elects early termination of an agreement not due to any fault of ours, we are entitled to reimbursement for all costs incurred in performing the agreement through the date of termination, including costs incurred in terminating our performance and costs incurred to any subcontractors.

In March 2007, we executed a Memorandum of Understanding with Calgon Carbon Corporation ( CCC ) to jointly market AC to the utility market and to explore ways in which we could cooperate with each other in expanding capacity at CCC s facilities and in implementing our plans to build a new AC production facility. In July 2007, CCC gave us notice of its intent not to proceed with any joint development plans, and terminated the agreement effective in August 2007. We intend, and CCC has advised us that it intends, to honor commitments made to one another for certain joint activities and on bids for supply contracts made to other parties during the term of the agreement. We expect the impact of the termination to result in reduced commissions in 2009 of up to \$3.0 million that we expected as a result of activities under the agreement. We are continuing to proceed with development of a Greenfield AC manufacturing facility and securing interim AC supply as discussed below.

#### **Development of Proposed Activated Carbon Manufacturing Facility**

We believe that the current capacity of AC will be inadequate for the demand created by the developing mercury emissions control market. We project shortages of the material as early as 2010. In 2006, we commissioned a market study from an independent third party and utilized purchased multiple-client market studies to estimate the current worldwide production and expected future demand for AC in both the conventional water treatment markets and the developing mercury control market. The study we commissioned documented that the current U.S. market for AC, which is primarily for water treatment, is approximately \$200 million per year. With regulations in place today to reduce mercury emissions, this could more than double by 2010, and if a more stringent federal regulation comes into effect, the demand could more than triple by that time.

In 2004, we initiated activities aimed at positioning ADA-ES to supply AC to meet the needs of coal-fired electrical generating utilities. Initially these activities involved obtaining manufacturing capacity through the possible acquisition of existing facilities. This strategy did not prove successful, and in 2006, we determined to pursue the design and construction of a new AC manufacturing facility which, if completed, will be the largest AC manufacturing facility built to date in the US. We are designing the facility to maximize efficiency and produce the most cost-effective AC product for the mercury control market. We will manufacture and process the AC including chemical treatment, in the United States. We will design this AC to be effective for capturing mercury produced as a byproduct of burning Western lignite and subbituminous coals, which we believe represents the largest potential market for AC mercury emission reduction. We expect our AC product to meet the required, stringent quality specifications of this market.

We accomplished several key project milestones in 2007 and are continuing with development plans for the project. Through December 31, 2007, we have capitalized approximately \$8.1 million of project costs that appear on our balance sheet as Development Projects.

We have formed three Delaware limited liability companies to carry out the operational aspects of the project at three potential locations. The names of these entities are Red River Environmental Products, LLC, Bowman Environmental Products, LLC, and Underwood Environmental Products, LLC.

We engaged a project development consultant, Emission Strategies Inc., a Maryland corporation ( ESI ), to oversee the project on our behalf. Our contract with ESI provides for fixed monthly compensation, with incentive payments on the attainment of certain milestones, which may include amounts based on revenues from the planned facility. We can terminate the agreement with ESI on 30 days notice for convenience, and for cause on 10 days notice, with cure rights to correct any default within 30 days. If termination is for convenience, ESI is entitled to receive all monthly fees earned prior to termination and any milestone payments for milestones achieved on the project, if ever and if any.

We expect to obtain three air permits to build AC manufacturing facilities, each covering two production lines capable of producing up to a total of 350 million pounds of AC per year, in North Dakota and Louisiana. Permit time lines and the overall business environment will dictate which site we will choose to build first. At the present time, we are farthest along with the permit in Louisiana, which was filed with the Louisiana Department of Environmental Quality ( LDEQ ) in August 2007. During the public comment period, comments were filed opposing the issuance of the permit by LDEQ. LDEQ responded to these comments, moved the permit forward without changes and submitted it to EPA Region 6 for their approval. If there are no additional comments from the EPA, we expect our final permit to be issued within the first half of 2008.



We have engaged BE&K Construction Company, LLC, of Birmingham, Alabama, as our engineering, procurement and construction contractor to perform the preliminary work needed to build the plant. BE&K is currently operating under Phase 1 of a two-phase Agreement, the second phase of which would be finalized prior to obtaining debt financing for the project. Under Phase 1, BE&K is performing preliminary site assessment, design work for the facility itself, and early site work, and has started the procurement process that will be necessary to construct the facility. We can terminate our current agreement with BE&K on three days' notice, in which case we would be liable to BE&K for work performed through the date of termination.

Commercial operation of the first production line is planned for the first quarter of 2010. All-in financing for the first production line is estimated at approximately \$300 million, and we expect that \$120 million of that amount will come from equity participation from us and a strategic partner, while \$180 million will be provided by debt financing. We consider participation of a strategic partner essential to the project and are seeking a strategic partner who is able and willing to commit approximately \$60 million to the project through the purchase of up to one half of the equity interest in the company through which the project will be carried out. We are currently negotiating the terms that will define our relationship with a strategic partner. In August 2007, we engaged Credit Suisse Securities, (USA) LLC to assist us with locating such a strategic partner and negotiating the debt financing that will also be needed for the project. Under our agreement with Credit Suisse, it is entitled to reimbursement of expenses incurred in connection with providing us with services, and a customary commission will be payable to Credit Suisse upon closing of the debt financing for the project.

### **Near-Term AC Supply**

In addition to our plans to develop an AC manufacturing plant, we are in the process of implementing a near-term (interim) plan to supply AC to meet the growing demand in the mercury control market for coal burning power plants. Market forecasts predict AC demand increasing to over 100 million pounds per year in 2009 and our plan should allow us to capture a portion of this market beginning in the second half of 2008. Our near-term supply product will be processed, including chemical treatment at a US facility so that it is effective for capturing mercury produced by a variety of coals, and should meet the required, stringent quality specifications of this growing market. We have hired key personnel with extensive experience in the production of AC to lead this effort. Preliminary indications are that we will be able to obtain adequate supplies of AC (foreign and domestic) to meet our market projections. We expect that a portion of the AC we are able to supply in this manner will be offered to potential long-term customers who may become parties to off-take contracts for AC to be supplied from our manufacturing facility.

### **Clean Coal Solutions**

In 2006, we established the Clean Coal JV with an affiliate of NexGen to market our patented refined coal technology that reduces emissions of nitrogen oxides and mercury from certain, treated coals. The JV's primary opportunity is based on tax credits available under Section 45 of the Internal Revenue Code (Section 45 Tax Credits), as it was amended by the American Jobs Creation Act of 2004 (the 2004 Act) for qualifying RC. Under the 2004 Act, an owner can earn a tax credit with a current value of approximately \$5.60 per ton of RC for a period of ten years ending in or before 2019. Our refined coal technology incorporates our patented chemical called CyClean that we developed for slagging boilers (see discussion of ADA-249M below), and our expertise with sorbent-based mercury control technology. NexGen's affiliates have extensive experience and expertise with Section 29 tax credits, which applied to the development of syn-fuels, and we anticipate that NexGen's experience and expertise in this area will serve as a template for monetization of Section 45 Tax Credits in the RC area. Our refined coal technology is applicable to a target market of approximately 20 million tons of RC per year, which would amount to a market potential to Clean Coal of approximately \$150 million a year.

We sold a 50% interest in Clean Coal to NexGen's affiliate for \$1.0 million in 2006, after a successful demonstration of our RC product. The total payment of \$1.0 million net of tax has been included in our shareholders' equity. We expect the JV to supply chemicals, additives, equipment and technical services to cyclone fired boiler users, but the JV's primary purpose is to seek and obtain approval from the United States Internal Revenue Service to qualify for Section 45 Tax Credits (a Section 45 Business). If the JV obtains that approval and becomes a Section 45 Business, NexGen has the right to maintain its 50% interest by paying us an additional \$4.0 million, in eight quarterly payments of \$500,000 each, beginning in the quarter the JV receives qualification. NexGen is not obligated to make those payments, but if it does not do so, it will forfeit a part of its interest in Clean Coal in direct proportion to the amount of the \$4.0 million that it elects not to pay. Once it fails to make any one payment, it cannot reclaim its interest by making later payments. We are not required to refund any of the payments made by NexGen. The agreement requires NexGen and us to each pay 50% of the costs of operating the JV, and specifies certain duties that both parties are obligated to perform.

We also licensed certain patents and know-how (the Licensed Property ) to Clean Coal on a fully paid-up, royalty-free, non-transferable and exclusive basis, to allow it to exploit our refined coal technology for the cyclone-fired boiler market. We are required to provide technical assistance without charge to the JV relating to the development, marketing and deployment of the Licensed Property and, with certain limitations, to prosecute, maintain and defend the patents that are a part of the Licensed Property, take appropriate steps to protect the know-how and trade secrets comprising a part of the Licensed Property, and indemnify and hold Clean Coal harmless in the event the Licensed Property infringes the intellectual property of any third party.

Finally, we entered into a Chemicals, Equipment and Technical Services Supply Agreement with Clean Coal pursuant to which we supply the JV with certain chemicals, additives, equipment and technical services to facilitate the purposes of the JV. Clean Coal pays us standard charges for the chemicals, additives, and technical services we supply to the JV. If we choose to supply equipment to the JV, we have agreed to do so at our cost.

Thus far, we have conducted three full-scale tests of our RC product, CyClean, that demonstrated the ability to meet the emission control performance required to qualify for the Section 45 Tax Credits. We are continuing to market our product to the industry. Legislative correction is needed to Section 45 of the Internal Revenue Code to clarify the current tax credit requirement for a 50% increase in the market value of the RC. Because market value for coal is not a well-defined concept, this provision makes it difficult for both the technology supplier and the Internal Revenue Service to determine how to interpret and enforce this provision. We have made good progress working with Congress, and the correction we needed to address this problem was included in the final markup of the 2007 Senate Energy bill. The Senate was unable to get the required 60 votes, however, and the tax title was dropped from the Energy Bill passed last fall. We are still working to get this correction in an Energy Tax Bill that Congress will work on this year, driven by the need for extension of tax credits for renewable energy. We expect these changes to be enacted in 2008. In any event, we will continue to sell and market our RC product through the JV, although we expect it to be a smaller aspect of our business than would be the case if the Section 45 tax credits were available.

Our net operating loss for 2007 includes net costs of \$247,000 related to our RC efforts and \$150,000 from the JV.

#### **FGC**

We have developed technologies for conditioning flue gas streams from coal-fired combustion sources that allow existing air pollution control devices to operate more efficiently. Through various suppliers and contractors, we are able to manufacture engineered units for each individual application. The units mix, pump and monitor the feed of proprietary chemical blends. The chemical blends are applied to the flue gas streams by a pressurized system of specially designed lances and nozzles. Such treatment of the flue gas stream allows for more effective collection of fly ash particles that would otherwise escape into the atmosphere. Our technology also has application in the cement and petroleum refining industries where particulate emissions are being or need to be controlled. We are not currently actively pursuing the non-utility markets but companies in that market have recently expressed interest in our technology.

We currently have three operating FGC units installed at coal-fired utilities in Illinois and Louisiana. Revenues from sales of equipment and chemicals to FGC customers in 2007, 2006 and 2005 and other FGC contract work totaled \$1.0 million, \$1.7 million and \$1.9 million, respectively. One customer discontinued chemical usage in 2007. Activities in late 2007 and early 2008 indicate that FGC could once again be a revenue growth product line for us. We are responding to recent inquiries about our product meeting certain requirements in the mercury emission control regulations. We expect to conduct a demonstration of our FGC technology in 2008.

#### **ADA-249M**

Since 2000, we have produced and sold a specialty chemical, called ADA-249M, which is designed to save utility companies with cyclone furnaces significant costs each year through reduced fuel costs, enhanced operational flexibility and improved marketability of combustion by-products. ADA-249M is a patented product designed to modify slag viscosity. ADA-249M is a blend of iron oxides, mineralizers, and flow enhancers that are added to the PRB coal prior to combustion in order to create the proper slag layer for combustion within the cyclone barrel. The addition of ADA-249M to the coal results in more coal burning in the cyclone, less carbon in the fly ash, better precipitator performance, reliable slag tapping, and more bottom ash to sell. We design and sell the delivery system and the continuing supply of chemical. We expect that Clean Coal will pursue future applications for ADA-249M that are a part of our refined coal technology as applied to cyclone coal-fired boilers.

Sales related to ADA-249M are recorded in the FGC and Other segment and were \$124,000, \$60,000 and \$327,000 in 2007, 2006 and 2005, respectively.

### **Other Consulting Services**

We also offer consulting services to assist utilities in planning and implementing strategies to meet new government emission standards requiring reductions in sulfur dioxide, nitrogen oxide, particulates and mercury, and we continue to develop and test new chemical blends expected to aid coal-burning utilities in the variety of problems that may be encountered in switching to lower cost coals. We received funding for a portion of our development and testing activities from an industry partner that has a strategic interest in the technology. Total revenues from other consulting services approximated \$1.2 million, \$1.5 million and \$3.0 million in 2007, 2006 and 2005, respectively, most of which is related to the mercury emission control segment.

### **Competition**

The commercial mercury control market for existing coal-fired electric utilities has emerged as a result of the enactment of state and federal regulations that for the first time in U.S. history are requiring those utilities to control mercury emissions. We estimate that there are approximately 1,100 individual units (several may be located on one site) in excess of 25 megawatts of generating capacity that could be impacted by these regulations. Regulations currently exist that require new coal-fired plants to control mercury emissions. There are as many as 45 new coal-fired power plants in the United States under various stages of development, all of which have requirements for mercury emission control. Through 2007, our mercury control technology has been demonstrated on a full scale at over 30 plants, generally yielding over 90% mercury control on most applications. In addition, our approach to mercury control is quite cost effective, in many cases reducing costs associated with mercury control to less than 20% of initial cost estimates. Our experience in installing full scale demonstration plants, together with our practice of providing users with performance guarantees, as well as the cost effectiveness of our methodology, are our principal methods of competing in this market. We have responded to more than one hundred bid requests for ACI systems since January 2006, of which we believe over 70 are likely to proceed to orders between now and 2010. The capital equipment we provide ranges from approximately \$750,000 to \$1.0 million per unit, and the sorbent we intend to supply is estimated to range from approximately \$1.0 million to \$2.0 million per year per unit. We believe Norit Americas, Siemens Environmental Systems and Sorbent Technologies, have responded to requests for commercial bids for mercury control systems, and are our principal competitors in this market. Based on the contracts we were awarded since 2005, we believe we have approximately 40% of the existing market. As this market matures, we expect competition to increase, primarily in the sorbent supply arena (AC). See the discussion above under the caption Market for Our Products and Services.

We are focused on the growing North American market for activated carbon used for the control of mercury emissions from power plant exhaust. Our principal competitors in this market include Norit, N.V., a Dutch company, Calgon Carbon Corporation, a United States company, HOK, a German company, Sorbent Technologies, a United States company, and Alstom, a French company. However, of these, only Norit, Calgon Carbon, and HOK actually produce the carbon they sell. Sorbent Technologies and Alstom treat and supply carbon produced by others. Asian producers of carbon, primarily in China, are also sources of carbon to the market, and supply companies that re-sell their carbon, such as Sorbent Technologies. Other US producers of activated carbon, who currently tend to focus on other activated carbon applications, include Mead/Westvaco Corporation and Siemens Water. Competition in activated carbon, and carbon equipment and services is based on price, quality, and performance.

Our primary competition in the FGC arena is conventional FGC technology using either sulfur trioxide or a combination of sulfur trioxide and ammonia. This technology has been available commercially since the 1970 s and is offered by Chemithon Engineers Ltd., Wahlco, Inc. and Benetech, in a variety of forms. Conditioning of fly ash by injecting small amounts of sulfur trioxide into the flue gas is a well-proven technique for improving performance of the electrostatic precipitator (ESP). Sulfur trioxide conditioning loses its effectiveness in applications with temperatures over 350 degrees Fahrenheit. The capital costs of conventional FGC technology are in excess of \$1.0 million. Injection of water mist into the flue gas stream is also a known technique for improving performance of the ESP in certain applications and is offered by EnviroCare, Inc. The capital cost of a water injection system is typically \$200,000 to \$300,000. A typical ADA-ES system costs between \$300,000 and \$600,000. We have also introduced a product shown to be effective in the 300-750 degree range that is suitable for intermittent application and can augment a sulfur trioxide system and help to avoid use of ammonia. The competitive advantages of our FGC technology include an effective temperature range

of 300 to 900 degrees Fahrenheit; a simple injection system; a non-toxic conditioner that will not become a secondary pollutant; and chemicals that are safer and easier to handle on site. The different products in the industry that aid ESP performance primarily compete on the basis of performance and price. We usually arrange for a full-scale demonstration of our products to potential customers prior to selling our systems and chemicals for use on a continual basis.

With respect to our refined coal technology and ADA-249M, there are no major barriers to entry in this niche market; however, utility companies are generally slow to embrace new technologies when they perceive any potential for disruption in the production of electricity. Potential competition for these products comes from the use of magnetite, iron ore and coal blends. Even though there is currently no significant direct competition, the market for ADA-249M has been slow to emerge. However, we expect the demand for products in this area to increase as recent consent decrees requiring mercury emission control in several states are beginning to impact the market.

#### **Patents**

We have received six patents and have an additional seven patent applications pending or filed relating to different aspects of our technology. Our existing patents have terms of 17 years measured from the application date, the earliest of which was in 1995. Although important as protection for certain aspects of our continuing business, we do not consider any of our patents or pending patents to be critical to the ongoing conduct of our business, with the exception of the patents and intellectual property rights licensed to Clean Coal, as noted above.

#### **Supply of Chemicals for Our Customers**

We typically negotiate blending contracts that include secrecy agreements with chemical suppliers located near major customers. These arrangements minimize transportation costs while assuring continuous supply of our proprietary chemical blends. We have operated under these arrangements since the spring of 1999. They are generally renewed on an annual basis. We are investigating several near-term and long-term alternatives to assure the supply of AC to our customers. See the discussion above under the caption **Market for Our Products and Services**.

We are also in the process of developing the ability to supply utility customers with AC for mercury control needs. We anticipate that we will be able to commence significant deliveries of this material, which we will likely procure from foreign suppliers, around the fourth quarter of 2008. Initial tests of the material we have procured and then treated, packaged and tested under actual operating conditions at a power plant burning Western PRB Coal indicate that our product is effective for removal of greater than 90% of the mercury under very favorable feed conditions.

#### **Raw Materials, Contract Installation and Working Capital Practices**

We purchase equipment from a variety of vendors for the engineered ACI systems, components and other equipment we manufacture and/or provide. Such equipment is available from numerous sources; however based on the system requested by the customer, we may determine that some sources are not suitable. We typically subcontract the major portion of the construction labor associated with installation of such equipment, again from a variety of vendors, usually located near the work site. We purchase our proprietary FGC, RC and ADA-249M chemicals through negotiated blending contracts with chemical suppliers generally located near each major customer. The chemicals used are readily available, and there are several chemical suppliers that can provide us with our requirements. We do not maintain any significant amounts of inventory for any of our business segments, and we do not provide any extended payment terms to our customers. We typically provide equipment warranties and performance guarantees related to our ACI systems (see **Risk Factors** and Footnote 7 **Commitments and Contingencies**, in the Financial Statements filed as a part of this Report).

#### **Seasonality of Activities**

The sale of FGC chemicals depends on the operations of the utilities to which such chemicals are provided. Our FGC customers routinely schedule maintenance outages in the spring of each year. During the period of such outages, which may range from two weeks to over a month, no FGC chemicals are used and purchases from us are correspondingly reduced. The other aspects of our business are not seasonal in any material way.

#### **Dependence on Major Customers**

During 2007, we recognized 37% of our revenue from services provided directly or as a subcontractor under contracts to the U.S. government and industry involving mercury control systems, as discussed above under **Government and Industry-Supported Contracts**. (See also Notes 4 and 8 to the Consolidated Financial Statements included elsewhere in this Report). In 2007, we supplied ACI systems to eight customers. We recognized 13% and 10% of our total revenue from Alstom Power Inc. in Tennessee and Fluor Enterprises, Inc. in South Carolina, respectively. Our own sales staff markets our technology through trade shows, mailings and direct contact with potential customers.



### **Backlog Orders**

As of December 31, 2007, we had contracts in progress for supply of ACI systems totaling approximately \$11.3 million. We expect to complete and recognize approximately \$6.1 million of this revenue in 2008, with the remainder in 2009 and 2010. As noted above with regard to our DOE and industry funded R&D contracts, assuming no changes in funding, future revenues from current contracts in progress total \$5.4 million, of which we expect to recognize approximately \$3.0 million in 2008. Contracts in progress for other consulting work totaled approximately \$524,000 at year end 2007. We expect to complete and realize the revenues for all of our existing consulting work in 2008.

As of December 31, 2006, we had contracts in progress for supply of ACI systems totaling approximately \$3.3 million, of which we recognized approximately \$2.5 million in 2007. Expected future revenues from our DOE and industry funded R&D contracts totaled \$13.2 million at the end of 2006, which was reduced by \$800,000 by the DOE and of which we recognized approximately \$7.2 million in 2007. Contracts in progress for other consulting work totaled approximately \$464,000 at year-end 2006, of which \$175,000 was recognized in 2007. All of these backlog amounts relate to our MEC segment as FGC orders are generally filled as submitted and do not typically give rise to backlog.

### **Research and Development Activities**

We are involved in several R&D contracts funded by DOE and industry groups, primarily directed toward the control of mercury emissions. We participate in cost share arrangements in many of those contracts. For 2007, 2006 and 2005 our direct cost share for R&D under DOE related contracts approximated \$163,000, \$481,000 and \$273,000, respectively. In addition, we spent approximately \$1,038,000, \$983,000 and \$704,000 on our own behalf on research and development activities related to further development of our technologies during 2007, 2006 and 2005, respectively.

### **Employees**

As of December 31, 2007 we employed a total of 58 full-time personnel, including seven Company executive officers. 52 people are employed at our offices in Littleton, Colorado, 1 in Alabama, 1 in Pennsylvania, 2 in Maryland and 2 in Texas. In addition, other personnel provided services to us on a contract basis for specific project tasks during the year, including two key positions, one of whom oversees our RC business and one our Greenfield AC development project.

### **Copies of Reports**

Our periodic and current reports are filed with the SEC pursuant to Section 13(a) of the Securities Exchange Act of 1934, and amendments thereto, and are available free of charge, as soon as reasonably practicable after the same are filed with or furnished to the SEC, at the Company's website at [www.adaes.com](http://www.adaes.com).

### **Copies of Corporate Governance Documents**

The following Company corporate governance documents are available free of charge at the Company's website at [www.adaes.com](http://www.adaes.com) and such information is available in print to any shareholder who requests it by contacting the Secretary of the Company at 8100 SouthPark Way Unit B, Littleton, CO 80120.

Audit Committee Charter

Compensation Committee Charter

Nominating and Governance Committee Charter

Code of Conduct

### **Forward-Looking Statements Found in this Report**

This Annual Report contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934 that involve risks and uncertainties. In particular such forward-looking statements are found in this Part 1 and under the heading Management's Discussion and Analysis of Financial Condition and Results of Operation. Words or phrases such as anticipates, believes, hopes, expects, intends, plans, the negative expressions of such words, or similar expressions are used in this Report to identify forward-looking statements, and such forward-looking statements include, but are not limited to, statements or expectations regarding:

- (a) the impact of national and state mercury regulations on the nation's 1,100-plus coal-fired units;

- (b) the capability of U.S. coal reserves to serve demand for the next 250 years;
- (c) future estimated costs to control mercury emissions;
- (d) rapid development of the mercury emission control market;
- (e) expected growth in the power industry's interest in DOE carbon dioxide removal projects;
- (f) impact of the termination of our Memorandum of Understanding with CCC;
- (g) amounts and timing of, and changes in, future revenues, research and development expenses, and costs of operating Clean Coal;
- (h) annual lease costs and other expenditures and gross margins;
- (i) expected M&A activities;
- (j) our ability to meet contract delivery milestones for ACI systems, RC and chemicals;
- (k) the size of the applicable target market and market potential for refined coal technology and ADA-249M;
- (l) our expectation that changes in tax laws will be passed to clarify the conditions applicable to Section 45 tax credits and the timing of those changes in the tax laws;
- (m) the timing of completion of projects and future demonstrations;
- (n) the procession of outstanding bid requests to orders between now and 2010;
- (o) the range of costs for capital equipment expected to be required by each coal-fired unit and range of sorbent requirements per unit;
- (p) the continued use of coal for generating a large part of the electricity used in the United States;
- (q) the inability of the supply of AC to meet market demand as early as 2010;
- (r) the expected costs for the development of a Greenfield AC manufacturing facility;



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- (s) **our ability to obtain necessary permits for the construction of a planned Greenfield AC manufacturing facility;**
  - (t) **our ability to raise the funds necessary to maintain our desired level of participation in our planned AC manufacturing facility;**
  - (u) **our ability to enter into appropriate arrangements with a strategic partner to share development costs of our planned AC manufacturing facility;**
  - (v) **our ability to enter into suitable long-term contracts for the delivery of AC from our planned AC manufacturing facility and our ability to be able to timely deliver the AC required by such contracts;**
  - (w) **our ability to obtain adequate long-term debt financing for our planned AC manufacturing facility;**
  - (x) **our ability to meet a significant portion of the expected shortage in AC supply, including in the near-term (2008 and 2009) from interim sources, and in the longer term (2010 and beyond) from our new AC manufacturing facility;**
  - (y) **the appropriation of funds by Congress for DOE projects;**
  - (z) **impact of market price risk; and**
- (aa) **the immateriality of any future adjustments to previously received revenue as a result of DOE audits. Our expectations are based on certain assumptions, including without limitation, that:**
- (a) **coal will continue to be a major source of fuel for electrical generation in the United States;**
  - (b) **we will continue as a key supplier of equipment and services to the coal-fired power generation industry as it seek to implement reduction of mercury in flue gases;**
  - (c) **contracts we have with the DOE, which generate a significant part of our revenue, will continue to be funded at expected levels and we will be chosen to participate in additional contracts of a similar nature;**
  - (d) **current environmental laws and regulations requiring reduction of mercury from coal-fired boiler flue gases will be strengthened as a result of the court remand of CAMR to the EPA and/or by pending federal and state legislation, and such laws and regulations will not be materially weakened or repealed by courts or legislation in the future;**
  - (e) **we will be able to meet any performance guarantees we make with respect to levels of mercury reduction from systems that we install;**
  - (f) **we will continue to be able to meet our other obligations under contracts as required by those contracts;**

- (g) we will be able to obtain adequate capital and personnel resources to meet anticipated growth;**
- (h) we will be able to establish and retain key business relationships with other companies;**
- (i) orders we anticipate receiving will in fact be received;**

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- (j) governmental audits of our performance under DOE contracts will not result in material adjustments to amounts we have previously received under those contracts;
  - (k) we will be able to formulate new chemicals and blends that will be useful to, and accepted by, the coal-fired boiler power generation business;
  - (l) we will be able to effectively compete against others who may choose to participate in our areas of business;
  - (m) we will obtain the necessary permits and funding required to build our planned AC manufacturing facility;
  - (n) the cost of our planned AC manufacturing facility will remain within budget;
  - (o) adequate supplies of coal will be available to power generators;
  - (p) we will be able to meet any technical requirements of projects we undertake;
  - (q) we will be able to obtain adequate supplies of the materials and supplies needed in our business, including materials needed to construct our planned AC manufacturing facility, and the AC needed to supply customers in the near term;
  - (r) our FGC segment will remain attractive to the power generation industry; and
  - (s) our stock price will not be negatively affected by our retaining earnings for future expansion rather than paying dividends to shareholders.

The forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from the anticipated results we discuss in this Report. Although forward-looking statements provide additional information about us, investors should keep in mind that forward-looking statements are only predictions, at a point in time, and are inherently less reliable than historical information. We do not guarantee future results, levels of activity, performance or achievements and we do not assume responsibility for the accuracy and completeness of these statements. You are cautioned not to place undue reliance on the forward-looking statements made in this Annual Report, and to consult any later filings we may make with the Securities and Exchange Commission for additional risks and uncertainties that may apply to our business and the ownership of our securities. The forward-looking statements contained in this Annual Report on Form 10-K are made and based on information as of the date of this Report. We assume no obligation to update any of these statements based on information after the date of this Report. In evaluating these statements, you should specifically consider the risks outlined under **Risk Factors** in Item 1A, including the following: changes in existing and planned environmental laws, changes in government funding, loss of key relationships, technical or operational problems with ACI systems sold, non-compliance with guarantees on ACI systems, failure to protect our intellectual property, IP infringement claims, decrease in demand for coal or increase in demand for alternative energy sources, lack of management expertise, dependence on third parties, material adjustments due to DOE audits, inability to obtain funding and other risks relating to the development of a Greenfield activated carbon facility, seasonality of our business, inadequate supply of activated carbon, inadequate supply of coal, lack or mismanagement of resources to support future growth, loss of key personnel, changes in taxation rules or financial accounting standards, dilution resulting from future sales of common stock or other securities, lack of dividend payments to shareholders and significant costs of compliance with securities laws and regulations. These risk factors may cause our actual results to differ materially from any forward-looking statement.

**Item 1A. Risk Factors.**

**RISKS RELATING TO OUR BUSINESS**

The following risks relate to our business as of the date of this Report. This list of risks is not intended to be exhaustive, but reflects what we believe are the material risks inherent in our business and the ownership of our securities as of the date of this Report. A statement to the effect that the happening of a specified event may have a negative impact on our business, results of operations, profitability, financial condition, or the like, is intended to reflect the fact that such an event would be likely to have a negative impact on your investment in the Company. The order in which the following risk factors are presented is not intended as an indication of the relative seriousness of any given risk.

**IF EXISTING AND PLANNED ENVIRONMENTAL LAWS ARE RESCINDED OR SUBSTANTIALLY CHANGED, OUR FGC BUSINESS WOULD BE ADVERSELY AFFECTED.**

A significant market driver for our existing products and services, and those planned in the future, are the environmental laws that limit emissions from power plants. If such laws were rescinded or substantially changed, our business would be adversely affected by declining demand for such products and services. Demand for our FGC and ADA-249M products is primarily two-fold. Customers purchase these products to mitigate operating problems and to help comply with environmental regulations such as the Clean Air Act Amendments of 1990. Although our existing customers and those expected in the near-term are believed to desire our products for mitigation of operating problems, we expect that any softening of existing air pollution control requirements would slow expected growth for these products and have an adverse effect on our business.

**THE OVERTURNING OF CAMR HAS LED TO SHORT-TERM UNCERTAINTY IN THE MARKET FOR OUR PRODUCTS AND SERVICES, AND IF EXISTING AND PLANNED ENVIRONMENTAL LAWS GOVERNING MERCURY CONTROL ARE RESCINDED OR SUBSTANTIALLY CHANGED, OUR MEC AND REFINED COAL BUSINESSES WOULD BE ADVERSELY AFFECTED.**

Demand for our MEC and refined coal technology is being driven almost exclusively by legislation requiring mercury emission control. Mercury has been identified as a toxic substance and pursuant to a court order the EPA issued the CAMR for its control in March 2005. CAMR has been controversial since its inception, and in February 2008, the United States Court of Appeals for the District of Columbia Circuit invalidated CAMR and remanded the matter to the EPA for further proceedings. Although we believe that the Court's ruling is likely to ultimately result in the EPA developing stricter mercury control rules, as of the date of this report, the reaction of industry has generally been a wait and see approach, which we have seen in our current dealings with some of the coal-fired electric generating utilities.

The impact of state and federal mercury control regulation on the future of our business, and the long-term growth of the MEC market for the electric utility industry will most likely depend on the outcome of the recently remanded CAMR, and how the states and the federal government react to it. This will in turn mandate how industry must respond to final federal regulations, as well as state regulations, including those that are presently in various stages of enactment. As many as 1,100 existing coal-fired boilers may be affected by such regulations when they are fully implemented. Permitting of new coal-fired plants generally requires them to meet more stringent requirements that include controlling mercury emissions. For the near-term, our revenues from this market will depend on (i) DOE- and industry-funded contracts, (ii) mercury testing services and (iii) equipment sales and AC sold to new plants and existing plants affected by the implementation of enacted regulations. We do not expect significant revenue growth unless and until federal or state regulations impact a significant portion of existing boilers. Delays in, or derailment of, the passage of state mercury control legislation, or undue delay in adoption by the EPA of regulations replacing CAMR, would likely cause an adverse effect on our business and financial condition.

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**IF THE DEPARTMENT OF ENERGY (DOE) DISCONTINUES FUNDING OF EXISTING AND PLANNED CLEAN COAL TECHNOLOGY PROGRAMS, OUR BUSINESS WOULD BE HARMED.**

In 2007, 2006 and 2005, 37%, 45% and 39%, respectively of our revenues were derived from or related to DOE programs. Our revenues from government contracts would be adversely impacted by any material decrease in funding for the projects in which we are involved. In addition, we have looked to DOE funding as a significant means to further develop our technology and intellectual property in the areas of mercury emissions control and flue gas conditioning additives covered by that funding, and we are expecting that DOE will soon begin to fund research into CO<sub>2</sub> capture technology, which we are hoping to develop. Any material decrease in funding for the projects in which we are involved would hamper the development of our technology and intellectual property as it does not appear that we could currently fund the same level of research and development work apart from the funding provided to us by the DOE. President Bush's currently proposed federal budget for fiscal year 2008 does not contain any funding for the types of mercury control DOE projects we have historically participated in. Although we believe Congress will appropriate funds consistent with past practice, we cannot be sure that this will occur, and failure to appropriate such funds would be likely to have a material adverse effect on our business.

**INADEQUATE SUPPLIES OF ACTIVATED CARBON COULD ADVERSELY AFFECT OUR BUSINESS.**

We expect the demand for AC to increase as power plants begin to use ACI systems to control mercury emissions. We are currently developing sources and processing capabilities that we expect will allow us to supply AC for the mercury control market beginning later in 2008. We believe that it is important for us to be able to supply AC on an interim basis until our planned AC manufacturing facility comes on line in order to supply AC to our ACI systems customers, and to create relationships with customers we can ultimately shift over to AC to be supplied by our planned AC manufacturing facility. We expect that the majority of AC we would sell in the short term would come from foreign sources. If the production of AC, which is currently outside our control, is inadequate to meet the increased demand, it would likely have a negative impact on our business and financial condition.

**WE HAVE COMMITTED SIGNIFICANT RESOURCES TO THE DEVELOPMENT OF A GREENFIELD ACTIVATED CARBON MANUFACTURING FACILITY TO SUPPLY THE EMERGING MERCURY EMISSION CONTROL MARKET AND OUR INABILITY TO COMPLETE THE PROJECT IN A TIMELY MANNER WOULD LIKELY HAVE AN ADVERSE EFFECT ON OUR BUSINESS AND FINANCIAL CONDITION.**

We have committed significant resources to the development of a Greenfield AC manufacturing facility, to date having expended approximately \$8.1 million on preliminary development work, including plant design, environmental and other permitting, equipment design and procurement, options to acquire land and consulting fees. The all-in cost of the project is estimated at approximately \$300 million for a facility with one production line capable of producing approximately 175 million pounds of AC per year. Completion of the project will require funding well beyond our present capabilities. We anticipate obtaining funding from three sources: our own equity contributions (\$60 million), equity contributions from a strategic partner (\$60 million) and third-party debt financing (\$180 million). We do not presently have all of the funds necessary to provide our own equity capital contribution to the project, we have not yet entered into any agreements with a strategic partner whom we are seeking to fund the other 50% of the equity capital for the project, nor do we have any commitments for the debt financing that will be needed for the project. If we are unable to obtain the capital necessary to fund the capital contributions necessary for our own interest in the project, to enlist the services of a strategic partner who is capable of providing the additional equity we require for the project, or to obtain the debt financing for the project, we would in all likelihood be required to abandon the project, and our financial condition would be likely to suffer materially as a result.

**OUR PROJECT TO BUILD A GREENFIELD AC MANUFACTURING FACILITY POSES CERTAIN ADDITIONAL RISKS TO US, ANY OF WHICH COULD HAVE AN ADVERSE EFFECT ON OUR BUSINESS OR FINANCIAL CONDITION**

*If we are unable to complete our planned AC manufacturing facility by early 2010, we may suffer adverse consequences.*

We expect that the need for AC by coal-fired electric utilities will increase significantly, outstripping the available foreign and domestic supply by early 2010. If we incur any significant delays in the project that cause us to be unable to commence operations by that time, we could miss market opportunities that would have been available had we been able to commence operation of the facility by that date. This would likely materially adversely affect our business and financial condition.

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*Our management does not have significant experience in projects of the size and complexity of our planned AC manufacturing facility and that inexperience could adversely affect our business and financial condition.*

Although we have employees and have hired, and expect to hire, consultants who have past experience in the design, oversight and construction of complex manufacturing facilities, our management has limited experience in managing or overseeing projects as complex as this one. As a result, various difficulties might arise during the planning, construction or operation of the project, including delays in development or construction, deviations from planned schedule, cost overruns, or any of various other possible construction or operational complications, any of which could impact the viability of the project, thereby causing us to suffer material adverse effects on our business and financial condition.

*We will require long-term sales agreements for the AC to be produced by the facility.*

In order to obtain the planned financing necessary for our AC manufacturing facility, we will need to have secure long-term AC sales ( off-take ) contracts from significant customers who agree to take or pay for the AC to be produced by the facility. Although we are presently negotiating with several possible customers for such contracts, we do not presently have commitments for any contracts, and our inability to obtain them in a timely manner would likely result in our inability to obtain financing for the project.

*We will require long-term supply agreements for the lignite feedstock necessary to produce AC from our planned facility.*

In order to assure that we will be able to manufacture AC at our planned AC facility, we will need to obtain long-term contracts to supply the lignite coal necessary as feedstock for the AC to be produced at the facility. Although we are negotiating with a lignite supplier for such a contract, we do not presently have commitments for any contracts, and our inability to obtain them in a timely manner and on reasonable terms would require us to abandon the project.

*We will require environmental and other permits for the plant which we do not yet have.*

We are in the process of applying for and/or obtaining air and other environmental and building permits from state, local and federal authorities for two potential plant sites, one in Louisiana and one in North Dakota. The air permit in Louisiana has been passed on to the EPA for review. We cannot assure you that we will obtain the necessary permits to build a facility in either Louisiana or North Dakota. If we fail to do so, we would likely have to delay or cancel the project.

**FAILURE TO PROTECT OUR INTELLECTUAL PROPERTY OR INFRINGEMENT BY US OF INTELLECTUAL PROPERTY OF A THIRD PARTY COULD HAVE AN ADVERSE IMPACT ON OUR FINANCIAL CONDITION.**

We rely on a combination of patent, copyright and trademark laws, trade secrets, confidentiality procedures and contractual provisions to protect our proprietary rights. Such means of protecting our proprietary rights may not be adequate because such laws provide only limited protection. We also enter into confidentiality and non-disclosure of intellectual property agreements with our employees, consultants and many of our vendors, and generally control access to and distribution of our proprietary information. Notwithstanding these precautions, it may be possible for a third party to copy or otherwise obtain and use our proprietary information without authorization. Policing unauthorized use of intellectual property is difficult. The laws of other countries may afford little or no effective protection of our technology. We cannot assure you that the steps taken by us will prevent misappropriation of our technology, which could result in injury to our business. In addition, pursuing persons who might misappropriate our intellectual property could be costly and divert the attention of our management from the operation of our business.

We are not aware and do not believe that any of our technologies or products infringe the proprietary rights of third parties. Nevertheless, third parties may claim infringement with respect to our current or future technologies or products or products manufactured by others and incorporating our technologies. We have entered into certain license agreements with Clean Coal, and may enter into additional license agreements with others, under which we agree to indemnify and hold the licensee harmless from and against losses it may incur as a result of the infringement of third party rights by our patents or other intellectual property. Responding to claims, whether or not they are found to have merit, can be time consuming, result in costly litigation, cause development delays, require us to enter into royalty or license agreements, or require us to cease using the technology that is the intellectual property of a third party. Royalty or license agreements may not be available on acceptable terms or at all. As a result, infringement claims could have a material adverse affect on our business, operating results, and financial condition.

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**THE MARKET FOR OUR PLANNED REFINED COAL PRODUCT AND QUALIFICATION FOR THE SECTION 45 TAX CREDIT ARE UNCERTAIN AND COULD ADVERSELY AFFECT OUR FUTURE GROWTH AND PROFITABILITY.**

The ability of Clean Coal to sell its planned RC product and qualify for the expected Section 45 tax credits depends on several conditions, including meeting the requirements of a presently unclear law which we believe requires corrective legislation that has not yet been enacted, selling the RC at the mark-up required by the law, contracting with monetizers to facilitate the sale of the required facilities, and completing and making operational such facilities prior to January 1, 2009, the date presently required by the law. The inability of Clean Coal to successfully resolve and complete any of these conditions would likely have an adverse effect on our future growth and profitability.

**THE LOSS OF KEY RELATIONSHIPS WOULD ADVERSELY AFFECT OUR SALES AND FINANCIAL CONDITION.**

We have developed key industry relationships with companies much larger than ourselves. We will need to enter into agreements with various companies to carry out our planned project to build an AC manufacturing facility, which are important and/or will be essential to allow us to position ourselves in the MEC market from coal-fueled power plants. Our inability to enter into these agreements could adversely affect our future growth, profitability and financial condition.

**TECHNICAL OR OPERATIONAL PROBLEMS WITH LONG-TERM OPERATION OF ACTIVATED CARBON INJECTION SYSTEMS COULD RESULT IN DELAYS THAT ADVERSELY AFFECT OUR FINANCIAL CONDITION.**

We started to install our ACI systems at coal-fired power plants on a permanent basis for the first time in 2006. We cannot assure that there will be not be technical or operational problems with our ACI systems from long-term operations. Any such problems could result in delays in, or postponement or cancellation of, expected installations at power plants, and would likely have a material adverse effect on our business.

**OUR DEPENDENCE ON THIRD PARTIES FOR MANUFACTURING KEY COMPONENTS MAY CAUSE DELAYS IN ASSEMBLY AND INCREASED COSTS TO US.**

We do not currently have our own manufacturing or assembly facility for our ACI systems or other components that we sell in our business. We rely upon third parties for the manufacture, assembly and some of the testing of key components. Delays and difficulties in the manufacturing or assembly of our products could substantially harm our business and financial condition.

There are limited sources of acceptable supply for some key ACI system components. Business disruptions, financial difficulties of the manufacturers or suppliers of these components, or raw material shortages could increase the cost of our goods sold or reduce the availability of these components. To date, we have been able to obtain adequate supplies of these key components. If sales accelerate, we may experience a rapid and substantial increase in our need for components. If we are unable to obtain a sufficient supply of required components, we could experience significant delays in manufacturing, which could result in the loss of orders, customers or liability for liquidated damages under delivery contracts. This could materially and adversely affect our business, financial condition and results of operations.

Although we may purchase inventories of strategic components, some parts of the systems (such as silos) may require custom fabrication, and may not be amenable to being stocked as part of standard inventory. Alternative sources may be difficult to locate if we experience delays in obtaining them from our usual suppliers. If the cost of components increases, we may not be able to pass on price increases to our customers if we are to remain competitive. The occurrence of any of these difficulties would likely have an adverse effect on our business and financial condition.

**THE EFFECT OF ISSUING PERFORMANCE GUARANTEES FOR COMMERCIAL ACTIVATED CARBON INJECTION SYSTEMS IS UNKNOWN AND COULD ADVERSELY AFFECT OUR FINANCIAL CONDITION.**

Performance guarantees have been and may likely continue to be an integral part of successful sales of our ACI systems. Such guarantees typically require levels of mercury removal efficiency based on stated injection rates of a specified or approved AC given other operating parameters, including the nature of the coal burned. Provisions of such guarantees generally require us to spend amounts up to the value of the sales contract to make right the performance of the ACI, if the guaranteed level of performance is not achieved. Any substantial payments under such guarantees would have an adverse effect on our financial condition and our ability to generate future sales.

**WE CANNOT BE CERTAIN THAT FGC DEMONSTRATIONS WILL LEAD TO SALES.**

Although we are scheduled to perform an additional demonstration project for our FGC technology in 2008, we cannot be certain that this demonstration, or any others we might be called upon to perform, will be successful or that future revenues will result from that demonstration.

**ANY DECREASE IN THE USE OF COAL OR INCREASE IN THE USE OF ALTERNATIVE ENERGY SOURCES BY ELECTRIC UTILITY COMPANIES COULD ADVERSELY AFFECT OUR FINANCIAL CONDITION AND BUSINESS.**

Our business depends substantially on providing air pollution and operating cost solutions to coal-fueled power plants. If the use of coal declines as a result of increases in the use of alternative fuels or alternative energy sources, technological developments or general economic conditions, our financial condition and business could be materially adversely affected.

**IF WE ARE UNABLE TO COMPETE WITH OTHER INDUSTRY PARTICIPANTS, WE WOULD SUFFER ADVERSE EFFECTS TO OUR BUSINESS AND FINANCIAL CONDITION.**

We face competition in all aspects of our operations, and will face competition in the AC supply business, including competition from both domestic and foreign suppliers. In North America, our competitors consist of large national companies, and local and regional companies of varying sizes and financial resources. Certain of our competitors may have significant advantages over us, including substantially greater financial, technical, personnel and other resources, and brand name recognition. We may not be able to successfully compete with them. In addition, competitors may reduce their prices to expand sales volume or to win competitively bid contracts. If this happens, we may be required to offer lower pricing to attract or retain our customers, resulting in an adverse impact to our margins, revenues and business.

**OUR FINANCIAL RESULTS MAY FLUCTUATE AS A RESULT OF SEASONALITY AND OTHER FACTORS, INCLUDING THE DEMAND FOR ENVIRONMENTAL TECHNOLOGY AND SPECIALTY CHEMICALS, WHICH MAKES IT DIFFICULT TO PREDICT OUR FUTURE PERFORMANCE.**

The sale of FGC chemicals depends on the operations of the utilities to which such chemicals are provided. Our FGC customers routinely schedule maintenance outages in the spring of each year. During the period of such outages, which may range from two weeks to over a month, no FGC chemicals are used and purchases from us are correspondingly reduced.

**INADEQUATE SUPPLIES OF COAL COULD ADVERSELY AFFECT OUR PROFITABILITY.**

Our profitability depends on working with coal-fueled power plants. If economically recoverable coal reserves are not available or if coal cannot be readily supplied to power plants because of transportation, labor or other issues, such unavailability could adversely affect our profitability and impede the growth of our business.

**WE ARE AN EMERGING COMPANY IN A NEW INDUSTRY, WHICH ENTAILS RISKS THAT COULD IMPAIR OUR BUSINESS.**

We intend to pursue a growth strategy for the foreseeable future by expanding our environmental technology/specialty chemicals business into the emerging MEC market. We anticipate that future operations will place a strain on management, information systems and other resources. We expect that we will need to attract and integrate new personnel, improve existing procedures and controls and implement new ones to support future growth. Any inability to meet our future hiring needs and to adapt our procedures and controls accordingly could have a material adverse effect on our results of operations, financial condition and business prospects. In addition, if we make strategic acquisitions, we must successfully integrate the acquired operations in a timely manner. We cannot assure you that we will be able to manage expected growth, and our inability to do so could materially adversely affect our results of operations and business.

**WE DEPEND ON KEY PERSONNEL.**

We depend on the performance of our senior management team - including Jonathan Barr, C. Jean Bustard, Dr. Michael Durham, Cameron Martin, Mark McKinnies, Richard Miller, John Rectenwald, Richard Schlager and Sharon Sjostrom, and their direct reports and other key employees, particularly highly skilled engineers. Our success depends on our ability to attract, retain and motivate these individuals. We do not have any binding agreements with any of our employees that prevent them from leaving our Company at any



time without any restrictions on their competing against us after their employment terminates. We compete heavily for these types of personnel. In addition, although we maintain key person life insurance on certain of our executives, the loss of the services of any of our key employees or our failure to attract, retain and motivate key employees, could harm our business.

**WE DEPEND SUBSTANTIALLY ON CONSULTANTS FOR SEVERAL KEY AREAS OF OUR BUSINESS, AND THE LOSS OF ONE OR MORE OF THESE CONSULTANTS COULD HAVE AN ADVERSE EFFECT ON OUR BUSINESS.**

We have engaged consultants to assist us with the operation of our RC business as well as to oversee the planning, permitting and construction of our proposed AC manufacturing facility. The agreements we have with these consultants contain provisions that are intended to protect our confidential information, and also prevent the consultants from competing with us during the terms of their agreements. The agreements do not, however, prevent these consultants from competing with us following the termination of their agreements. If we were to lose one or more of our consultants, it might be difficult to timely replace the lost consultant on reasonable terms, and our business could be harmed if one or more of our consultants were to engage in activities competitive with one of our areas of interest.

**MATERIAL ADJUSTMENTS PURSUANT TO DOE AUDITS OF OUR PAST PERFORMANCE COULD HAVE A DETRIMENTAL IMPACT ON OUR BUSINESS.**

11 of our completed and current contracts awarded by the DOE and related industry participants remain subject to adjustments as a result of future government audits. Our historical experience with these audits has not resulted in significant adverse adjustments to amounts previously received, however the audits for the years 2002 through 2007 have not been finalized. Revenues recognized from 2002 through 2007 that are subject to government audit totaled approximately \$26.2 million. In addition, we had \$5.4 million of remaining unearned amounts under contracts subject to audit as of December 31, 2007, \$3.0 million of which we expect to recognize in 2008. If audits for open years were to require us to repay material amounts, our results of operations and business would likely suffer material adverse impacts.

**CHANGES IN TAXATION RULES OR FINANCIAL ACCOUNTING STANDARDS COULD ADVERSELY AFFECT OUR RESULTS OF OPERATIONS.**

Changes in taxation rules and accounting pronouncements (and changes in interpretations of accounting pronouncements) have occurred and may occur in the future. A change in existing taxation rules or accounting standards could have an adverse effect on our reported results of operations.

**RISKS RELATING TO OUR COMMON STOCK**

**A SIGNIFICANT PORTION OF OUR OUTSTANDING SHARES OF COMMON STOCK MAY BE SOLD IN THE PUBLIC MARKET, WHICH COULD LOWER THE MARKET PRICE OF OUR STOCK.**

As of December 31, 2007, we had 5,683,689 shares of common stock issued and outstanding. We sold 789,089 shares of common stock in a private placement offering in October, 2005, and those shares are no longer restricted from resale in the public market. Sales of substantial amounts of our common stock, or the perception that such sales might occur, may have a material adverse effect on our stock price.

**THE ISSUANCE OF ADDITIONAL SECURITIES IN THE FUTURE COULD HARM THE BOOK VALUE OF THE OUTSTANDING SHARES OF OUR COMMON STOCK.**

We will need to raise capital to pursue our current development plans, and we expect to raise that capital through the issuance of our securities, likely through issuance of shares of our common stock. We might, however, also issue convertible securities, preferred stock or debt instruments having liquidation, dividend and other preferences and priorities over those of our common stock. Subject to the requirements of our NASDAQ Stock Market listing, our Board of Directors has the authority to offer and sell additional securities without the vote of, or notice to, existing shareholders. In 2007, shareholders approved the issuance of up to three million shares of our common stock to fund our development activities and our anticipated equity participation in our Greenfield AC manufacturing facility. It is likely that we will issue additional securities to obtain capital for this or other purposes, or in connection with acquisitions. The issuance of additional securities could dilute the percentage interests and per share book value of existing shareholders, and have a detrimental impact on the market for our common stock.

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**LACK OF EXPECTED DIVIDENDS MAY MAKE OUR STOCK LESS ATTRACTIVE AS AN INVESTMENT.**

We intend to retain all future earnings for the foreseeable future for use in the development of our business. We therefore do not anticipate paying any cash dividends on our common stock for the foreseeable future. Generally, stocks that pay regular dividends command higher market trading prices, and our stock price may therefore be lower as a result of our dividend policy.

**COMPLIANCE WITH SECURITIES LAWS AND REGULATIONS COULD BE COSTLY.**

The Sarbanes Oxley Act ( SOX Act ) and the rules and regulations promulgated by the SEC and the NASDAQ Stock Market affect the scope, complexity and cost of corporate governance, regulatory compliance and reporting, and disclosure practices. Our management is required to deliver a report that assesses the effectiveness of our internal controls over financial reporting, pursuant to Section 302 of the SOX Act. Section 404 of the SOX Act requires our independent registered public accounting firm to deliver an attestation report on the operating effectiveness of our internal controls over financial reporting in conjunction with their opinion on our audited financial statements as of each December 31. We had material weaknesses identified as of the end of our 2006 fiscal year, which we believe have been remediated at this time; however, we cannot guarantee that material weaknesses will not be identified in the future in connection with our compliance with the provisions of Sections 302 and 404 of the SOX Act. The existence of any such material weakness would preclude a conclusion by management and our independent registered public accounting firm that we maintained effective internal control over financial reporting. Our management may be required to devote significant time and expense to remediate any material weaknesses that may be discovered and may not be able to remediate any material weaknesses in a timely manner. The existence of any material weakness in our internal control over financial reporting could also result in errors in our financial statements that could require us to restate our financial statements, cause us to fail to meet our reporting obligations and cause shareholders to lose confidence in our reported financial information, all of which could lead to a decline in the market price of our common stock.

**Item 1B. Unresolved Staff Comments.**

None.

**Item 2. Properties.**

**Office Leases**

We do not own any real property, but lease all of our office facilities. We lease approximately 20,000 square feet of combined office and warehouse space in Littleton, Colorado, a suburb of Denver. The term of the lease runs through August 31, 2010, and the lease agreement has an option to extend the term for five years. We lease 440 square feet of office space in Columbia, Maryland on a month to month basis. In the near-term, we believe that sufficient space is available at reasonable rates in areas where we do business. Future annual lease costs are expected to amount to approximately \$207,000 through August 31, 2010.

**AC Manufacturing Facility Needs**

In order to construct our planned AC manufacturing facility, we will require real property upon which to locate the facility. We currently have an option to purchase the primary facility site, as described in the air permit application. We plan to enter into agreements to procure additional property and rights of way as necessary to support plant operations.

**Item 3. Legal Proceedings.**

There are no reportable pending legal proceedings involving the Company or our subsidiaries.

**Item 4. Submission of Matters to a Vote of Security Holders.**

No matters were submitted to a vote of the security holders, through the solicitation of proxies or otherwise, during the quarter ended December 31, 2007.



## PART II

**Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.**  
**Market for Common Equity and Related Stockholder Matters**

**Market Information**

Our common stock commenced trading on the NASDAQ Capital (formerly SmallCap) Market on October 14, 2004 under the symbol ADES. During 2007, 2006 and 2005 closing sales price ranges were as follows:

	2007		2006		2005	
	High	Low	High	Low	High	Low
1 <sup>st</sup> Quarter	\$ 16.92	\$ 13.00	\$ 24.14	\$ 21.68	\$ 31.38	\$ 22.40
2 <sup>nd</sup> Quarter	\$ 22.67	\$ 13.80	\$ 22.28	\$ 17.15	\$ 25.22	\$ 13.51
3 <sup>rd</sup> Quarter	\$ 22.26	\$ 10.19	\$ 15.44	\$ 13.00	\$ 24.00	\$ 14.55
4 <sup>th</sup> Quarter	\$ 13.61	\$ 7.15	\$ 16.60	\$ 13.95	\$ 20.50	\$ 14.40

The price ranges shown in the above table are based on NASDAQ quoted sales prices. The sale prices may reflect inter-dealer prices, without retail mark-up, markdown or commission and may not represent actual transactions.

**Holdings**

The number of record holders of our common stock as of February 29, 2008 was approximately 1,700; the approximate number of beneficial shareholders is estimated at 3,600.

**Dividends**

We have not paid dividends since inception and we have no plans for paying dividends in the foreseeable future.

**Securities authorized for issuance under equity compensation plans**

The disclosure required by this Item is included under Item 12 of this Report.

**Recent Sales of Unregistered Securities**

None

**Purchases of Equity Securities by the Company and Affiliated Purchasers**

Neither we nor any affiliated purchaser, as defined in SEC Rule 10b-18(a)(3), purchased any of our equity securities during the quarter ended December 31, 2007.

**Item 6. Selected Financial Data.**

**FIVE-YEAR SUMMARY OF SELECTED FINANCIAL DATA**

<i>(Dollars in thousands, except per share data)</i>	Years Ended December 31,				
	2007	2006	2005	2004	2003
<b><u>Income Statement Data:</u></b>					
Revenues	\$ 19,248	\$ 15,488	\$ 11,028	\$ 8,417	\$ 5,863

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Income from continuing operations	\$ 247	\$ 377	\$ 663	\$ 336	\$ 409
Income from continuing operations, per common share, basic and diluted	\$ .05	\$ .07	\$ .13	\$ .08	\$ .12
Dividends declared per common share	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-

As of December 31,

**Balance Sheet Data (at year end):**

Total assets	\$ 34,906	\$ 31,754	\$ 28,716	\$ 13,080	\$ 4,700
Long-term debt	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ 796
Stockholders' equity	\$ 28,404	\$ 27,641	\$ 25,856	\$ 12,010	\$ 2,973

See the audited financial statements attached hereto under Item 8 for additional information.

**QUARTERLY FINANCIAL DATA UNAUDITED**

	2007				2006			
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
<i>(Dollars in thousands except per share data)</i>								
<b>Revenues</b>	\$ 3,904	\$ 4,942	\$ 5,601	\$ 4,801	\$ 3,649	\$ 3,306	\$ 4,448	\$ 4,085
<b>Gross margin</b>	\$ 1,589	\$ 1,529	\$ 1,669	\$ 1,230	\$ 1,378	\$ 1,144	\$ 1,290	\$ 2,094
<b>Net income (loss)</b>	\$ (23)	\$ 55	\$ 215	\$ 0	\$ 238	\$ 44	\$ (128)	\$ 223
<b>Common Stock Data</b>								
Basic and Diluted:								
Net income (loss) per share	\$ .00	\$ .01	\$ .04	\$ .00	\$ .04	\$ .01	\$ (.02)	\$ .04
Average common shares outstanding:								
Basic	5,635	5,641	5,642	5,649	5,616	5,624	5,627	5,631
Diluted	5,635	5,770	5,676	5,681	5,834	5,875	5,627	5,708

**Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operation.**  
**Overview**

We provide environmental technologies and specialty chemicals to the coal-burning electric utility industry. Revenues are generated through (1) time and materials and fixed-price contracts for the emerging mercury emission control ( MEC ) market, several of which are co-funded by government (the DOE) and industry and (2) the sale of specialty chemicals and services for flue gas conditioning ( FGC ) and other applications.

Mercury has been identified as a toxic substance and pursuant to a court order; the EPA issued CAMR in March 2005. The United States Court of Appeals for the DC Circuit ruled that the EPA had erred in the process by which it adopted CAMR, invalidated the rules and remanded the matter back to the EPA in February 2008. The long-term growth of the MEC market for the electric utility industry will most likely depend on how industry responds to federal and state regulations, which are in various stages of enactment. As many as 1,100 existing coal-fired boilers may be affected by such regulations, if and when they are enacted and fully implemented. We have recently seen a significant increase in new plant projects. DOE's latest report, issued in 2007, includes 121 potential new projects totaling 72GW of capacity. Permitting of new coal-fired plants generally requires them to meet more stringent requirements that include MEC. For the near-term, our revenues from this market will depend on (i) DOE- and industry-funded contracts mentioned above, (ii) mercury testing services, (iii) equipment sales and (iv) AC sales to new and existing plants affected by the implementation of enacted regulations, which we expect to commence in 2008. State regulations and increasing numbers of consent decrees are becoming the largest market driver for this part of our business. Although we expect this market to show steady growth over the next several years, we believe the most significant revenue growth will occur when final federal regulations impact a significant portion of previously uncontrolled, existing boilers.

In addition to our two key growth areas, mercury control and RC, we continue to demonstrate our position as a premier developer of innovative clean energy technologies. Control of carbon dioxide from coal-fired power plants is currently a hot topic in Washington and a significant issue for the coal industry. In addition, the coal-fired power industry has been under increased scrutiny over environmental issues this past year especially related to the impact of carbon dioxide emissions on climate change. A number of permits for new coal-fired plants were rejected by various state officials in response to protests by environmental groups. We see this as an opportunity and have begun developing technologies to address the needs of our customers through reduction of carbon generation, carbon capture and beneficial use of the carbon.

The market for our FGC chemicals and services has been declining over the last couple of years, but we expect it to increase in the near-term based on recent inquiries to which we have responded about our product in meeting the needs of the changing regulation of mercury emissions. Margins on these products are typically higher than what we recognize for our present MEC sales, which are 34% as compared to 31%, respectively and represent an important but decreasing contribution to our overall profitability. Overall, margins for 2007 decreased to 31% from gross margins of 38% in 2006. We expect that overall gross margins will continue to decline somewhat in 2008 as MEC becomes a larger component of our total revenues.

In 2007, we signed contracts for 16 activated carbon injection ( ACI ) systems to be delivered in 2008 through 2010, bringing the total number of ACI systems that we have installed to date or are in process as of December 31, 2007 to 29. We have commenced work on two additional systems thus far in 2008 and we expect several more ACI system contracts to be awarded to us during the year. In the fourth quarter of 2007, we responded to 19 requests from customers for ACI system quotes. Various consent decrees and state regulations are driving the current market in this rapidly growing portion of our business. We expect that the current state regulations will require an additional 70 systems that should be awarded in 2008 and 2009. We believe the eventual outcome of the recently remanded CAMR will accelerate and further expand the market for our MEC products and services. Because many of our current and potential customers would be affected by new federal regulations replacing CAMR, we are seeing some delays in the decision-making process on mercury control as a result of the invalidation of CAMR, which could postpone the award of some near term projects as utilities revise their long-term plans for compliance. Some contracts that we expected would be awarded in February 2008 have been postponed and we have been asked to extend the periods for our bids to remain open. Revenue from ACI system contracts totaled \$9.6 million for the year ended December 31, 2007. We had contracts in progress at year-end for supply of ACI systems totaling approximately \$11.3 million. We expect to complete and realize approximately \$6.1 million of revenue under these contracts in 2008 and the remaining revenue in 2009 and 2010

DOE periodically evaluates its funding priorities and budgets and adjusts funding commitments to its contractors accordingly. During 2007, the DOE decreased its commitment on one of our contracts by \$800,000, which resulted in us reducing the scope of work performed related to the project. As of December 31, 2007 the DOE has yet to commit approximately \$600,000 of funds for two of our existing projects. We expect DOE funding for future mercury control projects to decline as the mercury control market matures. However, we expect funding for mercury control evaluation and testing projects directly from utilities to increase as they strive to meet state and local regulations. In addition, we anticipate that DOE may fund other projects related to our business, including projects aimed at carbon dioxide control. Assuming no additional changes in government funding, we expect to recognize the remaining revenue on in-progress DOE contracts totaling \$5.4 million as of December 31, 2007, recognizing approximately \$3.0 million during 2008, and \$2.4 million from 2009 through 2010. If further funding is not approved by DOE, we would decrease or cease activities on those contracts and would expect to maintain positive cash flow on these contracts, but at a reduced level. We expect DOE programs to represent a decreasing percentage of revenues over the next few years as we focus more on market growth for ACI systems for mercury emission control and the sale of AC from interim sources to utility customers.

In 2006, we entered into our 50% Clean Coal joint venture with NexGen to market our refined coal technology, as further described in Part I, Item 1 above. We received a \$1 million non-refundable payment from NexGen upon completion of a successful demonstration of our RC product in 2006. We are obligated to fund half of the operating costs for the JV, and we expect our portion of these costs to average approximately \$28,000 per month or approximately \$336,000 total in 2008. Our net operating loss for 2007 includes net costs of \$247,000 related to our RC efforts and \$150,000 from the JV. If the JV succeeds in obtaining approval for the anticipated Section 45 tax credits, NexGen has the right to maintain its 50% interest by paying us an additional \$4.0 million, in eight quarterly payments of \$500,000 each, beginning in the quarter the JV receives qualification. We expect clarifying legislation to be enacted in 2008 to make the Section 45 tax credits available to us. If such legislation is not enacted, we expect that we would continue to market and sell our clean coal technology through the JV, but it is likely that it would be a relatively small part of our business.

As part of our strategy to address the growing MEC market, we are not only pursuing internal, organic growth, but we have also been and expect to continue to be engaged in merger and acquisition (M&A) activities, particularly with respect to the vertical integration of our business to establish an invested role in the production and supply of AC and in the manufacture of ACI systems. Our M&A activities have been and will likely be focused on candidates engaged in those businesses. The costs we incur in our M&A activities may be significant. Such costs are currently generally deferred and either (a) expensed when it has been determined they are no longer of future value, or (b) capitalized as part of an acquisition and then subject to future impairment evaluations.

During 2007, our Board of Directors committed the necessary resources to continue the development of a new Greenfield AC manufacturing facility. Previously, we had announced that in order to stay ahead of an expected billion dollar market, we had undertaken preliminary activities for the new facility including plant design, initial permitting, securing key lignite reserves, and

third-party market analysis. Approved and funded activities completed in 2007 include plant design, securing options on various desirable properties for the plant, and filing of applications for necessary permits. We expect to obtain the operating permit for the first two production lines within the first half of 2008. We are in the process of specifying and sourcing of key capital equipment, and negotiating with potential financial partners.

In 2007, we incurred \$7.2 million in costs primarily for the development of an AC manufacturing plant, which costs have been deferred and are classified on the balance sheet as Development Projects. Such development costs are generally deferred and either (a) expensed when it has been determined they are no longer of future value, or (b) capitalized as part of long-term assets and then subject to future impairment evaluations. As of December 31, 2007, we believe that all the deferred charges have future value.

We produced our first batches of AC in January 2008 and in February we completed the first performance tests of the product at a power plant. While operating with our AC, mercury emissions were reduced by greater than 90% at a very competitive feed rate. To control mercury for these plants it is necessary to use the higher priced chemically treated AC. This was an important milestone for us, because we now have our own tested product to sell to our customers. Our interim supply plan creates greater potential for AC sales revenue in 2008 and 2009, and should enable us to compete for contracts that require AC supply prior to the 2010 startup of our first planned production line. We intend to put together the facilities and sourcing contracts so that by the end of 2008, we can supply up to 10 million pounds of AC per year and increase capacity to 30 to 50 million pounds per year by the end of 2009. Capital expenditures are expected to be less than \$2 Million. With the high costs of the foreign carbons and transportation expenses, this business is expected to operate at approximately 20% gross margins. Once our new manufacturing plant becomes operational, we expect the margins for our AC to increase to 60% or higher.

#### **Results of Operations 2007 versus 2006**

Revenues totaled \$19.2 million for 2007 versus \$15.5 million in 2006, representing an increase of 24%. Revenues in our MEC segment for 2007 increased by \$4.3 million (32%), and FGC and other activities decreased by (\$587,000) (31%).

Revenues in 2007 from the MEC segment were comprised of sales of ACI systems (53%), and government and industry-supported contracts (40%), and consulting services (7%), compared to 38%, 51% and 11%, respectively, in 2006. For the year, sales of our ACI systems contributed approximately \$9.6 million to MEC revenues recognized for the year, increasing 85% from the 2006 contribution to revenue of \$5.2 million. We had contracts in progress at year-end for supply of ACI systems totaling approximately \$11.3 million. We expect to complete and realize approximately \$6.1 million of revenue under these contracts in 2008 and the remaining revenue in 2009 and 2010.

Our DOE and industry demonstration contract revenues totaled \$7.2 million in 2007, representing an increase of 3% from 2006 revenues. The remaining unearned amount of these contracts was \$5.4 million as of December 31, 2007, of which expect to recognize \$3.0 million in 2008 (including cash contributions by other industry partners). Government funded work for mercury demonstration projects is diminishing as the market has moved into a commercial phase. During 2007, DOE decreased its commitment on one of our contracts by \$800,000. Future commitments on two other projects have not been made as of the end of 2007 in the amount of \$600,000, and it is unclear whether the funds will be allocated and paid on the contracts. Consequently those funds remain at risk pending funding decisions by DOE, and it is possible that other contract amounts could also be decreased or eliminated. We expect increased funding for CO<sub>2</sub> control technology will begin to replace that source of revenues for us beginning in late 2008 and continuing into 2009. While the dollar amount of revenues from both government and industry-supported contracts and ACI systems sales increased from 2006 to 2007, the most significant growth occurred in the sales of ACI systems, which increased \$4.4 million or 85% from 2006 to 2007, and is the result of an increasing number of system sales as noted above. We expect growth in 2008 in the MEC segment to result primarily from an increasing number of ACI systems sales, from existing government and industry-supported contracts and expected increase in funding for CO<sub>2</sub> technology from government and industry supported contracts.

Our contracts with the government are subject to audit by the federal government, which could result in adjustment(s) to previously recognized revenue. We believe, however, that we have complied with all requirements of the contracts and future adjustments, if any, will not be material. In addition, the federal government must appropriate funds on an annual basis to support these DOE contracts, and funding is always subject to unknown and uncontrollable contingencies. While we are not aware of any plans by DOE to reduce funding on projects currently under contract except as discussed above, we expect DOE funding for future mercury control projects to decline as the mercury control market matures. However, we expect funding from utilities for mercury control for evaluation and testing to increase to meet state and local regulations and that DOE may fund other projects related to our business, including carbon dioxide control.



Revenues from consulting services included in the MEC segment decreased approximately \$242,000, from 2006 to 2007, as a result of customer delays.

FGC and other revenues comprised 7% of total revenues in 2007, compared to 12% in 2006. FGC and other revenues decreased due to fewer sales of chemical and revenues related to continuing customers. We expect FGC and other revenues in 2008 to be higher than 2007, as we are responding to a recent interest in our product generated by the growth of mercury control mandates. We have one demonstration project scheduled for 2008. This segment's gross revenues for 2007 include approximately \$120,000 of chemical sales by Clean Coal. Under existing agreements between us and Clean Coal we will continue to sell such chemicals to the JV at a minor discount and accordingly, the impact on our future revenues is not expected to be material. Sales related to ADA-249M are recorded in the FGC and Other segment and were \$124,000, \$60,000 and \$327,000 in 2007, 2006 and 2005, respectively.

Cost of revenues increased by \$3.6 million or 38% in 2007 from 2006 as a result of increased volume and a change in our business product mix, as discussed below. Gross margins were 31% for the year as compared to 38% in 2006. The decrease reflects decreased margins in both MEC and FGC and other segments as described below. For the near term, we expect the sales of mercury control systems and fixed price consulting to continue to represent an increasing source of revenues, for which the anticipated gross margins are lower than for our specialty chemical sales and DOE demonstration work that involves industry cost sharing. As a result, we expect the gross margin for fiscal year 2008 to be slightly lower than the margin realized in fiscal year 2007.

Cost of revenues for the MEC segment increased by \$4.0 million in 2007 or 47%, as compared to the same periods in 2006 primarily due to our increased volume of ACI systems sales. Gross margins for the MEC segment were 31% in 2007 as compared to 38% in 2006. Government and industry supported revenue which has historically generated higher margins, decreased as an overall percent of the revenue in 2007 as compared to 2006, which contributed to the lower overall margins. Another factor in the decline of margins in the ACI systems market is increased downward pricing pressure as a result of competition. As the mercury control market is maturing, we expect more companies to bid on ACI systems. Increased competition in this area has, and we expect will continue, to require us to lower our margins to maintain our market share, which is currently around 40%. Looking further ahead, we expect CO<sub>2</sub> demonstration work and sales of activated carbon to positively affect margins.

Cost of revenues for the FGC and other segment decreased by \$304,000 or 26% in 2007, as compared to 2006 primarily as a result of decreased chemical sales. Gross margins for this segment were 34% for 2007 as compared to 39% in 2006. The decrease in gross margins from 2006 to 2007 is a result of increased FGC sales of a product we license from ARKAY Technologies, which carries a lower margin than historical FGC sales, as well as lower margins that we recognized on certain demonstration projects we carried out in 2007. FGC revenues represent primarily chemical sales, which carry a higher margin than the typical fixed price and time and materials sales in MEC revenues, although for the reasons described, we achieved lower margins on FGC and other segment sales in 2007 than in 2006.

We expect the amount of fixed price and time and materials work in the MEC segment for the near term to represent an increasing percentage of revenue. Overall gross margins for 2008 are therefore expected to decline somewhat from the levels achieved in 2007, as a result of an increasing proportion of fixed price and time and materials work, our assumption of an increasing share of costs in the field demonstration projects in which we have elected to participate and pricing pressure caused by increased competition.

General and administrative expenses increased by \$1.0 million or 25% to \$5.2 million in 2007. The dollar increase in 2007 resulted primarily from the increased number of employees, employee benefits, other overhead expenses and costs associated with the Sarbanes Oxley Act Section 404 compliance requirements (approximately \$478,000). Accounting, legal, IT and other consulting increased due to growth (approximately \$356,000). Included in our general and administrative expenses was approximately \$240,000 related to share based compensation. We continue to hire personnel in response to the growth realized and expected, and sufficient resources of skilled labor have been and are expected to be available to meet anticipated needs.

We incur R&D expenses not only on direct activities we conduct but also by sharing a portion of the costs in the government and industry programs in which we participate. Total research and development expenses decreased by (\$263,000) or 18% in 2007 as compared to 2006. Our direct cost share for R&D under DOE related contracts decreased from \$481,000 in 2006 to \$163,000 in 2007, reflecting the anticipated decrease in our cost share contribution and the overall decrease in mercury related demonstrations that we carried out during the year. The decrease is somewhat offset by increased activities related to preparing for growth in the delivery of our ACI systems, as well as our RC activities. Future consolidated research and development expenses, except for those anticipated to be funded by the DOE contracts and others that may be awarded, are expected to be close to, or slightly higher in 2008 as compared to 2007. We continue to anticipate that our future direct research and development expense will grow annually at about 10% for the next several years.

MEC segment profits increased by \$1.0 million or 33% to \$4.0 million as compared to 2006. The increase was primarily a result of increased MEC segment revenues from ACI systems and improved margins on our DOE contracts. FGC and other segment profits decreased by \$336,000 or 119% to a loss of (\$54,000), as compared to a profit of \$282,000 in 2006. The decrease was primarily the result of increasing project development costs incurred during the year, lower margin chemical sales and decreasing segment revenues.

We had net interest and other income of \$1.0 million in 2007, as compared to \$909,000 for 2006. The interest income consists of \$669,000 earned from our money market deposits and \$255,000 from our investment in corporate and government bonds. We anticipate interest income to decline in 2008, as we expect to use a portion of our working capital to fund our development projects and other activities, which will result in lower balances invested. A decrease in interest rates is also occurring and will reduce interest income on invested balances.

Other income and expense included our minority interest in the loss in Clean Coal, our JV with an affiliate of NexGen, which is pursuing RC opportunities. The minority interest in the JV's loss amounted to \$90,000 in 2007. Our net operating loss for 2007 includes net costs of \$247,000 related to our RC efforts and \$150,000 from the JV. We incurred an additional \$50,000 of expenses related to our direct JV activities in 2007. Through 2007, we have conducted three full-scale tests of our RC product, who demonstrated our ability to meet the emission control performance required to qualify for the Section 45 tax credits. However, clarifying legislation is needed to address certain RC pricing requirements in the statute, which we expect will occur in 2008. If the JV succeeds in obtaining approval for the Section 45 tax credits, NexGen has the right to maintain its 50% interest by paying us an additional \$4.0 million, in eight quarterly payments of \$500,000 each, beginning in the quarter the JV receives qualification. We expect to receive indication that our process qualifies for the Section 45 tax credits in 2008. NexGen is not obligated to make those payments, but if it does not do so once the JV has qualified for the Section 45 tax credits, it will forfeit a part of its interest in Clean Coal in direct proportion to the amount of the \$4.0 million that it elects not to pay, if any.

The income tax provision for 2007 represents an effective tax rate benefit of approximately (2)%, which is less than the rate of 22% we recognized for 2006. The decrease is primarily the result of the larger impact of R&D tax credits for 2007 as compared to 2006. We adopted the provisions of FIN 48 on January 1, 2007. No unrecognized tax benefits were recorded as of the date of adoption. The primary jurisdictions in which we file income tax returns are the U.S. federal government and State of Colorado. We are no longer subject to U.S. federal examinations by tax authorities for years before 2004 and Colorado state examinations for years before 2003.

Although we achieved significant revenue growth for the year, we reported an operating loss of \$777,000 for 2007 as compared to an operating loss of \$12,000 in 2006, due in large part to continued activities related to the Company's growth strategies. In addition to our capitalized development costs, which amounted to \$8.2 million at year end, we incurred significant costs related to our plans to vertically integrate into the production of and provide interim supply of AC that are not capitalized. During 2007, those costs and related overhead and expenses for developing our ACI systems group to handle the expanding market amounted to approximately \$1.7 million.

Unrealized gains, net of tax, on investments in debt and equity securities amounted to \$31,000 for 2007 as compared to \$134,000 for 2006. The decrease in the recorded unrealized gain in 2007 was the result of selling some portions of our debt securities offset by the increase in market value of our remaining equity investments as compared to 2006.

**Results of Operations 2006 versus 2005**

Revenues totaled \$15.5 million for 2006 versus \$11.0 million in 2005, representing an increase of 40%. Revenues in our MEC segment for 2006 increased by \$4.8 million (55%), and FGC and other activities decreased by (\$363,000) (16%) from revenues for those segments in the 2005 fiscal year.

Revenues in 2006 from the MEC segment were comprised of government and industry-supported contracts (51%), sales and installation of activated carbon injection (ACI) systems (38%) and consulting services (11%), compared to 54%, 21% and 25%, respectively, in 2005. For the year, our DOE and industry demonstration contract revenues totaled \$7.0 million representing an increase of 46% from 2005 revenues. The remaining unearned amount of the contracts was \$13.2 million as of December 31, 2006, of which \$7.2 million was recognized by the Company in 2007 (including cash contributions by other industry partners). ACI systems contributed approximately \$5.2 million to MEC revenues recognized for the year, increasing 178% from the 2005 contribution to revenue of \$1.9 million. We had contracts in progress at year-end for supply of ACI systems totaling approximately \$3.3 million which we realized in 2007. While the dollar amount of revenues from both the government and industry-supported contracts and the ACI systems sales increased from 2005 to 2006, the most significant growth occurred in the sales and installations of ACI systems, which increased \$3.3 million and is the result of an increasing number of system sales as noted above. Activities in two of our DOE contracts were behind the original planned schedule in 2006 due to the unavailability of one of the host sites and test results that did not meet project goals. Discussions with DOE resulted in reallocating a portion of the remaining contract amounts to our other activities. Our contracts with the government are subject to audit by the federal government, which could result in adjustment(s) to previously recognized revenue. We believe, however, that we have complied with all requirements of the contracts and future adjustments, if any, will not be material. In addition, the federal government must appropriate funds on an annual basis to support these DOE contracts, and funding is always subject to unknown and uncontrollable contingencies. Revenues from consulting services included in the MEC segment decreased approximately \$690,000, from 2005 to 2006, as a greater amount of work was performed in our DOE contracts in 2006 than under commercial contracts.

FGC and other revenues decreased due to fewer shipments of chemical and revenues related to continuing customers. Included in this segment's revenues for 2006 were approximately \$60,000 of chemical sales that accrued to the benefit of Clean Coal in 2007 and future periods. Under the existing arrangements we have continued to sell such chemicals to the JV at a minor discount, and so the impact on our future revenues has not been material.

Cost of revenues increased by \$2.8 million or 42% in 2006 from 2005 primarily as a result of increased revenues for the same periods. Gross margins were 38% for the year as compared to 39% in 2005. The decrease is a result of decreased margins in both the MEC and FGC and other segments as discussed below.

Cost of revenues for the MEC segment increased by \$2.7 million in 2006 or 47%, as compared to the same periods in 2005 primarily as a result of the increased revenue generating activities noted above. Gross margins for this segment were 38% for the year as compared to 35% for 2005. The improvement in gross margins from the prior year resulted from higher margins on DOE contracts as our cost share percentage on those contracts has decreased, offset by lower margins on ACI system sales as that market is developing. The changes in MEC segment profits from 2005 to 2006 are a result of the same factors.

Cost of revenues for the FGC and other segment increased by \$137,000 or 13% in 2006, as compared to 2005 as a result of increased costs for development projects included in this segment. Gross margins for this segment were 39% for 2006 as compared to 55% in 2005. The decrease in gross margins from 2005 to 2006 was a result of increased FGC sales of a product we license from ARKAY Technologies, which carry a lower margin than historical FGC sales, lower margins typically recognized on the demonstration projects we carried out in 2006, and the increased costs in development projects noted above. FGC revenues represent primarily chemical sales, which carry a higher margin than the typical fixed price and time and materials sales in MEC revenues. FGC and other revenues comprised 12% of total revenues in 2006, compared to 20% in 2005. The changes in the FGC segment profits from 2005 to 2006 are a result of the same factors.

General and administrative expenses increased by \$1.7 million or 67% to \$4.2 million in 2006. The dollar increase in 2006 resulted primarily from compensation expenses related to the implementation of Statement of Financial Accounting Standards (SFAS) No. 123R, *Share-Based Payment* (\$331,000 for 2006); legal and increased director fees and expenses incurred to maintain compliance with public company regulations (approximately \$160,000 for the year); accounting and consulting fees related to SOX 404 compliance (\$270,000) and facilities, benefits and other overhead expenses resulting from increases in number of employees (approximately \$313,000 for year). Included in our general and administrative expense for 2006 is \$65,000 related to directors and officers insurance for the period from June 2006 through the end of the year.

Research and development expenses increased by \$487,000 or 50% in 2006 as compared to 2005. We incur R&D expenses not only on direct activities we conduct but also by sharing a portion of the costs in the government and industry programs in which we participate. Of the amount incurred in 2006, \$481,000 was directly related to DOE contracts.

MEC segment profits increased by \$1.3 million or 73% to \$3.0 million as compared to 2005. The increase was primarily a result of increased MEC segment revenues and improved margins on our DOE contracts as described above. FGC and other segment profits decreased by \$728,000 or 72% to \$282,000 as compared to 2005. The decrease was primarily the result of increasing project development costs incurred during the year, lower margin chemical sales and decreasing segment revenues.

Included in interest and other expenses, we recognized \$411,000 of deferred costs related to our M&A activities as noted above. We had net interest and other income of \$909,000 in 2006, as compared to \$357,000 for 2005. Interest and other income increased in 2006 due to an increase in invested balances and increasing interest rates.

The deferred income tax provision for 2006 represents an effective tax rate of approximately 22%, which is less than the rate of 34% we recognized for 2005. The decrease is primarily the result of larger impact of R&D tax credits for 2006 as compared to 2005.

Unrealized gains, net of tax, on investments in debt and equity securities amounted to \$134,000 for 2006 as compared to a loss of (\$1,000) for 2005. The gains recorded in 2006 are the result of increases in the market value of our equity investments. The loss incurred in 2005 was primarily the result of increasing interest rates, which correspondingly tend to result in a decrease in the market value of our investments in longer-term fixed-rate debt securities.

### **Liquidity and Capital Resources**

We had a positive working capital of \$14.1 million at December 31, 2007, compared to working capital of \$18.5 million at December 31, 2006. The decrease was the result of investing in our development projects and increases in current liabilities in the normal course of business. In addition to working capital, we had long-term investments in securities, accounted for as available-for-sale investments, of approximately \$2.8 million and \$5.3 million at December 31, 2007 and 2006, respectively. We have no long-term debt and shareholders equity totaled over \$28 million as of December 31, 2007. We expect to use a portion of such investments and cash on hand to fund growth of the Company, which is expected to include development projects for AC production and may include expansion of product offerings and strategic acquisitions. We intend to retain a portion of these investments to demonstrate strength in our financial position to support performance guarantees we have been and will likely continue to provide on sales of ACI systems. We believe that existing and expected future working capital, which we expect to come from positive cash flow, will be sufficient to meet the anticipated operating needs of the Company for at least the next twelve months. We have sufficient resources on hand to continue pursuit of the rapidly growing mercury emission control market. However, we cannot be certain that the positive cash flow that we have achieved historically will continue, and it is possible that we could be required to expend some of our current working capital to fund operations, although we consider this unlikely. Our plans for the anticipated future need for expanded AC production will require additional funding.

As discussed in detail above, we have embarked on an aggressive plan to build a new AC manufacturing facility, which we expect to have an all-in, total cost of approximately \$300 million for a facility with one production line which will be capable of producing approximately 175 million pounds of AC per year. We have expended significant funds on the project to date, and had capitalized project costs of approximately \$8.1 million as of December 31, 2007. The development plan includes enlisting the support of a strategic partner to participate in 50% of the equity funded project development costs, which we expect will amount to approximately \$120 million for the first facility with a single production line. We expect the balance of the project funding, which we estimate to be \$180 million, to come from debt financing. We also expect that we will need to have entered into long-term AC supply agreements under which utilities have agreed to take the AC to be produced by the plant in agreed quantities and at agreed prices ( off-take contracts ) in order to obtain the debt financing needed to build the plant. We have no commitments from any person to enter into any of such off-take contracts, or to supply us with financing at this time, and we are not certain whether we will be able to enter into such contracts or that financing will be available to us as needed on acceptable terms. Our inability to achieve any one of what we currently see to be the critical requirements for the project would likely make it difficult for us to complete the project.

Our principal source of liquidity is our existing working capital and positive operating cash flow. The continuation of positive cash flow somewhat depends upon our success in maintaining a significant share of the market for mercury control equipment and the continuation of chemical sales and operations for FGC.

In 2007, we completed our office expansion. The total cost of this expansion was approximately \$235,000, which includes leasehold improvements and office equipment to accommodate new employees. We funded this out of our existing working capital and cash flow from operations.

Under our defined contribution and 401(k) pension plan, we match up to 5% of salary amounts deferred by employees in the Plan and contribute certain amounts based on the profits of the Company, which amounts are determined annually by our Board of Directors. During 2007 and 2006, we recognized \$161,000 and \$114,000, respectively, of matching expense. In the past, the Company has also made discretionary contributions to the Plan and employees. In 2007, the Company has paid and/or accrued a total of approximately \$91,000 for such discretionary payments.

We recorded net long term deferred assets of \$237,000 and net deferred current tax liabilities of (\$117,000) as of December 31, 2007 as compared to net deferred tax liabilities of (\$133,000) in 2006. We believe that it is more likely than not that our deferred tax assets will be realized in the future. In 2007, we made tax payments of approximately \$235,000 related to our current taxes payable.

Cash flow from operations totaled \$2.1 million for 2007 compared to \$1.8 million for 2006. Cash flow from operations in 2007 increased from 2006 primarily as a result of an increase in accounts payable of \$1.9 million to finance operations and development activities, an increase in deferred revenues and other liabilities of \$584,000, which was offset by an increase in our accounts receivable of (\$927,000) and cash paid for current income taxes of (\$235,000). These changes in our operating assets and liabilities correspond to our overall growth in business and development activities. In addition, adjustments related to our net income of \$247,000 for non-cash operating activities which included depreciation and amortization \$379,000 and expenses paid with stock and stock options \$362,000 increased our cash flow from operations for 2007. As noted above, we expect to successfully negotiate multiple long-term off-take contracts which would provide support for anticipated debt financing.

Net cash used by investing activities was \$5.1 million for 2007 compared to a use of \$817,000 in 2006. Net cash used by investing activities increased from 2006 primarily due to our continued investment in development projects and equipment of \$8.1 million. We liquidated approximately a net of \$3.0 million in securities and other short term investments to fund our development activities for our AC manufacturing facilities. In 2008, we intend to liquidate a portion of our investment in securities to fund our development activities which could also include M&A activities.

Cash provided by financing activities was \$323,000 and \$1.1 million in 2007 and 2006, respectively. In 2006, we received a cash payment of \$1.0 million related to the sale of a 50% interest in our Clean Coal JV. As noted above we expect to require additional debt or equity financing to support future anticipated growth, potential acquisitions and our plans to build AC manufacturing facilities.

In 2005, we entered into several Subscription and Investment Agreements and privately sold 789,089 shares of our common stock to a limited number of institutional accredited investors at a price of \$17.00 per share. We received net proceeds of approximately \$12.5 million from the sale of the shares. Pritchard Capital Partners LLP and Adams Harkness, Inc. acted as the placement agents for the sales and received a fee of approximately 6% of the gross proceeds of the offering, as well as reimbursement for certain offering expenses. The shares also carry certain piggy-back and other registration rights. A majority of the proceeds from the offering were invested in collateralized interest-bearing term deposits. We registered the shares for resale by the purchasers under the Securities Act of 1933 in August 2006.

We had the following contractual commitments as of December 31, 2007:

	Total	2008	Payments due by period		
			2009 and 2010	2011 and 2012	2013 and Beyond
Purchase obligations	\$ 7,044,000	\$ 7,044,000	\$	\$	\$
Operating lease obligations	552,000	207,000	345,000		
Development project obligations	961,000	625,000	336,000		
Total	\$ 8,557,000	\$ 7,876,000	\$ 681,000	\$	\$

### Critical Accounting Policies and Estimates

**Revenue Recognition** ADA follows the percentage of completion method of accounting for all significant contracts excluding government contracts and chemical sales. The percentage of completion method of reporting income takes into account the percent of work completed and overall revenue for contracts in progress. We recognize revenues on government contracts based on the time and expenses incurred to date.

**Capitalization of Development Costs** - We are capitalizing all direct and identifiable incremental costs associated with our development efforts to build an activated carbon facility. Such development costs are generally deferred and either (a) expensed when it has been determined they are no longer of future value, or (b) capitalized as part of long-term assets and then subject to future depreciation expense and impairment evaluations.

Significant estimates are used in preparation of our financial statements and include (1) our allowance for doubtful accounts, which is based on historical experience; (2) our valuation and classification of investments as available-for-sale securities, which is based on estimated fair market value; (3) our percentage of completion method of accounting for significant long-term contracts, which is based on estimates of gross margins and of the costs to complete such contracts; and (4) our warranty costs, which are based on an estimate of future equipment failures. In addition, amounts invoiced for government contracts are subject to change based on the results of future audits by the federal government. We have not experienced significant adjustments in the past, and we do not expect significant adjustments will be required in the future. We also use our judgment to support the current fair value of goodwill and other intangible assets of \$2.3 million on the consolidated balance sheets. Management believes the fair value of other recorded intangibles is not impaired, although market demand for our products and services could change in the future, which would require a write-down in recorded values. As with all estimates, the amounts described above are subject to change as additional information becomes available, although we are not aware of anything that would cause us to believe that any material changes will be required in the near term.

Under certain contracts the Company may grant performance guarantees or equipment warranties for a specified period and the achievement of a certain plant operating conditions. In the event the equipment fails to perform as specified, the Company is obligated to correct or replace the equipment. Estimated warranty costs are recorded at the time of sale based on current industry factors. The amount of the warranty liability accrued reflects our best estimate of expected future costs of honoring our obligations under the warranty section of each contract. We believe the accounting estimate related to warranty costs is a critical accounting estimate because: changes in it can materially affect net income; it requires us to forecast the amount of equipment that might fail to perform in the future and require a large degree of judgment.

Income taxes are accounted for under the asset and liability approach. Under this method, deferred tax assets and liabilities are recognized for the expected future tax consequences of differences between the carrying amounts of assets and liabilities and their respective tax bases using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period when the change is enacted. Deferred tax assets may be reduced by a valuation allowance if and when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized. The change in laws can have a material effect on the amount of income tax we are subject to. We are not aware of anything that would cause us to believe that any material changes will be required in the near term.

### Recently Issued Accounting Policies

In June 2006, the FASB issued FIN 48, Accounting for Uncertainty in Income Taxes - An Interpretation of FASB Statement No. 109 (FIN 48). This interpretation was issued to clarify the accounting for uncertainty in income taxes recognized in the financial statements by prescribing a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. FIN 48 requires the recognition of penalties and interest on any



unrecognized tax benefits. Our policy is to reflect penalties and interest related to FIN 48 issues as part of income tax expense as they become applicable. We adopted the provisions of FIN 48 on January 1, 2007. No unrecognized tax benefits were recorded as of the date of adoption. The primary jurisdictions in which we file income tax returns are the U.S. federal government and State of Colorado. We are no longer subject to U.S. federal examinations by tax authorities for years before 2004 and Colorado state examinations for years before 2003.

In September 2006, the FASB issued SFAS No. 157, Fair Value Measurement (SFAS 157), which defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements. SFAS 157 focuses on creating consistency and comparability in fair value measurements. SFAS 157 is effective for fiscal years beginning after November 15, 2007, and interim periods within those fiscal years. We are evaluating its impact and do not expect that adoption of SFAS 157 will have a material impact on our financial statements.

In February 2007, the FASB issued SFAS No. 159, The Fair Value Option for Financial Assets and Financial Liabilities. SFAS 159 permits entities to choose to measure many financial instruments and certain other items at fair value. The provisions of SFAS 159 will be effective beginning January 1, 2008. We are in the process of determining the effect, if any, the adoption of SFAS 159 will have on our financial statements.

In June 2007, the FASB also ratified EITF 07-3, Accounting for Nonrefundable Advance Payments for Goods or Services Received for Use in Future Research and Development Activities (EITF 07-3). EITF 07-3 requires that nonrefundable advance payments for goods or services that will be used or rendered for future research and development activities be deferred and capitalized and recognized as an expense as the goods are delivered or the related services are performed. EITF 07-3 is effective, on a prospective basis, for fiscal years beginning after December 15, 2007. We are in the process of determining the effect, if any, the adoption of EITF 07-3 will have on our financial statements.

In December 2007, the FASB issued SFAS No. 160, Noncontrolling Interests in Consolidated Financial Statements an amendment of ARB No. 51. SFAS No. 160 requires the ownership interests in subsidiaries held by parties other than the parent be clearly identified, labeled, and presented in the consolidated statement of financial position within equity, but separate from the parent's equity. It also requires the amount of consolidated net income attributable to the parent and to the noncontrolling interest be clearly identified and presented on the face of the consolidated statement of income. SFAS No. 160 is effective for fiscal years and fiscal quarters beginning on or after December 15, 2008. We are currently evaluating the impact of this pronouncement on our financial position and results of operations.

In December 2007, the FASB also issued SFAS 141 (revised 2007), Business Combinations, (SFAS 141R). SFAS 141R establishes principles and requirements for how an acquirer recognizes and measures in its financial statements the identifiable assets acquired, including goodwill, the liabilities assumed and any non-controlling interest in the acquiree. The Statement also establishes disclosure requirements to enable users of the financial statements to evaluate the nature and financial effects of the business combination. SFAS 141R is effective for business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. We have been and expect to be engaged in M&A activities, particularly with respect to the vertical integration of our business to establish a role in the production and supply of AC and in the manufacture of ACI systems. The impact of adopting SFAS 141R will depend on future business combinations that we may pursue after its effective date.

**Item 7A. Quantitative and Qualitative Disclosures About Market Risk.**  
**Commodity Price Risk**

In the normal course of our business, we are exposed to market risk or price fluctuations related to the goods and services we procure related to our revenue producing activities. Components of ACI systems and consulting services, which are significant to such revenue producing activities, have market prices that fluctuate regularly, but not widely. In most cases we can pass such price fluctuations on to our customers. Based on the estimated 2007 procurement of ACI components and consulting services, a hypothetical 10% increase (or decrease) in the price of ACI components and consulting services, if such fluctuations could not be passed on to our customers, would result in a pretax loss or gain of \$463,000, respectively.



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**Lignite Price Risk**

Market prices for coal have increased significantly over the last year as worldwide demand for this resource has increased. The feedstock for the planned Greenfield AC manufacturing facility is lignite, which we expect to secure through long term supply contracts. We estimate that the lignite needed for the plant will represent about \$8.0 million per year of operating costs at current cost. Based on current estimates of lignite price a hypothetical 10% increase (or decrease) in the price of lignite would result in a pretax loss or gain of \$800,000 respectively.

**Interest Rate Risk**

Approximately \$13.1 million of the cash and cash equivalents are invested in interest bearing accounts. A hypothetical change of 10% in the Company's effective interest rate from the year-end 2007 rate would increase or decrease interest income by \$66,000.

**Item 8. Financial Statements and Supplementary Data.**  
**Our Financial Statements can be found at pages F-1 through F-21 of this report.**

Index to Financial Statements

Reports of Independent Registered Public Accounting Firms

Financial Statements:

ADA-ES, Inc. and Subsidiaries

Consolidated Balance Sheets, December 31, 2007 and 2006

Consolidated Statements of Income, For the Years Ended December 31, 2007, 2006, and 2005

Consolidated Statements of Changes in Stockholders' Equity, For the Years Ended December 31, 2007, 2006, and 2005

Consolidated Statements of Cash Flows, For the Years Ended December 31, 2007, 2006, and 2005

Notes to Consolidated Financial Statements

**Item 9. Changes In and Disagreements With Accountants on Accounting and Financial Disclosure.**  
None.

**Item 9A. Controls and Procedures.**

We conducted an evaluation under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by the company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls and procedures also include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded as of December 31, 2007 that our disclosure controls and procedures were effective.

**Management's Report on Internal Control Over Financial Reporting**

## Edgar Filing: ADA-ES INC - Form 10-K

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15(d)-15(f)) is defined as a process designed by, or under the supervision of, a company's principal executive and financial officers, or persons performing similar functions, and effected by a company's board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with generally acceptable accounting principles and includes those policies and procedures that: (a) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (b) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (c) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the company's assets that could have a material effect on the financial statements.

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A material weakness is a control deficiency, or combination of control deficiencies, that result in more than a remote likelihood that a material misstatement of annual or interim financial statements will not be prevented or detected. Our management assessed our internal control over financial reporting as of December 31, 2007. Management based its assessment on criteria set forth in the framework in *Internal Control-Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our assessments, we believe that, as of December 31, 2007, our internal control over financial reporting is effective based on those criteria. Ehrhardt Keefe Steiner & Hottman PC ( EKS&H ), our independent registered public accounting firm, has audited our consolidated financial statements included with this report and has audited our internal control over financial reporting as of December 31, 2007. The report of EKS&H, which expresses an unqualified opinion on our internal control over financial reporting, is included on page F-2 of this report, and is incorporated here.

#### **Changes in Internal Control over Financial Reporting**

There have been no changes in our internal control over financial reporting during the most recently completed fiscal quarter that have materially affected, or are likely to materially affect, our internal control over financial reporting.

In our 2006 Annual Report, management identified three material weaknesses in our internal control over financial reporting. During the year ended December 31, 2007, we implemented a variety of changes to our internal control over financial reporting to remediate all three material weaknesses.

#### ***Remediation of Material Weaknesses***

Following is a summary description of the changes in our internal control over financial reporting implemented during the year ended December 31, 2007:

#### ***First Identified Weakness***

We did not have a sufficient complement of personnel with appropriate training and experience in generally accepted accounting principles ( GAAP ), or adequate controls over the resolution of GAAP accounting issues.

During the year ended December 31, 2007:

We have invested time and resources to enhance the knowledge and skills of existing staff.

We engaged in a search for a Controller, and on August 6, 2007, we appointed our former Director of Financial Planning and Internal Control as our new Controller.

#### ***Second Identified Weakness***

The Company's controls over the collection and recording of accounts payable did not operate effectively.

During the year ended December 31, 2007:

We systemized the collection and recordkeeping of invoices.

We implemented procedures to ensure that our financial closings are performed in accordance with a scheduled checklist and in accordance with our financial controls.

#### ***Third Identified Weakness***

The Company did not maintain adequate controls over the reconciliation of accounts receivable and deferred revenue.

During the year ended December 31, 2007:

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We revised our chart of accounts to ensure proper balance sheet classifications of accounts receivable and deferred revenue.

We established monthly revenue and expense review meetings with business process owners.

We established monthly reconciliations of our DOE and industry support contracts to insure proper classification of deferred revenue.

We believe that as of the date of this filing the annual financial statements, we have remediated all the material weakness in our internal controls listed above. The above disclosed previously identified material weaknesses did not result in adjustments to our consolidated financial statements for the year ended December 31, 2007.

**Item 9B. Other Information.**

**Date of Next Annual Meeting of Shareholders and Information Concerning Shareholder Proposals for Presentation at the Next Annual Meeting of Shareholders**

Our next Annual Meeting of Shareholders will be held on June 18, 2008. If a shareholder has not submitted a proposal to be considered at the meeting by January 5, 2008, the date stated in last year's proxy statement for submitting such proposals, and the shareholder fails to notify the Company of such proposal on or before March 23, 2008, then the proxies appointed by the Company's management will be allowed to use their discretionary voting authority when the proposal is raised at the Annual Meeting, without any discussion of the matter in the proxy statement. The proponent of any such proposal must own shares of Common Stock equal to the lesser of (a) 1% or more of the outstanding shares as of December 31, 2007 or (b) shares having a market value of at least \$2,000, and must have continuously owned such shares for one year and intend to continue to hold such shares through the date of the Annual Meeting in order to present a shareholder proposal to the Company.

**PART III**

**Item 10. Directors, Executive Officers, and Corporate Governance.**

Information regarding our directors is incorporated by reference from the information contained under the caption "Election of Directors" in our Proxy Statement for the 2008 Annual Meeting of Shareholders ( "2008 Proxy Statement" ) to be filed pursuant to Regulation 14A promulgated by the Securities and Exchange Commission under the Securities Exchange Act of 1934 within 120 days after the end of our fiscal year ended December 31, 2007. Information regarding any material changes to the procedures by which our shareholders may recommend nominees to our board of directors is incorporated by reference from the information contained under the caption "Nominating and Governance Committee" in our 2008 Proxy Statement. Information regarding our audit committee, including our audit committee financial expert, is incorporated by reference from the information contained under the caption "Audit Committee" in our 2008 Proxy Statement and information regarding executive officers is incorporated by reference from the information contained under the caption "Executive Officers" in our 2008 Proxy Statement. Information regarding Section 16 reporting compliance is incorporated by reference from information contained under the caption "Executive Compensation Section 16(a) Beneficial Ownership Reporting Compliance" in our 2008 Proxy Statement.

**Item 11. Executive Compensation.**

The information required by this item is incorporated by reference from the information contained under the captions "Compensation Committee, Executive Compensation, Director Compensation" and "Stock Incentive Plans" in our 2008 Proxy Statement.

**Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.**

The information required by this item is incorporated by reference from the information contained under the caption "Security Ownership of Principal Stockholders and Management and Related Stockholder Matters" and "Equity Compensation Plan Information" in our 2008 Proxy Statement.

**Item 13. Certain Relationships and Related Transactions and Director Independence.**

The information required by this item is incorporated by reference from the information contained under the captions "Certain Relationships and Related Transactions, Election of Directors" and "Director Independence" in our 2008 Proxy Statement.

**Item 14. Principal Accountant Fees and Services.**

The information required by this item is incorporated by reference from the information contained under the caption Relationship with Independent Certified Public Accountants in our 2008 Proxy Statement.

**PART IV**

**Item 15. Exhibits and Financial Statement Schedules.**

(a) The following documents are filed as part of this Annual Report on Form 10-K:

(1) Financial Statements see Part II, Item 8, which is incorporated herein by this reference;

(2) Financial Statement Schedules None required or applicable; and

(3) Exhibits as described in the following index.

**Index to Exhibits.**

No.	Description
3.1	Amended and Restated Articles of Incorporation of ADA-ES (1)
3.2	Amended and Restated Bylaws of ADA-ES (2)
4.1	Form of Specimen Common Stock Certificate (3)
4.2	Registration Rights Agreement dated October 21, 2005 (4)
4.3	Registration Rights Agreement between ADA-ES, Inc. and Arch Coal, Inc. dated March 19, 2003 (16)
4.4	Standstill and Registration Rights Agreements dated August 3-6, 2004(6)
10.1	Distribution Agreement dated as of March 17, 2003 between Earth Sciences, Inc. and ADA-ES, Inc. (7)
10.2	2003 ADA-ES, Inc. Stock Option Plan** (5)
10.6	Securities Subscription and Investment Agreement between ADA-ES, Inc. and Arch Coal, Inc. dated July 7, 2003 (7)
10.10	Tax Sharing Agreement between ADA-ES, Inc. and Earth Sciences, Inc. dated March 17, 2003 (5)
10.11	U.S. Department of Energy Cooperative Agreement No. DE-FC26-02NT41591 Long-Term Operation of a COHPAC System for Removing Mercury from Coal-Fired Flue Gas (7)
10.12	Amendment No. 1 to Distribution Agreement by and between ADA-ES, Inc. and Earth Sciences, Inc. dated August 15, 2003(8)
10.13	2003 Stock Compensation Plan #1** (9)
10.14	2003 Stock Compensation Plan #2** (10)
10.15	U.S. Department of Energy Cooperative Agreement No. DE-FC26-03NT41986 Evaluation of Sorbent Injection for Mercury Control (11)
10.16	Purchase Order #4500589101 signed 3/18/04 from We Energies (12)
10.17	Clean Coal Power Initiative Repayment Agreement between the U.S. Department of Energy and ADA-ES, Inc. dated April 6, 2004 (12)
10.21	ADA-ES, Inc. 2004 Executive Stock Option Plan** (13)

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- 10.22 U.S. Department of Energy Cooperative Agreement No. DE-FC26-05NT42307 Low-Cost Options for Moderate Levels of Mercury Control (14)
- 10.23 Employment Agreement dated May 1, 1997 between C. Jean Bustard and ADA Environmental Solutions, LLC (assigned to ADA-ES, Inc.) \*\* (14)
- 10.24 Employment Agreement dated May 1, 1997 between Michael D. Durham and ADA Environmental Solutions, LLC (assigned to ADA-ES, Inc.) \*\* (14)
- 10.25 Employment Agreement dated January 2, 2000 between Mark H. McKinnies and ADA Environmental Solutions, LLC (assigned to ADA-ES, Inc.) \*\* (14)
- 10.26 Employment Agreement dated January 1, 2000 between Richard J. Schlager and ADA Environmental Solutions, LLC (assigned to ADA-ES, Inc.) \*\* (14)
- 10.27 2004 Stock Compensation Plan #2 and model stock option agreements\*\* (13)
- 10.28 2004 Directors Stock Compensation Plan #1\*\* (15)
- 10.29 2005 Directors Compensation Plan\*\* (16)
- 10.30 License Agreement dated as of November 3, 2006 by and between ADA-ES, Inc. and ADA-NexCoal, LLC. (17)
- 10.31 Chemicals, Equipment, and Technical Engineering Services Supply Agreement dated as of November 3, 2006 by and between ADA-ES, Inc. and ADA-NexCoal, LLC. (18)

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- 10.32 Purchase and Sale Agreement dated as of November 3, 2006 by and among ADA-ES, Inc., NexGen Refined Coal, LLC and ADA-NexCoal, LLC. (19)
- 10.33 Amended and Restated Operating Agreement of ADA-NexCoal, LLC dated as of November 3, 2006 by and among ADA-ES, Inc., NexGen Refined Coal, LLC and ADA-NexCoal, LLC. (20)
- 10.34 Employment Agreement dated March 1, 2003 between Sharon M. Sjostrom and ADA Environmental Solutions, LLC (assigned to ADA-ES, Inc.)\*\* (21)
- 10.35 Executive Compensation Plan\*\* (22)
- 10.36 Memorandum of Understanding dated March 20<sup>th</sup>, 2007, between Calgon Carbon Corporation and ADA-ES, Inc. (23)
- 10.37 2006 Profit Sharing Plan\*\* (24)
- 10.38 2007 Equity Incentive Plan\*\* (25)
- 10.39\* Employment Agreement dated November 28, 2005 between Richard Miller and ADA-ES, Inc.\*\*
- 10.40\* U.S. Department of Energy Cooperative Agreement No. DE-FC26-06NT42774 Long-term carbon injection field test for >90% Mercury removal for a PRB Unit with a Spray Drier and Fabric Filter
- 10.41\* U.S. Department of Energy Cooperative Agreement No. DE-FC26-06NT42780 Evaluation of control Strategies to Effectively meet 70 90% Mercury Reduction on an Eastern Bituminous Coal Cyclone Boiler with SCR
- 10.42\* Agreement for Project Development Services dated November 30, 2007 by and among ADA-ES, Inc., Red River Environmental Products, LLC, Bowman Environmental Products, LLC, Underwood Environmental Products, LLC and Emission Strategies, Inc. \*\*\*
- 10.43\* Employment Agreement dated January 1, 2008 between Cameron E. Martin and ADA-ES, Inc.\*\*
- 10.44\* Engineering, Procurement and Construction Agreement dated January 29, 2008 between Red River Environmental Products, LLC and BE&K Construction Company, LLC. \*\*\*
- 21.1\* Subsidiaries of ADA-ES, Inc.
- 23.1\* Consent of Ehrhardt Keefe Steiner & Hottman PC
- 23.2\* Consent of Hein & Associates LLP
- 31.1\* Certification of Chief Executive Officer of ADA-ES, Inc. Pursuant to 17 CFR 240.13a-14(a) or 17 CFR 240.15d-14(a)
- 31.2\* Certification of Chief Financial Officer of ADA-ES, Inc. Pursuant to 17 CFR 240.13a-14(a) or 17 CFR 240.15d-14(a)
- 32.1\* Certification of Chief Executive Officer of ADA-ES, Inc. Pursuant to 18 U.S.C Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
- 32.2\* Certification of Chief Financial Officer of ADA-ES, Inc. Pursuant to 18 U.S.C Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Notes:

\* Filed herewith.

\*\* Management contract or compensatory plan or arrangement.

\*\*\* Portions of this exhibit have been omitted pursuant to a request for confidential treatment

(1) Incorporated by reference to Exhibit 3.1 to the Form 10-QSB for the quarter ended September 30, 2005 filed on November 10, 2005 (File No. 000-50216).



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- (2) Incorporated by reference to Exhibit 3.2 to the Form 8-K dated December 1, 2005 filed on December 5, 2005 (File No. 000-50216).
- (3) Incorporated by reference to Exhibit 4.1 to the Form 8-K dated October 21, 2005 filed on October 26, 2005 (File No. 000-50216).
- (4) Incorporated by reference to Exhibit 10.1 to the Form 8-K dated October 21, 2005 filed on October 26, 2005 (File No. 000-50216).
- (5) Incorporated by reference to the same numbered Exhibit to the Form 10-KSB for the year ended December 31, 2005 filed on March 30, 2006 (File No. 000-50216).
- (6) Incorporated by reference to Exhibit A to Exhibit 10.1 to the Form S-3 filed on October 18, 2004 (File No. 333-119795).
- (7) Incorporated by reference to the same numbered Exhibit to the Form 10-SB/A-3 filed on July 28, 2003 (File No. 000-50216).
- (8) Incorporated by reference to the same numbered Exhibit to the Form 10-SB/A-4 filed on August 24, 2003 (File No. 000-50216).
- (9) Incorporated by reference to Exhibit 99.2 to the Form S-8 filed on November 14, 2003 (File No. 333-110479).
- (10) Incorporated by reference to Exhibit 99.1 to the Form S-8 filed on February 6, 2004 (File No. 333-112587).

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- (11) Incorporated by reference to the same numbered Exhibit to the Form 10-KSB for the year ended December 31, 2003 filed on March 30, 2004 (File No. 000-50216).
- (12) Incorporated by reference to the same numbered Exhibit to the Form 10-QSB for the quarter ended March 31, 2004 filed on May 13, 2004 (File No. 000-50216).
- (13) Incorporated by reference to the same numbered Exhibit to the Form 10-KSB for the year ended December 31, 2005 filed on March 30, 2006 (File No. 000-50216).
- (14) Incorporated by reference to the same numbered Exhibit to the Form 10-KSB for the year ended December 31, 2004 filed on March 30, 2005 (File No. 000-50216).
- (15) Incorporated by reference to Exhibit 99.1 to the Form S-8 filed on April 16, 2004 (File No. 333-114546).
- (16) Incorporated by reference to Exhibit 10.29 to the Form 10-K for the year ended December 31, 2006 filed on March 27, 2007 (File No. 000-50216).
- (17) Incorporated by reference to Exhibit 10.1 to the Form 10-Q for the quarter ended September 30, 2006 filed on November 8, 2006 (File No. 000-50216).
- (18) Incorporated by reference to Exhibit 10.2 to the Form 10-Q for the quarter ended September 30, 2006 filed on November 8, 2006 (File No. 000-50216).
- (19) Incorporated by reference to Exhibit 10.3 to the Form 10-Q for the quarter ended September 30, 2006 filed on November 8, 2006 (File No. 000-50216).
- (20) Incorporated by reference to Exhibit 10.4 to the Form 10-Q for the quarter ended September 30, 2006 filed on November 8, 2006 (File No. 000-50216).
- (21) Incorporated by reference to Exhibit 10.34 to the Form 10-K for the year ended December 31, 2006 filed on March 27, 2007 (File No. 000-50216).
- (22) Incorporated by reference to Exhibit 10.35 to the Form 10-K for the year ended December 31, 2006 filed on March 27, 2007 (File No. 000-50216).
- (23) Incorporated by reference to Exhibit 10.36 to the Form 10-K for the year ended December 31, 2006 filed on March 27, 2007 (File No. 000-50216).
- (24) Incorporated by reference to Exhibit 10.37 to the Form 10-K for the year ended December 31, 2006 filed on March 27, 2007 (File No. 000-50216).

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(25) Incorporated by reference to definitive proxy material for the 2007 Annual Meeting filed on April 30, 2007 (File No. 000-50216)

**(b) See (a)(3) above.**

**(c) See (a)(2) above.**

**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Exchange Act, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

**ADA-ES, Inc.**  
**(Registrant)**

By /s/ Mark H. McKinnies  
Mark H. McKinnies, Senior Vice  
President and Chief Financial Officer  
(Principal Financial and Accounting Officer)

/s/ Michael D. Durham  
Michael D. Durham  
President (Chief Executive Officer)

Date: March 14, 2008

March 14, 2008

Pursuant to the requirements of the Exchange Act, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

/s/ John W. Eaves  
John W. Eaves, Director

Walter P. Marcum, Director

Date: March 12, 2008

Date: \_\_\_\_\_

/s/ Jeffrey C. Smith  
Jeffrey C. Smith, Director

/s/ Michael D. Durham  
Michael D. Durham, Director

Date: March 13, 2008

Date: March 14, 2008

/s/ Mark H. McKinnies  
Mark H. McKinnies, Director

/s/ Ronald B. Johnson  
Ronald B. Johnson, Director

Date: March 14, 2008

Date: March 13, 2008

/s/ Robert N. Caruso  
Robert N. Caruso, Director

/s/ Richard Swanson  
Richard Swanson, Director

Date: March 13, 2008

Date: March 13, 2008

/s/ Derek C. Johnson  
Derek C. Johnson, Director

Date: March 13, 2008

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**Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Stockholders of

ADA-ES, Inc. and Subsidiaries

Littleton, Colorado

We have audited the accompanying consolidated balance sheet of ADA-ES, Inc. and Subsidiaries as of December 31, 2007, and the related consolidated statement of income, stockholders' equity, and cash flows for the year then ended. We also have audited the Company's internal control over financial reporting based on criteria established in *Internal Control-Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO Criteria). The Company's management is responsible for these financial statements and for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying management's report. Our responsibility is to express an opinion on these financial statements and the effectiveness of the Company's internal control over financial reporting based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audit of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of ADA-ES, Inc. and Subsidiaries as of December 31, 2007, and the results of their operations and their cash flows for the year then ended, in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, ADA-ES, Inc. and Subsidiaries maintained, in all material respects, effective internal control over financial reporting as of December 31, 2007 based on the COSO Criteria.

/s/ Ehrhardt Keefe Steiner & Hottman PC

March 10, 2008

Denver, Colorado

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Board of Directors and Stockholders

ADA-ES, Inc. and Subsidiaries

Littleton, Colorado

We have audited the consolidated balance sheet of ADA-ES, Inc and Subsidiaries as of December 31, 2006 and the related consolidated statements of income, changes in stockholders' equity and cash flows for each of the two years in the period ended December 31, 2006. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of ADA-ES, Inc and Subsidiaries as of December 31, 2006 and the results of their operations and their cash flows for each of the two years in the period ended December 31, 2006, in conformity with U.S. generally accepted accounting principles.

As discussed in note 1 to the accompanying consolidated financial statements, effective January 1, 2006, the Company adopted Statement of Financial Accounting Standards No. 123(R), *Share-Based Payment*.

/s/ HEIN & ASSOCIATES LLP

DENVER, COLORADO

March 26, 2007

**ADA-ES, INC. AND SUBSIDIARIES****CONSOLIDATED BALANCE SHEETS***(Dollars in thousands)*

	<b>DECEMBER 31,</b>	
	<b>2007</b>	<b>2006</b>
<b><u>ASSETS</u></b>		
<b>CURRENT ASSETS:</b>		
Cash and cash equivalents	\$ 13,482	\$ 16,129
Trade receivables, net of allowance for doubtful accounts of \$5 and \$4, respectively	4,449	3,522
Investments in securities	1,916	2,427
Prepaid expenses and other	282	361
<b>Total current assets</b>	<b>20,129</b>	<b>22,439</b>
<b>PROPERTY AND EQUIPMENT, at cost</b>	<b>2,622</b>	<b>1,830</b>
Less accumulated depreciation and amortization	(1,372)	(1,033)
<b>Net property and equipment</b>	<b>1,250</b>	<b>797</b>
<b>GOODWILL, net of \$1,556 in amortization</b>	<b>2,024</b>	<b>2,024</b>
<b>INTANGIBLE ASSETS, net of \$46 and \$57 in amortization, respectively</b>	<b>247</b>	<b>241</b>
<b>INVESTMENTS IN SECURITIES</b>	<b>2,841</b>	<b>5,322</b>
<b>DEVELOPMENT PROJECTS</b>	<b>8,159</b>	<b>911</b>
<b>OTHER ASSETS</b>	<b>256</b>	<b>20</b>
<b>TOTAL ASSETS</b>	<b>\$ 34,906</b>	<b>\$ 31,754</b>
<b><u>LIABILITIES AND STOCKHOLDERS' EQUITY</u></b>		
<b>CURRENT LIABILITIES:</b>		
Accounts payable	\$ 4,285	\$ 2,352
Accrued payroll and related liabilities	603	618
Deferred revenue	944	761
Accrued expenses	204	161
<b>Total current liabilities</b>	<b>6,036</b>	<b>3,892</b>
<b>LONG-TERM LIABILITIES:</b>		
Accrued warranty and other	318	184
<b>Total liabilities</b>	<b>6,354</b>	<b>4,076</b>
<b>MINORITY INTEREST (Note 5)</b>	<b>148</b>	<b>37</b>
<b>COMMITMENTS AND CONTINGENCIES (Notes 5 and 7)</b>		
<b>STOCKHOLDERS' EQUITY:</b>		
Preferred stock; 50,000,000 shares authorized, none outstanding		
Common stock; no par value, 50,000,000 shares authorized, 5,683,689 and 5,635,137 shares issued and outstanding	28,077	27,592
Accumulated other comprehensive income	198	167
Retained earnings (accumulated deficit)	129	(118)
<b>Total stockholders' equity</b>	<b>28,404</b>	<b>27,641</b>
<b>TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY</b>	<b>\$ 34,906</b>	<b>\$ 31,754</b>



*See accompanying notes to these consolidated financial statements.*

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**ADA-ES, INC. AND SUBSIDIARIES****CONSOLIDATED STATEMENTS OF INCOME***(Dollars in thousands, except per share data)*

	<b>FOR THE YEARS ENDED DECEMBER 31,</b>		
	<b>2007</b>	<b>2006</b>	<b>2005</b>
<b>REVENUES:</b>			
Mercury emission control	\$ 17,954	\$ 13,607	\$ 8,784
Flue gas conditioning and other	1,294	1,881	2,244
Total revenues	19,248	15,488	11,028
<b>COST OF REVENUES:</b>			
Mercury emission control	12,379	8,426	5,722
Flue gas conditioning and other	852	1,156	1,019
Total cost of revenues	13,231	9,582	6,741
<b>GROSS MARGIN</b>	<b>6,017</b>	<b>5,906</b>	<b>4,287</b>
<b>OTHER COSTS AND EXPENSES:</b>			
General and administrative	5,214	4,170	2,502
Research and development	1,201	1,464	977
Depreciation and amortization	379	284	157
Total expenses	6,794	5,918	3,636
<b>OPERATING (LOSS) INCOME</b>	<b>(777)</b>	<b>(12)</b>	<b>651</b>
<b>OTHER INCOME (EXPENSE):</b>			
Interest and other expense		(412)	(9)
Interest and other income	1,020	909	357
Total other income	1,020	497	348
<b>INCOME BEFORE INCOME TAX</b>	<b>243</b>	<b>485</b>	<b>999</b>
<b>INCOME TAX BENEFIT (PROVISION)</b>	<b>4</b>	<b>(108)</b>	<b>(336)</b>
<b>NET INCOME</b>	<b>247</b>	<b>377</b>	<b>663</b>
<b>UNREALIZED GAINS AND (LOSSES) ON INVESTMENTS IN DEBT AND EQUITY SECURITIES, net of tax</b>	<b>31</b>	<b>134</b>	<b>(1)</b>
<b>COMPREHENSIVE INCOME</b>	<b>\$ 278</b>	<b>\$ 511</b>	<b>\$ 662</b>
<b>NET INCOME PER COMMON SHARE BASIC AND DILUTED</b>	<b>\$ 0.05</b>	<b>\$ 0.07</b>	<b>\$ 0.13</b>
<b>WEIGHTED AVERAGE COMMON SHARES OUTSTANDING</b>	<b>5,649</b>	<b>5,624</b>	<b>4,966</b>
<b>WEIGHTED AVERAGE DILUTED COMMON SHARES OUTSTANDING</b>	<b>5,737</b>	<b>5,729</b>	<b>5,137</b>

*See accompanying notes to these consolidated financial statements*



## ADA-ES, INC. AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS EQUITY

## FOR THE YEARS ENDED DECEMBER 31, 2007, 2006 AND 2005

(Dollars in thousands)

	COMMON STOCK		ACCUMULATED OTHER COMPREHENSIVE INCOME	(ACCUMULATED DEFICIT) RETAINED EARNINGS	TOTAL
	SHARES	AMOUNT			
<b>BALANCES, January 1, 2005</b>	4,795,711	\$ 13,134	\$ 34	\$ (1,158)	\$ 12,010
Stock and stock options issued to consultant and directors for expenses	4,221	75			75
Issuance of stock for cash, net	789,089	12,538			12,538
Issuance of stock on exercise of options	40,976	303			303
Tax benefit of stock transactions		268			268
Return of shares from escrow	(19,730)				
Unrealized holding losses on investments			(34)		(34)
Investment reclassification adjustments to income			32		32
Income tax effect			1		1
Net income				663	663
<b>BALANCES, December 31, 2005</b>	5,610,267	26,318	33	(495)	25,856
Stock and stock options issued to consultant and directors for expenses	7,000	164			164
Stock based compensation		331			331
Issuance of stock on exercise of options	17,870	116			116
Tax benefit of stock transactions		56			56
Expense of stock issuance		(12)			(12)
Sale of JV interest, net of \$344 tax		656			656
Minority Interest		(37)			(37)
Unrealized holding gains on investments			214		214
Income tax effect			(80)		(80)
Net income				377	377
<b>BALANCES, December 31, 2006</b>	5,635,137	27,592	167	(118)	27,641
Stock and stock options issued to consultant and directors for expenses	9,492	156			156
Stock based compensation		206			206
Issuance of stock on exercise of options	39,060	107			107
Tax benefit of stock transactions		16			16
Unrealized holding gains on investments			49		49
Income tax effect			(18)		(18)
Net income				247	247
<b>BALANCES, December 31, 2007</b>	5,683,689	\$ 28,077	\$ 198	\$ 129	\$ 28,404

*See accompanying notes to these consolidated financial statements*

## ADA-ES, INC. AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF CASH FLOWS

(Dollars in thousands)

	FOR THE YEARS ENDED DECEMBER 31,		
	2007	2006	2005
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>			
Net income	\$ 247	\$ 377	\$ 663
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	379	284	157
Loss on asset dispositions and securities	21	32	104
Write off of inventory	14		28
Expenses paid with stock and stock options	362	495	75
Minority interest in loss of consolidated subsidiary	(90)		
Deferred tax (benefit) provision	(271)	108	336
Changes in operating assets and liabilities:			
Trade receivables	(927)	(508)	(1,816)
Prepaid expenses and other	(139)	(82)	(103)
Accounts payable	1,933	646	1,273
Accrued expenses	13	74	222
Deferred revenue and other	584	395	270
Net cash provided by operating activities	2,126	1,821	1,209
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>			
Capital expenditures for equipment, patents and development projects	(8,120)	(1,431)	(374)
Investment in securities	(3,276)	(7,054)	(10,753)
Proceeds from sale of securities and certificates of deposit	6,300	7,668	8,999
Net cash used in investing activities	(5,096)	(817)	(2,128)
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>			
Payments on debt and notes payable		(5)	(4)
Capital contributions by JV participant	200		
Proceeds from sale of JV interest		1,000	
Exercise of stock options	123	104	303
Sale of stock			12,538
Net cash provided by financing activities	323	1,099	12,837
<b>(DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS</b>	<b>(2,647)</b>	<b>2,103</b>	<b>11,918</b>
<b>CASH AND CASH EQUIVALENTS, beginning of year</b>	<b>16,129</b>	<b>14,026</b>	<b>2,108</b>
<b>CASH AND CASH EQUIVALENTS, end of year</b>	<b>\$ 13,482</b>	<b>\$ 16,129</b>	<b>\$ 14,026</b>
<b>SUPPLEMENTAL SCHEDULE OF CASH FLOW INFORMATION:</b>			
Cash payments for interest	\$	\$ 1	\$ 2
Cash payments for income taxes	\$ 235	\$	\$
<b>SUPPLEMENTAL SCHEDULE OF NON-CASH INVESTING AND FINANCING ACTIVITIES:</b>			
Tax benefit of stock option exercises	\$ 16	\$ 56	\$ 268

*See accompanying notes to these consolidated financial statements*

**ADA-ES, INC. AND SUBSIDIARIES**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**1. SUMMARY OF NATURE OF OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES:**

**Nature of Operations** The accompanying consolidated financial statements include the accounts of ADA-ES, Inc. (ADA), its wholly owned subsidiaries, ADA Environmental Solutions, LLC (ADA LLC), Red River Environmental Products, LLC, Bowman Environmental Products, LLC, Underwood Environmental Products, LLC and our 50% JV interest in Clean Coal Solutions, LLC ( Clean Coal ). As of and for the year ended December 31, 2007, Red River Environmental Products, LLC, Bowman Environmental Products, LLC and Underwood Environmental Products, LLC had no significant assets, liabilities or operations. Clean Coal had \$313,000 in assets (see Note 5). All significant intercompany transactions have been eliminated. Collectively, ADA and its subsidiaries are referred to as the Company.

The Company is principally engaged in providing environmental technologies and specialty chemicals to the coal-burning utility industry. The Company generates a substantial part of its revenue from contracts co-funded by the government and industry. The Company's sales occur principally throughout the United States.

**Cash Equivalents** The Company considers all highly liquid debt instruments with original maturities of three months or less to be cash equivalents. The Company maintains the majority of its cash in deposit accounts collateralized by U.S. Treasury Securities. The amount on deposit at December 31, 2007 and 2006 was held in one commercial bank and was in excess of the insurance limits of the Federal Deposit Insurance Corporation.

**Receivables and Credit Policies** Trade receivables are uncollateralized customer obligations due under normal trade terms requiring payment within 30 days from the invoice date. Management reviews trade receivables periodically and reduces the carrying amount by a valuation allowance that reflects management's best estimate of the amount that may not be collectible.

**Investments** Investments in securities include certificates of deposit, common stock and debt securities. All investments are classified as available-for-sale securities, and are recorded at fair value in investments in securities, with the change in fair value during the period excluded from earnings and recorded net of tax as a component of other comprehensive income. Premiums and discounts on investments in debt securities are amortized over the contractual lives of those securities.

**Property and Equipment** Property and equipment is stated at cost. Depreciation on assets is provided using the straight-line method based on estimated useful lives ranging from 3 to 10 years. Maintenance and repairs are charged to operations as incurred. When assets are retired, or otherwise disposed of, the property accounts are relieved of costs and accumulated depreciation and any resulting gain or loss is credited or charged to income.

**Goodwill** Goodwill consists of the excess of the aggregate purchase price over the fair value of net assets of businesses acquired. Goodwill was amortized over a 10-year period through December 31, 2001 and is attributable to the Company's FGC reporting segment. As of January 1, 2002, goodwill is no longer amortized, but subject to an impairment evaluation, which is performed in the fourth quarter of each year. As a result of this evaluation, which was performed on the FGC reporting segment, the Company concluded that no impairment of its goodwill was required.

**Intangible Assets** Intangible assets principally consist of patents. Patents obtained by the Company directly are being amortized over a 17-year life. Amortization of intangible assets for the years ended December 31, 2007, 2006, and 2005 was \$23,000 \$13,000 and \$11,000 respectively. Based on the balance of intangible assets as of December 31, 2007, the Company anticipates amortization expense over the next 5 years to be approximately \$15,000 per year. The weighted average amortization period is 13 years.

## ADA-ES, INC. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Intangible assets consist of:

	At December 31,	
	2007	2006
	(In thousands)	
Patents:		
Cost	\$ 292	\$ 298
Less accumulated amortization	(45)	(57)
Total intangible assets, net	\$ 247	\$ 241

**Capitalization of Development Costs** The Company capitalizes all direct and identifiable incremental costs associated with its development efforts to build an activated carbon facility. Such development costs are generally deferred and either (a) expensed when it has been determined they are no longer of future value, or (b) capitalized as part of long-term assets and then subject to future depreciation expense and impairment evaluations.

**Warranty Costs** Under certain contracts, the Company may grant performance guarantees for a specified period and the achievement of a certain plant operating conditions. In the event the equipment fails to perform as specified, the Company is obligated to correct or replace the equipment. Estimated warranty costs are recorded at the time of sale based on current industry factors.

**Impairment of Long-Lived Assets** In the event that facts and circumstances indicate that the carrying value of assets or intangible assets may be impaired, an evaluation of recoverability would be performed. Based on the Company's evaluation as of December 31, 2007 and 2006, no impairment of value existed.

**Fair Value of Financial Instruments** The carrying amounts of financial instruments, including cash, cash equivalents, accounts receivable, accounts payable and accrued expenses approximate fair value due to the short maturity of these instruments. The fair values of investments are estimated based on quoted market prices for those investments.

**Revenue Recognition** ADA follows the percentage of completion method of accounting for all significant contracts excluding government contracts and chemical sales. The percentage of completion method of reporting income takes into account the percent of work completed and overall revenue for contracts in progress. The Company recognizes revenue on government contracts based on the time and expenses incurred to date. As of December 31, 2007 and 2006, costs incurred in excess of billings totaled \$1.9 million and \$1.4 million, respectively, and are included in accounts receivable, net, in the accompanying Balance Sheets. Billings in excess of recognized income totaled \$944,000 and \$761,000 as of December 31, 2007 and 2006, respectively, and are included in deferred revenue in the accompanying Balance Sheets.

ADA chemical sales are recognized when products are shipped to customers. No reserve is established for any returns, based on historical trends. Chemical products are shipped FOB shipping point and title passes to the customer when the chemicals are shipped. The Company's sales agreements do not contain a right of inspection or acceptance provision and products are generally received by customers within one day of shipment. The Company has had no significant history of non-acceptance, nor of replacing goods damaged or lost in transit.

Consulting revenue is recognized as services are performed and collection is assured.

**Cost of Revenues** - Costs of revenues include all labor, fringe benefits, subcontract labor, chemical costs, materials, equipment, supplies and travel costs directly related to the Company's production of revenue.

**General and Administrative** General and administrative costs include personnel related fringe benefits, sales and administrative staff labor costs, facility costs and other general costs of conducting business.



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Penalties and Interest Costs Under certain circumstance(s), the Company might have a penalty or interest charge that is classified as an expense and is shown in our general and administrative costs. The cost is charged in the period the company was notified of the charge. For the year ended December 31, 2007, the Company recorded penalty and interest charges of \$50,000 due to our 2006 income tax returns being filed late.

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## ADA-ES, INC. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Research and Development Costs Research and development costs are charged to operations in the period incurred.

Income Taxes The Company accounts for income taxes under the liability method whereby deferred tax assets and liabilities are determined based on tax rates and laws enacted as of the balance sheet date. A valuation allowance is provided if and when deferred tax assets are not expected to be realized.

Net Income Per Share Basic EPS is calculated by dividing the income available to common stockholders by the weighted average number of common shares outstanding for the period. Diluted EPS is calculated using the same numerator as basic EPS and further reflects the potential dilution that could occur if outstanding stock options were exercised. The effect of such dilutive stock options added 88,000, 105,000 and 171,000 shares in 2007, 2006 and 2005, respectively, to the weighted average number of common shares outstanding used in calculation of diluted EPS. A total of 148,350 and 43,300 of outstanding stock options were excluded from the 2007 and 2006 calculations respectively, of diluted shares as their inclusion would be anti-dilutive.

Comprehensive Income Comprehensive income is defined to include all changes in equity except those resulting from investments by owners and distributions to owners. For the years ended December 31, 2007, 2006 and 2005, comprehensive income includes net unrealized gains (losses) on investments, net of income tax expense, of \$31,000, 134,000 and \$(1,000), respectively.

Stock-Based Compensation Effective January 1, 2006, the Company adopted Statement of Financial Accounting Standards No. 123R (SFAS No. 123R), *Share-Based Payment*, which requires the Company to record equity compensation to employees at estimated fair value. Prior to January 1, 2006, the Company elected to use APB 25, which required expense to be recognized only to the extent the exercise price of the stock-based compensation was below the market price on the date of grant. The modified prospective approach was used in adopting SFAS No. 123R; therefore, results prior to January 1, 2006 have not been restated. For the years ended December 31, 2007 and 2006, \$206,000 and \$331,000, was charged to expense for equity compensation, which amounted to \$134,000 and \$299,000, after tax and (\$0.02) and (\$0.05) respectively, of basic and diluted earnings per share.

If compensation cost for the Company's stock-based compensation plans had been determined based on the estimated fair value at the grant dates for awards under those plans consistent with the method of SFAS No. 123R during 2005, then the Company's net income per share for the year ended December 31, 2005 would have been adjusted to the pro forma amounts indicated below:

	Year Ended December 31, 2005
<i>(In thousands, except per share data)</i>	
Net income:	
As reported	\$ 663
Fair value of stock based compensation, net of tax	(147)
Pro forma	\$ 516
Net income per share basic and diluted:	
As reported	\$ 0.13
Fair value of stock based compensation	(0.03)
Pro forma basic and diluted	\$ 0.10

**ADA-ES, INC. AND SUBSIDIARIES****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

The options granted in 2005 had exercise prices equal to the market price on the date of the grants. Prior to the third quarter of 2005, the Company showed expense related to stock options in the period of grant. The presentation above shows expense amortized over the estimated service period, as required under SFAS No. 123, *Accounting for Stock-Based Compensation*. The average fair value of each employee option granted in 2005 was approximately \$2.18, and was estimated on the date of grant using the Black-Scholes option-pricing model with the following weighted average assumptions:

	<b>Year Ended December 31, 2005</b>
Expected volatility	41%
Risk-free interest rate	2.6%
Expected life of options (in years)	4.8
Expected dividends	0

**Use of Estimates** The preparation of the Company's consolidated financial statements in conformity with generally accepted accounting principles requires the Company's management to make estimates and assumptions that affect the amounts reported in these financial statements and accompanying notes. Actual results could differ from those estimates. The Company makes significant assumptions concerning: 1) the impairment of and the remaining realizability of its intangibles; 2) estimates of certain overhead and other rates on research contracts with the U.S. Government, which are subject to future audits; 3) fair value of stock options; 4) warranty costs; 5) the allowance for doubtful accounts, which is based on historical experience; 6) the valuation and classification of investments in available-for-sale securities, which is based on estimated fair market value; and 7) the percentage of completion method of accounting for significant long-term contracts, which is based on estimates of gross margins and of the costs to complete such contracts.

**Segment Information** The Company follows established standards on the way that public companies report financial information about operating segments in annual financial statements and requires reporting of selected information about operating segments in interim financial statements issued to the public. It also establishes standards for disclosures regarding products and services, geographic areas, and major customers. These standards defines operating segments as components of a company about which discrete financial information is available that is evaluated regularly by the chief operating decision maker in deciding how to allocate resources and in assessing performance. The Company has two reportable segments: mercury emission controls (MEC) and flue gas conditioning and other (FGC).

**Reclassification** Certain amounts in the 2006 consolidated financial statements have been reclassified to conform to the 2007 presentation. Such reclassification had no effect on net income.

**Recently Issued Accounting Pronouncements** In June 2006, the FASB issued FIN 48, *Accounting for Uncertainty in Income Taxes* An Interpretation of FASB Statement No. 109 (FIN 48). This interpretation was issued to clarify the accounting for uncertainty in income taxes recognized in the financial statements by prescribing a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. FIN 48 requires the recognition of penalties and interest on any unrecognized tax benefits. The Company's policy is to reflect penalties and interest related to FIN 48 issues as part of income tax expense as they become applicable. The Company adopted the provisions of FIN 48 on January 1, 2007. The Company adopted the provisions of FIN 48 on January 1, 2007. No unrecognized tax benefits were recorded as of the date of adoption. The primary jurisdictions in which the Company files income tax returns are the U.S. federal government and State of Colorado. We are no longer subject to U.S. federal examinations by tax authorities for years before 2004 and Colorado state examinations for years before 2003.

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurement* (SFAS 157), which defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements. SFAS 157 focuses on creating consistency and comparability in fair value measurements. SFAS 157 is effective for fiscal years beginning after November 15, 2007, and interim periods within those fiscal years. The Company is evaluating its impact and does not expect that adoption of SFAS 157 will have a material impact on its financial statements.

**ADA-ES, INC. AND SUBSIDIARIES****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities*. SFAS 159 permits entities to choose to measure many financial instruments and certain other items at fair value. The provisions of SFAS 159 will be effective beginning January 1, 2008. The Company is in the process of determining the effect, if any, the adoption of SFAS 159 will have on its financial statements.

In June 2007, the FASB also ratified EITF 07-3, *Accounting for Nonrefundable Advance Payments for Goods or Services Received for Use in Future Research and Development Activities* (EITF 07-3). EITF 07-3 requires that nonrefundable advance payments for goods or services that will be used or rendered for future research and development activities be deferred and capitalized and recognized as an expense as the goods are delivered or the related services are performed. EITF 07-3 is effective, on a prospective basis, for fiscal years beginning after December 15, 2007. The Company is in the process of determining the effect, if any, the adoption of EITF 07-3 will have on its financial statements.

In December 2007, the FASB issued SFAS No. 160, *Noncontrolling interests in Consolidated Financial Statements* an amendment of ARB No. 51. SFAS No. 160 requires the ownership interests in subsidiaries held by parties other than the parent be clearly identified, labeled, and presented in the consolidated statement of financial position within equity, but separate from the parent's equity. It also requires the amount of consolidated net income attributable to the parent and to the noncontrolling interest be clearly identified and presented on the face of the consolidated statement of income. SFAS No. 160 is effective for fiscal years and fiscal quarters beginning on or after December 15, 2008. The Company is currently evaluating the impact of this pronouncement on its financial position and results of operations.

In December 2007, the FASB also issued SFAS 141 (revised 2007), *Business Combinations*, (SFAS 141R). SFAS 141R establishes principles and requirements for how an acquirer recognizes and measures in its financial statements the identifiable assets acquired, including goodwill, the liabilities assumed and any non-controlling interest in the acquiree. SFAS 141R also establishes disclosure requirements to enable users of the financial statements to evaluate the nature and financial effects of the business combination. SFAS 141R is effective for business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. The impact of adopting SFAS 141R will be dependent on the future business combinations that the Company may pursue after its effective date. Under SFAS 141R, all acquisition costs are expensed as incurred.

2. **PROPERTY AND EQUIPMENT:**

Property and equipment consisted of the following at the dates indicated:

	Life in years	As of December 31, 2007      2006 (In thousands)	
Machinery and equipment	3-10	\$ 1,881	\$ 1,357
Leasehold improvements	3	504	326
Furniture and fixtures	3-7	237	147
		2,622	1,830
Less accumulated depreciation and amortization		(1,372)	(1,033)
Total property and equipment, net		\$ 1,250	\$ 797

Depreciation and amortization of property and equipment for the years ended December 31, 2007, 2006 and 2005 was \$356,000, \$271,000 and \$146,000, respectively.

## ADA-ES, INC. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

3. **INVESTMENTS:**

Investments in available-for-sale securities are reported at their fair value in investments in securities and are summarized as follows at December 31, 2007 and 2006:

	Gross Unrealized Gain	Gross Unrealized Loss <i>(In thousands)</i>	Fair Value
<b>2007</b>			
Common stock	\$ 541	\$ (249)	\$ 1,756
Debt securities	223	(201)	3,001
Total	\$ 764	\$ (450)	\$ 4,757
Less short-term portion			(1,916)
Long-term portion			\$ 2,841
<b>2006</b>			
Certificates of deposit	\$	\$	\$ 400
Common stock	305	(14)	1,670
Debt securities	14	(39)	5,679
Total	\$ 319	\$ (53)	7,749
Less short-term portion			(2,427)
Long-term portion			\$ 5,322

Realized gains and losses are determined on the basis of specific identification of the security sold. Realized gains and losses are included in Interest and Other Income in the accompanying Statements of Income. During 2007 2006 and 2005, information on securities sold is as follows:

	2007	2006 <i>(In thousands)</i>	2005
Carrying amount of securities sold	\$ 6,287	\$ 7,662	\$ 9,031
Sale proceeds	\$ 6,300	\$ 7,668	\$ 8,999
Gross realized losses	\$ (113)	\$ (77)	\$ (60)
Gross realized gains	\$ 126	\$ 83	\$ 28

Accumulated other comprehensive income for 2007, 2006 and 2005 includes unrealized holding gains, net of tax, on securities of \$198,000, \$167,000 and \$33,000, respectively.

Debt securities will mature as follows:

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<b>Year(s)</b>	<b>Amount</b> <i>(In thousands)</i>
2008	\$ 161
2009-2012	1,003
2013-2017	1,001
Beyond 2017	836
<b>Total</b>	<b>\$ 3,001</b>

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**ADA-ES, INC. AND SUBSIDIARIES****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS****4. GOVERNMENT AND INDUSTRY FUNDED CONTRACTS:**

ADA is currently participating in five contracts awarded by the Department of Energy (the DOE) and participates with another three organizations as a subcontractor that contributed a total of \$7.2 million, \$7.0 million and \$4.3 million to revenues in 2007, 2006 and 2005, respectively. These amounts are included in Mercury emission control revenues. ADA typically invoices the DOE and industry cost-share partners monthly for labor and expenditures plus estimated overhead factors, less cost share amounts. The total approved DOE and industry budgets amount to \$23.7 million, of which the Company's and industry partners' cost-share portion is \$2.0 million. The remaining unearned amount of the contracts was \$5.4 million as of December 31, 2007, of which \$3.0 million is expected to be recognized by the Company in 2008 (including cash contributions by other industry partners). These contracts are subject to audit and future appropriation of funds by Congress. The Company's historical experience has not resulted in significant adverse adjustments to the Company, however the government audits for years ended 2002 through 2007 have not yet been finalized.

**5. JOINT VENTURE AND TRANSACTIONS WITH NEXGEN:**

In November 2006, the Company sold a 50% interest in its refined coal technology to a joint venture called Clean Coal Solutions, LLC, which was formed in October 2006 (Clean Coal or the JV), to be operated with NexGen Refined Coal, LLC (NexGen), to market such technology. During 2006, the Company received a non-refundable payment totaling \$1.0 million from NexGen. The total payment of \$1.0 million net of tax was included in Stockholders' Equity. The Operating Agreement also requires NexGen and us to each pay 50% of the costs of operating the JV and specifies certain duties that both parties are obligated to perform. For the year ended December 31, 2007 and 2006 our share of such cost amounted to \$150,000 and \$10,000, respectively. At present, we are considered the primary beneficiary of this variable interest entity and have consolidated the accounts of the JV. As of December 31, 2007, the primary assets of the JV consist of accounts receivable of \$120,000, property, plant and equipment, net of depreciation of \$96,000 and patents, net of amortization of \$69,000. Current liabilities amounted to \$17,000.

The JV function is to supply chemicals, additives, equipment and technical services to cyclone fired boiler users, but the JV's primary purpose is to seek and obtain approval from the United States Internal Revenue Service to qualify for Section 45 tax credits. If the JV succeeds in obtaining that approval and becomes a Section 45 Business, NexGen has the right to maintain its 50% interest by paying us an additional \$4.0 million, in eight quarterly payments of \$500,000 each, beginning in the quarter the credit is approved. NexGen is not obligated to make those payments, but if it does not do so, it will forfeit a part of its interest in Clean Coal in direct proportion to the amount of the \$4.0 million that it elects not to pay, if any. Once NexGen fails to make any one payment, it cannot reclaim its interest by making later payments. In no event are we required to refund any of the payments made to us by NexGen.

Thus far the JV has conducted three full-scale tests of its RC product, which demonstrated the ability to meet the emission control performance required to qualify for the Section 45 tax credits. The JV continues to market this product to industry. Our net operating loss for 2007 includes net costs of \$247,000 related to our RC efforts and \$150,000 from the JV.

**6. STOCKHOLDERS' EQUITY:**

Shares and Stock Options Issued for Pension Expenses and Directors' and Consultant Compensation In 2007 and 2006, the Company issued shares of its common stock for compensation of \$101,000 and \$141,000, respectively, to non-management directors based on the market price of the common stock, and recorded \$55,000 and \$22,000, respectively, of expense related to stock options issued to consultants.

Sale of Stock, Convertible Debenture and Grant of Option to Arch In 2003, the Company sold 137,741 shares of common stock to Arch Coal for \$1.0 million and sold a convertible debenture for \$300,000, both pursuant to an investment agreement. Of the shares sold, 37,741 were originally placed in escrow of which 19,730 shares were returned to the Company during 2005 since the market price of the Company's shares exceeded a minimum of

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*ADA-ES, INC. AND SUBSIDIARIES*

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

\$9.08 for a twenty-day continuous period during the one-year period from the date of their issuance. The Debenture was repaid during 2004. As a part of the share purchase Arch was also granted an option to purchase 50,000 shares for \$10.00 per share, which will expire in the third quarter of 2008. As of December 31, 2007, all of the shares under the option are available to be purchased.

*Sale of Stock 2005* - In October 2005, the Company entered into a Subscription and Investment Agreement. Under this agreement, the Company privately sold 789,089 shares of its common stock to a limited number of institutional investors at a price of \$17.00 per share. Net proceeds to the Company totaled \$12.5 million.

*Stock Options* During 2003, the Company adopted the 2003 ADA-ES, Inc Stock Option Plan and reserved 400,000 shares of Common Stock for issuance under the plan. In general, all options granted under the plan expire ten years from the date of grant unless otherwise specified by the Company's Board of Directors. The exercise price of each option was determined by the compensation committee of the Board of Directors at the time the option was granted and could not be less than 100% of the fair market value of a share of the Company's common stock on the date the option was granted. The compensation committee could provide in the option agreement that an option may be exercised in whole immediately or is exercisable in increments through a vesting schedule. During 2006, 19,900 options were granted under this plan. This plan was cancelled and replaced by the 2007 Equity Incentive Plan described below, and as result, 148,506 shares of Common Stock originally reserved for issuance upon exercise of options grantable under the 2003 Plan were removed from the 2003 Plan. During 2007, 3,354 options were exercised and 5,500 options were forfeited. As of December 31, 2007, 86,362 options remained outstanding and 84,237 options were exercisable.

During 2004, the Company adopted the 2004 Executive Stock Option Plan. This plan authorized the grant of up to 200,000 options to purchase shares of the Company's common stock to executive officers of the Company, all of which were granted in 2004. The option exercise price of \$8.60 per share was the market price on the date of the grant. The options are exercisable over a ten year period based on a vesting schedule that may be accelerated based on performance of the individual recipients as determined by the Board of Directors. In January 2006, the Board of Directors authorized the vesting of 38,428 options under this plan with a fair value of \$77,000. In 2006, 1,000 of such options were exercised. In February 2007, the Board authorized vesting of 17,258 options under this plan with a fair value of \$35,000. No additional options were vested in 2007. During 2007, 7,057 previously vested options were exercised. As of December 31, 2007, 49,429 options were exercisable.

During 2004, the Company adopted a plan (the 2004 Plan) for the issuance of shares and the grant of options to purchase shares of the Company's common stock to the Company's non-management directors. The 2004 Plan provided for the award of stock of 603 shares per individual non-management director or 4,221 shares in total, and the grant of options of 5,000 per individual non-management director or 35,000 in total, all of which were formally granted and issued in 2005 after approval of the 2004 Plan by the stockholders. The option exercise price of \$13.80 per share for the stock options granted on November 4, 2004 was the market price on the date of the grant. The options are exercisable over a period of five years and will vest over a three-year period, one-third each year for continued service on the Board. If such service is terminated, the non-vested portion of the option will be forfeited. In 2006, 15,000 of such options were forfeited after the resignation of three directors. During 2007, 985 of such options were exercised and 4,015 of options were forfeited after the death of a director. As of December 31, 2007, two-thirds of the remaining outstanding options, or a total of 8,333 options, vested and are exercisable.

During 2005, the Company adopted the 2005 Directors' Compensation Plan (the 2005 Plan), which authorized the issuance of shares of common stock and the grant of options to purchase shares of the Company's common stock to non-management directors. The 2005 Plan provides a portion of the annual compensation to non-management directors of the Company in the form of awards of shares of common stock and vesting of options to purchase common stock of the Company for services performed for the Company. Under the 2005 Plan, the award of stock is limited to not more than 1,000 shares per individual per year, and the grant of options is limited to 5,000 per individual in total. The aggregate number of shares of common stock reserved for issuance under the 2005 Plan totals 90,000 shares (50,000 in the form of stock awards and 40,000 in the form of options). The exercise price will be the market price on the date of grant, the shares of stock underlying the option will vest for exercise at a rate of no more than 1,667 shares per annual period per individual, and any unvested shares of stock that are



## ADA-ES, INC. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

outstanding at the date the individual is no longer a director will be forfeited. The 2005 Plan, if not terminated earlier by the Board, will terminate ten years after the date of its adoption. In January 2006, the Board of Directors authorized the issuance of 1,000 shares of common stock each, or a total of 7,000 shares, and in August 2006, the Board authorized the grant of 15,000 options to the non-management directors of the Company. As of December 31, 2007, 5,000 options were exercisable.

Following is a table of options activity for the three years ended December 31, 2007:

	Employees and Directors Options	Non-Employee Options	Weighted Average Exercise Price
<b>Options Outstanding, January 1, 2005</b>	297,740	50,000	\$ 9.01
Options granted	96,900	30,000	15.29
Options expired	(2,181)		13.80
Options exercised	(40,976)		7.39
<b>Options Outstanding, December 31, 2005</b>	351,483	80,000	10.99
Options granted	34,900		18.05
Options expired	(23,544)		12.68
Options exercised	(17,870)		8.63
<b>Options Outstanding, December 31, 2006</b>	344,969	80,000	11.55
Options granted			
Options expired	(52,215)	(21,000)	16.82
Options exercised	(11,396)		9.39
<b>Options Outstanding, December 31, 2007</b>	281,358	59,000	\$ 10.45

The weighted average remaining contractual life for all options as of December 31, 2007 was approximately 6.3 years. At December 31, 2007, 205,999 options with a weighted average exercise price of \$11.10 were fully vested and exercisable. Of the remaining 134,359 options, 22,125 options with a weighted average exercise price of \$12.38 vest in 2008, 15,000 options with a weighted average exercise price of \$10.80 vest in 2009, 10,000 options with a weighted average exercise price of \$8.60 vest in 2010, and the remaining 87,234 options with a weighted average exercise price of \$8.60 vest at the discretion of the Board of Directors based on specific performance objectives of executive officers.

No options were granted in 2007. The average fair value of each employee and director option granted in 2006 was approximately \$5.52 and was estimated on the date of grant using the Black-Scholes option-pricing model with the following weighted average assumptions:

	<b>2006</b>
Expected volatility	38% -76%
Risk-free interest rate	4.0%
Expected life of options (in years)	4.0
Expected dividends	

## ADA-ES, INC. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Following is information related to options outstanding/exercisable at December 31, 2007:

Range	Options Outstanding		Options Exercisable		Weighted Average Contractual Life (in years)
	Number of Options	Weighted Average Exercise Price	Number of Options	Weighted Average Exercise Price	
\$2.80	11,665	\$ 2.80	11,665	\$ 2.80	5.8
\$8.60 - \$10.00	230,343	8.90	113,109	9.22	6.4
\$13.80 - \$15.20	89,850	14.50	74,850	14.45	6.0
\$20.20	8,500	20.20	6,375	20.20	8.1
	340,358	\$ 10.45	205,999	\$ 11.10	6.3

The aggregate intrinsic value of options exercised in the years ended December 31, 2007, 2006 and 2005, based on an average market price of \$14.64, \$18.09 and \$19.03, respectively, was \$60,000, \$207,000 and \$477,000, respectively. The aggregate intrinsic value of options exercisable at December 31, 2007 was \$(727,000) based on a market price of \$7.57.

As of December 31, 2007, total compensation costs related to non-vested options, which had not yet been recognized was \$267,000. The weighted average period over which such expense is expected to be recognized is 1.5 years.

During 2007, the Company adopted the 2007 Equity Incentive Plan (the 2007 Plan), which replaces the 2003 Plan. The 2007 Plan authorizes the issuance to employees, directors and consultants of up to 600,000 shares of common stock, either as restricted stock grants or to underlie options to purchase shares of the Company's common stock. Under the 2007 Plan, the award of stock is limited to not more than 30,000 shares per individual per year with a maximum of 10,000 shares grantable in any year to non-management Directors. In general, all options granted under the 2007 Plan will expire ten years from the date of grant unless otherwise specified by the Company's Board of Directors. The exercise price for options granted under the 2007 Plan will be the market price on the date of grant and the shares of common stock underlying the option will vest on the passage of specified times following the date of grant, the occurrence of one of more events, the satisfaction of performance criteria or other conditions specified by the Company's Board of Directors. As of December 31, 2007, no options have been granted under the 2007 Plan.

During 2007, the Board of Directors awarded restricted stock under the 2007 Plan. All non-executive employees and certain officers were entitled to an award of restricted stock under the following conditions: (1) employees that had not received stock options upon commencement of employment received a restricted stock award equal based on a percentage of their starting salaries; (2) employees that had received stock options upon commencement of employment had the option to exchange any remaining stock options outstanding for a restricted stock award based on their starting salary; and (3) employees with five or more years of service received a restricted stock award based on a percent of their current annual salary. The purchase price for restricted stock was \$0.01 per share and the restricted stock vests over a five-year period on an annual basis. The stock based compensation related to the restricted stock awards was determined using the fair value of the Company's stock on the date of grant, which was \$12.60. In October 2007, seven employees opted to exchange 42,700 outstanding options for 3,389 shares of restricted stock. The exchange did not result in any stock option modification costs. Unvested shares of restricted stock are subject to forfeiture upon termination of employment with the Company. A total of 27,175 shares were granted with 502 shares vesting. In December 2007, 5,000 shares of restricted stock were awarded to a new employee upon commencement of employment in addition to the normal award based on a percentage of their starting salary, which vests over a two-year period. The stock based compensation related to the restricted stock award was \$7.76 per share. The total fair value of the grants was \$266,000. As of December 31, 2007, the Company recognized \$6,000 of compensation expense related to the vesting of restricted stock.

## ADA-ES, INC. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

A summary of the status of the non-vested shares as of December 31, 2007 is presented below:

Non-vested Shares	Shares	Weighted Average Grant Date Fair Value
Non-vested at January 1, 2007		\$
Granted	27,175	10.42
Vested	(502)	12.60
Forfeited		
Non-vested at December 31, 2007	26,673	\$ 10.62

7. **COMMITMENTS AND CONTINGENCIES**

**Pension Expense and Retirement Plan** The Company assumed a defined contribution and 401(k) plan covering all eligible employees as of January 1, 2003. The Company recognized contribution expense of \$252,000, \$237,000 and \$206,000 for 2007, 2006 and 2005, respectively, based on a percentage of the eligible employees' annual compensation.

**Performance Guarantee on Activated Carbon Injection Systems** Under contracts to supply AC injection systems, the Company may grant performance guarantees to the owner of the power plants that guarantee the performance of the associated equipment for a specified period and the achievement of a certain level of mercury removal based upon the injection of a specified quantity of AC at a specified rate given other plant operating conditions. In the event the equipment fails to perform as specified, the Company is obligated to correct or replace the equipment. In the event the level of mercury removal is not achieved, the Company has a "make right" obligation within the contract limits. As of December 31, 2007 and 2006, \$309,000 and \$120,000, respectively has been accrued for such equipment warranties and performance guarantees. The Company recognized expenses against the accrual of \$6,000 and -0- for 2007 and 2006, respectively.

**Purchase Obligations** We routinely issue purchase orders for the major components of the AC injection systems it supplies to customers. As of December 31, 2007, the Company had purchase obligations totaling \$7.0 million that it expects to pay in 2008.

**Operating Lease Obligations** - We lease office facilities under two noncancellable operating lease agreements. Our facilities leases generally provide for periodic rent increases and renewal options. Annual minimum commitments under these leases are shown in the table below. One of our operating lease agreements expires on August 31, 2010.

Years ending December 31,	Operating Lease Commitments (In thousands)
2008	\$ 207
2009	205
2010	140
Total operating lease commitments	\$ 552

Rent expense totaled \$228,000, \$187,000, \$153,000 in 2007, 2006 and 2005, respectively.

**Development Project Obligations** During 2007, we engaged a project development consultant, Emission Strategies Inc., a Maryland corporation (ESI), to oversee the development of our AC carbon manufacturing facility on our behalf. Our contract with ESI provides for fixed monthly

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compensation, with incentive payments on the attainment of certain milestones, which may include amounts based on revenues from the planned facility. Although the intent is for the milestone payments to be paid by the development company, we have guaranteed to pay up to \$961,000 for monthly compensation and the attainment of specific milestones. We can pay up to <sup>1</sup>/<sub>2</sub> of the amount in shares of our common stock, valued as of the day of payment. We can terminate the agreement with ESI on 30 days notice for convenience, and for cause on 10 days notice, with cure rights to correct any default within 30 days. If termination is for convenience, ESI is entitled to receive all monthly fees earned prior to termination and any milestone payments for milestones achieved on the project, if ever and if any.

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**ADA-ES, INC. AND SUBSIDIARIES****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS****8. MAJOR CUSTOMERS:**

Sales to unaffiliated customers who represent 10% or more of the Company's sales for the years ended December 31, 2007, 2006 and 2005 were as follows:

Customer	2007 (%)	2006 (%)	2005 (%)
A (Governmental Contracts)	17	24	21
B	13		
C	10		
D		15	13
E		11	
F			11

At December 31, 2007 and 2006, approximately 90% and 86% of the Company's trade receivables were from nine and eight customers, respectively.

**9. INCOME TAXES:**

The Company's income tax expense (benefit) from continuing operations consists of the following:

	As of December 31,		
	2007	2006	2005
	(In thousands)		
Current	\$ 267	\$	\$
Deferred	(271)	108	336
<b>Income tax expense (benefit)</b>	<b>\$ (4)</b>	<b>\$ 108</b>	<b>\$ 336</b>

During 2007, 2006, and 2005, stockholders' equity has been credited in the amounts of \$16,000, \$56,000 and \$268,000, respectively, for the income tax benefit of tax deductions related to stock option exercises.

During 2007, 2006 and 2005, the Company recognized charges to other comprehensive income of \$18,000, \$80,000 and \$1,000, respectively, for the income tax expense associated with the unrealized gains on marketable equity securities.

## ADA-ES, INC. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following lists the Company's deferred tax assets and liabilities, which are included in Other Assets, Accrued Expenses and Long-term Liabilities, respectively, in the accompanying Balance Sheets:

	At December 31,	
	2007	2006
	<i>(In thousands)</i>	
Current assets (liabilities):		
Prepaid expenses	\$ (90)	\$ (72)
Unrealized gains securities held for sale	(116)	(98)
Deferred revenues, compensation and other	89	87
	(117)	(83)
Non-current assets (liabilities)		
Deferred compensation, warranty and other	122	61
Property and intangible asset differences	(61)	(270)
Tax credits	176	159
	237	(50)
Net tax (liabilities) / assets	\$ 120	\$ (133)

No valuation allowance has been recorded as the Company believes that it is more likely than not that its deferred tax assets will be realized in the future.

A reconciliation of expected federal income taxes on income from operations as statutory rates with the expense (benefit) for income taxes follows:

	At December 31,		
	2007	2006	2005
Expected income tax rate - expense (benefit)	34%	34%	35%
Permanent differences	(7)%	2%	(4)%
Tax credits	(32)%	(9)%	(1)%
State income taxes	3%	3%	3%
Other	0%	(8)%	1%
Actual income tax rate	(2)%	22%	34%

The Company adopted the provisions of FIN 48 on January 1, 2007. No unrecognized tax benefits were recorded as of the date of adoption. The primary jurisdictions in which the Company files income tax returns are the U.S. federal government and State of Colorado. The Company is no longer subject to U.S. federal examinations by tax authorities for years before 2004 and Colorado state examinations for years before 2003.

## ADA-ES, INC. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

10. **RELATED PARTY TRANSACTIONS:**

As discussed above in Note 6, the Company executed a Securities Subscription and Investment Agreement with Arch Coal, Inc in 2003. Pursuant to the investment agreement, in September 2003, Arch purchased a \$300,000 convertible debenture from the Company, purchased 137,741 shares of the Company's common stock and was also granted an option to purchase 50,000 shares. The option to purchase these shares will expire in the third quarter of 2008. The debenture and accrued interest thereon was repaid in 2004. In addition, the Company cancelled a co-marketing agreement of its ADA-249M product and performed certain testing and research projects under agreements with Arch in 2006. Under such arrangements, the Company has recorded revenue of \$92,000, \$261,000 and \$230,000 in 2007, 2006 and 2005, respectively. A designee of Arch has been appointed a seat on the Company's Board of Directors and management of the Company has agreed in the future to nominate and to vote all proxies and other shares of stock in the Company which they are entitled to vote in favor of that designee so long as Arch holds no less than 100,000 shares of the Company's common stock.

11. **BUSINESS SEGMENT INFORMATION:**

The following information relates to the Company's two reportable segments: MEC and FGC and other. All assets are located in the U.S. and are not evaluated by management on a segment basis. All significant customers are U.S. companies.

	Years Ended December 31,		
	2007	2006	2005
	<i>(In thousands)</i>		
<b>Revenue:</b>			
MEC	\$ 17,954	\$ 13,607	\$ 8,784
FGC	1,294	1,881	2,244
Total	\$ 19,248	\$ 15,488	\$ 11,028
<b>Segment profit (loss):</b>			
MEC	\$ 3,994	\$ 3,000	\$ 1,738
FGC	(54)	282	1,010
Total	\$ 3,940	\$ 3,282	\$ 2,748

A reconciliation of the reported total segment profit to net income for the periods shown above is as follows:

	Years Ended December 31,		
	2007	2006	2005
	<i>(In thousands)</i>		
Total segment profit	\$ 3,940	\$ 3,282	\$ 2,748
Non-allocated general and administrative expenses	(4,338)	(3,010)	(1,940)
Depreciation and amortization	(379)	(284)	(157)
Interest, other income/expenses and tax (provision) benefit	1,024	389	12
Net income	\$ 247	\$ 377	\$ 663

Non-allocated general and administrative expenses include costs that benefit the business as a whole and are not directly related to one of our segments. Such costs include but are not limited to accounting and human resources staff, information systems costs, facility costs, audit fees and corporate governance expenses.

