Join us in celebrating the 10 Year Anniversary of the New Mexico Small Business Assistance (NMSBA) Program. Beginning in 2000, through legislation passed by the New Mexico State Legislature, Sandia National Laboratories and Los Alamos National Laboratory (joining in 2007) have provided technical assistance to 1,736 New Mexico small businesses.

NMSBA helps New Mexico small businesses facing a technical challenge to access the unique expertise and capabilities of New Mexico’s national laboratories. At no cost to the business, small businesses can seek assistance from lab scientists or engineers for projects that require testing, design consultation, and access to special equipment or facilities. Small businesses qualify if they are for-profit, US owned and operated, located in and pay gross receipts tax to the state of New Mexico, and meet the definition of a small business under US Small Business Administration guidelines. Businesses located in Bernalillo County are eligible for $10,000 worth of researcher hours per year, while businesses in rural counties are eligible for $20,000.

In 2010, over 320 NM companies received direct assistance from laboratory staff, through NMSBA partner organizations including New Mexico Manufacturing Extension Partnership, University of New Mexico’s Anderson School of Management and Management of Technology Program, New Mexico Institute of Mining and Technology’s Department of Management, and New Mexico State University’s Arrowhead Center, or as a leveraged project with multiple small businesses that shared in the same technical challenge.

We invite you to learn more about NMSBA through the experiences of the many New Mexico small businesses that have leveraged world-class science and technology to solve their technical challenges. To find out more about NMSBA or to contact us about your small business, visit www.nmsbaprogram.org.
ARMED RESPONSE TEAM

The Armed Response Team (ART) was founded in 2004 by a group of retired Albuquerque Police Department officers to address the inability of police to respond promptly to burglary alarms. The company fills a unique need by having armed response force personnel appear immediately, in-person to locations where intrusion alarms have occurred. ART also realized it needed new ideas in security technology to enhance further growth of their company. This was especially true in the case of a unique market segment ART had identified: remote detection of outdoor storage and construction yard intrusions.

Securing storage yards and construction sites has long been expensive and ineffective. ART wanted to evaluate various products for effectiveness before marketing them to customers. Through the New Mexico Small Business Assistance (NMSBA) Program, Sandia National Laboratories Principal Investigator David Furgal helped ART identify and evaluate video motion detection technology. This technology provides alarms and video clips of site intrusions to an alarm center for response force dispatch.

Los Alamos National Laboratory Principal Investigator Kirk Ellard later evaluated solar and battery power technology that could provide alternative means for powering outdoor security systems. “Many of these outdoor sites are not close to a power source,” explains ART President David Meurer. “LANL used research it was conducting for national defense purposes to support our technical challenges at ART.”

Over the past few years, ART’s revenues have grown by 70%, while many security companies have lost market share. “Our partnership with NMSBA has absolutely paid off,” says Meurer. “The expertise of our national labs allowed us to get into the marketplace faster, at a lower cost, and with better technology.” Building on the company’s growth from six to 33 employees, ART plans to open new locations in additional markets by 2012. The company will replicate the footprint it has established in Albuquerque, using in-person response, coupled with effective Laboratory inspired technology to win long-term clients.

CLEANAIR SYSTEMS, INC.

A visit to CleanAIR Systems in Santa Fe tells the story of the company’s impressive growth. The facility off of Cerrillos Road is undergoing a major expansion after its acquisition by Caterpillar, Inc. in 2010. In the next few months, CleanAIR nearly double its existing workforce to a total of 85 employees.

Over the years, this solid foundation has enabled us to grow our staff and millions of dollars in annual revenue. Founded in 1993, CleanAIR developed innovative technology to clean the emissions of large diesel engines used for electricity generation, oil drilling, and marine applications. Controlling emissions for diesel engines is a $12 billion worldwide business, driven by government regulations to reduce emissions.

“We have unique technology and a unique market position,” says Michael Roach, the company’s founder. “Over the years, this solid foundation has enabled us to grow our staff and increase revenues to millions of dollars.”

CleanAIR Systems was one of the first small businesses assisted by the New Mexico Small Business Assistance Program (NMSBA). The company approached Sandia National Laboratories to test and verify the performance of its catalyst system used to clean emissions in large diesel engines. Principal Investigator Ted Borek conducted experiments on diesel engine exhaust samples with CleanAIR catalysts. “It made a huge difference to customers to have Sandia National Laboratories evaluate our products’ performance,” says Roach.

CleanAIR was a NMSBA Innovation Award recipient in 2001. Over the past ten years, the company has gone on to achieve incredible business success and receive numerous awards and verifications for its emissions control technology. These include the prestigious 2009 Environmental Protection Agency Technology of the Year Award and the 2010 Award of Excellence in Technology Transfer from the Federal Laboratory Consortium. “It’s an example to all New Mexico small businesses of what we can achieve,” says Roach, who started the company with one employee and a credit card, and financed its growth through sales revenue and small loans. “The State of New Mexico and our national labs do a great job of providing access to scientific expertise and equipment at no cost,” says Roach. “I can’t think of a better place for a small business than New Mexico.”
Rod Danak, the owner of America’s largest Alpaca fiber processor, Royal Fiber Spinnery in Ruidoso, says the greatest challenge to the Alpaca grower community is the expense and logistics of transportation of fiber. Most of the 100,000 Alpacas in the U.S. exist in herds of 20, scattered in all 50 states. Moving the annual fiber clip from farms to processing centers across the U.S. is prohibitively expensive based on available wool or cotton balers. Current equipment creates bales weighing 700 pounds and measuring 4’ x 5’ x 2’, which is more fiber than most small farms would produce in a year.

Through NMSBA, Bob Winters, from Sandia’s Organic Materials in Advanced Manufacturing Department, provided design consultation on a baler that compresses Alpaca fiber to a maximum weight of 50 to 70 pounds and a size of 1.5’ x 1.5’ x 1.5’. As the design developed, a testing device was built to validate the concept, then a 3D model and detailed drawings were created for Royal Fiber to have the baler manufactured.

Dakan has taken the design to a metal fabricator to begin production and plans to market the smaller, more efficient baler to the Alpaca grower community, as well as utilizing it in his own processing facility. As a result, he anticipates significant increases in revenue and business for Royal Fiber Spinnery.

When Paul Laur first began working with algae biofuels, he never expected to end up in the oil fields of southeast New Mexico. With partner Alfonz Viszolay of VM Technology, Laur quickly realized that the large amount of water required for algae production could potentially limit the scope of his business. After consulting with an investor (and former petroleum company owner), Laur learned that millions of gallons of produced water are wasted annually as an unintentional consequence of oil and gas production. It was an ideal water source if Laur could figure out how to use it.

Through NMSBA, the Chemistry Division at LANL provided research and analysis of the chemistry of the produced water and biochemistry of algae based on VM Technology’s Ultra-Violet Ozone Oxidation (UVOX) water treatment system. LANL researcher Greg Wagner demonstrated successful algal growth in treated water under controlled laboratory conditions.

The team found that the produced water in the Jal fields had the ideal constituents for algal growth and learned how to customize the treatment process for different types of produced water. Eldorado Biofuels’ first ten-acre test bed in Jal will serve as a pilot for similar facilities that can be built on oil and gas fields statewide. It will also provide the data needed to scale up as the nation’s first 1,000-acre commercial algae facility.
2010 NEW MEXICO COMPANIES SERVED BY COUNTY

BERNALILLO
AAA Solar Supply, Inc.
Adherent Technologies, Inc.
Aegis Technologies Group, Inc.
Albuquerque Pipe & Pump Supply Company
Allied Medical Technologies, Inc.
Altelia, Inc.
AMMRE, Inc.
Analytical Solutions, Inc.
Arsham Technologies, Inc.
Armored Construction
AS-Photronics, LLC
Believe, Inc.
Big J Enterprises, LLC
Birdblaster of New Mexico
Black Mesa Coffee Co., Inc.
Century Sign Builders
Commercial Door & Hardware, Inc.
Concise Motion Systems
Consolidated Service Systems, Inc.
Continental Machining Company
Cornerstone Technical Services
Crestline Plastics, Inc.
Daniel B. Stephens & Associates, Inc.
Crestline Plastics, Inc.
Cornerstone Technical Services
Consolidated Service Systems, Inc.
Commercial Door & Hardware, Inc.
Century Sign Builders
Birdblaster of New Mexico
Big J Enterprises, LLC
Believe, Inc.
AS-Photonics, LLC
Armored Construction
Altela, Inc.
Allied Medical Technologies, Inc.
Albuquerque Pipe & Pump Supply
AEgis Technologies Group, Inc.
AAA Solar Supply, Inc.
Bernalillo

2010 New Mexico Companies

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