ClearSign Combustion Corporation

ClearSign Reaches Development Milestone, Demonstrates Technique to Provide Unprecedented Flame Stability up to 400,000 Btu/hr

A Brand New Technique for Pollution Control Could Mean Cost Savings and Increased Efficiency for Thousands of Industrial Combustion Systems

SEATTLE, WA -- (MARKETWIRE) -- 06/19/12 -- ClearSign Combustion Corporation (NASDAQ: CLIR), an emerging leader in combustion and emissions control technology for industrial, commercial and utility markets, reported today that it has successfully demonstrated its proprietary Electrodynamic Combustion Control™ (ECC™) technology operating in a system with a thermal output of more than 400,000 Btus per hour.

According to Joe Colannino, the company's Chief Technology Officer, the demonstration represents a key milestone in the path to commercializing the company's technology.

"We have exceeded our goal of 250,000 Btu/hr for the current quarter and moved closer to our key commercialization milestone of one million Btu/hour which continues to be our target for the end of this year.

"The purpose of this demonstration was to show that a flame can be stabilized and anchored at a selected location by using ClearSign's ECC technology to dramatically accelerate the rate of combustion," said Colannino. "We believe that this technique will allow us to reduce emissions of Nitrogen Oxides (NOx) to very low levels while at the same time radically simplifying burner design. Improved flame stability is also commercially very significant because it can translate directly to significant savings in fuel consumption for many industrial scale systems."

The company says that its technology can be used to anchor a flame to virtually any designated location above the gas nozzle, even with the fuel moving at a very high velocity. This is significant because normally a flame (even under turbulent conditions) cannot burn fast enough to counter the force of the gas jet.

ClearSign CEO, Rick Rutkowski, says this effect is unique and unprecedented. "The only way to burn back against this high velocity gas jet is to actually increase the reaction rates. The flame is able to stabilize because it is now burning at a speed that more closely matches that of the gas jet.

"Our commercial goal is to enable a whole range of proprietary combustion solutions based on this technique. We believe that there are numerous "high value" commercial and industrial applications where the ability to accelerate and control the rate of combustion can be translated to significant design improvements and substantial savings in both capital and operating costs for users."

"News of this development should be very well received by prospective customers and partners," added Rutkowski. "We have generated substantial interest among prospective launch customers, as well as with several leading combustion system OEMs and engineering and construction firms.

"We believe that our technology is a powerful tool that our customers will be able to use to reverse the trend of rapidly escalating costs in complying with air quality regulations," Rutkowski said.

"We believe that ECC offers the potential to dramatically reduce the high recurring cost associated with control of NOx emissions and will feature a much lower total cost of ownership than current generation technology. These are well known problems and costs that have defied a solution for a long time. I think the market is going to welcome this development."

According to the company, improved flame stability is just one of several powerful combustion control effects enabled by ECC technology. The technology can also be used to improve control of flame shape, to reduce or eliminate emissions of multiple pollutants including particulate, NOx and CO (Carbon Monoxide) and to improve both heat transfer efficiency and heat distribution. Each of these effects has significant commercial implications independently and can be combined in many cases to yield even more powerful advantages. The company will be conducting and reporting on additional experiments on each of these effects at the newly increased scale.

"Our goal is to turn the economics of emissions control on its head," said Rutkowski. "We believe our technology will enable our customers to reduce multiple types of emissions by suppressing them at the source and at the same time, will increase system efficiency, throughput and overall productivity. The ability to combine increased efficiency with emissions control is unprecedented and, potentially, a sea change. We're talking about a world where environmental compliance is no longer a cost but instead a source of additional profit and return on invested capital. That's great news for both industry and the environment."

Last year, The McIlvaine Company estimated that global sales of air pollution control equipment in 2011 were $42 billion. There are approximately 163,000 boilers operating at the commercial and industrial scale in the US.

A video of this effect (filmed at 300,000 Btu/hr) may be viewed at the ClearSign website:www.clearsign.com

About ClearSign Combustion Corporation

ClearSign Combustion Corporation designs and develops technologies that aim to improve key performance characteristics of combustion systems including energy efficiency, emissions control, fuel flexibility and overall cost effectiveness. Our Electrodynamic Combustion Control™ (ECC™) platform technology improves control of flame shape and heat transfer and optimizes the complex chemical reactions that occur during combustion in order to minimize harmful emissions. For more information about the Company, please visit www.clearsign.com

Cautionary note on forward-looking statements

This press release includes forward-looking information and statements within the meaning of the Private Securities Litigation Reform Act of 1995 and the provisions of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Except for historical information contained in this release, statements in this release may constitute forward-looking statements regarding our assumptions, projections, expectations, targets, intentions or beliefs about future events that are based on management's belief, as well as assumptions made by, and information currently available to, management. While we believe that our expectations are based upon reasonable assumptions, there can be no assurances that our goals and strategy will be realized. Numerous factors, including risks and uncertainties, may affect our actual results and may cause results to differ materially from those expressed in forward-looking statements made by us or on our behalf. Some of these factors include the acceptance of existing and future products, the impact of competitive products and pricing, general business and economic conditions, and other factors detailed in our Quarterly Report on Form 10-Q and other periodic reports filed with the SEC. We specifically disclaim any obligation to update or revise any forward-looking statement whether as a result of new information, future developments or otherwise.

CONTACT:

Media Contact:

Dennis S. Dobson, Jr.
(203) 258-0159

Investor Relations:
(206) 673-4848
investors@clearsign.com

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