

ClearSign Selected to Present at American Boiler Manufacturers Association 2013 Summer Meeting

SEATTLE, June 13, 2013 /[PRNewswire](#)/ -- ClearSign Combustion Corporation (NASDAQ: CLIR) today announced that CTO Joe Colannino has been invited to present a technical paper, "Electrodynamic Combustion Control (ECC™) Technology for Combustion Systems" at the American Boiler Manufacturers' (ABMA) 2013 Summer Meeting, to be held at The Broadmoor Resort in Colorado Springs, CO on June 21 - 24, 2013.

In his presentation, Mr. Colannino will announce the latest results from lab testing of ClearSign's novel Duplex™ Burner Architecture and report on progress toward reducing NOx beyond the recently-reported 5ppm milestone and toward the company's goal of achieving an industry-leading 2ppm NOx later in 2013.

"I'm excited to formally introduce ClearSign's technology at this important forum for the first time," said Colannino. "Our advances in NOx reduction are unprecedented and I'm particularly eager to share details of the Duplex Burner Architecture with my peers in the industry. Our results indicate that this powerful technique may overcome many of the costly challenges historically associated with NOx reduction.

"Conventional Ultra-Low NOx burners (ULNBs) typically require an increase in either excess air or external flue gas recirculation to achieve such low NOx emissions," Colannino continued. "ULNBs also tend to increase flame length, some by as much as 300%, which can exceed the firebox length and cause a host of operating problems. In contrast, ClearSign's Duplex Burner requires no external flue gas recirculation, operates with oxygen levels anywhere in the 1 to 3% range, and dramatically reduces NOx by more than 98% to 5ppm without increasing flame length. This unique combination of features promises significant gains in energy efficiency and a dramatically reduced cost of ownership as compared to either ULNBs or post-combustion treatments such as Selective Catalytic Reduction (SCR).

"This is the kind of technology advancement that combustion engineers dream about and potentially represents a ground-breaking path forward for the industry."

CEO Rick Rutkowski added, "ClearSign's mission is to develop technologies that will set new standards in energy efficiency and emissions control. With the combination of ECC™ technology and the Duplex Burner Architecture, we believe we can do just that. Over the last decade, industrial boiler operators have done much to dramatically improve air quality by repeatedly meeting a series of challenging new regulatory standards for NOx emissions. Unfortunately, they have achieved these goals at the expense of significant penalties in energy efficiency and plant productivity. In fact, it has been the trend that, as NOx emissions are reduced, energy efficiency is also reduced -- to the point where the economic sacrifice may simply not be sustainable. We believe that we have a solution that will reverse that trend by achieving unprecedented NOx emissions in the low single digits, while at the same time dramatically improving operating economics compared to traditional ULNBs or expensive after-treatment systems such as SCR."

According to Rutkowski, the market opportunity for ClearSign is significant, with over 163,000 boiler installations in the United States alone, many of which are facing challenges with NOx emissions. Further, new regulations in Texas and California will be coming into effect as early as July, 2014, pushing NOx emissions requirements even lower, with other regions expected to follow. This may mean conventional burners will become even less cost-effective, forcing operators to consider expensive SCR systems. ClearSign believes that, over the next two years, the market may reach an inflection point, making the timing of its innovative technology especially good.

Twice a year, ABMA-member industry leaders from across the country come together for ABMA's bi-annual membership meetings. These four-day events feature engaging and renowned speakers who address hot topics from a variety of perspectives. Prestigious economists, industry analysts, government authorities and professors from top-ranked research universities are among the recent participants.

The American Boiler Manufacturers Association (ABMA) is the national, nonprofit trade association of commercial, institutional, industrial and electricity-generating boiler system manufacturing companies (> 400,000 Btu/h heat input), dedicated to the advancement and growth of the boiler and combustion equipment industry. Founded in 1888 by boiler manufacturers in search of safe boiler design techniques and materials, the organization today provides a common ground for information sharing and to achieve better understanding and communication between manufacturers, their customers, government and the public. ABMA's community of focused interest and problem solving brings the technical and production expertise of an entire industry to bear on a range of energy and environmental policy issues.

Prior to joining ClearSign, Joe Colannino was the head of global R&D at John Zink Company, LLC, a wholly owned

subsidiary of Koch Industries and a worldwide leader in the supply of combustion and air pollution control equipment to the energy industry. There, his responsibilities included management of intellectual property, oversight of John Zink's testing facility and of the John Zink Institute, which trains more than 1,000 students per year in various aspects of combustion. Joe is a registered professional engineer with more than 25 years experience in the combustion industry and has written and reviewed problems appearing on the NCEES professional engineering exam, given in all 50 states for professional engineering licensure. Joe's areas of expertise include R&D management, combustion, pollutant formation and control, and statistical experimental design. Past and present memberships include the American Institute of Chemical Engineers, the American Chemical Society, the Air and Waste Management Association, the American Statistical Association and the National Association of Professional Engineers.

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.

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