

Midwest Energy Emissions Corp (ME₂C) has Successfully Tested an Alternative Technology to Reduce Mercury Emissions by 90%+ in Coal-Fired Power Plants at about 50% of the Cost of Current Mercury Capture Methods



John F. Norris Jr.
Chairman and CEO



Alan Kelley
Chief Operating Officer

**Industrial Goods
Pollutions & Treatment Controls
(MEEC-OTCBB)**

**Midwest Energy Emissions
Corporation**

**500 West Wilson Bridge Road,
Suite 140
Worthington, OH 43085
Phone: 614-505-6115
www.midwestemissions.com**

Executive Bios:

John Norris, Jr.

Chairman, Chief Executive Officer

Mr. Norris became Chairman and Chief Executive Officer of Midwest Energy Emissions Corp in 2011. Mr. Norris has decades of demonstrated experience at the senior executive level. He has an industry-proven ability in successfully building new services companies. Mr. Norris has many years of significant public company experience, as well as been instrumental in managing over a dozen successful merger acquisitions in his career. His experience includes both COO and CEO positions at mid-size companies, as well as Senior Executive positions in major corporations with direct operational responsibility of tens of billions of dollars in assets, billions of dollars in annual revenues, and over 8,000 employees.

Mr. Norris was previously President and CEO at Fuel Tech, Inc., a global air pollution control technology company. Prior to Fuel Tech, Inc., he was Senior Vice President of Operations & Technical Services with American Electric Power. Previous to that, Mr. Norris was President and COO of the American Bureau of Shipping (ABS)

Group, a world leader in providing safety, risk, technical and performance management services to oil and gas, power, maritime and government clients. Prior to ABS, Mr. Norris held multiple positions at Duke Energy Corporation, including President and CEO of Duke Engineering & Services, Inc. and Corporate Senior Vice President, Chairman and CEO of Duke Energy Global Asset Development. Prior to Duke Energy, Mr. Norris was in the USAF where he flew fighters (F-4 and A-10), twice earning the Meritorious Service Medal and the Commendation Medal. He received his B.S. degree in Nuclear Engineering from North Carolina State University (varsity football team) and completed the Executive Management Program at Duke University's Fuqua School of Business. Mr. Norris is a licensed Professional Engineer and a member of the National Coal Council.

Alan Kelley

President, Chief Operating Officer
Mr. Kelley joined Midwest Energy Emissions Corp in November 2011. Before joining MEEC, Mr. Kelley was President and CEO of Grand Bahama Power Company. Prior to that, Mr. Kelley held several positions during a 10-year span at Ameren including Senior Vice President-Generation and President, Chairman & CEO of Ameren's deregulated generating company, Ameren Energy Resources. Concurrent with this service at Ameren, Mr. Kelley was Chairman, President and CEO at Electric Energy, Inc. He has many years of extensive public company experience as well as demonstrated success in multiple "turnarounds" of underperforming businesses. In addition, Mr. Kelley

has international experience in developing and implementing return-on-investment regulatory structures. Mr. Kelley was Chairman of the Association of Edison Illuminating Companies Generation Committee, whose members represent over half of the generating facilities nationally and Chairman of the Mid-America Interconnected Network Regional Reliability Council. He is a former member of the Board of Directors of the North American Electric Reliability Council.

Mr. Kelley has a Bachelor of Science in Electrical Engineering from the University of Illinois and an MBA from the University of Missouri, in addition to having completed the Public Utility Executive Program at the University of Michigan.

Company Profile:

Midwest Energy Emissions Corp. (ME₂C) develops and delivers patented, cost-effective mercury capture systems and technologies to power plants and other coal-burning units in the United States and Canada. ME₂C takes a holistic approach to the mercury emissions problem by delivering proprietary technologies that allow customers to meet emissions regulations in an effective and economical manner, with the least disruption to their ongoing operations.

Midwest Energy Emissions Corp. (OTCBB: MEEC) started as a R&D relationship with the Energy & Environmental Research Center (EERC) of the University of North Dakota. EERC is one of the world's leading developers of cleaner, more efficient energy and environmental technologies to protect and clean air, water and soil. The EERC is recognized worldwide as an expert in understanding mercury in air and for research in the field of mercury emissions capture.

ME₂C and the EERC work closely with utilities, federal and state governments, emissions scientists and engineers to address the complexities of mercury emissions control. As a result, ME₂C has successfully tested an alternative proven technology to reduce mercury emissions by 90%+ in

coal-fired power plants at about 50% of the cost of current mercury capture methods. In addition, this technology meets the recent US EPA Mercury and Air Toxics Standard requirements, is fly-ash friendly and allows flexible custom designs depending on power plants' configurations. ME₂C believes that this is the best solution for mercury emissions capture considering cost, effectiveness and flexibility with minimal disruptions to ongoing plant operations. ME₂C is offering this technology to coal-fired power plants and utilities in the U.S. and Canada with future expansion into Europe and China.

Interview conducted by: Lynn Fosse, Senior Editor CEOCFO Magazine

CEOCFO: Mr. Norris, would you tell us about the focus of Midwest Energy Emissions Corp?

Mr. Norris: Our focus is to assist coal-fired power plants and other coal-fired units to comply with the US Environmental Protection Agency's Mercury and Air Toxics Standard ("US EPA MATS") requirements, as well as states' requirements, to remove mercury from flue gases before reaching the atmosphere. The US EPA MATS date of compliance for most power plants is April 16, 2015. This short timeline works to our benefit in that we have the technology NOW to assist power plants in compliance to these regulations at a lower cost than many of our competitors can do it. In addition, many states currently have regulations in place now that plants are complying with using a more expensive competitors' solution. This opens up many doors for us in that our technology can accomplish the same or better results at a fraction of the cost. In a way, you could consider us a 'green-oriented' service company helping power plants to meet their mercury emissions removal requirements as established by regulatory bodies. In addition, we are a small publicly traded company that is traded on the OTCBB as MEEC.

CEOCFO: What is the process of removing mercury, and what is it that you are doing that is different?

Mr. Norris: Mercury is present in very small hard-to-detect amounts in coal, but because the power plant burns large quantities of coal, mercury emissions can be an important health issue, especially with the water and fish intake when people eat those fish. We take the mercury out of those air emissions through a patented process that puts an injection in the boiler and then later in the flue-gas stream. It differs from other technologies in that we use a two-injection approach that has been proven to get much better mercury removal at much lower cost than our competitors.

CEOCFO: Does it get better results because you are doing it twice?

Mr. Norris: We have found that a combination of a two-step process and our proprietary non-toxic mixture really adds to the effectiveness of the mercury removal process. While we add a very small amount of our mixture to the boiler (front-end) and an activated carbon-based sorbent injection to the back-end, our competitors typically inject much larger quantities of activated carbon or brominated activated carbon to achieve lower mercury removal results. Our competitors' larger injection amounts frequently cause balance-of-plant problems for the power operators. Our process can achieve the requirements at a fraction of the cost and without the downstream plant impacts.

CEOCFO: Where is Midwest Energy Emissions Corp in the development and commercialization process?

Mr. Kelley: Over the last several years, our process has been demonstrated in a number of power plants across the country, often in head to head competitions with others who remove mercury. Our company always came out in first place in those competitions based on a mercury removal efficiency and cost. For example, one of those tests developed into a commercial customer who went online with our process on January 1st 2012. They are very pleased about the results and have been a great referral source for other perspective customers. We also recently announced that we have signed up another company to demonstrate our process. They are looking for a way to

save money on the mercury removal process than what they currently use in order to meet their state requirements. We will be carrying out the demonstration this summer. Frankly, we hope to have several more demonstrations carried out this summer. Our hope would be that they would lead to additional commercial customers.

CEOCFO: What is the process of implementation?

Mr. Kelley: Our process to help power plants meet state and federal mercury emissions requirements is as follows. First, in order for a power plant to insure that a technology will work within their unique plant configuration, they would typically require an onsite demonstration. After 7-10 days of testing, they will be able to determine the effectiveness of our technology for their needs. Once they commit to our solution, they will need to build and install (we provide the blueprints) low capital cost equipment on the front-end of the power plant. This equipment injects a small amount of our proprietary material into the boiler. We work with many vendors, as well as plants' construction crews, to provide guidance on the construction of this equipment. Our business model is based on the sale of the products that we inject and not on the building of equipment.

Secondly, on the backend, there is a sorbent injection system for the gas stream from the boiler. Many plants already have this backend injection system installed. We provide the proprietary chemical sorbent used in this part of the mercury removal process as well.

Lynn, let me also mention another thing that differentiates us from our competition. Our technology offers a power plant operator the ability to monitor in real time the amount of mercury it is emitting as well as the amount of our product it is using in order to achieve the most efficient use of our product.

Mr. Norris: Our revenue stream is generally consistent whenever the plant is operating. When the plant is

operating, it is going to be injecting something to control mercury. We do not make money as Alan said on the capital cost. We are a technology company providing the chemical injection materials. Everyday a power plant is operating our material is being used to remove mercury from the emissions. This results in a revenue stream for us. It is a razor/razor blade kind of approach, where we are providing the razor blade.

CEOCFO: Is the industry aware of Midwest Energy Emissions?

Mr. Norris: As with any small company, it is about getting out there and telling them who you are and why you believe your process is better. First off, Alan and I have been in the utility industry as senior executives for decades, both of us have been at very high levels with very large publicly traded companies. I was with Duke Energy and then American Electric

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Power. Alan was with Ameren and most recently president and CEO of Grand Bahamas Power. We know the utility industry and are friends with many of the top industry leaders. We are aggressively meeting with CEO's, presidents, plant personnel, as well as others to share our story including why we believe we have the solution to their mercury removal needs that can meet their existing and upcoming compliance requirements and save them significant amounts of money.

We also have a sales force. Our Vice President of Sales is highly experienced in selling to the utility industry using this type of business model. We employ a nationwide network of very experienced manufacture reps who work closely with their utility clients while promoting our mercury removal solutions to them.

CEOCFO: Are most companies actively looking or is it still on the backburner?

Mr. Kelley: Yes, they are now actively looking for solutions, especially

since the US EPA published the MATS in the Federal Register on April 16, 2012. Power plants have until April 16, 2015 to comply with these requirements, which on the average is an about 90% mercury removal requirement. Interest is picking up due to the deadlines for compliance now being set by the various regulatory bodies.

Many plants were on the fence waiting to see what the US government was finally going to come out with, what the final requirements were going to be, but the interest is clearly out there now. We expect the second half of 2012, and throughout the year 2013 to be high levels of activity in this arena.

Mr. Norris: Power plants take outages to do maintenance. Typically, some of them do it once a year, or every year and a half; some once every two years. Utilities have to decide if this technology is what they want to use at a particular station and then that has to get into their outage plan. If they have an outage in 2014, then they will have to decide this year or next what they are going to use. They can then order the capital equipment and material and have it installed so they can be ready to go. You have to look at each utility's planning horizon for their unit(s) and from that you can work backwards to determine when they have to make a decision.

Mr. Kelley: There are high cost ways to remove mercury and there are low cost ways to do it. We are in the subset of low cost ways. Some utilities, because of other requirements, are looking at installing new bag houses, new precipitators, scrubbers, and SCRs. These fall into the high cost ways. If a plant's decision is to go the high capital cost way, they will have to be moving quickly if they have not gotten those facilities installed by now. Not only are these systems expensive, but they take years to install. We think the lion's share of newly installed mercury removal systems are going to be the lower capital cost way, using some kind of sorbent/activated carbon injection. In

fact, over 100 plants in the country today use some form of activated carbon injection for mercury removal.

CEOCFO: Are there newer competing technologies in the market?

Mr. Norris: Our typical competition are companies who actually manufacture activated carbon. I would characterize them as looking for clients to sell their activated carbon to because an activated carbon plant is expensive to build; typically like \$100 million to build one. The competition tends to be people like Calgon, ADA-CS and NORIT that have a great deal of activated carbon to sell. We can buy that activated carbon from them or elsewhere. Our proprietary materials are blended products. We are primarily a technology provider.

I'd also note that we have some very strong patents in the US, Canada, and China and we intend to protect those patents.

CEOCFO: Would you tell us about the Chinese market potential?

Mr. Norris: The Chinese market is just evolving. The Chinese have a rule on their books right now for compliance at the German standards in 2015. They will be running some tests to make sure how they want most of their power plants to comply. Our approach in China is probably going to be to license the technology to Chinese companies. That market for us is in its infancy.

CEOCFO: Development is always costly; what is the financial picture like for Midwest Energy Emissions Corp. today?

Mr. Norris: As we have announced, we are in a capital raise campaign to properly capitalize the company. We have one customer on the west coast and with plans to add more customers. Our near term focus is to attract plants that have existing mercury control regulations and engage them to use our technology in achieve better results for less cost. These include about 15 US states that currently have mercury removal regulations, as well as Canada (especially Alberta, Saskatchewan and Nova Scotia).

For the longer term, we are also focusing our efforts on getting demonstrations and commitments for the broader US market in order for plants to comply with the US EPA MATS in April 2015. 1,100 coal power plants in the US today are going to have to comply with these requirements. The vast majority of them do not currently have systems in place to comply with the new MATS rule in 2015. This is a huge market. Even if a few hundred of them shut down, it is still a massive market potential for us. Our revenues for a thousand megawatt unit with some sort of a lower cost injection technology could be in the millions per year (while saving the power plant millions of dollars per year to achieve better mercury removal results than our competitors' technologies). For

example, a 1,000-megawatt plant might spend \$10,000,000 or more using a competitor's methods whereas with us that same plant could spend a 40-60% less for the same results.

CEOCFO: Why should investors consider Midwest Energy Emissions today?

Mr. Norris: We are a company that has tremendous market potential. We are unique in that we have highly experienced officers with decades of experience and contacts with many of the largest power plants in North America. Contacts are priceless and we are well-positioned to balance this with our high value, low cost technology to earn the rights to do business with many plants across North America. We also have very solid patents in the US, Canada and China, as well as in Europe that we believe will open up many new doors for us.

We encourage interested parties to go to our website, www.midwestemissions.com to learn more about us. In addition, we always keep our doors open to interested parties and investors wanting more information. We encourage them to leave a message on the website or to give us a call. We believe in helping a potential investor to be an informed investor.



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