



## **EPA's Commercial Demonstration Permit Program Names SkyMine® a Multi-Pollutant Control**

*Effective Alternative for Power Plants to Scrub Smokestack Emissions and Address Stricter Federal Air Quality Rules*

**AUSTIN, Texas** – May 26, 2011 – Skyonic Corporation today announced that its patented carbon mineralization process, SkyMine®, was listed as an advanced combustion control technology for fossil fuel power plants as part of the EPA's Commercial Demonstration Permit Program. The program was outlined in the proposed revisions to the New Source Performance Standards (NSPS) published in the [Federal Register](#) on May 3 in conjunction with the National Emission Standards for Hazardous Air Pollutants (NESHAP or the "utility air toxics rule"). Controls needed to comply with these rules share commonalities, and the EPA wants to allow owners/ operators to better plan to comply with both sets of requirements. SkyMine® is a unique pollution control technology designed to profitably capture and mineralize carbon emitted from flue gas stacks, while also scrubbing 99 percent of SO<sub>x</sub>, NO<sub>2</sub>, mercury and other heavy metals.

According to the EPA, power plants are the largest remaining unregulated source of toxic air pollutants, producing nearly half of mercury and more than half of acid gas emissions in the United States. Some reports estimate that coal-fired power plants are responsible for 99 percent of the power sector's mercury emissions. Roughly half of coal-fired power plants today utilize pollution control technologies, while the remaining coal plants, in addition to oil-fired power plants, will be required to comply with the new standards once they take effect. The EPA is holding public hearings this week on the proposed mercury and air toxics standards.

"The energy industry has been watching the emergence of new emission mandates closely as new technologies are needed to meet more stringent and demanding environmental standards that old technologies simply cannot meet or cannot meet at a reasonable cost," said Joe Jones, CEO and founder of Skyonic Corporation. "Now with the EPA selecting specific pollution control technologies, power plant owners have the guidance on viable solutions to reduce their emissions and meet these important new standards. That SkyMine® was named a multi-pollutant control technology by the EPA sends a clear signal to the industry that our carbon mineralization technology dramatically reduces power plant emissions in a safe and reliable way."

The SkyMine® process can be run in a non-carbon-capture mode called SkyScraper™ that accomplishes all the scrubbing of acid-gases and metals without generating carbonate and bicarbonate by-products. Skyonic estimates that this process-mode will allow compliance at a capital cost of \$150-300/kW instead of the \$450-600/kW typical for wet-limestone-scrubbers/SCR traditionally employed. "Furthermore," said Mark Clayton, Skyonic VP of Corporate Relations/Sales, "that capital savings occurs along with an estimated equivalent

parasitic load, and the processing units can be scaled down to 50MW units. Traditional scrubbing at the lower pollution targets proposed by the new standards are just not cost-effective.”

SkyMine® selectively removes carbon dioxide, acid gases, and heavy metals from coal combustion and other flue gas streams in a safe, efficient, and profitable manner. The process achieves this by using low-cost chemical inputs, producing high-value chemical outputs such as hydrochloric acid, hydrogen chloride, chlorine and hydrogen that are sold at a profit to offset plant costs, and operating at minimal parasitic loads for improved energy efficiency. A key criterion for the advanced combustion controls named in the new EPA rule is that they reduce compliance costs, parasitic energy requirements, and ammonia emissions.

###

### **About Skyonic Corporation**

Founded in 2005, Skyonic Corporation developed SkyMine®, the first carbon capture technology designed to profitably capture carbon dioxide (CO<sub>2</sub>) emissions by mineralizing the gas into baking soda. Developed by inventor and CEO, Joe Jones, SkyMine® is a patented green technology process that enables power-generation and industrial manufacturing plants to cost-effectively produce energy and products in a cleaner way. Skyonic has conducted field trials and pilot projects of its technologies at power plants throughout Texas. The company is headquartered in Austin, Texas and is backed by venture capital. To learn more about Skyonic and its other products visit <http://www.skyonic.com>.

###

### **Media contacts**

Stacy MacDiarmid  
(512) 658-2265  
[stacy@skyonic.com](mailto:stacy@skyonic.com)

Lauren Whittenberg  
Lois Paul & Partners  
(512) 638-5322  
[lauren\\_whittenberg@lpp.com](mailto:lauren_whittenberg@lpp.com)

