



New Scrubber Technology from Skyonic Reduces Greenhouse Gas Emissions

SkyScrapper™ Enabled Plants Can Neutralize Harmful Pollutants Found in Industrial and Power Plant Smokestacks, Addressing New EPA Rules

AUSTIN, Texas – Jan. 27, 2011 – Skyonic Corporation, a chemical engineering company developing technologies to safely recycle carbon emissions into economic mineral resources, today announced a new scrubber technology that can remove virtually all sulfur oxides (SO_x) and nitrogen oxides (NO_x) emitted from flue gas stacks. This new scrubber technology, SkyScrapper™, is designed to help refining, power and other industrial plants safely treat flue-gas streams and have the potential to mitigate rising environmental concerns around fly ash. SkyScrapper™ captures between 97-99 percent of pollutants found in exhaust gases, including SO_x, NO₂, mercury (Hg) and other heavy metals, and mineralizes these and other toxins while producing marketable byproducts, including chlorine and hydrogen.

Skyonic continues to be at the technological forefront in the push for the reduction of greenhouse gases (GHGs) and other toxic emissions. This month, new regulations imposed by the U.S. Environmental Protection Agency (EPA) will take effect, designed to decrease the GHGs deemed most detrimental to the environment and human health under the Clean Air Act of 1970. The largest fossil-fuel power plants (utility and refinery sectors) will be affected by the new rules first, in addition to any new construction facilities that will emit more than 100,000 tons of CO₂ or GHGs annually. Existing plants that also modify facilities resulting in a 75,000-ton increase in annual emissions will have to meet these guidelines. SkyScrapper™ addresses the GHG rules within these new mandates, while also providing a means for coal power plants to comply with other impending EPA rules that place challenging restrictions on the emissions of SO_x and NO_x, Hg and other pollutants from coal-fired plants.

“SkyScrapper™ was specifically developed to provide a more effective alternative to scrubbing methods today,” said Joe Jones, Skyonic’s CEO and Founder. “Current wet-limestone and SCR scrubbing is only scalable to large (400 MW or greater) equivalents and cost \$400 – 650/KW capital. SkyScrapper™ can operate down to the 10MW equivalent level and costs less per KW. Additionally, current scrubbing technologies release CO₂ as they capture acid gases; in contrast, SkyScrapper™ does not release any CO₂, which is consistent with Skyonic’s overall mission. In evaluating the market, we realized the existing solutions to remove smokestack impurities didn’t have the flexibility to meet current day needs. SkyScrapper™-enabled plants, in contrast, safely capture and remove practically all of the pollutants that cycle through flue gas streams, and we’re confident it can effect real change in the industry while helping to meet current and future regulatory requirements for reducing these emissions,” added Jones.

The patent-pending SkyScraper™ technology is a post-combustion process, and can be easily retrofitted to existing infrastructures or implemented as a new facility is being planned and built. SkyScraper™ joins SkyMine®, Skyonic's patented, for-profit carbon removal and mineralization technology, and expands the options for use by industrial plants to clean their facilities, while addressing air quality requirements. A key advantage of SkyScraper™ is its scalability to scrub almost all toxins found in flue gas streams, including 99.9 percent SO_x and 99 percent NO₂. SkyScraper™ achieves this by forcing an energy-efficient chemical reaction between the gases and an electrochemically generated caustic soda. The system also removes 97 percent Hg and other heavy metals with a separate unit. SkyScraper™ was developed in the field alongside SkyMine® testing, and has been tested in labs and at coal plants in Texas. SkyScraper™ can be deployed along side SkyMine® to mitigate CO₂ along with a full scrub of the emitter's acid gases and heavy metals.

SkyScraper™ technology helps coal plants eliminate the risks associated with coal ash, such as groundwater pollution, contamination of connected surface waters or generation of toxic vapors. Deployed in combination with Skyonic's SkyMine® technology, significant potential exists to eliminate the risks associated with coal ash disposal through its environmentally-safe approach to mineralizing smokestack emissions as baking soda, an ideal substance for long-term storage. Research has linked exposure to coal ash components, including arsenic, lead, and chromium and other toxic compounds to cancer and other health problems.

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About Skyonic Corporation

Founded in 2005, Skyonic Corporation developed SkyMine®, the first carbon capture technology designed to profitably capture carbon dioxide (CO₂) 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>.

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