Norit Americas, the largest producer of powder activated carbon (PAC) in the world, is at the forefront of developing mercury control technology for the coal-fired power industry. Norit Americas produces DARCO® Hg and DARCO® Hg-LH, a specialty treated carbon, in Marshall, Texas and Bienfait, Canada, supplying product to customers throughout the United States.

The toxicity and persistence of mercury in emissions from coal-fired power plants has caused many state environmental agencies to establish regulatory controls on flue gas emissions. Norit Americas pioneered the use of sorbent injection systems for mercury emission control. Today the company supplies PAC as well as storage silos and dust free dosing systems to the coal-fired utility market for flue gas treatment.

In 2009, environmental agencies’ increases in regulatory controls fueled a growing demand for PAC at coal-fired power plants. The demand pushed Norit Americas to expand its production facilities in Marshall, Texas and Bienfait, Canada. To meet the increased need for PAC throughout the upper Midwest, the company also decided to build a transloading terminal near St. Louis, Missouri which would be centrally located within hours of several key customers’ locations and be easily accessible by rail and bulk trailers. The PAC is shipped to the MidWest terminal by rail, and then distributed regionally by truck.

“The guarantee of PAC availability, as well as cost efficiencies of this method of distribution, makes it worth our while to ship the product by rail and unload into storage silos, then move through transloading stations to bulk trailers,” said Dick McKnight of Norit Americas.

The process of building this new terminal facility was set to a tight timeline. The company adopted an aggressive construction schedule and called upon vendors to meet their requirements.

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Insulation received their coating at the manufacturing facility, and were transported to the site and simply stood up in place.

“Bolted and factory welded tanks were good choices for this project because of their quick construction in the field,” said Todd Green of CST Storage. “CST Storage has a great history and working relationship with Norit, and working directly with them on the project helped us move through the process more quickly to meet their timeline.”

“CST Storage had proven to us in the past that they are willing to jump through hoops when we need them too, and clearly they came through for us in this case,” said McKnight.

Norit also chose CST Storage because bolted panel tanks may store large quantities of dry bulk material and offer reduced cost and quicker construction over field welded tanks.

Norit’s new transloading terminal in St. Louis will process more than 70 million pounds of PAC per year. The company that pioneered the use of PAC technology for mercury and dioxin emission control expects the demand for PAC by coal-fired utilities to grow and their new facility to supply customers for years to come.

AUTHOR BIOS
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Todd Green is Regional Manager for Bulk Solids for CST Storage. CST Storage specializes in the design, fabrication, factory coating/thermally curing and erection of tanks for dry bulk and liquid storage. The company manufactures BulkTec™ bolted and shop-welded tanks of carbon steel, aluminum and stainless steel featuring factory applied and thermally cured epoxy coatings. CST Storage tanks are manufactured at ISO 9001 Certified facilities and are found in 125 countries worldwide. Contact: tgreen@cst-storage.com or (620) 421-0200.