In the wood form shop, a smaller collector is equipped with six HemiPleat filters and explosion venting to protect against the possibility of combustible dust explosions. An underground ducting and automated control system energizes the dust collection system when any wood shop equipment is operating.

According to Gregg Jacobson, Wells Concrete vice president of operations, “The dust collection systems in the Albany facility have a user-friendly design, provide easy access to the cartridge filters, and have proven to be superior to what we have in the Wells plant, especially their reverse-pulse air systems.”

The HemiPleat filters have a patented open-pleat configuration, resulting in better airflow through the cartridges for more energy-efficient performance. Dust also tends to release more readily during pulse cleaning to reduce compressed air requirements. HemiPleat filters typically experience greatly extended service life and lower pressure drop compared to standard dust collector cartridge filters.

Jacobson adds: “To further conserve energy and minimize operating costs, the dust collectors have variable-speed drives that allow us to adjust their pickup airflows based on the dust volume being produced. Because of this, we received a sizable utility rebate from our local energy supplier based on annual natural gas savings that the high-efficiency dust collection equipment provides.”

The project team included Camfil Farr APC representative Glacier Technology (Plymouth, Minn.) and mechanical contractor/installer Ellingson Plumbing, Heating & Air Conditioning (Alexandria, Minn.).