

## Delhi Township Sludge Dewatering and Dryer Project

In 2007, Delhi Charter Township began major improvements to their Publically Owned Treatment Works geared toward improving their wastewater operations, generating Class A biosolids, and creating the infrastructure to harvest the available energy out of the waste stream, affectionately phrased "Poo to Power." Phase 1 of this process was the completion of the Township's award winning anaerobic 2-PAD digesters which captures and recycles waste heat and uses methane off gas to run two high speed (11,000 rpm) turbines to produce electricity for plant use.



Phase 2 of Poo to Power is to dewater and dry the Class A biosolids generated from the digesters from 2% to 85% solids. Dried product opens several new markets for the Township such as commercial fertilizer and coal substitute in electricity generation or improves on the existing land application market for the Township. While dewatering sanitary sludge is common in the industry to reduce transportation costs and there are a number of dryers in the U.S., this project would be the first of its kind to put the full process together with the end user burning the sludge for electricity production. Due to the green nature of the project, Delhi's sludge dryer was offered 50% funding through the Green Project Reserve within the SRF loan program. The \$2.58 million offered represents 20% of the entire Green Project Reserve for the State.

To gain support and seek other possible revenue sources, Delhi held an open house and bus tour of the plant at the POTW in January, 2011. Attendees included numerous local, county, and state politicians, renewable energy advocates, MSU power plant and Product Center personnel, and staff from numerous state agencies such as MDEQ, MDELEG, MEDC, and MPSC. The open house was a hit and lead to numerous funding opportunities and contacts within the regulatory arena.



On the web at [www.hrc-engr.com](http://www.hrc-engr.com)

For more information on the Delhi Township Sludge Dewatering and Dryer Project, please contact:  
Mr. George Hubbell II, P.E., President, at (248) 454-6300 or [ghubbell@hrc-engr.com](mailto:ghubbell@hrc-engr.com)