

## Shenyang Biosolids & Agricultural Byproducts

### Shenyang, China

Commencing operations in May 2012, the Shenyang Sludge Treatment Facility has the distinction of being **the largest facility using BDP's agitated bay technology and to the best of our knowledge, the largest biosolids composting facility in the world.** The facility was designed as a **biodrying** operation using the heat of the compost process to dry and stabilize the biosolids prior to land application as a fertilizer substitute. Traditional high carbon bulking agents, like wood or green wastes, are difficult to source in China due to high use of these materials as fuel. Therefore the facility was designed to recycle the maximum amount of dried compost coming out of the bays after 21 days and limit the amount of fresh bulking agent added. The split varies seasonally. Using an extensive network of conveyors, including for bay loading and unloading, the facility was designed to be completely automated from material receipt thru compost discharge. It incorporates ninety six 10 feet wide x 300 feet long bays served by eight 100 HP BDP agitators to co-compost @ 1,000 WTPD of municipal biosolids from Shenyang with limited amounts of rice hulls and other agricultural by products. The facility operates 7 days per week 16 hours per day. Shenyang is located in the northeastern part of China. Ambient temperatures at the facility range from -10F to 90F. An enclosed compact BacTee biofilter is used for odor control.



View of Biosolids/Rice Hull Compost in Bays



Compost Facility on over 30 acres.

<b>Primary Compost Material</b>	@ 360,000 WTPY Biosolids
<b>Key Characteristics</b>	Undigested 20% DS from centrifuges.
<b>Secondary Compost Material</b>	Minimal amounts of various agricultural byproducts
<b>Key Characteristics</b>	Dry organic material like rice hulls, corn straw, etc... <2"
<b>Facility Start Up</b>	May 2012
<b>Total Facility Size</b>	@ 32 acres
<b>Facility Engineer</b>	Siemens China
<b>Plant Contact</b>	Don Wang – MTI USA
<b>BDP Contact</b>	Rich Nicoletti – Compost Systems Manager



Fully Automated Agitator and Bay Unloading System