

Delaware County Municipal Solid Waste & Biosolids Facility

Walton, NY

In 2005 the Delaware County Public Works Department commenced operations of their Municipal Solid Waste (MSW) and Biosolids co-composting facility. This was a major part of the County's efforts to divert more 70% of the MSW that previously had been going to the adjacent landfill. The facility is designed to co-compost 35,000 tons per year of organics with 6,700 tons per year of biosolids. This facility is one of two biosolids and MSW co-composting facilities that utilize BDP's agitated bays. MSW is received in a large submerged waste receiving pit. The MSW is in the range 50% - 60% dry solids. The MSW is moved by grapple to a 157ft long x 14ft diameter rotating drum type "bioreactor" where it is subjected to physical reduction from the tumbling action for approximately 3 days. To aid in the physical reduction process, as well as to enhance the composting process by adding Nitrogen to the high Carbon content MSW, liquid biosolids and other liquid wastes recycled from within the facility are sprayed into the drum. After 3 days in the bioreactor the organic (compostable) material in the MSW is sufficiently reduced in size such that it can be effectively screened out without a significant portion of inorganic contaminants. This compostable material is then conveyed to the composting portion of the facility where high solids (>10% DS) biosolids are added to it prior to loading in the BDP bays. The facility incorporates fourteen 10 feet wide x 256 feet long bays and two 100 HP BDP agitators where the material is composted for up to 56 days. The fished compost material then undergoes a refining process to remove remaining contaminants before being sent to the indoor curing facility for up to 90 days. A traditional wood chip type biofilter is used for odor control of the entire facility. The material is then trucked out for final use in agricultural and commercial operations.



Solid Waste Receiving Pit



Solid Waste Composting Facility

Primary Compost Material	@35,000 WTPY Municipal Solid Waste 40% - 50% DS from after drum. Max particle size 1.5"
Secondary Compost Material	@ 6,700 WTPY Biosolids
Facility Start Up	May 2005
Total Facility Size	@ 5 acres
Facility Engineer	GHD – Cazenovia, NY
Plant Contact	Mike Oyler – Andy Zuk, Facility Manager
BDP Contact	Richard Nicoletti – Compost Systems Manager



BDP Agitator over Compost Conveyor