

## Kirkhill Treatment Plant:

**Mintlaw, Aberdeenshire  
Scotland**

Aberdeenshire Council has implemented a second Wright composting facility to assist the Council in meeting diversion targets set out in their Waste Strategy.

The Kirkhill Treatment Plant accepts 32,000 tonnes of mixed domestic and commercial waste, collected in wheeled bins, each year. This transfer facility is located on just over an acre of land outside of the village of Mintlaw in north eastern Aberdeenshire.



To recover organic material from the domestic and commercial waste, Wright installed a mixed waste processing system. Processing equipment includes a shredder, magnetic separator, sorting stations, trommel screen, mixer and conveyors linking this equipment and delivering < 50mm fines to one of three Wright composting tunnels. An extension was added to the original building to accommodate the loading sections of the composting tunnels and the tunnel loading conveyors.

Each of the three Wright composting tunnels is designed to accommodate 25 tonnes per day of processed organic waste with seven days retention within the tunnel. A retention time of seven days was selected because of the limited site area and considering Aberdeenshire's intended use of the compost as landfill cover material.

Each tunnel is comprised of five sections: a loading section, four common sections and a discharge section with a series of breaker bars and an auger to remove materials from the tunnel onto a discharge conveyor. A series of perforated stainless steel trays form the floor of each composting tunnel, providing flexibility in the number of trays loaded per day and allowing regular inspection of trays as they exit the tunnel during the loading procedure.

The biofilter is located in boxes installed above the composting tunnels as no area was available on the site for an inground biofilter.

Compost is being used to provide final cover for a series of closed landfills in Aberdeenshire. Compost is blended with sand and soil, placed to a depth of one metre and seeded to provide both an aesthetically acceptable final cover and biofiltration of landfill exhaust gases.