



ENGINEERED  
COMPOST SYSTEMS

## Aerated Static Pile

### Aeration System with Process Control and Monitoring

#### CLIENT FACILITY

Kelowna/Vernon BC —Biosolids Composting Facility



#### CLIENT REQUIREMENTS

Rapid growth in the Okanagan area of British Columbia pushed the Cities of Kelowna and Vernon expand their biosolids composting operations. They joined forces to build a large facility and improve their economies of scale. Their experienced operators had a number of requirements, including:

- An aeration floor that would be easily loaded, unloaded, and maintained;
- No cables or obstructions around the piles in the way of their Front End Loaders;
- Automatic process control and data logging to meet regulatory requirements;
- Readily expandable to keep up with the on-going growth.

#### THE SOLUTION

Once selected as the compost process equipment vendor, ECS began working with the client's consultant, Associated Engineering, to develop the detailed facility design. ECS produced the ASP aeration and control designs, and installation data that was included in the construction documents. Given the tight time-line, ECS simultaneously began fabrication of the aeration and control components, then coordinated deliveries with the construction schedule. Upon completion, ECS engineer's and technicians provided start-up and training.

The Kelowna/Vernon Compost Facility is sized initially for 10.5 dt/day of biosolids in 12 individually controlled ASP zones. The facility is laid out for ready expansion to 36 zones. The aeration system features the ECS high efficiency aeration floor, reversing aeration, rugged low-speed stainless steel fans, and zone-to-zone heat sharing. The ECS CompTroller™ Control System includes intuitive operator interface PC software, automatic temperature feedback based control zone control and monitoring, speed control of the fans for improved energy efficiency and control, and wireless temperature probes (RF TeleProbe™ – see photo right) for simplified operations.

