

Aerated Static Pile

Automated Control of Aerated Slab Biosolids Composting

CUSTOMER PROFILE

Arlington, Washington—Biosolids Composting Facility

CLIENT NEEDS



Local population growth encouraged the City of Arlington to change their biosolids management approach from a Class “B” land application program, to Class “A” composting. The City issued an RFP for a new ASP facility capable of composting up to 700 dry tons of biosolids per year.

The City required:

- Automated aeration and control of both primary composting and curing
- Automated documentation of compliance of regulations
- Pile-building conveyor

THE SOLUTION

ECS teamed with a local construction company to provide the process technology for a turnkey composting facility. ECS provided an ASP-CompTroller™ and the aeration hardware, coupled with in-slab aeration trenches, to aerate and control all 16 primary and secondary (curing) composting bays. The eight primary composting bays feature continuous variable volume and reversing aeration. Each bay has a fan controlled by a networked VFD. The eight curing bays are aerated with a single fan, manifold, and motorized dampers. All the 480 VAC motor controls for the site are integrated in an ECS provided Motor Control Center. The CompTroller Software tracks batches as they are moved from bay-to-bay within the facility and provide a complete record including operator comments.



The ECS Pile-Builder™ Conveyor allows the operators to efficiently control the pile dimension and top-coat the pile with an insulating layer of finish compost to meet the EPA 503 regulations.