

COMPOST FACILITY IN THE PACIFIC NORTHWEST, U.S.A.

Opportunity: By switching to a wireless PLC system, labor costs could be reduced, efficiency could be maximized and throughput could be dramatically increased.

Solution: The EcoProbe system was selected because of its high durability and reliability when compared to competitive probes. In partnership with an engineering firm, Reotemp produced and tailored the wireless EcoProbes to integrate into the customer's re-designed facility. The system was customized to meet PFRP & VAR requirements. A third party integrator was responsible for designing the software and programming a custom HMI. The HMI touchscreen allows the facility operators to control the automation of their equipment, including blowers and valves.

ECOPROBE SYSTEM BENEFITS

- Longer Probe Life
- Ability to Process More Material in Less Time
- Improved Process Management & Control
- 24/7 Remote Access with Continuous Monitoring
- Automated Storage of Pile Data
- Reduction in Labor Costs

FACILITY STATS

- 78 Wireless EcoProbes, 2 Temperature Sensors per Probe
- Monitoring 26 Aerated Static Piles, Split into Two Groups of 13
- Wireless Data was Funnelled into the Modbus PLC
- PLC was Used to Control 2 Independent Blower Skids (3rd Party)
- Developed Using Modbus Protocol
- Custom HMI Software was Created to Control and Monitor Entire System (3rd Party)
- Data was Archived and Reported to Meet PFRP & VAR Requirements (3rd Party)



EcoProbes

HMI Interface



Modbus Receiver

