

Minimum Technical Information Needs for Submittal
of Plans and Specifications for Sludge Compost Facilities

1. Plant Configuration (layout)
2. Process Information
 - a. Sludge, Amendment, and mix properties (for range of conditions)
 - Type and Amounts of Sludge, Amendment, & Recycle
 - Volatiles Content-Sludge, Amendment, Mix
 - Initial Solids Content -Sludge, Amendment, Mix
 - Porosity/Bulk Density - Mix, Product
 - Required Mix Ratios & calculations
 - b. Reactor Shape, Dimensions, and Volume
 - c. Detention Time in:
 - each reactor (active & curing phases)
 - aerated curing
 - product storage
 - d. Solids Retention Time in Reactors & Facility
 - e. Aeration (both in and outside reactor)
 - Method and Rate
 - Volume of Air (cf/unit of sludge)
 - Static Head Pressure
 - Range of Straight Line Airflow Distances
 - f. Moisture Content of Mix When Discharged from the Reactor & Facility
 - g. Monitoring & Control
 - Temperature & Moisture
 - Oxygen levels & Stability Testing
 - h. Mass Balance Calculations
 - i. Energy Balance Calculations
3. Product Quality Information
 - a. Ability to Meet Pathogen Reduction Criteria
 - b. Ability to Meet Regulatory Criteria (EPA part 503 & DEP 310 CMR 32.00)
4. Odor Control
 - a. Inventory of All Potential Odor Sources
 - b. Control Plan for Each Source, including:
 - Estimated Pollutant Emission Rates & Concentrations
 - Capture and Containment System
 - Treatment Facilities & Method of Dispersion
5. Materials Handling
 - a. System Configuration
 - b. Description of Components
 - Physical Descriptions

- Material Construction
 - O & M Requirements
 - Past Operating History & Reliability
 - Energy Requirements
- c. Control Systems & Flexibility
6. Aeration & Exhaust Systems
- a. Configuration
 - b. Description of Components
 - Physical Description
 - Materials of Construction
 - O & M Requirements
 - Past Operating History & Reliability
 - Energy Requirements
7. Reactor Systems (inc. discharge device)
- a. Configuration
 - b. Description of Components
 - Physical Description
 - Materials of Construction
 - O & M Requirements
 - Past Operating History & Reliability
 - Energy Requirements
8. Operations
- a. Labor Needs & Requirements
 - b. Skills Required For:
 - Operating the Equipment
 - Controlling the Process
 - O & M of Equipment
 - c. Proposed Operating Schedule(s)
9. Marketing Analysis & Description of Proposed Uses of the Product
10. Analysis of Required Storage and Curing Facilities for Off-season Storage
11. Demonstration of Compliance with DEP Redundancy Policies (if applicable)

