

MINNESOTA COMPOST RULES

Ginny Black

Source-separated Organics Coordinator

Minnesota Pollution Control Agency

Current Rule

- ▣ Backyard, exempt
- ▣ Yard Waste, permit by rule
- ▣ Solid Waste Compost Facility, full permit

Proposed Rule

- ▣ Small Facilities
- ▣ Yard waste
- ▣ Source separated organics
- ▣ Solid waste (MSW)

Small Facilities

- ▣ Food scraps, garden waste, non-recyclable paper, weeds, lawn cuttings, leaves and prunings;
- ▣ no meat, fats, oil, grease, dairy, manures, sanitary products, ASTM D6400 or ASTM D6868
- ▣ 80 cubic yard maximum (excluding finished compost)
- ▣ Managed to prevent odors, nuisance conditions and public health risks

Yard Waste Compost Facility

- ▣ Requires period turning
 - Aerate
 - Maintain temperatures
 - Reduce pathogens
- ▣ Less than 3 percent inerts, < 4mm
- ▣ Control run-off/ run-on
- ▣ Testing of finished product not required
- ▣ Unlimited use of finished product
- ▣ Annual report

Solid Waste Compost Facility

- ❑ MSW feedstocks
- ❑ Controlled access points
- ❑ Training plan
- ❑ Designated delivery area
- ❑ 10-7 pad for tipping/mixing/active compost area/curing area
- ❑ Leachate/storm water management systems
- ❑ Salvageable/recyclable materials properly stored and removed weekly
- ❑ Residuals properly stored and removed weekly
- ❑ Meet PFRP
 - Windrows: 21 days at 55° C, turn every 3-5 days
 - Static aerated pile: 7 days at 55° C
 - In-vessel: 3 days at 55° C

Source-separated Organics (SSO) Materials Definition

- ▣ New facility that can accept
 - Yard waste
 - Wood waste
 - Food waste
 - Industrial/manufacturing food residual – human food production
 - No fish waste, animal waste, meat by-products generated from industrial sources, sanitary products, diapers, sewage sludge, biosolids, septage

SSO Compost Facility Pad Requirements

- ▣ Pad: Hard packed all weather surface
 - 5' to water table
 - Any combination of the following soils:
 - ▣ Sandy clay loam, loam, silt loam, silt, sandy clay loam, clay, silty clay
 - Pad: 1' low permeability soils
 - ▣ < 5' from water table
 - ▣ Low permeability soils meeting MNDOT specs for surface aggregate
 - ▣ Other: concrete, asphalt or geomembrane

SSO Compost Facility Operations

- ▣ Focus on management plan:
 - Waste analysis plan to characterize SSO
 - Odor prevention
 - Contact water = water in contact with raw feed stocks or material that has not met PFRP
 - Storm water/surface water = water from all other areas of the compost facility
 - Storm water management plan
 - ▣ 24 hour 25 year event
 - Curing area = Solvita test maturity index of 5 on the ammonia; 4 on the CO₂
 - Plan to reduce vectors and nuisance conditions

SSO Compost Facility Training

Each employee:

- ▣ Training plan
 - 24 contact hours of training within 12 months of employment, then every 5 years
 - 5 contact hours every year
 - Course list approved by the Commissioner

- Contact hour = 50 minutes

Finished Compost Testing

- ▣ Testing required
 - 503 metals test
 - pH
 - Particle size
 - NPK
 - Soluble salts
 - Maturity – some flexibility
 - Fecal coliform, E. coli
 - PCB & mercury (exemption after 5 years of ND)
- ▣ Class I: \leq 503 metals standards
- ▣ Class II: \geq 503 metals standards.

THANK YOU FOR YOUR
ATTENTION

