

Feedstock Acceptance

Royal Oak Farm Composting Facility operates under a permit that may require regulatory pre-approval or permit modification for each new waste stream accepted for processing. The company's internal pre-acceptance protocols have been approved by the Virginia Department of Environmental Quality (DEQ) for pre-acceptance evaluation.

The following steps make up the pre-acceptance protocol:

1. ANALYTICAL REVIEW

In order to insure all finished composts meet or exceed standards for EPA Class A products, no feedstock is accepted by Royal Oak Farm that cannot meet the same standard for toxicity, including metals.

In addition to issues related to quality of finished compost products, laboratory tests also provide data related to toxins, corrosivity and ignitability, nutrient content, calcium carbonate equivalency, percent solids, and other factors that influence recipe development and processing.

Royal Oak Farm will arrange for the waste generator to provide laboratory analyses of the feedstocks for the parameters included in the attached Feedstock Analytical Review form. All results will be reported to Royal Oak Farm for review and approval.

2. COMPOST RECIPE REVIEW

Royal Oak Farm shall complete the Compost Recipe analysis of the proposed feedstock in accordance with the attached Compost Recipe Model and determine that the proposed feedstock will not compromise either mixture C:N ratios nor mixture moisture contents. Royal Oak shall also review the Feedstock Analytical Form to ensure no constituents in the feedstock will endanger compost quality.

3. BENCH/PILOT SCALE EVALUATION (optional)

For a new type of feedstock material, a bench or pilot scale evaluation may be warranted, as determined by Royal Oak Farm. Once analytical standards have been verified, an appropriate quantity of the proposed feedstock is composted to:

- Verify the feedstock is amenable to aerobic composting;
- Develop a feedstock profile to be used in processing the waste stream; and,

- Test any special amendments, bulking agents, handling, or processing systems that may be required to successfully process the feedstock.

All bench- and pilot-scale evaluations shall be conducted by Royal Oak Farm.

4. GENERATOR FILE REVIEW (optional)

Once analytical compliance has been verified and bench scale studies successfully completed, Royal Oak Farm will conduct a review of the generator's file located in the offices of the agency of regulatory jurisdiction.

Purpose of this procedure is to verify that the analyses provided by the generator for pre-acceptance are historically representative and consistent, and that there are no variations or fluctuations in feedstock quality that might adversely affect Royal Oak's ability to process the waste or find beneficial reuse for the resulting compost product(s).

PROJECT ID _____

CLIENT ID _____

Analytical review

*TCLP PARAMETER	COMPLIANCE LIMIT	FEEDSTOCK LEVELS	COMMENT OR OBSERVATION
Arsenic	5.0 mg/L		
Barium	100 mg/L		
Benzene	0.5 mg/L		
Cadmium	1.0 mg/L		
Carbon tetrachloride	0.5 mg/L		
Chlordane	0.03 mg/L		
Chlorobenzene	100.0 mg/L		
Chloroform	6.0 mg/L		
Chromium	5.0 mg/L		
o-Cresol	200.0 mg/L		
m-Cresol	200.0 mg/L		
p-Cresol	200.0 mg/L		
Cresol	200.0 mg/L		
2,4-D	10.0 mg/L		
1,4-Dichlorobenzene	7.5 mg/L		
1,2 Dichloroethane	0.5 mg/L		
1,1-Dichloroethylene	0.7 mg/L		
2,4-Dinitrotoluene	0.13 mg/L		
Endrin	0.02 mg/L		
Heptachlor (and its hydroxide)	0.008 mg/L		
Hexachlorobenzene	0.13 mg/L		
Hexachloro-1,3-butadiene	0.5 mg/L		
Hexachloroethane	3.0 mg/L		
Lead	5.0 mg/L		
Lindane	0.4 mg/L		
Mercury	0.2 mg/L		
Methoxychlor	10.0 mg/L		
Methyl ethyl ketone	200.0 mg/L		
Nitrobenzene	2.0 mg/L		
Pentachlorophenol	100.0 mg/L		
Pyridine	5.0 mg/L		
Selenium	1.0 mg/L		
Silver	5.0 mg/L		
Tetrachloroethylene	0.7 mg/L		
Toxaphene	0.5 mg/L		
Trichloroethylene	0.5 mg/L		
2,4,5-Trichlorophenol	400.0 mg/L		
2,4,6-Trichlorophenol	2.0 mg/L		
2,4,5-TP (Silvex)	1.0 mg/L		
Vinyl Chloride	0.2 mg/L		

*TOTAL METALS PARAMETER	MAX. ALLOWABLE CONC. (Mg/kg)	FEEDSTOCK LEVELS	COMMENT OR OBSERVATION
Aluminum			
Arsenic	41		
Cadmium	21		
Copper	1500		
Lead	300		
Magnesium			
Mercury	17		
Molybdenum	54		
Nickel	420		
Selenium	28		
Zinc	2800		
*PATHOGENS PARAMETERS			
<i>Ascaris</i> ova	0.5 ova/g dry solids		
<i>Salmonella</i> bacteria	100 MPN/g dry solids		
OTHER PARAMETERS			
*Corrosivity			
*Ignitability			
*Reactivity			
pH			
Nitrogen			
Phosphorus			
Potassium			
% Moisture			
Carbon			
C:N			
Calcium carbonate equivalency			
Bulk density			
Sodium			

*Required for regulatory compliance

Additional comments/observations:

Report number(s)/dated _____ was/were reviewed by

_____ on _____
 (REVIEWER SIGNATURE) (DATE)

NOTE: Attach copies of laboratory analyses used for evaluation