



State of Oregon
Department of
Environmental
Quality

DRAFT 8/16/2012

Proposed Changes to August 3, 2012 proposed rule language.

Further Proposed Changes to Draft Rule Proposals

The proposed rule drafts dated August 3rd noted certain areas of the rules that were still being researched, plus some of the proposed fees were still listed as "to be determined." Based on DEQ's research and discussion on these issues since August 3rd, below, in red, are proposed changes to the draft proposed rules.

Definition of Type 4 Feedstocks:

OAR 340-093-0030 (part)

(38) "Feedstock" means organic and other solid wastes used in a composting process to produce composted material, or used in a conversion technology facility to produce other products. For composting, four types of feedstocks are defined:

(a) Type 1 feedstocks include source-separated yard and garden wastes, wood wastes, agricultural crop residues, wax-coated cardboard, vegetative food wastes including department approved industrially produced vegetative food waste, and other materials the department determines pose a low level of risk from hazardous substances, physical contaminants and human pathogens.

(b) Type 2 feedstocks include manure and bedding and other materials the department determines pose a low level of risk from hazardous substances and physical contaminants and a higher level of risk from human pathogens compared to type 1 feedstock.

(c) Type 3 feedstocks include dead animals, meat and source-separated mixed food waste and industrially produced non-vegetative food waste. They also include other materials the department determines pose a low level of risk from hazardous substances and a higher level of risk from physical contaminants and human pathogens compared to type 1 and 2 feedstocks.

(d) Type 4 feedstocks include specified risk material (SRM) from bovine animal mortality and animal by-products from slaughter that pose a risk to the environment and public health from exposure to prions that can cause Bovine Spongiform Encephalitis (BSE). This includes the brain, skull, eyes, trigeminal ganglia, spinal cord, vertebral column (excluding the vertebrae of the tail, the transverse processes of the thoracic and lumbar vertebrae, and the wings of the sacrum), and dorsal root ganglia from cattle 30 months of age and older and the distal ileum of the small intestine and the tonsils from all cattle. Also includes whole cattle from which the SRM has not been removed, cattle that are not able to walk, and cattle with symptoms that might indicate BSE disease.

Pathogen Reduction and Pathogen Testing for Anaerobic Digestion and Liquid Digestate.

OAR 340-096-0140 (part)

(2) All composted material and solid digestate must meet the following limits:

(a) For composted material produced from Type 1 or Type 3 feedstock, or a mix of Type 1 and 3 feedstocks, analysis must be performed for salmonella or fecal coliform and meet the following limits:

(A) Salmonella analysis must result in less than 3 Most Probable Number per 4 grams of total solids (dry weight).

(B) Fecal coliform analysis must result in less than 1,000 Most Probable Number per gram of total solids (dry weight).

(b) For composted material and solid digestate produced from Type 1 or Type 3 feedstock with less than 50% by volume of Type 2 feedstock, analysis must be performed for salmonella or fecal coliform and meet the following limits:

Proposed Changes to August 3, 2012 proposed rule language. August 16, 2012

(A) Salmonella analysis must result in less than 3 Most Probable Number per 4 grams of total solids (dry weight).

(B) Fecal coliform analysis must result in less than 1,000 Most Probable Number per gram of total solids (dry weight).

(c) For composted material and solid digestate produced from feedstock containing more than 50% volume of Type 2 feedstock in the initial pile, analysis must be performed for fecal coliform and meet the following limits:

(A) Analysis must result in less than 1,000 Most Probable Number per gram of total solids (dry weight).

(3) Methods of Pathogen Reduction. All composting facilities subject to this rule must document and implement a pathogen reduction plan that addresses requirements of the Code of Federal Regulations, 40 CFR Part 503. The plan must include a Process to Further Reduce Pathogens (PFRP), ~~pursuant to~~ under 40 CFR Part 503 Appendix B, item (B)(1), dated February 19, 1993, that must include one of the following elements:

(a) Using either the within-vessel aerobic composting method or the static aerated pile composting method, the temperature of the active composting pile must be maintained at 55 degrees Celsius or higher for three days;

(b) Using the windrow composting method, the temperature of the active composting pile must be maintained at 55 degrees Celsius or higher for 15 days or longer. During the period when the composting pile is maintained at 55 degrees Celsius or higher, there must be a minimum of five turnings of the windrow;

(c) Using anaerobic digestion, the following parameters must be met:

(A) All feedstocks are pasteurized at 70 degrees Celsius or higher for five minutes or longer prior to placement in the digester; or

(B) The digestion process maintains an operating temperature of 53 degrees Celsius or higher for five hours or longer; or

(C) The digestion process maintains an operating temperature of 35 degrees Celsius or higher for 10 days or longer; or

(D) The digestion process maintains an operating or liquid digestate storage temperature above 6 degrees Celsius or higher for six months or longer;

or

~~(e)~~(d) An alternative method that permittee can demonstrate achieves an equivalent reduction of human pathogens.

(4) Testing compost and solid digestate for pathogen reduction. All composting facilities subject to this rule must test composted material and solid digestate with the following frequency:

(a) If less than 2,500 tons of composted material from Type 1 and 2 feedstocks are produced per year, testing must be conducted once a year.

(b) If more than 2,500 tons of composted material from Type 1 and 2 feedstock are produced per year, testing must be conducted every 5,000 tons of feedstock used or a maximum of once every three months.

(c) If less than 2,500 tons of composted material from Type 3 feedstocks are produced per year, testing must be conducted once every four months.

(d) If more than 2,500 tons of composted material from Type 3 are produced per year, testing must be conducted every 5,000 tons of feedstock used or monthly.

(5) Testing liquid digestate for pathogen reduction. All anaerobic digestion facilities subject to this rule and proposing to use liquid digestate as a soil amendment, fertilizer or other productive use must test liquid digestate with the following frequency:

(a) If less than one month storage for liquid digestate; testing must be conducted monthly.

(b) If between one month and six month storage for liquid digestate; testing must be conducted quarterly.

(c) If six month or greater storage for liquid digestate; testing must be semi-annually.

(6) All composting facilities subject to this rule must receive written approval from the department regarding ~~methods of pathogen reduction and pathogen testing for~~ any use of liquid digestate other than:

(a) discharge to an approved wastewater treatment system; or

(b) discharge under a water quality permit issued under ORS 468B.050.

(7) Composted material and digestate from type 4 feedstock must be disposed in a landfill or incinerator permitted to receive domestic solid waste, unless a facility receives written approval from the department for alternative use of the material.

Proposed Changes to August 3, 2012 proposed rule language. August 16, 2012

Application Processing Fee

OAR 340-097-0120 (2) (part)

(2) Application Processing Fee. Except as provided in sections (3), (4), and (5) of this rule with respect to composting facilities, an application processing fee must be submitted with each application for a new facility, including application for preliminary approval pursuant to OAR 340-093-0090. The amount of the fee will depend on the type of facility and the required action as follows:

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(g) A new conversion technology facility:

(A) Designed to receive over 7,500 tons of feedstocks per year: \$1,500

(B) Designed to receive 7,500 tons of feedstocks per year or less: \$1,000

(Note - the above fee is the equivalent of the composting fees for initial screening and for engineering review.)

Facility Plan Review Fee

OAR 340-097-0120 (4) (part)

(b) Every conversion technology facility that is required to comply with OAR 340-096-0180 must pay a fee as provided below. The fee must be submitted with the proposed Operations Plan, as provided in OAR 340-096-0180.

(A) For facilities designed to receive 3,500 tons of feedstock or less per year: \$1,000

(B) For facilities designed to receive over 3,500 tons but no more than 7,500 tons of feedstock per year: \$1,500

(C) For facilities designed to receive over 7,500 tons but no more than 20,000 tons of feedstock per year: \$2,200

(D) For facilities designed to receive over 20,000 tons but no more than 50,000 tons of feedstock per year: \$3,000

(E) For facilities designed to receive over 50,000 tons of feedstock per year: \$5,000