Washington State Department of Agriculture
Organic Food Program
(360) 902-1805
organic@agr.wa.gov

WSDA Organic Program – Manure and compost guidelines

Table 1: National Organic Program standards and equivalency to international organic standards:

	NOP	EEC 2092/91 (EU)	JAS (Japan)	COR (Canada)
Raw Manure	§205.203(c)(1): (c) The producer must manage plant and animal materials to maintain or improve soil organic matter content in a manner that does not contribute to contamination of crops, soil, or water by plant nutrients, pathogenic organisms, heavy metals, or residues of prohibited substances. Animal and plant materials include: (1) Raw animal manure, which must be composted unless it is: (i) Applied to land used for a crop not intended for human consumption;(ii) Incorporated into the soil not less than 120 days prior to the harvest of a product whose edible portion has direct contact with the soil surface or soil particles; or (iii) Incorporated into the soil not less than 90 days prior to the harvest of a product whose edible portion does not have direct contact with the soil surface or soil particles;	In addition to NOP requirements, the following conditions apply: All manure sources must be documented No raw manure from caged poultry operations Manure sources must be tested annually for heavy metals and pesticide residues and meet standards as outlined in Table 2	NOP equivalent	In addition to NOP requirements, the following conditions apply: All manure sources must be documented No raw manure from caged poultry operations Manure sources must be tested annually for heavy metals and pesticide residues and meet standards as outlined in Table 2
Composted Manure	§205.203(c)(2): (2) Composted plant and animal materials produced though a process that: (i) Established an initial C:N ratio of between 25:1 and 40:1; and (ii) Maintained a temperature of	• All manure sources must be documented • Manure sources must be tested annually for	NOP equivalent	• All manure sources must be documented • Manure sources must be tested annually for pathogens, heavy metals, and pesticide residues and

Washington State Department of Agriculture
Organic Food Program
(360) 902-1805
organic@agr.wa.gov

	NOP	EEC 2092/91 (EU)	JAS (Japan)	COR (Canada)
	between 131 °F and 170 °F for 3 days using an in-vessel or static aerated pile system; or (iii) Maintained a temperature of between 131 °F and 170 °F for 15 days using a windrow composting system, during which period, the materials must be turned a minimum of five times. OR **November 9, 2006 NOSB Recommendation for Guidance** Use of Compost, Vermicompost, Processed Manure and Compost Tea "This recommendation denotes other materials and practices that would be acceptable under 205.203(c)(2) which applies to plant and/or animal material mixes…"	pathogens, heavy metals, and pesticide residues and meet standards as outlined in Table 2		meet standards as outlined in Table 2
Processed manure	Follow NOP Technical Guidance **NOP 5006 – Processed Manure** Processed manure products must be treated so that all portions of the product, without causing combustion, reach a minimum temperature of either 150° F (66° C) for at least one hour or 165° F (74°C), and are dried to a maximum moisture level of 12%; or an equivalent heating and drying process could be used. In determining the acceptability of an equivalent process, processed manure products should not contain more than $1x10^3$ (1,000) MPN (Most Probable Number) fecal coliform per gram of processed manure sampled and not contain more than 3 MPN Salmonella per 4 gram sample of processed manure.	• All manure sources must be documented • Manure sources must be tested annually for pathogens, heavy metals, and pesticide residues and meet standards as outlined in Table 2	NOP equivalent	• All manure sources must be documented • Manure sources must be tested annually for pathogens, heavy metals, and pesticide residues and meet standards as outlined in Table 2

Washington State Department of Agriculture
Organic Food Program
(360) 902-1805
organic@agr.wa.gov

Table 2: Testing requirements for manure used under the WSDA International Organic Program

	Analytes	Accepted Test Methods	Standard
Pathogens (composted and processed manure only)	Fecal coliform, salmonella	No specific requirements if performed at an independent laboratory	May not contain more than $1x10^3$ (1,000) MPN (Most Probable Number) fecal coliform per gram and not contain more than 3 MPN Salmonella per 4 gram sample
Metal testing	Arsenic, Cadmium, Cobalt, Mercury, Molybdenum, Nickel, Lead, Selenium, Zinc	As given in Chapter 16-200 WAC	Must meet Washington state fertilizer standard for metals, WAC 16-200
Pesticides	Broad spectrum of organochlorines and organophosphates	EPA Test Methods 8081, 8081A, 8141, 8141B. Other test methods may be allowed with prior approval.	Must be below FDA Action Level or below 5% of the EPA Tolerance level

Blended Products

Many fertilizers contain raw, composted, or processed manure as a minor ingredient. Blended fertilizers which contain manure will be evaluated on a case-by-case basis. Products which contain manure as an ingredient at significant levels (e.g. ≥10%) will be required to meet the additional testing requirements noted in Table 2.