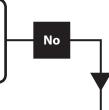


Do you incorporate raw untreated manure in to the soil at least 1 year before harvest<sup>1</sup>?



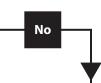
Raw manure presents a food safety risk because it contains pathogens that can contaminate fresh produce. When using raw manure, reduce risks by incorporating it into the soil within 72 hours after application, and never apply it during the growing season. Maximize the time between manure application and crop harvest to reduce risks. The LGMA requires a 1 year harvest interval, while the NOP requires 90/120 days<sup>7</sup> and the FSMA proposed produce rule requires 9 months.<sup>13</sup> Refer to the *Soil Amendments Overview* for more information and references.

Do you avoid spreading raw untreated manure on fields that are water saturated, prone to annual flooding or runoff, or are frozen or snow covered?



Manure applied to fields that are water saturated or prone to flooding can leach and contaminate surrounding production areas and water sources. Be sure to know and follow municipal, state, and federal rules and regulations. Your Natural Resources Conservation Service<sup>8</sup> (NRCS) state offices will have current state standards on water quality protection practices (codes 590 and 633).

If raw untreated manure is stored on your farm, is it covered and physically contained?



Runoff, leachate, and wind spread from raw manure piles can result in the contamination of produce, soil, and water sources. To reduce risks, manure piles should be physically contained and covered to protect them from rainfall and wind. The minimum containment for storage is on a concrete slab. Raw manure should never be piled in a produce field or on bare soil.

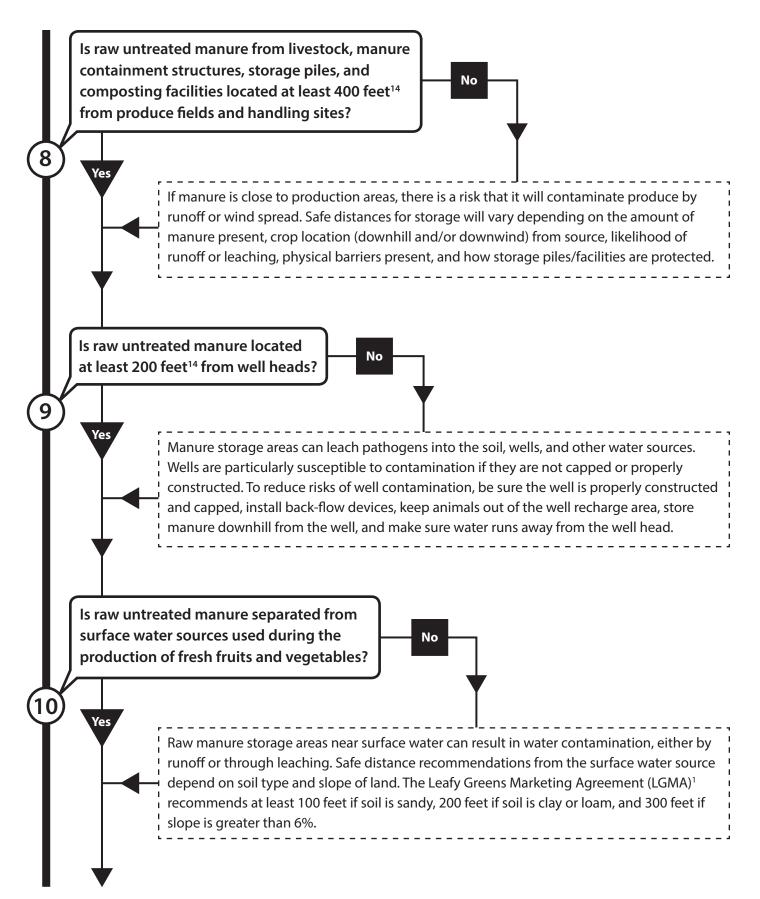
5

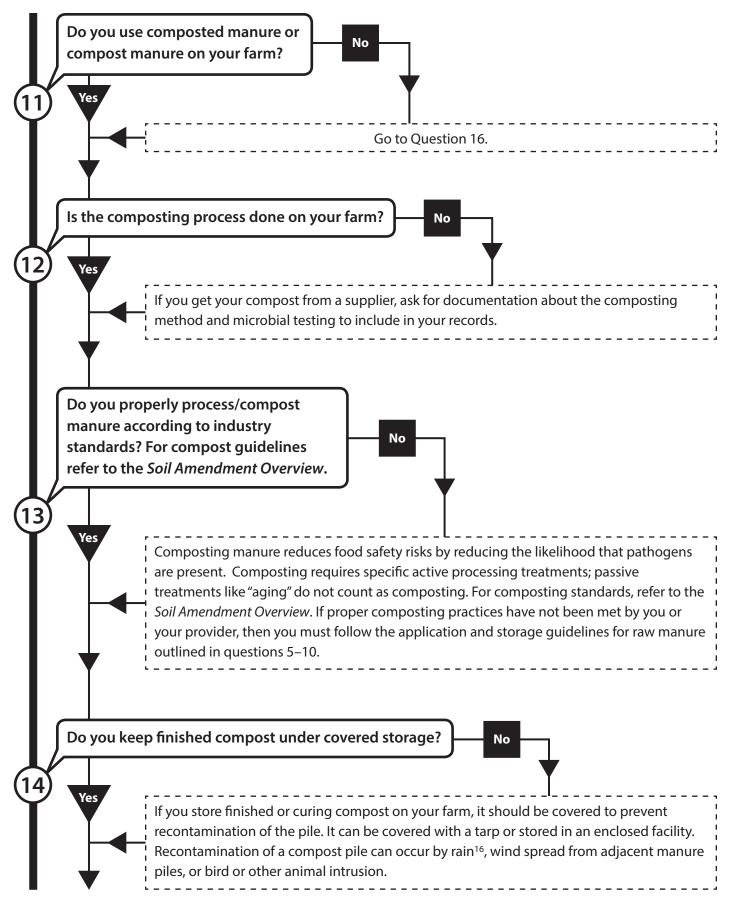
6

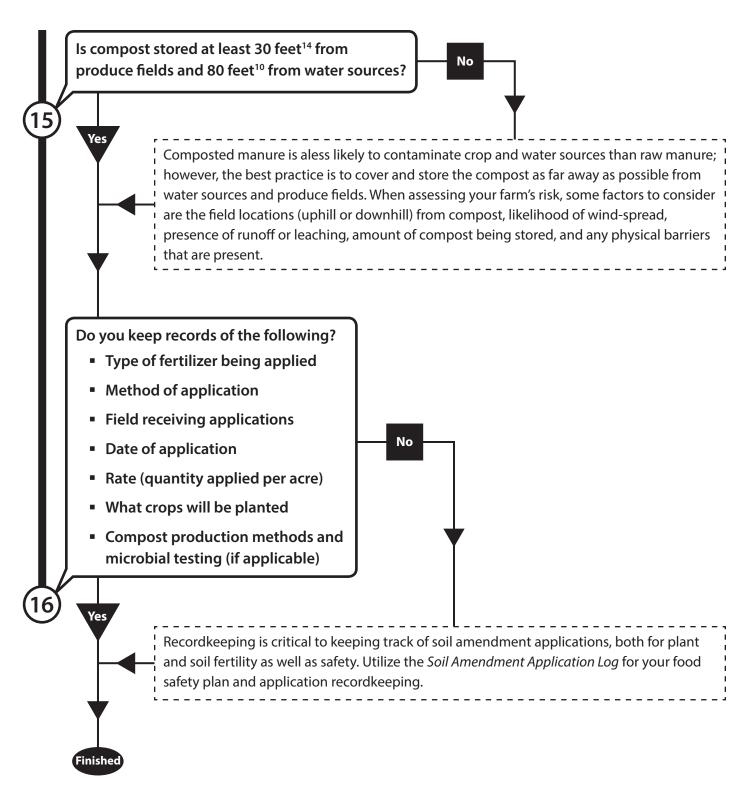
Yes

Yes

Yes







16. Erickson, M., F. Critzer and M. Doyle. 2010. Composting Criteria for Animal Manure. Produce Safety Project Issue Brief on Composting of Animal Manures. 13 p. http://www.pewtrusts.org/en/research-andanalysis/reports/0001/01/01/issue-brief-series-analyses-of-possible-sources-of-produce-contamination