Food waste is an ever growing waste stream. About 46 percent of the waste landfilled in Iowa is organic waste. These organics include items like wood, food, paper and yard waste. Composting is an excellent opportunity for organics diversion.

Thus, in an effort to promote more food waste composting, the Department of Natural Resources (DNR) is offering the following clarification of the existing rules and regulations for composting operations.

Iowa Administrative Code (IAC) 567 Chapter 105 outlines the regulatory requirements for compost operations. There are three different levels of compost facility regulation:

a. Exempt operations, which typically include waste that is composted and used on the same premises where it originated.

b. Permit by rule, which includes yard waste composting facilities, facilities that compost dead farm animals, and small quantity solid waste compost operations, limited to two tons or less per week.

c. Individual compost facilities that do not meet the criteria from sections “a” or “b” require a solid waste compost permit.

The incorporation of food waste into composting operations has historically followed the small quantity permit by rule or solid waste compost permit requirements. Both regulatory schemes have their limitations. As a result, the number of food waste composting facilities in Iowa is minimal, as is the quantity of food waste those facilities are willing to accept.

Yard waste compost facilities are the most prevalent type of operation found throughout Iowa communities. Usually, these facilities only accept grass clippings, brush and leaves. These compost operations are provided as a service for local residents wanting to dispose of their yard waste.
With the heightened awareness that organics are the largest waste stream going into landfills, communities (i.e. the public) are asking their local governments for landfill alternatives, such as composting, to manage food waste. One opportunity in this regard, is to work with the existing infrastructure of yard waste compost operations.

Yard waste is defined as “vegetative matter such as grass clippings, leaves, garden waste, brush and trees, and any clean wood waste which is necessary as a bulking agent and which is free of coatings and preservatives.” By clarifying that garden waste can include pre-consumed fruits and vegetables, be it from a homeowner’s garden, restaurant kitchen, school cafeteria or local grocery store, yard waste compost operations can incorporate the portion of food waste that is most prevalent from the community.

*Pre-consumed or pre-table food waste* is simply the uncooked vegetative food refuse and diminished quality bulk, raw food material that never makes it onto the plate. This food waste is generally already separated from the rest of the waste stream generated from a household. Thus no change is needed to keep contaminants out of the compost stream. Pre-consumed or pre-table food waste is the easiest household food waste to compost since it is still in a raw form.

One item to note is that due to its high moisture content, food waste that is not properly incorporated with bulking agents is highly susceptible to odor production -- mainly ammonia -- and the potential for large quantities of liquid leachate. Both odors and liquid run-off need to be properly managed. The best prevention for odor is a well-aerated pile that remains aerobic and free of standing water. Liquids can be reduced through aeration and sufficient amounts of a high carbon or a high moisture absorbing bulking agent like wood chips, dry unfinished compost, or dry leaves. Hay bales can be placed around the compost pile perimeter to absorb run-off and the captured leachate can be reapplied to the compost, by incorporating the bales into the pile(s).