



## Regulations Governing Land Application Of Food Waste in New York State

### Introduction

Receiving and applying food waste, food processing waste, or other organic wastes on agricultural land can generate revenues (tipping fees) for some of New York State's dairy and crop farms. This is especially the case if there is an additional on-farm technology such as anaerobic digestion that can further benefit from the addition of these types of organics (e.g. a digester produces more biogas when food waste is added to manure compared to digestion of the manure alone).

Agricultural land application and storage of food waste, food processing waste, and other organic waste (which for the purposes of this document will be collectively referred to as food waste) is regulated under the New York State Dept. of Environmental Conservation (DEC) regulation Subpart 360-4, Land Application Facilities,

[www.dec.state.ny.us/website/regs/subpart360\\_04.html](http://www.dec.state.ny.us/website/regs/subpart360_04.html).

Subpart 360-4 is an extensive document that defines applicability, describes food waste regulation categories, and provides detailed storage and land application practice guidelines. This document will not attempt to summarize all of Subpart 360-4, but will only highlight several issues relevant to the New York dairy industry.

The regulations for facilities that apply food waste to land fall into one of three categories: exemption, registration or permitted. The determination of which Subpart 360-4 regulation applies to a facility usually depends upon waste type, but sometimes also on waste quantity.

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### Exemption

Exempt facilities have low potential for environmental harm, are subject to few, if any operational conditions, and typically do not involve DEC notification. The primary exempt food waste activities for dairy farms are the storage and land application of "recognizable" food processing waste. Recognizable food processing waste is defined by Part 360-1.2(b)(70) as vegetative residues that are recognizable as part of a plant, fruit or vegetable (e.g. corn husks, cabbage leaves, grape and apple pumice, bean snips, and carrot, tomato and potato skins).

Storage and land application of recognizable food waste are exempt from regulation. Waste must be applied at or below agronomic rates, and nuisance conditions (such as odors and flies) and negative impacts on surface and ground waters must be minimized. The storage and land application of yard waste, such as leaves and grass, are also exempt, provided that the requirements for application and timing of incorporation set forth in Part 360-4.2(a)(3) are met.

### Registration

Facilities that are eligible for registration represent limited potential environmental harm when operated in compliance with some basic operational criteria. To obtain registration, a facility must submit a completed registration form for a solid waste management facility to its regional DEC office, and wait to begin operation until notice from DEC is received. The registration form includes type of facility and owner and site information, and is available on-line at <http://www.dec.state.ny.us/website/dshm/redrecy/regfrm.pdf>.

Storage and land application of "nonrecognizable" food processing waste are the primary activities of dairy farms requiring registration. Nonrecognizable food waste is defined by Part 360-1.2(b)(70) as any solid, semisolid or liquid food sludge or residue that is

nonrecognizable but identifiable by analysis, or is certified as solely a byproduct of plant, fruit, vegetable or dairy processing (e.g. milk and cheese whey, whey permeate or lactose, brewery and winery waste, and byproducts from canned, frozen or preserved fruit and vegetable processing operations). Registered facilities also must meet specific operating conditions as set forth in Part 360-4.2(b)(1). These include a waste stream analysis, field condition and weather-based spreading restrictions, nutrient application restrictions, and a food processing waste storage limitation of 10% of the manure storage volume.

## Permit

Permitting is a more involved process that is required when facilities or conditions require greater DEC review and oversight than exempt or registered facilities, or when exempt or registered facilities are not being operated in compliance with their respective regulation requirements. An example of a general permit for a dairy operation would be a facility that would like to store (without an approved liner) a volume of food waste that is over 10% of its manure storage volume at any one time. The requirements for a general permit application for land application facilities are found in Part 360-4.3 and include a vicinity map and information on flood plains, wetlands, soil types, rates and methods of application and incorporation, and hydraulic loading. Written permission is required "... from all landowners other than the applicant..." for lands where the waste will be spread. The general permit application also requires a written agreement between the generator of the food waste, the land applier, and the landowner and/or lease holder which clearly describes who is responsible for each of the applicable operation requirements (outlined

in sections 4.6 – 4.8). Public notice of intention to grant a land application facility permit is also part of this process.

## Other Considerations

Producers that are considering the land application of foreign organic materials onto crop fields need to understand the impact of this food waste application on the farm's nutrient balance, nutrient management plan and soil health. Additional nitrogen and phosphorus that are imported onto a farm in food waste will need to be accounted for in the farm's nutrient management plan. Other food waste stream characteristics such as high or low pH, or the presence of salts or heavy metals that could have adverse effects on soil or crop production, should also be considered carefully before applying food waste to cropland.

## Further Information

Complete details for land application of food wastes according to DEC Subpart 360-4 can be found at: [www.dec.state.ny.us/website/regulations/subpart360\\_04.html](http://www.dec.state.ny.us/website/regulations/subpart360_04.html), and are also published in 6NYCRR Part 360 Solid Waste Management Facilities, available from DEC at the address below. Questions about land applying food waste under this regulation, along with questions regarding the application process and forms for land application facility registration or permitting, can be answered through the regional DEC offices, listed at: <http://www.dec.state.ny.us/website/about/aboutregulations.html>.

**This fact sheet should only be used as an introductory guide, not in place of the complete regulation!** Consult the regulation for complete details.

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