

# The Florida Handbook of Solid and Hazardous Waste Regulation: Residual Waste Disposal<sup>1</sup>

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## How may I use domestic wastewater residuals/sludge?

Domestic wastewater residuals (biosolids, sludge), are solid, liquid, or semi-solid wastes generated from wastewater treatment plants. This waste is rich in nutrients and may be applied to farmland as fertilizer or soil amendment. Applying sludge in such a way is disposing of waste and is therefore regulated. The Florida Department of Environmental Protection (FDEP) has established detailed regulations controlling the application of sludge to land. The regulations require all producers to classify their sludge based on the level of treatment it has received. Each class has different restrictions (Class AA least restrictive and Class B most restrictive).

## What are the application restrictions on using residuals?

Class AA and Class A residuals require more intensive treatment than Class B residuals. This system allows these

residuals, which are safer because of more intensive treatment, to have more uses and fewer restrictions.

All classes of residuals except Class AA are subject to the following application restrictions:

- may not be applied closer than 1,000 feet from a Class I water body, Outstanding Florida Water, or Outstanding National Resource Water
- may not be applied closer than 200 feet from any other surface water except self-contained canals or irrigation structures that will not discharge from the site, or to waters owned entirely by one person; this distance may be reduced to 100 feet if the biosolids are injected or incorporated into the soil
- may not be applied closer than 300 feet from any shallow private water supply well
- may not be applied closer than 500 feet from any public water supply well
- may not be applied if the soil pH is lower than 5.0

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- may not be applied during rains that cause runoff from the site
- may not be applied when soils are saturated
- may not be applied if the grade of the land is greater than eight percent
- must be applied with appropriate techniques and equipment

## What are the special restrictions for residuals?

Special restrictions on residuals are as follows:

- residuals may never be dumped into the ocean, or surface or ground waters
- residuals containing hazardous wastes may never be applied to agricultural lands, and may require disposal under more restrictive hazardous waste regulations
- depending on the type of residuals and land involved, there may be waiting periods that must be observed before the public may be allowed access to any land to which sludge has been applied

## How are residuals classified?

*Class AA residuals* are treated to a level that essentially destroys all pathogens. Class AA residuals may be used for the cultivation of tobacco or leafy vegetables and may be sold at retail garden centers for public use. Class AA residuals are generally exempt from most other restrictions.

*Class A residuals* contain no detectible levels of pathogens. Class A residuals may be used on playgrounds, parks, golf courses, lawns, hospital grounds, or other unrestricted access areas.

*Class B residuals* are treated but still contain detectible levels of pathogens. Class B residuals:

- may be applied to sod farms, pasture lands, forests, limited access highways or roadways, and plant nurseries
- may not be used on playgrounds, parks, golf courses, lawns, hospital grounds, or other unrestricted access areas
- may be used on agricultural land, but may require a waiting period after the residuals are applied before crops may be harvested
- require an 14-month waiting period for root crops and fruits and vegetables that touch the soil and are to be consumed raw

- require a 30-day waiting period for fruits and vegetables that do not touch the soil and are to be consumed raw
- require a 30-day waiting period before pasture vegetation may be cut or used for grazing
- require a 12-month waiting period before the public may have contact with the area

Due to stricter rules, sites where Class B residuals are applied:

- must include fencing or another a barrier around the perimeter of the site to discourage the entry of animals or unauthorized persons
- must have posted signs at the entrance to the site that advise the public of the nature of the project area
- must have a vegetated setback area