How may I use domestic wastewater residuals/sludge?

Domestic wastewater residuals (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 a form of fertilizer or soil amendment. Applying sludge in such a way is technically disposing of waste and is therefore regulated. The Florida Department of Environmental Protection (DEP) 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 on use, with Class AA being least restrictive and Class B being most restrictive.

What are the special restrictions on using residuals?

Class AA residuals are treated to the same level as Class A residuals, but Class AA may contain particular elements only up to certain levels. 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.

What methods of residual disposal are prohibited?

General prohibitions on the disposal of residuals are as follows:

- Residuals may never be dumped into the ocean, or surface or ground waters
The Florida Agricultural Handbook of Solid and Hazardous Waste Regulation: Residual Waste....

- Residuals containing hazardous wastes may never be applied to agricultural lands, and may require disposal under more restrictive, hazardous waste regulations

- Depending upon 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

All Classes of residuals except Class AA are subject to these restrictions:

- may not be applied closer than 3000 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 which will not discharge from the site (this distance may be reduced to 100 feet under certain conditions)

- 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 shallow public water supply well

- may not be applied if the soil pH is lower than 6.5

- 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 8 percent

- must be applied with appropriate techniques and equipment

What are the classes of residuals?

1. Class AA residuals (uses and restrictions):

   - may be used for the cultivation of tobacco or leafy vegetables

   - are exempt from most other restrictions

2. Class A residuals (uses and restrictions):

   - may be used on playgrounds, parks, golf courses, lawns, hospital grounds, or other unrestricted access areas

3. Class B residuals (uses and restrictions):

   - 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 grown or harvested

   - require an 18-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

   - are exempt for orchard tree crops that do not come in contact with the residuals

   - 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

Archival copy: for current recommendations see http://edis.ifas.ufl.edu or your local extension office.