

THE CLOCK IS TICKING...COUNT DOWN TO BIOSOLIDS LAND APPLICATION SITE PERMITTING

By Douglas E. Jones, PE



Sweeping changes are in store for facilities that generate or land apply domestic wastewater biosolids. The latest revision to biosolids rules (Chapter 62-640, Florida Administrative Code) has been in the works since 2002, with final adoption by the Environmental Regulatory Commission in 2010. These changes have remained below the radar of most owners, but the full effect is about to be realized as existing application sites must be permitted by the end of 2012.

The goals of the revised rules are to (1) reduce nutrient loading in water bodies and groundwater by requiring nutrient management of all sites, (2) improve accountability and land application site management, and (3) address continuing public concerns of biosolids.

FDEP indicates permit applications will be reviewed at both the district and state level. Given the number of sites in the state, FDEP is strongly encouraging permit applications be submitted for review as soon as is possible to ensure sites will be permitted by the end of 2012. A bottleneck is expected at the testing portion of the permit application process because of the number of soil samples that must be processed by either state or private laboratories.

Critical Changes

1. All existing land application sites must be permitted under the new rules by December 31, 2012. Proposed new sites will also be permitted under the new rules. Biosolids may not be applied to unpermitted sites after this date. There will be no exceptions or extensions allowed even if the site is in the permitting process (permit must be in hand).
2. Site permits must be renewed every 5 years.
3. Wastewater treatment facilities must identify permitted sites before beginning biosolids application at the site. This requires submittal of the Treatment Facility Biosolids Plan to FDEP.
4. Site permitting requires a site-specific 5-year nutrient management plan (NMP). The plan must be prepared by a professional engineer or certified nutrient management planner. The NMP replaces the old Agricultural Use Plan, but is much more comprehensive.
5. NMP determines whether biosolids loading is based on nitrogen or phosphorus. This determination may have a dramatic impact on the quantity of biosolids that may be applied to a site.
6. Application rates must consider phosphorus assessment, all nutrient sources, nitrogen mineralization, crop yields, and calcium carbonate equivalency.
7. Soil testing for fertility and background metals is required.
8. Groundwater monitoring of sites may be required under certain circumstances.
9. New requirements for alkaline-treated biosolids includes ¼-mile setback to property lines for surface application or waiver from neighboring property owners.
10. Minimum 75-foot setback to property lines must be met.

Terminology Changes

- “Biosolids” replaces “domestic wastewater residuals”
- “Biosolids treatment facility” replaces “residuals management facility”

New Forms

- Treatment Facility Biosolids Plan - Form 62-640.210(2)(a)
- Treatment Facility Biosolids Annual Summary - Form 62-640.210(2)(b)
- Biosolids Application Site Annual Summary - Form 62-640.210(2)(c)
- Biosolids Application Site Permit Application – Form 62-640.210(2)(d)
- Biosolids Application Site Log – Form 62-640.210(2)(e)

Prohibitions

- New provision clarifies spilling or tracking biosolids off-site by a hauling vehicle prohibited
- Land application prohibited within the primary and secondary protection zones of the Wekiva Study Area
- New land application restrictions in the St. Lucie River, Lake Okeechobee, and Caloosahatchee River watersheds

We recommend that all land appliers of biosolids begin the permitting process promptly as a significant backlog of applications are expected by FDEP. Again, it is imperative to begin this process early to prevent disruption of your operations come the end of 2012. The permitting process is much more extensive than the old Agricultural Use Plans.

Chastain-Skillman's engineers and scientists are currently preparing site application permit applications and nutrient management plans for clients. Please contact us should you have any questions. Additional information can be found at <http://www.dep.state.fl.us/water/wastewater/dom/resmake.htm>.

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