



November 19, 2009

Mike Sole  
Secretary,  
Department of Environmental Protection  
3900 Commonwealth Blvd.  
Tallahassee, Fl. 32399

1101 Audubon Way  
Maitland, Florida 32751  
Tel: (407) 539-5700  
Fax: (407) 539-5701  
[www.audubonofflorida.org](http://www.audubonofflorida.org)  
email: [Clee@audubon.org](mailto:Clee@audubon.org)

**RE: Chapter 62-640, Biosolids Rule, scheduled for ERC Adoption Hearing,  
December 1, 2009**

Dear Secretary Sole:

Audubon of Florida has reviewed the draft of the proposed Biosolids Rule, Chapter 62-640, Florida Administrative Code, which is now scheduled for adoption at the December 1, 2009 Environmental Regulation Commission Meeting.

Audubon of Florida has several serious concerns about the proposed rule, and must oppose the adoption of the rule in its current form. The addition of nutrients from biosolids disposal in the Northern Everglades appears to be one of the largest sources of nutrient enrichment impacting impaired waters. The rule in its current form fails to address this problem in a satisfactory way. Unless the rule is changed, we believe that it will have the effect of undermining success in meeting Northern Everglades Plan objectives, the objectives of the Everglades Forever Act, and the TMDL program.

This letter is to offer our comments on the draft rule, and to recommend specific amendments to correct the serious problems that we have identified.

The issues are as follows:

**(1) The draft rule is inconsistent with statutory prohibitions.**

The 2007 Florida Legislature enacted Senate Bill 392, which resulted in the creation of three geographically based prohibitions "...**prohibiting the disposal** of wastewater residuals ..." (quoting from Title to SB 392). These prohibitions apply within the Lake Okeechobee Watershed, (373.4595(3)(c)6.a), the Caloosahatchee River Watershed (373.4595(4)(a)2.e) and the St. Lucie River Watershed (373.4595(4)(b)2.e).

These statutory prohibitions read as follows:

**373.4595(3)(c)6.a** -- "After December 31, 2007, the department **may not authorize the disposal** of domestic wastewater residuals within the Lake Okeechobee watershed unless the applicant can affirmatively demonstrate that the phosphorus in the residuals will not add to phosphorus loadings in Lake

Okeechobee or its tributaries. This demonstration shall be based on achieving a net balance between phosphorus imports relative to exports on the permitted application site. Exports shall include only phosphorus removed from the Lake Okeechobee watershed through products generated on the permitted application site. **This prohibition** does not apply to Class AA residuals that are marketed and distributed as fertilizer products in accordance with department rule.”

**373.4595(4)(a)2.e** -- “After December 31, 2007, the department **may not authorize the disposal** of domestic wastewater residuals within the Caloosahatchee River watershed unless the applicant can affirmatively demonstrate that the phosphorus in the residuals will not add to phosphorus loadings in the watershed. This demonstration shall be based on achieving a net balance between phosphorus imports relative to exports on the permitted application site. Exports shall include only phosphorus removed from the watershed through products generated on the permitted application site. **This prohibition** does not apply to Class AA residuals that are marketed and distributed as fertilizer products in accordance with department rule.”

**373.4595(4)(b)2.e** -- “After December 31, 2007, the department **may not authorize the disposal** of domestic wastewater residuals within the St. Lucie River watershed unless the applicant can affirmatively demonstrate that the phosphorus in the residuals will not add to phosphorus loadings in the watershed. This demonstration shall be based on achieving a net balance between phosphorus imports relative to exports on the permitted application site. Exports shall include only phosphorus removed from the St. Lucie River watershed through products generated on the permitted application site. **This prohibition** does not apply to Class AA residuals that are marketed and distributed as fertilizer products in accordance with department rule.”

These statutory prohibitions are absolute but for one narrow exception. This one exception is the opportunity to demonstrate a showing that disposal of domestic wastewater residuals on a particular application site “...will not add to phosphorus loadings...” in the watersheds. The opportunity to make this showing is further limited by the language in the statute which specifies narrowly that the lack of any addition of phosphorus loadings in the watershed must result from (a) “...a net balance between phosphorus imports relative to exports...”, and (b) that within this calculus, “Exports shall include only phosphorus removed (from the watersheds) through products generated on the permitted application site”.

The proposed rule contains a section on prohibitions, titled “62-640.400 Prohibitions”.. Inexplicably, the clear prohibitions that are mandated in 373.4595(3)(c)6.a, 373.4595(4)(a)2.e and 373.4595(4)(b)2.e are not referenced at all within this section of the draft rule.

Instead of dealing with these prohibitions in a straightforward manner, the draft rule attempts to deal with the requirements of 373.4595(3)(c)6.a, 373.4595(4)(a)2.e and 373.4595(4)(b)2.e as a technicality in Section 62-640.500, relating to Nutrient

Management Plans (NMP). The final provision in the section on Nutrient Management Plans merely reads as follows:

“(8) For application sites subject to Section 373.4595, F.S., the NMP shall include the demonstration required by Section 373.4595(3)(c)6.a., Section 373.4595(4)(a)2.e., or Section 373.4595(4)(b)2.e., F.S., as applicable.”

The effect of this treatment in the draft rule of the clear prohibitions that are mandated in Sections 373.4595(3)(c)6.a, 373.4595(4)(a)2.e and 373.4595(4)(b)2.e, Florida Statutes, is to misleadingly downplay and disguise the nature of these prohibitions. By characterizing these statutory provisions as merely one more technical feature of a Nutrient Management Plan, the draft rule is clearly inconsistent with the statutory operation and intent of these sections.

Audubon believes that the way these features of the rule are treated constitutes a serious error, contravenes the statutes, and must be corrected.

We recommend the addition of the following to Section 62-640.400, Prohibitions:

**“(11) The disposal of class A and B biosolids, including but not limited to land application, is prohibited within the Lake Okeechobee, Caloosahatchee River, and St. Lucie River watersheds. This prohibition may be overcome in the event that a permit applicant demonstrates that the proposed disposal or land application of biosolids will not add to phosphorus loadings in the watersheds. The demonstration necessary to overcome the prohibition must show achievement of a net balance between phosphorus imports relative to phosphorus exports on the application site. In attempting to demonstrate that the required net balance will occur, only exports of phosphorus from the watersheds in the form of products generated on the permitted application site itself may be considered in the calculation.”**

In addition, we recommend that Subsection (8) of Section 62-640.500 Nutrient Management Plan (NMP) be amended as follows:

**“(8) ~~For application sites subject to Section 373.4595, F.S., the NMP shall include the demonstration required by Section 373.4595(3)(c)6.a., Section 373.4595(4)(a)2.e., or Section 373.4595(4)(b)2.e., F.S., as applicable. Within the Lake Okeechobee, Caloosahatchee River and St. Lucie River Watersheds, the NMP must include the demonstration necessary to overcome the prohibition on disposal or land application of biosolids. The specific requirements to demonstrate that an applicant has overcome the presumed prohibition are contained in Subsection (11) of Section 62-640.400. Demonstration of continued entitlement to utilize the exception to the general prohibition on land application of biosolids in these watersheds must be made on a quarterly basis through the submission of an update to the NMP. Each quarterly update must include calculations demonstrating that the net balance between phosphorus imports and phosphorus exports has been maintained at all times during the preceding quarter.”~~**

## **2. The draft rule proposes to allow biosolids application on soils that are flooded too frequently.**

In Section 62-640.700, “Requirements for application of Class AA, A, and B Biosolids”, Subsection (11) titled “Runoff prevention requirements” contains paragraph (c) precluding application of biosolids on soils that are frequently flooded. This paragraph reads:

“(c) Biosolids shall not be land applied on soils that are frequently flooded (i.e. the soil has a flooding frequency class of “frequent” as defined by NRCS in Section 618.27 of the *National Soil Survey Handbook*, hereby adopted and incorporated by reference, and given in soil surveys). A flooding frequency class of “frequent” or “frequently flooded” means flooding is likely to occur often under usual weather conditions; more than a 50 percent chance of flooding in any year or more than 50 times in 100 years, but less than a 50 percent chance of flooding in all months in any year.”

Audubon is concerned that reliance on this singular standard in the NRCS National Soil Survey Handbook will effectively result in allowing land application of biosolids on soil that may be ordinarily expected to flood up to once every two years. The NRCS National Soil Survey Handbook defines flooding classifications in six different levels, ranging from “None”, to “Very Rare”, “Rare”, “Occasional”, “Frequent”, and “Very Frequent”. In reviewing these classifications, Audubon has found that the flooding classification just below that of “Frequent”, which is referred to as “Occasional”, where the draft rule proposes to allow land application of biosolids, actually has a very wide range of expected flood probability, ranging from only a 5% chance of flooding in any given year to a 50% chance of flooding in any given year. For this reason, we believe that the choice of “Frequently Flooded” soils as the threshold for precluding land application, as a sole criterion, is not protective enough.

In order to utilize the NRCS Soil Survey Handbook’s “Frequent” flood category as a rational cutoff point, other factors must be considered, specifically the duration of expected flooding in any given flood event. The NRCS Soil Survey Handbook also contains “Flooding Duration Classes” of soils, ranging from “Extremely Brief” (0.1 to 4.0 hours), to “Very Long” (greater than 30 days). Audubon believes that if the “Frequent” flood probability classification is to be used as a cut-off point for permissible land application, it should be coupled with an appropriate limiting factor of expected flood duration. We suggest that the classification of “Brief” (2 to 7 days) be utilized as a cutoff point. In order to accomplish this, we recommend addition of the following sentence to Section 62-640.700 (11) (c):

**“Biosolids shall not be land applied on soils that have an expected flood duration classification of ‘Long’ or ‘Very Long’ in Section 618.27 of the National Soil Survey Handbook.”**

Finally on the subject of Flood Frequency, we believe that Section 62-640.700 (11) (c) should be clarified to indicate that biosolids should not be land applied on soils that are in

either the “Frequent” or “Very Frequent” classifications. We doubt that the drafters of this rule intended to allow biosolids application on soils in the “Very Frequent” class (more than a 50 percent chance of flooding in all months of any year), however this would be the potential legal effect of failing to include that soil classification from the National Soil Survey Handbook in the categories of soil listed in the rule where biosolids shall not be applied.

**(3) The draft rule’s definition of “Distribution and Marketing” is inappropriate.**

Section 62-640.200 of the draft rule contains the following definition:

“(16) “Distribution and Marketing” is the **giveaway** or sale of biosolids meeting the criteria of Rule 62-640.850, F.A.C., or a product derived from such biosolids, either packaged or in bulk form, by owners or operators of treatment works or by a person who receives biosolids or biosolids products from treatment works.”  
(Emphasis Added)

Inclusion of the term “giveaway” in this definition is antithetical to the very concept of “distribution and marketing”. It is clear that the intent of the exemptions and comparatively lax treatment of Class AA biosolids in this draft rule, and recent legislative enactments such as 373.4595(3)(c)6.a, (373.4595(4)(a)2.e and 373.4595(4)(b)2.e have been posited on the concept that AA biosolids would constitute legitimate fertilizers with economic value to benefit agricultural crops. Inclusion of “giveaway” in this definition encourages the processing of biosolids to meet AA criteria to facilitate unregulated dumping of this material as a simple means of disposal. Allowing such dumping thwarts and undermines the intended effect of the rule and various statutory provisions (see our first comment (1) above). Audubon believes that Class AA biosolids should be restricted to those products in legitimate commerce through bona fide “distribution and marketing” for commercial fertilizer, either packaged, or bulk. For this reason, we recommend that this definition in the draft rule be amended as follows:

**“(16) ‘Distribution and Marketing’ is the ~~giveaway or~~ sale of biosolids meeting the criteria of Rule 62-640.850, F.A.C., or a product derived from such biosolids, either packaged or in bulk form, by owners or operators of treatment works or by a person who receives biosolids or biosolids products from treatment works. ‘Distribution and marketing’ does not include the giveaway of biosolids or a product derived from such biosolids or sale for a nominal or token price inconsistent with the prevailing market value of same in normal commerce.”**

In conclusion, Audubon would be supportive of a revised draft rule amended as recommended above. We intend to be present at the upcoming Environmental Regulation Commission meeting to present testimony regarding these concerns, and to recommend the amendments provided above.

Sincerely,

A handwritten signature in black ink, appearing to read "Charles Lee", written in a cursive style.

Charles Lee  
Director of Advocacy

CC: Members, Environmental Regulation Commission  
Maurice Barker  
Phil Coram  
Janet Llewellyn