

Attachment 3

Review of FDEP Proposed Rule changes to FAC 62-640

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No - offense - but these changes aren't going to do a thing to reduce the nutrient issues to States waters
- let me just give you 3 reasons why

1) This legislation does nothing for Class AA biosolids - (200,000 dry tons per year) - they are twice the volume of Class B biosolids (100,000 dry tons per year) and are exempt from regulation because they meet the definition of "fertilizer" which is not regulated because of State and Federal "Right to Farm Act" provisions.

2) All this language about TP is bogus - The majority of the Class B biosolids are going on pasture and according to what most Florida soils scientists understand - bahia pasture grass in Florida does not need any supplemental TP - end of story - see IFAS Document attached and other documented references such as this:

Also a review of the P indices in the Nation which is the basis for the TP numbers referenced in the legislation - these indices are known to be inadequate - see the review of these methodologies attached and are not protecting agricultural surface waters from excesses in TP.

3) The rules allow biosolids to be applied based on either TN or TP - one or the other - but not both - when you review the methodologies within the FDEP approved nutrient management plans (NMP) and you are allowed to apply the biosolids based on TN - the application is contingent on Plant Available Nitrogen (PAN) which more times than not - is only around 40% - which means you are allowed to apply around 2.5 times the amount of TN needed for the crop - since there is something called the Nitrogen cycle over time that means you are importing 2.5 times the amount of actual TN needed which only adds to the legacy nitrogen in the soil - Finally when you are allowed to place 2.5 times the amount of TN - you are by default allowing 10 times the amount TP to be place on the soil which by most accounts doesn't need any TP (see #2 above)

In summary all of this proposed language is - blah - blah - blah - and will do nothing to reduce the impact to surface waters - it all still boils down to nutrient imports vs nutrient exports - 82 % of the lakes in the State are impaired for nutrients - this means if you were betting the ranch - if you pointed to any lake in the State - there is a good chance it is impaired for nutrients - so where is the best place in the State to be dumping biosolids - the amount of biosolids is increasing which means the imports vs exports is getting worse and legacy nutrients from biosolids within the State is increasing not decreasing.

All any of this language does is allow methodologies to be "manipulated to appear" to offer protection - to pasture crops that don't need any TP - or apply TN at 2.5 times the amount needed because of the PAN - increasing the legacy N - and finally - massage the nutrients around in the State first contaminating 1 area then going to another area (example - Lake Okeechobee biosolids move to the St. Johns)

Look at it another way - look at all the language in the proposed legislation - what sentence does anything to reduce nutrient imports to the State of Florida from biosolids - not one - it is simply "word salad" and just pushing the problem around in the same square -

This language will do nothing to increase protection just like the previous language adopted in 2010 did nothing - things continue to get worse - we just keep spinning the language like a rotisserie chicken - kind regards - roderick

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Again no offense - but - you can't do anything to the words to address the proposal - it's like having 10 gold fish in a bowl and you know - that you have 9 more fish than the bowl should have - you can write every sentence you want - but there is really only one solution - you have to start getting rid of some fish....

The bottom line on nutrients is imports versus exports - generally in Florida we are exceeding imports vs exports by 3 vs 1 for TN and 2 vs 1 for TP

Implementing the voluntary agricultural BMP program since 1998 has resulted in a reduction of manufactured TN by 22% and TP by 33% - you are not going to get too much more out of the agricultural BMP effort which by the way is also protected under the State and Federal "Right to Farm Acts"

Biosolid imports continue to increase:

You could propose any new language and it would mean nothing...and would not mean a thing any more than if I proposed a sentence that said - "Tulips are fruitless, and ding dong Billy Bong" ...it would not change a thing..

What is the solution - Everyone should be going "ape shit" on our State agencies and elected officials and demanding action and proposed funding for alternative technologies for biosolids other than using our rural lands as human waste disposal sites...

The first time an alternative project is proposed and funded - immediately - the nutrient impacts will begin to be reduced - immediately....

You can't propose any words - what did St. Johns try to do in the last legislative session - they tried to get what the Lake Okeechobee Protection Plan got - which just tries to send the problem somewhere else - and it didn't pass...would have just push the problem somewhere else in the same square..

And let me give you the bottom line - let's say - you were to come up with legislative language that was restrictive enough to keep Class B biosolids from being land applied - you know what the industry would do - they would just convert the remaining Class B biosolids into Class AA biosolids - which then would become totally unregulated - and then all of the biosolids in the State would be dumped on the agricultural lands totally unregulated - gosh - we sure solved that problem...and...they could drag this fight out for 20 years...like Henderson Act after Henderson Act...

There isn't enough lipstick to turn this pig into anything else - what needs to happen is total "ape shit" focus on alternatives to land application of biosolids - everyone needs to "raise hell" every time the nutrient forum is discussed - where was the rage in the last legislative session - what are you going to do

in 3 months when planning for the next legislative session begins.... That is where the focus should be - continuing to "beat this dead horse" is not going to amount to very much more

Here is my advice - all you can propose is language that will push the problem around and maybe you can push the problem farther away from you - great go ahead and try - but - when you have the agencies or the elected officials in the room or you are proposing any "new language" - you need to get out the can of "whoop ass" - and demand answers to why isn't this being prioritized and promoted by the State and why alternatives to land application of biosolids are not being seriously considered - proposed or resources set aside for supplemental funding – Roderick

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I read every underlined sentence proposed - I did not see a single sentence that would decrease nutrient impacts to surface waters or that could not offer "wiggle room" for the applicant or his representative.

First if you do a word search and look for words such as:

"description" - "discussion" - "unless" - "permittee shall ensure" - "reasonable assurance" - "may be adjusted"

Every time these words are used - they afford opportunity for applicant or the applicants professional - to offer opinion and subjective interpretation...this will inevitably be for the applicants benefit to receive more nutrients from biosolids and will not benefit the surface waters of Florida..

Now read the first sentence of the document I have attached - which is from:

62-640.100 Scope, Intent, Purpose, and Applicability.

(a) It is the intent of the Department in this chapter to regulate the management, use, and land application of biosolids so as to ensure protection of the environment and public health, including minimizing the migration of nutrients, nitrogen and phosphorous that impair or contribute to the impairment of waterbodies.

OK - again - fair enough I'll buy in on that - sounds great -

But where I really went into a "coma" is when I got to the section where you are reading the proposed changes for TP and TN...again see my highlighted document attached..

Look at everything after this statement that applies to TP and TN in the highlighted document attached - every TP highlighted reference is how you can increase the land application of P from biosolids...

And the last reference to TN states that if the NMP is based on TN rather than TP (which usually happens) then the plant available nitrogen (PAN) which is normally around 40% and EPA guidelines would normally allow around 2.5 times the amount of TN from biosolids - or - the proposed language also allows an alternative FDEP methodology that reduces the allowable TN from 2.5 times to 1.5 times - but it still results in excess TN that is sacrificed to the nitrogen cycle for legacy N to accumulate in the soil - and really "jacks up" the amount of allowable TP (see third graphic below) - usually the amount of TP needed for crops (if needed at all) would be maybe 18 pounds per acre (P2O5 is only 40% P) - and you can still use the EPA PAN methodology - the example below allows 193 pounds per acre TP from biosolids (P2O5 - 446 pounds per acre)

When I say the NMP is usually based on TN rather than TP that is because most soils in Florida can meet the P index value for low or medium potential for P movement from the site - notice also the reference in High potential that reads "as P management practices are necessary (if practical)" anyone want to tell me what (if practical) means..



P-Index Interpretation

The P-Index value determines whether the nutrient management (i.e., application rate) will be based N or P

P Index Value	Generalized Interpretation of P Index for Site
<75	Low Potential for P movement from site. If farming practices are maintained at the current level there is a low probability of an adverse impact to surface waters from P losses at this site. Nitrogen-based nutrient management planning is satisfactory for this site. Soil P levels and P loss potential may increase in the future due to N-based nutrient management.
75 - 150	Medium potential for P movement from this site. The chance for an adverse impact to surface water exists. Nitrogen-based nutrient management planning is satisfactory for this site when conservation measures are taken to lessen the probability of P loss. Soil P levels and P loss potential may increase in the future due to N-based nutrient management.
151 - 225	High potential for P movement from the site and for an adverse impact on surface waters unless remedial action is taken. Soil and water conservation as well as P management practices are necessary (if practical) to reduce the risk of P movement and water quality degradation. If risk cannot be reduced then a P-based management budget based on crop P requirement will be utilized.
> 225	Very High potential for P movement from the site and for an adverse impact on surface waters. Remedial action is required to reduce the risk of P movement. All necessary soil and water conservation practices, plus a P-based management plan must be put in place to avoid the potential for water quality degradation. The P-based management plan will be based on less than crop P requirement to reduce P over a defined period (not to exceed 20 years).



NMP Rule Requirements

DEP shall accept the following when accounting for nitrogen availability:

- [Chapter 7 EPA Process Design Manual](#) calculations to account for nitrogen availability over several years (mineralization rates differ depending on the biosolids treatment type)
 - First year PAN = $\text{NO}_3\text{-N} + K_{\text{vol}}(\text{NH}_4\text{-N}) + K_{\text{min}}(\text{Org-N})$
 - In the second year, the amount of PAN becoming available from the first year's application is calculated based off the remaining amount of organic nitrogen (i.e., after the first year's mineralized nitrogen is subtracted) and using the second year mineralization rate; this is continued for additional years
 - The amount of biosolids allowed to be applied in following years basically decreases because of the PAN becoming available from previous years' applications; settles out around year 4
- Alternatively, permittees can use a conservative 1.5 factor developed by DEP based on more restrictive situations under the EPA calculations
 - Provides a single, yearly rate (already accounts for mineralization, etc.)



EPA Calculations

Zone ID	<u>19A</u>	Nutrient Information Based on NMP						
Year	Crop(s) to be grown on the application zone	Basis for Nutrient Budget (N or P)	Crop Demand N (PAN) from All Sources (lbs/ac)	Crop Demand P ₂ O ₅ from All Sources (lbs/ac)	Maximum Allowed PAN from Biosolids (lbs/ac)	Maximum Allowed P ₂ O ₅ from Biosolids (lbs/ac)	Maximum Allowed TN from Biosolids (lbs/ac)	Maximum Allowed TP from Biosolids (lbs/ac)
1	bahiagrass	N	160	40	160	445.9	429.0	193.9
2	bahiagrass	N	160	40	160	363.0	349.3	157.8
3	bahiagrass	N	160	40	160	340.9	327.9	148.2
4	bahiagrass	N	160	40	160	330.4	317.8	143.6
5	bahiagrass	N	160	40	160	338.2	325.4	147.0

Zone ID	<u>19B</u>	Nutrient Information Based on NMP						
Year	Crop(s) to be grown on the application zone	Basis for Nutrient Budget (N or P)	Crop Demand N (PAN) from All Sources (lbs/ac)	Crop Demand P ₂ O ₅ from All Sources (lbs/ac)	Maximum Allowed PAN from Biosolids (lbs/ac)	Maximum Allowed P ₂ O ₅ from Biosolids (lbs/ac)	Maximum Allowed TN from Biosolids (lbs/ac)	Maximum Allowed TP from Biosolids (lbs/ac)
1	bahiagrass	N	160	40	144	445.9	429.0	193.9
2	bahiagrass	N	160	40	160	363.0	349.3	157.8
3	bahiagrass	N	160	40	160	340.9	327.9	148.2
4	bahiagrass	N	160	40	160	330.4	317.8	143.6

Proposed Changes to FAC 62-640

including minimizing the migration of nutrients, nitrogen and phosphorous that impair or contribute to the impairment of waterbodies.

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The application rate shall be based on the more limiting nutrient, nitrogen or phosphorus, unless the applicant can provide reasonable assurance that applying at a higher rate is protective of water quality.

An additional 20 lbs of P₂O₅ may be applied per acre after each cutting of hay if the soil tests low or medium for phosphorus.

7. The crop nutrient needs for phosphorus may be adjusted as given in a. – b. below, based on the soil phosphorus storage capacity index and the biosolids percent water extractable phosphorus when determining biosolids application rates.

a. When the percent water extractable phosphorus of biosolids is less than 14%, one of the following may be used:

(I) When the soil phosphorus storage capacity index for an application zone is greater than 40 mg/kg, the percent water extractable phosphorus value for the biosolids being applied may be used to adjust the amount of phosphorus applied.

(II) When the soil phosphorus storage capacity index is at least 20 and up to 40, the amount of phosphorus may be doubled to adjust the amount of phosphorus applied.

(III) When soil phosphorus storage capacity index is greater than 0 but less than 20, the amount of phosphorus may be increased by 50 percent to adjust the amount of phosphorus applied.

(IV) When the soil phosphorus capacity index is less than 0, the amount of phosphorus shall not be adjusted.

b. When the percent water extractable phosphorus of biosolids is 14% or greater, the amount of phosphorus shall not be adjusted unless the soil phosphorus storage capacity index is greater than 40, in which case the amount of phosphorus may be increased by 50 percent.

8. When considering the availability of nitrogen in biosolids, once the amount of plant available nitrogen to be supplied by biosolids has been determined (i.e. the crop nitrogen demand has been adjusted to take other sources of nitrogen into account), this

amount may be multiplied by a factor of 1.5 (i.e. a 50 percent increase) to determine the amount of total nitrogen that may be supplied by biosolids

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Fertilizers make modern agriculture possible on Florida's nutrient-poor sandy soils. Today's best management practices ensure that no more fertilizer is applied than needed. However, between the late 1940s-1980s, use of fertilizers created a phosphorus problem in our soils still affecting our water quality today.

Dr. Hilary Swain, Archbold's Executive Director, explains, "A study from 1998-2003 at Archbold's Buck Island Ranch found pastures not fertilized with phosphorus since 1986 still had 5-7 times the amount of phosphorus in drainage ditches compared to unfertilized pastures. A US Geological Survey study showed ~85% of phosphorus leaving pastures came from past fertilizer use, and is not 'naturally occurring' phosphorus in the soils. The fertilizer-phosphorus still remaining in soils is known as 'legacy phosphorus'."

There are large amounts of legacy phosphorus within the soils and waters of the Headwaters of the Everglades from Orlando to Lake Okeechobee. Many native plants evolved under low phosphorus conditions and are outcompeted by other plants, including non-natives, that can uptake excess phosphorus.

In collaboration with the South Florida Water Management District, Archbold is experimenting with pumping water from Harney Pond Canal into an abandoned orange grove field at Buck Island Ranch to grow a winter forage grass for cattle. Last year, we harvested 1.5 million pounds of forage grass containing almost 3,800 pounds of phosphorus from the 180-acre field. This harvest also reduces the amount of supplementary feed we bring into the ranch. Still in the early stages of assessing the land phosphorus budget, we are learning best management practices to remove legacy phosphorus from off-site water.

<https://www.facebook.com/ArchboldBiologicalStation/photos/a.142447469127252/2318471561524821/?typ>

Another piece of evidence on the problem of class AA biosolids. If used on pasture, the P problem will continue for years.

Most of the article is quite true - However the comment: " Today's best management practices ensure that no more fertilizer is applied than needed.

Is a bit troubling and the agricultural industry is totally convinced that the statement is true - say it enough times and the people will start to believe..

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CHAPTER 62-640 BIOSOLIDS

62-640.100	Scope, Intent, Purpose, and Applicability
62-640.200	Definitions
62-640.210	General Technical Guidance and Forms
62-640.300	General Requirements
62-640.400	Prohibitions
62-640.500	Nutrient Management Plan (NMP)
62-640.600	Pathogen Reduction and Vector Attraction Reduction
62-640.650	Monitoring, Record Keeping, Reporting, and Notification
62-640.700	Requirements for Land Application of Class AA, A, and B Biosolids
62-640.750	Agricultural Sites (Repealed)
62-640.800	Additional Requirements for Land Application at Reclamation Sites
62-640.850	Distribution and Marketing of – Class AA Biosolids
62-640.860	Other Solids
62-640.880	Additional Requirements Related to Biosolids Treatment Facilities

62-640.100 Scope, Intent, Purpose, and Applicability.

(1) All domestic wastewater treatment facilities which use biological treatment processes generate biosolids as a by-product of the treatment process. The Department finds that unregulated use, disposal, or land application of biosolids poses a threat to the environment and public health.

(a) It is the intent of the Department in this chapter to regulate the management, use, and land application of biosolids so as to ensure protection of the environment and public health, including minimizing the migration of nutrients, nitrogen and phosphorus that impair or contribute to the impairment of waterbodies.

(b) The Department encourages the highest levels of treatment, quality, and use for biosolids.

(c) The Department further encourages the beneficial use of biosolids in a manner which will foster public acceptance, as well as innovative and alternative uses for biosolids such as bioenergy-related uses.

(2) through (4) No change

(5) Applicability.

(a) Requirements in this chapter shall apply to domestic wastewater treatment facilities and biosolids management facilities that generate, treat, or manage biosolids.

(b) Requirements in this chapter shall also apply to applicors or distributors of biosolids or biosolids products, and to owners or operators of application sites which receive biosolids.

(c) Unless specifically provided otherwise in this chapter, requirements in this chapter shall apply to all septage management facilities that ~~treat more than 10,000 gallons per day monthly average daily flow or more than 20,000 gallons in a single day, and that~~ apply septage to agricultural sites or reclamation sites. Requirements in this chapter shall also apply to applicors of septage, and to operators or owners of an agricultural site or reclamation site which receive septage from facilities permitted under this chapter.

(d) Unless specifically provided otherwise in this chapter, requirements in this chapter that apply to biosolids shall also apply to septage from facilities regulated by the Department; to products derived from such septage, biosolids, or combinations thereof; and to the products and treated material from biosolids treatment facilities and septage management facilities regulated by the Department.

(e) Unless specifically provided otherwise in this chapter, requirements in this chapter shall apply to composting facilities, as defined by this chapter, which use yard trash, wood chips, or similar bulking agents, and apply the resulting compost to land or distribute and market the resulting compost.

(f) Facilities and biosolids application sites which have submitted a complete wastewater or biosolids site permit application, or which have received an initial permit before ~~August 29, 2010~~ (effective date of the rule), are considered to be existing facilities and existing sites and shall meet the requirements of this chapter in accordance with paragraphs (g) and (h), below.

(g) Unless specifically provided otherwise in this chapter, existing facilities in Florida shall comply with the requirements of this chapter at the time of renewal of the wastewater permit. ~~To facilitate the transition to land application site permits, for those wastewater facility permits renewed between August 29, 2010 and January 1, 2013, the Department shall include compliance schedules to achieve compliance with the land application site permitting requirements included in Rules 62-640.300, 62-640.500, 62-640.650, 62-640.700, F.A.C., by no later than January 1, 2013. Any such renewed permits shall contain conditions for the land application of biosolids based on the provisions of Chapter 62-640, F.A.C., as amended on 3-30-98, hereby adopted and incorporated by reference, during the period of the compliance schedule. A copy of Chapter 62-640, F.A.C., as amended on 3-30-98, is available from the Department of Environmental Protection, Domestic Wastewater Section, M.S. 3540, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, or any of the Department's District Offices.~~

(h) Existing biosolids application sites, whether permitted individually or under a facility permit in accordance with subparagraph 62-640.300(3)(a)2, shall meet the requirements of this chapter at the time of renewal of the biosolids application site permit or facility permit, but no later than within three years of (effective date of the rule). ~~Regardless of paragraph (g), above, no later than January 1, 2013, all facilities that land apply biosolids shall use permitted application sites.~~

(i) ~~After an application site is permitted, management and application of biosolids at the site shall be in accordance with the application site permit, which supersedes the site management and application requirements of any existing facility permits.~~

(i) ~~(i)~~ Biosolids or biosolids products which are generated outside of Florida but imported to Florida are subject to the provisions of this chapter beginning (effective date of the rule) ~~August 29, 2010.~~

(j) ~~(j)~~ Requirements in this chapter do not apply to the treatment, management, or disposal of industrial sludges, septage, or residuals resulting from industrial wastewater treatment except as provided for in paragraphs 62-640.100(6)(f) and 62-640.880(2)(c), F.A.C.

(6) Other Applicable Rules.

(a) Biosolids land application within areas of the state where basin management action plans (BMAPs) have been adopted in accordance with Sections 403.067(7), and 373.807, F.S., shall be in accordance with the applicable BMAPs. ~~Septage management facilities that treat 10,000 gallons per day or less on a monthly average daily flow basis and no more than 20,000 gallons in a single day are regulated by the Department of Health in accordance with Chapter 64E-6, F.A.C. Land application of septage treated by these facilities is also regulated by the Department of Health in accordance with Chapter 64E-6, F.A.C.~~

(b) through (h) No change

Rulemaking Authority 373.043, 403.051, 403.061, 403.062, 403.087, 403.088, 403.704, 403.707 FS. Law Implemented 373.4595, 403.021, 403.051, 403.061, 403.087, 403.088, 403.0881, 403.702, 403.704, 403.707, 403.708 FS. History—New 8-12-90, Formerly 17-640.100, Amended 3-30-98, 8-29-10.

62-640.200 Definitions.

Terms used in this chapter shall have the meaning specified below. The meaning of any term not defined below may be taken from definitions in other rules of the Department.

(1) through (15) No change

(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, to another person by the owners or operators of treatment works or by a person who receives biosolids or biosolids products from treatment works.

(17) “Dry weight basis” means calculated on the basis of having been dried at 105 degrees Celsius until reaching a constant mass (i.e., essentially 100 percent solids content).

(18) ~~“Existing application site” means a site approved for land application or land reclamation in a wastewater facility permit active on August 29, 2010 or included in a complete permit application submitted before August 29, 2010.~~

(19) through (24) renumbered (18) through (23) No change

(24) ~~(25)~~ “Incorporation” means the mixing of biosolids with topsoil by such means as discing, plowing, tilling,

or equivalent means to reduce exposure to the biosolids. To meet the requirements for vector attraction reduction in accordance with Rule 62-640.600xxxx, incorporation shall be to a depth of at least four inches.

(26) through (40) renumbered (25) through (39) No change

(40) "Seasonal high water table" means

(41) "Septage" means a mixture of sludge, fatty materials, human feces, and wastewater removed during pumping of an onsite sewage treatment and disposal system. Excluded from this definition are the contents of portable toilets, holding tanks, and grease interceptors.

(42) "Septage management facility" means a stationary facility that treats only domestic septage or combinations of domestic septage, food establishment sludges, wastes removed from portable toilets, and wastes removed from holding tanks associated with boats, marinas, and onsite sewage treatment and disposal systems, before use or land application. ~~Septage management facilities that are regulated by the Department are as described in paragraph 62-640.100(5)(c), F.A.C.~~

(43) through (51) No change

Rulemaking Authority 373.043, 403.051, 403.061, 403.062, 403.087, 403.088, 403.704, 403.707 FS. Law Implemented 373.4595, 403.021, 403.051, 403.061, 403.087, 403.088, 403.0881, 403.702, 403.704, 403.707, 403.708 FS. History—New 8-12-90, Formerly 17-640.200, Amended 3-30-98, 8-29-10.

62-640.210 General Technical Guidance and Forms.

(1) Unless specifically referenced elsewhere in this chapter, the following publications are listed for informational purposes as technical guidance to assist facilities, applicators, distributors and marketers, site managers, and site owners in meeting the requirements of this chapter. Publications or portions of publications containing enforceable criteria are specifically referenced elsewhere in this chapter. Information in the publications listed below does not supersede the specific requirements of this chapter. Members of the public may request and obtain copies of the publications listed below by contacting the appropriate publisher at the address indicated. Copies of the publications are on file and available for review during normal business hours at the Department of Environmental Protection, Domestic Wastewater Section, M.S. 3540, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 and in the Department's district and branch offices.

(a) U.S. Environmental Protection Agency, 1995, *Process Design Manual for Land Application of Sewage Sludge and Domestic Septage*, EPA Center for Environmental Research Information, 26 West Martin Luther King Drive, Cincinnati, Ohio 45268, www.epa.gov.

(b) Title 40, Code of Federal Regulations, Protection of Environment, 1993, Part 503, "Standards for the Use and Disposal of Sewage Sludge," revised as of October 22, 2015~~April 9, 2007~~ and effective on December 15, 2015~~April 25, 2007~~, www.gpoaccess.gov/cfr/index.html.

(c) through (k) No change

(l) USDA Natural Resources Conservation Service, ~~XXXX1999~~, "General Manual, Title 190, Part 402 – Nutrient Management," USDA-NRCS, Washington, DC, www.nrcs.usda.gov/technical.

(m) USDA Natural Resources Conservation Service – Florida, ~~20122007~~, "Field Office Technical Guide – Nutrient Management, Code 590", USDA-NRCS-FL, Gainesville, Florida, www.fl.nrcs.usda.gov/technical.

(n) USDA Natural Resources Conservation Service – Florida, ~~XXXX2004~~, "Field Office Technical Guide – Waste Utilization, Code 633," USDA-NRCS-FL, Gainesville, Florida, www.fl.nrcs.usda.gov/technical.

(o) Kidder, G. and R.D. Rhue, 2003, "Soil Testing," UF/IFAS Circular 239, <http://edis.ifas.ufl.edu/SS156>.

(p) Mylavarapu, R.S. and E.D. Kennelley, ~~XXXX2009~~, "Extension Soil Testing Laboratory (ESTL) Analytical Procedure and Training Manual," UF/IFAS Circular 1248, <http://edis.ifas.ufl.edu/SS312>.

(2) No change

Rulemaking Authority 373.043, 403.051, 403.061, 403.062, 403.087, 403.088, 403.704, 403.707 FS. Law Implemented 373.4595, 403.021, 403.051, 403.061, 403.087, 403.088, 403.0881, 403.702, 403.704, 403.707, 403.708 FS. History—New 8-12-90, Formerly 17-640.210, Amended 3-30-98, 8-29-10.

62-640.300 General Requirements.

(1) through (2) No change

(3) Biosolids Application Site Permit.

(a) through (c) No change

(d) All biosolids application site permit applications shall be considered projects of heightened public interest in accordance with subparagraph 62-110(7)(a)1., F.A.C.

(d) through (e) renumbered (e) through (f) No change

(4) No change

Rulemaking Authority 373.043, 403.051, 403.061, 403.062, 403.087, 403.088, 403.704, 403.707 FS. Law Implemented 373.4595, 403.021, 403.051, 403.061, 403.087, 403.088, 403.0881, 403.702, 403.704, 403.707, 403.708 FS. History—New 8-12-90, Formerly 17-640.300, Amended 3-30-98, 8-29-10.

62-640.500 Nutrient Management Plan (NMP).

(1) A site-specific NMP shall be submitted to the Department with the permit application for an agricultural site. For sites enrolled and participating in a Florida Department of Agriculture and Consumer Services (FDACS) Best Management Practices (BMP) program, a conservation plan or NMP prepared for the purposes of the BMP can be submitted as the site-specific NMP if the plan meets the NMP requirements given in subsections (4) through (8), below.

(2) USDA-NRCS-Florida Field Office Technical Guide – Nutrient Management, Code 590, November 2012~~September 2007~~, listed in paragraph 62-640.210(1)(m), F.A.C., is available to provide technical guidance in the preparation of NMPs from the Department of Environmental Protection, Domestic Wastewater Section, M.S. 3540, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 or any of the Department's District Offices.

(3) The NMP shall be prepared and signed by a person certified by the NRCS for nutrient management planning or prepared, signed and sealed by a professional engineer licensed in the State of Florida.

(4) The NMP shall identify each application zone to be used at the site as identified in the Biosolids Site Permit Application, Form 62-640.210(2)(d). Application zones shall be sized to facilitate accurate accounting of nutrient and pollutant loadings and shall be in accordance with Rule 62-640.700, F.A.C., as applicable for the class(es) of biosolids that will be applied to the site.

(5) The NMP shall meet the requirements of this chapter and shall:

(a) Include aerial site photograph(s)/imagery or site map(s), and a soil survey map of the site;

(b) Include guidance for NMP implementation, site operation, maintenance, and recordkeeping;

(c) Include a description of how the NMP complies with any applicable basin management action plans (BMAPs) adopted under Sections 403.067(7), and 373.807, F.S.

~~(d)(e)~~ Include results of soil, water, compost, manure, organics by-product, plant tissue, and biosolids analyses, as applicable. The soil fertility testing used to develop the NMP shall be less than one year old;

~~(e)(d)~~ Specify~~Identify~~ the frequency interval for soil fertility testing. The interval shall be at least once ~~annually~~every five years with consideration for more frequent testing if increases in soil phosphorus levels are expected;

(f) Include a discussion of the risk associated with phosphorus accumulation and a proposed phosphorus draw-down strategy if the soil phosphorus levels are increasing on any application zones at the site.

(g) Include a discussion demonstrating that biosolids application at the site presents low risk for phosphorus transport from the site from leaching and runoff pathways;

(h) Location of designated sensitive areas and the associated nutrient application restrictions and setbacks;

(i) Establish specific rates of application of biosolids based on nitrogen and phosphorus as well as procedures to land apply biosolids and all other nutrient sources to each application zone. The NMP shall address application rates for the period covered by the effective and expiration dates of the biosolids site permit, at a minimum. The application rate shall be based on the more limiting nutrient, nitrogen or phosphorus, unless the applicant can provide reasonable assurance that applying at a higher rate is protective of water quality. As part of establishing the application rates, the NMP shall include the following items.

1. The NMP shall identify the recommended crop nutrient needs for nitrogen and phosphorus (i.e. crop nutrient

demand) for the crops to be grown on each application zone based on IFAS recommendations or using the following values as a guide.

Crop	Nitrogen	Phosphorus (P2O5)
Forage Crops (per active growing season)		
Improved perennial grasses		
grazed	160	XX
hay or silage (assuming 4 harvests)	320	XX*
Cool season annual grasses		
(e.g., grazed small grains, ryegrass, fescue)		160 XX
Warm season annual grasses		
(e.g., sorghum-sudan hybrid or pearl millet)		
grazed	160	XX
hay or silage (4 harvests)	320	XX*

* - An additional 20 lbs of P2O5 may be applied per acre after each cutting of hay if the soil tests low or medium for phosphorus.

2. The NMP shall identify the current and planned plant production sequence or crop rotation for each application zone for the period of the biosolids site permit, at a minimum.

3. The NMP shall include realistic annual yield goals for each crop identified for each application zone.

4. The NMP shall include the soil phosphorus storage capacity index and soil phosphorus results from the most recent soil fertility testing for each application zone.

5. The NMP shall include a listing and quantification of all nutrient sources for each application zone, including any enhanced efficiency fertilizer products, if any.

6. The NMP shall include the percent water extractable phosphorus of each biosolids source (permittees may use a weighted average or estimated weighted average).

7. The crop nutrient needs for phosphorus may be adjusted as given in a. – b. below, based on the soil phosphorus storage capacity index and the biosolids percent water extractable phosphorus when determining biosolids application rates.

a. When the percent water extractable phosphorus of biosolids is less than 14%, one of the following may be used:

(I) When the soil phosphorus storage capacity index for an application zone is greater than 40 mg/kg, the percent water extractable phosphorus value for the biosolids being applied may be used to adjust the amount of phosphorus applied.

(II) When the soil phosphorus storage capacity index is at least 20 and up to 40, the amount of phosphorus may be doubled to adjust the amount of phosphorus applied.

(III) When soil phosphorus storage capacity index is greater than 0 but less than 20, the amount of phosphorus may be increased by 50 percent to adjust the amount of phosphorus applied.

(IV) When the soil phosphorus capacity index is less than 0, the amount of phosphorus shall not be adjusted.

b. When the percent water extractable phosphorus of biosolids is 14% or greater, the amount of phosphorus shall not be adjusted unless the the soil phosphorus storage capacity index is greater than 40, in which case the amount of phosphorus may be increased by 50 percent.

8. When considering the availability of nitrogen in biosolids, once the amount of plant available nitrogen to be supplied by biosolids has been determined (i.e. the crop nitrogen demand has been adjusted to take other sources of nitrogen into account), this amount may be multiplied by a factor of 1.5 (i.e. a 50 percent increase) to determine the amount of total nitrogen that may be supplied by biosolids

9. The calcium carbonate equivalency of any alkaline-treated biosolids and recommended lime application rates for each application zone.

10. Septage application rates for application zones with only septage application shall be no more than 40,000 gallons per acre per year for septage not containing food establishment sludge or no more than 30,000 gallons per acre per year if the septage includes food establishment sludge. Septage application rates for application zones with only septage application when the soil phosphours storage capacity index is less than 0 shall be no more than 12,000 gallons

per acre per year.

11. The method of land application for each application zone; and,

12. The methodology and calculations used to determine the application rates for each application zone.

(e) Establish specific rates of application and procedures to land apply biosolids and all other nutrient sources to each application zone. The NMP shall address application rates for a projected five year period, at a minimum. As part of establishing the application rates, the NMP shall include:

1. A specific assessment of the potential for phosphorus movement from each application zone,
2. A listing and quantification of all nutrient sources for each application zone,
3. The availability of the nitrogen in the biosolids being applied, any nitrogen available from biosolids applications in previous years, and any nitrogen available in subsequent years covering the minimum five year period of the NMP,
4. The current and planned plant production sequence or crop rotation for each application zone for the next five years, at a minimum,
5. Realistic annual yield goals for each crop identified for each application zone,
6. The recommended nitrogen and phosphorus application rates (i.e. nutrient demand) for the crops to be grown on each application zone,
7. The calcium carbonate equivalency of any alkaline treated biosolids and recommended lime application rates for each application zone,

8. The method of land application for each application zone; and,

9. The methodology and calculations used to determine the application rates for each application zone.

(6) When considering the availability of nitrogen in biosolids, the following shall be accepted by the Department:

(a) The nitrogen calculation methods found in Chapter 7 of the U.S. Environmental Protection Agency *Process Design Manual for Land Application of Sewage Sludge and Domestic Septage*, which is hereby adopted and incorporated by reference. All calculations and values used in the calculations shall be fully documented and submitted with the NMP. These values shall include a complete nitrogen analysis (i.e. organic nitrogen (Org N), ammonium (NH₄ N), and nitrate (NO₃ N)) for all facilities that will use the site, or

(b) In lieu of using the full calculation method for nitrogen in Chapter 7 of the U.S. Environmental Protection Agency *Process Design Manual for Land Application of Sewage Sludge and Domestic Septage*, once the amount of plant available nitrogen to be supplied by biosolids has been determined (i.e. the crop nitrogen demand has been adjusted to take other sources of nitrogen into account), this amount may be multiplied by a factor of 1.5 (i.e. a 50 percent increase) to determine the amount of total nitrogen that may be supplied by biosolids.

(7) through (8) renumbered (6) through (7) No change

(8) The NMP for a permitted biosolids land application site shall be reviewed annually and any revisions shall be provided to the Department. Revisions not requiring a minor permit revision in accordance with paragraph 62-640.300(3)(b), F.A.C., shall be provided to the Department with the site annual summary submitted in accordance with paragraph 62-640.650(5)(d), F.A.C., or earlier. Any revisions involving nutrient calculations shall be completed by a certified nutrient management planner or by a professional engineer licensed in the State of Florida.

Rulemaking Authority 373.043, 403.051, 403.061, 403.062, 403.087, 403.088, 403.704, 403.707 FS. Law Implemented 373.4595, 403.021, 403.051, 403.061, 403.087, 403.088, 403.0881, 403.702, 403.704, 403.707, 403.708 FS. History—New 8-12-90, Formerly 17-640.500, Amended 3-30-98, 8-29-10.

62-640.600 Pathogen Reduction and Vector Attraction Reduction.

All biosolids applied to the land or distributed and marketed shall be treated with a treatment process designed to reduce pathogens and achieve vector attraction reduction in accordance with the requirements of this section. The Department hereby adopts and incorporates by reference the pathogen and vector attraction reduction requirements of 40 C.F.R. 503.32 and 503.33, revised as of October 22, 2015~~April 9, 2007~~, and effective on December 15, 2015~~April 25, 2007~~, except for the site restrictions in 40 C.F.R. 503.32(b)(5), the septage requirements in 40 C.F.R. 503.32(c), and the vector attraction reduction requirements in 40 C.F.R. 503.33(b)(11) and 503.33(b)(12).

(1) Pathogen Reduction Requirements.

(a) Class AA and Class A Biosolids. Class AA and Class A biosolids shall meet one of the pathogen reduction

requirements described in 40 C.F.R. 503.32(a)(3), (4), (5), (7), and (8). For treatment processes permitted under 40 C.F.R. 503.32(a)(5), a permittee shall not implement the provisions of 40 C.F.R. 503.32(a)(5)(ii)(D) and 503.32(a)(5)(iii)(D) until:

1. The permittee demonstrates to the Department, based on monitoring data from the facility, that the documented pathogen treatment process operating parameters reduce enteric viruses and viable helminth ova to levels below the limits specified in 40 C.F.R. 503.32(a)(5); and,

2. The permit is revised to specifically allow the permittee to implement 40 C.F.R. 503.32(a)(5)(ii)(D) and 503.32(a)(5)(iii)(D).

(b) Class B Biosolids. Class B Biosolids shall meet one of the pathogen reduction requirements described in 40 C.F.R. 503.32(b).

(c) Septage management facilities that are regulated by the Department, and that do not treat any amount of biosolids or food establishment sludge, shall satisfy Class B pathogen reduction requirements if sufficient lime is added to produce a pH of 12 for a minimum of two hours, ~~or a pH of 12.5 for a minimum of 30 minutes~~. Processes and design shall be in accordance with the guidance for lime stabilization of septage in Chapter 6, Process Design Manual for Sludge Treatment and Disposal, which the Department adopts and incorporates by reference. The pH shall be maintained at or above 11 until land application, ~~but shall be less than 12.5 at the time of land application~~. Materials treated in accordance with this provision shall be managed as Class B biosolids.

(2) Vector Attraction Reduction Requirements.

(a) All Class A and Class B biosolids shall meet one of the vector attraction reduction requirements in 40 C.F.R. 503.33(b)(1) through (10).

(b) Class AA biosolids shall meet one of the vector attraction reduction requirements in 40 C.F.R. 503.33(b)(1) through (8).

(c) Septage management facilities that are regulated by the Department, and that do not treat any amount of biosolids or food establishment sludge satisfy vector attraction reduction requirements if the Class B pathogen reduction requirements of paragraph 62-640.600(1)(c), F.A.C. are met.

Rulemaking Authority 373.043, 403.051, 403.061, 403.062, 403.087, 403.088, 403.704, 403.707 FS. Law Implemented 373.4595, 403.021, 403.051, 403.061, 403.087, 403.088, 403.0881, 403.702, 403.704, 403.707, 403.708 FS. History—New 8-12-90, Formerly 17-640.600, Amended 3-30-98, 8-29-10.

62-640.650 Monitoring, Record Keeping, Reporting, and Notification.

(1) through (2) No change

(3) Monitoring Requirements.

(a) Biosolids Monitoring.

1. Biosolids sampling and analysis to monitor for the pathogen and vector attraction reduction requirements of Rule 62-640.600, F.A.C., and the parameters in subparagraph 62-640.650(3)(a)3., F.A.C., shall be conducted by the treatment facility in accordance with 40 C.F.R. 503.8, and the *POTW Sludge Sampling and Analysis Guidance Document*, August 1989, which the Department adopts and incorporates by reference. This document is available from the Department of Environmental Protection, Domestic Wastewater Section, M.S. 3540, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, or any of the Department's District Offices. In cases where disagreements exist between 40 C.F.R. 503.8 and the *POTW Sludge Sampling and Analysis Guidance Document*, the requirements in 40 C.F.R. 503.8 will apply. Monitoring for water extractable phosphorus shall follow _____, Pennsylvania State University, which the Department adopts and incorporates by reference.

2. Permit applications for all treatment facilities that land apply or distribute and market biosolids shall identify the monitoring that will be conducted for all microbial and all operational and process parameters necessary to demonstrate compliance with the pathogen reduction and vector attraction reduction requirements of Rule 62-640.600, F.A.C. All operational and process parameters, such as time and temperature, number of windrow turnings, pH readings, etc., shall be monitored on a continual basis as applicable to the treatment process to demonstrate compliance with Rule 62-640.600, F.A.C.

3. All treatment facilities that land apply or distribute and market biosolids shall analyze biosolids for the

following parameters, except as provided in paragraph 62-640.880(5)(a), F.A.C.:

Total Nitrogen	% dry weight basis
Total Phosphorus	% dry weight basis
Total Potassium	% dry weight basis
Water Extractable Phosphorus	% dry weight basis
Arsenic	mg/kg dry weight basis
Cadmium	mg/kg dry weight basis
Copper	mg/kg dry weight basis
Lead	mg/kg dry weight basis
Mercury	mg/kg dry weight basis
Molybdenum	mg/kg dry weight basis
Nickel	mg/kg dry weight basis
Selenium	mg/kg dry weight basis
Zinc	mg/kg dry weight basis
pH	standard units
Total Solids	%
Calcium Carbonate Equivalent*	% dry weight basis
*Only required for biosolids treated by alkaline addition	

4. through 6. No change

7. Monthly averages of parameter concentrations shall be determined by taking the arithmetic mean of all sample results for the month.

(b) Soil Monitoring.

1. The site permittee shall ensure soil fertility testing is conducted in accordance with the NMP. The soil fertility testing and results shall be equivalent to the “Phosphorus Index Test” as conducted by the University of Florida (UF)/Institute of Food and Agricultural Sciences (IFAS) Extension Soil Testing Laboratory. Soil testing shall follow the procedures in the IFAS publications “Soil Testing,” UF/IFAS Circular 239, September 2003, identified in paragraph 62-640.210(1)(o), F.A.C., and “Extension Soil Testing Laboratory (ESTL) Analytical Procedure and Training Manual,” UF/IFAS Circular 1248, February 2009, identified in paragraph 62-640.210(1)(p), F.A.C., which are hereby incorporated by reference. These documents are available from the Department of Environmental Protection, Domestic Wastewater Section, M.S. 3540, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 or any of the Department’s District Offices. Results of soil fertility tests shall be included in the application site records.

2. Representative soil monitoring for parameters in subsection 62-640.700(5), F.A.C., shall be conducted at application sites for each application zone prior to application site permitting, except for sites only permitted for Class AA biosolids. At a minimum, one soil sample shall be taken for each application zone or for every 50 acres of application area, whichever is smaller. Each sample shall be a composite of at least ten random samples to a depth of six inches and shall be completely mixed to form a minimum one-pound sample. Sampling and analysis shall be in accordance with 40 C.F.R. 503.8(4), which is hereby incorporated by reference. Results of initial soil monitoring shall be reported on the Biosolids Site Permit Application, Form 62-640.210(2)(d).

(c) Ground Water Monitoring.

1. A ground water monitoring program shall be established by the site permittee, and approved by the Department for land application sites when the application rate in the NMP exceeds more than 100400 lbs/acre/year of plant available nitrogen or more than XX lbs/acre/year of total P2O5. When the application rates are below these amounts, the permittee shall allow the Department to install ground water monitoring wells at any time during the effective period of the Department-issued facility or land application site permit and conduct monitoring.

2. through 5. No change

(d) Surface Water Monitoring

1. The site permittee shall ensure surface water monitoring for total phosphorus, total nitrogen, and fecal coliform bacteria is conducted for sites when an application site is bordered or crossed by waters of the state and the application zone is located within 1000 feet of waters of the state, excluding wetlands.

2. If the receiving water is a stream or canal, the surface water monitoring shall be conducted on a quarterly basis at points 500 feet upstream and 500 feet downstream from where runoff from the application site enters state waters. If the receiving water is a lake, estuary, or coastal water, the surface water monitoring shall be conducted on a quarterly basis 500 feet downstream from where runoff enters the water body and at an approved background monitoring point.

~~(e)(4)~~ Any laboratory tests required by this chapter shall be performed by a laboratory certified in accordance with paragraph 62-620.610(18)(d), F.A.C. Sample collection required by this chapter shall be performed in accordance with paragraph 62-620.610(18)(e), F.A.C. The Specific Oxygen Uptake Rate (SOUR) test, as required by 40 C.F.R. 503.33(b)(4), shall be conducted within 15 minutes of sample collection and shall be performed by a certified laboratory or under the direction of an operator certified in accordance with Chapter 62-602, F.A.C.

(4) through (6) No change

Rulemaking Authority 373.043, 403.051, 403.061, 403.062, 403.087, 403.088, 403.704, 403.707 FS. Law Implemented 373.4595, 403.021, 403.051, 403.061, 403.087, 403.088, 403.0881, 403.702, 403.704, 403.707, 403.708 FS. History—New 3-30-98, Amended 8-29-10.

62-640.700 Requirements for Land Application of Class AA, A, and B Biosolids.

(1) through (5) No change

(6) General Application Site Requirements.

(a) Biosolids shall be applied with appropriate techniques and equipment to assure uniform application over the application zone.

~~(b) Beginning within one year of August 29, 2010,~~ Class A and Class B biosolids treated by alkaline addition shall be applied by the best management practice of incorporation or injection unless the application area is located at a distance greater than one-quarter mile from the application site property line. This distance shall be decreased to the setback distance provided by subparagraph 62-640.700(8)(b)2., F.A.C., if the affected adjacent property owner provides written consent.

(c) Class A and Class B biosolids treated by alkaline addition shall be land applied within 24 hours of delivery to the site.

(d) The spraying of liquid domestic wastewater biosolids from an application vehicle shall be conducted so that the formation of aerosols is minimized. Unless specifically stated in the wastewater permit or site permit, spray guns shall not be used.

(e) Biosolids shall not be stored, stockpiled, or staged at a land application site for more than seven days unless approved by the Department pursuant to subparagraph 2., below.

1. All biosolids storage, stockpiling, or staging at land application sites shall:

a. Meet the applicable setback requirements for biosolids application sites in subsection 62-640.700(8), F.A.C.,

b. Not cause or contribute to runoff of biosolids, objectionable odors, or vector attraction; and,

c. For Class B biosolids, include fencing or other appropriate features to discourage the entry of animals and unauthorized persons.

2. The Department shall approve storage periods for longer than seven days if the following conditions are met:

a. The storage area and facilities are identified in the NMP and site permit application,

b. The applicable storage requirements of subparagraph 62-640.700(6)(e)1., F.A.C., are met,

c. All of the biosolids stored at the application site, up to the capacity of the onsite storage facilities, can be land applied without resulting in an exceedance of cumulative loading limits or the application rates established in the NMP,

d. The storage facilities are adequate for the rate of biosolids generated by permitted treatment facilities sending biosolids to the application site; ~~and,~~

e. A longer storage period is needed because of agricultural operations or climatic factors at the application site; ~~and-~~

f. Measures to prevent leaching of nutrients are implemented.

3. In no case shall storage of biosolids exceed two years.

4. EPA's *Guide to Field Storage of Biosolids*, paragraph 62-640.210(1)(k), F.A.C., provides guidance to assist permittees in the field storage, stockpiling, and staging of biosolids.

(f) Class B biosolids application sites shall be posted with appropriate advisory signs in English and Spanish which identify the nature of the project area and comply with the following requirements.

1. Signs shall be posted at all entrances to land application sites in such a position as to be clearly noticeable. The words "Class B Biosolids Site" (in Spanish "Sitio con Biosólidos"), "Public Access Prohibited" (in Spanish "Prohibido el Acceso al Público"), and the name and contact information of the site manager shall appear prominently on the signs.

2. For unfenced application sites, additional signs shall be posted at the corners and at a maximum of 500 feet intervals along the boundaries of the application site or zones, and in such a position as to be clearly noticeable from outside the boundary line of the application site. The words "Public Access Prohibited" (in Spanish "Prohibido el Acceso al Público") shall appear prominently on the signs.

3. Letters on the signs for all required statements shall not be less than two inches in height. Signs shall be maintained and legible.

(7) through (8) No change

(9) The pH of the soil or the the biosolids soil mixture shall be 5.0 or greater at the time Class A or Class B biosolids are applied. At a minimum, soil pH testing shall be done annually.

(10) A minimum unsaturated soil depth of two feet is required between the depth of biosolids placement and the water table level at the time the Class A or Class B biosolids are applied to the soil. The permittee can indicate the seasonal high ground water level for the application site in the Biosolids Site Permit Application, Form 62-640.210(2)(d), by use of soil survey maps. If the seasonal high ground water level is within two feet of the depth of biosolids placement or cannot be determined at the time of permitting, the water table level shall be determined in one or more representative location(s) in the application zone before each application of biosolids, by measuring the water level in a water-table monitoring well or a piezometer. Biosolids shall not be applied on soils having a seasonal high ground water table less than 15 centimeters from the soil surface or within 15 centimeters of the intended depth of biosolids placement.

(11) through (12) No change

Rulemaking Authority 373.043, 403.051, 403.061, 403.062, 403.087, 403.088, 403.704, 403.707 FS. Law Implemented 373.4595, 403.021, 403.051, 403.061, 403.087, 403.088, 403.0881, 403.702, 403.704, 403.707, 403.708 FS. History—New 8-12-90, Formerly 17-640.700, Amended 3-30-98, 8-29-10.

62-640.750 Agricultural Sites.

Rulemaking Authority 403.051, 403.061, 403.062, 403.087, 403.088, 403.704, 403.707 FS. Law Implemented 403.021, 403.051, 403.061, 403.087, 403.088, 403.0881, 403.702, 403.704, 403.707, 403.708 FS. History—New 3-30-98, Repealed 8-29-10.

62-640.800 Additional Requirements for Land Application at Reclamation Sites.

(1) through (4) No change

(5) Ground water and surface water monitoring shall be conducted for reclamation sites as provided in paragraphs 62-640.650(3)(c) and (d), F.A.C.

~~(6)(5)~~ In addition to the above requirements, land reclamation projects at mining reclamation sites shall be in compliance with any other applicable Department rules concerning mining reclamation.

Rulemaking Authority 373.043, 403.051, 403.061, 403.062, 403.087, 403.088, 403.704, 403.707 FS. Law Implemented 373.4595, 403.021, 403.051, 403.061, 403.087, 403.088, 403.0881, 403.702, 403.704, 403.707, 403.708 FS. History—New 8-12-90, Formerly 17-640.800, Amended 3-30-98, 8-29-10.

62-640.850 Distribution and Marketing of Class AA Biosolids.

The distribution and marketing of biosolids or biosolids products shall meet the requirements of this section and this chapter, but are not required to meet subsections 62-640.300(2) and (3); Rule 62-640.500; paragraphs 62-

640.650(3)(b) through (d); 62-640.650(4)(c) through (j); 62-640.650(5)(c) through (e); 62-640.650(6)(a), (b), (f), and (g); subsections 62-640.700(1) through (4); 62-640.700(6) through (12); and Rule 62-640.800, F.A.C.

(1) Distributed and marketed biosolids or biosolids products shall meet the requirements for Class AA biosolids as defined in subsection 62-640.200(10), F.A.C.

(2) Distributed and marketed biosolids or biosolids products shall be distributed and marketed as a fertilizer in accordance with Chapter 576, F.S., ~~(XXXX)(2009)~~, and Chapter 5E-1, F.A.C., ~~XX-XX-XXXX-1-18-2010~~, both hereby adopted and incorporated by reference, or distributed and marketed to a person or entity that will sell or give-away the biosolids or biosolids products as a fertilizer or as a component of a fertilizer subject to Chapter 576, F.S., and Chapter 5E-1, F.A.C. Copies of Chapter 576, F.S., and Chapter 5E-1, F.A.C., are available from the Department of Environmental Protection, Domestic Wastewater Section, M.S. 3540, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 or any of the Department's District Offices. For the purposes of this chapter, biosolids composts that are distributed and marketed outside of the Lake Okeechobee, St. Lucie River, and Caloosahatchee River watersheds, as defined in Section 373.4595, F.S., do not have to be distributed and marketed as a fertilizer if the biosolids compost product is enrolled and certified under the U.S. Composting Council's (USCC) Seal of Testing Assurance (STA) program in effect on 5-20-2010, hereby adopted and incorporated by reference. A copy of the USCC STA program document is available from the Department of Environmental Protection, Domestic Wastewater Section, M.S. 3540, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, or any of the Department's District Offices.

(3) Any treatment facility which produces biosolids in Florida that will be distributed and marketed or any person who delivers biosolids to Florida to be distributed and marketed shall submit the information listed in paragraph 62-640.850(3)(b), F.A.C., to the Department.

(a) The information shall be submitted as follows:

1. Florida facilities shall submit the information with the treatment facility permit application. The information shall be updated and re-submitted with each permit renewal application.

2. Persons shipping biosolids into Florida for distribution and marketing shall submit the information with the notification required by subsection 62-640.850(6), F.A.C. The information shall be updated and re-submitted every five years.

(b) The information shall include:

1. The Florida fertilizer license number assigned in accordance with Florida's Commercial Fertilizer Law, Chapter 576, F.S., (2009), and Chapter 5E-1, F.A.C., 1-18-2010, both hereby adopted and incorporated by reference, under which the biosolids or biosolids products will be distributed and marketed (copies of Chapter 576, F.S., and Chapter 5E-1, F.A.C., are available from the Department of Environmental Protection, Domestic Wastewater Section, M.S. 3540, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 or any of the Department's District Offices) or documentation showing proof of certification for biosolids composts enrolled in the USCC STA program in effect on 5-20-2010, hereby adopted and incorporated by reference (a copy of the USCC STA program document is available from the Department of Environmental Protection, Domestic Wastewater Section, M.S. 3540, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 or any of the Department's District Offices),

2. The quantity and characteristics of the biosolids or biosolids products to be distributed and marketed annually,

3. A description of the planned distribution and marketing operations, methods, and procedures,

4. Procedures for transportation, storage, and application for the biosolids or biosolids products by the facility or person shipping biosolids into Florida for distribution and marketing,

5. The label or information sheet to be provided at the time of distribution and marketing of the biosolids in accordance with subsection 62-640.850(5), F.A.C., Chapter 576, F.S., ~~(XXXX)(2009)~~, and Chapter 5E-1, F.A.C., ~~XX-XX-XXXX-1-18-2010~~, both hereby adopted and incorporated by reference, as applicable (copies of Chapter 576, F.S., and Chapter 5E-1, F.A.C., are available from the Department of Environmental Protection, Domestic Wastewater Section, M.S. 3540, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 or any of the Department's District Offices) or equivalent information for biosolid composts certified and enrolled in the USCC STA program in effect on 5-20-2010, hereby adopted and incorporated by reference (a copy of the USCC STA program document is available from the Department of Environmental Protection, Domestic Wastewater Section, M.S. 3540, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, or any of the Department's District Offices),

6. Management procedures for ensuring biosolids meet Class AA requirements prior to distribution and marketing, including procedures for notifying persons who received biosolids that failed to meet Class AA requirements; and,

7. Contingency plans if the biosolids or biosolids products are not distributed or marketed as planned.

(4) through (7) No change

Rulemaking Authority 373.043, 403.051, 403.061, 403.062, 403.087, 403.088, 403.704, 403.707 FS. Law Implemented 373.4595, 403.021, 403.051, 403.061, 403.087, 403.088, 403.0881, 403.702, 403.704, 403.707, 403.708 FS. History—New 8-12-90, Formerly 17-640.850, Amended 3-30-98, 8-29-10.

62-640.880 Additional Requirements Related to Biosolids Treatment Facilities.

The requirements of this section shall apply to any facility that treats biosolids from other facilities prior to use, land application, or disposal. These requirements also apply to septage management facilities that treat domestic septage and combinations of food establishment sludges, wastes removed from portable toilets, and wastes removed from holding tanks associated with boats, marina pumpout, or other onsite systems prior to use, land application, or disposal.

(1) No change

(a) through (i) No change

(j) Staffing. The level of operator staffing at a biosolids treatment facility shall be as follows:

	TYPE I*	TYPE II*	TYPE III*
A/AA**	Class A Operator	Class B Operator	Class B Operator
	8 hours/day	4 hours/day	2 hours/day
	5 days/week	5 days/week	5 days/week
B**	Class A Operator	Class B Operator	Class C Operator
	2 hours/day	1 hour/day	1 hour/day
	5 days/week	5 days/week	3 days/week
B***	Class A Operator	Class B Operator	Class C Operator
	1 hour/day	1 hour/day	1 hour/week
	5 days/week	3 days/week	

*Classification of Type of facility as determined by paragraph 62-640.880(2)(a), F.A.C.

**These letters correspond to the Class of pathogen reduction that is achieved by the biosolids treatment facility in accordance with subsection 62-640.600(1), F.A.C.

***This category is for Class B liquid alkaline stabilization only.

1. The operator classification requirements shall be in accordance with Chapter 62-699, F.A.C.

2. Operator staffing requirements for facilities addressed in paragraph 62-640.880(2)(d), F.A.C., shall be established as the more stringent of either the requirements in Chapter 62-699, F.A.C., or the requirements in paragraph 62-640.880(2)(j), F.A.C. For septage management facilities with a permitted capacity equivalent to 10,000 gallons per day or less, the Class C operator requirements given in paragraph 62-640.880(2)(j), F.A.C., may be substituted with a registered septic tank contractor or master septic tank contractor.

3. In addition to the above staffing requirements, other personnel that are trained in the treatment process and equipment being used, working under the direction of a certified operator, shall be present at the biosolids treatment facility during loading and unloading operations and during other operating hours as recommended in the preliminary design report.

4. If justified by the complexity of the treatment process, the Department shall require a higher classification, more frequent visits, or more hours per day. Requests to alter or decrease staffing requirements shall be made through a minor permit revision under Rule 62-620.325, F.A.C., and shall be based upon site-specific requirements, facility operation, risk to public health and the environment, and the presence of other trained personnel.

(k) The biosolids treatment facility permittee shall be responsible for making the facilities safe in terms of public health and safety at all times, and shall notify the Department and all affected parties, in writing, at least 60 days before ceasing operation in accordance with subsection 62-620.610(15), F.A.C.

(3) through (6) No change

Rulemaking Authority 403.051, 403.061, 403.062, 403.087, 403.088, 403.704, 403.707 FS. Law Implemented 403.021, 403.051, 403.061, 403.087, 403.088, 403.0881, 403.702, 403.704, 403.707, 403.708 FS. History—New 3-30-98, Amended 8-29-10.