



# **Chapter 62-640, F.A.C. Rulemaking Update**

**Division of Water Resource Management  
December 2, 2020**



# Outline

- **Background on Biosolids Rulemaking**
- **Senate Bill 712 (SB 712) and Biosolids**
- **Overview of Draft Amendments to Chapter 62-640, Florida Administrative Code (F.A.C.)**



# Biosolids Rulemaking

**Rulemaking began in 2019 after recommendations were made by the Biosolids Technical Advisory Committee (TAC)**

- **Notice of Rule Development – 3/22/19**
- **Held three public workshops – 6/25-27/19**
- **Notice of Proposed Rule – 10/29/19**
- **Statement of Estimated Regulatory Costs (SERC) – 10/29/19**
- **Proposed rule was withdrawn 3/20/20 to allow for the addition of provisions based on SB 712**
- **Notice of Rule Development – 4/14/20**



# Biosolids – SB 712

## Legislative findings and provisions:

- **It is in the best interest of the state to regulate biosolids management in order to minimize the migration of nutrients that impair water bodies**
- **Permitting according to site specific application conditions, an increase inspection rate, groundwater and surface water monitoring protocols, and nutrient management research will improve biosolids management and assist in protecting this state's water resources and water quality**
- **Requires DEP to adopt new rules for biosolids management; adopted rules must be ratified by the Legislature**



# Biosolids – SB 712 (2)

**New site permits and site permit renewals after July 1, 2020 shall:**

- **Meet a minimum unsaturated soil depth of two feet from the depth of biosolids placement when biosolids are applied**
- **Not allow application on soils with a seasonal high water table (SHWT) within six inches of the soil surface or depth of biosolids placement unless the permittee provides reasonable assurance through the site nutrient management plan and water quality monitoring plan that land application will not cause or contribute to surface water quality violations or ground water violations**
- **Require enrollment in a Florida Department of Agriculture and Consumer Services (DACS) Best Management Practices (BMP) program**



# Biosolids – SB 712 (3)

- **All site permits will have to comply with the DACS BMP enrollment requirement and the SHWT provision by July 1, 2022**
- **New and renewed permits after July 1, 2020 must include a permit re-opener condition to add a compliance date of no later than one year after the effective date of new biosolids rules**
- **All permits must comply with the new rules no later than two years after the effective date of the new biosolids rule**
- **A municipality or county may enforce or extend a local ordinance, regulation, resolution, rule, moratorium, or policy adopted before November 1, 2019, relating the application of Class A or Class B biosolids until the regulation, resolution, etc., is repealed by the municipality or county**



# Summary of Key Rule Revisions

- **Revising the provisions for determining biosolids land application rates**
  - **Determine rates based on Nitrogen (N) or Phosphorus (P), cannot exceed either**
    - **P adjustments will be based on the ability of the soil to store P and the water extractable P in biosolids**
    - **Provisions to adjust N limited to 1.5 factor**
- **Ground water and surface water monitoring requirements for land application sites**
- **Prohibition on applying biosolids to land with a SWHT within six inches of the soil surface or depth of biosolids placement (SB 712)**



# Summary of Key Rule Revisions (2)

- **Biosolids sites comply with the new rules (SB 712):**
  - **Within one year of the effective date of the new rules for new permits or permit renewals issued after July 1, 2020**
  - **Within two years of the effective date of the new rule for all permits**
- **Enrollment in an DACS BMP program will be required (SB 712)**
- **Biosolids permit applications shall be considered projects of heightened public interest**
- **References to Florida Department of Health (DOH) regulation of septage removed**



# **62-640.100, F.A.C.**

## ***Scope, Intent, Purpose, and Applicability***

- **Section 62-640.100(5)(c), F.A.C. – deletes obsolete references to the quantity of septage treated**
- **Sections 62-640.100(5)(f) through (h), F.A.C.– establishes the compliance period for existing facilities and land application sites (SB 712)**
  - **New or renewed facility or biosolids land application site permits issued after July 1, 2020 shall meet the new requirements no later than within one year of the effective date of the new rule**
  - **All permits for facilities and biosolids land application sites shall meet the new requirements within two years of the effective date of the new rule**
  - **Note, the above timeframes replace the three-year phase-in proposed in 2019**



# **62-640.100, F.A.C. (2)**

## ***Scope, Intent, Purpose, and Applicability***

- **Section 62-640.100(5)(i), F.A.C. – deletes obsolete language (2010 transition to site permitting)**
- **Section 62-640.100(6)(a), F.A.C. – provides informational language to highlight that biosolids sites are subject to any applicable basin management action plans (BMAPs)**
- **Adds section 403.0855, Florida Statutes (F.S.), to the rulemaking authority and law implemented notes for the rule (repeated for other rules – SB 712)**



# 62-640.200, F.A.C.

## *Definitions*

- **Section 62-640.200(9), F.A.C.** – adds “capacity index” as a measure of the ability of the site soil to store phosphorous
- **Section 62-640.200(18), F.A.C.** – deletes obsolete language (“existing site” now covered under Sections 62-640.100(5)(f) – (h), F.A.C.)
- **Section 62-640.200(28), F.A.C.** – includes revisions related to adopting and incorporating by reference (repeated throughout the rule)
- **Section 62-640.200(33), F.A.C.** – defines “percent water extractable phosphorus” (PWEPP) as percentage of phosphorus that is water extractable in a biosolids sample



# 62-640.200, F.A.C. (2)

## *Definitions*

- **Section 62-640.200(35), F.A.C. – clarifies pH definition**
- **Section 62-640.200(42), F.A.C. – defines “seasonal high water” as the elevation to which the ground and surface water may be expected to rise due to a normal wet season (SB 712)**
- **Section 62-640.200(44), F.A.C. – deletes obsolete language**
- **Section 62-640.200(51), F.A.C. – revises the definition of “water table” to be consistent with Chapter 62-520, F.A.C.**



# 62-640.210, F.A.C.

## *General Technical Guidance and Forms*

- **Includes various updated references/dates**
- **Section 62-640.210(1)(q), F.A.C. – adds a reference as supplemental guidance for the water extractable phosphorus method**
- **Section 62-640.210(1)(r), F.A.C. – adds a reference to provide the analysis method for water extractable phosphorus; this document is incorporated and adopted by reference in section 62-640.650(3)(a)1., F.A.C.**
- **Sections 62-640.210(1)(s) and (t), F.A.C. – add references for the Mehlich-3 extraction method for soil fertility testing**
- **Section 62-640.210(2), F.A.C. – revises the current rule forms to reflect the rule revisions; no new forms added**



# 62-640.300, F.A.C.

## *General Requirements*

- **Section 62-640.300(1), F.A.C. – adds “treatment” to clarify that the sentence applies to treatment facility permits, not biosolids site permits**
- **Section 62-640.300(3)(d), F.A.C. – requires all biosolids site permit applications to be considered projects of heightened public interest**
- **Section 62-640.300(3)(f), F.A.C. – deletes obsolete language related to the 2010 transition to permitted sites**
- **Section 62-640.300(3)(g), F.A.C. – requires permitted biosolids land application sites be enrolled in the DACS BMP Program (SB 712)**



# 62-640.400, F.A.C.

## *Prohibitions*

- **Section 62-640.400(14), F.A.C. – Biosolids shall not be applied on soils that have a seasonal high water table less than six inches from the soil surface or within six inches of the intended depth of biosolids placement, unless a Department-approved nutrient management plan and water quality monitoring plan provide reasonable assurance that the land application of biosolids at the site will not cause or contribute to a violation of the state’s surface water quality standards or ground water quality standards (SB 712)**



# 62-640.500, F.A.C.

## *Nutrient Management Plan (NMP)*

- **Section 62-640.500(5)(c), F.A.C.** – requires a description of how the site nutrient management plan (NMP) complies with any applicable BMAPs
- **Section 62-640.500(5)(e), F.A.C.** – reduces the minimum frequency of soil fertility testing to annually



# 62-640.500, F.A.C. (2)

## *Nutrient Management Plan (NMP)*

- **Section 62-640.500(5)(f), F.A.C. – requires rates of application based on nitrogen and phosphorus. Application shall not exceed either rate (i.e., application rate is limited to the more restrictive of the two nutrient-based rates), unless the applicant can provide reasonable assurance that applying at a higher rate is protective of water quality**
- **Section 62-640.500(5)(f)1., F.A.C. – adds a table with allowed minimum crop nutrient needs to aid in the determination of biosolids application rates**
- **Sections 62-640(5)(f)2. – 3., F.A.C. – reflect language previously included in the rule (not new requirements)**



# **62-640.500, F.A.C. (3)**

## ***Nutrient Management Plan (NMP)***

- **Section 62-640.500(5)(f)4., F.A.C. – requires the soil phosphorus storage “capacity index” and soil phosphorus results for each application zone be included in the NMP; the “capacity index” shall be based on Mehlich-3 extractions for phosphorus, iron, and aluminum**
- **Section 62-640.500(5)(f)5., F.A.C. – existing language**
- **Section 62-640.500(5)(f)6., F.A.C. – requires the NMP to include the “percent water extractable phosphorus” (PWEF) of each biosolids source to the site**



# 62-640.500, F.A.C. (4)

## *Nutrient Management Plan (NMP)*

- **Section 62-640.500(5)(f)7., F.A.C. – outlines the adjustments for phosphorus application rates depending on the soil “capacity index” (CI) and the biosolids PWEF (higher adjustments are allowed for higher CI values and lower PWEFs, while lower or no adjustments are allowed for soils with low or negative CI values and biosolids with higher PWEF values)**
- **Section 62-640.500(5)(f)8., F.A.C. – specifies that nitrogen application rates can be adjusted by a factor of 1.5 to account for the availability of nitrogen in biosolids and nitrogen mineralization.**
- **Section 62-640.500(5)(f)9., F.A.C. – existing language**



# 62-640.500, F.A.C. (5)

## *Nutrient Management Plan (NMP)*

- **Section 62-640.500(5)(f)10., F.A.C. – establishes allowable septage application rates based on the soil capacity index and whether or not a septage management facility accepts food establishment sludge (grease)**
- **Sections 62-640.500(5)(f)11. and 12., F.A.C. – existing language**
- **Section 62-640.500(8), F.A.C. – specifies when and how to submit revisions to the NMP, which may be necessary between permit cycles if the soil capacity index changes**



# 62-640.600, F.A.C.

## *Pathogen Reduction and Vector Attraction Reduction*

- **Section 62-640.600(1)(c), F.A.C. – eliminating the provision allowing septage to meet Class B pathogen reduction treatment by raising the pH to 12.5 for 30 minutes because lime cannot reach a pH over 12.47 at a temperature of 25 degrees Celsius**



# **62-640.650, F.A.C.**

## ***Monitoring, Record Keeping, Reporting, and Notification***

- **Section 62-640.650(3)(a)1.a., F.A.C. – includes minor changes for references**
- **Section 62-640.650(3)(a)1.b., F.A.C. – adopts and incorporates by reference the analysis method for monitoring for water extractable phosphorus**
- **Section 62-640.650(3)(a)1.c., F.A.C. – requires treatment facilities to monitor for water extractable phosphorus immediately following the effective date of the rule**
- **Section 62-640.650(3)(a)3., F.A.C. – adds water extractable phosphorus to the list of parameters to be analyzed in biosolids during routing monitoring for treatment facilities**



# 62-640.650, F.A.C. (2)

## *Monitoring, Record Keeping, Reporting, and Notification*

- **Section 62-640.650(3)(b)1., F.A.C. – identifies a specific University of Florida Institute of Food and Agricultural Sciences (IFAS) soil fertility test, the “Phosphorus Index Test,” for soil fertility testing, but if a permittee uses a different agricultural lab other than IFAS, specifies the required soil fertility parameters; additionally, allows soil fertility testing samples for the capacity index to be deeper than six inches, but cannot go below the seasonal high water table (SHWT)**
- **Sections 62-640.650(3)(b)1.a.-c., F.A.C. – breaks out references separately and adds a Mehlich-3 reference (incorporated)**
- **Section 62-640.650(3)(b)2., F.A.C. – deletes a reference to sites permitted for Class AA biosolids because no sites have been, or are, expected to be permitted for only Class AA**



# **62-640.650, F.A.C. (3)**

## ***Monitoring, Record Keeping, Reporting, and Notification***

- **Section 62-640.650(3)(c)1., F.A.C.**
  - **Revises the requirement for ground water monitoring to a lower nitrogen threshold and establishing a phosphorus threshold (phosphorus rate or soil capacity index)**
  - **Adds a requirement to submit a ground water monitoring plan if the soil capacity index changes to a negative value**
  - **Adds a provision allowing the Department to install wells and conduct monitoring at the site even if a site is not required by rule to conduct ground water monitoring**



# **62-640.650, F.A.C. (4)**

## ***Monitoring, Record Keeping, Reporting, and Notification***

- **Section 62-640.650(3)(d), F.A.C.**
  - **Adds surface water monitoring requirements for biosolids land application sites based on the proximity of the application area to surface water**
  - **Adds a provision to allow the Department to conduct surface water monitoring at the site even if surface water monitoring is not required by rule**
- **Section 62-640.650(3)(e), F.A.C. – adds, “unless specifically provided otherwise in this chapter” to the requirement to use a certified laboratory because agricultural laboratories are allowed by section 62-640.650(3)(b)1., F.A.C., for soil fertility testing**



# **62-640.650, F.A.C. (5)**

## ***Monitoring, Record Keeping, Reporting, and Notification***

- **Section 62-640.650(4)(j)4., F.A.C. – adds surface water monitoring results to the site record keeping requirements**
- **Section 62-640.650(4)(j)7., F.A.C. – adds demonstration of reasonable assurance to the record keeping requirements when the seasonal high water table is less than 6 inches from the soil surface or depth of biosolids placement (SB 712)**
- **Section 62-640.650(5)(d)2., F.A.C. – deletes the reference to sites permitted for Class AA only because no sites have been permitted for Class AA or are expected to be permitted for Class AA**



# 62-640.700, F.A.C.

## *Requirements for Land Application*

- **Rule Title – deletes the classes of biosolids from the title because it has caused confusion related to Class AA biosolids (Class AA is typically distributed and marketed)**
- **Section 62-640.700(6)(b), F.A.C. – deletes the obsolete one-year deadline date after the effective date of the 2010 revisions**
- **Section 62-640.700(6)(e)2.f., F.A.C. – adds measures to prevent leaching as a concern for long-term storage of biosolids at a site**
- **Section 62-640.700(9), F.A.C. – clarifies the soil pH requirement**



# **62-640.700, F.A.C. (2)**

## ***Requirements for Land Application***

- **Section 62-640.700(10), F.A.C. – Seasonal High Water Table**
- **Section 62-640.700(10)(a), F.A.C. – repeats the prohibition from section 62-640.400(14), F.A.C., regarding the prohibition on land application on soils with a SHWT less than six inches (SB 712)**
- **Section 62-640.700(10)(b), F.A.C. – retains the required two feet of unsaturated soil at the time of application (SB 712)**
- **Section 62-640.700(10)(c), F.A.C. – expands methods to determine the SHWT and adopts a document providing methodology**
- **Section 62-640.700(10)(d), F.A.C. – retains the determination of the water table level before application for SHWT less than two feet of the soil surface**



# 62-640.800, F.A.C.

## *Additional Requirements for Land Application at Reclamation Site*

- **Section 62-640.800(5), F.A.C. – adds the requirements for ground water and surface water monitoring from section 62-640.650, F.A.C. to the land reclamation site requirements**



# **62-640.850, F.A.C.**

## ***Distribution and Marketing of Class AA Biosolids***

- **Updates rule references and dates of reference documents**



# **62-640.880, F.A.C.**

## ***Additional Requirements Related to Biosolids Treatment Facilities***

- **Section 62-640.880(2)(j)2., F.A.C. – allows small septage management facilities to be operated by a registered septic tank contractor or master septic tank contractor**



# ERC Adoption

- **The revisions to Chapter 62-640, F.A.C., must be adopted by the Environmental Regulation Commission (ERC)**
- **An ERC rule adoption hearing has not been set yet; anticipated for the next ERC meeting**



# Legislative Ratification

- **Legislation ratification of a rule is required when the costs of the rule exceed \$1 million over a five-year period**
- **SB 712 requires ratification by the Legislature**
  - **Legislative ratification would likely have been required because of expected regulatory costs**



# Contact Information

**Maurice Barker**

**Wastewater Management Program**

**850-245-8614**

**[Maurice.Barker@floridadep.gov](mailto:Maurice.Barker@floridadep.gov)**

