

Type of Permit:

# Florida Department of Environmental Protection Division of Water Resource Management

# **Biosolids Site Permit Application**

Permit Renewal

Part I. General	Information:			
Enter the basic sit	e, permittee, and contact	information.		
1. Site ID (enter th	e number if this is an exi	sting site): FLA		
Site Name:				
			Latitude & Longitude:	
Section:	Township:	Range:	County:	
Driving Directions	to Site:			
2. Site Permittee				
Legal Name:			Title:	
Address:				
	State:			
Phone:	Fax:	Cell:	Email:	
Contact:			Title:	
Phone:	Fax:	Cell:	Email:	
3. Site Manager: _				
	State:			
Phone:	Fax:	Cell:	Email:	
<b>4.</b> Land Owner:				
	State:			
	Fax:			

#### Part II. Site Information Checklist

Complete the checklist and attach documents, as indicated, to the permit application. Attach a County Section Aerial map; or a copy of such map, and other maps, indicating the boundaries of the site and delineating the boundary of each biosolids application zone. The following shall be indicated on the maps: ☐ The identification number for each application zone. [62-640.500(4), F.A.C.] Biosolids storage areas or storage facilities, if any, on the site, [62-640,700(6)(e), F.A.C.] The property lines of the site and neighboring properties. 75 feet setback from property lines for land application. [62-640.700(8)(b)2., F.A.C.] One-quarter mile (1320 feet) setback from property lines for Class A and Class B surface-applied alkaline treated biosolids. [62-640.700(6)(b), F.A.C.] Occupied buildings on the site or within ¼ mile of the site. [62-640.700(8)(a)4. and (b)1., F.A.C.] 300 feet setback from buildings occupied by the general public (100 feet if biosolids are injected into the soil). [62-640.700(8)(b)1., F.A.C.] 1320 feet setback from buildings occupied by the general public from any storage or stockpiling area. [62-640.700(8)(a)4., F.A.C.] ☐ Water supply wells on the site or within 500 feet of the site. [62-640.700(8)(a)2., F.A.C.] 300 feet setback from any private drinking water supply well or 500 feet setback from any public drinking water supply well. [62-640.700(8)(a)2., F.A.C.] Surface waters on the site or within 1000 feet of the site. [62-640.700(8)(a)1., F.A.C.] 1000 feet setback (setback area shall be vegetated) from Class I water bodies, Outstanding Florida Waters, or Outstanding National Resource Waters. [62-640.700(8)(a)1., F.A.C.] 200 feet setback (setback area shall be vegetated) from any other surface water, including wetlands that are classified as waters of the state, except canals or bodies of water used for irrigation, which are located completely within the site and will not discharge from the site (100 feet if injected). [62-640.700(8)(a)1., F.A.C.] The locations for surface water monitoring. [62-640.650(3)(d), F.A.C.] 200 feet setback from any natural or man-made conduits that could allow direct contamination of ground water. [62-640.700(8)(a)3., F.A.C.1 ☐ Ground water monitoring locations, as applicable. Water Table Monitoring: The locations of the piezometers or monitoring wells for monitoring the ground water table level if needed to demonstrate the minimum unsaturated soil depth of two feet required between the depth of biosolids placement and the water table level in accordance with subsection 62-640.700(10), F.A.C. Ground Water Quality Monitoring: The locations of ground water monitoring wells for monitoring ground water quality (if applicable in accordance with paragraph 62-640.650(3)(c), F.A.C.).

", d	requently flooded areas from soil surveys or areas with soils with a flooding frequency class of "frequent" or very frequent," or having a flooding duration class of "long" or "very long," as given in soil surveys and as efined by the Natural Resources Conservation Service (NRCS) in Section 618.27 of the <i>National Soil Survey dandbook</i> , as of October 2009. [62-640.700(11)(c), F.A.C.]
propos	the following as applicable: the proposed ground water monitoring plan [62-640.650(3)(c), F.A.C.]; the ed surface water monitoring plan [62-640.650(3)(d), F.A.C.]; and the surface water monitoring locations 0.650(3)(d), F.A.C.]
Attach F.A.C.]	a description of the biosolids storage, stockpiling, or staging that will be conducted onsite. [62-640.700(6)(e),
	Verify that the site has fencing or other appropriate features to discourage the entry of animals and unauthorized persons from storage and staging areas. [62-640.700(6)(e)1.c., F.A.C.]
	Is site storage of biosolids for more than seven days being requested, yes or no?
	If yes, attach documentation demonstrating that the requirements of subparagraph 62-640.700(6)(e)2., F.A.C., are met.
by use of licensed Environ Ecologic	ne seasonal high ground water table for each application zone. Seasonal high water table can be determined of soil survey maps or by an evaluation conducted by a professional engineer with soils training who is d in the State of Florida or a professional soil scientist certified and registered by the Florida Association of mental Soil Scientists. The methodologies set forth in the document "Soil and Water Relationships of Florida's cal Communities" (Florida Soil Conservation Staff 1992, https://floridadep.gov/sites/default/files/soil-and-df) may be used may be used to establish the seasonal high water table. [62-640.700(10)(b), F.A.C.]
	The minimum seasonal high ground water table as determined through Natural Resources Conservation Service maps or other documentation, is Attach maps or documentation.
	The intended depth of biosolids placement is inches.
	Documentation is attached proposing how reasonable assurance will be provided by the site nutrient management plan and water quality monitoring plan to ensure biosolids application on soils with a seasonal high ground water table within 6 inches of the soil surface or intended depth of biosolids placement will not cause or contribute to a violation of surface water quality standards or ground water standards (otherwise, biosolids application is prohibited). [62-640.400(14), F.A.C.
applica Slopes with the	an appropriate map, such as a U.S. Geological Survey (USGS) topographic map, determine the slope of the tion zones and attach documentation of the actual slope determination procedure or calculations used. shall not exceed eight percent. Slopes may be between three and eight percent if documentation is provided a nutrient management plan (NMP) demonstrating that the runoff from a 10-year recurrence interval 1-hour n storm event will be retained onsite or if the biosolids are injected or incorporated. [62-640.700(11)(b), F.A.C.]
Verify t	hat soil fertility testing will be conducted at least annually.
	Verify that most recent soil fertility testing results are included in the NMP in accordance with paragraph 62- 640.500(5)(c), F.A.C. The soil testing results used to develop the NMP shall be less than one year old.
	Verify that the pH result of the soil fertility testing is greater than 5.0 in accordance with subsection 62- 640.700(9), F.A.C.
	documentation of the initial background soil monitoring of metals conducted in accordance with subparagraph .650(3)(b)2., F.A.C. (required only for new permits).
Verify t	hat provisions will be taken to comply with site recordkeeping requirements. [62-640.650(4), F.A.C]
	Verify the site provisions for maintaining hauling records and sending receipts. [62-640.650(4)(d) & (g), F.A.C]

	Attach a description of where copies of the site logs and records will be kept onsite and how to access them. [62-640.650(4)(j), F.A.C]
	that sites are posted with advisory signs in English and Spanish at entrances and at intervals of 500 feet for sed areas and the signs meet the requirements of paragraph 62-640.700(6)(f), F.A.C.
	a description of the application techniques, methods and application equipment to be used at the site to uniform application. [62-640.700(6)(a), F.A.C.]
Spray or no?	guns shall not be used unless specifically authorized in the site permit. Are spray guns being requested, yes
	ise of spray guns is being requested, include a demonstration of why spray guns are needed and how ols will be minimized in the description of the application methods and application equipment. [62-640.700(6) A.C.]
Service	documentation demonstrating that the site is enrolled in a Floida Department of Agriculture and Consumer es (FDACS) best management practices (BMP) program or is within an agricultural operation enrolled in the m for the applicable commodity type. [62-640.300(3)(g), F.A.C.]
Attach	the signed and prepared Nutrient Management Plan (for agricultural sites). [62-640.500(1), F.A.C.]
	lamation sites, attach a description of the land reclamation project including the following (only applies to ation sites): [62-640.800), F.A.C.]
	Description of the circumstances that have caused damage to the land and resulted in the need to perform land reclamation. [62-640.800, F.A.C.]
	Description of the existing condition of the land. [62-640.800, F.A.C.]
	Description of how the use of biosolids on the site will be part of planned land reclamation activities. [62- 640.800, F.A.C.]
	Description of the grading to be performed (all site grading shall be completed before biosolids application begins). [62-640.800(4), F.A.C.]
	Description of the method of incorporation into the soil that will be used. The applied biosolids shall be incorporated into the soil the same day as application, except for Class A biosolids. [62-640.800(2), F.A.C.]
	Description of the type of vegetation to be established and the schedule for planting. Seed or turf-forming grass shall be planted as soon as possible, but in no case later than three months after the last application of residuals. [62-640.800(3), F.A.C.]
	Description of the anticipated application quantity in dry tons per acre. The maximum allowable application quantity is 50 dry tons per acre with such application to be accomplished one time within a one-year period on any acre of the site. [62-640.800(1), F.A.C.]
Includ	e the permit application fee, as applicable. [62-640.300(3)(c), F.A.C.]

Part III. Application Zone Summar	(attach additional sheets if necessary)	). Total Acreage of All Application Zones:

Enter the zone ID and applicable information for each application zone. Enter the latitude and longitude for the centroid of each zone.

Zone ID	Acreage	Seasonal High Water Table (depth in inches)	Site slope (topographic grade in %)	Application method to be used	Latitude deg	Latitude min	Latitude sec N	Longitude deg	Longitude min	Longitude sec W

## Part IV. Application Zone Initial Background Soil Testing Results (attach additional sheets if needed)

Enter the zone ID and initial background soil testing results in mg/kg for each application zone.

Zone ID	As	Cd	Cu	Pb	Hg	Мо	Ni	Se	Zn

(enter metal concentrations in mg/kg)

Part V. Application Zone Current Cumulative Loadings – Year (a	attach additional sheets if needed)
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Enter the zone ID and the most recent year's cumulative metal loadings for each application zone (as applicable) in lbs/acre, the date of the first application of biosolids subject to the cumulative loading requirements, and the estimated remaining life that the zone can continue to be used.

Zone ID	As	Cd	Cu	Pb	Hg	Мо	Ni	Se	Zn	Date of first use	Est. Life of Zone (years)
							_				_

(enter cumulative metal loadings in lbs/acre)

#### Part VI. Application Zones - NMP Summary

Enter the applicable nutrient information related to each application zone as established by the NMP (Attach additional sheets as necessary to cover all application zones).

## Nutrient Information Based on NMP for Zone ID: \_\_\_\_\_

	Crop(s) to be grown	Expected	Crop	Crop	Maximum	Maximum	Maximum	Maximum
	on the application	Limiting	Demand	Demand	Allowed	Allowed	Allowed	Allowed
Year	zone and number	Nutrient	N (PAN)	P <sub>2</sub> O <sub>5</sub> from	PAN from	P <sub>2</sub> O <sub>5</sub> from	TN	TP
1 001	of harvests		from All	All	Biosolids	Biosolids	from	from
	(if applicable)	(N or P)	Sources	Sources	(lbs/ac)	(lbs/ac)	Biosolids	Biosolids
			(lbs/ac)	(lbs/ac)			(lbs/ac)	(lbs/ac)
1								
2								
3								
4								
5								

#### Nutrient Information Based on NMP for Zone ID:

	Crop(s) to be grown	Expected	Crop	Crop	Maximum	Maximum	Maximum	Maximum
	on the application	Limiting	Demand	Demand	Allowed	Allowed	Allowed	Allowed
Year	zone and number	Nutrient	N (PAN)	P <sub>2</sub> O <sub>5</sub> from	PAN from	P <sub>2</sub> O <sub>5</sub> from	TN	TP
1 Gai	of harvests (if		from All	All	Biosolids	Biosolids	from	from
	applicable)	(N or P)	Sources	Sources	(lbs/ac)	(lbs/ac)	Biosolids	Biosolids
			(lbs/ac)	(lbs/ac)			(lbs/ac)	(lbs/ac)
1								
2								
3								
4								
5								

#### Nutrient Information Based on NMP for Zone ID:

Year	Crop(s) to be grown on the application zone and number of harvests (if	Expected Limiting Nutrient	Crop Demand N (PAN) from All	Crop Demand P <sub>2</sub> O <sub>5</sub> from All	Maximum Allowed PAN from Biosolids	Maximum Allowed P <sub>2</sub> O <sub>5</sub> from Biosolids	Maximum Allowed TN from	Maximum Allowed TP from
	applicable)	(N or P)	Sources (lbs/ac)	Sources (lbs/ac)	(lbs/ac)	(lbs/ac)	Biosolids (lbs/ac)	Biosolids (lbs/ac)
1								
2								
3								
4								
5								

(PAN = plant available nitrogen;  $P_2O_5 = 2.3 \times TP$ )

#### Part VII. NMP Checklist

ecklist shall be completed for all sites by the site applicant's nutrient management planner or professional engineer epared the plan in accordance with Rule 62-640.500, F.A.C., to verify that the NMP addresses the rule requirements.
<b>1.</b> The NMP has been prepared in accordance with nutrient management standards and guidelines such as the USDA-NRCS-Florida Field Office Technical Guide – Nutrient Management, Code 590.
2. The NMP has been 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.
<b>3.</b> The NMP identifies each application zone to be used at the site. The application zones shall be sized to facilitate accurate accounting of nutrient and pollutant loadings and shall comply with Rule 62- 640.700, F.A.C., as applicable for the class(es) of biosolids that will be applied.
4. The NMP includes guidance for NMP implementation, site operation and maintenance, and recordkeeping.
5. The NMP includes aerial site photograph(s) or map(s), and a soil survey map of the site.
<b>6.</b> The NMP identifies the frequency of soil fertility testing. The interval shall be at least once annually and include the soil phosphorus "capacity index."
7. The NMP includes results of soil, water, plant tissue, and biosolids analyses, as applicable.
<b>8.</b> The NMP establishes specific rates of application and procedures to land apply biosolids and all other nutrient sources to each application zone for the period to be covered by the permit, at a minimum. As part of establishing the application rates, the NMP includes:
a. The soil phosphorus "capacity index," biosolids Percent Water Extractable Phosphorus (PWEP)
(for multiple biosolids sources, a weighted average of PWEP may be used).
<b>b.</b> A listing and quantification of all nutrient sources to each application zone.
<b>c.</b> The current and planned plant production sequence or crop rotation for each application zone for the next five years, at a minimum.
d. Realistic annual yield goals for each crop identified for each application zone.
<b>e.</b> The recommended nitrogen and phosphorus application rates (i.e., nutrient demand) for the crops to be grown on each application zone.
f. The method of adjustment of nitrogen and phosphorus nutrient demands and resulting
application rates for each application zone.
<b>g.</b> The calcium carbonate equivalency of any alkaline-treated biosolids and therecommended lime application rates for each application zone.
h. The method of land application for each application zone.
i. The methodology and calculations used to determine the application rates for each application zone.
<b>9.</b> For sites located in geographic areas subject to restrictions on phosphorus as required by subsection 62-640.500(7), F.A.C., the NMP, at a minimum, bases application rates on the phosphorus needs of the crops and addresses measures that will be used to minimize or prevent water quality impacts that could result from biosolids applications to surface waters.
<b>10.</b> For sites in the Lake Okeechobee, St. Lucie River, or Caloosahatchee River watersheds, the NMP shall include the demonstration required by subsection 62-640.400(11) or (12), F.A.C., as applicable.

#### Part VIII. Land Owner Consent

(I)(We), the undersigned, hereinafter referred to as "Landowner," being the owner(s) of the subject property of this site permit application, consent to the use of this property by the site permittee named in this permit application as a biosolids land application site. To the best of my (our) knowledge, the information provided in this permit application is accurate. (I)(We) have been provided a copy of Chapter 62-640, Florida Administrative Code, by the site permittee and understand its content. I understand that the requirements of Chapter 62-640, F.A.C., the information in this site permit application, and the site Nutrient Management Plan, must be followed and apply to all parties using this property and the use of biosolids on this property.

Name	of Land	Owner	or	Authorized	Agent	(Type	or	Print)
Teleph	none No.:						• : :	
				Authorized A				
Date (ı	mm/dd/yy)	:						

#### Part IX. Site Permittee

The site permittee certifies that he/she is familiar with and shall comply with the applicable requirements of Chapter 62-640, F.A.C.; shall only allow land application of biosolids that meet the general criteria for land application in Chapter 62-640, F.A.C.; shall maintain the required records and logs for the site; and, shall file an annual summary with the Department.

Name of Site Permittee or Authorized Agent (Type or Print):	
Telephone No.:	-
Signature of Site Permittee or Authorized Agent:	
Date (mm/dd/yy):	