Kentucky Department for Environmental Protection Division of Waste Management Solid Waste Branch 300 Sower Boulevard – Frankfort KY 40601 (502) 564-6716 FOR OFFICIAL USE ONLY. DO NOT WRITE IN THIS SPACE

Application for a Biosolid Land Application Facility Permit

1 Application Information					
1. Application Information					
Application Number	Application Identification Number:				
If a new application, check here 🗌					
Facility Identification	Agency Interest Number: Solid waste permit number:				
If a new application, check here ☐					
Have the notifications pursuant to 401 KAR 45:105 Section 3(5) and (6) been made? Yes	Date notification made				
Fee Submitted	\$.	County:			
Method of Payment	☐ Cashier's Check ☐ Money ord	der			
	☐ Other- Explain:				
	Cashier's Check or Money order #:	Date Submitted: / /			
Existing Permit Transition If not applicable, check here	☐ Special waste landfarm Type A ☐ Special waste landfarm Type B ☐ Special waste storage and treatment ☐ Special waste beneficial reuse ☐ Other, Describe:				
Modification Type	☐ New acreage	☐ New biosolid source			
If not applicable, check here □	Other, Describe:				
	2. Applicant Information				
Applicant Name:	Address:				
City: State	: :	Zip Code:			
Email Address:	Phone Number: () -	Fax Number: () -			
Contact Person:	i	·			
Corrections to application are to be made by:	Name:				
Address:	City:	State:			
Zip Code:	Phone Number: () -	,			
Applicant Legal Status:	Government	☐ Private			
3. Site Attachments					
Attachment 1. Do you now hold, or have you held, any other permit or approval to dispose of waste from the Division, including a land application permit, registered permit-by-rule, sludge giveaway, or landfill? If so, state the permit type, permit number if applicable, and date permit or approval was granted. If you have been granted approval to landfill your sludge, also indicate the landfill name and permit number.					
If not applicable, check here: □					
Attachment 2. Provide a copy of the property deed(s), or land application agreement(s) if the applicant is not the property owner. The agreement must conform to the "Land Application Agreement" in the back of application. Refer to the "Land Application Agreement" in Attachment 2A of this form.					
Attachment 3. Describe the location of the proposed land application site(s), official mailing address, physical address.					

4. Ownership Information									
Legal Organizational Structure of	Applicant								
☐ Proprietorship	☐ Joint Venture ☐ Ge] General P	General Partnership			
☐ Corporation	☐ Limited Liability Corporation				n Limited Partnership			artnership	
☐ Government agency		☐ Othe	r. Describe	e:					
Registered with Secretary of State	?	☐ Yes				☐ No			
Registered process agent:			Address:						
City:			State:				Zip Code:		
Email Address:			Phone Number: () - Fax Number: () -					er: () -	
		5. Biosc	olids Comp	osition Inf	ormation				
Biosolids Source (Generator):					KPDES Nu	mber:			
Address:		City:			State:	Zip Code	i.		
Phone Number: () -					Contact Pe	rson:			
Waste Classification per 40 CFR 5	03:	☐ Class A	A		☐ Class B				
Amount of sewage sludge to be land applied (metric tons per 365-day period) per Table 1 of 40 CFR 503.16			r than zero l	to or greater		greater th	☐ Equal to or ☐ Greater that greater than 1,500 15,000 out less than 15,000		
The sewage sludge meets the ceiling concentrations in 503.12, the pollutant concentrations in Table 3 of 40 CF pathogen reduction requirements at 40 CFR 503.32(a), vector attraction reduction requirements at 40 CFR 503			R 503.13, C and one of t	lass A the			□N	□ No	
The sewage sludge is sold or given away in a bag or ot application to the land.			ner contain	iner for Yes No			0		
Attachment 4. Provide a list of all la	ndfills rece	iving biosolid	ls from this	facility inclu	ıding landfill ı	name, addr	ess, and pe	ermit number.	
Using the table below, provide existing sewage sludge monitoring data for the pollutants for which limits in sewage sludge have been established in 40 CFR 503 and 401 KAR 30:031 for your facility's expected use or disposal practices. Pursuant to 40 CFR 503.8, representative samples shall be collected and analyzed. Pursuant to 40 CFR 503.5, the Director of the Division of Waste Management may require additional analytes if determined necessary to protect public health and the environment from any adverse effects from a pollutant or contaminant in the biosolids.									
Pollutant	nt Concentrati (mg/kg dry we			Analytical Method		hod	Detection Level for Analysis		
Arsenic									
Cadmium									
Copper									
Lead									
Mercury									
Molybdenum									
Nickel									
Selenium									

Zinc							
Other(specify):							
Other(specify):	ecify):						
Attachment 5. Provide the laboratory analyses used to calculate the averages in the item above.							
Attachment 6. Describe the meth 503.33 Vector attraction reduction.	ods to be	used to meet the requireme	ents of 40 (CFR 503.32 Pathogens and	d the requirements of 40 CFR		
		6. Biosolids Appli	cation Info	ormation			
Method of Application	Application ☐ Subsurface Injection ☐ Surface Injection			ce Application With Surface Application Without Incorporation			
	e type pursuant to 40 CFR 503.12 (if re than one site, provide description each site as Attachment 7)				Reclamation Other		
Are the vector attraction reducti	on requi	rements at 40 CFR 503.33	met?	☐ Yes	□No		
Which vector attraction reduction (Check only one response.)	option is	s met at the land application	n site?	☐ Option 9 (injection below land surface)	☐ Option 10 (incorporation into soil within 6 hours)		
Are the biosolids applied to this s cumulative pollutant loading rate If more than one site, provide this	(CPLRs	s) in 40 CFR 503.13(b)(2)?		Yes	□No		
	Has bulk biosolids subject to CPLRs been applied to this site since July 20, 1993? If more than one site, provide this information for each site as □ Yes □ No						
Attachment 9. Describe biosolids conditions or breakdowns of equip		provisions and capacities or	alternate o	lisposal methods to be use	d during adverse weather		
Attachment 10. Provide the name of the proposed land application si		s, telephone number, and ce	ertification i	number of the Kentucky ce	rtified land application operator(s)		
Attachment 11. Describe how the	Attachment 11. Describe how the subplot boundaries shall be marked to ensure their identification during the life of the permit.						
Attachment 12. Describe the anti period of one year and calculate at	cipated c n agronor	ropping program for each su mic rate pursuant to 40 CFR	bplot and t 503.11(b)	the schedule of waste appl for each crop grown.	ication for each subplot for a		
Attachment 13. Determine the application rate for each crop/subplot. Use the average of the sludge analyses from the table above.							
Attachment 14. Provide the name, mailing address, and contact information of the landowner(s) of the land application site(s).							
Attachment 15. Provide the name, mailing address, and contact information of the landowners of properties adjacent to the land application site(s).							
7. Site Information							
' ' ']Alluvial]Granul]Karst	l ar unconsolidated	☐ Lo	nallow fracture flow and decalized fractures and mino one of the above			
 Attachment 16. Provide an enlargement of a current United States Geological Survey topographic map. The enlarged map shall have a minimum scale of one (1) inch equals four hundred (400) feet and the contour interval as published. This map shall contain the following: a. The property lines and boundaries of the proposed site. b. Proposed land application unit and subplots, numbered sequentially, within the land application boundary. c. Access and proposed or existing roads. d. The boundaries of one hundred (100) year floodplain, if applicable. e. The delineation of existing site surface water drainage, and existing and proposed run-off/run-on structures. f. Steepest slope of each sub-plot (numerical value) on the proposed land application site. g. Boundaries of all buffer zones pursuant to 401 KAR 45:105, Section 5 with the distance to the buffer feature marked in feet. h. Identify on the map any locations that may be utilized to meet the requirements of attachment 9 above. i. Map legend showing all symbols used, total site acreage, and quadrangle name. 							

Attachment 17. Provide the following information:

- a. If the site is on aquifer type Alluvial or Granular Unconsolidated, a physical description of the soils in the uppermost four (4) feet. Soils information may be obtained from a current USDA Soil Conservation Service Soil Survey or a field investigation.
- b. Indicate the depth to seasonal high water table and depth to bedrock using a current USDA Soil Conservation Service Soil Survey or a field investigation.
- c. Locations and types of karst features in the application site.

8. Permit Personnel Information					
Use the spaces below to provide information or include information for those that are necessary		be used or consulted wit	th to prepare this	biosolids application. Only	
Consultant Name:	Address:				
City:	State:	•	Zip Code:		
Phone Number: () -		Prepared by:			
Kentucky Registration No. (if engineer):		•			
Biosolids Applier Name:	KY License or Certi	fication Number:	Date:	1 1	
Mailing Address:	City:	State:		Zip Code:	
Email Address:	Phone Number: () -	Fax Nu	mber: () -	
Company Affiliation:			•		
Soil Scientist:			Date:	1 1	
Mailing Address:	City:	State:		Zip Code:	
Email Address:	Phone Number: () -	Fax Nu	Fax Number: () -	
Company Affiliation:			•		
Agronomist:			Date:	1 1	
Mailing Address:	City: State:			Zip Code:	
Email Address:	Phone Number: () - Fax Number: () -				
Company Affiliation:					
Geologist:	KY P.G. Registratio	n Number:	Date:	1 1	
Mailing Address:	City:	State:		Zip Code:	
Email Address:	Phone Number: () - Fax Number: ()			mber: () -	
Company Affiliation:					
	9. Certificati	on Statement			
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete, including the regulatory requirements set forth in subsections (5) and (6) of 401 KAR 45:105 Section 3. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for such violations."					
Name (<i>Print</i>)	Sig	nature:			
Title/Position:	Da	te: / /			
Name of Applicant:					

DEP 4505 (Revised December, 2023) 401 KAR 45:105

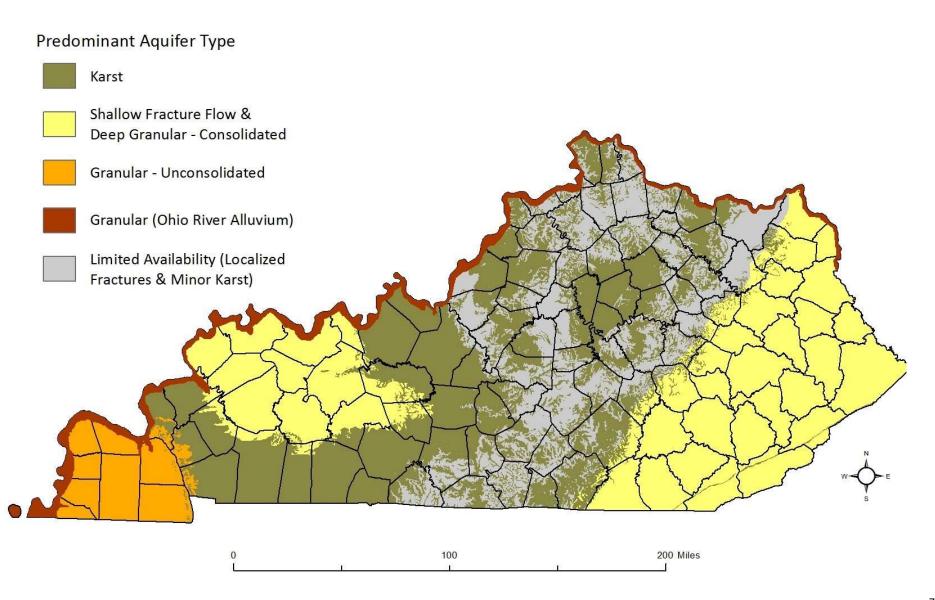
Subscribed and sworn to before me by	
Notary public signature	
My commission expires	/ /

Attachment 2A: Land Application Agreement

The following items must be addressed in the land application agreement:

- 1. The agreement specifies that the area of land covered under the agreement will receive sewage sludge.
- 2. A brief description of the site location and a map showing the boundaries of the proposed sewage sludge land application zones.
- 3. If Class B sewage sludge is to be applied, the agreement must include the following restrictions pursuant to 40 CFR 503.32(b)(5) and 401 KAR 45:105:
 - Food crops with harvested parts that touch the sewage sludge/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of sewage sludge.
 - Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of sewage sludge when the sewage sludge remains on the land surface for four months or longer prior to incorporation into the soil.
 - Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of sewage sludge when the sewage sludge remains on the land surface for less than four months prior to incorporation into the soil.
 - Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of sewage sludge.
 - Animals shall not be grazed on the land for 30 days after application of sewage sludge.
 - Turf grown on land where sewage sludge is applied shall not be harvested for one year after application of the sewage sludge when the harvested turf is placed on either land with a high potential for public exposure or a lawn.
 - Public access to land with a high potential for public exposure shall be restricted for one year after application of sewage sludge.
 - Public access to land with a low potential for public exposure shall be restricted for 30 days after application of sewage sludge.
- 4. If the cumulative concentration of any metal is greater than that allowed by regulation no additional land application is authorized. Subsequent data analysis obtained from the plot may be used in the future to determine the resumption of land application at the site.
- 5. A farm cropping plan is required for each sub-plot where sludge is to be applied. The farmer must notify the permit holder of any cropping change and the permit holder must in turn notify the Division. The landowner agrees to harvest crops as indicated in this application and/or permit modifications.
- The agreement must contain language that addresses the terms established between the landowner and the land applier for termination of the agreement.

Generalized Aquifers of Kentucky



GENERAL INSTRUCTIONS Application for Biosolids Land Application Facility

Instructions provided are for the DEP 4505, Application for Biosolids Land Application Facility form. For any questions regarding any section of this form, please call the Division of Waste Management's Solid Waste Branch (SWB). This form must be completed either by typing or by printing legibly with black ink.

If a previous registration of application is needed, request a copy by completing an open records request through the Department of Environmental Protection at (502) 564-3999 or EEC.KORA@ky.gov.

All sections of this form must be completed to be accepted by the cabinet. This application form supersedes all previously submitted application forms for the biosolids facility. Be sure to include all information for every activity at the facility, even if this information was previously submitted on previous registration or application forms. For any future changes in information, an amended application form shall be submitted pursuant to 401 KAR 45:105.

Submit DEP 4505 form via mail to the following address:

Kentucky Department for Environmental Protection
Division of Waste Management
Solid Waste Branch
300 Sower Boulevard, Second Floor
Frankfort, KY 40601
Phone: (502) 564-6716

Submit DEP 4505 electronically using the eForms portal: https://dep.gateway.ky.gov/eForms/Account/Home.aspx

Section	1.	Application Information- Provide the application number assigned by the Solid Waste Branch, if known. For a new facility, check the box.					
		 Agency Interest Number: Provide the Agency Interest Number assigned to the facility, if known. Solid Waste Permit Number: Provide the solid waste permit number assigned to the facility, if known. For a new facility, check the box. 					
		Fee Submitted- Provide the amount of the fee submitted for this application.					
	Method of Payment- Provide the type of payment and identifying information.						
		Transition Application- Check the box or boxes for type of existing permit being transitioned, if any.					
		Modification Application- If this is an application to modify an existing biosolids landfarm, designate the type of modification application. If the modification is a transfer of ownership only, complete form DEP 7014.					
Section	2.	 Applicant Information Applicant Name and Contact Information: Provide the name and contact information of the applicant. The applicant is the entity that is applying for the permit. Corrections are to be made by: Provide the name and contact information for the entity authorized to make corrections to this permit. Applicant Legal Status: Indicate whether the applicant is a government or private entity. 					
Section	3.	Site Attachments- Provide the information requested as Attachments 1 through 3.					
Section	4.	Ownership Information Legal Organizational Structure of Applicant: Check the box that indicates the appropriate option. Registered in Kentucky: Indicate whether or not the applicant is registered in Kentucky. Registered Agent: Provide the name and contact information for the permittee's registered agent in Kentucky.					
Section	5.	Biosolids Composition Information Waste Source- Provide the information for the source (generator) of the biosolids to be land applied. KPDES Number- Provide the Kentucky Pollutant Discharge Elimination System Number for the generator. Waste Classification- Indicate whether the waste is classified as Class A or Class B pursuant to 40 CFR 503. Sewage Sludge Monitoring Data- Complete the table using the average of waste analyses performed. Representative samples of the sewage sludge shall be taken pursuant to 40 CFR 503.8. For more information on representative sampling, see: EPA-530-D-02-002 Resource Conservation and Recovery Act (RCRA) Waste Sampling Draft Technical Guidance at https://www.astm.org/mnl42-eb.html Implementation, and Assessment of Sampling Activities" at https://www.astm.org/mnl42-eb.html					

		Waste analysis methods shall be performed pursuant to 40 CFR 503.8(b). • Duplicate this section if there is more than one source of biosolids to be managed at this facility. Provide the information for each generator.					
Section	6.	 Method of Application- Indicate how the biosolids will be applied to the land. Site type- Check the box or boxes that correspond to the type of site where biosolids will be land applied pursuant to 40 CFR 503.12. If more than one site, provide description for each site as Attachment 7. Vector attraction reduction requirements- Check yes or no regarding the vector attraction reduction requirements of 40 CFR 503.33(b)(9) and (b)(10). Vector attraction option- Check the box that applies to the onsite vector attraction reduction option. Cumulative pollutant loading rates-Check yes or no regarding whether the sewage sludge that has been applied to this site since July 20, 1993 is subject to the cumulative pollutant loading rates (CPLRs) in 40 CFR 503.13(b)(2). Bulk sewage sludge subject to cumulative pollutant loading rates- Check yes or no regarding whether bulk sewage sludge subject to CPLRs been applied to this site since July 20, 1993. If more than one site, provide this information for each site as Attachment 7 or 8, as applicable. Provide the information requested as Attachments 9 through 15, as directed. 					
Section	7.	Aquifer Type(s) Check all boxes that apply to aquifers at the proposed land application site. See Attachment 16A: Generalized Aquifers of Kentucky of this form for more information. Additional information may be found at https://eec.ky.gov/Environmental-Protection/Water/GW/Pages/GWBasics.aspx Attachments 16-17- Provide the information requested as Attachments to the application.					
Section	8.	Permit Personnel Information- Provide the name, contact information, and certification or registration information for personnel involved in preparation for the permit, as applicable.					
Section	9.	Certification Statement- Only a person with signature authority for the applicant may complete the certification statement. The certification statement must be notarized. A new certification statement shall accompany each submittal in the case of a notice of deficiency.					