

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

Application Number If a new application, check here <input type="checkbox"/>	Application Identification Number:		
Facility Identification If a new application, check here <input type="checkbox"/>	Agency Interest Number:	Solid waste permit number:	
Have the notifications pursuant to 401 KAR 45:105 Section 3(5) and (6) been made? <input type="checkbox"/> Yes	Date notification made		
Fee Submitted	\$	County:	
Method of Payment	<input type="checkbox"/> Cashier's Check	<input type="checkbox"/> Money order	<input type="checkbox"/> Exempt (Publicly Owned Facility)
	<input type="checkbox"/> Other- Explain:		
	Cashier's Check or Money order #:		Date Submitted: / /
Existing Permit Transition If not applicable, check here <input type="checkbox"/>	<input type="checkbox"/> Special waste landfarm Type A <input type="checkbox"/> Special waste storage and treatment <input type="checkbox"/> Other, Describe:	<input type="checkbox"/> Special waste landfarm Type B <input type="checkbox"/> Special waste beneficial reuse	
Modification Type If not applicable, check here <input type="checkbox"/>	<input type="checkbox"/> New acreage <input type="checkbox"/> Other, Describe:	<input type="checkbox"/> New biosolid source	

2. Applicant Information

Applicant Name:		Address:	
City:	State:	Zip Code:	
Email Address:	Phone Number: () -	Fax Number: () -	
Contact Person:			
Corrections to application are to be made by:	Name:		
Address:	City:	State:	
Zip Code:	Phone Number: () -		
Applicant Legal Status:	<input type="checkbox"/> Government	<input type="checkbox"/> 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				
<input type="checkbox"/> Proprietorship		<input type="checkbox"/> Joint Venture		<input type="checkbox"/> General Partnership
<input type="checkbox"/> Corporation		<input type="checkbox"/> Limited Liability Corporation		<input type="checkbox"/> Limited Partnership
<input type="checkbox"/> Government agency		<input type="checkbox"/> Other. Describe:		
Registered with Secretary of State?		<input type="checkbox"/> Yes		<input type="checkbox"/> No
Registered process agent:		Address:		
City:		State:		Zip Code:
Email Address:		Phone Number: () -		Fax Number: () -
5. Biosolids Composition Information				
Biosolids Source (Generator):			KPDES Number:	
Address:		City:	State:	Zip Code:
Phone Number: () -			Contact Person:	
Waste Classification per 40 CFR 503:		<input type="checkbox"/> Class A		<input type="checkbox"/> Class B
Amount of sewage sludge to be land applied (metric tons per 365-day period) per Table 1 of 40 CFR 503.16		<input type="checkbox"/> Greater than zero but less than 290	<input type="checkbox"/> Equal to or greater than 290 but less than 1,500	<input type="checkbox"/> Equal to or greater than 1,500 but less than 15,000
				<input type="checkbox"/> Greater than 15,000
The sewage sludge meets the ceiling concentrations in Table 1 of 40 CFR 503.12, the pollutant concentrations in Table 3 of 40 CFR 503.13, Class A pathogen reduction requirements at 40 CFR 503.32(a), and one of the vector attraction reduction requirements at 40 CFR 503.33(b)(1)–(8).			<input type="checkbox"/> Yes <input type="checkbox"/> No	
The sewage sludge is sold or given away in a bag or other container for application to the land.			<input type="checkbox"/> Yes <input type="checkbox"/> No	
Attachment 4. Provide a list of all landfills receiving biosolids from this facility including landfill name, address, and permit 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	Concentration (mg/kg dry weight)	Analytical Method	Detection Level for Analysis	
Arsenic				
Cadmium				
Copper				
Lead				
Mercury				
Molybdenum				
Nickel				
Selenium				

Zinc			
Other(specify):			
Other(specify):			
Attachment 5. Provide the laboratory analyses used to calculate the averages in the item above.			
Attachment 6. Describe the methods to be used to meet the requirements of 40 CFR 503.32 Pathogens and the requirements of 40 CFR 503.33 Vector attraction reduction.			
6. Biosolids Application Information			
Method of Application	<input type="checkbox"/> Subsurface Injection	<input type="checkbox"/> Surface Application With Incorporation	<input type="checkbox"/> Surface Application Without Incorporation
Site type pursuant to 40 CFR 503.12 (if more than one site, provide description for each site as Attachment 7)	<input type="checkbox"/> Agricultural <input type="checkbox"/> Forest <input type="checkbox"/> Public contact	<input type="checkbox"/> Reclamation <input type="checkbox"/> Other	
Are the vector attraction reduction requirements at 40 CFR 503.33 met?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Which vector attraction reduction option is met at the land application site? (Check only one response.)	<input type="checkbox"/> Option 9 (injection below land surface)	<input type="checkbox"/> Option 10 (incorporation into soil within 6 hours)	
Are the biosolids applied to this site since July 20, 1993, subject to the cumulative pollutant loading rates (CPLRs) in 40 CFR 503.13(b)(2)? If more than one site, provide this information for each site as Attachment 8.	<input type="checkbox"/> Yes	<input type="checkbox"/> 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 Attachment 8.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Attachment 9. Describe biosolids storage provisions and capacities or alternate disposal methods to be used during adverse weather conditions or breakdowns of equipment.			
Attachment 10. Provide the name, address, telephone number, and certification number of the Kentucky certified land application operator(s) of the proposed land application site.			
Attachment 11. Describe how the subplot boundaries shall be marked to ensure their identification during the life of the permit.			
Attachment 12. Describe the anticipated cropping program for each subplot and the schedule of waste application for each subplot for a period of one year and calculate an agronomic rate pursuant to 40 CFR 503.11(b) for each crop grown.			
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			
Aquifer Type(s)	<input type="checkbox"/> Alluvial <input type="checkbox"/> Granular unconsolidated <input type="checkbox"/> Karst	<input type="checkbox"/> Shallow fracture flow and deep granular consolidated <input type="checkbox"/> Localized fractures and minor karst <input type="checkbox"/> None 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: <ul style="list-style-type: none"> 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 on the individuals that will be used or consulted with to prepare this biosolids application. Only include information for those that are necessary for this application.

Consultant Name:	Address:
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City:	State:	Zip Code:
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Phone Number: () -	Prepared by:
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Kentucky Registration No. (if engineer):

Biosolids Applier Name:	KY License or Certification Number:	Date: / /
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Mailing Address:	City:	State:	Zip Code:
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Email Address:	Phone Number: () -	Fax Number: () -
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Company Affiliation:

Soil Scientist:	KY License or Certification Number:	Date: / /
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Mailing Address:	City:	State:	Zip Code:
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Email Address:	Phone Number: () -	Fax Number: () -
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Company Affiliation:

Agronomist:	KY License or Certification Number:	Date: / /
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Mailing Address:	City:	State:	Zip Code:
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Email Address:	Phone Number: () -	Fax Number: () -
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Company Affiliation:

Geologist:	KY P.G. Registration Number:	Date: / /
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Mailing Address:	City:	State:	Zip Code:
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Email Address:	Phone Number: () -	Fax Number: () -
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Company Affiliation:

9. Certification 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>)	Signature:
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Title/Position:	Date: / /
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Name of Applicant:

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


Attachment 2A: Land Application Agreement

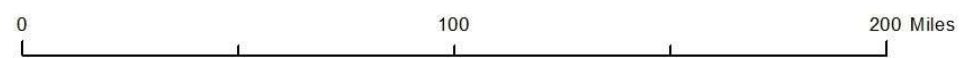
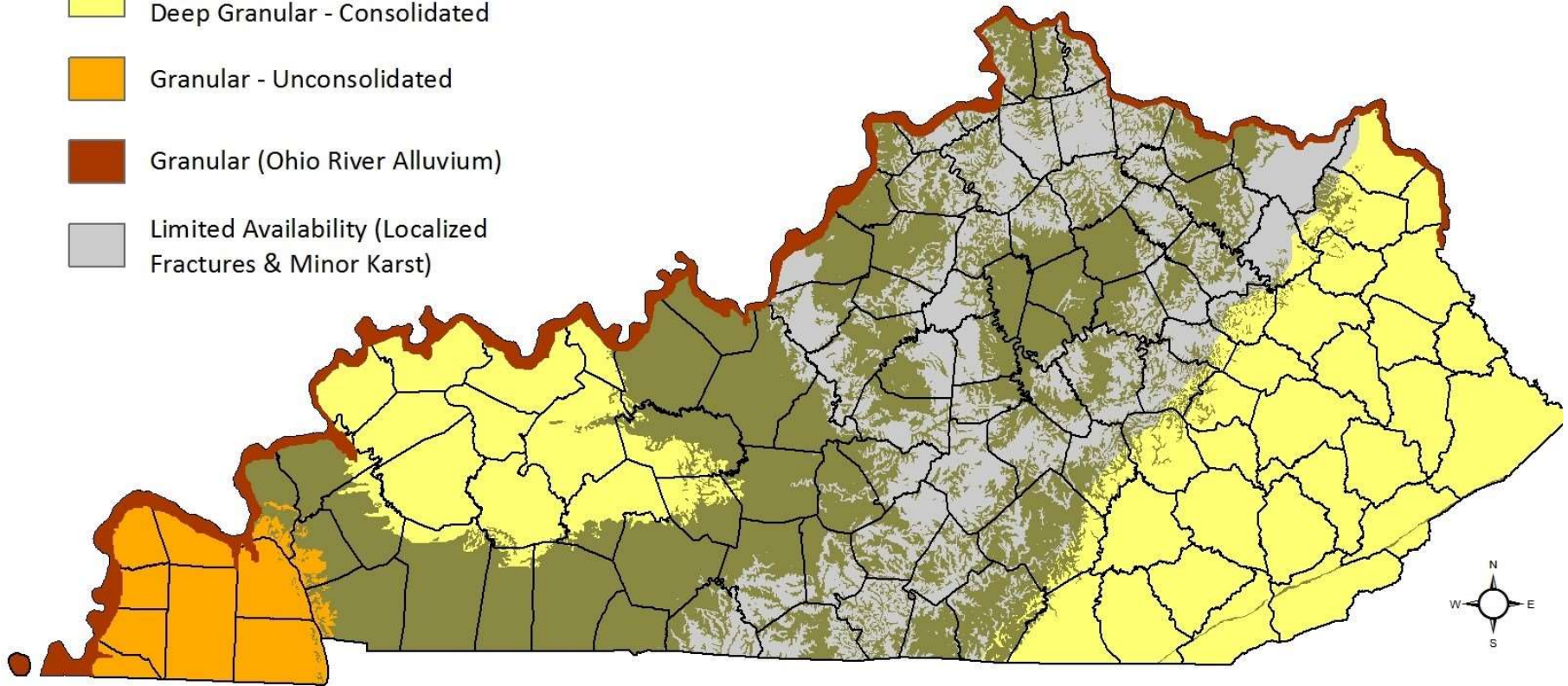
The following items must be addressed in the land application agreement:

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.
6. 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

Predominant Aquifer Type

-  Karst
-  Shallow Fracture Flow & Deep Granular - Consolidated
-  Granular - Unconsolidated
-  Granular (Ohio River Alluvium)
-  Limited Availability (Localized Fractures & Minor Karst)



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.	<p>Application Information- Provide the application number assigned by the Solid Waste Branch, if known. For a new facility, check the box.</p> <p>Facility Information</p> <ul style="list-style-type: none"> • 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. <p>Fee Submitted- Provide the amount of the fee submitted for this application.</p> <p>Method of Payment- Provide the type of payment and identifying information.</p> <p>Transition Application- Check the box or boxes for type of existing permit being transitioned, if any.</p> <p>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.</p>
Section	2.	<p>Applicant Information</p> <ul style="list-style-type: none"> • 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.	<p>Site Attachments- Provide the information requested as Attachments 1 through 3.</p>
Section	4.	<p>Ownership Information</p> <ul style="list-style-type: none"> • 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.	<p>Biosolids Composition Information</p> <ul style="list-style-type: none"> • 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.epa.gov/hw-sw846/draft-technical-guidance-about-waste-sampling-under-resource-conservation-and-recovery-act and "MNL42-EB RCRA Waste Management: Planning, Implementation, and Assessment of Sampling Activities" at https://www.astm.org/mnl42-eb.html

		<p>Waste analysis methods shall be performed pursuant to 40 CFR 503.8(b).</p> <ul style="list-style-type: none"> • 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.	<p>Biosolids Application Information</p> <ul style="list-style-type: none"> • 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.	<p>Site Information</p> <ul style="list-style-type: none"> • 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.	<p>Permit Personnel Information- Provide the name, contact information, and certification or registration information for personnel involved in preparation for the permit, as applicable.</p>
Section	9.	<p>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.</p>