State of North Carolina Department of Environmental Quality Division of Water Resources

Animal Feeding Operations Permit Application Form (THIS FORM MAY BE PHOTOCOPIED FOR USE AS AN ORIGINAL) Distribution of Animal Waste Residual Solids

This application is intended for facilities which distribute materials which have been processed with animal waste solids with <u>no</u> domestic sewage contribution.

1. GENERAL INFORMATION

1.1 Application date:				
1.2 Applicant's name (please specify the name of t	the corporation, individual	, etc.):		
1.3 Print owner's or signing official's name and tit	tle (the person legally resp	onsible for the facility and its compliance):		
1.4 Mailing address:				
City:	State:	Zip:		
Telephone number: ()	Fax: (_)		
E-mail:				
1.5 Fee submitted: \$ [Major, \$180 if >3,000 dry ton/year; Minor, \$60 if < 3,000 dry ton/year]				
1.6 Specify the process facility's owner classification: 🗌 private 🗌 federal 🔲 state 🔲 local government				
1.7 Specify the source of the animal waste product: Doultry swine cattle other (explain)				
1.8 Specify how these residuals will be distributed: 🗌 sold or given away in bags or other containers 🗌 lawn (bulk)				
home garden (bulk) coher (explain)				
1.9 Estimated volume of waste product to be proce	essed annually: dry	tons/year		
1.10Physical address of animal waste generating f	acility:			
1.10Physical address of animal waste generating factorized for the second sec	-	Zip:		
	State:	Zip:		
City:	State:	Zip:		
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City:	State: ity: State: s located (if in North Carol of animal waste Carolina?] yes] no. I al.	Zip: Zip: lina): process facility if "yes", please include three (3) sets of plans and		

2.3 If this application is being submitted as a renewal or modification of an existing permit, list the existing permit number:

and its issue date:

2.

3. CHEMICAL POLLUTANT INFORMATION

3.1 Please complete a chemical analysis of each residual material. Each analysis must include the parameters listed in the table below as well as any other known or suspected contaminants of concern. Animal waste residuals cannot be sold or given away if the concentration of any pollutant in the residuals exceeds any of the Ceiling Concentrations specified in the table below on a dry-weight basis (mg/kg). Fill out the pollutant concentrations of the residuals in the table below (attach all lab analyses):

Pollutant	Pollutant Concentration dry weight (mg/kg)	Pollutant Ceiling Concentration dry weight (mg/kg)
Copper		1500
Zinc		2800

3.2 Were any pilot or bench-scale studies performed on the residual material? 🗌 yes 🗌 no. If "yes", please provide the results of those studies, including the approximate fertilizer equivalent of the material.

4. PATHOGEN REDUCTION INFORMATION

In accordance with 15A NCAC 02T .1310, animal waste residuals shall be monitored for the density of fecal coliform or Salmonella sp. Bacteria at the time the residuals are used or disposed, or at the time they are prepared for sale or giving away for land application. Sampling results must demonstrate compliance with pathogen limit in either Part A <u>or</u> Part B below (please submit all lab analyses, test results, and calculations). Please check which of the following applies to the subject residual:

Part A 🗌 A fecal coliform density less than 1000 Most Probable Number per gram of total dry solids

Part B 🗌 A Salmonella sp. density less than 3 Most Probable Number per 4 grams of total dry solids

Part C Please select the method used to achieve compliance with respect to pathogen limit requirements.

- Alkaline treatment the pH of the residuals is raised to greater than 12 for at least 72 hours. During this time, the temperature of the residuals should be greater than 52° C for at least 12 hours. In addition, after the 72-hour period, the residuals shall; be air-dried to greater than 50% total solids.
- ☐ Composting using either the within-vessel or static aerated pile composting methods, the temperature of the residuals are raised to 55° C or higher for three days. Using the windrow composting method, the residuals are raised to 55° C or higher for fifteen days. During the high temperature period, there will be a minimum of five turnings of the windrow.
- Heat Drying residuals are dried by direct or indirect contact with hot gases to reduce the moisture content of the residuals to 10% or lower. Either the temperature of the gas in contact with the residuals exceeds 80° C or the wet bulb temperature of the gas in contact with the residuals, when the residuals leave the dryer, exceeds 80° C.
- Heat Treatment liquid residuals are heated to a temperature of 180° C or higher for thirty minutes.
- Pasteurization the temperature of the residuals is maintained at 70° C or higher for at least thirty minutes.
- $\Box \quad \underline{Other} \text{please describe in detail.}$

5. PROCESS INFORMATION

- 5.1 Please provide a brief narrative concerning materials handling and processing, including the following:
 - a. How will the animal waste product be handled and transported from where they are produced to where they will be treated?
 - b. Where will the animal waste residuals be stored until processing?
 - c. How will the animal waste be treated and what will be the duration of treatment of the animal waste product? Provide detailed description and all necessary calculations, designs, site maps, and supporting documentation _____
 - d. Where will the final product be stored?
 - e. How will leachate collection from the raw product storage, treatment facility, and finished product storage be handled?
 - f. How long will the final product be stored before being distributed?
 - g. How will the final product be distributed (packaging), if applicable?
- 5.2 Please provide a sampling and monitoring plan that describes how the animal waste residuals will comply with Sections 3 and 4 of this application. [15A NCAC 02T .1310 (b)]
- 5.3 Please attach a marketability statement detailing destinations and approximate amounts of the final product to be distributed. [15A NCAC 02T .1310 (b)]
- 5.4 Please provide either a **label**, which shall be affixed to the bagged processed animal waste residual, or an **information sheet**, which shall be provided to the person who receives the processed animal waste residual. The label or information sheet shall contain, at a minimum, the following information [15A NCAC 02T .1310 (b)] :
 - a. The name and address of the person who prepared the animal waste residual that is sold or given away in a bag or other container for application to the land.
 - b. A statement that application of the animal waste residual to the land is prohibited except in accordance with the instructions on the label or information sheet.
 - c. A statement that animal waste residuals must be applied at agronomic rates and recommended rates for intended uses.
 - d. A statement that the animal waste residuals shall not be applied to any site that is flooded, frozen, or snow-covered.
 - e. A statement that adequate procedures shall be provided to prevent surface runoff from carrying any disposed or stored animal waste residuals into any surface waters.
 - f. A statement which identifies that this material shall be prevented from entering any public or private water supply source (including wells) and any stream, lake, or river.
 - g. The pollutant concentrations for the pollutants listed in Section 3 above measured to be in the animal waste residual.
 - h. The nitrogen and phosphorus concentration in the animal waste residual.

6. **PROFFESSIONAL ENGINEER'S CERTIFICATION**

NOTE: Engineer's Certification is required only for construction of new treatment and/or storage facilities to be located in North Carolina.

Name of engineering firm:		<u>.</u>	
Mailing address:			
City:	State:	Zip:	
Telephone: ()	Fax: ()	
E-mail:			
T	attest tha	t this application for	
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has been reviewed by me and is accurate and complete to the best of my knowledge. I further attest that, to the best of my knowledge, the proposed design has been prepared in accordance with the applicable regulations. Although certain portions of this submittal package may have been developed by other professionals, inclusion of these materials under my signature and seal signifies that I have reviewed the material and have judged it to be consistent with the approved design.

North Carolina Professional Engineer's seal, signature, and date:

7. APPLICANT'S CERTIFICATION (include a designation letter if signing for the Permittee)

I, _____, attest that this application for ______

has been reviewed by me and is accurate and complete to the best of my knowledge. I understand that if all required parts of this application are not completed and that, if all required supporting information and attachments are not included, this application package will be returned to me as incomplete.

Signature: _____ Date: _____

PLEASE SUBMIT THE COMPLETED APPLICATION PACKAGE, ALL SUPPORTING INFORMATION AND MATERIALS, AND ANY PLANS AND SPECIFICATIONS TO THE FOLLOWING ADDRESS:

NORTH CAROLINA DIVISION OF WATER RESOURCES WATER QUALITY PERMITTING SECTION ANIMAL FEEDING OPERATIONS PROGRAM **1636 MAIL SERVICE CENTER RALEIGH, NORTH CAROLINA 27699-1636 TELEPHONE NUMBER: (919) 707-9129**

ELECTRONIC SUBMISSION IS ENCOURAGED. EMAIL TO RAMESH.RAVELLA@NCDENR.GOV

FORM: DARS 04/2020

DIVISION OF WATER RESOURCES REGIONAL OFFICES (4/2020)

Asheville Regional WQROS Supervisor 2090 U.S. Highway 70 Swannanoa, NC 28778 (828) 296-4500 Fax (828) 299-7043

Avery Macon Buncombe Madison Burke **McDowell** Caldwell Mitchell Cherokee Polk Clay Rutherford Graham Swain Haywood Transylvania Henderson Yancey Jackson

Washington Regional WQROS Supervisor Raleigh Regional WQROS Supervisor 943 Washington Square Mall Washington, NC 27889 (252) 946-6481 Fax (252) 946-9215

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1628 Mail Service Center Raleigh, NC 27699-1628 (919) 791-4200 Fax (919) 571-4718

Chatham Nash Durham Northampton Edgecombe Orange Franklin Person Granville Vance Halifax Wake Warren Johnston Lee Wilson

Fayetteville Regional WQROS Supervisor Mooresville Regional WQROS Supervisor Wilmington Region WQROS Supervisor 225 Green Street, Suite 714 610 East Center Avenue 127 Cardinal Drive Extension Fayetteville, NC 28301-5094 Mooresville, NC 28115 Wilmington, NC 28405-3845 (910) 433-4300 (910) 796-7215 (704) 663-1699 Fax (910) 486-0707 Fax (704) 663-6040 Fax (910) 350-2004

Anson Moore Bladen Richmond Cumberland Robeson Harnett Sampson Hoke Scotland Montgomery

Iredell

Lincoln Alexander Mecklenburg Cabarrus Catawba Rowan Cleveland Stanly Gaston Union

Brunswick New Hanover Onslow Carteret Columbus Pender Duplin

Winston-Salem Regional WQROS Supervisor 450 Hanes Mill Road, Suite 300 Winston-Salem, NC 27105 Phone (336) 776-9800 Fax (336) 776-9797

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