APPLICATION FOR A PERMIT TO UTILIZE
WASTEWATER SLUDGE IN DELAWARE DM 1902-K-03

PRELIMINARY INFORMATION

1. Name of facility: Kent County Regional Resource Recovery Facility

   Mailing Address: 139 Milford Neck Rd.
   Milford, DE 19963

   Location (street address, if different from mailing address):

   _____
   _____
   _____

2. Name of operator: Mr. Colby Harrington

   Mailing Address: 555 Bay Road
   Dover, DE 19901

   Telephone Number: (302)744-2430

1. Does this facility have a currently effective NPDES permit?
   ___X__ Yes _____ No

2. Is this facility required to have, or is it requesting, permit(s) from other agencies under other programs (e.g. RCRA, UST, CERCLA, etc.)?
   __X__ Yes _____ No

If the answers to the above questions are **both** no, complete Part 1 only. If the answer to **any** of the above questions is yes, complete Part 2 rather than Part 1.

Send the completed application information to:

State of Delaware
Division of Water Resources
Department of Natural Resources and Environmental Control
Surface Water Discharges Section
89 Kings Highway, P.O. Box 1401
Dover, Delaware 19901

PART 1: LIMITED BACKGROUND INFORMATION
Applicants that answered "no" to all questions in the Preliminary Information section (Part 1) complete Part 1 only. Applicants that answered yes to any of the questions to the Preliminary Information section complete Part 2.

1. Does this operator own the facility for which the information is submitted?
   _____ Yes _____ No

2. Indicate type of facility:
   _____ Federally owned treatment works
   _____ Privately owned treatment works
   _____ Publicly owned treatment works (POTW)
   _____ Other _____

3. **Description of Sewage Sludge Use or Disposal Practices.** Provide the following information on the quantity (total dry metric tons per year) of sewage sludge handled at the applicants facility:

   Amount of sewage sludge:
   _____ generated at the facility:
   _____ received from off-site:
   _____ land applied on-site:
   _____ sent off-site for land application:
   _____ sent off-site for further treatment or distribution for ultimate land application:
   _____ disposed of in a surface disposal unit on-site:
   _____ sent off-site for surface disposal:
   _____ used or disposed of by a method not described above, including sewage sludge sent to a municipal solid waste landfill unit (explain below):

_____

_____

4. **Sludge Quality Data.** Attach any data available on the quality of the sewage sludge, including but not limited to pollutant concentrations and the level of pathogen reduction attained. The applicant may use the tables in Section A of Part 2 to provide any or all of this information.

5. **Certification.** Sign the certification statement below.

   I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with the system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person/s who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name of Officer: _____
Official Title of Officer: _____
Telephone Number: _____
Signature of Officer: _____
Date Signed: _____

PART 2: PERMIT APPLICATION INFORMATION
Applicants that answered □yes□ to any of the questions in the Preliminary Information section complete Part 2.

SLUDGE USE AND DISPOSAL INFORMATION

SECTION A. GENERAL INFORMATION

A.1. Applicants NPDES Permit Number DE 0020338

A.2. Does this operator own the facility for which the application information is submitted?
_____ Yes __X__ No

A.3. Indicate type of facility:
_____ Federally owned treatment works
_____ Privately owned treatment works
__X__ Publicly owned treatment works (POTW)
If a POTW, provide the following:
Total population served: 184,149
Design influent flow (MGD): 20 MGD
Other _____

A.4. Does this applicant perform any collection, treatment, storage, application to land, or disposal of sewage on Indian Lands?
_____ Yes __X__ No

A.5. Provide a topographic map (or other appropriate map if a topographic map is unavailable) that shows the following three items of information. Include the area one mile beyond all property boundaries of the applicants facility (submit as many maps as necessary to show the entire area).

a. Location of sewage sludge management facilities (including on-site disposal sites).
b. Location of all water bodies.
c. Location of wells used for drinking water listed in public records or otherwise known to the applicant within 1/4 mile of the property boundaries.

A.6. Other Requirements
a. List all Federal, State, and local permits or construction approvals received or applied for that are not described above that regulate sewage sludge management practices used by this applicant.
DM 1902-K03
AGU 2104-K-03 AGU 1901-K-03

b. Submit, with this application information, any other information that the permitting authority requests to assess sewage sludge use and disposal practices or identify appropriate requirements.

A.7. Provide the information on sewage sludge generated or material derived from sewage sludge at the applicant's facility.

SECTION B. SEWAGE SLUDGE GENERATION OR PREPARATION

Complete Section B if the applicant generates sewage sludge or derives material from sewage sludge.

B.1. Sewage Sludge Use and Disposal

a. Total dry metric tons per year generated 10,000 – 12,000

b. Total dry metric tons per year received from off site 0

If sewage sludge is received from off-site, list the owner and NPDES permit number (if applicable) of the off-site facility. Also list the quantity (total dry metric tons per year) of sewage sludge received from each

source (attach additional pages if necessary).

Owner: _____
NPDES Permit Number: _____
Quantity: _____

B.2. Off-Site Treatment or Distribution. To be completed if the applicant sends sewage sludge to another facility for treatment or distribution prior to application to the land.

a. Total dry metric tons per year sent to receiving facility by the applicant NA

b. Name and address of facility to which sewage sludge is sent

Name _____
Address _____
_____

c. Which class of pathogen reduction (if any) is met by the sewage sludge before it leaves the applicant's facility? _____

Describe the process(es) (if any) used to meet this class of pathogen reduction. _____
_____

d. Which of the following vector attraction reduction requirements (if any) is met by the sewage sludge before it leaves the applicants facility?

_____ Minimum 38 percent reduction in volatile solids
_____ Anaerobic process, with bench-scale demonstration
_____ Aerobic process, with bench-scale demonstration
_____ Specific oxygen uptake rate (SOUR) for aerobically digested sludge
_____ Aerobic processes plus raised temperature
_____ Raise pH to 12 and retain at 11.5
_____ 75 percent solids with no unstabilized solids
_____ 90 percent solids with unstabilized solids
_____ Other, explain. _____

Describe the process(es) used to meet this vector attraction reduction requirement. _____
_____

e. Check all activities performed by the receiving facility on the applicants sewage sludge.

_____ Dewatering
_____ Composting
_____ Stabilization
_____ Pathogen reduction
_____ Vector attraction reduction
_____ Blending with sewage sludge from other treatment works
_____ Addition of bulking materials (wood chips, sawdust, manure)
_____ Placement in bag or other container
_____ Sale or give-away to public
_____ Other

Describe the activities identified above. Attach a copy of all labels or notices that accompany the product.
_____
_____

B.3. To be completed if the applicant processes or packages sewage sludge for sale or give-away in a bag or other container for application to land (as explained in the instructions)

a. Provide the total dry metric tons per year processed or packaged for sale or give-away in a bag or other container for application to land. 10,000 – 12,000

b. Indicate which class of pathogen reduction is met by the sewage sludge processed or packaged for sale or give away in a bag or other container for application to land. Class A and Class B

Describe the process(es) used to meet this class of pathogen reduction: Thermal treatment and lime stabilization

Are all processes used to meet this class of pathogen reduction provided by the applicant?
__X__ Yes _____ No

If no, explain. _____

c. Which of the following vector attraction reduction requirements is met by the sewage sludge processed or packaged for sale or give away in a bag or other container for application to land?

_____ Minimum 38 percent reduction in volatile solids
_____ Anaerobic process, with bench-scale demonstration
_____ Aerobic process, with bench-scale demonstration
_____ Specific oxygen uptake rate (SOUR) for aerobically digested sludge
_____ Aerobic processes plus raised temperature
__X__ Raise pH to 12 and retain at 11.5
_____ 75 percent solids with no unstabilized solids
_____ 90 percent solids with unstabilized solids
_____ Other, explain. _____

Describe the process(es) used to meet this vector attraction reduction requirement. Lime addition following dewatering

Are all processes used for vector attraction reduction provided by the applicant?
__X__ Yes _____ No

If no, explain. _____

d. Briefly describe any blending or manufacturing processes employed prior to sale or give away in a bag or other container. _____

e. Attach a copy of all labels or notices that accompany the product being sold or given away.

B.4. To be completed if sewage sludge from this facility is applied to land.

a. Provide the total dry metric tons per year from this facility applied to each land application site

Amount	Land Application Site
TBD	Kent County KSF1, KSF4, KSF5, and West Farms, (Multi-Farm)
TBD	Kent County Vineyard Farm
TBD	Application at sites Identified in BARRS Report Attached

b. Have all land application sites been identified at the time of permit application?
__X__ Yes _____ No

If no, submit a copy of the land application plan with this application information. Complete Section C only for land application sites identified at the time of permit application.

B.5. To be completed if sewage sludge from this facility is disposed of in a surface disposal site.

a. Total dry metric tons per year from the applicants facility disposed of in surface disposal site _____

b. Name and location of surface disposal site

Name _____

Location _____

_____

c. If the surface disposal site is owned or operated by the applicant, go to B.6, and also complete Section D. If not, answer B.5.d through B.5.f.

d. Provide the name and address of the site owner/operator.

Name _____

Address _____

e. Which class of pathogen reduction is met for the sewage sludge disposed of in this surface disposal site?

_____

Describe the process(es) used to meet this class of pathogen reduction. _____

_____

Are all processes used to meet this class of pathogen reduction provided by the applicant?

_____ Yes _____ No

If no, explain. _____

f. Which of the following vector attraction reduction requirements is met for the sewage sludge disposed of in this surface disposal site?

_____ Minimum 38 percent reduction in volatile solids

_____ Anaerobic process, with further bench-scale demonstration

_____ Aerobic process, with further bench-scale demonstration

_____ Specific oxygen uptake rate (SOUR) for aerobically digested sludge

_____ Aerobic processes plus raised temperature

_____ Raise pH to 12 and retain at 11.5

_____ 75 percent solids with no unstabilized solids

_____ 90 percent solids with unstabilized solids

_____ Injection below land surface

_____ Incorporation into soil within 6 hours

_____ Covering active sewage sludge unit daily

_____ Other, explain. _____

Describe the process(es) used to meet this vector attraction requirement. _____

_____

Are all processes used for vector attraction reduction provided by the applicant?

_____ Yes _____ No

If no, explain. _____

SECTION C. LAND APPLICATION

Applicants whose sewage sludge is applied to land, and applicants that apply sewage sludge to land complete Section C.

C.1. Amount of Sewage Sludge Applied to Land Application Site. Provide the total dry metric tons per hectare per year applied to this site. 9.93

C.2. Site Information.

a. Provide the name (if any) and street address of this land application site.

Name Kent County (SEE PDR)
Address _____

b. Provide the size of the land application site in hectares. _____

c. Federal, State, and local permit number(s) applicable to this land application site (attach additional pages if necessary).

Permit Number	Type of Permit

d. Is this site owned/operated by the applicant?
X Yes _____ No

e. What is the concentration of total nitrogen (as N on dry weight basis) in the bulk sewage sludge applied to this land application site? Approx. 3.75%

C.3. Person that Land Applies the Sewage Sludge. Sewage sludge is applied to the site by:
X Facility generating the sewage sludge
X Site owner/operator
_____ Other _____
Provide the name and address of the person that applies sewage sludge to this site.

Name Kent County
Address 555 Bay Road
Dover, DE 19901

C.4. Type of Land Application Site

X Agricultural
_____ Forest
_____ Public contact
_____ Reclamation site
_____ Lawn or home garden
_____ Other _____

C.5. Vegetation Grown on Site.

a. What type of vegetation is grown on this site? grain corn/soybeans/small grains

b. What is the nitrogen requirement for this vegetation? 0 lb/acre – 165 lb/acre

C.6. Other facilities. Is sewage sludge sent to this land application site by any facilities other than the applicant□s facility?

_____ Yes __X__ No

If yes, provide the names and addresses of other persons that send sewage sludge to the site.

Name _____

Address _____

_____

C.7. Sewage Sludge Applied to Land in a Different State. Is this land application site located in a State other than the State where the sewage sludge is generated or the material is derived from sewage sludge?

_____ Yes __X__ No

If yes, describe how the applicant plans to notify the permitting authority for the State where the land application site is located. _____

C.8. Land Application Cumulative Pollutant Loading Rates. Is this sewage sludge applied to land subject to cumulative pollutant loading rates?

_____ Yes __X__ No

If yes, have the cumulative pollutant loading rates of each pollutant applied to land in accordance with been determined?

_____ Yes _____ No

If yes, provide the allotment remaining for the following pollutants (in kilograms per hectare).

_____ Arsenic	_____ Lead	_____ Nickel
_____ Cadmium	_____ Mercury	_____ Selenium
_____ Chromium	_____ Molybdenum	_____ Zinc
_____ Copper		

C.9. Pathogen Reduction.

a. Which class of pathogen reduction is met by the sewage sludge applied to this site? Class A

b. Describe the process(es) used to meet this class of pathogen reduction. Alternative II Time and Temperature Method

c. Are all processes used to meet this class of pathogen reduction provided by the applicant>

__X__ Yes _____ No

If no, explain. _____

C.10. Vector Attraction Reduction.

a. Which of the following vector attraction reduction requirements is met by the sewage sludge applied to this site?

_____ Minimum 38 percent reduction in volatile solids
_____ Anaerobic process, with further bench-scale demonstration
_____ Aerobic process, with further bench-scale demonstration
_____ Specific oxygen uptake rate (SOUR) for aerobically digested sludge
_____ Aerobic processes plus raised temperature
__X__ Raise pH to 12 and retain at 11.5
_____ 75 percent solids with no unstabilized solids
_____ 90 percent solids with unstabilized solids
_____ Injection below land surface
_____ Incorporation into soil within 6 hours
_____ Covering active sewage sludge unit daily
_____ Other, explain. _____

b. Describe the process(es) used to meet this vector attraction reduction requirement. Lime addition after dewatering

_____

c. Are all processes used for vector attraction reduction provided by the applicant>
__X__ Yes _____ No

If no, explain. _____

SECTION D. SURFACE DISPOSAL

Complete Section D if applicants own or operate a surface disposal site.

D.1. Name and Location of Surface Disposal Site.
Name _____
Address _____
_____

D.2. Ownership Status. Is this surface disposal site owned by the applicant?
_____ Yes _____ No

D.3. Person Who Disposes of Sewage Sludge in the Surface Disposal Site. Sewage sludge is disposed of in the surface disposal site by (check all that apply)
_____ Facility generating the sewage sludge
_____ Site owner
_____ Other _____

Provide name and mailing address of person who disposes of sewage sludge in this surface disposal site.

Name _____
Address _____
_____

D.4. Ground-Water Monitoring.

a. Is ground-water monitoring conducted at this surface disposal site?
_____ Yes _____ No

If yes, describe. _____

b. Has a ground-water monitoring plan been prepared for the surface disposal site?

_____ Yes _____ No

If yes, provide a copy of the ground-water monitoring plan.

c. Has the applicant obtained a certification from a qualified ground-water scientist that ground-water contamination has not occurred?
_____ Yes _____ No

If yes, provide a copy of the certification.

Provide the information requested in D.5. - D.12. once for each active sewage sludge unit.

D.5. Name or Number of Active Sewage Sludge Unit. _____

D.6. Amount of Sewage Sludge Disposed of in the Unit. Provide the total dry metric tons per year disposed of in this sewage sludge unit. _____

D.7. Pathogen Reduction.

a. Which class of pathogen reduction is met for the sewage sludge disposed of in this sewage sludge unit?
_____

b. Describe the process(es) used to meet this class of pathogen reduction. _____
_____

c. Are all processes used to meet this class of pathogen reduction provided by the applicant?
_____ Yes _____ No

If no, explain. _____

D.8. Vector Attraction Reduction.

a. Which of the following vector attraction reduction requirements is met for the sewage sludge disposed of in this surface disposal site?
_____ Minimum 38 percent reduction in volatile solids
_____ Anaerobic process, with further bench-scale demonstration
_____ Aerobic process, with further bench-scale demonstration
_____ Specific oxygen uptake rate (SOUR) for aerobically digested sludge
_____ Aerobic processes plus raised temperature
_____ Raise pH to 12 and retain at 11.5
_____ 75 percent solids with no unstabilized solids
_____ 90 percent solids with unstabilized solids
_____ Injection below land surface
_____ Incorporation into soil within 6 hours
_____ Covering active sewage sludge unit daily
_____ Other, explain. _____

b. Describe the process(es) used to meet this vector attraction reduction requirement. _____
_____

c. Are all processes used for vector attraction reduction provided by the applicant?
_____ Yes _____ No

If no, explain. _____

D.9. Distance from Property Boundary. Is the distance from the boundary of this sewage sludge unit to the property line of the surface disposal site less than 150 meters?

_____ Yes _____ No

If yes, list the actual distance: _____

D.10. Liners. Does this sewage sludge unit have a liner?

_____ Yes _____ No

If yes, describe the liner. _____

D.11. Leachate Collection Systems. Does this sewage sludge unit have a leachate collection system?

_____ Yes _____ No

If yes, describe the method used for leachate disposal. _____

_____

Also if yes, provide Federal, State, and local permit number(s) for the disposal of leachate.

Permit Number	Type of Permit
_____	_____
_____	_____
_____	_____

D.12. Site-Specific Limits. Are site-specific pollutant limits being sought for the sewage sludge disposed of in this sewage sludge unit?

_____ Yes _____ No

SECTION F. CERTIFICATION

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 who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Officer: Diana T Galt 11-28-23
Name of Officer: Diana T. Galt
Official Title of Officer: Public Works Director
Telephone Number: 302.744.2430
Date Signed: 11-28-23