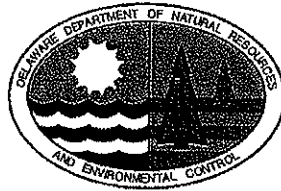


State Permit Number AGU 0901-K-03
Effective Date: March 1, 2009
Expiration Date: February 28, 2014




AUTHORIZATION TO OPERATE A LAND TREATMENT SYSTEM
FOR THE
AGRICULTURAL UTILIZATION OF SLUDGE

1. Pursuant to the provisions of 7 Del. C., 6003

Kent County Levy Court
555 Bay Road
Dover, Delaware 19901

is hereby granted a permit to operate land treatment systems for the agricultural utilization of sludge generated by the Kent County Wastewater Treatment Facility. This permit is limited to the application of stabilized sludge from the Kent County Wastewater Treatment Facility at agronomic rates to the sites designated in this permit.

2. The application rates, monitoring requirements and other permit conditions are set forth in Parts I, II and III hereof.



R. Peder Hansen, P.E., Program Manager
Surface Water Management Section
Division of Water Resources
Department of Natural Resources
and Environmental Control

February 13, 2009

Date Signed

Part I

General Description of Operation

The operation involves the transportation of stabilized sludge from the Kent County Wastewater Treatment Facility to any of the site locations listed below. The sludge will be delivered to the sites in accordance with Delaware Waste Transporters Permit No. OH-11 where it will be land applied at agronomic rates. The sludge will be applied either by means of surface application followed by incorporation into the soil within 6 hours of application, or by subsurface injection.

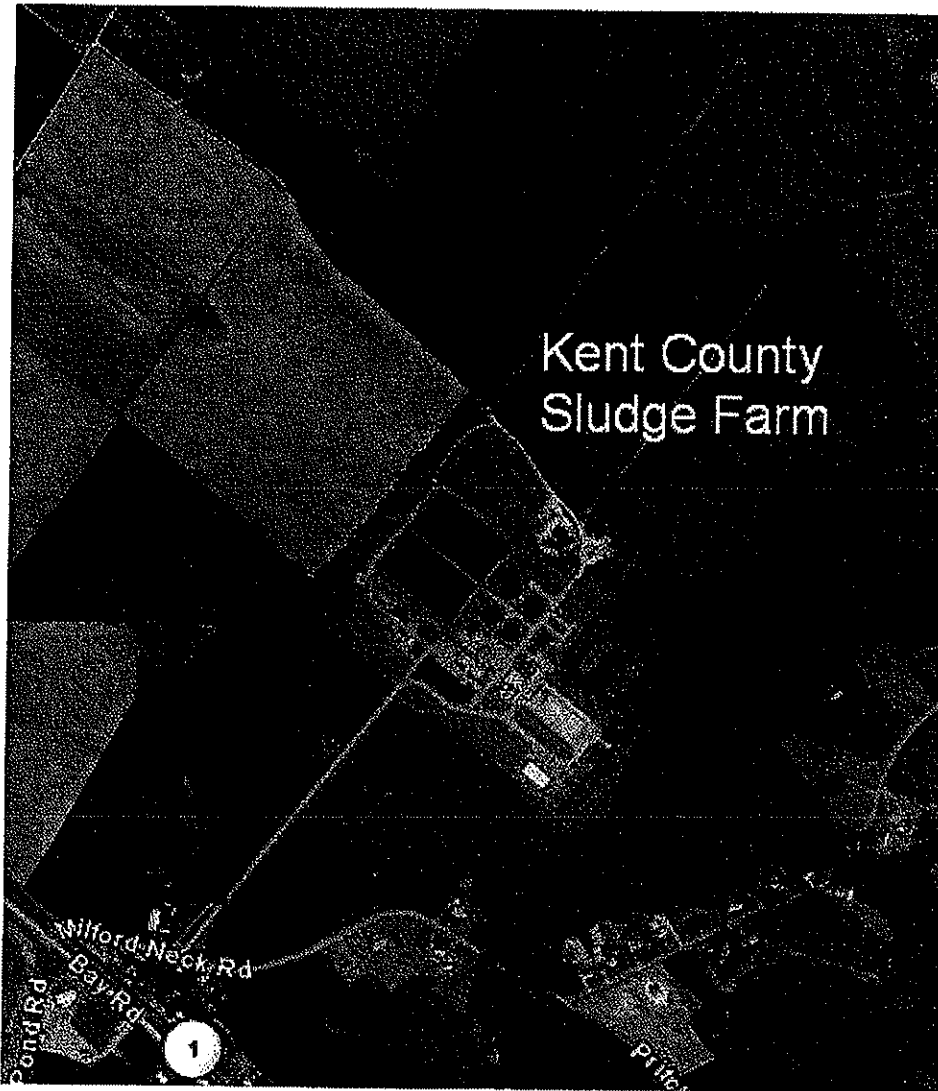
Sludge stabilization will be achieved by an approved alternative found in Part III, (B), Section 600 of the Guidance and Regulations Governing The Land Treatment of Wastes, and Title 40 Code of Federal Regulations, Part 503, Standards for the Use or Disposal of Sewage Sludge.

Site Locations:

1. **Kent County Sludge Farm (KSF2) Site Description:**

The site consists of one parcel of approximately 73 acres, located on the northeast side of the Kent County Wastewater Treatment Facility, approximately 2 miles east of Frederica.

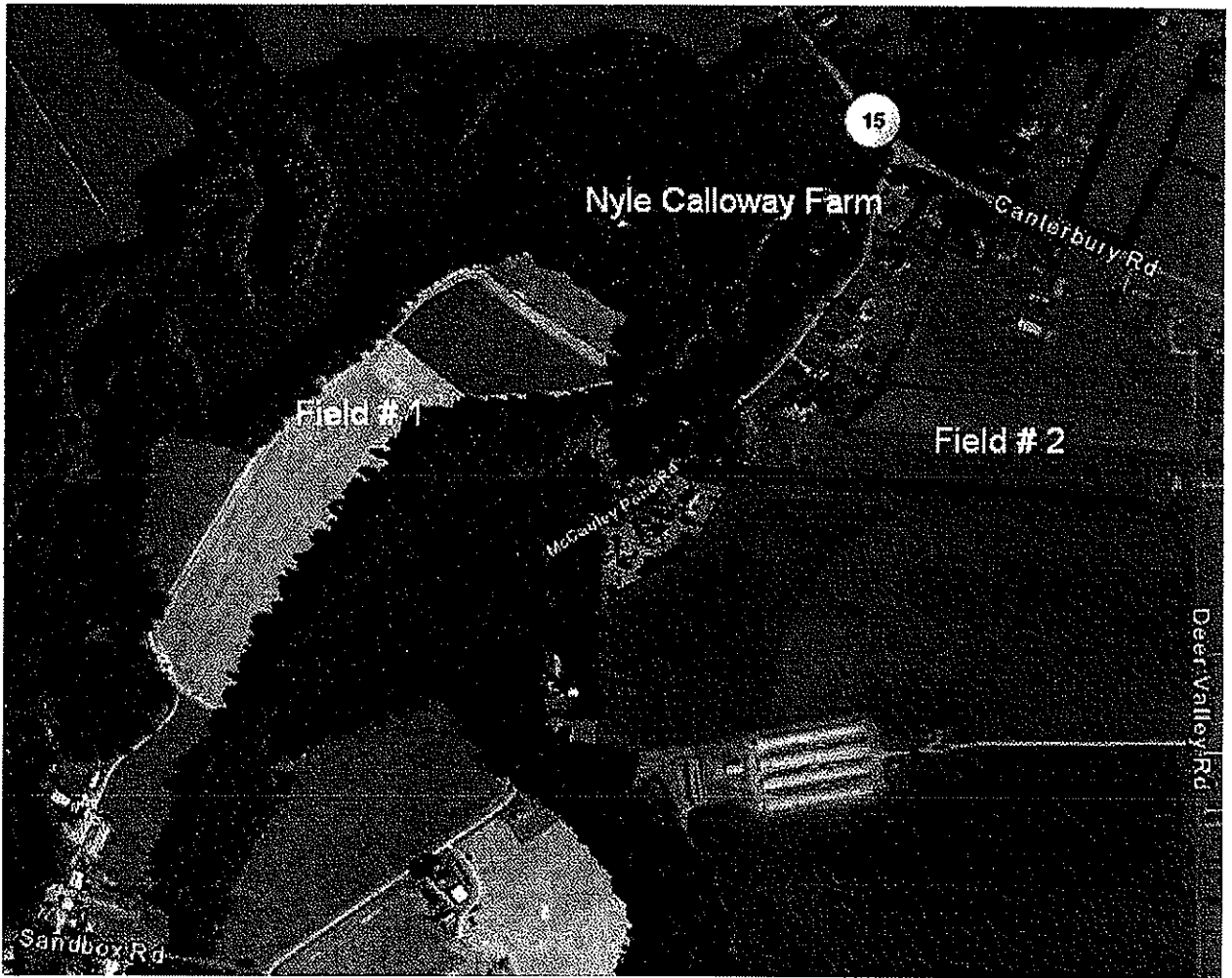
Tax parcel number: 5-00-142.00-01-55.00



2. Nyle Calloway Farm (Including fields 1 and 2) Site Description:

The site consists of two fields, approximately 117 acres in total approximately 3 miles southwest of Frederica. Field 1 is located on Kent County Road 398 (Sandbox Road) and bounded on the north and west by McCauley Pond. Field 2 is east of field one and is located on Kent County Road 395 (Deer Valley Road) between Route 15 and Kent County Road 398 (Sandbox Road).

Tax parcel numbers: 5-00-161.00-01-11.00 and 5-00-161.00-01-28.01



3. The Blessing Farm (KSF4) Site Description:

The Blessing Farm consists of 149 acres, located 1 mile north of Houston, on the east side of County Road # 384 (Killens Pond Road), approximately 0.15 miles north of Delaware Route 14.

Tax parcel numbers: 5-00-172.00-01-69.00 and 5-00-172.00-01-33.00



4. The Goldinger Farm (KSF5) Site Description:

The site consists of one parcel of approximately 125 acres. Located on the southeast side of Kent County Road # 84 (Twin Willows Road) 4 miles southeast of Smyrna.

Tax parcel number: 1-00-038.00-01-02.00



Regulatory and Supporting Documents:

The land treatment operations shall be conducted in accordance with the following documents:

1. The Department's Guidance and Regulations Governing the Land Treatment of Wastes, Part III, (B); (October 1999 Revision)
2. Title 40 of the Code of Federal Regulations Part 503, Standards for The Use and Disposal of Sewage Sludge, Final rule date February 19, 1993.
3. The Kent County Sludge Management Manual dated January 1994.
4. The permit renewal package, for the Kent County Sludge Farm, the Nyle Calloway Farm, the Blessing Farm, the Goldinger Farm and the request for the removal of the Buckaloo Tract, Frazier Farm, Lynn F. Torbert Farm and the Penuel Tract from this permit, dated June 6, 2007.

For the Kent County Sludge Farm (Field KSF-2):

5. The letter of intent dated February 15, 1989;
6. The Project Development Report dated April 14, 1989;

For the Nyle Calloway Farm (INC 1 and 2)

7. The letter of intent dated July 3, 1990;
8. The Project Development Report received January 18, 1991.

For the Blessing Farm:

9. The Letter of Intent dated December 27, 1990;
10. The Project Development Report dated November 16, 1992.

For the Goldinger Farm:

11. The Letter of Intent dated July 8, 1992;
12. The Project Development Report dated August 20, 1993;
13. The Request to Incorporate the Goldinger Farm into Permit AGU 0028/97C dated April 8, 2002.

A.1 SLUDGE APPLICATION LIMITATIONS

During the period beginning on the effective date and lasting through the expiration date the permittee is authorized to operate land treatment sites as identified on pages 3-6 of this permit for the application of stabilized sludge at agronomic rates. The timing of sludge application to the site, as well as the quantity and quality of sludge to be land applied is specified below:

If supplemental fertilizers are used on the portions of the site which have received sludge, the total amount of plant available nitrogen applied shall not exceed the requirement for the current crop.

When any of the limits specified above have been achieved, no additional sludge may be applied to the site unless a supplementary approval has been issued by the Department.

Sludge application rates shall only be increased by the permittee with prior authorization from the Department. Before the Department can authorize any increase in sludge application rates, the permittee shall submit new sludge analytical results to the Department along with an application rate worksheet (including mineralization calculations if applicable) in support of the proposed increase.

The permittee shall automatically reduce the sludge application rate if subsequent analyses show an increase in the Land Limiting Constituent, which has been identified to be nitrogen based on Project Development Report information. Reductions in the sludge application rate do not require prior authorization from the Department.

For any portions of the sludge application area where the depth to seasonal high water table is less than 20 inches but greater than 12 inches, sludge application is limited to May, June or July. In addition, appropriate vegetation must be established and harvested prior to October 31 of the same year. Sludge shall only be applied when the actual water table depth is at least 20 inches below the maximum depth of tillage as defined in Part I, G. 3 and pursuant to Part III, (B), Subsection 702 (6) (b) of the Guidance and Regulations Governing the Land Treatment of Wastes.

A.2 OTHER LIMITATIONS

Only sludge which has been treated at minimum by a Process to Significantly Reduce Pathogens (PSRP), as defined in Part III, (B), Section 600 of the Guidance and Regulations Governing the Land Treatment of Wastes may be applied to the land treatment sites. A sufficient amount of lime to adjust the soil pH to a value of 6.2 or above shall be applied to the site prior to sludge application.

Sludge may not be applied when the ground is frozen, saturated or covered with snow or during periods of rain or runoff.

The sludge shall be applied so that the application is uniform.

The sludge shall be incorporated into the soil within 6 hours of surface application (unless subsurface injected).

Livestock shall not be allowed to graze for at least one (1) month after the application of sludge.

- Crops for direct human consumption may not be grown on the sludge application area for two (2) years subsequent to application of the sludge.

Public access to the sludge application area must be controlled for at least twelve (12) months after sludge application, unless sludge has been treated by an approved process to further reduce pathogens (PFRP).

Buffer zones established pursuant to Part III, (B), Subsection 702 (2) of the Guidance and Regulations Governing the Land Treatment of Wastes shall be maintained at all times during sludge application.

No sludge shall be applied if sample analysis yields pollutant concentrations in excess of the following values:

Arsenic	75 mg/kg	Cadmium	85 mg/kg	Chromium	3000 mg/kg
Copper	4300 mg/kg	Lead	840 mg/kg	Mercury	57 mg/kg
Molybdenum	75 mg/kg	Nickel	420 mg/kg	Selenium	100 mg/kg
Zinc	7500 mg/kg	PCB	5 mg/kg		

A.3 GROUNDWATER LIMITATIONS

Application of sludge to the designated fields shall not cause groundwater to be in violation of applicable Federal or State Drinking Water Standards on an average annual basis.

B. MONITORING REQUIREMENTS

During the period beginning on the effective date and lasting through the expiration date the permittee is authorized to apply stabilized sludge at agronomic rates to the sludge application sites found in Part I, of this permit. Such applications shall be monitored by the permittee as specified below:

B.1 STABILIZED SLUDGE

B.1.a. During periods when sludge is prepared in accordance with Permit Number DM 0008/93C (Kentorganite Distribution and Marketing Permit) and given away or sold in bulk, the monitoring and reporting requirements of that permit will fulfill the monitoring and reporting requirements of this permit.

B.1.b. When sludge is prepared for land application at any site approved in this permit, monitoring will be required as specified below:

<u>Parameter</u>	<u>Unit of Measurement</u>	<u>Minimum Frequency</u>	<u>Sample Type</u>
Moisture Content	percent	Quarterly	Composite
Total Nitrogen as N (Moist & Dried)	percent	Quarterly	Composite
Organic Nitrogen as N (Moist & Dried)	percent	Quarterly	Composite
Ammonium and Nitrate Nitrogen as N (Moist & Dried)	percent	Quarterly	Composite
pH	S.U.	Quarterly	Composite
Volatile Solids	percent	Quarterly	Composite
Phosphorus as P (dry weight basis)	percent	Quarterly	Composite
Potassium (dry weight basis)	percent	Quarterly	Composite
Arsenic (dry weight basis)	mg/kg	Quarterly	Composite
Cadmium (dry weight basis)	mg/kg	Quarterly	Composite
Chromium (dry weight basis)	mg/kg	Quarterly	Composite
Copper (dry weight basis)	mg/kg	Quarterly	Composite
Lead (dry weight basis)	mg/kg	Quarterly	Composite
Mercury (dry weight basis)	mg/kg	Quarterly	Composite
Molybdenum (dry weight basis)	mg/kg	Quarterly	Composite
Nickel (dry weight basis)	mg/kg	Quarterly	Composite
Selenium (dry weight basis)	mg/kg	Quarterly	Composite
Zinc (dry weight basis)	mg/kg	Quarterly	Composite
Fecal Coliform (MPN dry wt basis)	colonies/g	Quarterly	Composite
Cyanide (dry weight basis)	mg/kg	Annually	Composite
PCB's (dry weight basis)	mg/kg	Annually	Composite
Priority Pollutant Scan	---	Annually	Composite

Sludge samples shall be collected at the following location: the sludge cake storage area or the sludge storage lagoons. All sludge samples shall be taken and analyzed in accordance with Section 1000 of the Department's Guidance and Regulations Governing the Land Treatment of Wastes. See Part I F. for reporting frequencies.

* At least one sample must be analyzed within 30 days of land application.

NOTE: The 126 priority pollutants list can be found in 40 CFR, Part 423, Appendix A, 1987

B.2 SLUDGE STABILIZATION PROCESS MONITORING

The permittee shall establish a sludge stabilization process in compliance with Part III, (B), of the Guidance and Regulation Governing the Land Treatment of Wastes and Title 40 Code of Federal Regulations Part 503: Standards for the Use or Disposal of Sewage Sludge. Unless approved prior to its implementation, the permittee must obtain approval for a new or different stabilization process. The permittee shall be exempt from the monitoring requirements of this permit section if the stabilization process monitoring is conducted as required in State Permit Number DM 0008/93C. Any new or different stabilization process shall be monitored at a minimum frequency of once per quarter. At least one (1) monitoring event must occur within fifteen (15) days of land application. See Part I, F. for reporting requirements.

B.3 VECTOR ATTRACTION REDUCTION

Vector attraction reduction must be achieved by method (i), subsurface injection or (j), incorporation of surface applied sludge, from Part III, (B), Subsection 604 (2) of the Guidance and Regulations Governing the Land Treatment of Wastes. Other alternative methods for achieving vector attraction reduction found in Subsection 604 of Part III, (B), of the Guidance and Regulations Governing the Land Treatment of Wastes, may be employed with prior Departmental approval.

B.4 SOIL MONITORING

Soil monitoring shall commence at least thirty (30) days prior to land application at the locations and frequency outlined below. The permittee shall be exempt from the requirements of this section if no sludge is land applied. **A copy of all soil monitoring results for all approved fields shall be sent to the Department within thirty (30) days of the date the results are received by the Permittee.**

<u>Parameter</u>	<u>Unit of Measurement</u>	<u>Minimum Frequency</u>	<u>Sample Type</u>
pH	S.U.	(1) Annually	Composite
Total Nitrogen as N (dry soil basis)	mg/kg	(1) Annually	Composite
Total Phosphorus as P (dry soil basis)	mg/kg	(1) Annually	Composite
Potassium (dry soil basis)	mg/kg	(1) Annually	Composite
% Organic Matter	percent	(1) Annually	Composite
Arsenic (dry soil basis)	mg/kg	(2) Every 3 years	Composite
Cadmium (dry soil basis)	mg/kg	(2) Every 3 years	Composite
Copper (dry soil basis)	mg/kg	(2) Every 3 years	Composite
Chromium (dry soil basis)	mg/kg	(2) Every 3 years	Composite
Lead (dry soil basis)	mg/kg	(2) Every 3 years	Composite
Mercury (dry soil basis)	mg/kg	(2) Every 3 years	Composite
Molybdenum (dry soil basis)	mg/kg	(2) Every 3 years	Composite
Nickel (dry soil basis)	mg/kg	(2) Every 3 years	Composite
Selenium (dry soil basis)	mg/kg	(2) Every 3 years	Composite
Zinc (dry soil basis)	mg/kg	(2) Every 3 years	Composite

NOTE: Composite soil samples representing each soil series identified within each sludge application area shall be collected in accordance with the Kent County Sludge Management Manual. Soil chemistry testing must be in accordance with the Methods of Soil Analysis published by the American Society of Agronomy, and in accordance with Part III, (B), Section 1000 of the Department's Guidance and Regulations Governing the Land Treatment of Wastes. See Part I, F.1. for reporting requirements.

1. Monitoring shall be conducted annually for three (3) years after any sludge is land applied at one of the sites approved in this permit.
2. Monitoring shall be conducted every three (3) years but may cease after three (3) years if sludge is no longer land applied at one of the sites approved in this permit.

B.5 PLANT TISSUE AND GRAIN ANALYSIS

None is required at this time.

B.6 GROUNDWATER MONITORING

<u>Parameter</u>	<u>Unit Measurement</u>	<u>Minimum Frequency</u>	<u>Sample Type</u>
pH	S.U	Annually	Grab
Specific Conductivity	UMHOS/CM	Annually	Grab
Total Nitrogen as N	mg/l	Annually	Grab
Organic Nitrogen	mg/l	Annually	Grab
Total Kjeldahl Nitrogen	mg/l	Annually	Grab
Nitrate	mg/l	Annually	Grab
Ammonium as N	mg/l	Annually	Grab
Phosphorus as P	mg/l	Annually	Grab
Potassium, Total	mg/l	Annually	Grab
Arsenic, Total	mg/l	Annually	Grab
Cadmium, Total	mg/l	Annually	Grab
Chromium, Total	mg/l	Annually	Grab
Copper, Total	mg/l	Annually	Grab
Lead, Total	mg/l	Annually	Grab
Molybdenum, Total	mg/l	Annually	Grab
Mercury, Total	mg/l	Annually	Grab
Nickel, Total	mg/l	Annually	Grab
Selenium, Total	mg/l	Annually	Grab
Zinc, Total	mg/l	Annually	Grab
Fecal Coliform	Colonies/100 ml	Annually	Grab

NOTE: Groundwater samples shall be collected and analyzed individually from all monitoring wells at the Kent County Sludge Farm (KSF-2).

* The monitoring frequency for ground water will be increased to semi-annually at any of the above sites, when sludge is applied.

C. SCHEDULE OF COMPLIANCE

None

D. BONDING

Not Required

E. MONITORING

1. Representative Sampling:

Samples and measurements taken as required herein shall be representative of the volume and nature of the sludge to be land applied.

2. The permittee shall automatically resample the sludge and submit to the Department and landowner additional analyses if there has been a significant change (greater than 25%) in the quality of sludge. The permittee shall then be required to recharacterize the sludge in order to determine if any change in the land limiting constituent has occurred. Any change in sludge characteristics that affects the land limiting constituent shall be included in revised Project Development Reports which shall be submitted to the Department. After a review of these results, the Department may invoke the provisions of Part II, B.6 of this permit.

3. Recording of Results:

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- a. The exact place, date and time of sampling and/or measurement;
- b. The person(s) who performed the sampling and/or measurement;
- c. The dates and times the analyses were performed;
- d. The person(s) who performed the analyses;
- e. The results of each analysis.

4. Records Retention:

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed and calibration and maintenance of instrumentation and recording from continuous monitoring instrumentation shall be retained for five (5) years. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Department.

F. REPORTING

1. The permittee shall submit to the Department and landowners an annual operation report on or before February 1 of each year. The annual operation report shall include the following:
 - a. The daily operational record (as specified in Part II, A.1);
 - b. The weight (wet and dry tons) and volume of sludge utilized at the land application site;
 - c. Any changes in ownership of the land where the operation is conducted or any change in any lease agreement for the use of such land that may affect or alter the operator's rights upon such land;

- d. A chemical analysis of soil from each field for the constituents identified in Part I, B.4. The results shall be compared to the corresponding soils data submitted as a part of the Project Development Reports. The procedure for soil analysis shall be consistent with Department guidance.
 - e. Site maps of the same scale and contour interval as the maps submitted with the Project Development Reports, showing the boundaries within each field where sludge has been applied during the previous year;
 - f. For each site: the cropping scheme followed during the previous year and anticipated for the coming year; Crop yield data and an explanation of which portions of the plants were harvested; Results of plant tissue and grain analyses, if required; Identification of fields to be used during the coming year; Sludge application rates for the coming year based on nitrogen mineralization calculations from previous sludge application practices;
 - g. Septage application rate adjustments, if necessary (See Part I, A.1).
 - h. Any other information required by the Department.
2. Sludge analytical and stabilization process monitoring data obtained during the previous one (1) quarter shall be summarized for each quarter and postmarked no later than the 28th day of the month following the completed reporting period. **If no sludge was applied during this quarter a signed statement saying no application occurred this quarter shall be submitted to the Department.** Signed copies of these, and all other reports required herein, shall be submitted to the Department at the following address:

DELAWARE DEPARTMENT OF NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL, DIVISION OF WATER RESOURCES,
SURFACE WATER DISCHARGES SECTION, 89 KINGS HIGHWAY,
DELAWARE 19901; TELEPHONE: (302) 739-9946

When submitting monitoring results, copies of the original laboratory sheets should be included. If more than one sample is analyzed during any month, a table showing the range of constituent concentration values shall be prepared and included with the submittal.

3. The permittee shall submit copies of all monitoring results to the landowner of each site in accordance with condition F.2, above.
4. The permittee shall maintain monthly sludge inventory data. This data shall include at a minimum (a) the quantity of sludge generated, (b) quantity of sludge stored on site, and (c) quantity of sludge transported off site. Transportation records shall include the date, quantity, carrier used, and the final destination of each shipment. The inventory data shall be maintained at the facility and be made available to the Department in accordance with Part I, E.4 of this permit.

5. Test Procedures

Test procedures for all analyses shall conform to the applicable test procedures identified in Part III, (B), Section 1000 of the Department's Guidance and Regulations Governing the Land Treatment of Wastes, unless otherwise specified in this permit.

G. DEFINITIONS

1. "Agricultural Utilization" means the application rate of wastes or sludge or sludge products which shall not exceed the nutrient needs of the crop grown on the particular soil plus the other assimilative pathways in soils (e.g. immobilization with organic material, volatilization, and leachate in compliance with drinking water standards). This term may be used interchangeably with "agronomic rate".
2. "Composite" means a series of grab samples which have been collected in a manner such that the final sample is representative of the volume and characteristics of the material to be analyzed.
3. "Depth of Tillage" means the maximum depth at which sludge can be found after injection or incorporation into the soil.
4. "Land application" means the placement of sludge, treated sludge, or any other product containing these materials within 2 feet below the surface of land used to support vegetative growth.
5. "PFRP" means Process to Further Reduce Pathogens.
6. "PSRP" means Process to Significantly Reduce Pathogens.
7. "Sewage" means water-carried human or animal wastes from septic tanks, water closets, residences, buildings, industrial establishments, or other places, together with such groundwater infiltration, subsurface water, admixture of industrial wastes or other wastes as may be present.
8. "Sewage sludge" means sludge which derives in whole or in part from sewage.
9. "Sludge" means the accumulated semi-liquid suspension, settled solids, or dried residue of these solids that is deposited from (a) liquid waste in a municipal or industrial wastewater treatment plant, (b) surface or ground water treated in a water treatment plant, whether or not these solids have undergone treatment. Septage is included herein as sludge.
10. "Treatment" means a process which alters modifies or changes the biological, physical, or chemical characteristics of sludge or liquid waste.
11. "Vector Attraction" is the characteristic of sewage sludge that attracts rodent, flies, mosquitoes, or other organisms capable of transporting infectious agents.

Part II

A. Management Requirements

1. Land Application of Sludge

The permittee shall prepare and maintain an operational record for each day that sludge is applied and when any other management activities are conducted at the land application sites. The daily operational record shall include the following:

- (i) The date, type, and wet and dry weights of the sludge applied;
- (ii) The facility from which the sludge originated;
- (iii) A record of any major deviations from the operating plan;
- (iv) General daily weather conditions;
- (v) The application rate for sludge;
- (vi) A map for each site showing the area of daily activity;
- (vii) A record of all actions taken to correct violations of the Delaware Environmental Protection Act and the Department's Regulations;
- (viii) Management undertaken, such as planting and harvesting of crops, fertilizers and chemicals added, irrigation frequency, techniques used, etc.

2. Change in Operation

The application of sludge to the sites authorized herein shall be consistent with the terms and conditions of this permit. The application of sludge at levels in excess of the amount necessary to provide plant available nitrogen for the crop being grown, in accordance with the limits identified in Part I, A. 1, 2, and 3 of this permit, shall constitute a violation of the permit. Any anticipated facility expansion, production increase, or change in site conditions which would affect the land limiting constituent, create a new land limiting constituent, or adversely affect site conditions must be reported to the Department. Upon review of this information, the Department may invoke the provisions of Part II, B.6 of this permit.

3. Noncompliance Notification

The permittee shall report to the Department:

- a. In writing thirty (30) days before any planned physical alteration or addition to the permitted facilities or activities, if that alteration or addition would result in any significant change in information that was submitted during the permit application process;
- b. In writing thirty (30) days before any anticipated change which would result in noncompliance with any permit condition or Part III, (B), of the Guidance and Regulations Governing the Land Treatment of Wastes;
- c. Orally within twenty-four (24) hours from the time the permittee became aware of any noncompliance which may endanger the public health or the environment, at (800) 662-8802. In addition, a call must be placed at (302) 739-9946 during normal business hours, and;
- d. In writing as soon as possible but within five (5) days of the date the permittee knows or should know of any noncompliance unless extended by the Department;

This report shall contain:

- (i) A description of the noncompliance and its cause;
 - (ii) The period of noncompliance including to the extent possible, times and dates and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
 - (iii) Steps taken or planned to reduce or eliminate reoccurrence of the noncompliance.
- e. In writing as soon as possible after the permittee becomes aware of relevant facts not submitted or incorrect information submitted, in a permit application or any report to the Department. Those facts or the correct information shall be included as a part of this report.

4. Minimize Impacts

The permittee shall take all necessary actions to eliminate and correct any adverse impact on the public health or the environment resulting from permit noncompliance.

B. Responsibilities

1. **Renewal Responsibilities**

At least 180 days before the expiration date of this permit, the permittee shall submit a new application for a permit or notify the Department of the intent to cease operation by the expiration date. **When submitting a new permit application, updated Project Development Reports (PDRs) for all sludge application sites must be included.** In the event that a timely and sufficient reapplication has been submitted and the Department is unable, through no fault of the permittee, to issue a new permit before the expiration date of this permit, the terms and conditions of this permit are automatically continued and remain fully effective and enforceable.

2. **Entry and Access**

The permittee shall allow the Department, consistent with 7 Del. C., Chapter 60, to:

- a. Enter the permitted facilities;
- b. Inspect any records that must be kept under this permit;
- c. Inspect any facility, equipment, practice, or operation permitted or required by this permit;
- d. Sample or monitor for the purpose of assuring permit compliance, any substance or any parameter at the facility or land application site.

3. **Provide Information**

The permittee shall furnish to the Department within a reasonable time, any information requested, including copies of records, which may be used by the Department to determine whether cause exists for modifying, revoking, reissuing, or terminating the permit, or to determine compliance with the permit or Part III, (B), of the Guidance and Regulations Governing the Land Treatment of Wastes.

4. **Transfer of Ownership or Control**

This permit shall be transferable to a new owner or operator provided that the permittee notifies the Department by requesting a minor modification of the permit before the date of transfer and provided that the transferee shows evidence of a legal right to use the site and is otherwise in compliance with all applicable provisions of Part III, (B), of the Department's Guidance and Regulations Governing the Land Treatment of Wastes.

5. Operation of Facility

The permittee shall at all times properly maintain and operate all structures, systems, and equipment for treatment, control and monitoring, which are installed or used by the permittee to achieve compliance with this permit or Part III, (B), of the Guidance and Regulations Governing the Land Treatment of Wastes.

6. Permit Revocation and Modification

- a. After notice and opportunity for a hearing, this permit may be modified or revoked in whole or in part during its term for cause including, but not limited to, the following:
- (i) Violation of any terms or conditions of this permit;
 - (ii) Obtaining this permit by misrepresentation or failure to disclose fully all of the relevant facts;
 - (iii) Any change in operating conditions that requires either a temporary or permanent permit modification; or
 - (iv) If the Department finds that the public health, safety or welfare requires emergency action, the Department shall incorporate findings in support of such action in a written notice of emergency revocation issued to the permittee. Emergency revocation shall be effective upon receipt by the permittee. Thereafter, if requested by the permittee in writing, the Department shall provide the permittee a revocation hearing and prior notice thereof. Such hearings shall be conducted in accordance with 7 Del. C., Chapter 60.
- b. The Department may revoke this permit if the permittee violates any permit condition, any provisions of Part III, (B), of the Guidance and Regulations Governing the Land Treatment of Wastes, or fails to pay applicable Department fees.

7. Permit Closure Report

- a. All land approved for the Agricultural Utilization of sludge is required to have a closure report when the land is no longer being utilized as described in permit application. The report must be submitted to the Department within four (4) months of determination that the field will no longer be utilized for sludge application. The closure report will have the following:

- (i) Letter from permittee stating the application site (with tax parcel number(s)) will no longer receive sludge approved by this Permit.
- (ii) Copy of the last sludge monitoring results as required in Part 1, B.1 of this permit.
- (iii) Copy of the last soil monitoring results as required in Part 1, B.4 of this permit. A soil test is required after the last land application of sludge.
- (iv) Copy of the last groundwater monitoring well results as required in Part 1, B.6 of this permit. A groundwater test is required after the last land application of sludge (If monitoring was previously required).

8. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under 7 Del. C., Chapter 60.

9. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation.

10. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

11. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application or any provision of this permit to any circumstances is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

Part III

A. Special Conditions

The permittee must ensure that the following conditions are met:

1. Monitoring wells
 - a. Groundwater shall be sampled at the following locations at the frequencies indicated.
 - (i) At the Kent County Sludge Farm (KSF-2), groundwater shall be sampled per the frequency listed in Part I, Subsection B.6. at monitoring wells #1b thru #6.
 - b. All monitoring wells samples shall be analyzed for the parameters listed in Part I, Subsection B.6.
 - c. Copies of the laboratory reports for all groundwater analytical data and the corresponding sampling logs shall be submitted to the Department within thirty days of receipt of the analytical data. In addition, the elevation of the top of the casing (TOC) for each monitoring well shall be surveyed in reference to a permanently marked, stationary point. After notice and opportunity for a hearing, the Department may modify the list of parameters specified above based on observations of groundwater quality trends in the area. Groundwater monitoring shall continue in effect until the Department determines that it is no longer necessary.
 - d. The monitoring frequency for groundwater will be increased to semi-annually at any of the above sites, when sludge is applied.
2. Only sludge meeting the requirements for stabilization and that has been processed to significantly reduce pathogens, by methods approved by the Department and as specified in this permit, may be land applied.
3. Sludge shall be transported to the land treatment sites in accordance with Delaware Non Hazardous Waste Transporters Permit No. OH-11.
4. Based upon the information provided in the Project Development Report for each approved site, the permittee can achieve the nitrogen loading rate specified in the crop management plan by applying stabilized sludge. Subsequent annual sludge application rates can be adjusted by the Department based on annual nitrogen mineralization calculations submitted to the Department by the permittee as required in Part I, F.1 (f) of this permit.
5. Supersedes Previous Permit

This permit supersedes the State Permit No. AGU 0028/97C, effective April 1, 2002.

6. Pre Start-Up

- a. Prior to the application of sludge, buffer zones and the areas on which sludge is to be applied must be clearly marked with stakes or other suitable markers acceptable to the Department.
- b. The permittee must notify the Department at (302) 739-9946 at least two (2) working days prior to the application of sludge to any field.
- c. Before the permittee can begin to apply sludge to the designated site, a pre start-up inspection may be conducted by the Department to verify that proper buffer zones and non-application areas are suitably marked. Based on the results of the pre start-up inspection, the Department will either:
 - (i) grant approval for sludge application operations to begin or;
 - (ii) require the permittee to perform additional site preparation (such work must be performed and approved prior to sludge application).

7. Application Measures

If at any time during the sludge application period the depth to groundwater is less than 20 inches from the depth of tillage, all sludge application activities shall immediately cease and the Department shall be notified. Departmental approval shall then be required before sludge application operations can continue.

8. Post Application Measures

- a. The facility must provide the Department with a crop plan for the year in which stabilized sludge are to be applied to lands specified in this permit. Any changes to the crop rotation plan must be approved by the Department prior to implementation.
- b. The Annual Report shall be submitted to the Department as required in Part I, F.1 of this permit. Should the permittee fail to supply the required documents on or before the deadline specified, the Department may revoke this permit.

9. If, for any reason, any of the contracts or agreements specified in the Project Development Report any one of the approved sites is cancelled or amended, approval granted for use of that site shall be void.

10. Regulatory Modification

In the event that Part III, (B), of the Guidance and Regulations Governing the Land Treatment of Wastes or Title 40 of the Code of Federal Regulations Part 503, Standards for the Use or Disposal of Sewage Sludge is revised, this permit may be reopened and modified accordingly after notice and opportunity for a public hearing.