

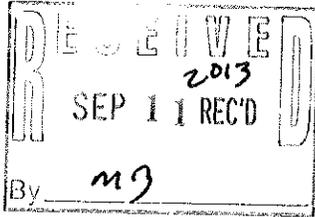
# Georgia Department of Natural Resources

Environmental Protection Division • Watershed Protection Branch

4220 International Parkway • Suite 101 • Atlanta • Georgia 30354

(404) 675-6232; Fax (404) 675-6247

Judson H. Turner, Director



August 30, 2013

Mr. Thomas C. Fry  
Chief, Environmental Division  
Directorate of Public Works  
United States Department of the Army  
1550 Frank Cochran Drive  
Fort Stewart, Georgia 31314

Re: Permit Issuance  
Land Application System  
Permit No. GAJ030325  
Evans Army Airfield

Dear Mr. Fry:

Pursuant to the Georgia Water Quality Control Act, as amended, and the Rules and Regulations promulgated thereunder, we have issued the attached Georgia Land Application System (LAS) Permit for the specified wastewater treatment system.

Please be advised that on and after the effective date indicated in the attached LAS permit, the permittee must comply with all the terms, conditions and limitations of this permit. If you have any questions, please contact Alan Leake at (404) 362-2621 or send an email message to [alan.leake@dnr.state.ga.us](mailto:alan.leake@dnr.state.ga.us).

Sincerely,

A handwritten signature in cursive script, appearing to read "Judson H. Turner".

Judson H. Turner  
Director

JHT:awl

Enclosures

cc: Coastal District Office

**STATE OF GEORGIA  
DEPARTMENT OF NATURAL RESOURCES  
ENVIRONMENTAL PROTECTION DIVISION**

**LAND APPLICATION SYSTEM PERMIT**

**Permit No. GAJ030325**

**In accordance with the provisions of the Georgia Water Quality Control Act (Georgia Laws 1964, p. 416, as amended), and the Rules and Regulations promulgated pursuant thereto, this permit is issued to the following:**

**UNITED STATES DEPARTMENT OF THE ARMY  
Directorate of Public Works  
Fort Stewart, Georgia 31314**

**is authorized to operate the land application system located at**

**Evans Army Airfield (SIC 3537)  
Liberty County, Georgia (Ogeechee Basin)**

**This permit is conditioned upon the permittee complying with the effluent limitations, monitoring requirements and other conditions set forth in the permit and with the statements and supporting data submitted with the application and filed with the Environmental Protection Division of the Department of Natural Resources.**

**This permit is effective on the date signed by the Director of the Environmental Protection Division and is subject to revocation on evidence of noncompliance with any of the provisions of the Georgia Water Quality Control Act or any of the Rules and Regulations promulgated pursuant thereto; or with any presentation made in the above mentioned application or the statements and supporting data entered therein or attached thereto; or with any conditions of this permit.**

**This permit shall become effective on September 1, 2013.**

**This permit shall expire at midnight on August 31, 2018.**

**Signed this 30<sup>th</sup> day of August, 2013.**



  
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**Director  
Environmental Protection Division**

A. CONDITIONS

1. DEFINITIONS

- a. EPD: the Environmental Protection Division of the Department of Natural Resources.
- b. State Act: the Georgia Water Quality Control Act (Official Code of Georgia Annotated; Title 12, Chapter 5, Article 2).

2. MONITORING AND REPORTING

- a. Upon a determination by the EPD, the permittee shall install a primary flow-measuring device in accordance with accepted engineering practice. For secondary flow measurements, a continuous totalizer may be required. The permittee may also be required to install an indicating recorder. All flow measuring devices shall be located on the effluent to the sprayfield and calibrated appropriately.
- b. Quarterly monitoring shall be performed during the months of March, June, September, and December, semi-annual monitoring shall be performed during the months of June and December, and annual monitoring shall be performed during the month of June, unless otherwise specified.
- c. Samples and measurements taken for the purpose of monitoring shall be representative of the volume and nature of the monitored waste stream. The permittee shall maintain a written sampling and monitoring schedule.
- d. For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:
  - 1. The exact place, date, and time of sampling, and the person(s) collecting the samples,
  - 2. The dates and times the analyses were performed,
  - 3. The person(s) who performed the analyses,
  - 4. The analytical procedures or methods used,
  - 5. The results of all required analyses.
- e. If the permittee monitors any pollutant at, or in addition to, the location(s) designated herein more frequently than required by this permit, the permittee shall analyze all samples collected using approved analytical methods, and the results of such monitoring shall be included in the calculation and reporting of the values required in the Monitoring Report Forms. Such increased monitoring frequency shall also be indicated. EPD may require by written notification, more

frequent monitoring or the monitoring of other pollutants not specified in this permit.

- f. Monitoring Report Forms shall be completed each calendar quarter with the monitoring results, signed by a principal executive officer or ranking elected official, or by a duly authorized representative of that person who has the authority to act for or on behalf of that person, and submitted to EPD, postmarked no later than the 21<sup>st</sup> day of the month following the reporting period. EPD may require the reporting of additional monitoring results by written notification. Signed copies of these and all other reports required herein shall be submitted to the following address:

Georgia Environmental Protection Division  
Coastal District Office  
400 Commerce Center Drive  
Brunswick, Georgia 31523

- g. The permittee shall retain records of all monitoring information, including all records of analyses performed, calibration and maintenance of instrumentation, recordings from continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of EPD at any time.
- h. The land application system will be operated in accordance with the design criteria as presented in approved engineering reports, operation and maintenance manuals, Plan of Operation, the permit application and/or other written agreements between EPD and the permittee. This includes, but is not limited to, the following:
1. A vegetative cover is to be maintained at all times on the application site and is to be managed according to design criteria.
  2. All pretreatment units are to be maintained and operated for maximum efficiency.
  3. Hydraulic and nitrogen loading is to be maintained within design criteria.
- i. The permittee, upon written notification by EPD, may be required to install groundwater monitoring wells if same were not included in the original design, or if existing wells are inadequate. When applicable, depth to groundwater measurements shall be made prior to pumping

and sampling of the monitoring wells. Each monitoring well shall be pumped and allowed to recharge prior to sampling. Samples shall be representative of the column in each monitoring well at the time of sampling.

- j. A daily log will be kept by the land application system operator of the gallons of wastewater sprayed on each area each day.
- k. A summary of pertinent maintenance such as planting or cutting vegetation, resurfacing areas, upgrading pretreatment units, etc. shall also be included in the quarterly report.
- l. All analyses shall be made in accordance with the latest edition of Standard Methods for the Examination of Water and Wastes, Methods for Chemical Analysis of Water and Wastes, or other approved methods.

m. Trouble Shooting

If the information submitted by the permittee or collected by EPD indicates contamination of groundwater or surface water, problems with meeting operational criteria, or changes from design criteria due to increased production or other factors, EPD will request additional reports or modifications to the system.

n. No Discharge System

The wastewater and disposal system must be operated as a no discharge system; therefore, additional land for spraying must be utilized if the application rate cannot satisfactorily be handled by the currently approved spray field.

o. Change in Wastewater Influent

The influent to the system is authorized as long as it is consistent with the design criteria specified in the approved Design Development Report and the protocol established in the approved Plan of Operation. Any anticipated facility expansions, production increases, or process modifications which will result in new, different, or increased discharges of pollutants or flow to the system must be approved by EPD prior to implementation. Submittal of a new permit application and reissuance of the Land Application System permit, as well as upgrading of the system, may be required in the process of obtaining EPD approval.

p. Reporting Violations and Problems

The permittee shall notify EPD immediately if mechanical failure, inclement weather or other factors cause a discharge of contaminated runoff from the fields or an overflow from a holding pond, or if any other problems occur which could cause an adverse effect on the environment.

B.1. LIMITATION AND MONITORING REQUIREMENTS

Parameter (units)	Discharge Limitation	Monitoring Requirements		
		Measurement Frequency	Sample Type	Sample Location
Flow (MGD)	0.050	Daily	Total	Effluent to Sprayfield
TSS (mg/l)	Report	1/month	Grab	Effluent to Sprayfield
Nitrate/Nitrite (mg/l as N)	Report	1/month	Grab	Effluent to Sprayfield
BOD <sub>5</sub> (mg/l)	Report	1/month	Grab	Effluent to Sprayfield
Oil & Grease (mg/l)	Report	1/month	Grab	Effluent to Sprayfield
Ammonia Nitrogen (mg/l as N)	Report	1/month	Grab	Effluent to Sprayfield
TKN (mg/l)	Report	1/month	Grab	Effluent to Sprayfield
Total Phosphorus (mg/l as P)	Report	1/month	Grab	Effluent to Sprayfield
Total Nitrogen (lbs/acre/qtr)	190	1/month	Grab	Effluent to Sprayfield
Specific Conductance (uS/cm)	Report	1/month	Grab	Effluent to Sprayfield

The pH shall be maintained between 6.0 and 9.0 standard units. It shall be monitored monthly and the minimum and maximum values shall be reported quarterly.

**B.2. GROUNDWATER MONITORING REQUIREMENTS**

Groundwater leaving the land application system boundaries must not exceed primary maximum contaminant levels for drinking water. The maximum contaminant level for nitrate nitrogen is 10.0 mg/l. The groundwater shall be monitored from each groundwater monitoring well by the permittee for the parameters and at the frequency listed below:

Parameter	Measurement Frequency
Nitrate-Nitrite Nitrogen (mg/l as N)	Quarterly
Total Phosphorus (mg/l as P)	Quarterly
pH, standard units	Quarterly
Depth to Groundwater (feet)	Quarterly
Ammonia-Nitrogen (mg/l)	Quarterly
COD (mg/l)	Quarterly

**B.3. SOIL MONITORING REQUIREMENTS**

Representative samples shall be collected from each major soil series present within the spray field area. The samples shall be analyzed in accordance with the latest edition of Methods of Soil Analysis (published by the American Society of Agronomy, Madison, Wisconsin) or other methods approved by EPD. The soil samples shall be analyzed for the parameters and at the frequency listed below:

Parameter	Measurement Frequency
pH, standard units	One/Year
Soil Fertility Test by Mehlich-1 extraction procedure	One/Year
Cation Exchange Capacity	If pH changes by one unit
Percent Base Saturation	If pH changes by one unit
Nitrate Nitrogen (mg/kg, dry weight)	One/Year

**B.4. SURFACE WATER MONITORING**

The water quality of any surface water adjacent to or traversing the land application site shall be monitored. Grab samples collected upstream and downstream of the spray fields shall be monitored for the parameters and at the frequency listed below:

Parameter	Measurement Frequency
Nitrate/Nitrite (mg/l as N)	Quarterly
BOD <sub>5</sub> (mg/l)	Quarterly
pH, standard units	Quarterly
Ammonia Nitrogen (mg/l as N)	Quarterly
Total Phosphorus (mg/l as P)	Quarterly

C. GENERAL REQUIREMENTS

1. The wetted spray field area of the land application system shall consist of 11 acres. The hydraulic wastewater loading to the spray field areas must not exceed the rate established and approved by EPD. At no time shall the maximum application rate exceed 2.5 inches per week. Any request for a higher loading rate must be submitted to EPD for approval.
2. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge disposal in violation of this permit, which has a reasonable likelihood of adversely affecting human health or the environment.
3. Groundwater leaving the land application system boundaries must not exceed maximum contaminant levels for drinking water. If groundwater samples indicate contamination, the permittee will be required to develop a plan, which will ensure that the primary maximum contaminant levels for drinking water are not exceeded. The plan will be implemented by the permittee immediately upon EPD approval.
4. The permittee shall allow the Director of EPD and/or authorized representatives, agents, or employees, upon presentation of credentials:
  - a. To enter upon the permittee's premises where a regulated activity or facility is located or conducted, in which any records are required to be kept under the terms and conditions of this permit; and
  - b. At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and to sample any substance or parameters at any location.
5. The State Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine or by imprisonment, or by both. The State Act also provides procedures for imposing civil penalties, which may be levied for violations of the Act, any permit condition or limitation established pursuant to the Act, or negligently or intentionally failing or refusing to comply with any final or emergency order of the Director of EPD.
6. Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

7. 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.
8. The permittee shall furnish to EPD, within a reasonable time, any information which EPD may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to EPD upon request, copies of records required to be kept by this permit. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to EPD, the permittee shall promptly submit such facts or information.
9. A permit may be transferred to another person by a permittee if:
  - a. The permittee notifies the Director of EPD in writing of the proposed transfer at least 30 days in advance of the proposed transfer;
  - b. A written agreement containing a specific date for transfer of permit responsibility and coverage between the current and new permittee (including acknowledgment that the existing permittee is liable for violations up to that date, and that the new permittee is liable for violations from that date on) is submitted to the Director at least 30 days in advance of the proposed transfer; and
  - c. The Director, within thirty (30) days, does not notify the current permittee and the new permittee of EPD's intent to modify, revoke and reissue, or terminate the permit and to require that a new application be filed rather than agreeing to the transfer of the permit.
10. This permit may be modified, terminated, or revoked and reissued in whole or part during its term for cause including, but not limited to, the following:
  - a. Violation of any condition of this permit;
  - b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
  - c. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted activity.

The filing of a request by the permittee for a permit modification, termination, revocation and reissuance, or a notification of planned changes or anticipated noncompliance does not stay any permit conditions.

11. The permittee shall not operate the system after the expiration date. In order to receive authorization to operate beyond the expiration date, the permittee shall submit such information, forms, and fees as are required by EPD at least 180 days prior to the expiration date.
12. Any person who is aggrieved or adversely affected by any action of the Director of EPD shall petition the Director for a hearing within thirty (30) days of notice of such action.
13. The provisions of this permit are severable; and, if any provision of this permit, or the application of 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.
14. The permittee shall ensure that the person in responsible charge of the daily operation of this land application system shall be certified in accordance with the Georgia Certification of Water and Wastewater Plant Operators and Laboratory Analysts Act, as amended, and specified by Subparagraph 391-3-6-.12 of the Georgia Rules and Regulations for Water Quality Control.
15. The permittee shall ensure that, when required, the person in responsible charge of the laboratory performing the analysis for determining permit compliance is certified in accordance with the Georgia Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts Act, as amended, and the Rules promulgated hereunder.

D. Special Requirements

1. The wastewater disposal system shall be operated as a no-discharge system. Spraying shall not occur when saturated conditions are present, which could cause wastewater runoff from the site.
2. Monitoring wells shall be identified in the reports submitted to EPD as up-gradient, mid-field, and down-gradient. The down-gradient wells shall be considered compliance wells for groundwater pollutants.
3. Within 12 months from the issuance date of this permit, the permittee shall submit to EPD a groundwater potentiometric surface map that includes the location of the monitoring wells.