

Georgia Department of Natural Resources

Environmental Protection Division • Watershed Protection Branch
2 Martin Luther King Jr. Drive • Suite 1152 East • Atlanta • Georgia 30334
(404) 463-1511; Fax (404) 656-2453
Judson H. Turner, Director

RECEIVED

JUL 28 2015

July 23, 2015

Mr. Thomas C. Fry
Chief, Environmental Division
United States Army, Fort Stewart
1550 Veterans Parkway
Fort Stewart, Georgia 31314

RE: Permit Issuance
United States Army, Fort Stewart (Tac-X)
LAS Permit No. GAJ030332 (formerly
GA03-332)
Fort Stewart, Bryan County

Dear Mr. Fry:

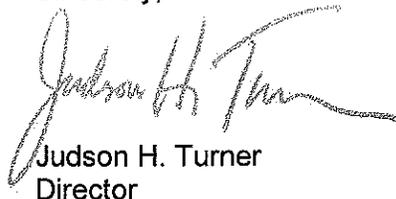
Pursuant to the Georgia Water Quality Control Act, as amended, and the Rules and Regulations promulgated thereunder, we have issued the attached permit for the above-referenced facility.

Your facility has been assigned to the following EPD office for reporting and compliance. Signed copies of all required reports shall be submitted to the following address:

Environmental Protection Division
Coastal District Office
400 Commerce Center Drive
Brunswick, Georgia 31523-8251

Please be advised that on and after the effective date indicated in the permit, the permittee must comply with all terms, conditions, and limitations of the permit. If you have questions concerning this correspondence, please contact Audra Dickson at 404.463.4934 or at audra.dickson@dnr.ga.us

Sincerely,



Judson H. Turner
Director

JHT/ahd
Enclosure(s)

CC: EPD Brunswick Office -- Mr. Bruce Foisy (email)

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

LAND APPLICATION SYSTEM PERMIT

In compliance 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 Army, Fort Stewart
1550 Veterans Parkway
Fort Stewart, Liberty County, Georgia 31314

is authorized to operate the land application system located at

Tac-X
Fort Stewart, Bryan County, Georgia 31321
Ogeechee River Basin

in accordance with effluent limitations, monitoring requirements and other conditions set forth in the permit and with the statements and supporting information submitted with the application.

This permit shall become effective on August 1, 2015.

This permit and the authorization to discharge shall expire at midnight on July 31, 2020.

Issued this 23rd day of July 2015.





Director,
Environmental Protection Division

Part I.

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. 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.
- c. 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.
- 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 and all results obtained during the previous month shall be summarized and reported on the Operation Monitoring Report. These reports and any other required reports and information shall be completed and 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 15th day of the month following the reporting period. EPD may require the reporting of additional monitoring results by written notification.
- 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 monitoring report.
- l. **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.
- m. **No Discharge System:** The wastewater and disposal system must be operated as a no discharge system to surface waters. To ensure this, no wastewater shall be sprayed during rain or when the conditions are such that sprayed wastewater will not be absorbed into the soil.
- n. **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.
- o. **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.

3. SEWAGE SLUDGE DISPOSAL AND MONITORING

Hazardous sludge shall be disposed of in accordance with the regulations and guidelines established by EPD and/or EPA pursuant to the Federal Clean Water Act (CWA) and the Resource Conservation and Recovery Act (RCRA). For land application of nonhazardous sludge, the permittee shall comply with any applicable criteria outlined in EPD's "Guidelines for Land Application of Municipal Sludges." Prior to disposal of sludge by land application, the permittee shall submit a proposal to EPD for approval in accordance with applicable criteria. Upon evaluation of the permittee's proposal, EPD may require that more stringent control of this activity is required. Upon written notification, the permittee shall submit to EPD for approval, a detailed plan of operation for land application of sludge. Upon approval, the plan will become a part of the LAS permit.

The permittee shall develop and implement procedures to ensure adequate year-round sludge disposal. The permittee shall monitor the volume and concentration of solids removed from the plant. Records shall be maintained which document the quantity of solids removed from the plant. The ultimate disposal of solids shall be reported to EPD with the Operation Monitoring Report forms required under Part A.2.g of this permit on a dry weight basis.

B.1. TREATMENT LIMITATIONS AND MONITORING REQUIREMENTS

- a. The effluent shall refer to the discharge from the treatment facility to the spray field(s) and shall be limited and monitored as follows:

Parameter (units)	Discharge Limitation	Monitoring Requirements		
	Monthly Average (unless otherwise stated)	Measurement Frequency	Sample Type	Sample Location
Flow, (MGD)	0.035	Daily	Instantaneous	Effluent
Nitrate-Nitrogen (mg/L)	Report	1/month	Grab	Effluent
TKN (mg/L)	Report	1/month	Grab	Effluent
Biochemical Oxygen Demand- 5-day (mg/L)	Report	1/month	Grab	Effluent
Total Suspended Solids (mg/L)	Report	1/month	Grab	Effluent
Total Nitrogen (lbs/acre/qtr)	100	1/month	Grab	Effluent
Ammonia Nitrogen (mg/l)	Report	1/month	Grab	Effluent
Total Phosphorus (mg/l)	Report	1/month	Grab	Effluent
Oil & Grease (mg/l)	Report	1/month	Grab	Effluent
pH (standard units)	Report (min and max)	1/month	Grab	Effluent

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. Grab samples of 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 Nitrogen, as N (mg/l)	Quarterly
Total Phosphorus, as P (mg/l)	Quarterly
Total Dissolved Solids (TDS)	Quarterly
pH (standard units)	Quarterly
Depth to Groundwater (feet)	Quarterly
Chemical Oxygen Demand (mg/l)	Quarterly

* Groundwater monitoring wells are identified as: U1, M1, D1, and D2. (U= up gradient, M = mid gradient, and D = down gradient)

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 Test by phosphorus Mehlich-1 extraction	One/Year
Cation Exchange Capacity	If pH changes by one unit
Percent Base Saturation	If pH changes by one unit
Nitrate / Nitrogen Testing	One/Year

* Major soil series are identified as follows: Lakeland and Chipley

B.4. SURFACE WATER MONITORING

If applicable, the water quality of any surface water adjacent to or traversing the land application site shall be monitored. Grab samples will be collected at a maximum of 100 feet upstream and a maximum 100 feet downstream of the spray fields shall be monitored for the parameters and at the frequency listed below:

Parameter	Measurement Frequency
Nitrate Nitrogen as N (mg/l)	Quarterly
BOD ₅ (mg/l)	Quarterly
Fecal Coliform (# col/100mL)	Quarterly
Ammonia Nitrogen, as N (mg/l)	Quarterly
Total Phosphorus, as P (mg/l)	Quarterly

C. GENERAL REQUIREMENTS

1. The wetted spray field area of the land application system shall consist of 10 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 1.05 inches per week. The instantaneous application rate for the site is 0.17 inches/hour. Any requests for a higher loading rate must be submitted to the Division 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 shall 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 permittee shall operate and maintain the system as described in the June 24, 2008 approved Design Development Report (DDR).