Georgia Department of Natural Resources

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Chris Clark, Commissioner
F. Allen Barnes, Director
Environmental Protection Division
404/656-4713

December 22, 2009

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. GA03-332
TAC-X Facility

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 the permit.

Sincerely,

F. Allen Barnes

F. Allen Barnes
Director

FAB:awl

Attachment

cc: Coastal District Office - Savannah

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

LAND APPLICATION SYSTEM PERMIT

Permit No. GA03-332

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

Tactical Exercise Academy (TAC-X) (SIC 3537)
Bryan County, Georgia (Ogeechee River 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 expire at midnight on November 30, 2014.

Signed this 16th day of December, 2009.

F. Allen Barnes

Director
Environmental Protection Division

A. CONDITIONS

1. DEFINITIONS

a. Division: 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 Division, 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.

b. Samples analyzed on a quarterly basis shall be monitored four times per calendar year and submitted with the reports for the months of March, June, September, and December. Semi-annual monitoring shall be submitted with the reports for the months of June and December. Annual monitoring shall be submitted with the report for the month of June.

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. The Division 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 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 the Division, postmarked no later than the **15th** day of the month following the reporting period. Monitoring results for parameters analyzed less frequently than once per month shall be submitted to the Division postmarked no later than the 15th day of the month following the specified reporting period. The Division 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 - Savannah
6555 Albercorn Street, Ste. 130
Savannah, Georgia 31405

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 the Division 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 the Division 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 the Division, 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 required methods.

m. Trouble Shooting

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

n. No Discharge System

The wastewater and disposal system must be maintained 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 sprayfield.

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 the Division 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 the Division's approval.

p. Reporting Violations and Problems

The permittee will notify the Division 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

Pretreatment Facility

Parameter (Units)	Discharge Limitation Average for Quarter	Monitoring Requirements		
		Measurement Frequency	Sample Type	Sample Location
Flow (MGD)	0.035	Daily	Total	Effluent to spray field
BOD_5 (mg/l)	Report	1/month	Grab	Effluent to sprayfield
TSS (mg/l)	Report	1/month	Grab	Effluent to sprayfield
Total Nitrogen (lbs/acre/qtr)	100	1/month	Grab	Effluent to sprayfield
Ammonia Nitrogen (mg/l)	Report	1/month	Grab	Effluent to sprayfield
Nitrate Nitrogen (mg/l)	Report	1/month	Grab	Effluent to sprayfield
Total Kjeldahl Nitrogen (mg/l)	Report	1/month	Grab	Effluent to sprayfield
Total Phosphorus (mg/l)	Report	1/month	Grab	Effluent to sprayfield
Oil & Grease (mg/l)	Report	1/month	Grab	Effluent to sprayfield
pH	Report	1/month	Grab	Effluent to sprayfield

B.2. GROUNDWATER MONITORING REQUIREMENTS

Groundwater leaving the land application system boundaries must not exceed primary maximum contaminant levels for drinking water. 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
COD	Quarterly
Nitrate Nitrogen (mg/l as N)	Quarterly
Total Phosphorus	Quarterly
Total Dissolved Solids (TSS)	Quarterly
pH	Quarterly
Depth to Groundwater	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 the Division. 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 phosphorus by 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

B.4. SURFACE WATER MONITORING

Upon written notification by the Division, the water quality of surface water shall be monitored downstream of the land application site as specified below:

Parameter	Measurement Frequency
Nitrate Nitrogen (mg/l as N)	Quarterly
BOD_5	Quarterly
Fecal Coliform	Quarterly
Ammonia Nitrogen (mg/l as N)	Quarterly
Phosphorus	Quarterly

C. GENERAL REQUIREMENTS

1. The hydraulic wastewater loading to spray field areas must not exceed the rate established and approved by the Division. At no time shall the maximum application rate exceed **2.5** inches per week (inches/week) or a total application of **N/A** inches per event. Any request 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 primary 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 Division approval.

4. The permittee shall allow the Director of the Division 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 the Division.

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 the Division, within a reasonable time, any information which the Division 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 the Division 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 the Division, 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 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 the Division'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 the Division no later than 180 days prior to the expiration date.

12. Any person who is aggrieved or adversely affected by any action of the Director of the Division 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.

D. Special Requirements

None.