

ENVIRONMENTAL PROTECTION DIVISION

General Land Application System (LAS) Permit for Land Disposal of Septage (Tier 1 Operation) General LAS Permit No. GAG620000

Technical Contact:

Dominique Hawkins, Environmental Specialist Dominique.hawkins@dnr.ga.gov 470-524-1658

Draft permit:

- □ First issuance
- Reissuance with no or minor modifications from previous permit
- □ Reissuance with substantial modifications from previous permit
- □ Modification only

1.0 GENERAL INFORMATION

Background:

The Georgia Water Quality Control Act requires the Division to regulate and permit any land disposal site that receives septic tank waste (domestic septage) under a permit issued by the Director of the Division. In February of 2014, the Department of Natural Resources Board adopted a rule change to amend Georgia's Rules and Regulations for Water Quality Control Chapter, 391-3-6-.23; "Land Disposal of Septage". The rule change establishes a two-tiered permitting system that distinguishes between single pumper-single site operations and larger facilities that receive waste from more than one pumper. Additionally, the Rule amendments provide clarification through the modification of language, new or modified requirements, the amendment of existing definitions, and includes the addition of new definitions.

A Tier 1 operation is defined in the Rules as "a land disposal site that receives and land applies septic tank waste from a single permitted septic tank pumping and hauling business." General Permit No. GAG620000 allows coverage of that activity. The disposal of septage shall take place under controlled conditions, by either injection or incorporation into the soil, within the State of Georgia. This general permit does not authorize coverage to land disposal systems associated with biosolids and grease trap waste, covered by an individual land application system permit, or associated with or containing industrial, commercial, solid, hazardous, or non-biodegradable wastes.

The Department of Public Health (DPH) was previously charged with administering domestic septage land disposal permits. The General Assembly transferred the regulation and permitting authority for land disposal sites receiving septage from the DPH to the Division on July 1, 2012. This permit addresses Tier 1 single pumper, single site operations. Tier 2 operations will be addressed separately.

Domestic Septage as defined in the Georgia Rules and Regulations for Water Quality Control Chapter 391-3-6-.23 is the liquid or solid material removed from a septic tank, cesspool, portable toilet, type III marine sanitation device, or a similar system that receives only domestic sewage. Domestic Septage does not include liquid or solid material removed from a septic tank or similar treatment works that receives either commercial wastewater or industrial wastewater. Domestic Septage does not include grease removed from a grease trap.

Septage, which has been properly pretreated and stabilized, may be beneficially used, as these are nutrient-rich organic materials that will provide nitrogen and phosphorus as well as trace amounts of micronutrients. However, septage may contain pathogens or other contaminants that could potentially harm plants, animals, or humans if applied at too great a rate, or if managed improperly. This permit allows for the utilization of the nutrients and other beneficial properties of septage while ensuring that the health and welfare of the general public is protected.

This permit contains requirements for land application of domestic septage at agronomic rates on land with a low potential for public exposure (non-public contact sites). Septage application is allowed based on nutrient uptake of the crop, unless the application is limited by other parameters. The application rate will be determined by the type and the condition of the soil and cover crop, topography, and other properties of the septage. The septage shall meet pollutant looading limits, pathogen reduction, and vector attraction reduction requirements in accordance with 40 CFR Part 503 and Georgia Water Quality Control Rules Chapter 391-3-6-.23. In addition, the septage shall be screened and stabilized prior to land application.

Coverage:

This permit shall provide coverage for any land disposal site that receives septage and to any person who land applies septic tank waste for subsurface injection or incorporation into the soil from a single permitted septic tank pumping and hauling business.

Coverage under this general permit shall become effective upon written receipt of Notice of Inclusion by the Division.

The Division may deny coverage under this permit based on incomplete or incorrect Notice of Intent submittal or failure to submit an approvable Septage Management Plan. The Director may at any time revoke coverage under this permit in accordance with the State Rules, Section 391-3-6-.15(11).

2.0 APPLICATION REQUIREMENTS

Notice of Intent (NOI)

- 1. Owners/operators that must submit a signed and completed Notice of Intent (NOI) and other required documents as required for coverage under the general LAS permit include:
 - a. Owners/operators proposing to land apply domestic septage at agronomic rates (new coverage);
 - b. Owners/operators already covered under the general permit who want to renew coverage under the permit;
 - c. Owners/operators already covered under the general permit who want to modify their coverage (for instance, to add disposal sites).
- 2. Any owners/operators proposing to land apply domestic septage at agronomic rates (new or expanding systems) must submit a Septage Management Plan (SMP). The SMP must be approved by the Division prior to obtain coverage under the general permit.
- 3. Any owners/operators proposing to land apply domestic septage at agronomic rates (new or expanding systems) must receive, in writing, a final authorization to begin operation from EPD.

Notice of Termination (NOT)

A permittee that has ceased the land application of septage for which permit coverage was obtained must submit a NOT to the Division within thirty (30) days after the activity has permanently ceased.

Transfer of Ownership:

Coverage under this permit may be transferred to another person by a permittee if:

- 1. The new owner/operator submits a NOI to the Division at least thirty (30) days in advance of the proposed ownership transfer. The new owner/operator must also submit a Septage Management Plan, and any other documents as required, to the Division for approval prior to receiving coverage under the General Permit.
- 2. 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 thirty (30) days in advance of the proposed transfer; and
- 3. 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.

3.0 PUBLIC PARTICIPATION REQUIREMENT

Any owners/operators proposing to land apply domestic septage at agronomic rates (new or expanding systems) must complete a 30-day public notice in a local newspaper, or other approved public notice mechanism, in the area of the proposed activity.

4.0 LIMITATIONS AND MONITORING REQUIREMENTS

Septage Monitoring & Loading Limitations

1. Septage at the time of application shall be monitored for the following parameters:

Parameter	Value	Measurement Frequency
Arsenic (mg/Kg)	Report	Once/Year
Cadmium (mg/Kg)	Report	Once/Year
Chromium (mg/Kg)	Report	Once/Year
Copper (mg/Kg)	Report	Once/Year
Lead (mg/Kg)	Report	Once/Year
Mercury (mg/Kg)	Report	Once/Year
Nickel (mg/Kg)	Report	Once/Year
Selenium (mg/Kg)	Report	Once/Year
Zinc (mg/Kg)	Report	Once/Year
Total Nitrogen (%)	Report	Once/Year
Ammonia, as N (%)	Report	Once/Year
Total Kjeldahl Nitrogen (%)	Report	Once/Year
Nitrate, as N (%)	Report	Once/Year
Total Volatile Solids Report (%)	Report	Once/Year
Total Solids (%)	Report	Once/Year
Total Suspended Solids (%)	Report	Once/Year
Total Phosphorus, as P (%)	Report	Once/Year
Total Potassium, as K (%)	Report	Once/Year
pH (Standard unit)	Report	See Below ⁽¹⁾

⁽¹⁾ pH shall be measured for each septage load received prior to screening and stabilization, and after screening and stabilization.

2. The application rate shall not exceed 40,000 gallons/acre/year and shall comply with the site specific application rates in the approved Septage Management Plan.

Parameter	Annual Pollutant Loading Rate (lbs/acre/year)	Cumulative Pollutant Loading Rate (lbs/acre)
Arsenic	2.0	41
Cadmium	1.9	39
Chromium	150	3,000
Copper	75	1,500
Lead	15	300
Mercury	0.85	17
Nickel	21	420
Selenium	5.0	100
Zinc	140	2,800

3. Pollutant loading rate on the application sites shall be limited as specified below:

Septage Vector Attraction Reduction

The domestic septage, at the time of application, shall be disposed of by the permittee as specified below:

Operational Standard	Method	Limitations
Vector Attraction Reduction	Injection ⁽¹⁾	 Septage shall be injected below the surface of the land. No significant amount of septage shall be present on the land surface within one hour after the septage is injected.
	Incorporation	Septage shall be incorporated into the soil within 6 hours after septage land application.

⁽¹⁾ Injection may be accomplished by any device(s) that place(s) the septage beneath the soil in a narrow trench at a depth of no greater than eighteen (18) inches and promptly replaces the cover soil in the same action of trenching and placing septage. Excavation of a trench followed by placement of septage and later covering of the trench is not considered injection.

Septage Pathogen Control

The following management practices on all permitted land application sites must be met to comply with pathogen control requirements:

Operational Standard	Limitations
-	 Limitations Food crops with harvested parts that touch the land surface or that develop above the land surface shall not be harvested for fourteen (14) months after domestic septage application. Feed crops or fiber crops shall not be harvested for thirty (30) days after domestic domestic septage application. Food crops with harvested parts below the land surface shall not be harvested for thirty-eight (38) months after domestic septage application. Turf grown on land where domestic septage is applied shall not be harvested for one (1) year after domestic septage application. Animals shall not be allowed to graze on the land for thirty (30) days after the application of domestic septage. Public access shall be restricted for thirty (30) days after the
	 Public access shall be restricted for thirty (30) days after the application of domestic septage. Domestic septage shall not be applied to soils saturated with water or during rain events. Domestic septage shall not be applied to a site that is frozen, flooded, or snow-covered.

Soil Monitoring Requirements

Representative samples shall be collected from each major soil series present within the land application area. The samples shall be analyzed in accordance with the latest edition of <u>Methods of Soil Analysis</u> (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	
Soil Fertility Test ⁽¹⁾	Once/Year	

⁽¹⁾ This testing is to be done in October of each year. The soil fertility testing is to include soil pH, nitrogen, phosphorus, potassium, calcium, magnesium, zinc, and manganese using the Mehlich I extraction procedure.

The permittee may be required, upon written notification by the Division, to sample for additional parameters. These parameters may include, but are not limited to, heavy metals and organic compounds.

Groundwater Limits and Monitoring Requirements

1. Groundwater leaving the land disposal system boundaries must not exceed maximum contaminant levels for drinking water. Groundwater from each groundwater monitoring well identified in the SMP shall be monitored by the permittee for the parameters and at the frequency listed below:

Parameter (units)	Measurement Frequency	Sample Type
Depth to Groundwater (feet)	One Day/Month	Grab
Nitrate, as N (mg/L) ⁽¹⁾	One Day/Month	Grab
pH (standard unit)	One Day/Month	Grab
Specific Conductivity (µmho/cm)	One Day/Month	Grab
Escherichia Coli (#/100mL) ⁽²⁾	One Day/Quarter	Grab

⁽¹⁾ The maximum contaminant level for nitrate nitrogen is 10.0 mg/L, as amended in the Safe Drinking Water Rules and Regulations.

⁽²⁾ The maximum contaminant level for *E. coli* is zero positive samples, as amended in the Safe Drinking Water Rules and Regulations.

- 2. The permittee may be required, upon written notification by the Division, to sample for additional parameters. These parameters may include, but are not limited to, heavy metals and organic compounds.
- 3. The permittee, upon written notification by the Division, may be required to install groundwater monitoring wells. This requirement may apply if monitoring wells were not included in the SMP and also, if the Division determines the existing groundwater monitoring wells are not adequate.
- 4. If groundwater samples indicate contamination, within sixty (60) days of those results, the permittee shall submit to the Division a corrective action plan that will ensure that the primary maximum contaminant levels for drinking water are not exceeded.
- 5. The corrective action plan will be implemented by the permittee immediately upon Division approval.

5.0 **REPORTING AND RECORD KEEPING**

Required analytical results obtained by the permittee shall be summarized on an Operational Monitoring Report (OMR) form. The OMR forms shall be completed quarterly and the summarized monitoring results compiled in an annual report. The annual report shall be signed in accordance with the Georgia Rules and Regulations for Water Quality Control, Chapter 391-3-6-.11(5)(e) and maintained on file at the facility for a minimum of five (5) years or longer if requested by the Division. The permittee shall submit the results of all required monitoring activities to the Division upon request. The Division may require the reporting of additional monitoring results by written notification.

6.0 **PROCEDURES FOR THE FORMULATION OF FINAL DETERMINATION**

1. Comment Period

The Georgia Environmental Protection Division (EPD) proposes to issue a permit to this applicant subject to the effluent limitations and special conditions outlined above. These determinations are tentative.

The permit application, draft permit, and other information are available for review at 2 Martin Luther King Jr. Drive, Suite 1462 East, Atlanta, Georgia 30334, between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday. For additional information, you can contact 404-463-1511.

2. Public Comments

Persons wishing to comment upon or object to the proposed determinations are invited to submit same in writing to the EPD address above, or via e-mail at EPDcomments@dnr.ga.gov within 30 days of the initiation of the public comment period. All comments received prior to that date will be considered in the formulation of final determinations regarding the application. The permit number should be placed on the top of the first page of comments to ensure that your comments will be forwarded to the appropriate staff.

3. Public Hearing

Any applicant, affected state or interstate agency, the Regional Administrator of the U.S. Environmental Protection Agency (EPA) or any other interested agency, person or group of persons may request a public hearing with respect to an LAS permit application if such request is filed within thirty (30) days following the date of the public notice for such application. Such request must indicate the interest of the party filing the request, the reasons why a hearing is requested, and those specific portions of the application or other LAS form or information to be considered at the public hearing.

The Director shall hold a hearing if he determines that there is sufficient public interest in holding such a hearing. If a public hearing is held, notice of same shall be provided at least thirty (30) days in advance of the hearing date.

In the event that a public hearing is held, both oral and written comments will be accepted; however, for the accuracy of the record, written comments are encouraged. The Director or a designee reserves the right to fix reasonable limits on the time allowed for oral statements and such other procedural requirements, as deemed appropriate.

Following a public hearing, the Director, unless it is decided to deny the permit, may make such modifications in the terms and conditions of the proposed permit as may be appropriate and shall issue the permit.

If no public hearing is held, and, after review of the written comments received, the Director determines that a permit should be issued and that the determinations as set forth in the proposed permit are substantially unchanged, the permit will be issued and will become final in the absence of a request for a contested hearing. Notice of issuance or denial will be made available to all interested persons and those persons that submitted written comments to the Director on the proposed permit.

If no public hearing is held, but the Director determines, after a review of the written comments received, that a permit should be issued but that substantial changes in the proposed permit are warranted, public notice of the revised determinations will be given and written comments accepted in the same manner as the initial notice of application was given and written comments accepted pursuant to EPD Rules, Water Quality Control, subparagraph 391-3-6-.11(6). The Director shall provide an opportunity for public hearing on the revised determinations. Such opportunity for public hearing and the issuance or denial of a permit thereafter shall be in accordance with the procedures as are set forth above.

4. Final Determination

At the time that any final permit decision is made, the Director shall issue a response to comments. The issued permit and responses to comments can be found at the following address:

http://epd.georgia.gov/watershed-protection-branch-permit-and-public-comments-clearinghouse-0

5. Contested Hearings

Any person who is aggrieved or adversely affected by the issuance or denial of a permit by the Director of EPD may petition the Director for a hearing if such petition is filed in the office of the Director within thirty (30) days from the date of notice of such permit issuance or denial. Such hearing shall be held in accordance with the EPD Rules, Water Quality Control, subparagraph 391-3-6-.01.

Petitions for a contested hearing must include the following:

- a. The name and address of the petitioner;
- b. The grounds under which petitioner alleges to be aggrieved or adversely affected by the issuance or denial of a permit;
- c. The reason or reasons why petitioner takes issue with the action of the Director;
- d. All other matters asserted by petitioner which are relevant to the action in question.