PART I Authorization to Operate

A. The permittee is authorized to operate a Class V Injection Well at the facility described in the permit application and in the cover page of this permit, in accordance with the provisions set forth in this permit. In the case of this permit, the disposal system is defined as the injection well.

B. The permittee must have routine and daily control of the treatment and effluent disposal system for operation in accordance with the terms of this permit.

C. Only the treated domestic sanitary wastewater described in the original permit application and any subsequent permit application modification issued by the Alabama Department of Environmental Management (ADEM) shall be injected.

D. This permit and the authorization to inject shall remain in effect until the expiration date as stated on the cover page of this permit. If the permittee desires to continue injection past the expiration date of this permit, the permittee shall request a permit reissuance at least 180 days prior to expiration of this permit.

PART II Construction Requirements

A. Injection Well Requirements

1. The permittee shall inject only domestic sanitary wastewater that has been treated by passing through a wastewater treatment system. The treatment system shall be adequate to meet the discharge limitations contained in Appendix A.

2. Injected effluent shall not surface from the effluent disposal system.

3. The permittee shall maintain a means of sampling the wastewater after treatment and prior to injection.

4. The disposal field areas shall be the areas identified in the permit application.

5. The disposal field areas shall be maintained so that standing or ponded water resulting from precipitation does not occur.

6. Adequate select soil fill material shall be maintained in areas where shallow subsurface soil restrictive features might limit effluent absorption.

7. The permittee shall maintain a thriving vegetated cover throughout the year and must overseed the disposal field area when necessary to maintain a cover crop.

8. All treatment and disposal system components and equipment shall be installed, monitored, and maintained in accordance with manufacturers' directions.

9. The loading rate of treated wastewater shall not exceed the design loading rate as specified in the permit application.

B. Modifications

Approval by ADEM shall be obtained prior to modification of any injection well or supporting surface. Modification shall mean any action that will change the configuration of the well beneath the surface, the methods of monitoring injection, or will result in injection of a fluid not specifically authorized by this permit.

PART III Monitoring and Operating Requirements

A. Injection Fluid

1. The permittee shall not inject any substance that is defined as hazardous or toxic by Federal or State laws or regulations or any substance not identified in the application for this permit. The proposed use of substances other than those identified in the permit application must be reviewed and approved by ADEM prior to use.

2. The daily volume of injected wastewater shall not exceed the design flow of 44,000 gallons per day, in accordance with the plans and specifications submitted with the permit application.

3. The rate of wastewater injection into the effluent disposal system shall not exceed the soil infiltration rate and the requirements of Part II.A.9 of this permit.

4. The permittee shall monitor the fluid to be injected as specified in Appendix A of this permit.

5. The permittee shall not exceed the limits established in Appendix A of this permit.

6. ADEM may change the sampling requirements if the sampling data indicates a need to do so.

B. Groundwater Monitoring Requirements

1. The permittee shall maintain monitoring wells sufficient to monitor groundwater quality immediately hydraulically down gradient of the disposal fields.

2. Each monitoring well shall include the following.

   a) The permittee shall screen each monitoring well in the uppermost saturated zone. The well screen shall be of sufficient length to account for seasonal fluctuations in the water table and affects of the subsurface effluent disposal system.

   b) The annulus around each well casing above the well screen shall be sealed with bentonite to prevent the passage of surface water into the injection zone.

   c) The surface installation shall include a concrete protective pad around the base of the well, a metal protective casing, and a locking cap.

3. All surface water shall be routed away from the monitoring well's surface installation.

4. The permittee shall monitor the groundwater as specified in Appendix B of this permit.

5. The permittee shall not exceed the limits established in Appendix B of this permit.

6. ADEM may change the sampling requirements if the sampling data indicates a need to do so.

C. Test Procedures

Test procedures for the analysis of pollutants shall conform to 40 CFR Part 136 of the Federal Register and guidelines published pursuant to Section 304(h) of the Federal Water Pollution Control Act (FWPCA). If more than one method of analysis of a substance is approved for use, a method having a detection limit lower than the permit limit shall be used. If the detection limit of all methods is higher than the permit limit, the method having the lowest detection limit shall be used and a report of less than detection limit shall constitute compliance. However, should the Environmental Protection Agency (EPA) approve a method with a lower detection limit during the term of this permit the permittee shall use the newly approved method.

D. Certified Operation

If required by ADEM, the wastewater treatment plant shall only be operated by a duly certified operator who meets the requirements specified in ADEM Administrative Code, Rule 335-10-1.

E. Operation

1. The injection well(s) operated under this permit shall function properly and wastewater shall not surface. Should the injection well fail to function properly, the permittee shall take immediate corrective action, to include cessation of injection, as required by ADEM.

2. The permittee shall adopt the following best management practices:

a) Properly operate and maintain in good working order all treatment or control facilities or systems (and related appurtenances) installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the terms and conditions of this permit.

b) Comply with Federal, State, and local solid and liquid waste disposal regulations.

c) Solids, sludges, filter backwash, or any other pollutant or other waste removed in the course of treatment or control of wastewaters shall be disposed in a manner that complies with all applicable ADEM rules and regulations.

d) Upon the loss or failure of any treatment facilities, including but not limited to the loss or failure of the primary source of power of the treatment facility, the permittee shall, where necessary to maintain compliance with the discharge limitations specified in Appendix A, of this permit, or any other terms or conditions of this permit, cease, reduce or otherwise control all discharges until

treatment is restored. If control of discharges during loss or failure of the primary source of power is to be accomplished by means of alternate power sources, standby generators or retention of inadequately treated effluent, the permittee must furnish to ADEM prior to the initiation of injection, a certification that such control mechanisms have been installed.

3. Bypass

a) A bypass of the permitted injection well is prohibited.

b) A bypass of treatment facilities is not prohibited and need not meet the discharge limitations specified in Appendix A of this permit if:

(i) It is unavoidable to prevent loss of life, personal injury, or severe property damage;

(ii) There are no feasible alternatives to the bypass, such as use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime (note: this condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance); and

(iii) The permittee submits a written request for authorization to bypass to ADEM at least ten (10) days prior to the anticipated bypass (if possible), the permittee is granted such authorization, and the permittee complies with any conditions imposed by ADEM to minimize any adverse impact on human health or the environment from the bypass.

F. Monitoring Equipment and Instrumentation

All equipment and instrumentation used to determine compliance with the requirements of this permit shall be installed, maintained, and calibrated in accordance with the manufacturer's instructions or, in the absence of manufacturer's instructions, in accordance with accepted practices. At a minimum, flow measurement devices shall be calibrated at least once every 12 months.

PART IV Records, Reports, & Submittals

A. Records

1. The permittee shall record the information listed below for all monitoring activities:

a) The date, exact place, and time of sampling or sampling measurement(s);

b) The name of individual(s) who perform the sampling or measurement(s);

c) The date(s) analyses were performed;

d) The name of the individual(s) who performed the analyses;

e) The analytical or technical methods used;

f) The results of each analysis performed; and

g) The completed chain-of-custody forms for all samples collected.

2. The permittee shall retain all records concerning the data used to complete the permit application, the operation of the wells, and the nature and composition of pollutants injected; to include records of the calibration of instruments, meters and gauges, quality control records, and recordings from continuous monitoring instrumentation for the previous three years of operation.

3. When requested by ADEM, the permittee shall deliver to ADEM copies of any of the records maintained in accordance with this permit.

B. Reports

1. The permittee shall submit monitoring reports not later than 28 days after each reporting period, whether a discharge occurs from the treatment system or not. The monitoring reports shall include:

a) The date, exact place, and time of sampling or sampling measurement(s);

b) The results of each analysis performed.

2. If applicable, the permittee shall submit sludge inventory data not later than 30 days from the effective date of the permit which at a minimum contains the following information:

a) Type of sludge stabilization/digestion method, daily or annual sludge production (dry weight basis), and ultimate sludge disposal practice(s).

b) The permittee shall give prior notice to ADEM of at least 30 days of any change planned in the permittee's sludge disposal practices.

3. The permittee shall report to ADEM any of the following:

a) Any planned action which will change the use of the injection well, will result in injection of a fluid different from that authorized by this permit, will result in injection of wastewater at a rate greater than the design flow rate, will change the method of operations of the injection well, or will change the method of the monitoring of well operations or injected fluids. No such changes shall be implemented unless or until a permit modification has been received.

b) Any planned transfer of ownership of all or part of the permitted facility.

c) Any relevant facts of which the permittee becomes aware which should have been submitted in a permit application and any corrections to data previously submitted in a permit application.

4. Within 120 days of the effective date of this Permit, the Permittee shall develop a Sanitary Sewer Overflow (SSO) Response Plan to establish timely and effective methods for responding to notifiable sanitary sewer overflows. A notifiable sanitary sewer overflow is defined as an overflow, spill, release or diversion of wastewater from a sanitary sewer system that: (a) reaches a surface water of the State; or (b) may imminently and substantially endanger human health based on the potential for public exposure including but not limited to close proximity to public or private water supply wells or in areas where human contact would be likely to occur. The Plan shall include each of the following:

   a) Procedures to notify the Department, the local county health department, and any other affected entity such as public water systems, within 24- hours of becoming aware of any sanitary sewer overflow (SSO) or other unpermitted discharge to the surface from any part of the sanitary sewer collection system, treatment system or injection well;

   b) Procedures to notify the public, such as distributing flyers to nearby residents; posting signs at the location of the SSO and where the SSO enters a water of the state; posting signs at a central public location; posting signs at fishing piers, boat launches, parks, swimming waterbodies, etc.; posting information on websites and/or social media; and notifying local print or radio and broadcast media;

   c) Information to be provided in public notifications (e.g., identification that an SSO has occurred, date, duration if known, estimated volume if known, location of the SSO by street address or other appropriate method, initial destination of the SSO).

5. The Department is utilizing a web-based electronic environmental (E2) reporting system for notification and submittal of SSO reports. **If the Permittee is not already participating in the E2 Reporting System for SSO reports, the Permittee must apply for participation in the system within 30 days of coverage under this permit unless the Permittee submits in writing valid justification as to why it cannot participate and the Department approves in writing utilization of verbal notifications and hard copy SSO report submittals.** Once the Permittee is enrolled in the E2 Reporting System for SSO reports, the Permittee must utilize the system for notification and submittal of all SSO reports unless otherwise allowed by this permit. The Permittee shall include in the SSO reports the information requested by ADEM Form 415. In addition, the Permittee shall include the latitude and longitude of the SSO in the report except when the SSO is a result of an extreme weather event (e.g., hurricane). To participate in the E2 Reporting System for SSO reports, the Permittee Participation Package may be downloaded online at **https://e2.adem.alabama.gov/npdes**. If the E2 Reporting System is down (i.e., electronic submittal of SSO data cannot be completed due to technical problems originating with the Department's system), the Permittee is not relieved of its obligation to notify the Department or submit SSO reports to the Department by the required submittal date, and the Permittee shall submit the data in an alternate manner and format acceptable to the Department. Preapproved alternate acceptable methods include verbal reports, reports submitted via the SSO hotline, or reports submitted via fax, e-mail, mail, or hand-delivery such that they are received by the required reporting date. Within five calendar days of the E2 Reporting System resuming operation, the Permittee shall enter the data into the E2 Reporting System, unless an alternate timeframe is approved by the Department. For any alternate notification, records of the date, time, notification method, and person submitting the notification should be maintained by the Permittee. If a Permittee is allowed to submit SSO reports via an alternate method, the SSO report must be in a format approved by the Department and must be legible.

6. **If the Permittee is not already participating in the Department's web-based electronic environmental (E2) DMR reporting system, the Permittee must enroll and participate within 180 days of the effective date of this permit.** Once the permittee is enrolled in the E2 DMR system, the permittee must utilize the system for the submittal of DMRs. The Permittee Participation Package may be downloaded online at **https://e2.adem.alabama.gov/npdes**. If the E2 DMR system is down due to technical problems originating with the Department's system, the permittee is not relieved of the obligation to submit DMR data by the required submittal date via faxing, e-mailing, mailing, or hand-delivery of data such that they are received by the required reporting date.

7. Studies, engineering reports, plans and specifications, plugging and abandonment plans, logging reports, and other technical documents submitted to comply with this permit shall be prepared by or under the supervision of qualified persons defined by Rule 6-8-.13 of the Underground Injection Control (UIC) Regulations of ADEM.

PART V Plugging and Abandonment

The permittee shall perform any abandonment and closure actions that may be required by ADEM to remove a threat to groundwater quality or to the health of persons.

PART VI Permit Modification, Revocation, Suspension, and Termination

A. ADEM may impose emergency additional conditions to this permit when necessary to protect waters of the state from pollution. These conditions may include suspension of the permit to inject. Any such condition shall remain in effect until the permit is modified, revoked, suspended or terminated in accordance with the UIC Regulations of ADEM.

B. Non-emergency permit modification, revocation, suspension, and termination actions shall be accomplished in accordance with ADEM Administrative Rule 335-6-8.

PART VII General Provisions

A. The permittee shall comply with all provisions of the UIC Regulations of ADEM and shall comply with all provisions of this permit and shall reduce or halt injection if needed to maintain compliance with the permit and regulations.

B. The permittee shall comply with all applicable Federal and State hazardous waste management regulations.

C. The permittee shall allow members of the ADEM staff to:

1. Access property and records of the permittee for purposes of inspection.

2. Collect samples of the injected fluids, process and wastewater streams associated with the permitted injection wells.

3. Collect samples from monitoring wells.

4. Obtain copies of records upon request.

D. The permittee shall immediately take all reasonable steps to minimize or correct any adverse environmental impact resulting from the operation of the permitted injection wells.

E. This permit does not convey any property rights of any sort, or any exclusive privilege.

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

G. Any noncompliance with this permit constitutes a violation of the Alabama Water Pollution Control Act (AWPCA) and/or the UIC regulations and is grounds for enforcement action such as permit termination, revocation, modification; or denial of a permit renewal application.

H. Injection to waters of the state, which in this case is groundwater, in accordance with this permit shall not result in the exceedance of a Maximum Contaminant Level (MCL) as established by the Environmental Protection Agency. Injection to groundwater, in accordance with this permit shall not result in a violation of a surface water quality standard.

I. All provisions of ADEM Code Rule 335-6-8.12 are incorporated as terms and conditions of this permit by reference.

Appendix A

Effluent from the treatment system shall be limited and monitored prior to flowing into the effluent disposal system by the permittee as specified below:

EFFLUENT CHARACTERISTIC	DISCHARGE LIMITATIONS	MONITORING REQUIREMENTS		
	Monthly (mg/L)	FREQUENCY	SAMPLE TYPE	LOCATION
Biochemical Oxygen Demand (BOD5)	Report	Monthly	Grab	Effluent
Total Suspended Solids (TSS)	Report	Monthly	Grab	Effluent
Total Kjeldahl Nitrogen (TKN)	Report	Monthly	Grab	Effluent
Fecal Coliform colonies/100ml	Report or 200*	Monthly	Grab	Effluent
	MAXIMUM			
Flow (gallons per day)	44,000	Daily	Continuous	Effluent
pH	Report	Monthly	Grab	Effluent

* Effluent Fecal Limitation applies where public access to disposal system is not restricted.

Appendix B

The groundwater shall be monitored and limited by the permittee as specified below:

GROUNDWATER CHARACTERISTIC	UNITS	GROUNDWATER LIMITS	MONITORING REQUIREMENTS	
			FREQUENCY	SAMPLE TYPE
Total Nitrate	mg/l	10	Quarterly	Grab
pH	Standard	Report	Quarterly	Grab

ADEM Permit Rationale

Date: February 5, 2020

Prepared by: Jessica Spence

Responsible Official: Mike Oliver

Permittee Name: Harvest Monrovia Water Sewer and Fire Protection Authority
9131 Wall Triana Hwy
Harvest, AL 35749

Facility Name: Summerfield WWTP

Location: 119 Summer Trace Lane
Madison, Madison County, Alabama
Lat:N 34.794731/Long:W -86.731014
Town 3S, Range 2W, Section 10

UIC Permit Number ALSI9945730

Draft Permit is: Reissuance due to expiration

Injection Description: Treated domestic sanitary effluent from a wastewater treatment facility.

Discussion: Standard permit drafted.

1. No hazardous injection
2. Sampling point required
3. Monitoring well must be installed and sampled
4. Discharge must be sampled in accordance with Appendix A and B
5. Results must be submitted in a timely manner
6. BMPs included in permit
7. The effluent disposal area must be maintained to prevent the occurrence of standing water resulting from precipitation or injection of treated wastewater
8. The permittee shall maintain a thriving vegetated cover throughout the year and must overseed the disposal area when necessary to maintain a cover crop.
9. All subsurface effluent disposal system components and equipment must be installed, monitored, and maintained in accordance with manufactures' directions
10. The loading rate of treated wastewater shall not exceed the design loading rate
11. E2 DMR Requirement included in permit
12. ESSO requirement included in permit