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 drainage field is defined as the injection well.
- B. Only the wastewater described in the original permit application or any subsequent permit application approved by the Alabama Department of Environmental Management (ADEM) shall be injected.
- C. This permit and the authorization to inject shall remain in effect until the expiration date 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 maintain a grit separation device.
 - 2. The permittee shall maintain an oil separation device.
 - 3. The permittee shall inject only wastewater that has been treated by passing through a grit separation device and an oil separation device.
 - 4. The permittee shall provide a means of sampling the wastewater being injected after treatment and prior to injection.

B. Monitoring Well Construction

- 1. The permittee shall maintain a monitoring well down gradient of the injection field for the purpose of monitoring groundwater quality.
- 2. The monitoring well should include the following.
 - a) The permittee shall screen the 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 injection field.
 - b) The annulus around the well casing above the well screen shall be sealed with bentonite to prevent the passage of surface water or injection field water.
 - 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.

C. 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 permittee shall monitor the fluid to be injected as specified in Appendix A of this permit.
- 3. The permittee shall not exceed the limits established in Appendix A of this permit.
- 4. ADEM may change the sampling requirements if the sampling data indicates a need to do so.

B. Monitoring Well

- 1. The permittee shall sample the monitoring well in accordance with Appendix B of this permit. The permittee is required to sample the well prior to injection and in accordance with the frequency indicated in Appendix B of this permit.
- 2. The permittee shall not exceed the limits established in Appendix B of this permit.
- 3. The permittee shall purge the monitoring well prior to sampling.
- 4. ADEM may change the sampling requirements if the sampling data indicates a need to do so.

C. Operation

- 1. The drainage field operated under this permit shall function properly and wastewater shall not surface or saturate the uppermost soil layer. Should the drainage field fail to function properly, the permittee shall take corrective action, to include cessation of injection, as required by ADEM.
- 2. The permittee shall post the following notice at the facility for which this permit is issued:

"The use of any organic solvents for the removal of grease is prohibited and violates the Alabama Department of Environmental Management's (ADEM) Underground Injection Control Rules and Regulations. Only commonly used soaps and detergents may be used. The washing of engines is prohibited at this facility. Should there be any questions, call ADEM at (334) 270-5655."

- 3. The permittee shall adopt the following best management practices:
 - a) Inspect terminal equipment, tanks, and chemical containers regularly for leaks.
 - b) Calibrate treatment and application equipment regularly.
 - c) Process pit dirt to separate solids, contaminants, and wastewater.
 - d) Dry dirt in order to reduce waste shipped to special liquid waste landfills.
 - e) Hire a licensed transporter to dispose of the pit dirt and wastewater treatment residuals.
 - f) Comply with Federal, State, and local solids and liquid waste disposal regulations.

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; until at least three years after the closure of well(s).
- 3. When requested by ADEM, the permittee shall deliver to the ADEM copies of any of the records maintained in accordance with this permit.

B. Reports

1. The permittee must apply for participation in the E2 DMR system within 180 days of the effective date of this permit unless valid justification as to why they cannot participate is submitted in writing. After 180 days, hard copy DMRs may be used only with written approval from ADEM.

- 2. The permittee shall submit not later than 28 days after the reporting period, a monitoring report which shall include:
 - a) The date and exact place of sampling;
 - b) The results of each analysis performed.
- 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 change the method of operations of any injection well, or will change the method of the monitoring of well operations or injected fluids.
 - 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. Other Submittals

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 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 which is caused by the injection activity.

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 and 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 Code 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 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 any 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 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 Admin. Code Rule 335-6-8-.12 are incorporated as terms and conditions of this permit by reference.

APPENDIX A

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

| EFFLUENT CHARACTERISTIC | <u>UNITS</u> | DISCHARGE LIMITS | MONITORING FREQUENCY | REQUIREMENTS SAMPLE TYPE |
|------------------------------|--------------|------------------|-------------------------|-----------------------------|
| Total Lead Total Aluminum | mg/l mg/l | 0.015 Monitor | Annually Annually | Grab Grab |
| Oil and Grease | mg/l | 15 | Annually | Grab |

APPENDIX B

The down gradient monitoring well shall be sampled prior to startup and then as specified below: The monitoring well shall be limited and monitored by the permittee as specified below:

| GROUNDWATER | <u>UNITS</u> | <u>GROUNDWATER</u> | MONITORING REQUIREMENTS | |
|-----------------------------|--------------|--------------------|-------------------------|-------------|
| CHARACTERISTICS | | <u>LIMITS</u> | FREQUENCY | SAMPLE TYPE |
| Total Lead | ug/l | 15 * | Annually | Grab |
| Total Chromium | ug/l | 100 * | Annually | Grab |
| Total Aluminum | ug/l | Monitor | Annually | Grab |
| Benzene | ug/l | 5 | Annually | Grab |
| Carbon Tetrachloride | ug/l | 5 | Annually | Grab |
| 1, 2 -Dichloroethane | ug/l | 5 | Annually | Grab |
| Trichloroethylene | ug/l | 5 | Annually | Grab |
| 1, 4- Dichlorobenzene | ug/l | 75 | Annually | Grab |
| 1, 1 -Dichloroethylene | ug/l | 7 | Annually | Grab |
| 1, 1, 1- Trichloroethane | ug/l | 200 | Annually | Grab |
| Vinyl chloride | ug/l | 2 | Annually | Grab |
| cis-1,2-Dichlorethylene | ug/l | 70 | Annually | Grab |
| 1, 2-Dichloropropane | ug/l | 5 | Annually | Grab |
| Ethylbezene | ug/l | 700 | Annually | Grab |
| Chlorobenzene | ug/l | 100 | Annually | Grab |
| 1,2 -Dichlorobenzene | ug/l | 600 | Annually | Grab |
| Styrene | ug/l | 100 | Annually | Grab |
| Tetrachloroethylene | ug/l | 5 | Annually | Grab |
| Toluene | ug/l | 1,000 | Annually | Grab |
| trans- 1,2-Dichloroethylene | ug/l | 100 | Annually | Grab |
| Xylene (Total) | ug/l | 10,000 | Annually | Grab |
| Dichloromethane | ug/l | 5 | Annually | Grab |
| 1, 2, 4-Trichlorobenzene | ug/l | 70 | Annually | Grab |
| 1, 1, 2-Trichloroethane | ug/l | 5 | Annually | Grab |

If concentrations for any of the above chemicals exceed the groundwater limit, the well should be resampled and the results submitted to the Department within sixty (60) days of the sampling date for which limits were exceeded.

The Department reserves the right to modify the permit requirements for metals based on monitoring results.

^{*} If metal concentrations exceed the groundwater limit, the well should be resampled for both total and dissolved concentrations with careful attention to proper sampling techniques to minimize sediment in the sample.

ADEM Permit Rationale

Date: September 16, 2019

Prepared by: Jessica Spence

Permittee Name: Horace King

Facility Name: King Car Wash

Location: 14505 County Line Road (CR 48)

County Roads 48

Muscle Shoals, Colbert County, Alabama Lat:N 34.784013/Long:W -87.529083 Town 3S, Range 10W, Section 24

UIC Permit Number ALSI9917521

Draft Permit is: Reissuance due to expiration

Injection Description: Wastewater resulting from the operation of a self-service car

wash.

Discussion: Standard permit drafted.

1. No hazardous injection

2. Sampling point required

3. Discharge must be sampled annually

- 4. Monitoring well must be sampled annually
- 5. Results must be submitted in a timely manner
- 6. A monitoring well must be constructed and sampled prior to injection
- 7. BMP's included in permit
- 8. E2 Participation Requirement