STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES
Memphis Environmental Field Office
8383 Wolf Lake Drive
Bartlett, TN 38133
Phone 901-371-3000 Statewide 1-888-891-8332 Fax 901-371-3170

October 10, 2019

Mr. David A. Schmidt
Vice President
ATC Group Services, LLC
3144 Stage Post Drive, Suite 112
Bartlett, TN 38133

Re: Compliance Evaluation Inspection
Rhea's Car Care Groundwater Remedial Site
NPDES Permit No. TNG830083
Fayette County

Dear Mr. Schmidt:

On Monday, October 7, 2019, Mr. Eddy Bouzeid with the Division of Water Resources, Memphis Environmental Field Office (DWR/MEFO), conducted a Compliance Evaluation Inspection (CEI) of the Rhea's Car Care groundwater remedial site at 17155 Highway 64 in Somerville, Fayette County. Upon arrival at the facility, Mr. Bouzeid met with Mr. Schmidt and stated that the purpose of the inspection was to evaluate the facility's compliance with its General National Pollutant Discharge Elimination System (NPDES). This was accomplished by reviewing the facility's self-monitoring records and reports and subsequently conducting an inspection of the facility. Attached you will find the Compliance Evaluation Inspection (CEI) Report and corresponding photo documentation which summarize the findings of the CEI. The following are items to note regarding the inspection:

- In April 2019, the operational status of the Correctional Action Systems (CAS) at the site was altered. The dual Phase Extraction (DPE) systems was deactivated and replaced by BOS 200, a new remedial technology. The new technology involves the injection of microorganisms to accelerate biodegradation of organic compounds. No discharge of effluent is associated with the new system.
- The Rhea's Car Care DPE system, before it was deactivated in April 2019, had one exceedance of its permit limits for the period from October 2018 through June 2019. TSS was exceeded during the quarterly monitoring period of October-December 2018.
- The system should continue reporting the facility's Discharge Monitoring Reports via NetDMR even though the DPE systems had been deactivated. Since there is no discharge associated with the new technology, a "No Discharge" will be the appropriate reporting via NetDMR.

The Division appreciates M chmidt cooperation and assistance d ng the inspection and the facility's continued efforts to comply with its General NPDES permit requirements. If you have any questions or comments with regard to the inspection please contact me at (901) 371-3023 or eddy.bouzeid@tn.gov.

Sincerely,

Eddy Bouzeid
Environmental Protection Specialist
Division of Water Resources
Memphis Environmental Field Office

cc: TDEC/DWR/MEFO – File

ec: Jeff Phillips – Division of Underground Storage Tanks - MEFO

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
Division of Water Resources
Memphis Environmental Field Office, 8383 Wolf Lake Drive, Bartlett, TN 38133
1-888-891-8332 (TDEC)

Compliance Inspection for General NPDES Permit for Discharges of Treated Groundwater Associated with Underground Storage Tank Remediation

Facility Name: Rhea's Car Care	**NPDES Tracking Number:** TNG830083
Permit Effective Date: October 1, 2018	**Permit Expiration Date:** September 30, 2023
Date and Time of Inspection: 10/7/2019, 7:45 AM	**Inspector Name:** Eddy Bouzeid

Official Contact Person Name: Mr. David A. Schmidt, Vice President ATC Group Services, LLC	
Address: 3144 Stage Post Drive, Suite 112, Bartlett, TN 38133	**Phone Number:** (901) 230-8287
	Email: david.schmidt@atcgs.com

Summary of Findings and Comments

On Monday, October 7, 2019, Mr. Eddy Bouzeid with the Division of Water Resources, Memphis Environmental Field Office (DWR/MEFO), conducted a Compliance Evaluation Inspection (CEI) at the Rhea's Car Care facility located at 17155 Highway 64 in Somerville, Fayette County, Tennessee. Mr. Bouzeid met with David Schmidt, Vice President ATC Group Services, LLC, and reviewed the site's monitoring record and its self-monitoring program. Afterwards, Mr. Bouzeid and Mr. Schmidt inspected the onsite treatment system. The following is a summary of the findings and observations during and after the inspection.

I. Permit

The Rhea's Car Care is covered under the General National Pollutant Discharge Elimination System (NPDES) permit for discharges of treated groundwater associated with underground storage tank remediation and has been assigned the tracking number TNG830083. The effective date of the permit was October 1, 2018, with an expiration date of September 30, 2023.

The General NPDES permit authorizes the facility to discharge treated groundwater into an unnamed tributary of the Loosahatchie River via Outfall 001.

The Rhea's Car Care treatment system discharge effluent characteristic and monitoring requirements are as follows:

- Flow – Instantaneous
- Benzene – Quarterly Grab
- Ethyl Benzene - Quarterly Grab
- Toluene - Quarterly Grab
- Xylene - Quarterly Grab
- Lead - Quarterly Grab
- Total Suspended Solids (TSS) – Quarterly Grab
- Floating material, Color, Foam, and oil Sheen – Visual
- pH - Quarterly Grab
- IC25 – Once in the First 180 Days from the Effective Date of the Permit.

II. Records/Repor

Site records and reports for the treatment system were observed and appeared to be maintained as required by the NPDES permit. Sampling and analytical data, including flow records and Discharge Monitoring Reports (DMRs) for the period from October 2018 through September 2019 were reviewed and appeared to be complete. As of the date of the inspection, the Rhea's Car Care treatment system was reporting their DMRs via NetDMR successfully.

III. Facility Site Review

Rhea's Car Care operated two gasoline underground storage tank (UST) remediation systems onsite (North System and South System) known as a Dual Phase Extraction (DPE) systems (photo 1). In order to treat the area of contamination at the site, two systems were needed. The systems work simultaneous and each has a limit on how much water can be pumped and treated. The ground water and vapors extracted by each system were treated by using vacuum pressure, an oil water separator, and an air stripper. Once treated, the effluent from the systems was discharged into an unnamed tributary to the Loosahatchie River via Outfall 001.

In the spring of 2018, and prior to the expiration of the previous General NPDES permit (May 2018), Mr. David Willoughby, owner of Rhea's Car Care, approached the Division of UST and requested that the Division take over the remediation work at the site.

On September 5, 2018, ATC Group Services, LLC, a state contractor for the Division of UST, submitted a renewal application for the Rhea's Car Care remedial work. As mentioned earlier in the report, the General NPDES permit was renewed and reissued to ATC Group Services on October 1, 2018. ATC Group Services operated and maintained the DPE systems from October 2018 through April 2019.

In April 2019, the operational status of the Corrective Action Systems (CAS) at the site was altered. The DPE systems was ceased and replaced by BOS 200 injection as an alternative remedial technology. The BOS 200 is a Trap & Treat in situ remediation technology (versus the DPE which is a pump and treat) specifically designed to degrade petroleum hydrocarbons, related solvents, and oils. There is no discharge of effluent associated with the new system (BOS 200 injection). BOS 200 Trap & Treat system involves the injection of microorganisms to accelerate biodegradation of various organic compounds in the contaminated groundwater.

According to Mr. Schmidt, the BOS 200 injection was completed at the facility during May 2019. The North and South CAS were deactivated on May 7, 2019 (photo 1), prior to the commencement of the BOS 200 injection event, and the combined discharge from the CAS units was effectively eliminated on May 7, 2019. However, the apparatus for the DPE systems will remain at the facility in the event it needs to be reactivated.

Also according to Mr. Schmidt, the IC25 biomonitoring was not conducted during the first 180 days from the effective date of the permit due to the plan to deactivate the CAS units.

The Rhea's Car Care treatment system, before it was deactivated, had one exceedance of its permit limits for the period from October 2018 through September 2019. TSS was exceeded during the October – December 2018 quarter (Table 1).

Table 1

Monitoring Period	Parameter	Limits	Results
Oct – Dec 2018	TSS	40 mg/l	80 mg/l

IV. Effluent/Receiving Waters

At the time of the inspection, there was no discharge from the CAS units (photo 2). The sign was placed at the outfall (photo 3) and the information on the sign was consistent with the requirements of the permit.

V. Flow Measurement

Before the CAS units were deactivated, a flow meter on each of the treatment systems was used to measure the flow rate. A flow-weighted average was calculated based upon the measured flow rates from the individual systems.

VI. Self-Compliance Program

According to Mr. Schmidt, when the CAS system was in operation, ATC Group Services technician collected the effluent grab samples for analysis. All analytical work was conducted at Waypoint laboratory in Memphis.

pH is field parameter routinely measured by the lab technician at the time of sample collection. Calibration log for the pH meter was available for review.

A review of the chain-of custodies revealed that the samples shipped to Waypoint Laboratory in a cooler were maintained below the 6 degrees Celsius as required by 40 CFR, Part 136.

VII. Laboratory

All analytical work was conducted at Waypoint Laboratory in Memphis.

VIII. Operations and Maintenance

The CAS units were deactivated on May 7, 2019, and there has been no discharge from the units. There is no discharge associated with the BOS 200 injection system.

Photo Document

Facility Name:	Site Location:	Tracking No.:
Rhea's Car Care	Somerville, TN	TNG830083

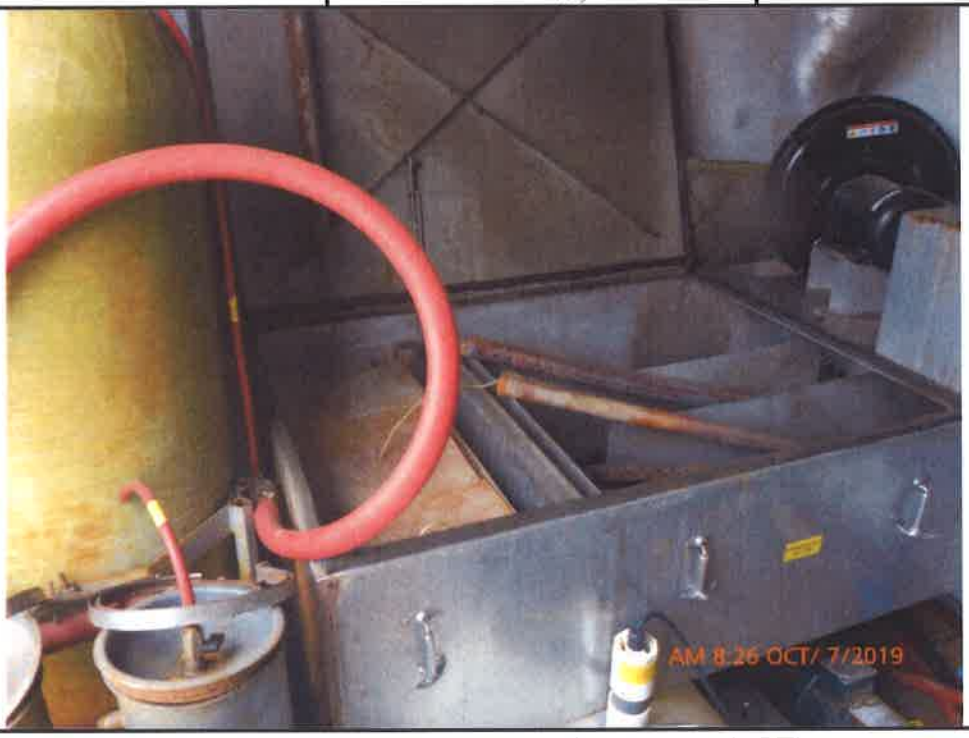

Photo 1. View of the North Deactivated Dual Phase Extraction System (DPE).

Facility Name:	Site Location:	Tracking No.:
Rhea's Car Care	Somerville, TN	TNG830083

Map 2. There was no discharge from the DPE system at the time of the inspection due to its deactivation.

Facility Name:	Site Location:	Tracking No.:
Rhea's Car Care	Somerville, TN	TNG830083

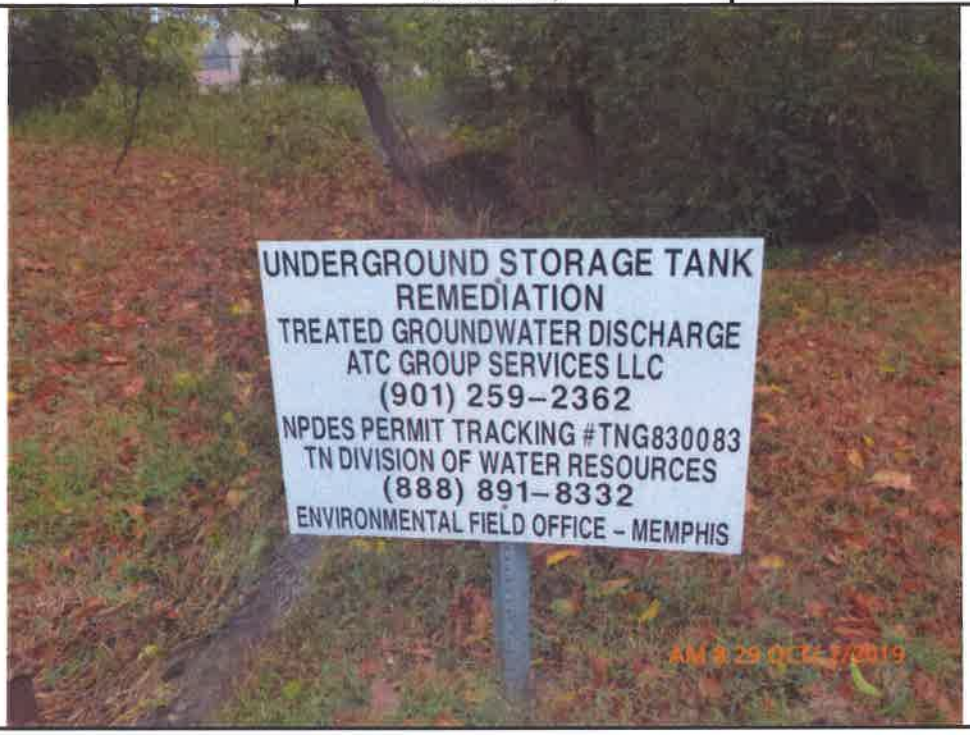

Photo 3. View of the sign at the outfall. The information on the sign is consistent with the requirements of the permit.