

**MISSOURI**  
DEPARTMENT OF  
NATURAL RESOURCES

Michael L. Parson  
Governor

Dru Buntin  
Director

November 13, 2023

Ameren Missouri-Huster Substation  
ATTN: Lisa Meyer, Consulting Environmental Scientist  
P.O. Box 66149, MC-602  
St. Louis, MO 63166

**FINDING OF COMPLIANCE**

Dear Lisa Meyer:

Staff from the Department of Natural Resources conducted an inspection on November 3, 2023 of the Huster Substation located at 3800 Huster Road, St. Charles in St. Charles County. The entity operates under the authority of Missouri State Operating Permit MO0137642.

Compliance with the Missouri Clean Water Law, the Missouri Clean Water Commission Regulations, and Missouri State Operating Permit MO0137642 was evaluated. The entity was found to be **in compliance** based upon the observations made at the time of the evaluation.

The enclosed report describes the findings and may provide important recommendations, to ensure continued compliance. Your cooperation in implementing those recommendations will be appreciated.

If you have any questions or would like to schedule a time to meet with a Department team member to discuss compliance requirements, please contact Christopher Maher by mail at the Missouri Department of Natural Resources, St. Louis Regional Office, 7545 South Lindbergh Blvd., Suite 210, St. Louis, Missouri 63125; by phone at (314) 416-2960; or by email at [dnrsro.wpc@dnr.mo.gov](mailto:dnrsro.wpc@dnr.mo.gov).

Sincerely,

ST. LOUIS REGIONAL OFFICE

Josh Willison  
Environmental Supervisor

JLW/CCM/jws

Enclosures

**Missouri Department of Natural Resources**  
**St. Louis Regional Office**  
**Report of Inspection**  
**Huster Substation**  
**3800 Huster Road, St. Charles, St. Charles County**  
**MO0137642**  
**November 13, 2023**

## **Introduction**

Pursuant to Section 644.026.1 of the Missouri Clean Water Law, I, Christopher Maher of the Missouri Department of Natural Resources (Department) St. Louis Regional Office (SLRO) conducted a routine water pollution compliance inspection of Huster Substation located at 3800 Huster Road, St. Charles, St. Charles County, Missouri on November 3, 2023.

Participants included:

### Ameren Missouri

Lisa Meyer	Manager of Environmental
Annie Muehlfarth	Environmental Engineer

### Loureiro Engineering Associates, Inc.

Reggie Gardner	Operations Manager
Troy Eppinger	Project Manager

### MoDNR

Christopher Maher	Environmental Program Analyst	<a href="mailto:chris.maher@dnr.mo.gov">chris.maher@dnr.mo.gov</a>
Jonathan Clark	Environmental Program Specialist	<a href="mailto:jonathan.clark@dnr.mo.gov">jonathan.clark@dnr.mo.gov</a>

This water pollution control inspection was conducted to determine the facility's compliance with the Missouri Clean Water Law, the Missouri Clean Water Commission Regulations, and the Missouri State Operating Permit (permit) MO0137642. This report presents the findings and observations made during the compliance inspection, including file review, site visits, and communications with entity representatives.

## **Entity Description and History**

As part of the inspection, I reviewed the files for Huster Substation, including previous inspection reports, correspondence, and the permit conditions of Missouri State Operating Permit MO0137642, to familiarize myself with the requirements specific to this facility.

Huster Substation's Missouri State Operating Permit, MO0137642, was last issued on October 1, 2019, and expires on September 30, 2024. This permit sets forth effluent limitations, monitoring requirements, and permit conditions, both standard and specific, that the permittee is to follow.

The facility consists of a groundwater containment system (GCS) with an air stripper used to treat contaminated groundwater that is the result of past contamination from chlorinated volatile organic compounds (CVOCs). Treatment is intended to address CVOCs, including cis-1,2-dechloroethylene, vinyl chloride, trichloroethylene, and tetrachloroethylene (also known as perchloroethylene (PCE)), in accordance with an Administrative Order of Consent (AOC) with the United State Environmental Protection Agency. Following treatment, wastewater effluent is discharged to surface water from permitted Outfall #001. The receiving stream for this facility is a tributary to Sandfort Creek, which is located in the Peruque-Piasa watershed (HUC 07110009). Site UTM coordinates were Easting: 714407, Northing: 4300026.

Carly Reidt, formerly with the SLRO, conducted the previous compliance inspection of the facility on September 5, 2018. Carly Reidt did not document any violations during the inspection and the facility was determined to be in compliance with Missouri State Operating Permit MO0137642.

I checked the Discharge Monitoring Reports for the previous two-year period. The facility reported exceedances for net total recoverable iron in October and December 2021. The facility is current for all required permit fees.

### **Discussion of Inspection and Observations**

The inspection was conducted during normal business hours. Prior notification of the inspection was provided to ensure timely access to the site. Upon arrival at the facility, I met with Lisa Meyer and Annie Muehlfarth and outlined the purpose and scope of the inspection. Lisa Meyer granted permission to access the site and accompanied me throughout the tour of the facility.

We met with Reggie Gardner and Troy Eppinger with Loureiro Engineering Associates, Inc. Reggie Gardner demonstrated the treatment system within the building. Groundwater is sent into the facility through three wells, with one well in operation at the time (Photo #1) then to a holding tank prior to treatment (Photo #2). Water is sent through bag filters, then to the air stripper for removal of CVOCs (Photos #3 and #4). Following the air stripper, wastewater effluent flowed through an additional set of bag filters and then is pumped to the outfall for discharge.

After treatment, wastewater effluent is pumped through the effluent line over the levee berm (Photo #5). The effluent line leading to the outfall descended from the top of the berm (Photo #6). I observed the area below the outfall, which was not actively discharging (Photo #7). The area below the outfall was wet with an orange-red appearance. Due to vegetation and standing water conditions in the area, I was unable to get a direct view of water surrounding the outfall pipe.

I observed standing water below a stormwater outfall leading from the site (Photo #8). The drainage characteristics of the site flowed to the north and met with the drainage from Outfall #001. The water flows entered a road culvert under Huster Road to the west (Photos #9 and #10).

I collected a grab sample of influent at the influent sample port prior to the storage tank and a grab sample at the effluent sample port following all treatment. I shipped the samples to the Environmental Services Program for laboratory analyses to determine compliance with the permitted effluent limitations.

### **Sampling and Monitoring**

I took the appropriate sampling materials on the inspection, including a copy of the Missouri Department of Natural Resources' Standard Operating Procedures, as well as instruments for field monitoring that were capable of testing pH, temperature, conductivity, and dissolved oxygen. The field monitoring equipment had been properly calibrated and/or compared to standards in accordance with the St. Louis Regional Office's Quality Assurance/Quality Control procedures.

I conducted on-site water quality monitoring and collected the grab sample at the influent sample port and effluent sample port within the building serving the air stripper. After collection, I packed the samples into a cooler with ice. I shipped the samples to the Department's Environmental Services Program for analysis of Total Recoverable Iron (Fe) and Volatile Organic Analyses (VOA). As of the writing of this report, the sample analysis results were not available for inclusion. The sample analysis results will be forwarded to the owner/permittee when they are available.

<b>Effluent Sample Port for Huster Substation</b>						
<b>Results of Sample Analyses</b>			<b>Permitted Effluent Limitations</b>			
<b>Grab Sample; Sample #23002109</b>						
<b>Parameter</b>	<b>Sample Result</b>	<b>Units</b>	<b>Minimum</b>		<b>Maximum</b>	<b>Units</b>
pH	7.9	SU	6.5		9.0	SU
Temperature	15.2	°C				
<b>Parameter</b>	<b>Sample Result</b>	<b>Units</b>	<b>Daily Maximum</b>	<b>Weekly Average</b>	<b>Monthly Average</b>	<b>Units</b>
Dissolved Oxygen	10.28	mg/L				
Conductivity	1270	µS/cm				
cis-1,2-dichloroethylene (DCE)	**	µg/L	141		70	µg/L
Tetrachloroethylene (PCE)	**	µg/L	1.6		0.8	µg/L
Trichloroethylene (TCE)	**	µg/L	10.1		5	µg/L
Vinyl Chloride (VC)	**	µg/L	4.0		2.0	µg/L
Total Recoverable Iron	**	µg/L	*		*	µg/L
<b>Groundwater Influent Sample Port for Huster Substation</b>						
<b>Grab Sample; Sample #23002111</b>						
<b>Parameter</b>	<b>Sample Result</b>	<b>Units</b>	<b>Daily Maximum</b>	<b>Weekly Average</b>	<b>Monthly Average</b>	<b>Units</b>
Total Recoverable Iron	**	mg/L	*		*	mg/L

\*Monitoring requirement only.

\*\*Sample analysis results not available as of the writing of this report.

**Abbreviations:** MPN (Most Probable Number per 100 mL); SU (Standard pH Units)

### **Compliance Determination, Listing of Violations and Required Actions**

The facility was found to be in compliance with the Missouri Clean Water Law, the Missouri Clean Water Commission regulations, and Missouri State Operating Permit MO0137642, based upon observations made during the inspection.

### **Additional Comments/Conclusion**

As a result of the inspection, Huster Substation was in compliance with the Missouri Clean Water Law, the Missouri Clean Water Commission Regulations, and Missouri State Operating Permit MO0137642.

Report of Inspection  
Huster Substation  
November 13, 2023  
Page 4 of 4

Any questions regarding this report should be directed to Christopher Maher by mail at the SLRO, 7545 South Lindbergh Blvd., Suite 210, St. Louis, Missouri 63125; by phone at (314) 416-2960; or by email at [dnrslro.wpc@dnr.mo.gov](mailto:dnrslro.wpc@dnr.mo.gov).

## Signatures

SUBMITTED BY:



---

Christopher Maher  
Environmental Specialist  
St. Louis Regional Office

REVIEWED BY:



---

Josh Willison  
Environmental Supervisor  
St. Louis Regional Office

CCM/JLW/jws

## Attachments

**Attachment # 1 – Photos (#1) - (#10)**  
**Attachment # 2 – Aerial Maps**

**Attachment #1 – Photos**

**Huster Substation**

**Date of Report**



Photo #: 1  
Taken by: Maher, Christopher  
Entity: Huster Substation  
Permit: MO0137642  
Location: Treatment Building  
Description: Meters for flow from three extraction wells.  
Date Taken: 11/3/2023  
Media: WPC



Photo #: 2  
Taken by: Maher, Christopher  
Entity: Huster Substation  
Permit: MO0137642  
Location: Treatment Building  
Description: Storage tank prior to treatment.  
Date Taken: 11/3/2023  
Media: WPC



Photo #: 3  
Taken by: Maher, Christopher  
Entity: Huster Substation  
Permit: MO0137642  
Location: Treatment Building  
Description: Air blower motor for air stripper system.  
Date Taken: 11/3/2023  
Media: WPC

Attachment #1 – Photos

Huster Substation

Date of Report

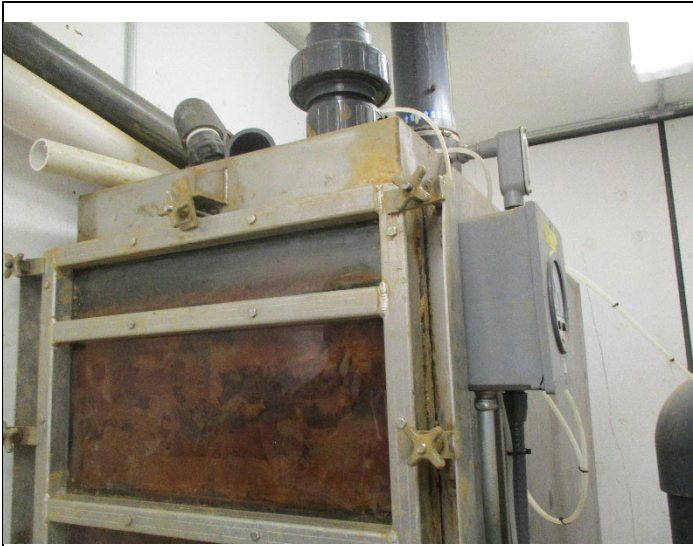


Photo #: 4  
Taken by: Maher, Christopher  
Entity: Huster Substation  
Permit: MO0137642  
Location: Treatment Building  
Description: Air stripper.  
Date Taken: 11/3/2023  
Media: WPC



Photo #: 5  
Taken by: Maher, Christopher  
Entity: Huster Substation  
Permit: MO0137642  
Location: Near Treatment Building at Levee  
Description: Effluent line on right side and influent line over levee berm; facing north.  
Date Taken: 11/3/2023  
Media: WPC






Photo #: 6  
Taken by: Maher, Christopher  
Entity: Huster Substation  
Permit: MO0137642  
Location: Northwestern Portion of Facility  
Description: View of discharge line from top of levee berm; facing northwest.  
Date Taken: 11/3/2023  
Media: WPC

Attachment #1 – Photos

Huster Substation

Date of Report

	<p>Photo #: 7 Taken by: Maher, Christopher Entity: Huster Substation Permit: MO0137642 Location: Outfall #001 Description: Outfall not actively discharging; facing northeast. Date Taken: 11/3/2023 Media: WPC</p>
	<p>Photo #: 8 Taken by: Maher, Christopher Entity: Huster Substation Permit: MO0137642 Location: Stormwater Outfall Description: Water flow from stormwater pipe upstream of meeting flow from Outfall #001; facing northwest. Date Taken: 11/3/2023 Media: WPC</p>
	<p>Photo #: 9 Taken by: Maher, Christopher Entity: Huster Substation Permit: MO0137642 Location: Huster Road Description: Culvert on upstream (eastern) side of Huster Road; facing east. Date Taken: 11/3/2023 Media: WPC</p>



**Attachment #1 – Photos**

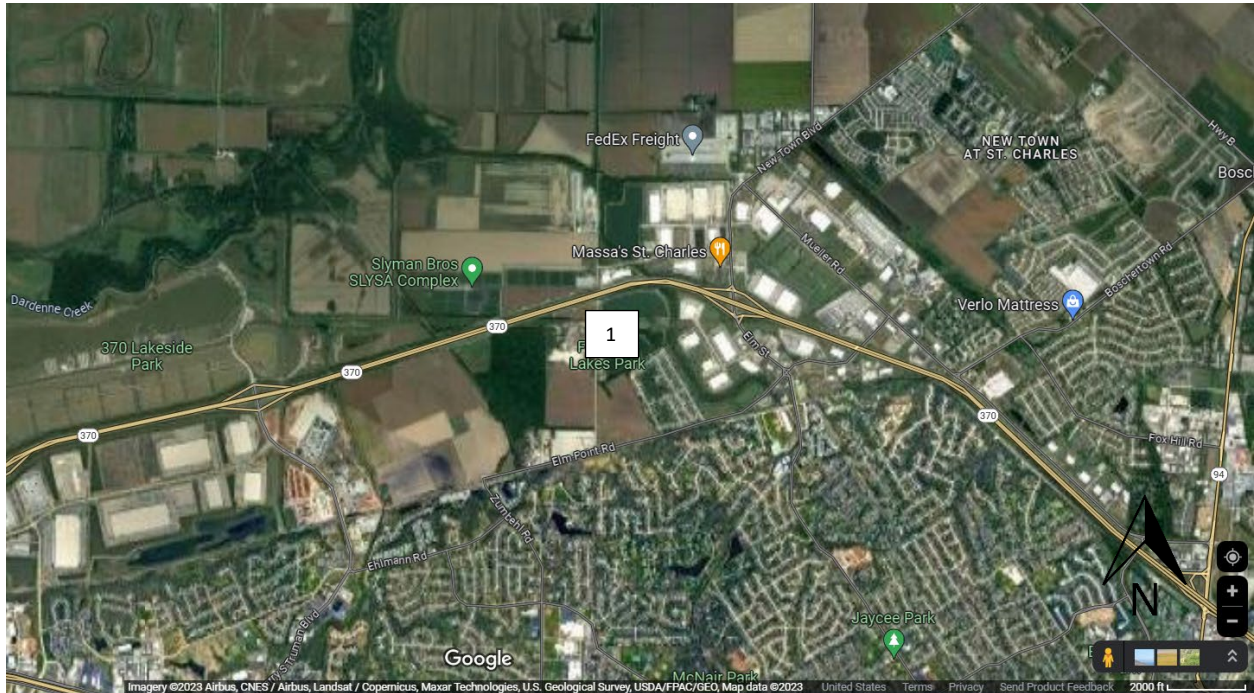
**Huster Substation**

**Date of Report**

**Page 4 of 4**



Photo #: 10  
Taken by: Maher, Christopher  
Entity: Huster Substation  
Permit: MO0137642  
Location: Huster Road  
Description: Water flow on the downstream (western) side of road culvert at Huster road; facing west.  
Date Taken: 11/3/2023  
Media: WPC



Aerial Map A: General Location of Subject Facility. 1 – Huster Substation



Aerial Map B: Layout of Facility. 1 – Treatment Building; 2 – Outfall #001