



# COMMONWEALTH of VIRGINIA

DEPARTMENT OF HEALTH

## OFFICE OF DRINKING

## WATER

### Richmond Field Office

Karen Shelton, MD  
State Health Commissioner

Madison Building  
109 Governor St., 6<sup>th</sup> Floor  
Richmond, VA 23219  
Phone: 804-864-7409  
Fax: 804-864-7520

SUBJECT: Louisa County  
Waterworks: Lake Anna Technology  
Campus  
PWSID No: 2109646

December 12, 2025

Bobby Rose  
7828 Kentucky Springs Road  
Mineral, Virginia 23177  
brosejr@amazon.com

Dear Bobby Rose:

Enclosed please find Waterworks Operation Permit No. 2109646T with Operation Permit Conditions dated December 12, 2025, issued by the Commonwealth of Virginia Department of Health, Office of Drinking Water (ODW). This permit is your authorization from the State Health Commissioner to operate the subject waterworks located in Louisa County in accordance with the *Waterworks Regulations*. This permit is not transferable. This permit does not suspend, minimize, or otherwise alter this owner's obligation to comply with applicable federal, state, or local laws and regulations or permits.

You will note that the permit indicates that this waterworks has a permitted capacity of 25,200 gpd. This limit is based on the maximum capacity of the system and shall not be exceeded.

Temporary Permit Requirements are included for this waterworks. These include completion of construction of permanent potable water system facilities per the plans and specifications approved by the issuance of Construction Permit No. 92365 and notification to this office when the waterworks exceeds 24 full-time employees reporting to the water system that will be regularly served by the waterworks for 26 or more weeks per year.

Bobby Rose  
December 12, 2025  
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Per 12VAC5-590-115 of the *Waterworks Regulations*, if you object to ODW's action, you have the right to an appeal and may send a written request for an administrative proceeding. Your request must be received no later than 30 days from the date you received this letter or the date it was mailed to you, whichever occurred first. Please use the attached form for this purpose and send it to this office.

We look forward to your cooperation in the maintenance and operation of this waterworks.

Sincerely,



James Reynolds, PE  
Field Director

cc: Louisa County Health Department  
Louisa County Administrator  
Louisa County Building Official

**OBJECTION AND REQUEST FOR AN ADMINISTRATIVE PROCEEDING (Include for  
permits/amendments not requested by the owner)**

This is to advise Virginia Department of Health that I, \_\_\_\_\_, object to the operation permit (*amendment*) proposed by Virginia Department of Health dated \_\_\_\_\_ of Waterworks Operation Permit No. \_\_\_\_\_ for \_\_\_\_\_ located in \_\_\_\_\_ and request an administrative proceeding in accordance with 12VAC5-590-115 of the *Waterworks Regulations*.

My specific objection(s) to the proposed operation permit (*amendment*) are as follows:

(Name)

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(Date)

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(Title)



Virginia Department of Health  
Office of Drinking Water

## Temporary Waterworks Operation Permit

Amazon Data Services, Inc. is hereby granted permission to operate the Lake Anna Technology Campus waterworks, an unclassified, transient noncommunity waterworks located in Louisa County, subject to the attached Temporary Permit Requirements to protect public health and demonstrate compliance with Title 32.1 of the *Code of Virginia* and of the *Virginia Waterworks Regulations*, 12VAC5-590-10 *et seq.* The waterworks has a capacity of 25,200 gpd. This temporary permit is issued with the understanding that this owner shall operate the waterworks in accordance with Part II of the *Virginia Waterworks Regulations* titled "Operation Regulations for Waterworks." This temporary permit does not suspend, minimize, or otherwise alter this owner's obligation to comply with applicable federal, state, or local laws and regulations or permits. This temporary permit shall expire on December 12, 2026 or may be revoked at any time upon written notice of revocation by the State Health Commissioner if it is determined that Amazon Data Services, Inc. has failed to comply with any of the attached Temporary Permit Requirements.

Attachments: Operation Permit Conditions (  ), Variances (  ), Exemptions (  ), or Temporary Permit Requirements (  )

PERMIT NO.: 2109646T

EFFECTIVE DATE: December 12, 2025

EXPIRATION DATE: December 12, 2026

APPROVED

A handwritten signature in black ink, appearing to read "James Reynolds, PE".

James Reynolds, PE, Engineering Field Director, Richmond Field Office  
for the State Health Commissioner pursuant to VA Code § 2.2-604

## TEMPORARY PERMIT REQUIREMENTS

Temporary Operation Permit No. 2109646T

Lake Anna Technology Campus

Amazon Data Services, Inc., owner of the Lake Anna Technology Campus waterworks, shall comply with the temporary permit requirements below in compliance with Title 32.1 of the Code of Virginia and 12VAC5-590-10 *et seq.* of the *Virginia Waterworks Regulations (Regulations)*.

1. Complete construction of the permanent potable water system per the plans and specifications approved by the issuance of Construction Permit No. 92365 as required by 12VAC5-590-190 of the *Regulations*. Construction should be completed **no later than December 12, 2026**.
2. Upon exceeding 24 full-time employees reporting to the water system that will be regularly served by the waterworks for 26 or more weeks per year, contact the Richmond Field Office so that the water system classification can be updated to a nontransient noncommunity waterworks as required by 12VAC5-590-10 *et seq.* of the *Regulations*. Items that will need to be updated at that time include:
  - a. Bacteriological Sample Siting Plan
  - b. Development of Lead and Copper Monitoring Plan and Lead Service Line Inventory
  - c. Chemical sample schedules
  - d. Operator requirements

## OPERATION PERMIT CONDITIONS

**Operation Permit No.:** 2109646T

**Permit Effective Date:** December 12, 2025

**Waterworks Name:** Lake Anna Technology Campus

**Waterworks Class:** Unclassified

### **OPERATOR REQUIREMENTS:**

Operating personnel shall be in attendance as necessary to perform monitoring and process evaluation, and to make any process adjustments.

### **OPERATION, MONITORING, AND REPORTING:**

Operation, monitoring, and reporting shall be in accordance with Title 32.1 of the *Code of Virginia* and 12VAC5-590-10 *et seq.* of the *Virginia Waterworks Regulations*.

### **WATERWORKS CAPACITY:**

#### **Source Capacity:**

Well No. 2 (Well B): 25,200 gpd

#### **Treatment Capacity:**

The following treatment is provided:

UV Disinfection (voluntary)

Cation Exchange Softening (voluntary)

Corrosion Control, pH Adjustment chemical feed- Soda Ash (not a treatment technique requirement)

The permitted capacity is not limited by the installed treatment units.

#### **Storage and Delivery Requirements:**

The waterworks shall provide sufficient distribution storage and pumping capacity to meet peak hourly flow demand.

#### **Permitted Capacity:**

This waterworks is permitted for a capacity of 25,200 gpd, due to the limited source capacity.

**VIRGINIA DEPARTMENT OF HEALTH**  
**WATERWORKS DESCRIPTION SHEET**

**DATE:** December 12, 2025

**WATERWORKS NAME:** Lake Anna Technology Campus      **WATERWORKS CLASS:** Unclassified

**COUNTY/CITY:** Louisa County      **TYPE:** Transient Noncommunity

**PERMIT NUMBER:** 2109646T

**TYPE OF TREATMENT:** pH adjustment, softening (ion exchange), UV disinfection

**SOURCE:** One drilled well

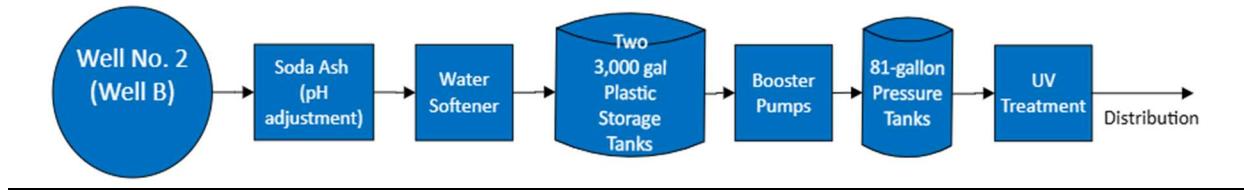
**CAPACITY:** 25,200 gpd

**DESCRIPTION OF THE WATERWORKS**

**Service population**

Business type	Industrial
Number customers served daily	0
Number of employees	Currently under active construction, no full time employees on site yet. Number of transient construction employees on-site average less than 1,000 per day
Number year round residents	0
Days/weeks/months of operation	365 days per year
Hours per day of operation	24
Population served	1,000
Number of service connections	2

**System Diagram**



*For the tables below, enter the available information. Enter "unknown" if the information is not available.*

**Wells**

Name	Well No. 2 (Well B)		
Well Class	2		
Casing Depth	60 ft		
Casing Material	Black Steel		
Grout Depth	60 ft		
Grout Type	Neat Cement		

Screen Depths	None		
Total Well Depth	502 ft		
Pump Depth	63 ft		
Pumping Capacity	17.5 gpm		
Yield	36 gpm		
Yield and Drawdown duration and date			
Treatment requirements (GUDI, 4-log virus, Fe+Mg control, etc.)	None		
Pump control scheme	Float valves in 3,000 gallon storage tanks activate well pump when tank low level setpoint reached		

#### **Pressure Tanks**

Name	ST002- 81 Gallon Bladder Tanks		
Nominal Capacity	81 gal (each booster pump train has 1 tank, only one train runs at a time)		
Effective Capacity	27 gal		

#### **Atmospheric Storage Tanks**

Name	ST001- 3,000 Gal Tank 1	ST001- 3,000 Gal Tank 2	
Constructed in Accordance with Regs?	Yes- Temporary Installation	Yes- Temporary Installation	
Nominal Capacity	3,000 gal	3,000 gal	
Effective Capacity	3,000 gal	3,000 gal	
Effective Storage Elevation	0 ft above grade	0 ft above grade	
Overflow Elevation	8.8 ft above grade	8.8 ft above grade	
Mixing or Aeration	None	None	

#### **Pump Stations**

Name	PF001- Primary Booster Pump	PF001- Secondary Booster Pump	
Number of Pumps	1	1	
Individual Capacities of Pumps	35 gpm	28 gpm	
Firm Capacity of Pump Station	35 gpm	28 gpm	
Description of operation scheme	Pressure switch activates booster pumps	Pressure switch activates booster pumps	

#### **Chemical Feed Systems**

Type	Soda Ash Feed-Diaphragm Pump		
Metering Pump Capacity	30 gpd		
Chemical tank volume	30 gal		
SCADA/operating scheme	Activates with well pump		
Required treatment?	No		
Solution strength	Unknown		

## **OTHER**

UV Treatment is provided after the booster pumps, prior to the entry point to the distribution system. It includes a bypass, status indicator, and sensor. The system is rated for 100 gpm.

The facilities listed are temporary facilities, except Well No. 2 (permanent), which will be utilized until facilities identified in Construction Permit No. 92365 issued on March 1, 2025, are delivered and installed. Well No. 2 is connected to the temporary facilities at the stub near the Access Control Building by above grade plastic waterline which is heat traced and insulated.

## **WATERWORKS CAPACITY**

1. Estimated Water Demand:  
 $(15 \text{ gpd/person})(1,000 \text{ persons}) = 15,000 \text{ gpd}$  (per *AWWA Design and Construction of Small Systems, 1999*)  
 $\text{Peak Hour Demand} = (4)(15,000 \text{ gpd})/(24 \text{ hr}) = 2,500 \text{ gal}$
2. Source Capacity:  
 $\text{Well No. 2 Well Yield} = (36 \text{ gpm})(1,440 \text{ min/day}) = 51,840 \text{ gpd}$   
 $\text{Well No. 2 Pump Capacity} = (17.5 \text{ gpm})(1,440 \text{ min/day}) = 25,200 \text{ gpd}$
3. Treatment Capacity: Installed treatment does not limit capacity of waterworks
4. Storage Capacity:  $(2)(3,000 \text{ gal}) + 27 \text{ gal} = 6,027 \text{ gal}$

Noncommunity systems are required to meet peak hour demand.

Delivery Capacity  
 $(17.5 \text{ gpm})(60 \text{ min}) + 6,027 \text{ gal} = 7,077 \text{ gal} > 2,500 \text{ gal}$  peak hour demand

## **CONCLUSION:**

This waterworks is permitted for a capacity of 25,200 gpd, due to the limited source capacity.

## **OPERATION PERMIT HISTORY**

Permit Issuance (Effective Date)	Description / Reason <sup>1</sup>
December 12, 2025	Initial issuance of temporary permit for temporary treatment system and associated facilities.