



STATE OF TENNESSEE  
**DEPARTMENT OF ENVIRONMENT AND CONSERVATION**  
**DIVISION OF WATER RESOURCES**

William R. Snodgrass - Tennessee Tower  
312 Rosa L. Parks Avenue, 11th Floor  
Nashville, Tennessee 37243-1102

February 21, 2024

Mr. Johnny Moore  
Manager, ORNL Site Office  
US Department of Energy  
e-copy: moorejo@ornl.gov  
Oak Ridge, TN 37831

Subject: **Draft of State Operating Permit No. SOP-23032**  
**U.S. Department of Energy (DOE)**  
**ORNL**  
**Oak Ridge, Roane County, Tennessee**

Dear Mr. Moore:

Enclosed please find one copy of the draft state operating permit, which the Division of Water Resources (the division) proposes to issue. The issuance of this permit is contingent upon your meeting all of the requirements of the Tennessee Water Quality Control Act and the rules and regulations of the Tennessee Water Quality, Oil and Gas Board.

If you disagree with the provisions and requirements contained in the draft permit, you have thirty (30) days from the date of this correspondence to notify the division of your objections. If your objections cannot be resolved, you may appeal the issuance of this permit. This appeal should be filed in accordance with Section 69-3-110, Tennessee Code Annotated.

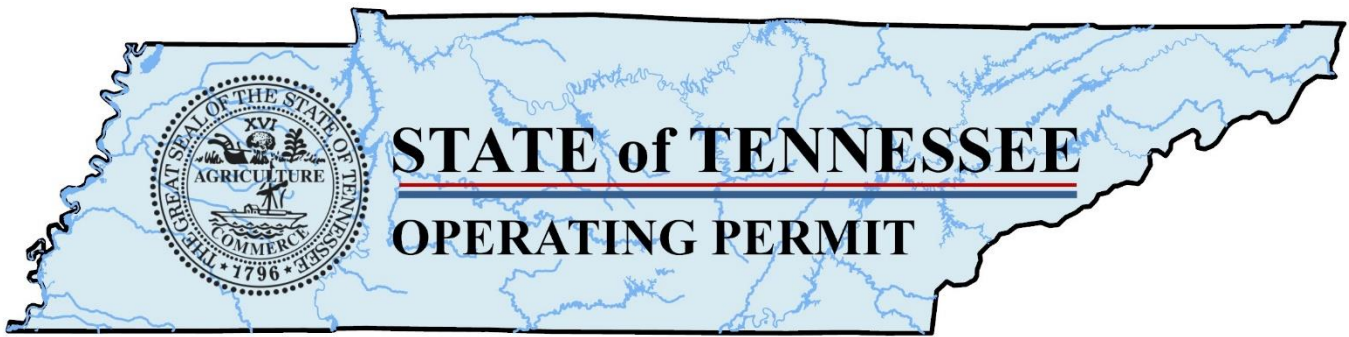
If you have questions, please contact the Knoxville EFO at 1-888-891-TDEC; or, at this office, please contact Mr. Wade Murphy at (615) 532-0666 or by E-mail at [Wade.Murphy@tn.gov](mailto:Wade.Murphy@tn.gov).

Sincerely,

Vojin Janjić  
Manager, Water-Based Systems

Enclosure

cc: Mr. Thomas Doty, Operations and Oversight, US Department of Energy,  
[dotytw@ornl.gov](mailto:dotytw@ornl.gov)  
Mr. Jerry Lindsay, Chickasaw Mgmt. Svcs, LLC, [jerry.lindsay@science.doe.gov](mailto:jerry.lindsay@science.doe.gov)  
Mr. Patrick Berge, P.E., Public Works Director, Oak Ridge, [pberge@oakridgetn.gov](mailto:pberge@oakridgetn.gov)  
EFO-Knoxville-DWR, [robert.ramsey@tn.gov](mailto:robert.ramsey@tn.gov)  
TDEC-DWR-Engineering Services Unit, [timothy.hill@tn.gov](mailto:timothy.hill@tn.gov)  
Permit File



**State of Tennessee Operating Permit  
Permit Number SOP-23032**

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Issued by  
**State of Tennessee  
Department of Environment and Conservation  
Division of Water Resources  
William R. Snodgrass - Tennessee Tower  
312 Rosa L. Parks Avenue, 11th Floor  
Nashville, Tennessee 37243-1102**

In accordance with the provisions of Tennessee Code Annotated Section §69-3-108 and regulations promulgated pursuant thereto, permission is hereby granted to:

Permittee: **U.S. Department of Energy  
Oak Ridge National Laboratory (ORNL)**

for the operation of: single vault toilet systems at two security portals

from a facility located at: 1 Bethel Valley Rd., Oak Ridge, Anderson and Roane Counties,  
Tennessee

and located in: the Clinch River Watershed.

This permit shall become effective on:

This permit shall expire on:

Issuance date:

**DRAFT**

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for Jennifer Dodd  
Director

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## **PART 1**

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The U.S. Department of Energy, doing business as Oak Ridge National Laboratory (ORNL), at 1 Bethel Valley Rd, in Oak Ridge, Anderson and Roane Counties, is hereby only authorized to operate single vault toilets at locations on the site without water service. The system shall be operated so that there is no discharge of any wastewater to any surface or subsurface stream, watercourse, or drainage ditch.

Overflows, releases, spills, or the occurrence of any other condition that causes a discharge to any surface or subsurface stream, watercourse, or drainage ditch is a violation of this permit. In addition, this system must be operated in a manner preventing the creation of a public health hazard.

This authorization is consistent with approved plans, specifications, and other data submitted to the Division of Water Resources (Division) in support of the complete application, all of which are filed with and considered as a part of this permit, together with the following named conditions and requirements.

### **1. PERMIT CONDITIONS AND REQUIREMENTS**

#### **1.1. GENERAL PROVISIONS**

The system must be operated, and maintained in accordance with plans and specifications approved by the Division and in a manner which will ensure that the system does not cause any violations of the conditions or requirements of this permit.

The discharge of wastewater in any way to waters of the state from any portion of the facility constitutes a violation of this permit.

The permittee must provide for wastes to be pumped from this system on a regular schedule sufficient to ensure that a reasonable margin of safety is provided against the possibility of an overflow. Pumping frequencies should be sufficient to ensure that the tank remains below  $\frac{3}{4}$  full, in terms of volume capacity, at all times.

The following conditions shall be followed:

- 1) A representative of the permittee shall be present at all times when waste is being transferred to a haul truck to ensure that waste spills do not occur. In the event of an accidental spill of wastes, wastes shall be removed and disposed of with the vault toilet wastes.



- 2) The permittee or the waste hauling contractor must clean up any spillage of waste that results from the operation of this vault toilet system.
- 3) It is the permittee's responsibility to ensure that the waste removal contractor performs all work relative to this system in accordance with this permit and good operating procedures.
- 4) The wastewater must be disposed of at a publicly owned treatment works or other facility in the lawful business of receiving wastes for treatment and disposal. The transport and ultimate disposal of the wastes must be documented by a manifest system on forms approved by the Division. The permittee shall also record on the manifest forms the number of loads hauled, the volume of each load, the dates of hauling, and the names of people present. A copy of the manifest must be submitted to the EFO on a monthly basis. If there is no waste disposed of during any given month, this shall be documented and submitted to the EFO as well.

Notwithstanding this permit, the permittee shall remain liable for any damages sustained by the State of Tennessee, including but not limited to fish kills and losses of aquatic life and/or wildlife, as a result of the discharge or spill of wastewater to any surface or subsurface waters. Additionally, it shall be the responsibility of the permittee to conduct its sewage disposal activities in a manner such that public or private health hazards or nuisances will not be created.

Sludge or any other material removed by the wastewater treatment system must be disposed of in a manner which prevents its entrance into or pollution of any surface or subsurface waters. Additionally, the disposal of such sludge or other material must be in compliance with the Tennessee Solid Waste Disposal Act, TCA 68-31-101 et seq. and the Tennessee Hazardous Waste Management Act, TCA 68-46-101 et seq. The permittee must keep records of the Publicly Owned Treatment Works (POTW) or treatment facility that receives the wastewater discharge.

This permit is subject, at any time, to review by the Division.

## **1.2. RECORD-KEEPING AND REPORTING REQUIREMENTS**

Records of when pumping takes place must be kept at the facility. Monthly Operational Reports (MORs) will include pumping dates and volume of waste pumped on each trip.

The MORs shall be submitted by the 15<sup>th</sup> day of the month following data collection. Reports shall be submitted by one of the following methods, presented below in order of preference:

- 1) Use [MyTDEC Forms](#), if available.
- 2) Email a signed and certified copy in pdf format to the «Efo\_Name» EFO:

Chattanooga	<a href="mailto:TDEC.Chattanooga.EFO@tn.gov">TDEC.Chattanooga.EFO@tn.gov</a>
Columbia	<a href="mailto:TDEC.Columbia.EFO@tn.gov">TDEC.Columbia.EFO@tn.gov</a>
Cookeville	<a href="mailto:TDEC.Cookeville.EFO@tn.gov">TDEC.Cookeville.EFO@tn.gov</a>
Jackson	<a href="mailto:TDEC.Jackson@tn.gov">TDEC.Jackson@tn.gov</a>
Johnson City	<a href="mailto:TDEC.JohnsonCity.EFO@tn.gov">TDEC.JohnsonCity.EFO@tn.gov</a>
Knoxville	<a href="mailto:TDEC.KEFO.DWRPermits@tn.gov">TDEC.KEFO.DWRPermits@tn.gov</a>
Memphis	<a href="mailto:TDEC.Memphis.EFO@tn.gov">TDEC.Memphis.EFO@tn.gov</a>
Nashville	<a href="mailto:DWR.NEFO@tn.gov">DWR.NEFO@tn.gov</a>

- 3) Submit signed and certified forms to the EFO at the following address:

*STATE OF TENNESSEE  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
DIVISION OF WATER RESOURCES  
Knoxville Environmental Field Office  
3711 Middlebrook Pike  
Knoxville, Tennessee 37921*

Additionally, the permittee must keep a log of the following:

- Date of sewage removal;
- Facility name and address where wastewater is disposed/hailed;
- Amount of waste hauled;
- Any operational problems encountered during pump and haul.

All records and information resulting from the monitoring activities required by this permit shall be retained for a minimum of three (3) years, or longer if requested by the Division. A copy of these records must be sent to the Knoxville EFO within 15 days of a request.

### **1.3. ADDITION OF WASTE LOADS**

The permittee shall not add waste loads from other sources without approval by the Division.

#### 1.4. ELECTRONIC REPORTING

This permit requires the submission of forms developed by the Director in order for a person to comply with certain requirements, including, but not limited to, making reports, submitting monitoring results, and applying for permits. The Director may make these forms available electronically and, if submitted electronically, then that electronic submission shall comply with the requirements of Chapter [0400-01-40](#). Electronic submission is required when available unless waived by the Commissioner in accordance with 40 C.F.R. § 127.15.

In the event of large-scale emergencies and/or prolonged electronic reporting system outages, an episodic electronic reporting waiver may be granted by the Commissioner in accordance with 40 CFR § 127.15. A request for a deadline extension or episodic electronic reporting waiver should be submitted to [DWRWater.Compliance@tn.gov](mailto:DWRWater.Compliance@tn.gov), in compliance with the Federal NPDES Electronic Reporting Rule.

If an episodic electronic reporting waiver is granted, reports with wet-ink original signatures shall be mailed to the following address:

*STATE OF TENNESSEE  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
DIVISION OF WATER RESOURCES  
COMPLIANCE & ENFORCEMENT UNIT  
William R. Snodgrass - Tennessee Tower  
312 Rosa L. Parks Avenue, 11th Floor  
Nashville, Tennessee 37243-1102*

For purposes of determining compliance with this permit, data provided to the Division electronically is legally equivalent to data submitted on signed and certified forms. A copy must be retained for the permittee's files.



## PART 2

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### **2. STANDARD CONDITIONS**

#### **2.1. GENERAL PROVISIONS**

##### **2.1.1. Duty to Comply**

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Water Quality Control Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

##### **2.1.2. Duty to Reapply**

The permittee is not authorized to discharge after the expiration date of this permit. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information and forms as are required to the Division Director no later than 180 days prior to the expiration date. Such forms shall be properly signed and certified.

##### **2.1.3. Proper Operation and Maintenance**

The permittee shall, at all times, properly operate and maintain all facilities and systems (and related appurtenances) for collection and treatment which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory and process controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems, which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

##### **2.1.4. Right of Entry**

The permittee shall allow the Director, the Regional Administrator of the U.S. Environmental Protection Agency, or their authorized representatives, upon the presentation of credentials, to:

- a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records shall be kept under the conditions of this permit;
- b) Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this permit;

- c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d) Sample or monitor at reasonable times for the purposes of assuring permit compliance or as otherwise authorized by the Director.

#### **2.1.5. Availability of Reports**

All reports and data shall be kept for a minimum of three years.

#### **2.1.6. Property Rights**

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

#### **2.1.7. Severability**

The provisions of this permit are severable. If any provision of this permit due to any circumstance is held invalid, then the application of such provision to other circumstances and to the remainder of this permit shall not be affected thereby.

#### **2.1.8. Other Information**

If the permittee becomes aware of failure to submit any relevant facts in a permit application, or of submission of incorrect information in a permit application or in any report to the Director, then the permittee shall promptly submit such facts or information.

### **2.2. CHANGES AFFECTING THE PERMIT**

#### **2.2.1. Permit Modification, Revocation, or Termination**

- a) This permit may be modified, revoked and reissued, or terminated for cause. 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. Causes for such permit action include but are not limited to the following:
  - i. Violation of any terms or conditions of the permit;
  - ii. Obtaining a permit by misrepresentation or failure to disclose fully all relevant facts; and
  - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.



- b) The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

### **2.2.2. Change of Ownership**

Individual permits are not transferable to any person except after notice to the Commissioner, as specified below. The Commissioner may require modification or revocation and reissuance of the permit to change the name of the permittee.

- a) The permittee notifies the Director of the proposed transfer at least 30 days in advance of the proposed transfer date;
- b) The notice includes a written agreement between the existing and new permittees containing a specified date for transfer of permit responsibility, coverage, and liability between them; and
- c) The permittee shall provide the following information to the Director in their formal notice of intent to transfer ownership:
  - i. The permit number of the subject permit;
  - ii. The effective date of the proposed transfer;
  - iii. The name, address, and contact information of the transferor;
  - iv. The name, address, and contact information of the transferee;
  - v. The names of the responsible parties for both the transferor and transferee;
  - vi. A statement that the transferee assumes responsibility for the subject permit;
  - vii. A statement that the transferor relinquishes responsibility for the subject permit;
  - viii. The signatures of the responsible parties for both the transferor and transferee pursuant to the signatory requirements of subparagraph (i) of Rule [0400-40-05-.07\(2\)](#); and
  - ix. A statement regarding any proposed modifications to the facility, its operations, or any other changes, which might affect the permit, limits and conditions contained in the permit.



### **2.2.3. Change of Mailing Address**

The permittee shall promptly provide to the Director written notice of any change of mailing address. In the absence of such notice, the original address of the permittee will be assumed to be correct.

## **2.3. NONCOMPLIANCE**

### **2.3.1. Effect of Noncompliance**

Any permit noncompliance constitutes a violation of applicable State and Federal laws and is grounds for enforcement action, permit termination, or denial of permit reissuance.

### **2.3.2. Reporting of Noncompliance**

#### a) 24-hour Reporting:

In the case of any noncompliance, or any release (whether or not caused by improper operation and maintenance), which could cause a threat to human health or the environment, the permittee shall:

- i. Report the noncompliance to the «EFO\_Name» EFO within 24 hours from the time the permittee becomes aware of the circumstances.
- ii. Submit a written report within five days of the time the permittee becomes aware of the noncompliance unless this requirement is waived by the Director on a case-by-case basis. The permittee shall provide the following information:
  1. A description of and the cause of the noncompliance or release;
  2. The period of noncompliance or release, including start and end dates and times i.e. duration or, if not corrected, the anticipated time the noncompliance or release is expected to continue;
  3. The steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance or release.

#### b) Scheduled Reporting:

For instances of noncompliance which are not reported under a) above, the permittee shall report the noncompliance on an annual basis. The report shall contain all information concerning the steps taken, or planned, to reduce,



eliminate, and prevent recurrence of the violation and the anticipated time the violation is expected to continue.

### **2.3.3. Adverse Impact**

The permittee shall take all reasonable steps to minimize any adverse impact to the waters of Tennessee resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

## **2.4. LIABILITIES**

### **2.4.1. Civil and Criminal Liability**

The permittee is subject to civil and criminal liability for violation of this permit. Notwithstanding this permit, the permittee shall remain liable for any damages sustained by the State of Tennessee, including but not limited to fish kills and losses of aquatic life and/or wildlife, as a result of the discharge of wastewater to any surface or subsurface waters. Additionally, notwithstanding this Permit, it shall be the responsibility of the permittee to conduct its wastewater treatment and/or discharge activities in a manner such that public or private nuisances or health hazards will not be created.

### **2.4.2. Liability Under State Law**

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law.

## PART 3

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### 3. PERMIT SPECIFIC REQUIREMENTS

#### 3.1. SCHEDULE OF COMPLIANCE

Within thirty (30) days of a decision to supply water service to a toilet facility, the permittee shall initiate plans to have the toilet system connected to public sewer or otherwise initiate the engineering/planning process to reevaluate the feasibility of sewage system alternatives in consideration of life cycle costs.

#### 3.2. PLACEMENT OF SIGNS

Within 60 days of the effective date of this permit, the permittee shall place and maintain a sign at the vault toilets. The sign should be clearly visible to the public. The *minimum* sign size should be two feet by two feet (2' x 2') with one-inch (1") letters. The sign should be made of durable material and have a white background with black letters.

**Vault Toilet**  
**US Department of Energy**  
**State Operating Permit NO. SOP-23032**  
**TENNESSEE DIVISION OF WATER RESOURCES**  
**1-888-891-8332 ENVIRONMENTAL FIELD OFFICE - Knoxville**

## **RATIONALE**

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**U.S. Department of Energy**  
**Oak Ridge National Laboratory (ORNL) – Vault Toilet System**  
**State Operating Permit No. SOP-23032**  
**Permit Writer: Wade D. Murphy**  
**Date: February 20, 2024**

**FACILITY CONTACT INFORMATION:**

Mr. Johnny O. Moore  
Manager, ORNL Site Office  
Phone: (865) 576-3536  
moorejo@ornl.gov  
1 Bethel Valley Road, Oak Ridge

**Engineering basis:**

Per the meeting minutes from the preliminary project discussion held on June 1, 2022, and tracked as WPN22.0373, ORNL is looking to construct a temporary research station and another outpost outside the range of water and sewer service at the reservation. During the design of the project and investigation into environmental permitting requirements, ORNL realized that two vault toilet facilities, at the east (Anderson County) and west (Roane County) security entrances, are being operated without a permit. ORNL seeks to properly permit the two existing vault toilet facilities (and later add the two new facilities, if needed). The existing east and west security entrance vault toilet facilities were constructed around 2014/2015. They consist of 1000 gallon, precast concrete tanks with a liner, located below the buildings. There is no water service to the buildings. Utilities are reported to be approximately 3/4 mile on one side and 3 miles away for the other. Each entrance is staffed with 2-3 people per day. Using an estimate of 15 gpcd, the available storage is 22 days. ORNL has a contract with Carson Crest, LLC, dba TNT Portable Toilets and Septic Tank Services. They service the facility approximately 2 times a month in the spring and summer and 1 time a month in the winter. The contract pumping and lack of water service makes the operation and maintenance expense of audible and visual alarms

unnecessary. The Division intends to review and approve plans and specifications for the existing two vault toilets as tracking number WPN23.0521.

<b>Facility Location:</b>	Two locations along 1 Bethel Valley Road
<b>Name of nearest stream:</b>	This sewage activity is located in the Clinch River Watershed. The east security portal, located in Anderson County at 35.966727, -84.251784, is in the drainage area of Western Branch to Melton Hill Reservoir. The west security portal, located in Roane County at 35.920165, -84.331673 is located in the drainage area of White Oak Creek.
<b>Treatment System:</b>	None. At the time of permit application, the owner arranged with the City of Oak Ridge for the sewage to be accepted for treatment at Oak Ridge's Turtle Park POTW.
<b>Permit Period:</b>	This permit will be issued for a five-year period effective from the issuance date on the cover page.
<b>Monitoring and reporting:</b>	Record (log book) keeping only, unless noted otherwise in the permit above.
<b>Annual Maintenance Fee:</b>	An annual maintenance fee of \$ 350.00 applies to this non-discharging sewerage system pursuant to Rule 0400-40-11. The fee is payable upon receipt of an invoice.
<b>Financial Security:</b>	As a government-owned facility, it is exempted from providing financial security prior to construction and operation per Rule 0400-40-06.-11.
<b>Permit Specific Requirements:</b>	The permit requires that within thirty (30) days of a decision to supply water service to a toilet facility, the permittee shall initiate plans to have the toilet system connected to public sewer or otherwise initiate the engineering/planning process to reevaluate the feasibility of sewage system alternatives in consideration of life cycle costs associated with the added water demand.