



STATE OF TENNESSEE  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Solid Waste Management  
William R. Snodgrass Tennessee Tower  
312 Rosa L. Parks Avenue, 14<sup>th</sup> Floor  
Nashville, Tennessee 37243

January 14, 2019

Mr. Bob Shires, Regional Vice President  
Waste Corporation of Tennessee, LLC  
1550 Lamons Quarry Lane  
Knoxville, TN 37932

CERTIFIED MAIL  
# 7002 2030 0004 2547 2545  
RETURN RECEIPT REQUESTED

RE: Final Permit Decision – Class III Landfill Major Modification  
Yarnell Demolition Landfill – DML470000069

Dear Mr. Shires:

The Tennessee Department of Environment and Conservation (TDEC), Division of Solid Waste Management (DSWM), is hereby issuing the enclosed permit to you for construction and operation of the referenced disposal facility major modification. A copy of the final permit decision summary and response to public comments are also enclosed.

Please be aware that, before the permit can become effective, you must file additional financial assurance in an amount to be determined by the Commissioner. Financial assurance for this site is required in the amount of \$971,017. Please contact Robert Dickinson at (615) 532-0877 for assistance concerning financial assurance.

I appreciate your interest in complying with state statutes and look forward to working with you again. If you have any questions, please contact Jeremy Hooper of this office by email at [jeremy.hooper@tn.gov](mailto:jeremy.hooper@tn.gov) or call 615-532-0072.

Sincerely,

A handwritten signature in black ink, appearing to read "Patrick J. Flood".

Patrick J. Flood, P.E.  
Director

Enclosures – (3)

cc: Revendra Awasthi, DSWM/Knoxville Environmental Field Office  
John LeCroy, TDEC Regional Director for External Affairs/Knoxville Environmental Field Office  
Loretta Buchanan, DSWM/Nashville Central Office  
Rachel Goulet, DSWM/Nashville Central Office  
Daisy Crary, DSWM Central Files/Nashville Central Office  
Bassam Faleh, DSWM/Nashville Central Office  
Robert Dickinson, TDEC Financial Responsibility Group

## Expansion to the Yarnell Demolition Landfill Approved

The Tennessee Department of Environment and Conservation (TDEC), Division of Solid Waste Management (DSWM), has issued a solid waste disposal facility permit for a major modification to the Yarnell Road Demolition Landfill. The facility, identified as DML470000069, is located in Knox County at 1550 Lamons Quarry Lane, Knoxville, Tennessee.

This permit authorizes construction, operation, and closure of a fully-permitted vertical expansion to the existing disposal facility, resulting in an additional 115,000 cubic yards to be used for the disposal of farming wastes, landscaping and land clearing wastes, construction/demolition waste, shredded automotive tires, and/or certain wastes having similar characteristics and approved in writing by TDEC.

DSWM made the draft of this permit available for review during a 45-day public comment period which ended January 4, 2019. DSWM has prepared a Response to Comments document, which summarizes comments received during the public comment period.

The final permit is posted online. Visit [tn.gov/environment/notices/yarnell](http://tn.gov/environment/notices/yarnell) to access the facility information in the Dataviewer. Two locations also have paper copies available for review:

Farragut Branch Library  
417 North Campbell Station Rd  
Knoxville, TN 37934  
865-777-1750

TDEC Knoxville  
Environmental Field Office  
3711 Middlebrook Pike  
Knoxville, TN 37921  
865-594-6035

For questions, contact the facility's official responsible for operation or DSWM's Solid Waste Permitting Manager:

Mr. Bob Shires, Regional Vice President  
Yarnell Demolition Landfill  
1550 Lamons Quarry Lane  
Knoxville, TN 37932  
352-377-0800

Mr. Nickolaus Lytle  
TDEC DSWM, Tennessee Tower, 14<sup>th</sup> Floor  
312 Rosa L. Parks Ave  
Nashville, TN 37243  
615-532-8004  
[Nickolaus.Lytle@tn.gov](mailto:Nickolaus.Lytle@tn.gov)

If it is hard for you to read, speak, or understand English, TDEC may be able to provide translation or interpretation services free of charge. Please contact Mary F. Evans at 615-532-0798 for more information.

TDEC is an Equal Employment Opportunity/Affirmative Action (EEO/AA) employer. TDEC does not unlawfully discriminate on any basis prohibited by applicable law in any of its programs, services or activities.

EEO/AA/ADAAA inquiries or complaints may be directed to the ADAAA Coordinator, HR Division, at 615-532-0200. Hearing impaired callers may use the Tennessee Relay Service 800-848-0298.

If you would like to receive notices like this directly, contact the Public Participation Officer in DSWM's Central Office for a Mailing List Request form. Email [Solid.Waste@tn.gov](mailto:Solid.Waste@tn.gov) or call 615-532-0788.

# RESPONSE TO PUBLIC COMMENTS

Yarnell Demolition Class III Landfill  
Vertical Expansion Class III Disposal Facility

DML470000069

1550 Lamons Quarry Lane  
Knoxville, Tennessee

January 14, 2019

Prepared by the Division of Solid Waste Management

**Comment #1: Where are construction drawings for the existing leachate collection system? Is there a photo record of the leachate collection system during and after its construction?**

**Response #1:** Sheet 2, titled *Existing Conditions* provides a view of the leachate lines to the site's tank and treatment system where there exists a force main connection to the local utility. Yarnell has provided construction quality assurance reports which include pictures, testing, and surveys for each phase of landfill construction that documents the installation of the leachate lines. Digital copies of the construction quality assurance reports are available upon request by contacting the Tennessee Department of Environment and Conservation's Knoxville Field Office or Nashville Central Office. The Solid Waste Program at the Knoxville Environmental Field Office can be reached at 3711 Middlebrook Pike, Knoxville, TN 37921. (865) 864-5468. The Nashville office can be reached at 312 Rosa L Parks Ave, 14<sup>th</sup> Floor, Nashville TN 37243. (615) 532-0780. A link to the most current version of the proposed engineering plans was provided in the public notice for this comment period.

**Comment #2: What are operating conditions of all branches of the (leachate) system in both the closed areas and area to be expanded?**

**Response #2:** The leachate lines merge at two main connections into one line going into the site tank and treatment system prior to the leachate entering the force main connection. Both have been observed by Division of Solid Waste Management (DSWM) staff during routine quarterly inspections to have positive flow and appear to be in good working order in both the active and closed portions of the landfill. The site expansion area is on top of existing waste and these existing lines will service the expansion area.

**Comment #3: Where can I find lab results for the leachate collection system semi-annual analyses?**

**Response #3:** Leachate analysis is performed annually and reported in the groundwater reports. Separately, the receiving wastewater utility requires testing and reporting under the governing pre-treatment permit authority. Digital copies of these reports are available upon request by contacting the Tennessee Department of Environment and Conservation's Knoxville Field Office or Nashville Central Office. The Solid Waste Program at the Knoxville Environmental Field Office can be reached at 3711 Middlebrook Pike, Knoxville, TN 37921. (865) 864-5468. The Nashville office can be reached at 312 Rosa L Parks Ave, 14<sup>th</sup> Floor, Nashville TN 37243. (615) 532-0780.

**Comment #4: List of any NOV's on the landfill operations since opening of the first section of the existing landfill?**

**Response #4:** A summary of inspection results for Yarnell can be found at <https://www.tn.gov/environment/about-tdec/tdec-dataviewers.html>. In addition, digital copies of any NOV's are available upon request by contacting the Tennessee Department of Environment and Conservation's Knoxville Field Office or Nashville Central Office. The Solid Waste Program at the Knoxville Environmental Field Office can be reached at 3711 Middlebrook Pike, Knoxville, TN 37921. (865) 864-5468. The Nashville office can be reached at 312 Rosa L Parks Ave, 14<sup>th</sup> Floor, Nashville TN 37243. (615) 532-0780. Copies of any recent NOV's will be provided to the commenter.

**Comment #5: A third party, West Knox Sewer System, operates the leachate collection system now. What are their responsibilities and to whom?**

Manual". Attachment 1 of the permit submittal contains detailed peak discharge calculations to determine required pond and channel sizing. Also, from this data, the height of a spillway, which is required to overtop for a least a 100 year/ 24 hour rain event, was calculated. TDEC reviewed the permit for compliance with these two storm events and found the permit to be in agreement.

**Comment #11: Was an Environmental Assessment done for the original design and for this expansion?**

**Response #11:** Tennessee state regulations pertaining to the permitting of Class III disposal facilities do not include any requirements for an environmental impact statement or environmental assessment as required at a Federal level under the National Environmental Policy Act. A comprehensive permit review was held and TDEC has found that this permit application meets all State of Tennessee regulations for a Class III disposal facility. These regulations can be found at the link provided under Rule Chapter 0400-11-01.

<https://publications.tnsosfiles.com/rules/0400/0400-11/0400-11-01.20160707.pdf>

State of Tennessee  
Department of Environment and Conservation  
Division of Solid Waste Management

Solid Waste Management Program  
William R. Snodgrass Tennessee Tower  
312 Rosa L. Parks Avenue, 14<sup>th</sup> Floor  
Nashville, Tennessee 37243  
615-532-0780

REGISTRATION AUTHORIZING SOLID WASTE  
DISPOSAL ACTIVITIES IN  
TENNESSEE

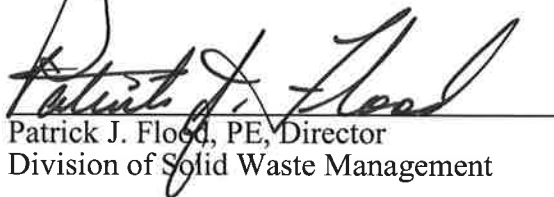
Registration Number: DML47000069

Date Issued: January 14, 2019

Issued to: Waste Corporation of Tennessee, LLC

**Activities Authorized:** Construction, operation, closure, and post-closure care of a Class III disposal facility known as Yarnell Demolition Landfill, located in Knox County at 1550 Lamon Quarry lane, on the south side of Yarnell Road between Lovell Road and Campbell Station Road, in Knoxville, Tennessee for the disposal of landscaping and land clearing wastes, construction/demolition waste, shredded automotive tires, and/or certain wastes having similar characteristics and approved in writing by the Department.

By my signature this registration is issued in compliance with the provisions of the Tennessee Solid Waste Disposal Act (Tennessee Code Annotated, Section 68-211-101, et seq.), and applicable regulations developed pursuant to this law and in effect; and in accordance with the conditions and other terms set forth in this registration document and attached Registration Conditions.

  
Patrick J. Flood, PE, Director  
Division of Solid Waste Management

## PERMIT TERMS AND CONDITIONS

1. Recertification by Permittee for Facilities Whose Initial Operation is Delayed - If the facility does not initiate construction and/or operation within one year of the date of this permit, the permittee must re-certify the application in accordance with Rule 0400-11-01-.02(3)(d).
2. Duty to Comply - The permittee must comply with all conditions of this permit, unless otherwise authorized by the Department. Any permit noncompliance, except as otherwise authorized by the Department, constitutes a violation of the Act and is grounds for enforcement action, or for permit termination, revocation and re-issuance, or modification.
3. Need to Halt or Reduce Activity Not a Defense - It shall not be a defense for a 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.
4. Duty to Mitigate - In the event of noncompliance with the permit, the permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent adverse impacts on human health or the environment.
5. Proper Operation and Maintenance - The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.
6. Permit Actions - This permit may be modified, revoked and re-issued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and re-issuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any existing permit condition.
7. Property Rights - This permit does not convey any property rights of any sort, or any exclusive privilege.
8. Duty to Provide Information - The permittee shall furnish to the Commissioner, within a reasonable time, any relevant information which the Commissioner may request to determine whether cause exists for modifying, revoking and re-issuing, or terminating this permit, or to determine compliance with this permit. The permittee must also furnish to the

Commissioner, upon request, copies required to be kept by this permit. All records, including a copy of this permit and the approved Part I and Part II application, must be maintained at the facility or other locations as approved by the Commissioner.

9. Inspection and Entry - The permittee shall allow the Commissioner, or an authorized representative, to:

- (i) Enter at any reasonable time the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- (ii) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (iii) Inspect at any reasonable time any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit (Note: If requested by the permittee at the time of sampling, the Commissioner shall split with the permittee any samples taken.);
- (iv) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Act any substances or parameters at any location; and
- (v) Make photographs for the purpose of documenting items of compliance or noncompliance at waste management units, or where appropriate to protect legitimate proprietary interests, require the permittee to make such photos for the Commissioner.

10. Monitoring and Records

- (i) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- (ii) The permittee shall retain records of all required monitoring information. The permittee shall maintain records for all groundwater monitoring wells and associated ground-water surface elevations, for the active life of the facility, and for the post-closure care period as well. This period may be extended by request of the Commissioner at any time.
- (iii) Records of monitoring information shall include:
  - (I) The date, exact place, and time of sampling or measurements;
  - (II) The individual(s) who performed the sampling or measurements;



- (III) The date(s) analyses were performed;
- (IV) The individual(s) who performed the analyses;
- (V) The analytical techniques or methods used (including equipment used); and
- (VI) The results of such analyses.

11. Reporting Requirements

- (i) The permittee shall give notice to the Commissioner as soon as possible of any planned physical alterations or additions to the permitted facility.
- (ii) Monitoring results shall be reported at the intervals specified elsewhere in this permit.
- (iii) The permittee shall report orally within 24 hours from the time the permittee becomes aware of the circumstances of any release, discharge, fire, or explosion from the permitted solid waste facility which could threaten the environment or human health outside the facility. Such report shall be made to the Tennessee Emergency Management Agency, using the 24-hour toll-free number (800) 262-3300.
- (iv) Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Commissioner, it shall promptly submit such facts or information.

12. Periodic Survey

- (i) Within 60 days of his receipt of the written request of the Commissioner to do so, the permittee shall cause to be conducted a survey of active and/or closed portions of his facility in order to determine if operations (e.g., cut and fill boundaries, grades) are being conducted in accordance with the approved design and operational plans. The permittee must report the results of such survey to the Commissioner within 90 days of his receipt of the Commissioner's request.
- (ii) The Commissioner may request such a survey:
  - (I) If he has reason to believe that operations are being conducted in a manner that significantly deviates from the approved plans; and/or
  - (II) As a periodic verification (but no more than annually) that operations are being conducted in accordance with the approved plans.
- (iii) Any survey performed pursuant to this part must be performed by a qualified land surveyor duly authorized under Tennessee law to conduct such activities.

13. Duration of Permits - This permit shall be effective for the operating life of the facility.
14. Effect of Permit - The issuance of this permit does not authorize the permittee to injure persons or property or to invade other private rights, or to violate any local law or regulations.
15. Transfer, Modification, Revocation and Re-issuance, and Termination of Permits - This permit may be transferred, modified, revoked or reissued, or terminated as set forth in 0400-11-01-.02(6).
16. Applicable Standards - All applicable facility standards of Rule Chapter 0400-11-01, Solid Waste Processing and Disposal Amendments shall be considered conditions of this registration.
17. Penalties - Any violation of the conditions or other terms of this registration may subject the registrant to the penalties set forth in Tennessee Code Annotated Section 68-211-114 and 68-211-117.
18. Hazardous Waste Restriction - No hazardous waste, as regulated by the Tennessee Hazardous Waste Management Act (TCA Section 68-212-101, et seq.), and the Rules adopted pursuant to that Act, shall be accepted at this facility.
19. Construction and Operation - The permittee shall construct and operate the facility in accordance with the approved engineering plans and operations manual which becomes a condition of this permit as Attachment I.
20. Financial Assurance - Prior to beginning operation, the permittee must file a Financial Assurance Instrument in accordance with Rule 0400-11-01-.03.
21. Special Waste - Except as specifically provided for in the Facility-Specific Conditions of this permit, the permittee may not accept for disposal any special waste unless approved to do so in writing by this Department.
22. Automobile Batteries - This facility is specifically prohibited from accepting automobile batteries for disposal.

Registration Number: DML47000069

Date Issued: January 14, 2019

## **VARIANCES AND WAIVERS**

The following variances or waivers from standards or requirements in Rule Chapter 0400-11-01, Solid Waste Processing and Disposal Amendments, are hereby granted in accordance with Rule 0400-11-01-.01(5):

Phases F-1, F-2, and F-3 of the permitted landfill area are not subject to the buffer zone standards set forth in Rule 0400-11-1-.04(3)(c).

**FACILITY-SPECIFIC PERMIT CONDITIONS**

The following conditions of this permit are established pursuant to Rule 0400-11-01-.02(5)(b):

1. Before construction/demolition waste may be placed in all portions of the site, the construction quality assurance report for placement/verification of five (5) foot geologic buffer (horizontal or vertical) meeting a permeability of  $1 \times 10^{-6}$  cm/sec for that area must have been reviewed and accepted by the Division of Solid Waste Management. The five-foot buffer must be placed against the quarry high wall or any other vertical rock formations internal to the waste placement footprint. The finished buffer surface must be inspected by a representative of this Division prior to the first waste being placed in each new area.
2. Class III wastes for this site are as defined in Rule 0400-11-1-.01(3)(c), except that farming wastes are excluded from disposal at this facility.
3. Waste deposited in this site will normally be covered in accordance with Class III requirements (once every 14 days). If the operator chooses to designate a section of the fill for Class IV waste only and operate it in accordance with Class IV requirements, he must submit a site map or a portion of a site map designating the section as a Class IV fill only, and receive approval from the Division before changing the cover frequency or any other applicable operating procedure.
4. The following groundwater parameters will be sampled on a semi-annual basis:

Arsenic	Ammonia (as N)	Chemical Oxygen Demand (COD)
Barium	Calcium	Biological Oxygen Demand (BOD)
Cadmium	Chloride	Total Dissolved Solids (TDS)
Chromium	Iron	Total Organic Carbon (TOC)
Cyanide	Magnesium (dissolved)	pH
Lead	Nitrate (as N)	Tannins and Lignins
Mercury	Potassium	Appendix I VOC's
Selenium	Sodium	
Silver	Sulfate	

5. Some physical method (i.e., gage post or equivalent), subject to approval by DSWM shall be utilized to indicate the amount of sediment accumulation in the sedimentation basin.
6. All sediment control structures shall be inspected at least once every 30 days, and after all significant precipitation events. Any damaged structures must be repaired in a timely fashion.
7. All groundwater monitoring wells shall be monitored for the presence of methane gas accumulation within the well casings at least once per year. The monitoring shall be performed immediately after the well is opened for sampling (e.g., the well shall not be allowed to "breathe" or "equilibrate" before monitoring takes place). A contingency plan

which defines the action levels for methane and subsequent remedial actions to be taken in the event that methane is found at or above the defined action levels must be submitted to the DSWM personnel at the Knoxville Environmental Field Office within 90 days of issuance of this permit.

8. Only construction/demolition wastes, landscaping/land clearing wastes, shredded automotive tires, and certain approved wastes similar in characteristic may be accepted for disposal at this facility. Putrescible waste, oily waste, paint waste, contaminated soil, asbestos, and white goods may not be disposed of at this facility.
9. Prior to initial receipt of wastes at this facility, and during all periods of operation thereafter, the facility must maintain on-site a roll-off bin that is staged and ready to receive unacceptable materials being diverted from the landfill.
10. During the operational life of, and during the entirety of the post-closure period, the facility must maintain adequate erosion control on the crown and side slopes of the filled area. In the event that side-slope erosion becomes a chronic problem, the facility may be required to install additional interceptor berms on the side-slopes, as well as runoff let-down structures, armored ditches, and energy-dissipation devices.
11. The Permittee shall modify the Final Grading Plan and analyze the associated stormwater controls and structures for compliance with the Rule 0400-11-01-.04(2)(i)3 & Rule 0400-11-01-.04(2)(i)6. The revised final grading plan for the site shall be submitted to the DSWM within 90 days after the effective date of this permit.



**Yarnell Road Vertical Expansion Class III Demolition Landfill  
Permit #DML 470000069 Landfill Phase F-2 Only  
FINANCIAL ASSURANCE WORKSHEET**

<b>ITEM</b>	<b>ACTIVITY</b>	<b>2018</b>
1	Closure Cost	\$541,617.00
2	Post Closure Cost	\$391,900.00
3	Operation Cost	\$37,500.00
4	Total Financial Assurance Amount Due	<b>\$971,017.00</b>

**NOTES**

- (1) The estimated third- party cost to close the solid waste unit as submitted by owner/operator and as approved and amended by the Division of Solid Waste Management.
- (2) The summation of the 2 years of post closure cost as submitted by the owner/operator and approved or amended by the Division
- (3) Calculated at 250 tons per day x 30 days at \$5.00 per ton.

**ANNUAL INFLATION ADJUSTMENTS**

Annual inflation adjustments to financial assurance will utilize the inflation factor as published annually by the U. S. Department of Commerce. This factor will be applied at the conclusion of the first year to the dollar amount of financial assurance as calculated in the year in which the financial assurance was established. The application of the annually published inflation factor will be applied each year to the prior year's inflation adjusted closure, post closure, contingency, and operational cost. This process will continue in subsequent years until the facility is certified closed.

The total amount of financial assurance can be reduced after certification of closure by the sum of closure cost, operations cost , and contingency cost as established by the cumulative annual inflation adjustments at the point of closure.

After the first year of post closure, the post closure amount will be reduced by the approved cost of that year's post closure care. The cost of the remaining years will be adjusted for inflation by using the inflation factor as published by the U. S. Department of Commerce. This process will be repeated each year for the duration of post closure.