



STATE OF TENNESSEE  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
KNOXVILLE ENVIRONMENTAL FIELD OFFICE – MINING SECTION  
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January 24, 2024

## NOTICE OF DETERMINATION

Application for a new NPDES permit to discharge treated mine wastewater and storm water into a wet weather conveyance to an unnamed tributary to Baker Creek in Loudon County, Tennessee.

**Tri County Crushed Stone, LLC**  
4921 US Hwy 411 South  
Maryville, TN 37801

**Tri County Crushed Stone**  
1373 Hutton Road  
Greenback, TN 37742  
NPDES Permit TN0070717 (New)  
Loudon County

This NPDES permit will authorize the discharge of treated mine wastewater and storm water from a new 71.35-acre limestone quarry and processing facility. The permittee submitted a complete application on August 28, 2023, which included supporting plans and design calculations for mine wastewater and storm water treatment. The Division of Mineral & Geologic Resources (the “Division”) made a preliminary determination that the proposed activity would cause no measurable degradation due to the implementation of a developed Total Maximum Daily Load (TMDL) approved by the EPA on March 28, 2007, thus, no alternatives analysis or social and economic justification was required, per *Chapter 0400-40-03-.06(1)(b)2 of the Rules of TDEC*. The applicant has also submitted calculations which demonstrate that the treatment structures are capable of storing the expected runoff volume from a 10-year/24-hour storm event. The volume and treatment capacity will increase as the pit expands, and thus reducing the likelihood of discharges from the facility.

This NPDES permit authorizes discharges to a wet weather conveyance to an unnamed tributary to Baker Creek in Loudon County, Tennessee. The unnamed tributary to Baker Creek is unassessed. Due to the size of the unnamed tributary’s watershed, the Department has determined that the assessment status of Baker Creek would be appropriate for the antidegradation review and to afford the same antidegradation protections of Baker Creek to the unnamed tributary.

Baker Creek is not identified or designated as an Exceptional Tennessee Water (ETW) or Outstanding National Resource Water (ORNW) according to the most recent list of “Known Exceptional Tennessee Waters and Outstanding National Resource Waters.” According to the information available to the Division, Baker Creek meets the specifications described at *Chapter 0400-40-03-.06(3)* for the classification of available parameters for the pollutants of concern at

this facility (Total Suspended Solids (TSS) and pH). In conjunction with information provided by the EPA approved TMDL, The Division has made a final determination that the proposed activity will cause no measurable gradation of parameters that are available.

The Division issued a draft NPDES permit for the Tri County Stone Quarry on September 14, 2023, and issued a public notice document concerning the draft permit action on September 27, 2023. Due to the amount of public interest in the project, the Division issued a notice of public hearing on November 8, 2023, which requested comments from other regulatory agencies and members of the public.

A hybrid Public Hearing was held at the Greenback Community Center and via a Microsoft Teams video-teleconference on December 11, 2023. The Division held a preliminary technical session with the public from 5:00-6:00 P.M. EST to provide the opportunity for the public to hear information regarding the proposed project and to ask questions about the project and the decision-making process. Introductory remarks by the hearing officer provided a brief summary of the proposed permitting action, the purpose of the hearing, a brief description of the hearing procedure, and the decision process.

Approximately 91 people attended the meeting at the Greenback Community Center, and approximately seven people attended the meeting via Microsoft Teams. Greenback City Mayor Dewayne Burchfield and representatives of the Loudon County Commission appeared in person. 13 individuals offered testimony during the hearing and approximately 30 written comments were received during the Public Comment period. The Public Comment Period expired on December 21, 2023. All comments received by the Division during the comment period are part of the hearing record and were considered by the Division in making a final permit decision.

### **Comments and Responses**

Please note that several comments are not included in this document because: 1) they were not directly related to the proposed project, 2) state a belief or opinion, 3) required a response without a direct relationship to the project, and/or 4) required information or involved matters beyond the regulatory authority of the Division.

Subjects included in the comments and the Division's responses follow: (Several of the public comments representing similar concerns and issues are grouped together under specific categories.)

#### **A: Surface and Ground Water Quality Comments:**

*A-1: The proposed quarry activity will cause pollution of surface water in Baker Creek and will impact fish, wildlife, and livestock.*

The waters of Tennessee are the property of the State and are held in public trust for the use of the people of the State. The waters of Tennessee have many uses in the public interest, such uses can include sources of water supply for domestic and industrial purposes, propagation and maintenance of fish and other aquatic life; recreation in and on the waters including the safe consumption of

fish and shellfish; livestock watering and irrigation; navigation; generation of power; propagation and maintenance of wildlife; and the enjoyment of scenic and aesthetic qualities of waters. The *Rules of TDEC 0400-40-04* list the designated uses for Baker Creek as fish and aquatic life, recreation, livestock watering and wildlife, and irrigation.

The *Federal Clean Water Act* and the *Tennessee Water Quality Control Act* recognize the right of a permittee to discharge to waters of the state, as long as the discharge does not impair the designated uses of the receiving stream or violate state water quality standards, causing a condition of pollution. In fact, the primary purpose of any NPDES permit is to ensure that all designated uses of the receiving stream are protected. Any discharge from this facility must be consistent with the terms and conditions of the NPDES permit and shall not impair the downstream designated uses. The Division has determined that this permit is protective of the designated uses of Baker Creek.

The proposed discharges from this facility do not have the reasonable potential to cause or contribute to a violation of state water quality standards. The designed settling pond meets or exceeds the Division's preferred design criteria for a 10-YR/24-HR storm event and the storage capacity will continue to increase as the quarry develops. If discharges from this facility are identified as causing a condition of pollution, the Division may modify the NPDES permit to include specific monitoring requirements for the pollutant and may also pursue enforcement action.

*A-2: The proposed mining activity is in karst limestone geology and will cause pollution of ground water and damage nearby wells, springs, and aquifers.*

One of the primary goals of the *Tennessee Water Quality Control Act* is to protect our valuable ground water resources. This NPDES permit authorizes the discharge to surface water only and does not authorize discharges to ground water. If a distinguishable subsurface discharge is noted on site, the Division will require the permittee to either eliminate the subsurface discharge or permit it through the Underground Injection Control (UIC) permitting program (ground water regulations can be found in the *Rules of TDEC 0400-40-03-.07*). The NPDES permit must also be modified if a UIC permit is issued for a subsurface discharge within the permit area, and the public would be notified of the proposed permit modification.

There are currently more than 180 individual NPDES permits for limestone mining facilities within Tennessee, and many of these facilities exist in areas of karst geology underlain with limestone aquifers. The Division's Mining Section is not aware of any contamination or damage to water wells due to limestone mining facilities within the state.

*A-4: There are potential contaminants in the water that have not been tested. These need to be tested to be sure they are absent rather than taking the applicant's word for it.*

Pursuant to T.C.A. § 69-3-108(v)(2), permit coverage applies to those pollutants that have standards or limits in the permit, or to pollutants for which the permittee complied with all disclosure requirements, disclosed to the Department, and are in the Department's reasonable

contemplation at the time of permit issuance. EPA Form 3510-2D provides the applicant a list of pollutants not typically found in mining discharges. The applicant must mark whether they believe the pollutants to be present or absent in the discharge. If marked “believed present,” the permittee must provide results from at least one analysis for that pollutant.

Currently, the Division permits over 180 limestone quarries in the state. Limestone formations generally do not contain pollutants aside from TSS and pH rarely exceeds a range of 6 - 9 standard units. If the Division has reason to believe that any additional pollutants are present in the discharge at concentrations sufficient to cause a violation of Water Quality Standards, it may require additional testing of the permittee and may modify the permit to regulate the discharge of any pollutants of concern. The Division may also conduct its own sampling and analysis of any discharges from the facility.

*A-5: Heavy machinery will contaminate the water in the area.*

Machinery at this mine site must meet operational criteria under Mine, Safety and Health Administration (MSHA) regulations and must be regularly inspected and maintained. The NPDES permit also contains narrative water quality standards that provides there shall be “no distinctly visible floating scum, oil, or other matter contained in the wastewater discharge, and the wastewater discharge must also not cause an objectionable color contrast in the receiving stream.” The narrative water quality permit standards and the MSHA regulations in place for equipment on a mine site are more stringent than what is found for most other vehicular equipment, including farm equipment, any of the 2.3 million vehicles registered in Tennessee or equipment at any construction site.

*A-6: There is something in Section 401 in the Water Quality Act that says an Aquatic Resource Alteration Permit (ARAP) should be investigated, and I understand that it was investigated, but I would like to put in the public record that a response how it was determined that an ARAP is not needed for this particular project.*

Section 401 of the Clean Water Act (CWA) applies specifically to the state’s certification that a USACE 404 permit to dredge or discharge fill into Waters of the United States (WOTUS) will not violate a state’s water quality standards. In this instance no WOTUS (streams or wetlands) have been identified within the proposed permit area that would require a 404 permit for the state to certify. An ARAP may serve as the 401 certification or stand alone to permit alterations to waters that do not require 404 permit or waters that are not WOTUS, such as wetlands without surface connections to streams or streams with losing reaches that do not have a surface connection to navigable waters or water withdrawals. No water features occur within the proposed permit area such that an ARAP can be required.

*A-7: A commentor was concerned regarding the location that samples are taken and the delay from sampling to the reporting requirements each quarter.*

Water samples are taken twice each month from the point that treated mine wastewater leaves the permitted boundary. This is the location at which the treated mine wastewater must meet NPDES permit limits before discharging into the watershed. The monitoring and reporting requirements are determined by the Environmental Protection Agency (EPA) and are stated in the permit. Results must be recorded monthly and submitted quarterly. In addition, the NPDES permit also requires notice within 24 hours of any non-compliance, or exceedance, which could cause a threat to the public drinking water supplies, or any other discharge which could constitute a threat to human health or the environment.

*A-8: A commentor mentioned the Baker & Centenary Creek Restoration Initiative – Phase II grant. Why would TDEC allow a source of pollution to be permitted in an area that has a grant to clean up pollutants in the watershed?*

Discharge limits are federally promulgated limits determined by the EPA. These limits are determined based on historical data from the material mined and point source discharges. The grant mentioned addresses non-point source (NPS) pollutants in these watersheds and focuses on total suspended solids and pathogens related to agricultural use and failing wastewater (septic) systems. Mines and quarries typically have large holding capacities due to their pits and settling ponds. The settling time provided by these structures reduce the level of TSS discharged into the system compared to agricultural and livestock uses. An increased level of pathogens from this facility is not expected, nor is it permitted.

The Baker Creek watershed also has a TMDL developed for point source discharges into its watershed. *Section 303(d)* of the Federal *Clean Water Act (CWA)* requires each state to develop TMDLs for those waterbodies within its boundaries that are not attaining water quality standards. The TMDL process quantifies the amount of a pollutant, identifies the sources of the pollutant and establishes the maximum allowable loadings of a pollutant for a waterbody that will allow the waterbody to maintain water quality standards. TMDLs are developed on a watershed basis and are prioritized based on the severity of pollution. In accordance with 40 CFR 130.7, proposed TMDLs are placed on public comment and review. The final TMDL was approved by the EPA on March 28, 2007.

The historical sediment loading from mining sites located in impaired sub-watersheds is small compared to total loading for sub-watersheds. Thus, the NPDES permit limit of 40 mg/L for TSS is considered to be protective of water quality and is within the margin of safety for the WLA established in the developed TMDL. Any discharge from the permitted outfall must meet the permit limit of 40 mg/L TSS to be in compliance with the TMDL established for the Little Tennessee River watershed. Compliance with the TMDL will result in no measurable degradation to the Little Tennessee River or its subwatersheds.

**B: Comments Regarding Harm to Animals and Wildlife, Including Livestock, Fish and Aquatic Life, and Threatened or Endangered Species.**

*B-1: This mine will impact a wetland downstream and impact bald eagles and other animals.*

Fish and aquatic life, including endangered and threatened species and their habitat, will not be adversely affected, provided the permittee follows the approved plans and permit terms and conditions as required by 40 CFR 122.44(a)(1) and TCA 69-3-101. The proposed activity is not proposing any alterations to Baker Creek or its tributaries. The Technology-Based Effluent Limitations (TBELs) for TSS, together with narrative Water Quality-Based Effluent Limitations (WQBELs), are protective of fish and aquatic life, including threatened and endangered species. Pursuant to the *Rules of TDEC 0400-40-05-.06(9)*, the public notice document was forwarded to all agencies with jurisdiction over fish and wildlife resources and natural and historic preservation, including the Tennessee Wildlife Resources Agency (TWRA), the US Fish and Wildlife Service (USFWS), the TDEC Natural Heritage Program, TDEC Division of Archaeology and the Environmental Protection Agency (EPA). The Division received no comments from these Agencies. Based on a review of the Division's databases, all threatened and endangered (T&E) species identified as being present in the waters of Baker Creek, segment TN06010204043\_1000, were considered in the review of this application. The outfall of this facility is located approximately seven miles from the first recorded T&E species.

**C: Air Quality and Other Environmental Permit Comments**

*C-1: The facility will create dust which will migrate off-site causing impacts to residents, livestock and wildlife in the area.*

The NPDES permit is a water quality permit and does not regulate air quality. Air quality concerns should be directed to the Tennessee Division of Air Pollution Control, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 15TH Floor Nashville, TN 37243, or by calling TDEC Nashville Field office at (615) 687-7046.

**D: Blasting, Traffic, Zoning, and Other Non-Environmental Comments**

*D-1: Blasting at the site may cause damage to nearby homes and wells and disturb local wildlife and livestock.*

The Division of Water Resources does not regulate blasting activity. Blasting is regulated by the Tennessee Department of Commerce and Insurance, Division of Fire Prevention – State Fire Marshal's Office. The State Fire Marshal's Office can be contacted at 500 James Roberson Parkway, Nashville, TN 37243-0565 or by calling (615) 741-2241.

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*D-2: Several comments were received relating to vehicular safety, road use and damage, proximity of the facility to neighboring properties, impacts to property values, and local zoning ordinances.*

While the Division empathizes with the commenters and recognizes their concerns, the Division does not have jurisdiction or authority over these issues. The NPDES permit issued by the Division does not supersede any local or county rules or regulations, nor can the Division enforce any local ordinances. The Division encourages the commenters to contact their county government about these concerns.

### **Decision**

**The Division has reviewed the permit application, conducted the required antidegradation review, and considered all available stream assessments and data. Our review included in-stream background water quality monitoring, the most recent listing of 303(d) streams, Exceptional Tennessee Waters, and information concerning federal and state listed threatened and endangered species.**

**The Division issued a public notice of the proposed NPDES permit in accordance with 40 CFR 124.10(b) and the *Rules of TDEC 0400-40-05-.06(7)* on September 27, 2023. The Division issued a notice of public hearing on the proposed NPDES permit on November 8, 2023, in accordance with the *Rules of TDEC 0400-40-05-.06(8)*. Comments were accepted into the official record through December 21, 2023. The Division has responded to all relevant comments contained within the public hearing record.**

**The public participation process included notifying all applicable state and federal agencies, including the US Fish & Wildlife Service (USFWS), US Environmental Protection Agency (EPA), Tennessee Wildlife Resources Agency (TWRA), TDEC Natural Heritage Program, and TDEC Division of Archaeology.**

**Based on its review of all relevant data, the Division has determined that the NPDES permit complies with all applicable statutory and regulatory requirements, is protective of water quality, and can be issued.**

**The Permit may be appealed to the Board of Water Quality, Oil and Gas pursuant to Tenn. Code Ann. § 69-3-105(i) and *Rules of TDEC 0400-40-05-.12*.**

Sincerely,



**for Bryan W. Epperson  
Director - Division of Mineral & Geologic Resources**