

# STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION DIVISION OF MINERAL & GEOLOGIC RESOURCES – MINING SECTION 3711 MIDDLEBROOK PIKE KNOXVILLE, TN 37921-6538 PHONE (865) 594-6035 STATEWIDE 1-888-891-8332 FAX (865) 594-6105

APRIL 30, 2024

#### NOTICE OF DETERMINATION

Applications for a new National Pollutant Discharge Elimination System (NPDES) permit and a new Aquatic Resource Alteration Permit (ARAP) for the Hurricane Creek Mining, LLC Mine 2 surface coal mine near Clairfield, Tennessee.

Hurricane Creek Mining, LLC 3380 Cedar Fork Road Tazewell, TN 38789

Mine 2 Valley Creek Road Clairfield, TN 37715 NPDES Permit TN0070716 ARAP Permit NR23MS.010 Claiborne County

This facility is a 657.9-acre surface coal mine proposing to discharge treated mine wastewater and storm water from 28 outfalls into unnamed tributaries, which flow to: Hurricane Creek, Pigeon Roost Branch, Valley Creek, Spruce Lick Branch and Tackett Creek located in Claiborne County, Tennessee. The proposed activity will remine areas that have been previously mined and will reclaim, to the extent practicable, the old mine benches, highwalls, and pits that have been left by mining prior to the Surface Mining Control and Reclamation Act (SMCRA).

According to the Division's most current information, the receiving streams fully support their designated uses and are not listed as impaired in the EPA Approved Final Version Year 2022 303(d) List. The streams that receive drainage from the 465.21 acres in the Hurricane Creek, Pigeon Roost Branch, and Valley Creek drainage areas are part of the EPA Approved Total Maximum Daily Load (TMDL) for the Clear Fork of the Cumberland River, March 12, 2009. All discharges from the proposed facility to these drainage areas must comply with the Waste Load Allocation (WLA) prescribed in the TMDL. The annual WLA for the outfalls in these drainage areas is 50,086 pounds per year or approximately 9.2% of the total WLA for mining facilities within the subwatershed. This is approximately 107.66 pounds of Total Suspended Solids (TSS) per acre per year. This is a significant reduction of the TMDL target load for the watershed, which is 276.1 pounds of TSS per acre per year.

Compliance with the TMDL Waste Load Allocation will result in a reduction of sediment loading below existing conditions in the watershed from the site during mining. The outfalls in the 192.69 acres that are not part of the TMDL have the same effluent limitations for TSS as the discharges within the TMDL and

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should exhibit a similar reduction in pounds of TSS per acre per year. Therefore, discharges from the facility shall not constitute measurable degradation for sediment/siltation/TSS.

All receiving streams associated with this NPDES permit have available parameters for all other pollutants of concern, except selenium (Se). A water quality-based effluent limitation (WQBEL) is incorporated into the permit. The WQBEL is based on the 7Q10 low flow of zero cubic feet per second (cfs) to meet instream water quality standards for Se. The 7Q10 is the lowest 7-day average flow that occurs once every 10 years. Reasonable potential analysis for the 7Q10 receiving stream demonstrated that no in-stream water quality standard would be exceeded by discharges from this facility for any other parameters in the special conditions analysis; therefore, measurable degradation is not anticipated from this facility presuming proper operation, maintenance, and compliance with all effluent limitations specified in the NPDES permit.

Hurricane Creek and Spruce Lick Branch are designated as Exceptional Tennessee Waters (ETW). According to 0400-40-03.06(2)(a) and (3)(a), the Division has determined that this activity will not result in measurable degradation for parameters that are unavailable (TSS) and for other water quality limited parameters in the receiving streams.

Hurricane Creek Mining's proposed activities include the installation of 21 crossings of state jurisdictional streams that have been previously altered by historical mining. Additionally, 2.34 acres of wetlands will be dredged or filled and mitigated by the transfer of purchased wetland credits and United States Army Corps of Engineers (USACE) permit LRN-2009-00479.

The Division held a public hearing on January 9, 2024, at Cove Lake State Park in Caryville, Tennessee to consider public comments on the applications for the proposed NPDES and ARAP permits. The hearing began at 6:00 p.m. EST and lasted until all individuals present wishing to provide oral comments for the record were heard. An informal technical session by Mining Section staff preceded the public hearing from 5:00-6:00 p.m. EST. During this session an opportunity for discussion and review of the permit applications and plans was provided. Introductory remarks by the hearing officer provided a brief summary of the proposed permitting actions, the purpose of the hearing, a brief description of the hearing procedure and the decision process.

Approximately twenty-seven (27) individuals attended the public hearing with fourteen (14) attending inperson. Those present included concerned citizens and representatives of other federal and state agencies. Five (5) individuals offered testimony during the hearing. Copies of written comments were also submitted during the comment period. The Division received approximately 19 unique comments via email. The Division received approximately 1,193 emails in response to the public notice in total; however, approximately 1,174 emails were generated from an online form and were identical except for contact information. Written public comments continued to be accepted until the end of the comment period, February 7, 2024.

The Department operates under a NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM MEMORANDUM OF AGREEMENT BETWEEN THE STATE OF TENNESSEE AND THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 4 (MOA). The Department did not receive comments or objection from EPA Region IV within 30 days of receiving the draft NPDES permit in accordance with Section IV. B. 5., Permit Review and Issuance of the MOA. However, the Department agreed to accept and consider comments from EPA after receipt of the draft permit and before expiration of the public participation comment period with the understanding that EPA's comments could not be

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considered significant and did not meet the requirements established within Section IV. B. 12. a. The Department has reviewed all comments received in accordance with Section IV. B. 6. c. "significant comments objecting to the tentative determination and draft permit have been presented at the hearing or in writing pursuant to the public notice" and determined that none of the comments submitted would result in a permit that differed significantly from the draft permit provided to EPA. No substantial changes were made between the draft and final permit, aside from administrative changes which are made between all draft and final permits (such as the addition of issuance and expiration dates). Comments received did not provide new information that was not considered in preparation of the draft permit. Based on the criteria provided in the MOA and the Response to Comments provided in the Notice of Determination, the Department will not issue a proposed permit for this activity.

All comments, concerns, emails, etc. received by the Division during the comment period are part of the hearing record and were considered by the Division in making the permit decision.

# Glossary of Frequently Used Acronyms and Terms

ARAP	(Aquatic Resource Alteration Permit) - State Permit that authorizes the alteration of state
	jurisdictional waters (streams & wetlands, etc.). This permit may serve as 401 certification of
	a Federal 404 permit.

CFR (Code of Federal Regulations) – Regulations authorizing or prohibiting certain activities as specified in Federal Statute.

ECHO (Enforcement & Compliance History Online) – Environmental Protection Agency web-based database that provides environmental permit compliance information on a public facing dataviewer.

EIS (Environmental Impact Statement) – Prepared after an Environmental Assessment if a proposed major federal action is determined to significantly affect the quality of the human environment.

ETW (Exceptional Tennessee Waters) – Waters deemed by the Department to have high resource value due to ecological diversity, recreational or other significant uses.

NetDMR Environmental Protection Agency web-based application for the submittal of discharge monitoring reports.

NPDES (National Pollutant Discharge Elimination System) – A point source discharge permit established in 40 CFR and administered by each state's environmental resource agency.

NSPS (New Source Performance Standards) – Performance standards developed and established by EPA in 40 CFR for new discharges from specific activities. The NSPS establishes the minimum effluent limitations that shall be applied to a permitted discharger.

The average 7 consecutive day low flow that occurs (on average) every 10 years.

TMDL (Total Maximum Daily Load) - Calculation approved by EPA for the maximum amount of a pollutant allowed to enter a waterbody so that the waterbody will meet and continue to meet water quality standards for that pollutant. A TMDL determines a pollutant reduction target and allocates load reductions necessary to the source(s) of the pollutant.

TMI (Tennessee Macroinvertebrate Index) – The Department's scoring system for determining biological integrity in a stream based on aquatic macroinvertebrate assemblages and indexed to ecoregion reference data. A TMI score of 32 to 42 meets biological integrity goals.

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TSS (Total Suspended Solids) - Suspended particles, that are not dissolved, in a known volume of water trapped by a filter, dried, and weighed. This measure is used to determine compliance

with NSPS and the TMDL waste load allocation.

WLA (Waste Load Allocation) – The amount of a specific pollutant that can be discharged from a specific facility as established in an EPA Approved TMDL to reduce the loading of that pollutant and ensure the waterbody will meet and continue to meet water quality standards.

WQBEL (Water Quality Based Effluent Limitation) – An effluent limitation established in a permit based on the stream's assimilative capacity for a specific parameter when it has been demonstrated by reasonable potential analysis that a discharge has the potential to cause an instream excursion above the State's water quality standard.

# **Comments and Responses**

Please note that a number of comments (both written and oral) are not included in this document because they: 1) were not directly related to the proposed project, 2) state a belief, opinion, or request that did not specifically ask for a response, 3) require a response without a direct relationship to the project, and/or 4) requested information or involved matters beyond the regulatory authority of the Division.

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

## A. Water Quality and NPDES Permit Action Comments

A-1) Commenter(s) indicated that the affected watersheds are already impaired by siltation from mining and have a Total Maximum Daily Load (TMDL) for sediment in place. The Tennessee Department of Environment and Conservation should not issue a NPDES permit for this mine until the company can show that the discharges will be in compliance with waste load allocations for sediment in the TMDL. TDEC should show that the effluent limits within the draft permit are consistent with the waste load allocations within the Total Maximum Daily Load pursuant to 40 CFR § 122.44(d)(1)(vii)(B).1. Specifically, the commenter inquired about the daily component of the TMDL.

Response: The commenter is correct in stating many of the receiving streams are within the EPA approved Total Maximum Daily Load (TMDL) for the Clear Fork of the Cumberland River, March 12, 2009. All discharges within the watershed designated in the TMDL from the proposed facility must comply with the Waste Load Allocation (WLA) prescribed in the TMDL. The WLA for the discharges within the TMDL drainage areas for the proposed activity is 50,086 pounds per year or approximately 107.66 pounds per acre per year. This is a reduction in sediment loading of almost 40% less than the watershed WLA target, which is 276.1 pounds of TSS per acre per year. Compliance with the TMDL Waste Load Allocation will result in a reduction of sediment loading from the site during mining that is below the existing conditions of the watershed. Therefore, discharges from the facility will not result in measurable degradation and are protective of waters with available parameters and unavailable parameters for siltation.

The daily expression of the overall WLA for mining activity in each impaired subwatershed is expressed as an equation and is equal to the product of the Daily Maximum permit effluent limitation (70mg/L) for

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discharges from individual mining sites, an appropriate unit conversion factor, and the sum of all discharges from all mining sites in a single day in a particular subwatershed.

 $WLA_{Overall-Daily} = (70 \text{ mg/l}) (8.34 \text{ 1b-l/mg-Mgal}) (Q)$ Where: Q = Sum of all mining site discharges in the subwatershed [MGD]

Compliance with the WLA for mining activities in an impaired subwatershed includes compliance with both the overall annual and daily components of the WLAs in Table F-3 of the approved TMDL. Therefore, the permit is consistent with 40 CFR § 122.44(d)(1)(vii)(B).1. No lowering of water quality from the permitted discharges of TSS is allowable or should occur provided the permittee conducts proper operation and maintenance and complies with the applicable effluent limitations for TSS and the WLA prescribed in the TMDL.

A-2) Commenter(s) indicated determining sediment compliance within the watershed may be difficult as many other mines within the same watershed have not submitted required discharge monitoring reports, according to the EPA ECHO database, and appear to be functionally abandoned. As of late 2023, the Office of Surface Mining Reclamation and Enforcement has initiated bond forfeiture proceedings for many mines within the area. In a recent response to a Freedom of Information Act request, OSMRE's Knoxville Field Office has indicated that a staggering 63% of coal mining permits in Tennessee are now undergoing bond forfeiture proceedings. This means that out of 86 permits, 54 are no longer being cleaned up or maintained by the industry. This alarming statistic highlights the declining state of the industry and the associated increased environmental harm from unmaintained mines. Allowing a new coal mining related NPDES permit to go forward only increases this risk. The permit record should document how the receiving waters that are subject to TMDL have sufficient remaining pollutant load in accordance with 40 CFR § 122.4(i).

Response: The state cannot hold this permittee responsible for compliance issues associated with other permittees' facilities. The EPA Approved TMDL establishes the TMDL model that accounts for cumulative impacts within the subwatershed and assigns a conservative WLA for each permitted discharger under the assumption that each outfall has a continuous discharge and complies with the effluent limitation for TSS. Most outfalls from surface coal mines, including Mine 2, are precipitation driven and are not continuous. These outfalls have intermittent discharges and very few are likely to come close to the WLA for sediment at a permitted site. The twice a month monitoring will result in an overestimation of the amount of sediment discharged from the site, as discharges are presumed to be continuous until the next sampling event even when no discharge has occurred between sampling events. The permittee may sample more frequently than the required twice a month monitoring to document no discharge, demonstrate compliance with the monthly average and the TMDL, and demonstrate that the discharged sediment is less than the WLA of 107.66 pounds per acre per year. The applicant has proposed measures to comply with the TMDL's waste load allocation at the outfalls and result in a reduction of sediment loading from the affected area to prevent measurable degradation in the receiving stream.

Permittees or other responsible parties including those that abandon their permits are subject to regulatory action if they fail to monitor and comply with the annual and daily WLAs in their permits. Should an exceedance of the daily WLA (discharge > 70mg/L) occur, the annual loading from the facility may still be reduced for the subwatershed and comply with the annual WLA. The spreadsheet in the Permit Rationale documents how the receiving waters, as established in the EPA Approved TMDL, have sufficient remaining pollutant load based on the operational status of mines within the subwatershed. While it is true that several

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permitted facilities within the same watershed are not submitting monitoring reports, these facilities were never fully developed or are in various states of reclamation such that ongoing sediment loading is significantly less than the loading allowed under the approved WLA. Federal agencies, State agencies, surety companies, and landowners are working together to develop a strategy to stabilize and minimize potential impacts from abandoned facilities.

A-3) Commenter(s) stated neither the EPA nor TDEC antidegradation forms appear as part of Hurricane Creek Mining's original (06/07/2023) or revised (07/12/2023) NPDES application document, nor are they separately provided. As such, Hurricane Creek Mining's NPDES permit application fails to comply with the requirements of Tenn. R. & Regs. 0400-40-03-.06(1)(b).

Response: The applicant did submit the required information on a TDEC worksheet as an addendum on September 13, 2023. As an oversight the information was not uploaded to the TDEC Dataviewer initially, and the public comment period was extended to give the public a full 30 days to view the information from the posting date on the Division's web page. However, the information was available, and the commenter could have requested a copy from the Division at any time prior its upload to the Dataviewer on January 8, 2024. There is no requirement to complete the specific worksheets. The applicant is only required to provide the equivalent information on the referenced worksheets for antidegradation review purposes. It should also be noted that the applicant indicates on the form whether they consider the discharge to be greater than de minimis, de minimis, or no measurable degradation. The final antidegradation determination is TDEC's and is evaluated on the totality of information submitted, relevant available public records, and on a parameter-by-parameter basis and may be different than what the applicant indicated on the form.

A-4) Commenter(s) stated that TDEC should clarify how the draft permit conditions and evaluation are consistent with TDEC's antidegradation and de minimis requirements within Rule 0400-40-03.

Response: For the parameter TSS/siltation, please see the response to comments *A-1*), *A-2*), and *A-3*). For the parameter Selenium (Se), discharges were presumed to be to 7Q10 zero flow streams. In 7Q10 zero flow streams, discharges from the outfalls are the receiving stream flow and the effluent limitation is set at water quality standards. De minimis discharges of Se are not allowed by the NPDES permit, and the WQBEL is set for each discharge such that measurable levels of selenium above the water quality standards in the discharges are not allowable as there is no assimilative capacity. Because the discharge during the 7Q10 condition is the receiving waters, any Se discharge above the WQBEL/in-stream water quality standard is considered degradation and a violation of the permit. No lowering of water quality from the permitted discharges due to Se should occur provided the discharge complies with the WQBEL for Se.

A-5) Commenter(s) were cumulative impacts considered including direct and cumulative impacts on any and all endangered aquatic species and all species of freshwater mussels that live in those creeks or downstream in bigger rivers?

Response: Cumulative impacts were considered for Mine 2, specifically for sediment, the primary pollutant of concern for surface mines. Cumulative impacts are precisely what the TMDL models consider when developing a WLA. When implemented properly, the loading of the pollutant of concern is reduced within the watershed. Additionally, the permit must meet New Source Performance Standards (NSPS) effluent limitations.

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The Division solicits comments/input from Tennessee Wildlife Resources Agency (TWRA), TDEC-Division of Natural Areas (TNDNA), and the U.S. Fish and Wildlife Service (USFWS) when the permit is drafted and, to the extent practicable and consistent with regulation, the Division incorporates those measures requested by the resource agencies into the permit. In this instance the Division indirectly received comments from the USFWS requesting that the treatment ponds be retained as water features post-mining, as slope stability allows, to enhance bat habitat. It was also requested that any structures retained be cut down to shallow water features to prevent the introduction and stocking of bass and sunfish species that might prey on Blackside Dace (*Chrosomus cumberlandensis*) if washed downstream into reaches where the dace may occur. These comments were provided directly to the applicant's consultant as part of the proposed Protection and Enhancement Plan (PEP), which is developed during the SMCRA application process. A copy of this letter was shared with TDEC. The ultimate post-mining disposition of the pond is a function of the SMCRA permit.

A-6) Commenter(s) stated even if the available data demonstrated that all existing dischargers within the watershed were in compliance with their NPDES permits, TDEC still couldn't make the necessary affirmative findings because it has issued numerous NPDES permits in this watershed that grant technology-based storm exemptions to water-quality based limits for TSS in contravention of the waste load allocation in the TMDL that was placed on public notice and approved by EPA.

Response: The assumption the commenter made is incorrect. The permittee must request the alternate storm limitation and provide documentation of the applicable precipitation event to receive the exemption for an exceedance. The alternate storm limitations exempt the applicant from receiving an effluent limitation violation for exceedances for TSS during a certain precipitation event. It does not exempt the permittee from the requirement to collect and report the TSS as well as other parameters during a precipitation event when alternate storm limitations are in affect. The permittee regardless of alternate storm limitations must provide the documentation of sample collection in NetDMR to demonstrate compliance with the approved TMDL waste load allocation. See the response to comment A-2).

A-7) TDEC's statement in the Rationale "preliminary determination that the proposed new or increased discharge will not cause measurable degradation of parameters that are unavailable and/or will only cause de minimis degradation of parameters that are available" is flawed for multiple reasons. First, the proposed discharges will cause measurable degradation of parameters that are unavailable. Second, the proposed discharges will cause more than de minimis degradation of parameters that are available. Finally, TDEC's presumptions of "proper operation and maintenance of the facility and compliance with all applicable effluent limitations and waste load allocations assigned under the Approved TMDL" are not only unsupported in the record, but plainly contradicted by the documented experience of multiple other coal mines in the same watershed.

Response: The Division disagrees with the commenter's statement concerning measurable and de minimis degradation as refuted in the response to comments A-1) thru A-6). None of the receiving streams are identified as having parameters that are unavailable. The Division has established effluent limitations that reduce discharges of most parameters to the in-stream water quality standards under the assumption that 1) no assimilative capacity exists in the receiving stream, and 2) in instances where a WLA for TSS applies, a scientifically based WLA under the EPA Approved TMDL exists for the overall reduction in sediment loading in the watershed at the discharge monitoring point.

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Permit reviewers do not have statutory authority to presume that the applicant will not conduct "proper operation and maintenance of the facility and be in compliance with all applicable effluent limitations and waste load allocations assigned under the Approved TMDL" based on other permittees in the area. The Division does have the regulatory and statutory authority to pursue enforcement IF the applicant does not conduct "proper operation and maintenance of the facility and is NOT in compliance with all applicable effluent limitations and waste load allocations assigned under the Approved TMDL".

A-8) Commenter(s) indicated Tennessee water quality standards provide that "[i]nterpretation and application of narrative criteria shall be based on available scientific literature and EPA guidance and regulations." Id. at 0400-40-03-.02(10). Two peer-reviewed scientific reports published by the EPA determined that a significant percentage of aquatic life is extirpated when conductivity reaches 300 microsiemens per centimeter (μS/cm).2 Additionally, Bernhardt et al (2012) derived a threshold of 308 μS/cm for biological impairment related to increased conductivity, and a threshold of 50 mg/L for sulfate concentrations.3 And, as cited below, ample scientific data indicate that instream conductivity above 240 μS/cm is harmful to Blackside Dace.

Response: The Division is also aware of the scientific literature on conductivity that the commenter cited as well as the EPA methodology for establishing a conductivity benchmark. In previous review of the documents cited by the commenter the Division has rejected the scientific validity of establishing a numeric effluent limit for conductivity in Tennessee as a pollutant. Conductivity is the measure of the ability of an aqueous solution to carry an electrical current, and thus the measure has no inherent toxicity. This is demonstrated in the document EPA/600/R-10/023F, March 2011, where an extirpation value for the aquatic beetle Oulimnius was calculated at >2791  $\mu$ S in West Virginia and 320  $\mu$ S for Kentucky. For comparison, drinking water in the United States generally runs from 50 to 1500  $\mu$ S.

While reviewing the EPA benchmark study, the Department found that sampling bias from the methodology used influenced whether "conductivity sensitive organisms" were collected. For instance, species such as Lepidostoma and Pycnopsyche were collected using qualitative multi-habitat sampling methods but were often absent from quantitative single habitat samples within the same stream reach sampled regardless of conductivity. This is demonstrated by information provided by the commentor demonstrating Hurricane Creek and its tributaries exhibit average conductivities  $>300~\mu\text{S}$ , but the stream has consistently exhibited high biological diversity (TMI  $\geq$  40) such that it is classified as an ETW. Spruce Lick Branch has exhibited wildly variable biological integrity (TMI 24-42) in the reach from which Dr. Eisenhour reported a Blackside Dace in 2013, but the conductivity has been consistently in the range of 415 to 820  $\mu$ S from 2007 to 2022.

There can be a high degree of variation in conductivity between one stream reach and another stream reach. Additionally, significant variation can exist in conductivity from one sample event to the next within the same stream reach; however, the Division still believes that conductivity is an important indicator parameter and valuable monitoring tool to identify changes in water chemistry that could adversely affect biological integrity. Therefore, conductivity is required as a reporting limit on coal mine discharges that, in conjunction with the permittee's Comprehensive Biological Monitoring Plan (CBMP), document conductivity trends which enhance the permittee's and Division's ability to identify potential issues within the treatment system. If potential issues are identified, proactive measures for the control and elimination of pollutants prior to an adverse effect on biological integrity in the receiving stream can be developed and implemented. This approach is consistent with other coal mining NPDES permits within the region. Of the approximately 3,300 permitted coal mining facilities nationwide, approximately 2,250 include conductivity monitoring requirements. The Division was only able to identify two facilities nationwide

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which have numeric effluent limitations for conductivity. These two facilities have conductivity limits set at 1000 μS/cm.

The Division will evaluate effluent monitoring results for conductivity as it relates to the EPA specific conductance thresholds (300-500  $\mu$ S) but it will not arbitrarily establish a numeric effluent limitation without a regulatory water quality standard, and as demonstrated in the previous paragraphs it is difficult to establish a violation of a narrative water quality standard due to increased conductivity. If a numeric water quality standard is promulgated federally for conductivity the NPDES permit shall be modified to incorporate an appropriate numeric effluent limitation.

### B. Wetland and ARAP Permit Action Comments

B-1) Commenter(s) indicated "We understand that in-lieu fee payments for wetlands to be impacted by this mining operation have already been made by a previous permittee seeking to mine this area. For the reviewing public, it would be helpful if TDEC would provide specific information regarding where the inlieu fee funded offsite mitigation was conducted, the nature of that mitigation (e.g., preservation, enhancement, or restoration), and to confirm that it has or will successfully offset the impacts contemplated by this new permit application."

Response: The invoices and in-lieu fee information are part of the permit application and available by entering the permit number NR23MS.010 in the TDEC Dataviewer at <a href="https://dataviewers.tdec.tn.gov/dataviewers/f?p=2005:1:16470751284230">https://dataviewers.tdec.tn.gov/dataviewers/f?p=2005:1:16470751284230</a>::::: and searching the Documents dropdown tab.

B-2) Commenter(s) indicated "It is also our understanding from review of the SMCRA permit application, that the applicant intends to avoid and minimize impacts to all jurisdictional streams by establishing 100-foot buffers on both stream sides. In these buffers, the mining operation does not intend to cause any physical impacts other than the establishment and use of temporary stream crossings that will be removed as the mining operation moves through the reclamation process. It is our understanding that there will be no mining through streams, no filling of streams, and no disturbance of the stream buffers by mining activities other than the crossings. We strongly support these best practices and suggest that these commitments be referenced in the final ARAP permit."

Response: The commenter is correct, and the "Responsible Miners Act" requires that mining not occur within 100 feet of streams except for "operations to improve the quality of stream segments previously disturbed by mining and for activities related to and incidental to the removal of coal from its original location" Tenn. Code Ann. § 69-3-108 (f). The removal of the crossings is incorporated into the Mitigation and Monitoring Requirements of the ARAP permit.

## C. Administrative and Non-Permit Actionable Comments

C-1) Commenter(s) indicated that an EIS (Environmental Impact Statement) is badly needed, especially due to the threat of damaging favorable habitat of the Tricolor bat.

Response: The Division issues water quality permits that authorize the discharge of treated mine wastewater and the alteration of waters of the state. As such, the permit reviewers consider and incorporate to the extent practicable any protective measures for aquatic species deemed as endangered or threatened

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by the Tennessee Wildlife Resources Agency (TWRA), TDEC-Division of Natural Areas (TNDNA), and the U.S. Fish and Wildlife Service (USFWS) into the water quality permits. The protection and regulation of all species deemed as endangered or threatened are addressed by consultation between the permittee, the Office of Surface Mining Reclamation and Enforcement (OSMRE) and the agencies listed above. The water quality permits do not address impacts to bats, other terrestrial organisms, or their habitat beyond the scope of the water quality permits and the referenced consultation.

C-2) Commenter(s) indicated that this company and its principal owners/shareholders be required to post a very substantial bond, at least 100 times the level of previous bonds, due the very likely abandonment of their responsibility to clean up the site. As a taxpayer, I don't want to pay for their mess while they walk away with huge profits.

Response: The Division accepts this comment and refers the commenter to OSMRE. OSMRE will set bond for the mining activities under the requirements for the SMCRA permit for surface mining. NPDES and ARAP are water quality permits and do not require a bond for the proposed activities.

C-3) Commenter(s) indicated surface coal mine is going to compromise health and work against our climate change goal. There are already plenty of mines that have been abandoned that can be restructured or just a warning sign of why we should not be starting a new one. Low pay and poor health will send potential nearby workers away and cause residents to move away. Leaving the poor there and letting the rich get richer.

Response: No new specific health concerns related to water quality were provided that could be addressed in the permit. Economic and social considerations were considered during the permit review to address discharges to Exceptional Tennessee Waters and waters that have a WLA apportioned under the EPA approved TMDL.

C-4) Commenter(s) stated "DONT IGNORE US. YOU CANT GET AWAY WITH EVERYTHING YOU CORRUPT PEOPLE. JUST KNOW THAT NONE OF YOU ARE SAFE. BE SMART WITH THE WORLD AND ITS PEOPLE OR SUFFER THE CONSEQUENCES OF YOUR OWN HUBRIS."

Response: The Division accepts that the comment was not likely intended as a threat or an attempt at intimidation. However, such rhetoric is accusatory, asserts facts not in evidence, and provides no relevant information to assist the Division in the decision to modify, issue, or deny the proposed permit. The Division cannot exceed its statutory authority and is required to issue a water quality discharge (NPDES) permit, provided that the applicant has provided sufficient plans and supporting information to demonstrate that it can meet the applicable effluent limitations and is protective of water quality standards in accordance with the federal and state regulatory requirements.

C-5) Commenter(s) during the hearing asked that benefits to the local community and stakeholders be given equal consideration as the commenters from outside the immediate community. Commenters emphasized jobs, severance taxes (revenue), and other economic benefit to the community.

Response: The Division posts the public notice on its website and requires the applicant to post signage on-site and distribute the notice in a local paper. The Division appreciates and welcomes comments from the local community and its stakeholders; however, the Division does not restrict commenters from outside the local community from providing comments on the proposed permit action. While the Division did

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receive 1,174 emailed comments from an online generated form, many of which were outside the local community, the Division gives all comments received equal consideration.

While economic and social considerations were evaluated for the antidegradation review, as well as the company's ability to implement measures protective of water quality, the Division does not have economic expertise or authority in place to evaluate the broader economic benefit or cost to the community. More information on severance taxes can be obtained at <a href="https://www.tn.gov/revenue/taxes/severance-taxes.html">https://www.tn.gov/revenue/taxes/severance-taxes.html</a>.

C-6) Commenter(s) stated that they were opposed to the permit or that TDEC should deny the permit or don't allow any more surface mining.

Response: The permits the Division reviewed are water quality permits that authorize the discharge of treated mine wastewater or alteration and mitigation of streams and wetlands. The Division must make the decision to issue or deny a permit based on whether the applicant has submitted sufficient information to indicate that they will or will not comply with the statutes and regulations governing water quality permits. The Division's water quality permits do not deny or provide authorization for land use or convey the right to mine a property or resource. Consequently, the water quality permits are not issued or denied based on opposition or support for the project but solely on demonstration in the application and supporting plans of the ability to comply with the applicable water quality regulations and permit terms and conditions.

Notice of Determination Hurricane Creek Mining, LLC – Mine 2 NPDES Permit TN0070716 ARAP Permit NR23MS.010 April 30, 2024 Page 12 of 12

#### Decision

The Division has reviewed the plans, alternatives analysis, and conducted the required antidegradation review, including the status of the receiving streams.

The Division has considered available data regarding 303(d) stream listings, Exceptional Tennessee Waters (ETW) and information concerning federal and state listed endangered or threatened aquatic species.

The Division responded to both oral and written comments contained in the hearing record. Public participation included the opportunity for review by the Environmental Protection Agency (EPA), Office of Surface Mining Reclamation and Enforcement (OSMRE), United States Army Corps of Engineers (USACE), United States Fish and Wildlife Service (USFWS), Tennessee Wildlife Resources Agency (TWRA) and the Tennessee Historical Commission (THC), as well as other state and local agencies and individuals who requested to be included on an email or mailing list for public notice announcements. The EPA and USFWS provided comments that have been considered in the preparation of this document.

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

This permit action may be appealed to the Board of Water Quality, Oil and Gas pursuant to Tenn. Code Ann. § 69-3-105(i) and Tenn. Comp. R. & Regs. 0400-40-05-.12.

for Bryan Epperson – Director

Division of Mineral & Geologic Resources

April 30,2024

Date