1. Permit types explained

| <u>AIR</u> - contaminant permits for construction and operating - Can be combined for one site. Requires public comment. |
|---|
| <u>WATER</u> - Aquatic Resource Alteration Permit (ARAP). Required for alteration of streams or wetlands such as installing a culvert, flooding or filling in a wetland, dredging, excavating, or straightening a stream etc. "General" permit is allowed if there is minor impact to the water resource. Requires no public comment. |
| <u>STORMWATER</u> - National Pollution Discharge Elimination System (NPDES) permit is required for stormwater mixed with industrial wastewater that is discharged into a waterway (washing/crushing/grinding sandstone). Requires a wastewater holding basin. Includes SWPPP. General - no public comment - Individual - requires public comment. |
| <u>Tennessee Multi-Sector Permit (TMSP)</u> is a less regulated subtype of NPDES. Includes a Stormwater Pollution Prevention Plan (SWPPP) with only stormwater discharge. The "general" TMSP requires no public comment. Example - quarry excavation /blasting. |

2. WHERE TO ACCESS PERMIT DATA VIEWERS ONLINE

https://www.tn.gov/environment/about-tdec/tdec-dataviewers.html TDEC data viewers and map viewers – comprehensive list.

https://dataviewers.tdec.tn.gov/dataviewers/f?p=19031:34001

Division of Air Pollution Control Permits data viewer.

https://dataviewers.tdec.tn.gov/dataviewers/r/tdec_reports/f11776/permit-search Division of Mineral and Geologic Resources data viewer.

https://dataviewers.tdec.tn.gov/dataviewers/f?p=2005:34308:13817233284941

Division of Water Resources data viewer

TO USE THESE DATA VIEWERS

- 1. Go to the County column and use the dropdown menu to select Marion.
- 2. Go to the Search box and type in Tinsley.
- 3. Click on the permit # to see a list of the documents.
- 4. Click the document to open the .pdf file

https://tdeconline.tn.gov/tdecwaterwells/

Well water map viewer for registered wells

Check accept box to access the viewer. Click (+) continuously to enlarge the map northwest of Chattanooga until you see grid 0094NE-7 (Tinsley property area). Then click on a registered well # for all the details on that well. On the bottom of the list, click on "more info" for the drillers report for depth

of the well, geologic formations, and soil types. Registering wells started around 1997. You can "Ask TDEC" if your well can be registered.

https://dataviewers.tdec.tn.gov/dataviewers/f?p=2005:34304:1482637751646:

Exceptional Tennessee Waterways data viewer

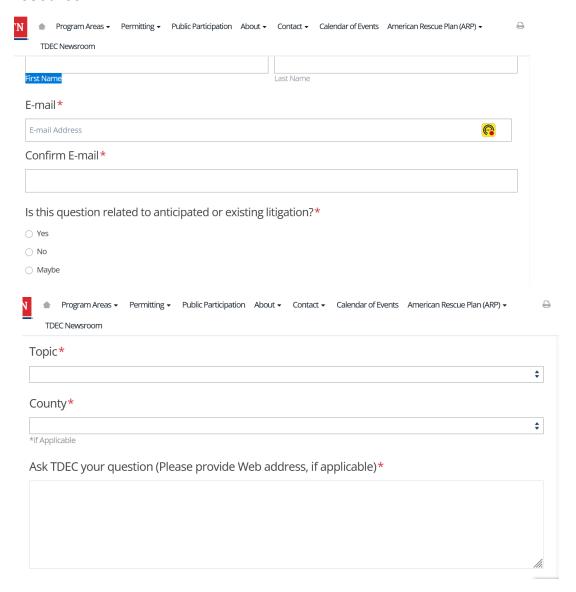
https://tnmap.tn.gov/assessment/

How to identify land parcels and owner information.

3. Ask TDEC

https://www.tn.gov/environment/ask-tdec-form.html

Fill out the online form. A sample form is below. Ask questions or comment about anything that TDEC regulates such as a mining, air, water, well water, pollution, degradation of the resource.



4. Sample letter cut and pasted into Comments box of Ask TDEC.

Dear Mr. Murray,

We are writing to express our concerns about a proposed sandstone quarry in our quiet neighborhood. Tinsley Sand & Gravel has applied for a mining permit (#TN0070731) at 18546 South Pittsburg Mountain Road, Sewanee, TN 37375 (Site ID # 178476).

TDEC must schedule a public hearing about this proposed mining operation and its impact on the community. Our primary concerns include the following:

- 1. Tinsley's NPDES application states that the operation will need 2,600 gallons of water per minute. The application fails to state where that water will come from. Will it be groundwater? If so, that would undoubtedly impact those of us who have wells as our only source of water. Our well which was recently registered with TDEC and not shown on the well map submitted in the application is within the one-mile radius of the boundaries of the the proposed mine. If Tinsley's operation pumps 2,600 gpm groundwater for mining, that will inevitably deplete the groundwater available for residential wells.
- 2. The mining operation will be a public nuisance in multiple ways:
 - a. It will generate silica dust, a known health hazard.
- b. Blasting rock and crushing sandstone into sand will be noisy, annoying and disturbing to a peaceful residential neighborhood.
- c. Heavy truck traffic from the mine will be a definite and on-going hazard to public safety. The proposed mine sits along State Route 156, which is a narrow two-lane mountain road without shoulders. The road is not adequate for 38-ton trucks traveling the 55-mph speed limit. Allowing the operation to use that road will seriously endanger public safety.
- 3. Tinsley's mining application falsely claims that the operation will contribute to the community's economy. The benefit, if any, will not be to the residents of JumpOff or Sewanee. The Marion County Commission has said it will use tax revenue from the operation for a park some 25 miles distant from -- and of little use to -- the impacted community.

We urge you to schedule a full public hearing in our community so that TDEC and public officials, can hear and consider the vast negative effects such a mining operation would have on a quiet residential community.

Thank you for your attention and consideration.

Respectfully, Name Address

5. Where to find TDEC requests for public comments and hearings.

Division of Mineral and Geologic Resources

https://www.tn.gov/environment/ppo-public-participation/ppo-public-participation/ppo-dmgr.html

Division of Air Pollution Control

https://www.tn.gov/environment/ppo-public-participation/ppo-public-participation/ppo-air.html

Division of Water Resources

https://www.tn.gov/environment/ppo-public-participation/ppo-public-participation/ppo-water.html

6. How to make public comments

1. Click on the link above for the Division that issued the permit of interest.

Scroll down the page to **Permit Public Notices** and click on the **Month** and specific **Date** to open the **list of Public Notice Documents**.

Scroll down the list of **Notices Requesting Public Comments on Draft Permit Actions** until you find the **permit # and Permitee** of interest.

Information you will need for writing your comments letter:

Applicant Description of Activity -optional Facility Effluent Description - optional Permit # Receiving stream - optional

County Address

City, State, Zip code

Persons wishing to comment on the proposed permit actions may submit comments in writing, by fax, by email, or by phone, depending on the Division issuing the Permit. Specific contact information is in each public notice. Comments must be received before the close of the comment period (30 days after the date in the announcement).

Division of Mineral and Geologic Resources

Writing: Division of Mineral and Geologic Resources -Mining Section

Knoxville Environmental Field Office

Attn: Public Notice Coordinator

3711 Middlebrook Pike Knoxville TN 37921

Fax: (865) 594-6105

Email: Dennis.Conger@tn.gov.

Division of Air Pollution Control

Writing: Ms. Michelle W. Owenby, Director

Division of Air Pollution Control

TDEC

Davy Crockett Tower

500 James Robertson Parkway

Nashville, TN 37243

Phone: 615-532-0554

Email: <u>air.pollution.control@tn.gov</u>

Division of Water Resources

Water Notices and Hearings

Public Participation Opportunities

Please Note: As of November 1, 2023, all mining-related public participation opportunities and notices (incl. NPDES and ARAP) will be published on the <u>Division of Mineral & Geologic Resources page</u>.

7. SAMPLE: TDEC PUBLIC COMMENTS NOTICE FOR TINSLEY AIR POLLUTION CONSTRUCTION PERMIT AT HWY 156.

June 26, 2024

• Air Pollution Control Construction Permit Application for the following facility: The applicant is Tinsley Sand and Gravel, LLC with a mailing address of 303 Ake Street, Estill Springs, TN, 37330. The applicant seeks to obtain an air contaminant permit (Division identification number: 58-0166 and 82337) for the construction of a rock crushing and sizing operation at the following location: 18546 South Pittsburg Mountain Road, Sewanee, TN. See the link to the attached document for additional details of this construction permit application and for information for those wishing to express comments. View The Tinsley Sand and Gravel LLC Public Notice Link

8. SAMPLE: TINSLEY SAND AND GRAVEL LLC PUBLIC NOTICE LINK

The Tennessee Division of Air Pollution Control (TDAPC) has received requests for construction and/or modification of air contaminant sources as noted below. The proposed construction and/or modification is subject to part 1200-03-09-.01(1)(h) of the Tennessee Air Pollution Control Regulations, which requires a public notification and 30-day public comment period. Interested parties may express their comments and concerns in writing to air.pollution.control@TN.gov or Ms. Michelle W. Owenby, Director, Division of Air Pollution Control, Davy Crockett Tower, 500 James Robertson Parkway, 7th Floor, Nashville, Tennessee 37243 within 30 days of the date of this notice. Questions concerning a source may be addressed to the assigned Division personnel at the same address or by calling 615-532-0554.

Construction permits issued by TDAPC do not grant any authority operate, construct, or maintain any installation in violation of any law, statute, code, ordinance, rule, or regulation of the State of Tennessee or any of its political subdivisions.

Individuals with disabilities who wish to participate should contact the Tennessee Department of Environment and Conservation to discuss any auxiliary aids or services needed to facilitate such participation. Such contact may be in person, by writing, telephone, or other means, and should be made no less than ten days prior to the end of the public comment period to allow time to provide such aid or services. Contact the Tennessee Department of Environment and Conservation ADA Coordinator, 6th Floor, Davy Crockett Tower, 500 James Robertson Parkway, Nashville, TN 37243, (615) 532-0207. Hearing impaired callers may use the Tennessee Relay Service (1-800-848-0298).

The applicant is Tinsley Sand and Gravel, LLC with a mailing address of 303 Ake Street, Estill Springs, TN, 37330. The applicant seeks to obtain an air contaminant permit (Division identification number: 58-0166 and 82337) for the construction at the following address: 18546 South Pittsburg Mountain Road, Sewanee. The permit request is for the construction of the following: a rock crushing and sizing operation that consists of crusher(s), screen(s), conveyor(s), and other equipment associated with crushing and sizing rock material. There would be physical construction. Regulated air contaminants would be emitted by this source. Information regarding this source can be found in the Division of Air Pollution Control Data viewer link which can be found at the bottom of the Division of Air Pollution Control webpage.

9. SAMPLE PUBLIC COMMENT LETTER TO TDEC ABOUT AIR POLLUTION PERMIT:

Subject: Combo Air contaminant construction and operating permit - ID#s 58-0166 and 82337

July 25, 2024

Ms. Michelle W. Owenby, Director Division of Air Pollution Control Tennessee Department of Environment and Conservation Davy Crockett Tower, 7th Floor 500 James Robertson Parkway Nashville, TN 37243

Re: Tinsley Air Pollution Control Construction Permit - ID#s 58-0166 and new combo permit# 982337. 18546 South Pittsburgh Mountain Rd, Sewanee TN 37375

Dear Ms. Owenby,

I am asking that TDAPC deny approval of the combined air contaminant construction/operating permit (58-0166 and 82337) for the Tinsley Marion County Sand Quarry located at 18546 South Pittsburgh RD, Sewanee TN 37375.

A notice for public comment concerning this permit was found only on the TDAPC/Air Notices and Hearings dated 6/26/24, and by chance a few days ago. Because there was no mandated public notice posted in any local newspaper, on site, or in another accessible location, **I respectfully request that the public comment period should be extended.**

This will give residents time to weigh in on the harmful effects of air- and water-borne macro- and micro silicate particulate pollution (PM, PM10, PM5.0, PM2.5) on 1) human and animal health 2) the 8 wetlands and 5 streams on site, 3) the 1100 acre Tenn Green Nature Conservancy in nearby Mitchell Cove 0.5 mile away, 4) the downstream waters of Exceptional TN Stream Jumpoff Creek and Jumpoff Falls that flow into Trout Cave and out the Blue Hole Resurgence and into Battle Creek in the valley.

Table 11.19.2-2 in permit #82337 mentions emission factors for crushed stone processing operations, but there is no data (ND) listed for primary and secondary crushing operations of bigger rocks that will also generate PM, PM10, and PM2.5 before tertiary and fines crushing. Most explanatory subscripts and references are missing from the bottom of the table. This information is necessary to correctly interpret the emission factor data.

In addition, there will be 19 pieces of equipment onsite for sandstone crushing and grinding operations which include 2 feeders, 1 washer, 3 crushers, 12 conveyers, and 1 dump hopper. And 100 tri-axel dump trucks coming and going from the quarry daily. All these diesel-powered engines will be emitting a lot of diesel exhaust containing harmful substances into the air, such as nitrous oxide and generating particulate matter (PM, PM10, PM2.5) that will pose a respiratory health hazard not only to onsite workers, but also to residents and farm animals nearby and for miles around the quarry.

Tinsley was allowed to use the non-Title V (EPA Clean Air Act) air contaminant construction permit application which is applicable for rock crushing applications with nonhazardous emissions at <100 tons/year. On the description of equipment page in the application, 40.24 TPY of PM and 14.89 TPY uncontrolled emissions are stated. I think this may be an underestimate of the PM and PM10 because wet suppression will not occur with the primary and secondary crushing of the big rocks, and videos of crushing operations show that considerable dust is generated at these first two steps. There appears to be no data for this, as stated in Table 11.19.2-2. Is it not possible that total TM and TM10 emissions from Crushing/grinding operations might exceed the 100 TPY limit and thus require a Title V permit?

The 150-acre Tinsley property is a pristine slice of the South Cumberland Plateau which presently has no industrial generators of air pollution from south of Sewanee to South Pittsburgh Mountain. There are hundreds of residents living in this area on farms, ranches, and residences, surrounded by hardwood forests, ponds and lakes, bluff, and delicate ecosystems. Real-time air quality monitoring data for the Sewanee area is available at https://www.iqair.com/gb/air-quality-map/usa/tennessee/sewanee. At a minimum, TDAPC should require Tinsley to provide testing from an independent lab to determine 24/7 air quality studies (nitrous oxide, PM10, PM5, PM2.5, silicates) at the quarry site and at residences at different distances from the quarry for baseline data before construction starts. Then a similar study should be repeated after crushing/grinding operations start. I have asthma and air pollutants and increased particulates such as dust in the air adversely affect my breathing. Air-borne silicates from the sand quarry blasting/crushing/grinding operations will be an unwelcome pollutant in our mountain air.

All of these points deserve more discussion and public input. Thus, I again ask TDAPC to allow an extension of the public comment period for the combined construction/operations permit 82337.

Regards, Name Address Phone

10. HOW TO REQUEST A PUBLIC HEARING FOR TINSLEY NPDES PERMIT TN0070731.

1. Request in writing that the Division of Mineral and Geologic Resources hold a public hearing on the permit.

Attn: Public Notice Coordinator.
Division of Mining and Geologic Resources,
Knoxville EFO
3711 Middlebrook Pike,
Knoxville TN 37921.

- 2. The request must be filed before the close of the 30-day comment period.
- 3. You must state your interest in requesting a hearing, the reason that such a hearing is warranted, and the water quality issues being raised.

- 4. When there is a significant public interest for a hearing, the Division will hold a hearing in accordance with Rule 0400-40-05-.06 (12).
- 5. A separate public notice will announce the hearing.

VERY IMPORTANT: The Public Hearing Request to DMGR must be only about water quality. Otherwise TDEC will not respond. Water quality issues include stream degradation, sediment, ground water, wells, chemical pollution, etc. Questions about the cumulative impact of Tinsley's multiple "de minimis" degradations that have already been allowed and/or are planned at the site can probably be asked because the TMSP and ARAP permits did not allow public comment before they were issued. The first 22 pages of the NPDES application and anti-degradation statement and flow diagram are very helpful reading.

11. SAMPLE PUBLIC HEARING LETTER:

Division of Mineral and Geologic Resources Attn: Public Notice Coordinator. Division of Mining and Geologic Resources, Knoxville EFO 3711 Middlebrook Pike, Knoxville TN 37921.

I am a resident of the Jumpoff community of Sewanee and a citizen concerned about the effects of the sandstone quarry stormwater and industrial wastewater surface discharges on the groundwater and water table and on the interconnected systems of wetlands and streams on the property, especially on exceptional Jumpoff Creek. I respectfully request a public hearing on Site ID 178476, specifically Permit Number TN0070731. Permittee Name is Tinsley Sand & Gravel LLC for the Facility Name Marion County Sand Plant located at 18546 South Pittsburgh Mountain Rd, Sewanee TN 37375.

The mining operation will consist of washing, crushing, and grinding sandstone using 2600 gpm of water and this process wastewater will discharge from the wash plant to a settling pond 1 with chemical treatment added as necessary to promote settling. What is the source of this water: Sewanee Utility District, on site well, water tanker, or rain (stormwater runoff)?

If the source of water for the washing/grinding/crushing operation is supposed to be stormwater, the Jumpoff area is in the throes of a 4-month drought with rainfall deficits of more than six inches. How is rainfall and stormwater runoff going to fill Pond 1 to supply 2600 gpm of water?

There is a non-registered well on the property. If Pond 1 water is sourced from the on-site well for industrial scale use, that will inevitably alter the depth the local water table and deplete the groundwater for nearby residents' wells.

The NPDES application states that both process wastewater (from crushing/grinding operations) and stormwater will discharge into settling Pond 1. Settling Pond 2 will receive discharge from the sludge dewatering area. Does Pond 1 = Basin 1 and Pond 2 = Basin 2 in the Flow Diagram? The Flow Diagram shows water from Basin 1 (Pond 1?) discharges via outflow 001 into Jumpoff Creek. And Basin 2/Pond 2 will receive discharge from the sludge dewatering area and also discharge into Stream 4 via outfall 002 (see Layout Plan TMSP TNR050785).

Stream 4 is an intermittent stream that has a naturally occurring ground water table connection (HD-Description of hydrologic features, 12/29/23). Str-4 flows into wetland 6, and into the pond 1 on the

property (different from NPDES Basin 1/Pond 1). Stream 4 ultimately drains off Tinsley's property into ponds on Charlie Smith's property. How will Tinsleys wastewater/stormwater discharge from mining operations in stream 4 affect the Smith ponds? Wetlands by definition can have surface and/or groundwater water connections. Str1-5 have groundwater connections, including exceptional Jumpoff Creek (HD report). It is highly likely that all of the wetlands and streams on Tinsley's property are hydrologically interconnected underground with the groundwater, but Tinsley was not required to do any surface and groundwater dye trace studies on site to prove or disprove this. Tinsley is allowed to state in the NPDES application that "it is <u>not</u> anticipated that groundwater flows will be adversely affected by the quarry operation", without any factual proof. That surface discharges will cause de minimus damage. What is the definition of "de minimus" damage?

We know from a surface and groundwater dye trace of Exceptional Jumpoff Creek done in January 2024, that there is an underground system of water flowing from Tinsley's property to over 5 miles downstream, down through Jumpoff Cove, 40 feet underground through Trout Cave and out the Blue Hole Resurgence in the valley. This underground water flow is perennial and Jumpoff Creek is still flowing out of the Blue Hole, even with this drought. The NPDES permit application (V. Mining Plan, B. Groundwater information) states that "it is not anticipated that groundwater flows will be adversely affected by the quarry operation." This statement absolutely has no facts to back it up! 1) The sand quarry is right in the middle of 8 wetlands and 7 streams, with one of those streams being exceptional Jumpoff Creek. 2) the Hydrology Determination states that several of the streams have groundwater connections. 3) the wetlands and steams on Tinsley's property likely are hydrologically interconnected via the water table and groundwater underground. 5) process wastewater/stormwater discharge from mining operations will affect the water quality and flow of underground Jumpoff Creek through Trout Cave and Blue Hole Resurgence.

In addition, the NPDES states "those periods when the groundwater table will be highest will correspond with the least active periods of operation of the quarry." Again, no facts to back this up.

Ponds 1 and 2 will discharge industrial wastewater, stormwater, and dewatered sludge effluent into Stream 4 and wetland 6 that will ultimately contaminate the water table and groundwater below. In addition, there will be stormwater discharge from the excavating/blasting mine areas into stream 2, wetland 3, wetland A, whose waters merge with stream 1 (Jumpoff Creek) in the wooded 50 acres of the property. Again, the water table and groundwater will be affected by this stormwater discharge (TMSP TNR050785).

In the Antidegradation Statement, Tinsley states the proposed activity will cause di minimus degradation. I challenge that assertion because the underground hydrological interconnections between the streams and wetlands have not been investigated. The effect of the industrial wastewater and stormwater discharges into the Jumpoff Creek water system on the property is unknown at this time.

I urge TDEC to schedule a public hearing on pending NPDES permit 0070731the so that the negative effects of the sandstone quarry operation on the surface and groundwater of the Jumpoff Creek system can be investigated and fully understood before mining starts.

Thank you for your attention and consideration.

Respectfully, Name Address