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INNOVATIVE RECLAMATION TECHNOLOGIES & ENGINEERING CO., INC.

211 MAIN STREET, P.O. BOX 306, CARYVILLE, TENNESSEE 37714

TELEPHONE: (423)-566-1915
FAX: (423)-566-1966

January 9, 2018

Mr. Bryan Epperson, NPDES Program Manager
Division of Water Pollution Control – Mining Section
Department of Environment and Conservation
3711 Middlebrook Pike
Knoxville, Tennessee 37921-6538

Subject: Campbell County Highway Department – Area No. 1
NPDES Permit #TN0063606 – Campbell County – NPDES Permit Renewal
Minor Modification Update

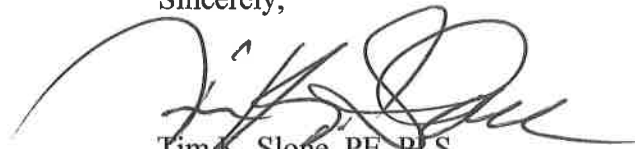
Dear Mr. Epperson:

This letter provides an update of the subject NPDES permit renewal application submitted in November of last year. After discussions with the permit writer, Mr. Geoff Klein, and review of the site with the road superintendent, Mr. Ron Dilbeck, it became apparent that there some minor modifications to the approved plans.

- The Campbell County quarry has not had an asphalt plant in many years. They rely on a contractor when asphalt mix is needed for tar and chip applications.
- After review with the road superintendent and some minor field work by the quarry, a storm water monitoring point is apparently no longer required.
- Some property adjacent to the quarry site previously used for storage has been sold and removed from the permit area. The overall permit boundary was adjusted resulting in no overall change to the permit acreage. An updated Site Plan Map is included with this update submittal.

Enclosed for your records are two additional copies of this letter with updated maps. If you have any questions or need further information, please contact me at (423)-566-1915.

Sincerely,



Tim K. Slone, PE, PLS
On Behalf of Campbell County
Highway Department

Enclosures

cc: Mr. Ron Dilbeck, Road Superintendent, Campbell County Highway Department
File

JAN 11 2018



INNOVATIVE RECLAMATION TECHNOLOGIES & ENGINEERING CO., INC.

211 MAIN STREET, P.O. BOX 306, CARYVILLE, TENNESSEE 37714

TELEPHONE: (423)-566-1915

FAX: (423)-566-1966

November 22, 2017

Mr. Bryan Epperson, NPDES Program Manager
Division of Water Pollution Control – Mining Section
Department of Environment and Conservation
3711 Middlebrook Pike
Knoxville, Tennessee 37921-6538

Subject: Campbell County Highway Department – Area No. 1
NPDES Permit #TN0063606 – Campbell County – NPDES Permit Renewal

Dear Mr. Epperson:

Campbell County Highway Department would like to request the renewal of the NPDES Permit for the subject site, based upon the currently approved plans, for a period of five years. According to the DWR Dataviewer, the current NPDES Permit will expire on June 3, 2018.

The subject site is in compliance with the effluent limitations and terms of its NPDES permit and will continue to operate as represented in the approved plans, including any approved modifications, and the NPDES permit issued for this facility. The approved plans are representative of the current activities at this site and will continue to be so until the permit is modified or terminated. Should the approved plans be altered, your office will be notified immediately.

Attached for your review are an Address Attachment for Permit Application, an Antidegradation Statement, an EPA Form #1, an EPA Form 2C, a Line Drawing for the outfalls, copies of Discharge Monitoring Reports for the past year, a general location map and an updated Site Plan Map.

Enclosed for your records are two additional copies of this letter with attachments. If you have any questions or need further information, please contact William M. Penley or myself at (423)-566-1915.

Sincerely,

Tim K. Slone, PE, PLS
On Behalf of Campbell County
Highway Department

Attachments

Enclosures

cc: Mr. Ron Dilbeck, Superintendent, Campbell County Highway Department

File

File: A1 – NPDES Renewal. doc

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ADDRESS ATTACHMENT FOR PERMIT APPLICATION

This must be filled out to complete your permit application.

NPDES PERMIT #: TN0063606

AREA NAME: Area No. 1

CORPORATE HEADQUARTERS: (Where the permit will go.)

CONTACT PERSON: Ron Dilbeck TELEPHONE #: (423)-562-3404
COMPANY NAME: Campbell County Highway Department
STREET AND/OR P.O. BOX #: 136 Mount Paran Road
CITY: Jacksboro STATE: Tennessee ZIP CODE: 37757

PERMIT BILLING ADDRESS: (Where the invoices will go.)

CONTACT PERSON: Ron Dilbeck TELEPHONE #: (423)-562-3404
COMPANY NAME: Campbell County Highway Department
STREET AND/OR P.O. BOX #: 136 Mount Paran Road
CITY: Jacksboro STATE: Tennessee ZIP CODE: 37757

FACILITY LOCATION: (Where the inspectors will go.)

FACILITY: Area No. 1 NPDES PERMIT #: TN0063606
STREET ADDRESS: 729 Towe String Road COUNTY: Campbell
P.O. BOX #: Not Applicable TELEPHONE #: (423)-562-3404
CITY: Jacksboro STATE: Tennessee ZIP CODE: 37757

DMR MAILING ADDRESS: (Where the pre-printed DMR's will go.)

CONTACT PERSON: Ron Dilbeck TELEPHONE #: (423)-562-3404
COMPANY NAME: Campbell County Highway Department
STREET AND/OR P.O. BOX #: 136 Mount Paran Road
CITY: Jacksboro STATE: Tennessee ZIP CODE: 37757

Antidegradation Statement Guidance

To Be Used When Administering Tennessee's Antidegradation Statement as Associated with Obtaining a National Pollutant Discharge Elimination System (NPDES) Permit

The Antidegradation Statement Guidance document is to be used in accordance with the *Tennessee's Antidegradation Statement Rule 0400-40-03-.06* as it pertains to completing the application requirements for a NPDES permit. This document may be used as equivalent information for the EPA Worksheets (A, G, O, R, V, W, X, Y, Z, and AB for the private sector and O, P, Q, S, T, U, and AA for the public sector).

Specifically the document is divided into five parts. Parts 1 – 2 are general information regarding the facility and receiving water. Part 3 characterizes the level of degradation and alternatives analysis (including social, economic, and environmental considerations of each alternative). Part 4 – 5 detail the social and economic justification required to demonstrate that the degradation associated with the proposed discharge to an Exceptional Tennessee Water (ETW) is justified. All permit applicants must complete, at a minimum, Parts 1-3 of this document. If you propose to discharge to an ETW, you must complete the document in its entirety.

Part 1. Contact Information	
1. Company name:	Campbell County Highway Department
2. NPDES No.: TN00	TN0063606
3. Facility or mine name:	Area No. 1
4. County:	Campbell

Part 2. Mine and Stream Information
--

I. Please select the type of mine.

Noncoal

- | | |
|---|---|
| <input checked="" type="checkbox"/> Limestone
<input type="checkbox"/> Sand and Gravel
<input type="checkbox"/> Industrial Sand
<input type="checkbox"/> Ball Clay | <input type="checkbox"/> Shale
<input type="checkbox"/> Dimension Stone
<input type="checkbox"/> Zinc |
|---|---|

Coal

- | | |
|--|---|
| <input type="checkbox"/> Reclamation
<input type="checkbox"/> Active mining
<input type="checkbox"/> Post mining | <input type="checkbox"/> Prep plants / associated areas
<input type="checkbox"/> Tipple / load out |
|--|---|

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Part 3. Characterize the Level of Degradation in the Proposed Activity and Analysis of Alternatives.

Please select one of the following levels and support your conclusion in the space that follows. Finally, complete the Alternatives Analysis.

Part 3-A - Level of Degradation

- The proposed activity is to renew an existing permit.

No changes to the acreage size, the number or location of outfall(s), or the volume of the existing discharge are proposed at this time. Renewal of the permit does not cause degradation above what is already permitted. (If this applies, skip to Part 3-B.)

- The proposed activity will cause no measurable degradation.

Activities causing no measurable degradation are defined as those activities that do not cause a measurable increase in levels of a given parameter in the receiving water.

- The proposed activity will cause de minimis degradation.

Activities causing de minimis degradation are defined as those activities that cause degradation of a small magnitude as described in *Rule 0400-40-03-.04 (4)(a)*. De minimis activities are described as single discharges that use less than five percent of the available assimilative capacity of the substance to be discharged.

Note, this option is not applicable if the 7Q10 of the receiving water is zero or if the receiving water has unavailable parameters for the pollutant to be discharged.

- The proposed activity will cause **more** than de minimis degradation.

Applications for activities causing degradation above the level of de minimis must analyze all reasonable alternatives and describe the level of degradation caused by each of the feasible alternatives. Analysis of each of these alternatives should also discuss the social and economic consequences of each alternative. Applicants must also demonstrate that the proposed degradation will not violate the water quality criteria for existing uses in the receiving waters and is necessary to accommodate important economic and social development in the area.

Attach additional pages as needed

Part 3-B – Alternatives Analysis

The following are examples of alternatives relative to natural resource extraction that are to be considered by applicants under *Tennessee's Antidegradation Statement 0400-40-03-.06*. Please check which treatment option(s) are currently used or will be used at the facility.

- Connect to existing treatment system.
- Use over-sized ponds to increase treatment ability and holding capacity beyond the 10 year /24 hour design storm.
Design capacity of the pollution control system –
Current capacity of the system (%) –
- Divert drainage from non-disturbed areas away from treatment structures separating storm water from mine wastewater – i.e. diversion berms, ditches, other BMPs.
- Use pit as primary treatment and/or storage to increase ability to hold water on site during storm events.
- Use ponds in series, forebays, and/or baffles to increase treatment and retention time.
- Use chemical treatment for pH adjustment or treatment of solids.
- Reuse/recycle treated process water to reduce discharge frequency. What percentage is already or will be recycled? **Less than 5%**
- Create no-discharge system.
- Use concurrent reclamation with mining activity.
- Land application of treated wasted wastewater.

If treatment option used is not listed, please describe below.

- 2) Based on the alternatives indicated above, describe the level of degradation caused by each, as well as the social and economic consequences of each alternative. Examples of social economic consequences may include by are not limited to, improved infrastructure such as road projects, housing development, as well as increasing local tax revenue and employment opportunities.

It should be noted that the site was developed prior to permitting and has been used for a number of years by various parties.

Constructing oversized impoundments to handle the surface water runoff was not much of a consideration during the pre-law development of the site. The ponds were constructed later to reduce the contribution of sediment to the receiving stream. The alternative had no social and economic consequence, but did slightly increase the cost of doing business.

The water discharged from Outfalls 001 and 002 is checked under the terms and conditions of the NPDES Permit for the site and will continue to be so under the new permit. The pH is checked within the basin if the impoundment is not discharging. Exceedance or near exceedance of the parameters specified within the NPDES permit is utilized as the basis for the implementation of any treatment.

The active pit is the primary drainage control device for the drainage area of Outfall 002. There is seldom a discharge at either outfall.

Chemical treatment in the form of neutralizers and/or flocculants is not anticipated to be needed at the site, but can be used if necessary to maintain discharges within effluent limits.

Reuse or recycling of water may occur in the control of dust at the site, but the amount utilized is anticipated to be less than 5 percent of surface water runoff.

- 3) Can the level of treatment achievable at the facility ensure that water quality criteria will not be violated? Please explain.

Yes! The site has received no NOVs or Notice of Non-Compliances in recent years and even the self-reporting indicates no exceedances for a number years.

- 4) Is there another discharge location that would have less impact on the watershed?

No

- 5) Evaluate the mining technique used at the site. Would another technique result in a reduction in quantity or improvement in quality of the discharge from the site?

No.

- 6) Were other locations for the facility evaluated? Describe the reasons why other locations were selected or rejected.

Other locations are always considered in the projected mining plans of an applicant. The site was an existing site at a convenient location, which provided a quality rock suitable for sale.

- 7) If this is an existing site, how long has the company mined at this location? If the option to mine has been reserved through payments to the owner or lessor of the rights, how long has that option been reserved? What is the projected life of the mine?

Mining at this site has been conducted for a number of years by various entities. The option to operate is reserved for as long as the appropriate permits are maintained.

Part 4. Economic Justification Not Applicable to this permitting action.

If you are applying for a new or expanded permit that discharges to Exceptional Tennessee Waters (ETC), complete Parts 4 and 5.

The following section shows economic/financial information for the facility. This information is necessary to determine if the applicant can afford to implement appropriate pollution control measures to protect water quality in the receiving water. Attach additional pages if needed.

1. Annual cost of operation and maintenance of pollution control project (including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration, and replacement).	
2. Annual earnings without pollution control project costs	
3. Annual earnings with pollution control project costs	

Part 5. Social Justification

Not Applicable to this permitting action.

The following section shows social justification of the proposed degradation within the community where the facility is located. Attach additional pages if needed.

1. Define the affected community in this case; what areas are included.	
2. Current unemployment rate in affected community (if available).	
3. Current national unemployment rate.	
4. Additional number of persons expected to collect unemployment in affected community due to compliance with water quality standards.	
5. Expected unemployment rate in the affected community after compliance with water quality standards (Current number of persons collecting unemployment in affected community + (4)/labor force in affected community.	
6. Number of jobs facility provides in the affected community.	
7. Average salary of these jobs.	
8. Median household income in affected community.	
9. Total number of households in affected community.	
10. Current total tax revenues in the affected community.	
11. Tax revenues paid by the private entity to the affected community.	

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Please print or type in the unshaded areas only.

FORM 1 GENERAL		U.S. ENVIRONMENTAL PROTECTION AGENCY GENERAL INFORMATION CONSOLIDATED PERMITS PROGRAM (Read the "General Instructions" before starting.)		I. EPA I.D. Number		TN0063606		T/A	C		
LABEL ITEMS		PLEASE PLACE LABEL IN THIS SPACE		F		13		14	15		
I. EPA I.D. NUMBER											
III. FACILITY NAME											
V. FACILITY MAILING ADDRESS											
VI. FACILITY LOCATION											
II. POLLUTANT CHARACTERISTICS											
INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms.											
SPECIFIC QUESTIONS			Mark "X"			SPECIFIC QUESTIONS			Mark "X"		
			YES	NO	FORM ATTACHED				YES	NO	FORM ATTACHED
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)				X		B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)				X	
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)			X		X	D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S.? (FORM 2D)				X	
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)				X		F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)				X	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)				X		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)				X	
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)				X		J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)				X	
III. NAME OF FACILITY											
1 SKIP		AREA NO. 1									
IV. FACILITY CONTACT											
A. NAME & TITLE (last, first, & title)					B. PHONE (area code & no.)						
2 DILBECK, RON - ROAD SUPERINTENDENT					423 562 3404						
V. FACILITY MAILING ADDRESS											
A. STREET OR P.O. BOX											
3 136 MOUNT PARAN ROAD											
B. CITY OR TOWN					C. STATE		D. ZIP CODE				
4 JACKSBORO					TN		37757				
VI. FACILITY LOCATION											
A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER											
5 729 TOWE STRING ROAD											
B. COUNTY NAME											
CAMPBELL											
C. CITY OR TOWN					D. STATE		E. ZIP CODE		F. COUNTY CODE (if known)		
6 JACKSBORO					TN		37757				

CONTINUED FROM THE FRONT

VII. SIC CODE (4-digit, in order of priority)			
A. FIRST		B. SECOND	
7	1422 (specify)	7	(specify)
LIMESTONE QUARRY			
C. THIRD		D. FOURTH	
7	(specify)	7	(specify)

VIII. OPERATOR INFORMATION			
A. NAME			B. Is the name listed in Item VIII-A also the owner?
8 CAMPBELL COUNTY HIGHWAY DEPARTMENT			<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other", specify.)		D. PHONE (area code & no.)	
F = FEDERAL S = STATE P = PRIVATE	M = PUBLIC (other than federal or state) O = OTHER (specify)	M	A 423 562 3404
E. STREET OR P.O. BOX			
136 MOUNT PARAN ROAD			
F. CITY OR TOWN		G. STATE	H. ZIP CODE
B JACKSBORO		TN	37757
IX. INDIAN LAND			Is the facility located on Indian Lands?
			<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

X. EXISTING ENVIRONMENTAL PERMITS			
A. NPDES (Discharges to Surface Water)		D. PSD (Air Emissions from Proposed Sources)	
9 N	TN0063606	9 P	
B. UIC (Underground Injection of Fluids)		E. OTHER (specify)	
9 U		(specify)	
C. RCRA (Hazardous Wastes)		E. OTHER (specify)	
9 U		(specify)	

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well were it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS (Provide a brief description)

LIMESTONE QUARRY WITH ASSOCIATED CRUSHING FACILITY

XIII. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)	B. SIGNATURE	C. DATE SIGNED
RON DILBECK, ROAD SUPERINTENDENT	<i>Ron Dilbeck</i>	11/16/17

COMMENTS FOR OFFICIAL USE ONLY
C

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C. Except for storm runoff, leaks, or spills, are any of the discharges in Items II-A or B intermittent or seasonal?

Yes (complete the following table)

No (go to Section III)

1. OUTFALL NUMBER (LIST)	2. OPERATION(S) CONTRIBUTING FLOW (List)	3. FREQUENCY		4. FLOW				c. DURATION (in days)
		a. DAYS PER WEEK (specify average)	b. MONTHS PER YEAR (specify average)	a. FLOW RATE (in mgd)		b. TOTAL VOLUME (specify with units)		
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	

III. PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

Yes (complete Item III-B)

No (go to Section IV)

B. Are the limitation in the applicable effluent guideline expressed in terms of production (or other measure of operation)?

Yes (complete Item III-C)

No (go to Section IV)

C. If you answered "yes" to Item III-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. AVERAGE DAILY PRODUCTION						2. AFFECTED OUTFALLS (List outfall numbers)	
a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. (specify)					
					Not Applicable		

IV. IMPROVEMENTS

A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

Yes (complete the following table)

No (go to Item IV-B)

1. IDENTIFICATION OF CONDITION AGREEMENT, ETC	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
	a. NO.	b. SOURCE OF DISCHARGE		a. REQUIRED	b. PROJECTED

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.

MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED

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V. INTAKE AND EFFLUENT CHARACTERISTICS

A,B, & C: See instructions before proceeding – Complete one set of tables for each outfall - Annotate the outfall number in the space provided.

NOTE: Tables V-A, V-B and V-C are included on separate sheets numbered V-1 through V-9.

- Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE
NO TOXIC POLLUTANTS OR HAZARDOUS SUBSTANCES ARE BELIEVED TO BE PRESENT			

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

Is any pollutant listed in Item V-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

Yes (list all such pollutants below)

No (go to Item VI-B)

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

Yes (identify the test(s) and describe their purposes below)

No (go to Section VIII)

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?


Yes (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)

No (go to Section IX)

A. NAME	B. ADDRESS	C. TELEPHONE (AREA CODE & NUMBER)	D. POLLUTANTS ANALYZED (LIST)
Not Applicable			

IX. CERTIFICATION

I certify under penalty of law this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. NAME AND OFFICIAL TITLE (type or print) <p style="text-align: center;">Ron Dilbeck Road Superintendent</p>	B. PHONE NO. (Area code & no.) <p style="text-align: center;">423-562-3404</p>
C. SIGNATURE 	D. DATE SIGNED <p style="text-align: center;">11/16/17</p>

EVAPOTRANSPIRATION

Note:

While flows vary depending upon precipitation, the estimated average flow is based on a 55 inches annual average with appropriate distributions. (2.34 acres X 43,560 sq.ft./acre X 4.58 feet X 7.48 gallons/cu.ft. / 365 days/year = 9,567 gallons per day

20% loss (191 gpd)

Estimated 20% lost as evaporation. (1,913 gallons per day average)

SURFACE WATER RUNOFF

957 gpd

SEDIMENT POND #1

OUTFALL 001

0 gpd

TO UNNAMED TRIBUTARY OF CUCKLE CREEK

*Pond has rarely discharged under normal circumstances

Estimated 70% lost through material and geologic absorption. (6,697 gallons per day average)

80% loss (766 gpd)

GEOLOGIC ABSORPTION

EVAPOTRANSPIRATION

While flows vary depending upon precipitation, the estimated average flow is based on a 55 inches annual average with appropriate distributions. (19.34 acres X 43,560 sq.ft./acre X 4.58 feet X 7.48 gallons/cu.ft. / 365 days/year = 79,071 gallons per day

20% loss (1,581 gpd)

Estimated 20% lost through in-pit detention as evaporation. (15,814 gallons per day average)

SURFACE WATER RUNOFF

7,907 gpd

SEDIMENT POND #2

OUTFALL 002

0 gpd

TO UNNAMED TRIBUTARY OF CUCKLE CREEK

*Pond has rarely discharged under normal circumstances

Estimated 70% lost through in-pit geologic absorption. (55,350 gallons per day average)

80% loss (6,326 gpd)

GEOLOGIC ABSORPTION

**CAMPBELL COUNTY HIGHWAY DEPARTMENT
AREA NO. 1
NPDES Permit No. TN0063606 - Campbell County
LINE DRAWING**

State of Tennessee - Department of Environment and Conservation

Division of Water Pollution Control - Surface Mining Section

Discharge Monitoring Report (DMR)

Permittee Name:	<u>Campbell County Highway Department</u>	NPDES #:	<u>TN0063606</u>
Address:	<u>P.O. Box 19</u>	Site # / Name:	<u>Campbell County Rock Quarry</u>
City, State, Zip:	<u>Jacksboro, Tn 37757</u>	Outfall #:	<u>001</u>
Phone Number:	<u>(423) 562-3404</u>	Rec. Stream:	<u>Cuckle Creek</u>
		County:	<u>Campbell</u>

Parameter	Flow	pH	TSS						STORMWATER				
				Reporting Levels						pH	TSS	O&G	
minimum		6.0									5 - 9	200	15
maximum		9.0	40.0								s.u.	mg/L	mg/L
average											annual		
units	gpm	s.u.	mg/L										
frequency	2/mo	2/mo	2/mo										
sample type	est.	grab	grab										grab
Date			max										
10/14/16	0.0												
10/28/16	0.0												
11/01/16	0.0												
11/16/16	0.0												
12/13/16	0.0												
12/26/16	0.0												
Average													
Maximum													
Minimum													
Violations													

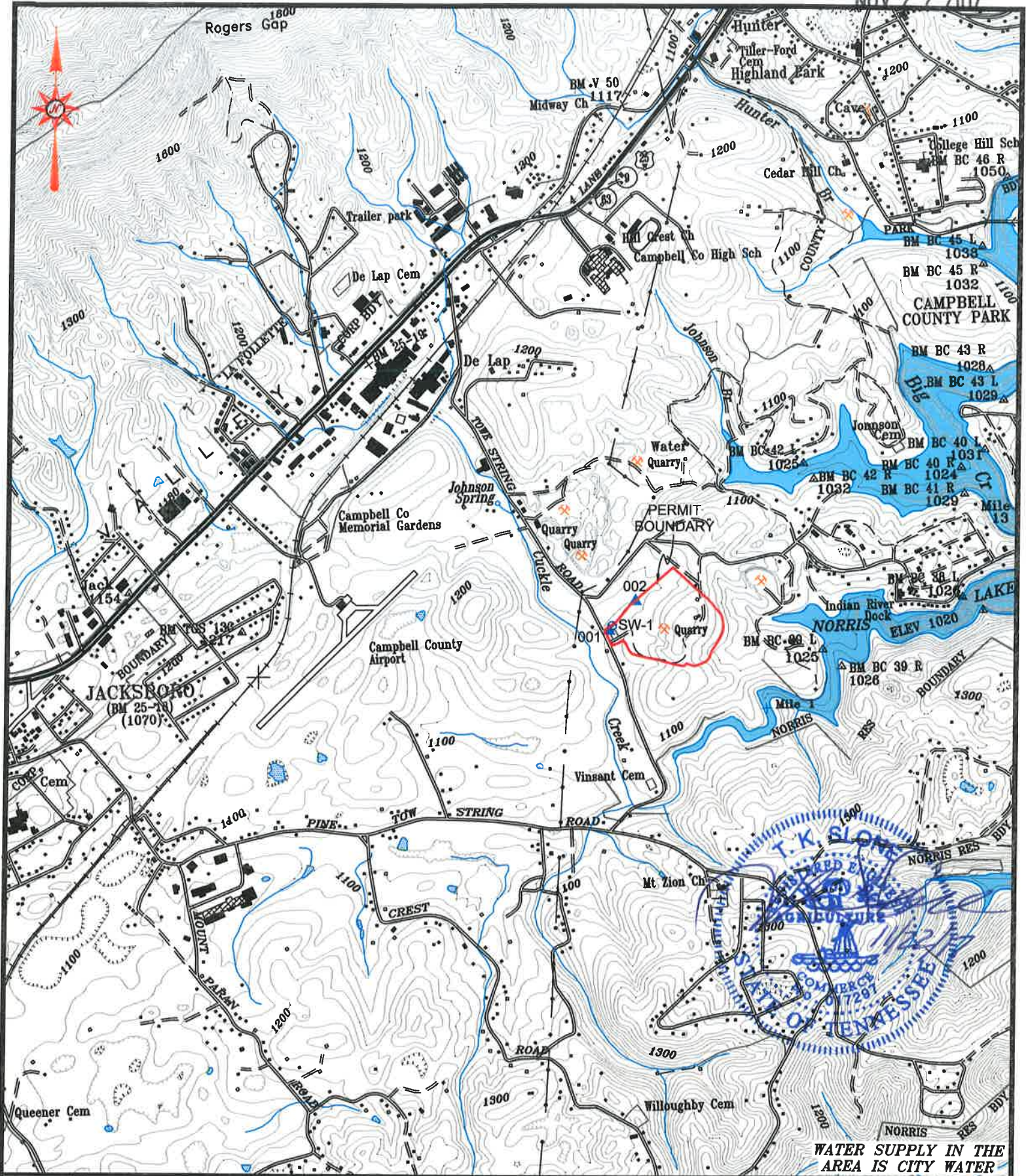
Name of Company(s) Collecting Samples and/or Performing Analyses: Standard Laboratories

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment. See 18 USC §1001 & 33 USC §1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years.)

Name & Title of Responsible Official _____ Signature of Responsible Official/Authorized Agent _____ Date _____

COMMENTS and VIOLATIONS (Provide additional sheets as necessary)

NOV 27 2017



WATER SUPPLY IN THE AREA IS CITY WATER

GENERAL LOCATION MAP

Campbell County Highway Department
 Area No. 1
 136 Mount Paran Road
 Jacksboro, Tennessee 37757

SCALE: 1"=2000'
 Jacksboro Quadrangle
 PREPARED BY:



IRTEC
 211 Main Street, P.O. Box 306
 Caryville, TN 37714
 423 688-1915



Fax 423 688-1968

CAMPBELL COUNTY
 LATITUDE: 36° 20' 05"
 LONGITUDE: 84° 08' 43"
 PERMIT AREA = 41 Ac.

FILE DWG: CCQ-GLM

▲ DISCHARGE MONITORING POINT