From:	Air.Pollution Control
To:	APC Permitting
Subject:	FW: Blue Water Industries (BWI) Applications for Construction Permits for a Mobile Non-Metallic Mineral Processing Plant System
Date:	Thursday, January 4, 2024 3:00:34 PM
Attachments:	BWIETN Portables Applic Submit 1-4-24.pdf

From: Alisa Hatmaker <ahatmaker@bluewaterindustries.com>
Sent: Thursday, January 4, 2024 2:33 PM
To: Air.Pollution Control <Air.Pollution.Control@tn.gov>
Cc: Walt Hillis <WHillis@bluewaterindustries.com>; Tracy Kefauver <Tracy.Kefauver@tn.gov>; Younes Aleali <Younes.Aleali@tn.gov>; Will Collins <Will.Collins@tn.gov>
Subject: [EXTERNAL] Blue Water Industries (BWI) Applications for Construction Permits for a Mobile Non-Metallic Mineral Processing Plant System

# \*\*\* This is an EXTERNAL email. Please exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email - STS-Security. \*\*\*

Good Afternoon,

Attached, please find two (2) combined construction/operating permit applications and one permit amendment request for seven (7) locations along with supporting documentation. All information has been combined into one document.

Please note, the construction permit application fees are being submitted via email to <u>tdec.fees@tn.gov</u> in a separate email.

If you have any questions, please contact me.

Thanks,

Alisa Hatmaker Blue Water Industries 9509 Diggs Gap Road Heiskell, TN 37754 865-279-0702 (cell) 865-512-7622 (office) ahatmaker@bluewaterindustries.com



#### Via Electronic Mail to Air.Pollution.Control@tn.gov

January 4, 2024

Michelle W. Owenby, Director Division of Air Pollution Control Tennessee Department of Environment & Conservation William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 15<sup>th</sup> Floor Nashville, TN 37243

#### Re: BWI ETN LLC dba Blue Water Industries Combined Construction/Operating Permit Applications Mobile Crushing, Screening, & Conveying Non-Metallic Mineral Processing Plant System

Dear Director:

Please find attached for your review, two (2) combined construction/operating permit applications for mobile processing equipment. The equipment contained within these permit applications is currently permitted at seven (7) other BWI locations. These applications are being submitted to permit the same equipment at two additional sites listed below so the equipment may be moved within the BWI East Tennessee region to supplement market demands as needed.

Location	ESR No.
BWI Greenback Quarry	53-0074
BWI Grasselli Quarry	45-0059

This system instead of being fixed and set in place on concrete pads would consist of multiple track-mounted self-propelled units and one unit that is mounted on a portable trailer. The units can be operated as a complete system, with only certain units being utilized, or even just one unit being utilized at any one time dictated by demands for diverse sizes of finished aggregate product. The units have onboard dual-purpose engines to propel the units and supply power to the processing equipment.

An amendment request is being submitted concurrently with these construction permit applications to add the two additional locations to the existing seven (7) permits. More specifically, the amendment request will be to add the locations to the table found in Appendix 4 – Startup Certification for startup notification and compliance testing.

Also, some of the equipment contained in the BWI Greenback Quarry application that is attached is permitted currently under Permit No. 080023. With this application, BWI requests that this permit be made inactive once the new permit being applied for is issued.

An equipment process flow diagram and combination equipment list/emissions calculation sheet are attached for reference. Also attached is the permit limitation agreement letter for each application.

The equipment systems proposed for permitting are affected facilities as listed in 40 CFR Part 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants per 60.670 (a) (1) Applicability and designation of affected facility and 60.2 Definitions. As a result, emissions testing on the equipment will be conducted per the requirement for affected facilities. The emissions testing will be coordinated with the Division's Compliance Validation Program and a start-up letter will be submitted to the Division.

BWI has already completed emission testing on some of the units listed in the application under other permits/approvals by the Division so these will not be retested when they operate in the same method as they were previously tested. These tests and approvals are included with each application.



BWI is submitting the application fee payment via credit card to <u>tdec.fees@tn.gov</u> with this application submittal.

If you have any questions concerning this correspondence, please contact me at (865)-512-7628 or whillis@bluewaterindustries.com.

Sincerely,

Walt Hillis

Walt Hillis Environmental Manager

Attachments



# **ESR 53-0074 CONSTRUCTION PERMIT APPLICATION**



## NON-TITLE V PERMIT APPLICATION FACILITY IDENTIFICATION

	Type or print and submit. Attach appropriate source description forms.														
			SITE	INF	ORMATION										
1.	Organization's legal	l name and SOS o	control n	umb	<b>)er</b> [as registe	ered with the TN	Secretary of State (SOS)]								
2.	Site name (if different from legal name)														
3.	. Is a construction permit application fee being submitted? Yes       No         (see instructions for appropriate fee to submit)       County name														
4.	Site address (St./Rd.)	/Hwy.)					County name								
	City			5. NAICS or SIC code											
6.	<b>Site location</b> (in lat. /long.)	Latitude	Longitude												
	CONTACT INFORMATION (RESPONSIBLE PERSON)														
7.	Responsible person	/Authorized con	tact			Phone number with area code									
	Mailing address (St.,	/Rd./Hwy.)				Fax number v	with area code								
	City		State		Zip code	Email address									
		CON	<b>FACT INF</b>	ORN	IATION (TEC	HNICAL)									
8.	Principal technical	contact				Phone numb	er with area code								
	Mailing address (St.,	/Rd./Hwy.)				Fax number v	with area code								
	City		State		Zip code	Email addres	S								
		CO		IFOR	MATION (BI	LLING)									
9.	Billing contact					Phone numb	er with area code								
	Mailing address (St.,	/Rd./Hwy.)				Fax number v	with area code								
	City		State		Zip code	Email addres	S								

### AIR CONTAMINANT SOURCE(S) INFORMATION

<ul> <li>11. Is the air contaminant source(s) in a nonattainment area? If "Yes", then minor source BACT must be addressed. Yes.</li> </ul>													
11. Is the air contaminant source(s) in a nonattainment area? If "Yes", then minor source BACT must be addressed. Yes No													
12. Normal operation:		Hours/Day	Days	/Week		Weeks/Year	Days/Year						
13. Percent annu throughput	al	Dec. – Feb.	Marc	:h – Ma	y	June – August	Sept. – Nov.						
		TYPE OF PERMIT	REQ	UESTED	(check a	ppropriate box)							
<b>14.</b> Operating permit		Date construction star	ted	Date c	ompleted	Date of ownersh	ip change (if applicable)						
		Last permit number(s)			Emiss	ion Source Reference	e Number(s)						
Construction permit		Last permit number(s)			Emissi	ion Source Reference	e Number(s)						
If you chose Const	truc	tion permit above, then	choos	se eithe	r New Co	nstruction, Modificat	ion, or Location Transfer						
New Construction	Sta	arting date			Completi	on date							
Modification	Da	te modification started o	or will	start	Date completed or will complete								
Location Transfer	Tra	ansfer date			Address	of last location							

15. Describe changes that have been m	ade to this equipment or op	eration(s) since the last construction
or operating permit application:		
16. Comments		
	SIGNATURE	
Based upon information and belief formed	after a reasonable inquiry, I, a	as the responsible person of the above
knowledge. As specified in TCA Section 39-7	lon contained in this application is 16-702(a)(4), this declaration is	on is accurate and true to the best of my smade under penalty of perjury.
<b>17. Signature</b> (application must be signed	before it will be processed)	Date
Walt Hillis	· · · · · · · · · · · · · · · · · · ·	
Signer's name (type or print)	Title	Phone number with area code



## NON-TITLE V PERMIT APPLICATION ROCK CRUSHING SOURCE DESCRIPTION

Type or print. Submit for each rock crushing operation. Submit with the APC 100.														
GENERAL IDENTIFICATION AND DESCRIPTION  1. Organization's legal name and SOS control number [as registered with the TN] 2. Emission Source														
1. Organization's legal name and SOS control number [as registered with the TN       2. Emission Source         Secretary of State (SOS)]       Reference Number														
3. Is this air contaminant source subject to an NSPS or NESHAP rule?       Yes       No         If Yes, list rule citation, including Part, Subpart, and applicable Sections:       No														
	EQUIPMENT INF	ORMATION												
The applicant must submit an equipmer equipment or attach a separate sheet crusher, screen, conveyor, bin, pugmill, equipment labeled with a reference num	nt list and flow diag of paper for the e feeder, agricultural nber.	ram. The appl quipment list lime, etc. The	licant may us . The equipm e flow diagram	e the table bo nent list mus m must show	elow to list the t include each r each piece of									
<b>4.</b> Equipment type (Note 1)	Flow diagram reference number (Note 2)	Size (Note 3)	Operat (Ton: Design	ing rate s/Hr.) Actual	Date of manufacture									

			EMISSIO	N INFORMA	IION										
<b>5. Air contaminants.</b> Emission estimates for each air contaminant emitted from this point should be based on stack sampling results or angineering calculations. Calculations should be attached on a separate should be															
stack sam	stack sampling results or engineering calculations. Calculations should be attached on a separate sheet. (see instructions for more details)														
(see instru	(see instructions for more details)														
Particulate Matter emission data:	Flow diagram ref. no. (Note 5)	Average Emissions (Lbs./Hr.)	Maximum Emissions (Lbs./Hr.)	Average Emissions (Tons/Yr)	Potential Emissions (Tons/Yr)	Emissions Estimation method (Note 6)	Control devices (Note 6)	Control efficiency (%)							
Primary crushing															
Secondary crushing															
Tertiary crushing															
Agricultural lime															
Open storage															
Enclosed storage															
Conveying & Transferring															
Loading out															
Traffic dust															
Other (specify)															
Other (specify)															
Totals															

**Note 1**: Equipment type: The applicant must list each crusher, screen, conveyor, bin, pugmill, feeder, agricultural lime, etc.

**Note 2**: Flow diagram reference number: The applicant must attach a flow diagram. The flow diagram must show each piece of equipment, including each crusher, screen, conveyor, bin, pugmill, feeder, agricultural lime, etc. Each piece of equipment must be labeled with a reference number.

**Note 3**: Size: For crushers, size is the design operating rate (in ton/hr.). For screens, size is the dimensions of the top deck of the screen. For conveyors, size is the width of the conveyor. For bins, size is the design capacity in tons.

- **Note 4**: Explain in comments, if necessary.
- **Note 5**: As identified on the flow diagram required in item #3

**Note 6**: Refer to the instructions for the estimation method and control device codes.

APC 109

6. Control device. Description of proposed monitoring, recordkeeping, and reporting to assure compliance with emission limits. Include operating parameters of control device (flow rate, temperature, pressure drop, etc.). **ROAD INFORMATION** Paved Unpaved Watered (Miles & 7. Roads: Other control (specify) (Miles of road) (Miles of road) frequency) Plant yard Access roads **STOCKPILE INFORMATION** Estimated Other Loading method Turnover rate Wetted as No. of sides 8. Stockpiles: dust (e.g. loader, conveyor) annual (Tons/Month) piled enclosed tons control Load in Load out Coarse: Over 1" Fine: 1" to 1/4" 1/4" and less MFG. Sand Other (specify) 9. Comments **SIGNATURE** If this form is being submitted at the same time as an APC 100 form, then a signature is not required on this form. Date this form regardless of whether a signature is provided. If this form is NOT being submitted at the same time as an APC 100 form, then a signature is required. Based upon information and belief formed after a reasonable inquiry, I, as the responsible person of the above mentioned facility, certify that the information contained in this application is accurate and true to the best of my knowledge. As specified in TCA Section 39-16-702(a)(4), this declaration is made under penalty of perjury. 10. Signature Date Walt Hillis Signer's name (type or print) Title Phone number with area code



Via Electronic Mail to Air.Pollution.Control@tn.gov

January 4, 2024

Michelle W. Owenby, Director **Division of Air Pollution Control** Tennessee Department of Environment & Conservation William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 15th Floor Nashville, TN 37243

#### **BWI ETN LLC dba Blue Water Industries** Re: BWI Greenback – ESR No. 53-0074 **Construction Permit Application** Mobile Crushing, Screening, & Conveying Non-Metallic Processing Plant System Permit Limitation Agreement Letter

Dear Director:

On behalf of BWI Greenback Quarry, the following permit limitations are agreed upon for the aggregate processing equipment for which a Construction Permit Application is being submitted for installation at the existing permitted facility.

The maximum production capacity shall not exceed a combined total production limit of 450,000 tons per calendar year for all sources listed in the permit.

BWI Greenback Quarry shall demonstrate compliance with the above-identified limitation by recordkeeping.

On behalf of BWI Greenback Quarry, I agree to the above limitations. I am authorized to represent and bind the facility in environmental affairs.

If you have any questions concerning this correspondence, please contact me at (865)-512-7628 or whillis@bluewaterindustries.com.

Sincerely,

Signature

Date

|--|

Name (Printed)	Walt Hillis
Title	Environmental Manager
Date	01/04/2024



# **EQUIPMENT CALCULATIONS & FLOW DIAGRAM**

PERMIT AMENDMENT APPLICATION	Wet Suppression Controlled Emissions: {Total Particulate Matter (TSP), PM-10, & PM-2.5} Emission Factors for Crushed Stone Processing Operations (Ib/Ton), Table 11.19.2-2 (English Units), AP-42 Revise																
MOBILE CRUSHING, SCREENING, & Equipment List & Emission Calc	CONVEYING I	PLANT SY	YSTEM		8/04 Tables 4&5 of APC 109 (Rev. 12-17)-Non-Title V Permit Application Rock Crushing Source Description Addendum												
						Design	Actual	Annual Production (tons/yr)	TSP (CONTROLLED)			PM-1	0 (CONTRO	LLED)	PM-2.5 (CONTROLLED)		
Equipment Type/Process	Description	Flow ID #	Date Mfg.	NSPS	NSPS Code	Operating Rate (ton/hr)	Operating Rate (ton/hr)		Emission factor (Ib/ton)	Emissions (lb/hr)	Emissions (ton/yr)	Emission factor (lb/ton)	Emissions (Ib/hr)	Emissions (ton/yr)	Emission factor (Ib/ton)	Emissions (lb/hr)	Emissions (ton/yr)
McCloskey J40V2 Jaw Crusher, CA	Tier IV Engine	e (track-m	nounted /self-	propell	ed)												
Feeder Box	14' X 7'	JF1	2018	No	4	450	350	450,000	0.000016	0.007	0.004	0.000016	0.007	0.004	0.000016	0.007	0.004
Jaw Crusher	J40V2	JCR1	2018	Yes	7	450	350	450,000	0.0012	0.540	0.270	0.00054	0.243	0.122	0.000100	0.045	0.023
Main Conveyor	36"	JC1	2018	Yes	7	450	350	450,000	0.00014	0.063	0.032	0.000046	0.021	0.010	0.000013	0.006	0.003
KPI-JCI Impact Crusher 5260, CAT	Tier III Engine	(track-mo	ounted /self-pi	ropelled	i)		-	-					-				
Feeder Box	50"x15'	IF1	2013	Yes	7	450	350	450,000	0.000016	0.007	0.004	0.000016	0.007	0.004	0.000016	0.007	0.004
Impact Crusher	5260 HIS	ICR1	2013	Yes	7	450	350	450,000	0.0012	0.540	0.270	0.00054	0.243	0.122	0.000100	0.045	0.023
Main Conveyor	40"	IC1	2013	Yes	7	450	350	450,000	0.00014	0.063	0.032	0.000046	0.021	0.010	0.000013	0.006	0.003
Side Conveyor	24	IC2	2013	Yes	7	50	35	100,000	0.00014	0.007	0.007	0.000046	0.002	0.002	0.000013	0.001	0.001
Metso Lokotrack Jaw LT105, CAT 1	ier III Engine (1	track-mou	unted /self-pro	opelled	)												
Vibratory Grizzly Feeder	48"x14'	LTJ-F1	2000	Yes	6	450	350	450,000	0.000016	0.007	0.004	0.000016	0.007	0.004	0.000016	0.007	0.004
Jaw Crusher	C105	LTJ-CR1	2000	Yes	6	450	350	450,000	0.0012	0.540	0.270	0.00054	0.243	0.122	0.000100	0.045	0.023
Main Conveyor	42"	LTJ-C1	2000	Yes	6	450	350	450,000	0.00014	0.063	0.032	0.000046	0.021	0.010	0.000013	0.006	0.003
Side Conveyor	18"	LTJ-C2	2000	Yes	6	50	35	100,000	0.00014	0.007	0.007	0.000046	0.002	0.002	0.000013	0.001	0.001
KPI-JCI GT200 Cone Crusher, Cum	nins Tier IV En	gine (trac	k-mounted /s	elf-pro	pelled)												
Belt Feeder	42"	GT BF1	2019	Yes	7	385	360	450,000	0.00014	0.054	0.032	0.000046	0.018	0.010	0.000013	0.005	0.003
Cone Crusher	1200LS	GT CR1	2019	Yes	7	385	360	450,000	0.0012	0.462	0.270	0.00054	0.208	0.122	0.000100	0.039	0.023
Under Crusher Conveyor	36"	GT C1	2019	Yes	7	385	360	450,000	0.00014	0.054	0.032	0.000046	0.018	0.010	0.000013	0.005	0.003
McCloskey Cone Crusher C38V2, C	AT Tier III Engi	ne (track-	-mounted /sel	f-prope	lled)												
Belt Feeder	42"	MC BF1	2014	Yes	7	350	325	450,000	0.00014	0.049	0.032	0.000046	0.016	0.010	0.000013	0.005	0.003
Cone Crusher	C38 V2	MC CR1	2014	Yes	7	350	325	450,000	0.0012	0.420	0.270	0.00054	0.189	0.122	0.000100	0.035	0.023
Under Crusher Conveyor	42"	MC C1	2014	Yes	7	350	325	450,000	0.00014	0.049	0.032	0.000046	0.016	0.010	0.000013	0.005	0.003
McCloskey R155 Scalping Screen, 0	CAT Tier IV Eng	ine (tracl	k-mounted /se	elf-prop	elled)												
Feed Hopper	16' X 6'	RF1	2018	Yes	7	450	350	450,000	0.00014	0.063	0.032	0.000046	0.021	0.010	0.000013	0.006	0.003
Double Deck Screen	16' X 5' DD	RS1	2018	Yes	7	450	350	450,000	0.0022	0.990	0.495	0.00074	0.333	0.167	0.000050	0.023	0.011
Feed Conveyor	55"	RC1	2018	Yes	7	450	350	450,000	0.00014	0.063	0.032	0.000046	0.021	0.010	0.000013	0.006	0.003
Collection Conveyor	48"	RC2	2018	Yes	7	450	350	450,000	0.00014	0.063	0.032	0.000046	0.021	0.010	0.000013	0.006	0.003
Tail Conveyor	55"	RC3	2018	Yes	7	450	350	450,000	0.00014	0.063	0.032	0.000046	0.021	0.010	0.000013	0.006	0.003
Side Conveyor	36"	RC4	2018	Yes	7	225	200	200,000	0.00014	0.032	0.014	0.000046	0.010	0.005	0.000013	0.003	0.001
Mid Convoyor	26"	PC5	2019	Voc	7	225	200	200.000	0.00014	0.022	0.014	0.000040	0.010	0.005	0.000042	0.002	0.001

BWI ETN LLC dba Blue Water PERMIT AMENDMENT APPLICATIO MOBILE CRUSHING, SCREENING, & Equipment List & Emission Calcu	Industries - N CONVEYING I Ilations	Portable 1/4/2024 PLANT SY	e Non-Meta 4 /STEM	llic Pr	ocess	ing Plant	: System		Emission Tables	Factors for C	Wet Suppr Crushed Stone 109 (Rev. 12-1	ession Control Processing Op 17)-Non-Title V	lled Emissions perations (lb/T / Permit Applic	: {Total Partic on), Table 11. ation Rock Cr	ulate Matter ( 19.2-2 (Englis rushing Source	TSP), PM-1 h Units), AF ce Descriptio	0, & PM-2.5] -42 Revised 8/04 on Addendum
	TSP	(CONTRO	LLED)	PM-10 (CONTROLLED)			PM-2.	5 (CONTRO	OLLED)								
Equipment Type/Process	Description	Flow ID #	Date Mfg.	NSPS	NSPS Code	Operating Rate (ton/hr)	Operating Rate (ton/hr)	Annual Production (tons/yr)	Emission factor (Ib/ton)	Emissions (lb/hr)	Emissions (ton/yr)	Emission factor (lb/ton)	Emissions (Ib/hr)	Emissions (ton/yr)	Emission factor (Ib/ton)	Emissions (Ib/hr)	s Emissions (ton/yr)
McCloskey S130 Screen, CAT Tier III	Engine (track	-mounted	d /self-propell	ed)	•		-	•									
Feed Hopper	14' X 6'	SF1	2013	Yes	7	450	350	450,000	0.00014	0.063	0.032	0.000046	0.021	0.010	0.000013	0.006	0.003
Double Deck Screen	14' X 5' DD	SS1	2013	Yes	7	450	350	450,000	0.0022	0.990	0.495	0.00074	0.333	0.167	0.000050	0.023	0.011
Under Feeder Conveyor	48"	SC1	2013	Yes	7	450	350	450,000	0.00014	0.063	0.032	0.000046	0.021	0.010	0.000013	0.006	0.003
Main Feed Conveyor	42"	SC2	2013	Yes	7	450	350	450,000	0.00014	0.063	0.032	0.000046	0.021	0.010	0.000013	0.006	0.003
Tail Conveyor	48"	SC3	2013	Yes	7	450	350	450,000	0.00014	0.063	0.032	0.000046	0.021	0.010	0.000013	0.006	0.003
Side Conveyor	26"	SC4	2013	Yes	7	225	200	200,000	0.00014	0.032	0.014	0.000046	0.010	0.005	0.000013	0.003	0.001
Side Conveyor	26"	SC5	2013	Yes	7	225	200	200,000	0.00014	0.032	0.014	0.000046	0.010	0.005	0.000013	0.003	0.001
McCloskey S190 3D Screen, CAT Tie	r III Engine (tr	ack-mour	nted /self-pro	pelled)										1			
VGF/Feeder Box	5 'x 15'	MS BF1	2015	Yes	7	450	350	450,000	0.00014	0.063	0.032	0.000046	0.021	0.010	0.000013	0.006	0.003
Sizing Screen	5 x 20 TD	MS S1	2015	Yes	7	450	350	450,000	0.00220	0.990	0.495	0.000740	0.333	0.167	0.000050	0.023	0.011
Feed Conveyor	48"	MS C1	2015	Yes	7	450	350	450,000	0.00014	0.063	0.032	0.000046	0.021	0.010	0.000013	0.006	0.003
Main Conveyor	42"	MS C2	2015	Yes	7	450	350	450,000	0.00014	0.063	0.032	0.000046	0.021	0.010	0.000013	0.006	0.003
Tail Conveyor	48"	MS C3	2015	Yes	7	450	350	450,000	0.00014	0.063	0.032	0.000046	0.021	0.010	0.000013	0.006	0.003
Side Conveyor	32"	MS C4	2015	Yes	7	225	200	200,000	0.00014	0.032	0.014	0.000046	0.010	0.005	0.000013	0.003	0.001
Side Conveyor	32"	MS C5	2015	Yes	7	225	200	200,000	0.00014	0.032	0.014	0.000046	0.010	0.005	0.000013	0.003	0.001
3D Transfer Conveyor	26"	MS C6	2015	Yes	7	225	200	200,000	0.00014	0.032	0.014	0.000046	0.010	0.005	0.000013	0.003	0.001
3D Auxillary Conveyor	26"	MS C7	2015	Yes	7	225	200	200,000	0.00014	0.032	0.014	0.000046	0.010	0.005	0.000013	0.003	0.001
AMS FT3620 Screen Unit, CAT Tier IV	V Engine (trac	k-mounte	d /self-prope	lled)		<u> </u>											
Feeder Box	14.5' x 8.5'	AMS F1	2013	Yes	7	450	350	450,000	0.00014	0.063	0.032	0.000046	0.021	0.010	0.000013	0.006	0.003
Sizing Screen	6x20 TD	AMS S1	2013	Yes	7	450	350	450,000	0.0022	0.990	0.495	0.00074	0.333	0.167	0.000050	0.023	0.011
Conveyor (Under AMS F1)	48"	AMS C1	2013	Yes	7	450	350	450,000	0.00014	0.063	0.032	0.000046	0.021	0.010	0.000013	0.006	0.003
Conveyor (AMS S1 Feed)	48"	AMS C2	2013	Yes	7	450	350	450,000	0.00014	0.063	0.032	0.000046	0.021	0.010	0.000013	0.006	0.003
Conveyor (Crossover)	24"	AMS C3	2013	Yes	7	450	350	450,000	0.00014	0.063	0.032	0.000046	0.021	0.010	0.000013	0.006	0.003
Conveyor, overs (back discharge)	24"	AMS C4	2013	Yes	7	225	200	200,000	0.00014	0.032	0.014	0.000046	0.010	0.005	0.000013	0.003	0.001
Conveyor (front side discharge)	30"	AMS C5	2013	Yes	7	225	200	200,000	0.00014	0.032	0.014	0.000046	0.010	0.005	0.000013	0.003	0.001
Conveyor (back side discharge)	30"	AMS C6	2013	Yes	7	225	200	200,000	0.00014	0.032	0.014	0.000046	0.010	0.005	0.000013	0.003	0.001
Conveyor, fines (front discharge)	48"	AMS C7	2013	Yes	7	225	200	200,000	0.00014	0.032	0.014	0.000046	0.010	0.005	0.000013	0.003	0.001

Г

BWI ETN LLC dba Blue Water PERMIT AMENDMENT APPLICATION	Industries - ON	e Non-Meta 4	Wet Suppression Controlled Emissions: {Total Particulate Matter (TSP), PM-10, & PM-2.5} Emission Factors for Crushed Stone Processing Operations (lb/Ton), Table 11.19.2-2 (English Units), AP-42 Revised														
MOBILE CRUSHING, SCREENING, & Equipment List & Emission Calc	& CONVEYING	PLANT S'	YSTEM						Tables	s 4&5 of APC	109 (Rev. 12-1	7)-Non-Title \	/ Permit Applic	ation Rock Cr	ushing Sourc	e Description	8/04 n Addendum
						Desian	Antival		TSP (CONTROLLED) PM-10 (CONTROLLED) PM-2.5								OLLED)
Equipment Type/Process	Description	Flow ID #	Date Mfg.	NSPS	NSPS Code	Operating Rate (ton/hr)	Operating Rate (ton/hr)	Annual Production (tons/yr)	Emission factor (Ib/ton)	Emissions (lb/hr)	Emissions (ton/yr)	Emission factor (lb/ton)	Emissions (lb/hr)	Emissions (ton/yr)	Emission factor (Ib/ton)	Emissions (lb/hr)	Emissions (ton/yr)
Astec PSP 2618VM Screen, Tier II J																	
VGF/Feeder Box	8' X 14'	PSP F1	2012	Yes	7	450	350	450,000	0.00014	0.063	0.032	0.000046	0.021	0.010	0.000013	0.006	0.003
Sizing Screen	6 X 18 DD	PSP S1	2012	Yes	7	450	350	450,000	0.00220	0.990	0.495	0.000740	0.333	0.167	0.000050	0.023	0.011
Under Feeder Conveyor	32"	PSP C1	2012	Yes	7	450	350	450,000	0.00014	0.063	0.032	0.000046	0.021	0.010	0.000013	0.006	0.003
Delivery Conveyor	36"	PSP C2	2012	Yes	7	450	350	450,000	0.00014	0.063	0.032	0.000046	0.021	0.010	0.000013	0.006	0.003
Side Conveyor	24"	PSP C3	2012	Yes	7	225	200	200,000	0.00014	0.032	0.014	0.000046	0.010	0.005	0.000013	0.003	0.001
Side Conveyor	24"	PSP C4	2012	Yes	7	225	200	200,000	0.00014	0.032	0.014	0.000046	0.010	0.005	0.000013	0.003	0.001
Fines Conveyor	36"	PSP C5	2012	Yes	7	225	200	200,000	0.00014	0.032	0.014	0.000046	0.010	0.005	0.000013	0.003	0.001
Metso Lokotrack ST2.8 Screener, C	AT Tier III Engi	ne (track	-mounted /sel	f-prope	elled)		-			-			-				
Pan Apron Feeder	4x13	LT-PF1	2017	Yes	7	450	350	450,000	0.00014	0.063	0.032	0.000046	0.021	0.010	0.000013	0.006	0.003
Screen	5x16 DD	LT-C1	2017	Yes	7	450	350	450,000	0.00014	0.063	0.032	0.000046	0.021	0.010	0.000013	0.006	0.003
Conveyor, transfer	48"	LT-S1	2017	Yes	7	450	350	450,000	0.00220	0.990	0.495	0.000740	0.333	0.167	0.000050	0.023	0.011
Conveyor, stockpile	48"	LT-C2	2017	Yes	7	225	200	200,000	0.00014	0.032	0.014	0.000046	0.010	0.005	0.000013	0.003	0.001
Conveyor, stockpile	32"	LT-C3	2017	Yes	7	225	200	200,000	0.00014	0.032	0.014	0.000046	0.010	0.005	0.000013	0.003	0.001
Conveyor, transfer	48"	LT-C4	2017	Yes	7	225	200	200,000	0.00014	0.032	0.014	0.000046	0.010	0.005	0.000013	0.003	0.001
Conveyor, stockpile	32"	LT-C5	2017	Yes	7	225	200	200,000	0.00014	0.032	0.014	0.000046	0.010	0.005	0.000013	0.003	0.001
TEREX TRS 550 Screener, CAT Tier	4F Engine (trad	k-mount	ed /self-prope	elled)			T	1		•			•				
Pan Apron Feeder	4x13	TRX-PF1	2014	Yes	7	450	350	450,000	0.00014	0.063	0.032	0.000046	0.021	0.010	0.000013	0.006	0.003
Screen	5x16 DD	TRX-S1	2014	Yes	7	450	350	450,000	0.00220	0.990	0.495	0.000740	0.333	0.167	0.000050	0.023	0.011
Conveyor, stockpile	48"	TRX-C1	2014	Yes	7	225	200	200,000	0.00014	0.032	0.014	0.000046	0.010	0.005	0.000013	0.003	0.001
Conveyor, stockpile	32"	TRX-C2	2014	Yes	7	225	200	200,000	0.00014	0.032	0.014	0.000046	0.010	0.005	0.000013	0.003	0.001
Conveyor, transfer	48"	TRX-C3	2014	Yes	7	225	200	200,000	0.00014	0.032	0.014	0.000046	0.010	0.005	0.000013	0.003	0.001
Conveyor, stockpile	32"	TRX-C4	2014	Yes	7	225	200	200,000	0.00014	0.032	0.014	0.000046	0.010	0.005	0.000013	0.003	0.001
							TOTAL E	MISSIONS		11.97	6.08		4.31	2.19		0.62	0.32
Emission factors are from AP-42, Table	11.19.2-2 (Revise	ed 8/2004)							Allowat	ole Emissio	ns (Ibs/hr)	Allowable	& Potential	Emissions	Actı	ual Emissi	ons
Equations used in calculation:		E =	17.31(P)0	.16	46.01	lb/hr		11.97	lb/hr								
[TPM Emissions (lb/hr)] = [Operating rate (i		(P) =	450		2000	hr/yr		450,000	ton/yr								
[TPM Emissions (ton/yr)] = [TPM Emissions (lb/ton)] x [Annual Production (tons/yr)] / [2000 lb/ton]										46.01		2000	lbs/ton		450	ton/hr	
40 CFR Part 60, Subpart OOO, NSPS Co	de	(6) 60 67	5(c)(2) Table 2	offor 9/2	21/1002 6	aut boforo 4/2	2/2009		<b>46.01</b> ton/yr 2000 lbs/ton								
(1) 60.670 (a)(1) Affected facilities		(Openity)	15% orushoro a	anei 0/5	other off	out before 4/2	.2/2000		Notae:								
(2) 60.670 (a)(2) wet material processing         (Opacity 15% crushers and 10% other affected facilities)           (3) 60.670 (d)(1) Like for Like (equal or smaller size)         (7) 60.675(c)(3) Table 3, on or after 4/22/2008           (4) 60 670 (e) on or ore 8/31/1083 (Opacity 20%)         (Opacity 12% crushers and 7% other affected facilities)										Various units of this portable non-metallic processing system may be operated singularly or in conjunction with one another based on product needs							
(5) 60 672 (d) Truck dumping in to screen	feed hopper, crus	her	,;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;				,		she anothe	. saces on pr							





# **PERMIT AMENDMENT REQUEST**



#### Via Electronic Mail to Air.Pollution.Control@tn.gov

January 4, 2024

Michelle W. Owenby, Director Division of Air Pollution Control Tennessee Department of Environment & Conservation William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 15<sup>th</sup> Floor. Nashville, TN 37243

#### Re: Amendment Request – Permits to Construct / Modify and Operate BWI ETN LLC dba Blue Water Industries Mobile Crushing, Screening, & Conveying Non-Metallic Mineral Processing Plant System

Dear Director:

Please find attached for your review a permit amendment request to include two (2) additional locations to the table listed in Appendix 4: Startup Certification for each permit listed below. Concurrent with this amendment request, BWI is submitting two (2) construction permit applications for the two additional locations. These applications are being submitted to permit the same equipment at two additional sites listed below so the equipment may be moved within the BWI East Tennessee region to supplement market demands as needed. This amendment request is to add these locations to the permit so that initial startup at one facility will be considered startup for all locations and one performance test will be considered compliance for all locations.

#### Locations to be added as part of amendment request.

Location	ESR No.
BWI Greenback Quarry	53-0074
BWI Grasselli Quarry	45-0059

#### Permits requested to be amended to include locations listed above.

Location	Permit No.	ESR No.
BWI Watauga Quarry	081319	10-0012-12
BWI Elizabethton Quarry	081320	10-0086-10
BWI Riverbend Quarry	081321	29-0039-14
BWI Coy Stone Plant	081322	45-0069-10
BWI Tri-Cities Airport Quarry	081323	82-0166-17
BWI Unicoi Quarry	081324	86-0040-13
BWI Locust Mount Quarry	081325	90-0123-12

If you have any questions concerning this correspondence, please contact me at (865)-512-7628 or whillis@bluewaterindustries.com.

Sincerely,

Walt Hillis

Walt Hillis Environmental Manager



# **VEE REPORTS**



November 23, 2022

Ms. Alisa Hatmaker Blue Water Industries Greenback Quarry 9509 Diggs Gap Road Heiskell, Tennessee 37754

Reference Number: 53-0074-03

#### Dear Ms. Hatmaker:

The Tennessee Division of Air Pollution Control has received the sixteen EPA Method 9 visible emission evaluations (VEE) submitted for the mobile crushing and sizing plant located at the Greenback Quarry, 2107 Big Hill Road, Lenoir City, Tennessee. On June 2, 2022 a start-up notification was submitted to the Division for four of the five permitted pieces of equipment. This facility is subject to the Conditions listed in State of Tennessee Operating Permit #080023. These evaluations were conducted on November 2, 2022 by Ms. Hatmaker of Blue Water Industries and were performed to satisfy Condition F1-2 of the current permit. The Division notes that upon start-up of the final piece of permitted equipment (McCloskey S130), another notification will be needed along with VEEs.

The VEE was verified and found acceptable by the Division. The review of the VEE determined that the emission point subject to the New Source Performance Standards for New Stationary Sources (40 CFR Part 60 Subpart OOO) was achieving compliance with the applicable visible emission standard during the time period of the evaluation.

Should you have any questions concerning the evaluation of this report, please contact either Garrett Ammons at (615) 687-7076 or me at (615) 687-7037.

Sincerely,

Bryan Parker

Bfyan Parker Environmental Manager Compliance Validation Program Tennessee Division of Air Pollution Control



40 CFR Part 60, Subpart OOO, Appendix A, Method 9 Visible Emissions Evaluation Report

Completed For:

BWI ETN LLC dba Blue Water Industries Greenback Quarry Loudon County, Tennessee 2107 Big Hill Road Lenoir City, TN 37772

Non-Metallic Mineral Processing Plant Emission Source No. 53-0074-03 Permit No. 080023 New Mobile Plant Construction

> Evaluations Date: November 2, 2022

**Report Prepared By:** 

Alisa Hatmaker Blue Water Industries 9509 Diggs Gap Road Heiskell, TN 37754

Report Date: November 4, 2022



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## 1. INTRODUCTION

BWI ETN LLC dba Blue Water Industries (BWI) owns and operates the Greenback Quarry with a non-metallic mineral processing plant located at 2107 Big Hill Road, Lenoir City, TN 37772. The processing plant crushes and sizes quarried stone into various sizes of aggregate products for sale. The Greenback Quarry is permitted by the TDEC-APC Division as Emission Source No. 54-0074-03 and Construction/Operating Permit No. 080023 to operate a mobile crushing and screening plant. On March 29, 2021, BWI submitted a construction permit application on February 11, 2022 for a track-mounted mobile plant. The Department approved the request with the issuance of permit no. 080023 on May 20, 2022. A startup notice was submitted on June 2, 2022 for four (4) of the five (5) mobile equipment units permitted as part of the mobile plant.

## 2. TEST PURPOSE/PROCEDURES

The United States Environmental Protection Agency promulgated standards of performance for new sources of nonmetallic mineral processing plants, which became effective on August 1, 1985. These standards are applicable to any Affected Facility that commenced construction, modification, or reconstruction after August 31, 1983. These standards were revised as published in the Federal Register on June 9, 1997. The standards were revised again as published in the Federal Register on April 28, 2009.

The pieces of equipment evaluated at the Greenback Quarry Mobile Crushing and Screening Plant is defined as "Affected Facilities" in 40 CFR Part 60 Subpart A 60.2 and as listed in Subpart 000 60.670 (a) (1). The mobile crushers, mobile screens, and associated conveyors with each unit are "Affected Facilities" as designated in 40 CFR Part 60 Subpart 000 Paragraph 60.670. Therefore, demonstration of compliance with the visible particulate matter emissions standard is required as stated in 40 CFR Part 60 Subpart 000 Paragraph 60.672 Standard of Particulate Matter. Alisa Hatmaker (BWI) conducted the visible emissions evaluations in order to determine compliance during normal plant production. The visible emissions evaluations were conducted according to the procedures outlined in 40 CFR Part 60 Subpart 000 Paragraph 60.675 Test Methods and Procedures. Observations were conducted for 30-minutes (five 6-minute averages/5 sets of 24 consecutive observations at 15-second intervals) using 40 CFR Part 60, Appendix A-4 Method 9. The reported opacity for the equipment is the average of the five 6-minute averages.

### 3. PROCESS & EQUIPMENT DESCRIPTIONS

The Greenback Quarry Mobile Crushing and Screening Plant is a Non-Metallic Mineral (Crushed & Broken Limestone SIC 1422- NAICS Code 212312) Track-Mounted Mobile Processing Facility. Stone is blasted from the quarry face, hauled via truck, and dumped in the primary feeder for the primary jaw crusher. After initial crushing, the stone is further screened, crushed, and sized for sale in the construction and related industries. The equipment evaluated at the facility is a part of the stone processing plant.

The affected facilities were constructed after August 31, 1983 and as such are subject to the performance guidelines outlined in 40 CFR Part 60, Subpart OOO, published in the 51 FR 31337, August 1, 1985 as amended at 62 FR 31359, June 9, 1997 and 74 FR 19309 April 28, 2009.

Pursuant to 40 CFR Part 60, Subpart OOO §60.675(g) and TDEC-APC requirements, the Division's Compliance Validation Program was contacted prior to the evaluation of the visible emission evaluations and gave BWI authorization to conduct the evaluations. The visible emissions evaluations were conducted during normal operations on November 2, 2022. The equipment based on product needs and operating scenarios was



operating at approximately 90-95% during testing, which is the normal method of operation for the equipment.

#### EQUIPMENT EVALUATED

- 1. McCloskey J40V2 Jaw Crusher & Associated Conveyors
- 2. McCloskey R155 Scalping Screen & Associated Conveyors
- 3. KPI-JCI GT200 Cone Crusher & Associated Conveyors
- 4. AMS FT3620 Screen Unit & Associated Conveyors

#### 4. SUMMARY OF TEST RESULTS

Per 40 CFR Part 60, Subpart 000, 60.672 Standard for particulate matter, Section (b) and Table 3, details the fugitive emission limits for transfer points associated with the equipment that was evaluated. The test was conducted per 60.675 Test Methods and procedures. The emission point(s) results that were obtained are presented in the following table. Five (5) sets of twenty-four (24) consecutive observations at fifteen (15) second intervals to yield six (6) minute averages were performed. The averages of the five 6-minute averages for each point are listed below. All equipment units were demonstrating compliance with this level during testing. Table 1 lists the Emission Point ID, Emission Source Description, Average Opacity of the Five 6-minute Averages, and the Visible Opacity Limit of each emission source per Subpart OOO, Table 3.



Emission Point ID	Emission Source Description	Visible Opacity Limit <sup>(1)</sup>	Average Opacity of Five 6-Minute Averages
1	Jaw Crusher JCR1 drop onto Conveyor JC1	12%	1.92%
2	JC1 feed onto R155 Screen Feed Hopper RF1	7%	0.0%
3	Conveyor RC1 transfer onto Screen & Area above Screen RS1	7%	0.0%
4	RS1 feed onto Conveyor RC3	7%	0.0%
5	RS1 feed onto Conveyor RC4	7%	0.0%
6	Conveyor RC2 feed onto Conveyor RC5	7%	0.0%
7	RC4 feed onto GT200 Belt Feeder GTBF1	7%	0.0%
8	GTBF1 feed into Cone Crusher GTCR1	12%	3.83%
9	GTCR1 feed onto Conveyor GTC1	12%	1.17%
10	GTC1 feed onto FT3620 Screen Feed Box AMS F1	7%	0.0%
11	Conveyor AMS C1 feed onto Conveyor AMS C2	7%	0.0%
12	AMS C2 feed onto Screen & Area above Screen AMS S1	7%	0.0%
13	Conveyor AMS C3 feed to Conveyor AMS C4	7%	0.0%
14	AMS S1 feed onto Conveyor AMS C5	7%	0.0%
15	AMS S1 feed onto Conveyor AMS C6	7%	0.0%
16	AMS S1 feed onto Conveyor AMS C7	7%	0.0%

#### TABLE 1: SUMMARY OF VEE POINTS AND EVALUATION RESULTS

(1) EPA Subpart 40 CFR Part 60, Subpart OOO, Table 3



### APPENDIX A

Plant Process Flow Diagram & Emission Point Identifications

# Blue Water Industries-Greenback Quarry (ETN Mobile Plant)

VEE Points ID List: 10/21/2022

#### Emission Source No. 53-0074-03 Permit No. 080023 Construct/Modify/Operate

Point ID	Type of Equipment	Flow Diagram ID #	Point Description					
McClosk	key J40V2 Jaw Crusher							
1	J40 V2 Jaw Crusher	JCR1	Jaw Crusher JCR1 drop onto Conveyor JC1					
2	J40 V2 Conveyor	JC1	JC1 feed onto R155 Screen Feed Hopper RF1					
McClosk	key R155 Scalping Screen							
3	R155 Conveyor/Screen	RC1/RS1	Conveyor RC1 transfer onto Screen & Area above Screen RS1					
4	R155 Screen	RS1	RS1 feed onto Conveyor RC3					
5	R155 Screen	RS1	RS1 feed onto Conveyor RC4					
6	R155 Screen/Conveyor	RS1/RC2	Conveyor RC2 feed onto Conveyor RC5 <sup>(1)</sup>					
7	R155 Conveyor	RC4	RC4 feed onto GT200 Belt Feeder GTBF1					
KPI-JCI	GT200 Cone Crusher							
8	GT200 Belt Feeder	GTBF1	GTBF1 feed into into Cone Crusher GTCR1					
9	GT200 Cone	GTCR1	GTCR1 feed onto Conveyor GTC1					
10	GT200 Conveyor	GTC1	GTC1 feed onto FT3620 Screen Feed Box AMS F1					
AMS FT	3620 Screen Unit							
11	AMTS FT3620 Conveyor	AMS C1	Conveyor AMS C1 feed onto Conveyor AMS C2					
12	AMTS FT3620 Conveyor & Screen	AMS C2/AMS S1	AMS C2 feed onto Screen & Area above Screen AMS S1					
13	AMTS FT3620 Screen & Conveyor	AMS S1/AMS C3	Conveyor AMS C3 feed to Conveyor AMS C4 <sup>(2)</sup>					
14	AMTS FT3620 Screen	AMS S1	AMS S1 feed onto Conveyor AMS C5					
15	AMTS FT3620 Screen	AMS S1	AMS S1 feed onto Conveyor AMS C6					
16	AMTS FT3620 Screen	AMS S1	AMS S1 feed onto Conveyor AMS C7					

#### Notes:

(1) Screen RS1 drop to RC2 is directly above RC2 drop to RC5 so only one point is being proposed for testing. (Point ID #6)

(2) AMS S1 screen drop to Conveyor AMS C3 is hidden in machine. (Point ID #13)





### APPENDIX B

Visible Emissions Evaluations (VEE) Forms

Commentation         Comments         Comments         Comments         Comments           City:         2017 Big UIII Road         111         212:         1         0         0         4         Comments           City:         Load Coty         Load Coty         Load Coty         1         0         0         5         5         0 <th>Source Name: BWI</th> <th colspan="4">urce Name: BWI ETN LLC dba Blue Water Industries</th> <th>n Date:</th> <th>Start Time</th> <th>: St</th> <th>op Time:</th> <th></th>	Source Name: BWI	urce Name: BWI ETN LLC dba Blue Water Industries				n Date:	Start Time	: St	op Time:	
Address         2107 Big Hie Road         III/2 12 - 2         7/3 O AM         0 - 0 AM           City         County         The         307 - 45         -0	Gree	enback Quarry				Dutor		.		
City:         County:         State:         Zip:         MiniSec         0         15         30         45         Comments           Chord City:         Bos 695 5322         Pacified IV IN No:         63 007403         2         5         5         5         5           Process Equipment:         Operating Mode:         3         0         0         0         0           Vol Jaw Chuther:         Operating Mode:         6         0         0         0         0           Web Suppression         DV 100 %         6         0         0         0         1140           Bescribe Emission Point:         Derekting Mode:         6         0         0         0         1141           Jaw Cuther JCR1 dog onto Conveyor JC1         1         8         0         5         5         1141           Jaw Cuther JCR1 dog onto Conveyor JC1         1         8         0	Address: 210	7 Big Hill Road			11/2	122	9:30	AM	10.00 AM	
Lond City         Loudon         TN         37772         1         0         0         5         5           Prione:         655.985.920         Facility ID: S20074.03         2         5         5         0         0         0           Procese Equipment:         Operating Mode:         3         0 <td< td=""><td>City: Cou</td><td>inty:</td><td>State:</td><td>Zip:</td><td>Min/Sec</td><td>0</td><td>15</td><td>30</td><td>45</td><td>Comments</td></td<>	City: Cou	inty:	State:	Zip:	Min/Sec	0	15	30	45	Comments
Phone:         686:986-332         Facility ID No:         530:74:03         2         5         5         0           Process Equipment:         Operating Mode:         3         0         0         0         0           JAV 22 Jaw Chasher         Operating Mode:         5         0         0         0         0           Mark Suppression         JM / 200%         6         0         0         0         0           Mark Suppression         JM / 200%         6         0         0         0         0           Jaw Crusher JCR1 drop onto Convegor JC1         1         8         0         <	Lenoir City Loud	don	TN	37772	1	0	0	5	5	
Process Equipment:         Operating Mode:         3         0         0         0           402-3w Cumber         90-95 %         4         0         0         0         1           Control Equipment:         Operating Mode:         5         0         0         0         1         1         0         0         0         1         1         0         0         0         1         1         0         0         0         1         1         0         0         0         0         1         1         0 <td>Phone: 865-</td> <td>-986-5322</td> <td>Facility ID No:</td> <td>53-0074-03</td> <td>2</td> <td>5</td> <td>5</td> <td>5</td> <td>0</td> <td></td>	Phone: 865-	-986-5322	Facility ID No:	53-0074-03	2	5	5	5	0	
JAO V2. Base Cruster       JO - 4 S V <sub>0</sub> 4       0       0       0         Viet Suppression       Operating Mode:       5       0       0       1st 6-Minute Avg.         Wet Suppression       DN / 100 %       6       0       0       5       0       1/1         Describe Emission Point:       Intel State Minute Avg.       6       0       0       5       5       1/1         Describe Emission Point:       1       8       0       0       0       0       0       0         Wet Cusher 2/R 14 dop onto Conveyor JC1       1       8       0	Process Equipment:		Operating Mode:	A	3	0	0	0	0	
Control Equipment:         Operating Mode:         s         O         O         It 8t 8-Minute Avg.           Vet Suppression         DN         IoN         6         O         S         I/I/I/2           Describe Ensistion Point:         Ensistion PV ID         7         5         S         S         I/I/I/2           Jaw Cubuer JCRI diap onto Conveyor JC1         1         8         O         S         C         I/I/I/2           Jaw Cubuer JCRI diap onto Conveyor JC1         1         8         O         S         S         S         I/I/I/2           Jaw Cubuer JCRI diap onto Conveyor JC1         1         8         O         S         S         I/I/I/2           Jaw Cubuer JCRI diap onto Conveyor JC1         1         8         O         C         O         I/I/I/2           Describe Ensions:         Directoon Toon Observer:         Directoon Toon Observer:         11         O         O         O         I/I/I/2           Start: UL Intermittent []         16         5         5         O         I/I/I/2         I/I/I/2 <td>J40 V2 Jaw Crusher</td> <td></td> <td>90-95</td> <td>20</td> <td>4</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td></td>	J40 V2 Jaw Crusher		90-95	20	4	0	0	0	0	
Wet Suppression         DN         I/O 2         6         0         5         5         1//4           Describe Emission Point:         Imission PL ID         7         5         5         5         5           Jaw Crusher JCR1 drop onto Conveyor JC1         1         8         0         5         0         0           Height Above Ground Level:         Height Relative to Observer:         9         0         0         0         0           Start.         Direction from Observer:         10         0 </td <td>Control Equipment:</td> <td></td> <td>Operating Mode:</td> <td></td> <td>5</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>1st 6-Minute Avg.</td>	Control Equipment:		Operating Mode:		5	0	0	0	0	1st 6-Minute Avg.
Describe Emission Put:         Emission Put:         T         5         5         5           Jaw Crusher JCR1 drop onto Conveyor JC1         1         8         0         5         0         5           Start: 30 '         End: 30 '         Start: 30 '         End: 30 '         10         0         0         0         0           Start: 30 '         End: 30 '         Start: 30 '         End: 30 '         10         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         2nd 6-Minute Avg.           Start: 100 '         End: 100 '         Start: W         12         5         5         0         18%         0	Wet Suppression		DN 100%	0	6	0	0	5	5	1,44
Jaw Conster JCR1 drop on to Conveyor JC1       1       8       0       5       0       0         Height Above Ground Level:       Height Relative to Observer:       9       0       0       0       0         Start JO ^       End 30 '       Start JO ^       End 30 '       0       0       0       0       0         Distance from Observer:       Direction from Observer:       11       0       0       0       2////////////////////////////////////	Describe Emission Poi	nt:		Emission Pt. ID	7	5	5	5	5	
Height Rotative to Observer:       B       O       O       O       O         Start       30 '       End: 30 '       End: 30 '       10       O       O       O         Start       JO '       End: 30 '       Start for Om Observer:       11       O       O       O       O       Data 6-Minute Avg.         Start       JO '       End: AD '       Start       W       End: AD '       Start       O       O       O       O       O       Data 6-Minute Avg.         Start       JO '       Start       W       End: AD '       End: AD '       Start       O       O       O       Data 6-Minute Avg.         Start       JO O       O       O       O       O       O       O       D       D       D       O       O       D	Jaw Crusher JCR1 drop	onto Conveyor JC	1	1	8	0	5	0	0	
Start:         30 '         End:         30 '         10         0         0         0         2nd           Distance from Observer:         Direction from Observer:         Direction from Observer:         11         0         0         0         2nd 6-Mmute Avg.           Start:         Discribe Emissions:         13         5         5         5         0           Start:         Monte         End:         Multiple         14         0         0         0         0           Start:         Monte         End:         Multiple         14         0         0         0         0           Start:         Monte         End:         Multiple         Fugative (X)         Intermittent []         16         5         5         0	Height Above Ground L	evel:	Height Relative to	Observer:	9	0	0	0	0	
Distance from Observor:       Direction from Observer:       11       0       0       2nd 6-Minute Avg.         Start. [00 ' End: [00 ' Start. [W] End: [W]       12       5       5       1/8 g         Describe Emission:       13       75       5       0         Start. [00 ' End: [00 ' Start. [W] End: [W]       13       75       5       0         Start. [00 ' End: [W] Intermittent []       13       75       5       0         Start. [01 ' End: [W] Intermittent []       16       5       5       0         No [X] Yes []       Attached []       Detached []       18       6       0       0         No [X] Yes []       Attached []       Detached []       18       6       5       5       0         Point In the Plume at which Opacity was Determined:       19       0       5       5       5       0       0         Start. NA       End: NA       20       5       5       5       0 </td <td>Start: 30 F</td> <td>nd 30 1</td> <td>Start: 301</td> <td>End: 30</td> <td>10</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td></td>	Start: 30 F	nd 30 1	Start: 301	End: 30	10	0	0	0	0	
Start       00°       End:       00°       Start       Wend       End:       Wend       12       5       5       5       18         Describe Emission       Start       End:       ROULD Dist       13       75       5       0       14       0       0       0       18       0       0       0       16       0       0       16       0       0       16       0       0       16       0       0       17       0       0       0       17       0       0       0       17       0       0       0       17       0       0       0       17       0 </td <td>Distance from Observe</td> <td>r:</td> <td>Direction from Obs</td> <td>server:</td> <td>11</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>2nd 6 Minute Ava</td>	Distance from Observe	r:	Direction from Obs	server:	11	0	0	0	0	2nd 6 Minute Ava
Cash (D)       Doin (D)       Date (D) <t< td=""><td>Start: 100 C</td><td>nd IAA C</td><td>Start: (1)</td><td>End (L)</td><td>12</td><td>E</td><td>E</td><td>T</td><td>5</td><td></td></t<>	Start: 100 C	nd IAA C	Start: (1)	End (L)	12	E	E	T	5	
Start         None         End:         Rolf Dust         14         0         0         0           Emission Color:         Plume Type: Continuous []         16         0         0         0           Start         Clificat         End:         Multe         Plume Type: Continuous []         16         0         0         0           Water Droptets Present:         If Water Droptet Plume:         NA         17         0         5         3d 6-Minute Avg.           No(X]         Yes []         Attached []         Detached []         18         6         5         5           Point In the Plume at which Opacity was Determined:         19         0         5         5         5         0           Describe Background         End:         NA         20         5         5         5         0	Describe Emissions:				13	2	5	5	0	1/05
Start:       End: EDUC DUS)       14       0       0       0         Start:       End: EDUC DUS)       15       0       0       0         Start:       End: Muter       Fugitive [X] Intermittent []       16       5       5       0         Water Droplets Present:       If Water Droplets Present:       If Water Droplets Present:       17       0       5       5       0         No [X]       Yes []       Attached []       Detached []       18       6       0       5       5       0         Point in the Plume at which Opacity was Determined:       19       0       5       5       0<	and Aline		- Port D	ist	14	5	0	5	0	
Intervention of the function of t	Emission Color:		Plume Type: Conti		14	0	0	0	0	
Start:       Clean       Figure [X]       Intermittent []       10       5       5       5       3rd 6-Minute Avg.         Water Droplets Present:       If Water Droplets Plume: NA       17       0       5       5       3rd 6-Minute Avg.         Point in the Plume at which Opacity was Determined:       19       0       5       5       5       0         Describe Background:       End:       NA       20       5       5       0       0         Start:       NA       End:       NA       20       5       5       0       0         Start:       End:       NA       20       5       5       0	Claar	10/10/10			15	0	0	F	0	
No [X]       Yes []       Attached []       Detached []       17       0       5       5       3rd 6-Minute Avg.         No [X]       Yes []       Attached []       Detached []       18       6       0       2,08         Point in the Plume at which Opacity was Determined:       19       0       5       5       0       2,08         Start:       NA       End:       NA       20       5       5       0       0         Start:       Maximum       End:       NA       20       5       5       0       0       0         Start:       Bull       End:       Sky Conditions:       Partial       21       0	Start: Clear E	nd: VVVCte	Fugitive [X] Inter	mittent [ ]	10	5	5	5	0	
NO LX       Yes []       Intrached []       Detached []       18       G       S       S       X,OS         Point in the Plume at which Opacity was Determined:       19       0       5	Mater Dropiets i resent		in Water Droplet i i	ume. NA	17	0	0	5	5	3rd 6-Minute Avg.
Point inter Pulite at winch Opachy was betermined.       19       0       5       5       0         Start: NA       End: NA       20       5       5       0       0         Start: Start: Start: Start: Start: Start: Cloudy End:Cloudy 24       0       0       0       0       0         Background: Start: Blue       Start: Cloudy End:Cloudy 24       0       0       0       0       0       0         Start: Start: Start: Cloudy End:Cloudy 24       0       0       0       0       0       0       0         Start: Call M End: Call M Start: NA       End: NA       28       0       0       0       0       0       0         Start: Sart: Sar	No[X] Y	es[]	Attached [ ]	Detached [ ]	18	6	0	5	6	2.08
Start:       NA       20       5       5       0         Describe Background:       21       0       0       0         Start:       Budy start:       22       0       0       0         Start:       Budy start:       County start:       Pay Hy       23       0       5       0       0         Start:       Budy start:       County start:       Pay Hy       23       0       5       0       0       16         Start:       Budy start:       County start:       Pay Hy       23       0       5       0       0       16       16       6       17       16       0       0       16	Point in the Plume at w	mich Opacity was	Determinea:		19	0	5	5	5	
Describe Background:       End:       Stat:       21       0       0       0         Stat:       Sty Conditions:       22       0       0       0       4th 6-Minute Avg.         Background Color:       Stat:       Stat:       Stat:       0       0       4th 6-Minute Avg.         Stat:       Stat:       Bull       Stat:       Coludy       24       5       0       0       4th 6-Minute Avg.         Stat:       Stat:       Call M       End:       Direction       25       5       5       5       5         Stat:       Sart:       NA       PA       26       0       5       0       0         Stat:       Sate:	Start: NA		End: NA		20	5	5	5	0	
Start:       Due       Due <t< td=""><td>Describe Background:</td><td></td><td>SA</td><td></td><td>21</td><td>0</td><td>0</td><td>0</td><td>0</td><td></td></t<>	Describe Background:		SA		21	0	0	0	0	
Background Color:       Sky Conditions:       Darthy         Stat:       Blue       Stat:       Conditions:       Darthy         Stat:       Blue       Stat:       Cloudy       End:       Darthy         Stat:       Call M       End:       Wind Directions'       25       S       S       Ithe Alinute Avg.         Stat:       Call M       End:       Call M       End:       NA       26       O       S       O         Ambient Temp:       Wet Builb Temp:       RH, percent       27       S       S       S       Ithe Alinute Avg.         Start:       Sar.       Sar.       NA       NA       28       O       O       Sthe Alinute Avg.         Sun	Start:		End: OKY		22	D	0	0	0	
Start:       Blue       End:       Blue       Start:       Cloudy       End:       24       S       0       5       1,88         Wind Speed:       Wind Direction       25       5       5       5       5         Start:       Cull m       End:       NA       26       0       5       0         Ambient Temp:       Wet Builb Temp:       RH, percent       27       5       5       5         Start:       5 2 0       NA       NA       28       0       0       0       5th 6-Minute Avg.         Sun	Background Color:	2	Sky Conditions:	Davily	23	0	5	0	0	4th 6-Minute Avg.
Wind Speed:       Wind Direction       25       5       5       5         Start: Call M End: Call M Start: NA End: NA       End: NA       26       0       5       0         Ambient Temp:       Wet Bulb Temp:       RH, percent       27       5       5       5         Start: 52.°       End: 52.°       NA       NA       28       0       0       0         Sun        Source Layout Sketch:       North Arrow       29       0       0       0       5th 6-Minute Avg.         Wind        Source Layout Sketch:       North Arrow       29       0       0       5       \$2,29         Stack       with          30       0       0       5       \$2,29         Stack	Start: BUC E	ind: Blue	Start: Cloudy	End:Cloudy	24	5	0	0	5	1.88
Start: Call M       End: Call M       Start: NA       End: NA       26       0       5       0         Ambient Temp:       Wet Bulb Temp:       RH, percent       27       5       5       5       5         Start: 52.°       End: 52.°       NA       NA       28       0       0       0         Sun       Source Layout Sketch:       North Arrow       29       0       0       5       2,29         Wind       Stack       With       C       Highest single average of the five       0       2,29         Average Opacity of the five       Average Opacity of the five       0       2,29       0       0       0         Stack       with       C       Highest single average of the five       0       2,29       0       0       0         Mumber of Readings Above:       12       %       Were       0 <td< td=""><td>Wind Speed:</td><td></td><td>Wind Direction?</td><td>J</td><td>25</td><td>5</td><td>5</td><td>5</td><td>5</td><td></td></td<>	Wind Speed:		Wind Direction?	J	25	5	5	5	5	
Ambient Temp:       Wet Bulb Temp:       RH, percent       27       5       5       5         Start:       52.9       NA       NA       28       0       0       0         Sun	Start: Calm E	ind: Calm	Start: NA	End: NA	26	0	0	5	0	
Start:       52°       End:       52°       NA       NA       28       0       0       5th 6-Minute Avg.         Sun       Source Layout Sketch:       North Arrow       29       0       0       5th 6-Minute Avg.         Wind       Stack       30       0       5       5       9.29         Wind       Stack       30       0       5       5       9.29         With       C       Highest single average of the five       0       0       5       9.29         Average Opacity of the five       0       0       5       9.29       0       0       0       5       9.29         Highest single average of the five       0       0       5       9.29       0	Ambient Temp:		Wet Bulb Temp:	RH, percent	27	5	5	5	5	
Sun       Source Layout Sketch:       North Arrow       29       0       0       5th 6-Minute Avg.         Wind       Stack       30       0       5       5       2,29         Highest single average of the five       0       0       5       2,29         Highest single average of the five       0       0       5       2,29         Highest single average of the five       0       0       2       0       0         Highest single averages:       0       2,29       0       0       0       0         Average Opacity of the five       1       92       0       0       0       0       0         Mumber of Readings Above:       12       %       Were       0 <td>Start: 52° E</td> <td>ind: 520</td> <td>NA</td> <td>NA</td> <td>28</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td></td>	Start: 52° E	ind: 520	NA	NA	28	0	0	0	0	
Wind       30       0       5       5       2,29         Stack       With       C       Highest single average of the five       2,29         Highest single average of the five       6-minute averages:       2,29         Average Opacity of the five       1,92         Average Opacity of the five       1,92         Number of Readings Above:       12         Minimum:       0         Maximum:       5%         Observer's Position       Alisa Hatmaker         Observer's Signature:       0         Minimum:       0         Muse of Opacity Readings:       11/2/22         Minimum:       0         Misa Hatmaker       Observer's Signature:         Observer's Signature:       0         Organization:       Bue Water Industries         Environmental Affairs Department       Certified By:         Singleton Smoke School       10/11/2022         Kodak. TN       Kodak. TN	Sun Sour	rce Layout Sketch:		North Arrow	29	0	0	0	0	5th 6-Minute Avg.
Stack         with       C         Plume       Image: Stack         with       C         Plume       Image: Stack         Image: Stack       Image: Stack         With       C         Plume       Image: Stack         Image: Stack	Wind				30	0	0	5	5	2.29
Stack       6-minute averages:       C. C. T.         with Plume       Conservation Point       Average Opacity of the five 6-minute averages:       1.92         Total Tota					Highest sin	gle average	of the five		2	na
Plume       6-minute averages:       1, 42         Image: Server servet ion Point       Image: Server servet ion Point       Number of Readings Above: 12 % Were 0         Range of Opacity Readings:       Minimum: 0 % Maximum: 5 %         Observer's Position       0bserver's Name: (print)         Image: Sun Location Line       Alisa Hatmaker         Comments:       Organization: Blue Water Industries         Environmental Affairs Department       Certified By:         Sky overcast + 6 back / Syn hidden       Date:         Sky overcast + 6 back / Syn hidden       Singleton Smoke School	Stack with				6-minute av	verages: pacity of th	e five		0,0	x 7
Image: Second state of the second s	Plume				6-minute a	verages:			1,9	2
Image: Comments:       Image: Comments:         BWI Greenback Quarry - Mobile Plant       Sun Location Line         Sup Overcast to back / Sun hidden       Certified By:         Singleton Smoke School       Date:         Image: Sky overcast to back / Sun hidden       Certified By:         Singleton Smoke School       Date:         Image: Sky overcast to back / Sun hidden       Certified By:         Sky overcast to back / Sun hidden       Sky overcast to back / Sun hidden		X	Observation Point		Number of	Readings A	bove: 12	_%	Were 🚺	
Minimum:       0       Maximum:       %         Minimum:       0       Maximum:       %         Observer's Name:       (print)       Alisa Hatmaker         Observer's Signature:       Date:       11/2/22         Organization:       Blue Water Industries       11/2/22         BWI Greenback Quarry - Mobile Plant       Certified By:       Date:         Sky overcast to back / Syn hidden       Singleton Smoke School       10/11/2022		Jay of J	CI		Range of C	Dpacity Rea	idings:		-	
Observer's Position       Alisa Hatmaker         Observer's Signature:       Date:         Observer's Signature:       Date:         Observer's Signature:       Ul/2/22         Organization:       Blue Water Industries         Environmental Affairs Department       Certified By:         Sky overcast to back /Syn hidden       Singleton Smoke School         Kodak TN       10/11/2022					Minimum:	0	% M	aximum	: 5 %	
140       Observer's Position         140       Observer's Position         140       Observer's Signature:         Observer's Signature:       Date:         00bserver's Signature:       11/2/22         Organization:       Blue Water Industries         Environmental Affairs Department         Sky overcast to back /Sun hidden         Kodak TN					Observer's	s Name: (pr	int)			
Observer's Signature:     Date:       Observer's Signature:     Date:       Output     Utput       Sun Location Line     Organization: Blue Water Industries       Comments:     Environmental Affairs Department       BWI Greenback Quarry - Mobile Plant     Certified By:       Sky overcast to back /Syn hidden     Singleton Smoke School       Kodak TN     Date:		140 Observer's Position				Alisa	a Hatmaker			
Sun Location Line     Organization: Blue Water Industries       Comments:     Environmental Affairs Department       BWI Greenback Quarry - Mobile Plant     Certified By:     Date:       Sky overcast to back /Syn hidden     Singleton Smoke School     10/11/2022				Observer's Signature: Date:					0	
Sun Location Line     Organization: Blue Water Industries       Comments:     Environmental Affairs Department       BWI Greenback Quarry - Mobile Plant     Certified By:     Date:       Sky ovcrcast to back /Syn hidden     Singleton Smoke School     10/11/2022				alls	attati	maker	/	11/2/2	2	
Comments:       Environmental Affairs Department         BWI Greenback Quarry - Mobile Plant       Certified By:       Date:         Singleton Smoke School       10/11/2022         Kodak, TN       Kodak, TN	Sun Location Line			Organizati	on: Blue W	later Industi	ries			
BWI Greenback Quarry - Mobile Plant     Certified By:     Date:       Sky overcast to back / Syn hidden     Singleton Smoke School     10/11/2022	Comments:				Environmental Affairs Department					
Sky overcast to back/Syn hidden Singleton Smoke School 10/11/2022	BWI Greenback Quarry -	Mobile Plant			Certified B	y:		D	ate:	
Kodak TN	Sky over	cast to h	ack/Sun h	idden	Singleton S	Smoke Scho	lool		10/11/2022	
		151 1- 0	1. 1. 5. 5. 1. 1.		Kodak, TN					

Source Name: BWI ETN LLC dba Blue Water Industries			Dive water	Observation Date: Start Time: Stop Time:					
	Greenback Quarry			11.01		A .			
Address:	2107 Big Hill Road			11/2/	n	9:30 A	MI	0:00AM	
City:	County:	State:	Zip:	Min/Sec	0	15	30	45	Comments
Lenoir City	Loudon	TN	37772	1	0	0	0	0	-
Phone:	865-986-5322	Facility ID No:	53-0074-03	2	0	0	0	0	
Process Equipme	ent:	Operating Mode:		3	0	0	0	0	
J40 V2 Conveyor		90-95	lo	4	0	0	0	0	
Control Equipme	nt:	Operating Mode:		5	0	0	0	0	1st 6-Minute Avg.
Wet Suppression		100%		6	0	0	ð	0	0
Describe Emissio	on Point:		Emission Pt. ID	7	Ó	0	0	0	
JC1 feed onto R15	55 Screen Feed Hopper I	RF1	2	8	0	0	C	0 0	
Height Above Gro	ound Level:	Height Relative to	Observer:	9	0	0	0	0	
Start: 301	End: 30 -	Start: 30	End: 301	10	0	0	0	Õ	
Distance from Ob	oserver:	Direction from Ob	server:	11	Ŏ	0	6	0	2nd 6-Minute Ava.
Start: 100 -	Start: 100 - End: 100 - Start: W End: W			12	0	0	N	B	0
Describe Emissio	ons:			13	0	D	0	0	,
Start: Man	D		R	14		0	0	0	
Emission Color:	C	Plume Type: Conti	inuous [ ]	15	0	0	0	0	
	Classe			16	0	0	0	0	
Water Droplets P	resent:	If Water Droplet P	Iume: N/A	10	0	0	0	G	
				17	0	0	0	0	3rd 6-Minute Avg.
NO[X]	Yes [ ]	Attached [ ]	Detached [ ]	18	0	0	0	0	0
Former in the Fium	e at which opacity was	beternmed.		19	0	0	0	0	
Start: NA	di	End: NA		20	0	0	0	0	3
Describe Backgro	ouna:	CI		21	0	0	C	0 0	
Start: Sky		End: SKU		22	0	0	0	0	
Background Cold	or:	Sky Conditions:	Partly	23	0	0	0	ð	4th 6-Minute Avg.
Start: 3/4C	End: Bluc	Start: Cloudy	End: Cloudy	24	0	0	0	0	0
Wind Speed:	0.0	Wind Direction:	1	25	0	O	0	0	
Start: Calm	End: Calm	Start: NA	End: NA	26	0	0	0	0	
Ambient Temp:		Wet Bulb Temp:	RH, percent	27	0	0	0	Õ	
Start: 52°	End: 52°	NA	NA	28	0	0	0	0	
Sun	Source Layout Sketch:		North Arrow	29	0	0	0	0	5th 6-Minute Avg.
Wind —				30	0	0	0	0	0
			$\bigcirc$	Highest sin	gle average	e of the five		12	
Stack				6-minute av	verages:	flue		0	
Plume				6-minute a	verages:	le live		0	
	JCLOX	Observation Point		Number of	Readings A	Above: 7	%	Were 🔿	
	0-1-1-	0		Range of C	Dpacity Rea	adings:			
	REI	PCI		Minimum	0	% M	aximum	. 0 %	
				Observer's	s Name: (pi	rint)	annum	. 🧹 70	
	Observer's Position				Alio	a Hatmaker			
	140'			Observer's	s Signature		D	ate:	
				Apin	Hat	nation		11/2/2	2
				Organizati	on: Blue V	Vater Indust	ries		
Comments:	Sun Loc	ation Line		Environmental Affairs Department					
BW/ Groophook C	)uarou - Mobile Plant			Certified E	By:		D	ate:	
		de l'anno	11	Singleton S	Smoke Scho	loc		10/11/2022	
SEYOU	creast to bad	cr j sun hi	aaen	Kodak. TN					
a 🔒				1					

Source Name:         EVM E HULL OBD BUB Writer Production         Observation Date:         Stop Intime:         Stop Intintip Intintintintime:         Stop Intime:	[0	Blue wat				5 Defe	Ofert The			*	
Address:         2107 Big Hill Road         III / 2 / 22         9130 Am         IO: 00 Am           City:         Country:         State:         Zip:         MinAsec         0         16         30         44         Comments           Lacoir City:         Locdon         TN         State:         Zip:         MinAsec         0         44         Comments           Phone:         885-685-522         Facility ID No:         State:         3         0         0         0         9           Phone:         885-685-522         Facility ID No:         State:         3         0         0         0         18         0         0         14         6         0         0         18         0         0         18         0         0         0         18         0         0         0         18         0         0         0         18         0         0         0         0         0         18         0	Source Name:	Greenback Quarty	ie vvater Industries		Observatio	on Date:	Start Time	: Sto	op rime:		
City:         County:         Istate:         Zit:         Minisfee:         0         16         30         46         Comments           Land: City         Joudon         TN         37772         1         0	Address:	2107 Big Hill Road			11/2	122	9:304	mI	0:00 AM		
Landr City         Loudon         TN         3772         1         0         C         Process           956 986 9322         Pacifity IDVs         53 074-03         2         0         0         0           Process Equipment:         Operating Mode:         3         3         0         0         0         0           R155 Conveyord/Screen         90 - 15         2         0         0         0         1st 6-Minute Avg.           R155 Conveyord/Screen         0         0         1st 6-Minute Avg.         0         0         1st 6-Minute Avg.           Observise         Operating Mode:         5         0         0         0         1st 6-Minute Avg.           Neight Above Ground Level:         Height Relative to Observor:         9         0         0         0         0           Start         100 -         5         10         0         0         0         0         0           Start         100 -         Start:         W End         N         12         0         0         0         0           Start         100 -         Start:         W End         N         12         0         0         0         0         0 <t< td=""><td>City:</td><td>County:</td><td>State:</td><td>Zip:</td><td>Min/Sec</td><td>0</td><td>15</td><td>30</td><td>45</td><td>Comments</td></t<>	City:	County:	State:	Zip:	Min/Sec	0	15	30	45	Comments	
Phone:         866-866-822         Pacility ID No:         53-0074-03         2         0         0         0           Process Equipment:         Operating Mode:         3         3         0         0         1         1         0         0         1         1         1         0         1         1         0         1         1         1         0         1         1         0         1         1         1         0         1         1         0         1         1         0         0         1         1         1         0         0         1         1         0         0         1         1         0         0         1         1         0         0         1         1         0         0         1         1         0         0         1         1         0         0         1         1         0         0         1         1         0         0         1         1         0         0         1         1         0         0         0         1         0         0         0         1         0         0         0         1         0         0         0         0         <	Lenoir City	Loudon	TN	37772	1	0	D	0	0		
Process Equipment:         Operating Mode:         3         3         0         0         0           R155 Conveyor/Screen         0-9 G 7         4         0         0         0         0           R155 Conveyor/Screen         0         0         0         0         0         0           Control Equipment:         0         0         0         0         0         0         0           Describe Emission Point:         Conveyor RC1 transfer onto Screen & Area above Screen R3         3         8         0         0         0         0           Start         3         6         0         0         0         0         0           Distano from Observor:         9         0 <td>Phone:</td> <td>865-986-5322</td> <td>Facility ID No:</td> <td>53-0074-03</td> <td>2</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td></td>	Phone:	865-986-5322	Facility ID No:	53-0074-03	2	0	0	0	0		
R155 Conveyord/Soreen       40-95 %       4       0       0         Control Equipment:       Operating Mode:       5       0       0       1st 6-Minute Avg.         Wet Suppression       100 %       6       0       0       0       1st 6-Minute Avg.         Describe Emission Point:       Conveyor RC1 transfer onto Screen RS1       3       8       0       0       0       0         Start:       30 '       End: 30 '       End: 30 '       10       0       0       0       0         Start:       30 '       End: 30 '       End: 30 '       10       0 <td>Process Equipme</td> <td>ent:</td> <td>Operating Mode:</td> <td>and the second se</td> <td>3</td> <td>Q</td> <td>0</td> <td>0</td> <td>0</td> <td></td>	Process Equipme	ent:	Operating Mode:	and the second se	3	Q	0	0	0		
Control Equipment:         Operating Mode:         5         0         0         1st 8-Minute Avg.           Wet Suppression         //0.0 %.         6         0         0         0         1st 8-Minute Avg.           Describe Emission Point:         Emission Point:         8         0         0         0         0         0           Conveyor RC1 transfer onto Screen 8.4 ras above Screen RS1         3         8         0<	R155 Conveyor/Sc	creen	90-95	070	4	0	0	0	0		
Wet Suppression       100 9%       6       6       6       6       6       7	Control Equipment	nt:	Operating Mode:		5	Ø	5	0	0	1st 6-Minute Avg.	
Describe Emission Point:       Emission PL ID       7       0       0       0         Conveyor RC1 transfer onto Screen & Area above Screen RS1       3       8       0       0       0         Start:       30'       End: 30'       Start:       9       0       0       0         Start:       30'       End: 30'       Interview:       9       0       0       0       0         Distance from Observer:       Direction from Observer:       11       0       0       0       0       0         Describe Emissions:       Start:       Wind Dropic Plume Type: Continuous []       15       0       0       0       0         Start:       Notice       End:       Notice       14       0	Wet Suppression		100 %		6	m	0	0	0	Δ	
Conveyor RC1 transfer onto Screen & Area above Screen RS1         3         8         0         0         0           Height Above Ground Level:         Height Relative to Observer:         9         0         0         0         0           Start:         30 /         End:         30 /         End:         30 /         0	Describe Emissio	on Point:		Emission Pt. ID	7	0	0	0	0		
Height Above Ground Level: Height Relative to Observer: Start: 30 / End: 30 / End: 30 / 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Conveyor RC1 trar	nsfer onto Screen & Area	a above Screen RS1	3	8	0	0	6	0		
Start:         30 /         End:         30 /         End:         30 /         10         0         0         0         2nd 6-Minute Avg.           Distance from Observer:         Direction from Observer:         11         0         0         0         2nd 6-Minute Avg.           Start:         Direction from Observer:         11         0         0         0         0           Describe Finissions:         13         0         0         0         0         0           Start:         Note         14         0         0         0         0         0           Start:         Note         End:         Note         14         0         0         0         0           Start:         Note         End:         Note         14         0	Height Above Gro	ound Level:	Height Relative to	Observer:	9	0	0	2	0		
Outcome         Outcome         Direction from Observer:         11         O         O         Znd 6-Minute Avg.           Start:         Direction from Observer:         11         O         O         C         Znd 6-Minute Avg.           Start:         Direction from Observer:         11         O         O         O         O           Start:         Direction from Observer:         11         O         O         O         O           Start:         No L         End:         No L         12         O         O         O           Start:         No L         End:         No L         14         O         O         O           Start:         No L         Plume Type: Continuous []         15         O         O         O           Start:         No L         Propiot in the Plume at which Opacity was Determined:         19         O         O         O         O           Start:         NA         End:         NA         20         O <td>Start: 301</td> <td>End: 30</td> <td>Start: 30 /</td> <td>End: 301</td> <td>10</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td></td>	Start: 301	End: 30	Start: 30 /	End: 301	10	0	0	0	0		
Start:       0.0 r       End:       12       0       0       0         Describe Emissions:       13       0       0       0       0       0         Start:       Nowle       14       0       0       0       0       0         Emission Color:       Plume Type: Continuous []       15       0       0       0       0       0         Start:       Lear Machine Machine       14       0       0       0       0       0         Start:       No [Lear End:       Plume Type: Continuous []       15       0       0       0       0       0         Start:       Lear Machine Machine       No [X]       Yes []       Attached []       16       0	Distance from Ob	server:	Direction from Ob	server:	11	0	0	0	0	2nd 6-Minute Ava	
Case of the inisions:         Date         Date         Date         Describe Enissions:	Start: 1001	End: 100 -	Start: IN	End: h	12	0	0	0	0		
Start:       NoWL       International start       NoWL       International start	Describe Emissio	ons:	Otart.		13	0	6	6	0	0	
Start: Note: Find: Note: Indication of the second of the s	and Klaud	2	- NINIAO	L.	14	0	0	0	0		
Start:       Life averages:       Fugitive [X]       Intermittent []       16       0       0         Start:       Fugitive [X]       Intermittent []       16       0       0       0         No [X]       Yes []       Attached []       Detached []       18       0       0       0         Point in the Plume at which Opacity was Determined:       19       0       0       0       0         Start:       NA       End:       NA       20       0       0       0         Start:       NA       End:       NA       20       0       0       0         Start:       Start:       Church       Start:       Church       22       0       0       0         Start:       Bulke       End:       Start:       Church       End:       0       0       0         Start:       Bulke       End:       NA       A       26       0       0       0         Start:       Start:       Church       Start:       NA       A       28       0       0       0         Start:       Start:       Start:       NA       NA       A       28       0       0       0	Emission Color:		Plume Type: Conti	inuous [ ]	14	0	0	0	0		
Start:       Current Planter (1)       10       0       0       0       3rd 6-Minute Avg.         No [X]       Yes []       Attached []       Detached []       18       0       0       0       3rd 6-Minute Avg.         No [X]       Yes []       Attached []       Detached []       18       0	Alagu	Cloud			10	0	0	0	0		
No [X] Yes [] Attached [] Detached [] 18 0 0 3rd 6-Minute Avg.   No [X] Yes [] Attached [] Detached [] 18 0 0 0   Start: NA End: NA 20 0 0 0   Describe Background: 21 0 0 0 0   Start: Start: Start: Start: Start: 22 0 0 0   Background Color: Start: Start: Start: Color: <	Start: Cull	End: Clear	Fugitive [X] Inter	rmittent [ ]	10	0	0	0	0		
No (X)       Yes []       [Attached []       Detached []       18       0       0       0         Point in the Plume at which Opacity was Determined:       19       0       0       0       0         Start:       NA       End:       NA       20       0       0       0         Start:       NA       End:       Start       22       0       0       0         Background Color:       Start:       Start Clocky       End:       Purty       23       0       0       0         Start:       Bule       End:       Mult Direction:       25       0       0       0       0         Start:       Start:       NA       End:       NA       26       0       0       0       0         Start:       Start:       NA       End:       NA       26       0			in Water Dropiet		17	0	0	0	0	3rd 6-Minute Avg.	
Point in the Fraine at which opacity was been innet.       19       0       0       0         Start: NA       End: NA       20       0       0       0         Describe Background:       21       0       0       0       0         Start: Stry       End: Stry       22       0       0       0       0         Background Color:       Start: Cloudy       End: Cloudy       24       0       0       0       0         Start: Blue       End: Cloudy       End: Cloudy       24       0       0       0       0         Wind Speed:       Start: Cloudy       End: Cloudy       24       0       0       0       0         Start: Speed:       Wind Direction:       Start: NA       End: Cloudy       25       0       0       0       0         Start: Speed:       Start: NA       End: NA       28       0       0       0       0         Start: Speed:       Na       NA       28       0       0       0       0       0         Start: Speed:       North Arrow       29       0       0       0       0       0       0       0         Stack       with       C       N	NO[X]	Yes [ ]	Attached [ ]	Detached [ ]	18	0	0	0	0	0	
Start:       NA       End:       NA       20       0       0       0         Describe Background:       Start:       Start:       Start:       21       0       0       0       0         Background Color:       Sky Conditions:       Dartfy       23       0       0       0       0       0         Start:       Bule       End:       Cloudy       24       0       0       0       0         Start:       Bule       End:       Cloudy       24       0       0       0       0         Start:       Bule       End:       Cloudy       24       0       0       0       0       0         Start:       Start:       NA       End:       NA       25       0	Foline in the Fluin	e at which opacity was	s Determined.		19	0	0	0	0		
Leschibe background:       Start:       Sty       End:       Sty       End:       Sty       End:       Sty       End:       Sty	Start: NA	d.	End: NA		20	0	0	0	0		
Start:       OL       22       O       O         Background Color:       Skey Conditions:       Durfty       23       O       O         Start:       Bute       End:       Bute       End:       Conditions:       23       O       O         Wind Speed:       Wind Direction:       End:       Conditions:       25       O       O       O         Start:       Call M       End:       NA       26       O       O       O         Ambient Temp:       Wet Bulb Temp:       RH, percent       27       O       O       O         Start:       52.°       End:       52.°       NA       NA       28       O       O       O         Sun		ouna:	CL		21	0	0	0	0		
Background Color:       Sky Conditions:       Parting       23       0       0       4th 6-Minute Avg.         Start:       Bulle       End:       Bulle       Start:       Cloudy       24       0       0       0       0         Wind Speed:       Wind Direction!       Start:       Cloudy       24       0       0       0       0       0         Start:       Ambient Temp:       Start:       NA       End:       NA       26       0	Start: 0K4		End: Du		22	$\bigcirc$	0	0	0		
Start:       Blue       Start:       Clouby       End:       Clouby       24       0       0       0         Wind Speed:       Wind Direction:       25       0       0       0       0       0         Start:       Ambient Temp:       Start:       NA       End:       NA       26       0       0       0         Start:       52°       NA       NA       28       0       0       0       0         Start:       52°       NA       NA       28       0       0       0       0       0         Start:       52°       NA       NA       28       0	Background Colo	or:	Sky Conditions:	Partly	23	0	0	0	0	4th 6-Minute Avg.	
Wind Speed:       Wind Direction: <sup>1</sup> 25       0       0       0         Start:       NA       End: NA       26       0       0       0         Ambient Temp:       Wet Bulb Temp:       RH, percent       27       0       0       0         Start:       52°       End: S2°       NA       NA       28       0       0       0         Start:       52°       End: S2°       NA       NA       28       0       0       0         Start:       52°       End: S2°       NA       NA       28       0       0       0       5th 6-Minute Avg.         Sun        Source Layout Sketch:       North Arrow       29       0       0       0       5th 6-Minute Avg.         Stack       with       C        30       0       0       0       0       0         Stack       with       C	Start: Blue	End: Blue	Start: Cloudy	End: Cloudy	24	0	0	0	0	C	
Start: CA W       End: CA W       End: NA       26       0       0       0         Ambient Temp:       Wet Bulb Temp:       RH, percent       27       0       0       0         Start: 52 °       End: 52 °       NA       NA       28       0       0       0       0         Sun	Wind Speed:	0 (	Wind Direction:		25	ð	5	0	0		
Ambient Temp:       Wet Bulb Temp:       RH, percent       27       O       O         Start:       52.°       End:       52.°       NA       NA       28       O       O       O         Sun	Start: Calm	End: Calm	Start: NA	End: NA	26	0	0	0	0		
Start:       52°       NA       NA       28       0       0       0         Sun	Ambient Temp:		Wet Bulb Temp:	RH, percent	27	0	0	0	0		
Sun       Source Layout Sketch:       North Arrow       29       0       0       5th 6-Minute Avg.         Wind       Image: Stack       30       0	Start: 52°	End: 520	NA	NA	28	0	0	0	0		
Wind       30       0       0       0         Stack       With       0       0       0       0         Plume       0       0       0       0       0         Number of Readings Above:       7       %       Were       0         Range of Opacity Readings:       0       0       0       0         Number of Readings Above:       7       %       Were       0         Range of Opacity Readings:       Minimum:       %       Maximum:       %         Observer's Position       0       0       0       0       0         Number of Readings Above:       7       %       Were       0       0         Number of Readings Above:       7       %       Maximum:       %       0         Observer's Name:       (print)       Alisa Hatmaker       0	Sun	Source Layout Sketch:		North Arrow	29	0	0	0	0	5th 6-Minute Avg.	
Stack         with       C         Plume       Average Opacity of the five         Build of the five       O         Average Opacity of the five       O         Build of the five <td< td=""><td>Wind —&gt;</td><td></td><td></td><td></td><td>30</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></td<>	Wind —>				30	0	0	0	0	0	
Stack       iminute averages:       iminute averages:         Average Opacity of the five       6-minute averages:       iminute averages:         Average Opacity of the five       6-minute averages:       iminute averages:         Number of Readings Above:       7       %         Observer's Position       %       Maximum:       %         Observer's Signature:       0       Minimum:       0       %         Observer's Signature:       0       0       Minimu       0       %         Organization Line       0       0       Minimu       0       Minimu       %				$\bigcirc$	Highest sin	gle average	e of the five		0		
Plume       Average opacity of the rive         6-minute averages:       0         Number of Readings Above:       7         %       Were         Minimum:       %         Minimum:       %         Maximum:       %         Observer's Position       Alisa Hatmaker         Observer's Signature:       Date:         Observer's Signature:       UMM2         Organization Line       Organization:	Stack				6-minute av	verages:	no fivo		-		
Observation Point       Number of Readings Above: 7 % Were 0         Range of Opacity Readings:         Minimum: 0 % Maximum: 0 %         Observer's Position         140         Observer's Position         Alisa Hatmaker         Observer's Signature:         Observer's Signature:         Observer's Signature:         Observer's Signature:         Observer's Signature:         Opacition Line         Organization: Blue Water Industries	Plume				6-minute a	verages:	ie nve		0		
Range of Opacity Readings:         Minimum:       %         Minimum:       %         Minimum:       %         Observer's Name: (print)         Alisa Hatmaker         Observer's Signature:         Observer's Signature:         Observer's Signature:         Output         Organization:         Blue Water Industries		DCIQX	Observation Point		Number of	Readings A	bove: 7	%	Were /	_	
Minimum:       %         Minimum:       %         Minimum:       %         Minimum:       %         Observer's Name:       (print)         Alisa Hatmaker       0         Observer's Signature:       Date:         Observer's Signature:       11/11/12         Organization:       Blue Water Industries		Q	SII		Range of C	Dpacity Rea	adings:				
Observer's Name: (print) Alisa Hatmaker Observer's Signature: Alisa Hatmaker Date: Alisa Hatmaker Diserver's Signature: Diserver's Name: (print) Date: Alisa Hatmaker Date: Alisa Hatmaker Diserver's Date: Alisa Hatmaker Diserver's Name: (print) Date: Alisa Hatmaker Diserver's Name: (print) Date: Alisa Hatmaker Diserver's Name: (print) Date: Alisa Hatmaker Diserver's Name: (print) Date: Alisa Hatmaker Diserver's Name: (print) Diserver's Name: (print) Date: (print) Diserver's Name: (print) Diserver's Name: (pr					Minimum:	0	% M	aximum:	0 %		
Observer's Position     Alisa Hatmaker       140     Observer's Signature:     Date:       Observer's Signature:     0       Organization:     Blue Water Industries							rint)				
Sun Location Line Observer's Signature: Date: Description Line Organization: Blue Water Industries		140 Observer's Position					a Hatmaker				
Sun Location Line Organization: Blue Water Industries						s Signature	:	Da	ite:		
Sun Location Line Organization: Blue Water Industries							make		11/2/2	2	
odi i Eoodio i Eino	2	Sun Location Line					Organization: Blue Water Industries				
Comments: Environmental Affairs Department	Comments:				Environmental Affairs Department						
BWI Greenback Quarry - Mobile Plant Certified By: Date:	BWI Greenback O	uarry - Mobile Plant			Certified By: Date:						
Sky aver cast to back Singleton Smoke School 10/11/2022	Stu Au	excast to bar	+ /sun hide	1 pro/	Singleton S	Smoke Scho	loc		10/11/2022		
upy over cast to over parti indular	ory ou	creasi jo euc		un	Kodak, TN						
					Indak, IN						

Blue wate			Blue Water	naustries	5	a			l
Source Name:	BWI ETN LLC dba Blu	e Water Industries		Observatio	n Date:	Start Time	: Sto	p Time:	
Address:	2107 Big Hill Road			11/2/2	2	11:32	m 12	:02 PM	
City:	County:	State:	Zip:	Min/Sec	0	15	30	45	Comments
Lenoir City	Loudon	TN	37772	1	0	0	0	0	
Phone:	865-986-5322	Facility ID No:	53-0074-03	2	0	0	0	0	
Process Equipme	nt:	Operating Mode:		3	0	0	0	0	
R155 Screen		90-95	06	4	0	0	G	0	
Control Equipmer	nt:	Operating Mode:		5	0	0	0	0	1st 6-Minute Avg.
Wet Suppression		100%		6	0	6	0	0	0
Describe Emissio	n Point:	1-1-	Emission Pt. ID	7	0	0	0	0	
RS1 feed onto Cor	veyor RC3		4	8	0	0	0	0	
Height Above Gro	und Level:	Height Relative to	Observer:	9	0	6	0	0	
Start: 50 (a	1 End: (0/	Start (0'	End: 6	10	0	0	0	a	
Distance from Ob	server:	Direction from Ob	server:	11	0	0	0	0	2nd 6-Minute Ava
Start: 1001	End: 1001	Start: SE	End: SF	12	8	0	0	0	2nd o-Minute Avg.
Describe Emissio	ns:			13	0	ă	. 0	0	
ALDAR		Nou	0.	14	0	0	6	0	
Emission Color:		Plume Type: Cont	inuous [ ]	15	0	0	0	0	
Class	Class			10	0	C	0	0	
Start: Ula /	End: Clear	Fugitive [X] Inte	rmittent [ ]	10	0	0	0	00	
		in Water Bropietr		17	0	0	0	0	3rd 6-Minute Avg.
NO[X]	Yes [ ]	Attached [ ]	Detached [ ]	18	0	0	0	0	0
Found in the Fluin	e at which opacity was	Determined.		19	0	0	0	0	
Start: NA	und.	End: NA		20	0	0	0	0	
	ouna:	1	0	21	0	0	0	0	
Start: Eguy	pment	End:Egup	ment	22	0	0	0	0	
Background Colo	r:	Sky Conditions:		23	0	0	0	0	4th 6-Minute Avg.
Start: Green	End: Then	Start: OVCCas	t End: Over cast	24	0	0	Ô	0	0
Wind Speed:	01	Wind Direction:		25	0	0	0	0	
Start: Calm	End: Calm	Start: NA	End: NA	26	0	0	0	0	
Ambient Temp:		Wet Bulb Temp:	RH, percent	27	0	0	0	0	
Start: 55°	End: 57 °	NA	NA	28	D	0	0	0	
Sun – 🔶 –	Source Layout Sketch:		North Arrow	29	0	0	0	Ø	5th 6-Minute Avg.
Wind —>			$(\checkmark)$	30	0	0	0	0	0
				Highest single average of the five					
stack				Average O	pacity of th	ne five	C		
Plume				6-minute a	verages:	10 1110	0		
	×	Observation Point		Number of	Readings A	Above: 7	%	Were 0	_
	RC3			Range of C	Dpacity Rea	adings:			
				Minimum:		% M	aximum:	%	
					s Name: (p	rint)			
140 Observer's Position				Alis	a Hatmaker				
			Observer's	s Signature	):	Da	te:		
			alis	a Hat	meter		11/2/2	2	
Sun Location Line			Organization: Blue Water Industries						
Comments:				Environmental Affairs Department					
BWI Greenback O	uarry - Mohile Plant			Certified By: Date:					
STI OIGCIDACK Q	bidd and			Singleton S	Smoke Scho	loc		10/11/2022	
Jun	mach			Kodak, TN					
1				1					

Source Name: BWI ETN LLC dba Blue Water Industries			Blue water i	Observatio	on Date:	Start Time	: Ste	op Time:	
	Greenback Quarry	1		1110	120	Laste	A	atilaa	
Address:	2107 Big Hill Road			11/21	122	10.101	Am I	0.40 Am	
City:	County:	State:	Zip:	Min/Sec	0	15	30	45	Comments
Lenoir City	Loudon	TN Facility ID Net	37772	1	0	0	0	0	
Phone:	865-986-5322	Facility ID No:	53-0074-03	2	0	0	0	0	
Process Equipme	ent:	Operating Mode:	2.4	3	0	0	0	0	
R155 Screen		90-95	10	4	0	0	0	0	
Control Equipme	nt:	Operating Mode:		5	0	0	0	0	1st 6-Minute Avg.
Wet Suppression		100 %	1	6	0	0	0	0	0
Describe Emissio	on Point:		Emission Pt. ID	7	0	0	0	0	
RS1 feed onto Co	nveyor RC4		5	8	0	0	0	0	
Height Above Gro	ound Level:	Height Relative to	Observer:	9	0	0	0	0	
Start: 20'	End: 20 1	Start: 20 1	End: 20 1	10	0	0	0	0	
Distance from Ob	oserver:	Direction from Ob	server:	11	0	0	0	0	2nd 6-Minute Avg.
Start: (001	End: (00 ′	Start: 🔨 ស	End: NW	12	6	0	0	0	0
Describe Emissio	ons:			13	0	0	Ô	0	
Start: NOM	l	End: None	2	14	0	0	0	O	
Emission Color:	22	Plume Type: Conti	inuous [ ]	15	6	0	0	0	
Start CLAV	End CLEAN	Fugitive [X] Inte	rmittent [ ]	16	0	0	0	0	
Water Droplets P	resent:	If Water Droplet P	lume: N/A	17	0	0	0	0	3rd 6-Minute Ava.
NoIXI	Yes []	Attached [ ]	Detached [ ]	18	0	0	0	0	0
Point in the Plum	ie at which Opacity was	Determined:	Detached[]	19	0	0	0	0	
Stort: NA		End: NA		20	6	0	0	0	
Describe Backgr	ound:	Enu. NA		21	6	0	0	0	
Falls	oment	- Frun	nent	22	0	0	0	0	
Start: Background Cold	or:	Sky Conditions:	rerej	22	0	0	0	0	Ath C Minute Ave
and Oraclus	- Green	Party	Partly	20	0	0	0	0	4th 6-Minute Avg.
Start: Green	End: Green	Wind Direction:	End: Cloudy	24	0	0	0	2	0
	Colina	110	110	25	0	0	0	0	
Start: Com	End:	Start: N/T Wet Bulb Temp:	End: NA	20	0	0	0	0	
L'10	540	Wet Build Temp.		21	0	0	0	0	
Start: 54	End: C	NA	North Arrow	28	0	6	0	0	
sun – – –	Source Layour Sketch.			29	0	0	0	0	5th 6-Minute Avg.
Wind			$\bigcirc$	30 Highost sir		O of the five	0	0	0
Stack				6-minute a	verages:	e of the live		0	
with O				Average C 6-minute a	pacity of the operation	ne five	(	)	
	Tori X	Observation Point		Number of	Readings A	Above: 7	%	Were 💧	
	RSIER	C4		Range of	Opacity Re	adings:			
				Minimum	: O	% N	laximum	: 🔿 🧠	
				Observer'	s Name: (p	rint)			
	140 Observer's Position				Alis	a Hatmaker			
					Observer's Signature: Date: Uise Hatmaken 11/2/22				
2	Sun Location Line			Organizat	ion: Blue V	Vater Indust	tries	edmant.	
Comments:					Enviro	onmental Af	Tairs Dep	anment	
BWI Greenback G	Quarry - Mobile Plant			Certified E	Зу:		D	ate:	
Sky	overcast to ba	ick/Sun h	idden	Singleton	Smoke Sch	loo		10/11/2022	
	ory our cast to back ( sur ridden			Kodak, TN					

Source Name:	burce Name: BWI ETN LLC dba Blue Water Industries				n Date:	Start Time	: Ste	op Time:	
	Greenback Quarry			110 1		11120	1		
Address:	2107 Big Hill Road			11/2/2	22	11:32	Am I	2:02 PM	
City:	County:	State:	Zip:	Min/Sec	0	15	30	45	Comments
Lenoir City	Loudon	TN	37772	1	0	0	0	0	
Phone:	865-986-5322	Facility ID No:	53-0074-03	2	0	0	9	0	
Process Equipme	ent:	Operating Mode:		3	0	0	0	0	
R155 Screen/Conv	veyor	90-950	lo	4	0	0	0	0	
Control Equipment	nt:	Operating Mode:		5	0	0	0	0	1st 6-Minute Avg.
Wet Suppression		100 %		6	0	0	0	0	0
Describe Emissio	n Point:		Emission Pt. ID	7	6	6	0	O	
Convevor RC2 fee	d onto Convevor RC5		6	8	0		0	0	
Height Above Gro	ound Level:	Height Relative to	Observer:	9	0	0	0	0	
51	- 11		End TI	10	0	0	0	0,	
Start:	End: >	Start: J	server:	10	0	0	0	0	
	(-0 (	brost	Frank SF	10	0	0	<u>o</u>	0	2nd 6-Minute Avg.
Start: 00 /	End: 00	Start: Start:	F End: Je	12	0	0	0	0	0
Describe Emissio	115.	11.		13	0	0	0	0	
Start: None		End: None		14	0	0	0	0	
Emission Color:	21	Plume Type: Conti	nuous[]	15	0	0	0	0	
Start. Clear	End: Clear	Fugitive [X] Inter	rmittent [ ]	16	0	0	0	O	
Water Droplets P	resent:	If Water Droplet P	lume: N/A	17	0	0	0	0	3rd 6-Minute Avg.
No [ X ]	Yes[]	Attached [ ]	Detached [ ]	18	0	0	0	0	0
Point in the Plum	e at which Opacity was	Determined:		19	0	0	0	0	
Start: NA		End: NA		20	0	0	0	0	
Describe Backgro	ound:			21	0	O	0	0	
Start: Equin	ment	End Earn	ment	22	0	0	0	σ	
Background Colo	or:	Sky Conditions:		23	0	0	0	0	4th 6-Minute Ava.
Start Co com	End Core end	Start Drecons	FEnd Olevorst	24	0	0	C		0
Wind Speed:	Lind. Green	Wind Direction:		25	0	0	0	6	
Colmi	- Calm			26	0	0	0		
Ambient Temp:	End: Ch mo	Wet Bulb Temp:	RH. percent	27	0	0	0	0	
TTO	FAO			21	0	0	U	0	
Start: 55	End: 5/	NA	NA North Arrow	20	0	0	0	0	
sun – – –	Course Enjour exercisi		$\bigcirc$	29	0	0	0		5th 6-Minute Avg.
Wind			$\checkmark$	30		O of the five	0	U	0
Stack				6-minute av	verages:			D	
with O				Average O 6-minute a	pacity of the	he five		0	
	, D. X	Observation Point		Number of	Readings /	Above: 7	%	Were 🔿	
	BS RC2	265		Range of 0	Opacity Re	adings:	_		-
				Minimum:	0	% M	laximum	: 🔿 %	
				Observer's	s Name: (p	rint)			
	140 Observer's Position				Alis	a Hatmaker	8		
				Observer's	s Signature	e:	Da	ate:	
				aliso	a Hat	maker		11/2/2	2
	Sun Location Line			Organizati	ion: Blue V	Vater Indust	ries		
Comments:				Environmental Affairs Department					
BWI Greenback O	uarry - Mobile Plant			Certified By: Date:					
SIIV	hiddon			Singleton 8	Smoke Sch	ool		10/11/2022	
Jur	magne			Kodak, TN					
1				1					

Source Name	Source Name: BWI ETN LLC dba Blue Water Industries				on Date:	Start Time	Stor	o Time:	
oource Name.	Greenback Quarry							575 (2	
Address:	2107 Big Hill Road			11/2	122	10:10	m 10	40 AM	
City:	County:	State:	Zip:	Min/Sec	0	15	30	45	Comments
Lenoir City	Loudon	TN	37772	1	Û	0	0	0	
Phone:	865-986-5322	Facility ID No:	53-0074-03	2	0	0	0	0	
Process Equipme	nt:	Operating Mode:		3	0	0	0	0	
R155 Conveyor		90-95	10	4	0	0	0	0	
Control Equipmen	nt:	Operating Mode:		5	0	0	0	0	1st 6-Minute Avg.
Wet Suppression		100010		6	$\wedge$	0	0	0	0
Describe Emissio	n Point:		Emission Pt. ID	7	0	0	0	0	
RC4 feed onto GT2	200 Belt Feeder GTBF1		7	8	0	0	0	Õ	
Height Above Gro	und Level:	Height Relative to	Observer:	9	0	0	0	6	
Chart 201	End: 2.01	Starts 20-	End: 101	10		6	0	0	
Distance from Ob	server:	Direction from Ob	server:	11	0	0	0	0	2nd 6 Minuto Ava
900	900	04-4 ( )( )	End: $\Lambda(1)$	12	0	0	0	a	
Describe Emissio				12		0	0		0
	0	1)	6.2	13	0	0	0	0	
Start: NON	l l	End: Conti		14	0	0	0	0	
	DI	Fiume Type. Cond	nuous [ ]	15	0	0	0	0	
Start: Clar	End: Clar	Fugitive [X] Inter	rmittent [ ]	16	0	0	0	0	
water Droplets Pl	resent:	If water Droplet P	iume: N/A	17	0	0	0	0	3rd 6-Minute Avg.
No [ X ]	Yes[]	Attached [ ]	Detached [ ]	18	0	0	0	0	0
Point in the Plume at which Opacity was Determined:				19	0	6	0	0	
Start: NA		End: NA		20	0	0	0	0	
Describe Backgro	ound:	01		21	0	0	0	0	
Start: Ky		End: 34/		22	0	0	0	0	
Background Colo	r:	Sky Conditions:	Partly	23	0	0	0	0	4th 6-Minute Avg.
Start: Blue	End: Blue	Start: Cloudy	End: Cloudy	24	0	0	0	0	0
Wind Speed:		Wind Direction:	,	25	0	0	0	0	
Start: Cilm	End: Calm	Start: NA	End: NA	26	0	0	0	0	
Ambient Temp:		Wet Bulb Temp:	RH, percent	27	0	0	0	0	
Start: 52°	End: 546	NA	NA	28	0	0	0	0	
Sun -d-	Source Layout Sketch:		North Arrow	29	0	0	0	0	5th 6-Minute Avg.
Wind				30	0	0	0	0	0
			$\bigcirc$	Highest sir	ngle average	e of the five		0	
Stack	-0			6-minute a	verages:			0	
Plume				6-minute a	verages:	ie five	0	9	
	ox	Observation Point		Number of	Readings A	Above: 7	%	Were /	_
	RULC	TBED		Range of (	Opacity Re	adings:			
				Minimum:	0	% M	aximum:	0 %	
	Ī			Observer's	s Name: (p	rint)			
	140 Observer's Position				Alis	a Hatmaker			
				Observer's	s Signature	): /	Dat	e:	0
_				uers	actat	maker	/ (	1/2/2	-L
Sun Location Line			Organizat	ion: Blue V	Vater Indust	ries	101 IR.		
Comments:					Enviro	onmental Af	airs Depar	tment	
BWI Greenback Q	uarry - Mobile Plant			Certified E	Зу:		Dat	te:	
Sky or	vercast to he	ack (Sun h	idden.	Singleton	Smoke Sch	loc	1	10/11/2022	
opporters in succession march			Kodak, TN						

Construction         Construction<	Source Name: BWI E	TN LLC dba Blu	e Water Industries	Blue water i	Observatio	on Date:	Start Time	e: S	top Time:	
Address:       2107 Big IM Road       III / 222       III State:       707       1       5       5       5       6       Commente         Lead City       County:       County:       1       5	Greer	back Quarry					14.15			
Chy:         Country:         State:         Zip:         Millised:         0         15         30         45         Comments           Inder City         Ladon         NN         37772         1         5         5         5         5           Phone:         695-690-6322         Pacifiely ID No:         95 -0074-03         2         10         5         5         5           Process Equipment:         Operating Mode:         3         0         0         0         5         3         9         6         5	Address: 2107	Big Hill Road			11/2/	22	1:45	PM	2:15 PM	
Landr City Loudon IN ST772 1 6 5 5 5 5 Process Equipment: Operating Mode: 3 00 0 0 5 5 Process Equipment: Operating Mode: 3 0 0 0 5 5 Cartol Equipment: Operating Mode: 5 0 0 0 5 5 Cartol Equipment: Operating Mode: 5 0 0 0 5 5 Cartol Equipment: Operating Mode: 5 0 0 0 5 5 Cartol Equipment: Operating Mode: 5 0 0 0 5 5 Cartol Equipment: Operating Mode: 5 0 0 0 5 5 Cartol Equipment: Operating Mode: 5 0 0 0 5 5 Cartol Equipment: Operating Mode: 5 0 0 0 5 5 Cartol Equipment: Operating Mode: 5 0 0 0 5 5 Cartol Equipment: Operating Mode: 5 0 0 0 5 5 Cartol Equipment: Operating Mode: 5 0 0 0 5 5 Cartol Equipment: Operating Mode: 5 0 0 0 5 5 Cartol Equipment: Operating Mode: 5 0 0 0 5 5 Cartol Equipment: Operating Mode: 5 0 0 0 0 5 Cartol Equipment: Operating Mode: 7 0 0 0 5 5 Cartol Equipment: Operating Mode: 7 0 0 0 5 5 Cartol Equipment: Operating Mode: 7 0 0 0 5 5 Cartol Equipment: Operating Mode: 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	City: Coun	ty:	State:	Zip:	Min/Sec	0	15	30	45	Comments
Phone:: 665:665:322 Facility ID No:: 53:074:03 2 1 0 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Lenoir City Loudo	n	TN	37772	1	5	5	5	5	
Process Equipment:         Operating Mode:         3         O         O         S           Control Equipment:         Operating Mode:         6         S         S         0         0         5           Control Equipment:         Operating Mode:         6         S         S         0         0         5         0         0         0         7         0         0         5         0         0         0         5         0         0         0         5         0         0         0         5         0	Phone: 865-9	86-5322	Facility ID No:	53-0074-03	2	10	5	5	5	
GT200 BelF Fender       90 - 95%       4       5       10       5         Control Equipment:       Operating Mode:       5       0       0       7       1st C-Minute Avg.         Wel Suppression       100%       6       5       5       5       0       7       1st C-Minute Avg.         Mel Suppression       10%       6       5       5       5       0       7       0       0       5       0       7       0       0       5       0       7       0       0       5       0       7       0       0       5       0       0       5       0       0       0       5       0<	Process Equipment:		Operating Mode:		3	0	0	0	5	
Control Equipment:         Operating Mode:         5         0         0         0         1st 0-Minute Avg.           Wet Suppression         // 00%         6         5         5         5         3,94/e           Describe Emission Point:         Bit of fed into Cone Cruber GTCR1         8         8         5         0         0         5           GTBF 1 fed into Cone Cruber GTCR1         Bit of fed into Cone Cruber GTCR1         8         5         0         0         0         5         0         0         0         5         0	GT200 Belt Feeder		90-95	-0/0	4	5	5	10	5	
Wet Buopresion       100%       6       5       5       3       9         Describe Emission Point:       Emission PL ID       7       0       0       5       0         TBP1 fed inti Cone Crusher GTGR1       8       8       5       0       5       0         Height Above Ground Level:       Height Relative to Observer:       9       5       0       0       5       0         Start:       15       End:       17       10       0       5       0       0       0         Start:       160 pht Relative to Observer:       9       5       0       0       0       2nd 6-Minute Avg.         Start:       11       10       0       5       0       0       0       2nd 6-Minute Avg.         Start:       13       5       0	Control Equipment:		Operating Mode:		5	0	0	0	0 0	1st 6-Minute Avg.
Describe Emission Point:         Emission PL ID         7         0         0         5         0           GTBF 1 feed into Cone Crusher GTCR1         Height Above Smound Level:         Height Above Smound Level:         Height Above Smound Level:         0         5         0         <	Wet Suppression		100%		6	5	5	5	5	3.910
B         B         C         S         C         S         C           Height Above Ground Level:         Height Relative to Deserver:         9         5         0	Describe Emission Point	:		Emission Pt. ID	7	m	0	0	5	, ip
Height Above Ground Level:       Height Relative to Observer:       9       5       0       0       0         Start.       [5]       End: [5]       Istart [5]       End: [5]       Inter Genome Deserver:       10       0       5       0       0       0         Start.       [15]       End: [5]       Start.       Inter Genome Deserver:       11       10       0       5       2.0.16 Adminute Avg.         Start.       [15]       End: [15]       Start.       Start.       11       10       0	GTBF1 feed into Cone Cru	usher GTCR1		8	8	5	0	C	0	
Start       5'       End:       5'       End:       5'       10       0 <th0< th="">       0       0</th0<>	Height Above Ground Le	vel:	Height Relative to	Observer:	9	5	0	0	~	
State       State <t< td=""><td>State ITI Fo</td><td>151</td><td>Starts IT 1</td><td>End: 10-1</td><td>10</td><td>0</td><td>0</td><td>0</td><td>C</td><td></td></t<>	State ITI Fo	151	Starts IT 1	End: 10-1	10	0	0	0	C	
Start:       US       End:       SUB       11       12       10       0	Distance from Observer:	u. ( )	Direction from Ob	server:	11	0	5	2		and C Minute Aug
Start: US End: US [start: SW End. 3W End. 3W [12] 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	and lati to	171	Stat 5/11	End: 51.1	12	10	10	2	2	
Ind. Bock DustInd. Bock DustInd. Bock DustInit bockFightwe Type: Continuous []16000Emission Color:Plume Type: Continuous []160555Start:MutheFugtive [X]Intermittent []161670555Water Droplets Present:If Water Droplet Plume:NA175510103rd 6-Minute Avg.No[X]Yes []Attached []Detached []181055541,17Point in the Plume at which Opacity was Determined:1900000Start:NAEnd:NA200500Start:Find:End:K20055510Start:GreenStart:Conditions:23551010Start:GreenStart:NaEnd:2855510Start:GreenStart:NaRH, percent2855510Start:GreenStart:NaNa28555541,65Wind Speed:NaNANA285555541,65Start:GreenStart:NaNa285555541,65Wind Speed:NaNANANA	Describe Emissions:	d. <u>U</u> S	Start. 300		12	5	0	0	0	dita
Start:       CONTROL       End:       CONTROL       14       C       C       C         Start:       Univer Type: Continuous [ ]       15       C       S       S       S         Start:       Univer Type: Continuous [ ]       16       (C)       S       S       S         Water Droplets Present:       If Water Droplet Plume:       NA       17       S       S       S         No [X]       Yes [ ]       Attached [ ]       Detached [ ]       18       (O       S       S       S         Point in the Plume at which Opacity was Determined:       19       O	Rock Du	ct	Park	Duch	13	5	0	0	0	
Linisario Guon. Start: Wurde Tropiet Present: If Water Dropiets Present: If Water Present: If Water Present: If Water Dropiets Present: If Water Dropiets Present: If Water Present: If Water Present: If Water Dropiets Present: If Water Present: If Wa	Start: COCC DU	[5]	End: KOCK		14	0	0	0	0	
Start:       With Color:       Fugitive [X]       Intermittent []       16       10       S       S         Vater Droplets Present:       If Water Droplet Plume: NA       17       5       10       10       3rd 6-Minute Avg.         No[X]       Yes[]       Attached []       Detached []       18       10       5       5       4, 17         Point in the Plume at which Opacity was Determined:       19       0       0       0       0         Start:       NA       20       0       5       0       0       0         Start:       NA       20       0       5       0       0       0       0         Start:       Guy Present:       NA       20       0       5       0			Fiume Type. Cond	indous [ ]	15	O	5	5	5	
water Uropiete Present:       if Water Uropiete Present:       17       5       10       10       3rd 6-Minute Avg.         No [X]       Yes []       Attached []       Detached []       18       10       5       5       44.17         Point in the Plume at which opacity was Determined:       19       0       0       0       0       0         Start:       NA       End:       NA       20       0       5       5       5       44.17         Describe Background:       21       5       5       5       5       5       5       5         Start:       End:       NA       22       5       5       6       0       0       0       0       0       11       10       10	Start: White En	d: White	Fugitive [X] Inter	rmittent [ ]	16	10	5	5	5	
No [X]       Yes []       Attached []       Detached []       18       10       S       5       4, 17         Point in the Plume at which Opacity was Determined:       19       0       10       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0 <td>water Droplets Present:</td> <td></td> <td>If water Droplet P</td> <td>iume: N/A</td> <td>17</td> <td>5</td> <td>5</td> <td>10</td> <td>10</td> <td>3rd 6-Minute Avg.</td>	water Droplets Present:		If water Droplet P	iume: N/A	17	5	5	10	10	3rd 6-Minute Avg.
Point in the Plume at which Opacity was Determined: Start: NA End: NA 20 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	No[X] Ye	s[]	Attached [ ]	Detached [ ]	18	[0	5	5	5	4,17
Start:       NA       End:       NA       20       0       5       0       0         Describe Background:       Start:       End:       End:       End:       21       5       5       5       5         Start:       End:       End:       End:       End:       22       5       10       10         Background:       Start:       OK       0       End:       6       0       4th 6-Minute Avg.         Start:       OK       Start:       OK       0       5       5       5       3,54         Wind Speed:       Wind Direction:       Start:       NA       End:       Ambient Temp:       Net Bulb Temp:       RH, percent       27       0<	Point in the Plume at wh	ich Opacity was	Determined:		19	0	0	0	0	
Describe Background:       21       5       5       6         Start: Equipment       22       5       5       6       4th 6-Minute Avg.         Background Color:       Sky Conditions:       23       5       5       0       4th 6-Minute Avg.         Start: Green       Start: Over cost End Over cost       24       0       5       5       3,54         Wind Speed:       Wind Direction:       25       10       5       5       10         Start: Call memp:       Start: NA       End: Calm       Start: NA       26       5       5       5         Start: (g) °       End: Go °       NA       NA       28       5       5       5       5         Sun -Q-       Source Layout Sketch:       North Arrow       29       5       5       5       5       41,58         Wind -       Source Layout Sketch:       North Arrow       29       5       5       5       41,58         Stack       with       C       Go Stack       S       5       41,58         Wind -       Source Layout Sketch:       North Arrow       29       5       5       5       41,58         Stack       with       C <td< td=""><td>Start: NA</td><td></td><td>End: NA</td><td></td><td>20</td><td>0</td><td>5</td><td>0</td><td>0</td><td></td></td<>	Start: NA		End: NA		20	0	5	0	0	
Start:       End:       Equipment       22       5       10       10         Background Color:       Sky Conditions:       23       5       5       0       4th 6-Minute Avg.         Start:       Green       End:       Oer cost End:       24       0       5       5       3,54         Wind Speed:       Wind Direction:       25       10       5       5       10         Start:       Call       Start:       NA       End:       26       5       5       5         Start:       O       Sat:       NA       End:       0       0       0       0         Start:       O       NA       NA       28       5	Describe Background:			641	21	5	5	5	5	
Background Color:       Sky Conditions:       23       5       5       0       4th 6-Minute Avg.         Start: Green       Start: Ore cash End. Ore cash       24       0       5       5       3, 54         Wind Speed:       Wind Direction:       25       10       5       5       10         Start: Call M       End: MA       End: NA       26       5       5       5         Ambient Temp:       Wet Bulb Temp:       RH, percent       27       0       0       0         Start: Og P       End: G3 P       NA       NA       28       5       5       5       5         Sun       Source Layout Sketch:       North Arrow       29       5       5       5       5       5       5       4       5       4       5       4       5       4       5       4       5       4       5       4       5       5       5       5       5       5       5       5       5       5       5       5       5       5       6       6       5       7       5       6       5       5       5       5       5       5       6       6       6       7       5 <t< td=""><td>Start: Equipme</td><td>nt</td><td>End: Equip</td><td>ment</td><td>22</td><td>5</td><td>5</td><td>10</td><td>10</td><td></td></t<>	Start: Equipme	nt	End: Equip	ment	22	5	5	10	10	
Start: Green       Start: Ore rash End: Ore ra	Background Color:	224	Sky Conditions:		23	5	5	5	0	4th 6-Minute Avg.
Wind Speed:       Wind Direction:       25       10       5       5       10         Start: Ca(m       End: Ca(m       Start: NA       End: NA       26       5       5       5         Ambient Temp:       Wet Bulb Temp:       RH, percent       27       0       0       0       0         Start: (D3)       End: (D3)       End: (D3)       NA       NA       28       0       5       5       10         Start: (D3)       End: (D3)       NA       NA       NA       28       0       5       5       10         Start: (D3)       End: (D3)       NA       NA       NA       28       5       6       5       5       5       5       5       6       6       6 <t< td=""><td>Start: Green En</td><td>d: Green</td><td>Start: Over Cas</td><td>+End: Overcast</td><td>24</td><td>0</td><td>5</td><td>5</td><td>5</td><td>3,54</td></t<>	Start: Green En	d: Green	Start: Over Cas	+End: Overcast	24	0	5	5	5	3,54
Start: Ca(m       End: Ca(m)       Start: NA       End: NA       26       5       5       5         Ambient Temp:       Wet Bulb Temp:       RH, percent       27       0       0       0         Start: (p3)       End: (p3)       NA       NA       28       5       5       5         Sun       Source Layout Sketch:       North Arrow       29       5       5       5       5       6         Wind       Stack       Stack       Stack       Stack       0       6       5       5       5       5       5       5       5       6       5       6       5       6       5       6       5       6       5       6       5       6       5       6       5       6       5       6       5       6       5       6       5       6       5       6       5       6       5       6       6       6       6       6       7       6       0       0       6       6       6       6       6       7       6       0       7       6       7       6       7       7       0       0       0       7       6       7       7	Wind Speed:		Wind Direction:		25	10	5	5	10	
Ambient Temp:       Sun 2000       Wet Bulb Temp:       RH, percent       27       0       0       0         Start: (p3 °       End:       (p3 °)       NA       NA       28       0       5       5       5         Sun       Source Layout Sketch:       North Arrow       29       5       7       5	Start: Calm En	d: Calm	Start: NA	End: NA	26	5	5	5	5	
Start:       (03°       End:       (63°       NA       NA       28       0       5       5       5         Sun       Source Layout Sketch:       North Arrow       29       5	Ambient Temp:		Wet Bulb Temp:	RH, percent	27	0	0	0	0	
Start       Unit       Init	Start: 1030 En	1. 630	NA	NA	28	0	5	5	5	
Wind       Image: Stack with Computer Strategy Point         Stack with Computer Strategy Point       Image: Strategy Point         Image:		e Layout Sketch:		North Arrow	29	C	5	5	5	5th 6-Minute Avg
Stack         with         Plume         X         Observation, Point         Generating Stack         Number of Readings Above:         140         Observer's Position         140         Observer's Position         140         Observer's Position         Sun Location Line         Comments:         BWI Greenback Quarry - Mobile Plant         Sun Midden	Wind			$\bigcirc$	30		F	2	5	4.CS
Stack              with Original Point               6-minute averages:               4/5                Average Opacity of the five 6-minute averages:               3, 8 3               Average Opacity of the five 6-minute averages:               3, 8 3               Mumber of Readings Above: 12 % Were O               Range of Opacity Readings:             Minimum: O % Maximum: 10 %             Observer's Position             Observer's Position					Highest sin	gle average	e of the five	5	1	1/30
with       Observation Point         x       Observation Readings Above: 12 % Were         x       Number of Readings Above: 10 %         Number of Readings Above: 10 %       Maximum: 10 %         Observer's Name: (print)       Alisa Hatmaker         Observer's Signature:       Date:         Allisa Hatmaker       Organization: Blue Water Industries         Comments:       Environmental Affairs Department         BWI Greenback Quarry - Mobile Plant       Certified By:         Singleton Smoke School       10/11/2022         Kodak, TN       10/11/2022	Stack				6-minute av	verages:			4,5	8
Image: Starting Point       Number of Readings Above: <u>12</u> % Were <u>0</u> Range of Opacity Readings:         Minimum:       % Maximum:         0 bserver's Position         140       Observer's Name: (print)         Alisa Hatmaker         Observer's Signature:         0 bserver's Signature:         0 comments:         BWI Greenback Quarry - Mobile Plant         Sun Location Line         Certified By:         Singleton Smoke School         Number of Readings Above: <u>12</u> % Were <u>0</u> Range of Opacity Readings:         Minimum:       0 % Maximum:         Maximum:       0 %         Observer's Signature:       Date:         11/2/22       Organization: Blue Water Industries         Environmental Affairs Department       Certified By:         Singleton Smoke School       10/11/2022	with O		C		Average O 6-minute a	pacity of th verages:	ne five		3,83	
Alise Hatmaker         Observer's Position         140         Observer's Position         Sun Location Line         Comments:         BWI Greenback Quarry - Mobile Plant         Sun Midder         Certified By:         Singleton Smoke School         Molder		xC	Observation, Point		Number of	Readings A	bove: 12	%	Were 🜔	
Image: Sun Location Line       Minimum:       0 %       Maximum:       10 %         Minimum:       0 %       Maximum:       10 %         Observer's Name:       (print)       Alisa Hatmaker         Observer's Signature:       0       Date:         Minimum:       0 %       Maximum:       10 %         Observer's Name:       (print)       Alisa Hatmaker       0         Observer's Signature:       0       Date:       11/2/22         Organization:       Blue Water Industries       11/2/22         Organization:       Blue Water Industries       Environmental Affairs Department         Sun Midder       Certified By:       Date:       10/11/2022         Kodak, TN       Kodak, TN       10/11/2022       10/11/2022					Range of C	Dpacity Rea	adings:			
Imminum:       Imminum: <td< td=""><td></td><td></td><td>GTCRI</td><td></td><td>Minimum</td><td>0</td><td>% M</td><td>laximun</td><td>nº 10 %</td><td></td></td<>			GTCRI		Minimum	0	% M	laximun	nº 10 %	
Ido       Observer's Position         Alisa Hatmaker         Observer's Signature:         Organization:         Blue Water Industries         Environmental Affairs Department         Sun hidder         Singleton Smoke School         Kodak, TN					Observer's	s Name: (pi	rint)	aximun	11. 10 70	
Instantation       Date:       Observer's Signature:       Observer's Signature:       Observer's Signature:       Oution Hammatic       Observer's Signature:       Oution Hammatic       Observer's Signature:       Oution Hammatic       Organization:       Blue Water Industries       Environmental Affairs Department       Sun hidder       Kodak, TN		140	Observer's Positior	n		Alie	a Hatmaker			
Sun Location Line     Alisa Hatmaku     II/2/22       Organization: Blue Water Industries     Environmental Affairs Department       BWI Greenback Quarry - Mobile Plant     Certified By:     Date:       Sun hidder     Singleton Smoke School     10/11/2022		140			Observer's	s Signature		0	Date:	
Sun Location Line     Organization: Blue Water Industries       Comments:     Environmental Affairs Department       BWI Greenback Quarry - Mobile Plant     Certified By:     Date:       Sun Middee     Singleton Smoke School     10/11/2022					Alia	a that	motor		11/2/2	-2-
Comments:     Environmental Affairs Department       BWI Greenback Quarry - Mobile Plant     Certified By:     Date:       Sun hidder     Singleton Smoke School     10/11/2022		Suplos	ation Line		Organizati	on: Blue V	Vater Indust	tries	11-1-	-
BWI Greenback Quarry - Mobile Plant     Certified By:     Date:       Sun hidder     Singleton Smoke School     10/11/2022       Kodak, TN     Kodak, TN     10/11/2022	Comments:	Sun Loo				Enviro	onmental Af	ffairs Dep	partment	
Sun hidden Kodak, TN	BWI Greenback Quarty	Mobile Plant			Certified B	By:		[	Date:	
Kodak, TN	Sin la	Ada			Singleton S	Smoke Scho	loc		10/11/2022	
	Jurin	uner			Kodak, TN					

Source Name:	BWI ETN LLC dba Blu	e Water Industries	Dide Water	Observatio	n Date:	Start Time	: Sto	p Time:	
Address	Greenback Quarry			11/210	17	1400	0 2	IF PM	
Address:	2107 Big Hill Road	States	Zini	Min/Soc	0	1175	30	45	Comments
Lenoir City	Loudon	TN	21p: 37772	1	0	15	50	45	Commenta
Phone:	865-986-5322	Facility ID No:	53-0074-03	2	0	5	0	5	
Process Equipme	ent:	Operating Mode:		3	0	0	0	0	
GT200 Cone		90-95	2/0	4	0	0	T.	5	
Control Equipme	nt:	Operating Mode:	0	5	6	I.	90	A	1st 6-Minute Ava
Wet Suppression		100 %		6	0	5	0	0	1.44
Describe Emissio	on Point:		Emission Pt. ID	7	~	0	0	0	1140
GTCR1 feed onto	Conveyor GTC1		9	8	6	5	0	0	
Height Above Gro	ound Level:	Height Relative to	Observer:	9	6	0	0	5	
Start: 71	End: 71	Start: 7/	End 71	10	0	~	0	~	
Distance from Ob	server:	Direction from Obs	server:	11	6	IA	0	6	2nd 6-Minute Ava
Start: 1001	End: 601	Start: 5W	End: SW	12	0	0	~	0	A. /03
Describe Emissio	ons:			13	0	0	0	0	07(0)
Start NOMO		End: Nous	<i>2</i>	14	6	0	6	0	
Emission Color:		Plume Type: Conti	nuous [ ]	15	0	0	0	0	
Start CLOAF	EndClong	Fugitive [X] Inter	mittent []	16	0	6	0	0	
Water Droplets P	resent:	If Water Droplet Pl	ume: N/A	17	0	5	5	5	3rd 6-Minute Ava
No [ X ]	Yes []	Attached [ ]	Detached [ ]	18	5	0	5	0	1,04
Point in the Plum	e at which Opacity was	Determined:		19	6	5	0	0	1/- /
Start: NA		End: NA		20	0	6	0	0	
Describe Backgro	ound:			21	0	0	0	0	
Start Equir	mont	End Fairs	ment	22	0	5	5	5	
Background Cold	pr:	Sky Conditions:	incore j	23	0	2	0	0	4th 6-Minute Ava
Start: Tan	End: Tam	Start: Ouroco	End: Overone	24	0	0	0	0	1,04
Wind Speed:	(007	Wind Direction:		25	0	0	0	0	
Start: Calm	- End: Calm	Start: NA	End: NA	26	5	5	5	0	
Ambient Temp:		Wet Bulb Temp:	RH, percent	27	0	0	0	0	
Start: 63°	End: 63°	NA	NA	28	0	5	5	0	
Sun – 🔶 –	Source Layout Sketch:		North Arrow	29	5	5	5	0	5th 6-Minute Avg.
Wind				30	0	0	0	ð	1,67
Stack				Highest sin 6-minute av	gle average verages:	e of the five		1,67	
with O				Average O 6-minute a	pacity of th verages:	ne five		1,17	
	J x	Observation Point		Number of	Readings A	bove: 12	%	Were !	0
	STCI	CT		Range of C	Dpacity Rea	adings:			
	14 13	SICRI		Minimum:	D	% M	aximum:	5 %	
				Observer's	s Name: (p	rint)			
	140*	Observer's Position	(		Alis	a Hatmaker			
				Observer's	s Signature	maken	Da	te:	22
	Sun Loc	ation Line		Organizati	on: Blue V	Vater Industr	ies	-1-1	
Comments:				1	Enviro	onmental Aff	airs Depa	rtment	
BWI Greenback O	uarry - Mobile Plant			Certified B	y:		Da	te:	
Sun	hiddon			Singleton S	Smoke Scho	lool		10/11/2022	
				Kodak, TN					

Source Name: BWI ETN LLC dba Blu	e Water Industries	Dide Water	Observatio	n Date:	Start Time	: Sto	op Time:	
Greenback Quarry			11/2 12	1	1100	11	110 0	
Address: 2107 Big Hill Road	Tei i	- I	11/2/2	2	1.10 K		40 P M	Commente
City: County:	State:	Zip: 37772	Min/Sec	0	15	30	45	Comments
Phone: 865-986-5322	Facility ID No:	53-0074-03	2	0	0	0	0	
Process Equipment:	Operating Mode:	33-0074-03	3	0	0	0	0	
GT200 Convevor	90-95	-07_	3	0	N	0	0	
Control Equipment:	Operating Mode:	10	5	0	0	0	0	
Wet Suppression	100 %		6	0	0	0		1st 6-Minute Avg.
Describe Emission Point:	100 10	Emission Pt ID	0	0	0	0	0	0
GTC1 feed onto ET3620 Screen Feed Box	AMS F1	10		0	0	0	0	
Height Above Ground Level:	Height Relative to	10 Observer:	8	0	0	0	0	
	Theight Relative to	observer.	9	0	0	0	0	
Start: St	Start: / S	End: /S	10	0	0	0	6	
Distance from Observer:	Direction from Ob	server:	11	O	0	0	0	2nd 6-Minute Avg.
Start: 60 End: 60	Start: Start:	End:	12	0	0	0	0	0
Describe Emissions:	1)		13	O	0	G	0	
Start:	End: None	, 	14	0	0	0	0	
Emission Color:	Plume Type: Conti	inuous [ ]	15	0	0	0	0	
Start: Clear End: Clear	Fugitive [X] Inter	rmittent [ ]	16	0	0	0	O	
Water Droplets Present:	If Water Droplet P	lume: N/A	17	0	0	0	0	3rd 6-Minute Avg.
No [X] Yes []	Attached [ ]	Detached [ ]	18	0	0	0	0	0
Point in the Plume at which Opacity was	s Determined:		19	0	6	0	0	
Start: NA	End: NA		20	0	0	0	0	
Describe Background:			21	0	0	0	0	
Start: Overburden	End: Overb	urden	22	0	0	0	0	
Background Color:	Sky Conditions:		23	0	0	0	Ø	4th 6-Minute Avg.
Start: Brown End: Brown	Start: Overcas	End: Overcast	24	D	0	0	0	0
Wind Speed:	Wind Direction:		25	0	6	0	0	
Start: Calm End: Calm	Start: NA	End. A	26	0	0	O	0	
Ambient Temp:	Wet Bulb Temp:	RH, percent	27	0	0	0	0	
Start: 43° End: 63°	NA	NA	28	0	0	0	C	
Sun Source Layout Sketch:		North Arrow	29	0	0	0	0	5th 6-Minute Ava.
Wind			30	0	0	0	0	0
			Highest sin	gle average	e of the five		0	
Stack			6-minute av	verages:	- fl		0	
Plume			6-minute a	verages:	le live	(	0	
R R	Observation Point		Number of	Readings A	Above: 7	%	Were 🜔	
	STC		Range of C	Dpacity Rea	adings:			
AMSE			Minimum:	0	% M	aximum:	0 %	
			Observer's	s Name: (p	rint)	avannann	<u> </u>	
140	Observer's Positior	n		Alis	a Hatmaker			
			Observer's	s Signature	): 	Da	ite:	
			alisa	Hatn	even		11/2/2	2
Sun Loc	cation Line		Organizati	on: Blue V	Vater Indust	ries	1 1	
Comments:			1	Enviro	onmental Af	airs Depa	artment	
BWI Greenback Quarry - Mobile Plant			Certified B	By:		Da	ate:	
Sun hidden			Singleton S	Smoke Scho	loc		10/11/2022	
Jun maden			Kodak, TN					

Source Name:       BWI ETN LLC dba Blue Water Industries Greenback Quarry       Observation Date:       Start Time:       Stop Time:         Address:       2107 Big Hill Road       11/2/22       1.10 P M       1.40 P M         City:       County:       State:       Zip:       Min/Sec       0       15       30       45       Con         Lenoir City       Loudon       TN       37772       1       0       0       0       0         Phone:       865-986-5322       Facility ID No:       53-0074-03       2       0       0       0       0         Process Equipment:       Operating Mode:       3       0       0       0       0       0	nments
Greenback Quarry           Address:         2107 Big Hill Road         II/2/22         I. 10 P M         I. 40 P M           City:         County:         State:         Zip:         Min/Sec         0         15         30         45         Con           Lenoir City         Loudon         TN         37772         1         0         0         0         0           Phone:         865-986-5322         Facility ID No:         53-0074-03         2         0         0         0         0           Process Equipment:         Operating Mode:         3         0         0         0         0	nments
City:         County:         State:         Zip:         Min/Sec         0         15         30         45         Con           Lenoir City         Loudon         TN         37772         1         0 <t< td=""><td>nments</td></t<>	nments
Lenoir City         Loudon         TN         37772         1         0         0         0           Phone:         865-986-5322         Facility ID No:         53-0074-03         2         0         0         0           Process Equipment:         Operating Mode:         3         0         0         0         0	
Phone:         865-986-5322         Facility ID No:         53-0074-03         2         0         0         0           Process Equipment:         Operating Mode:         3         0	
Process Equipment: Operating Mode: 3 0 0 0 0	
AMTS ET3620 Conveyor $U_{0} = 2$	
$\begin{array}{c c} \hline & & \\ \hline \hline & & \\ \hline \hline \\ \hline & & \\ \hline \hline \\ \hline & & \\ \hline \hline \\ \hline \\$	
Wet Compression	nute Avg.
vvet Suppression (00 % 6 0 0 0 0 0	)
Describe Emission Point: Emission Pt. ID 7 0 0 0	
Conveyor AMS C1 feed onto Conveyor AMS C2 11 8 O O O	
Height Above Ground Level:     Height Relative to Observer:     9     0     0     0	
Start: 7 End: 7 Start: 7 End: 7 10 0 0 0	
Distance from Observer: 11 O O O 2nd 6-M	inute Avg.
Start: UD' End: UD' Start: 5 End: 5 12 0 0 0 0	)
Describe Emissions:	
Start: N(D)N / End: N(D)N(L) 14 0 0 0	
Emission Color: Plume Type: Continuous []	
Start: CCAV End: CCAV Fugitive X Intermittent I III III III IIII IIIIIIIIIIIIIII	
	nute Avg.
No [X] Yes [] Attached [] Detached [] 18 0 0 0 0 0	)
Point in the Plume at which Opacity was Determined:	
Start:         NA         20         O         O	
Describe Background: 21 O O O	
Start: DUPY burden End: Over byrden 22 0 0 0	
Background Color: Sky Conditions: 23 O O O 4th 6-Mi	nute Avg.
Start: Brown End: Brown Start: Dvercast End: Overcast 24 0 0 0 0 0	0
Wind Speed: Wind Direction: 25 6 0 0 0	
Start: Calm End: Calm Start: NA End: NA 26 0 0 0	
Ambient Temp: Wet Bulb Temp: RH, percent 27 0 0 0	
1 - 1 - 2 = 1 - 1 - 2 = 1 - 1 - 2 = 1 - 1 - 2 = 1 - 1 - 2 =	
Start: () End: () NA NA 20 0 0 0	
	nute Avg.
Vind	/
Stack 6-minute averages:	
with O Average Opacity of the five 6-minute averages:	
x Observation Point Number of Readings Above: 7 % Were	
Range of Opacity Readings:	
Minimum: 🔘 % Maximum: 🖉 %	
Observer's Name: (print)	
Observer's Position Alisa Hatmaker	
Observer's Signature: Date:	
alise Hatmaker 11/2/22	
Sun Location Line Organization: Blue Water Industries	
Comments: Environmental Affairs Department	
BWI Greenback Quarry - Mobile Plant Certified By: Date:	
Singleton Smoke School 10/11/2022	

			Blue water	naustries	5 Defei	04			
Source Name:	BWI ETN LLC dba Blu	e Water Industries		Observatio	n Date:	Start Time	: Sto	op lime:	
Address:	2107 Big Hill Road			11/2/	22	2:05	PM 2	1:55PM	
City:	County:	State:	Zip:	Min/Sec	0	15	30	45	Comments
Lenoir City	Loudon	TN	37772	1	$\bigcirc$	0	0	0	
Phone:	865-986-5322	Facility ID No:	53-0074-03	2	0	0	0	0	
Process Equipme	ent:	Operating Mode:		3	0	0	0	0	
AMTS FT3620 Cor	nveyor & Screen	90-95	0/0	4	0	0	0	0	
Control Equipmen	nt:	Operating Mode:	10	5	0	0	0	0	1st 6-Minute Ava
Wet Suppression		100 %		6	0	0	0	0	
Describe Emissio	n Point:	10- 70	Emission Pt. ID	7	0	0	0	0	
AMS C2 feed onto	Screen & Area above S	creen AMS S1	12	8	6	0	0	6	
Height Above Gro	ound Level:	Height Relative to	Observer:	9	0	2	0'	0	
n nei	- 251	151	51 200	10	0	6	0	0	
Start: O	End: X Y	Start:	End: X	10	0	0	0	0	
	//		End	11	0	0	0	0	2nd 6-Minute Avg.
Start: 40	End: 40	Start: NC		12	0	0	0	0	0
Describe Ellissio		A.I		13	0	0	O	0	
Start: None		End: None		14	0	O	0	0	
Emission Color:	01	Plume Type: Conti	nuous [ ]	15	0	0	0	0	
Start: Clear	End: Clear	Fugitive [X] Inter	rmittent [ ]	16	0	0	0	0	
Water Droplets Pi	resent:	If Water Droplet Pl	lume: N/A	17	0	0	0	0	3rd 6-Minute Avg.
No [ X ]	Yes[]	Attached [ ]	Detached [ ]	18	0	0	0	6	0
Point in the Plum	e at which Opacity was	Determined:		19	0	0	0	0	
Start: NA		End: NA		20	0	0	0	0	
Describe Backgro	ound:			21	0	0	0	0	
Start: Treel	ine	End: Treelin	2	22	0	0	0	0	
Background Colo	r:	Sky Conditions:		23	0	0	0	0	4th 6-Minute Avg.
Start: Yellow	End: Yellow	Start: Overas	-End. Overcast	24	0	0	0	0	0
Wind Speed:	J	Wind Direction:		25	0	0	0	0	
Start Calm	End Calm	Start: NA	End: NA	26	0	0	0	0	
Ambient Temp:		Wet Bulb Temp:	RH, percent	27	0	0	0	0	
Start 1030	End: 1040	ΝΔ	NA	28	0	0	0	0	
Sun –	Source Layout Sketch:		North Arrow	29	0	0	0	0	5th 6-Minute Ava
Wind ->			$(\uparrow)$	30	0	6	0	0	
			$\bigcirc$	Highest sin	gle average	of the five	0	0	
Stack				6-minute av	verages:			0	
with O Plume	07			Average O 6-minute a	pacity of th verages:	ie five		0	
	A MAS X	Observation Point		Number of	Readings A	bove: <b>7</b>	%	Were 🔿	
	TAN	1551		Range of C	Dpacity Rea	dings:			15
				Minimum:	0	% M	aximum:	0 %	
				Observer's	s Name: (pr	int)			
	140	Observer's Position	ı		Alisa	a Hatmaker			
				Observer's	Signature	:	Da	te:	
			_	alise	a Ham	naker		11/2/2	2
	Sun Loc	ation Line		Organizati	on: Blue W	ater Indust	ries	( (	
Comments:				1	Enviro	nmental Aff	airs Depa	rtment	
BWI Greenback O	uarry - Mobile Plant			Certified B	y:		Da	te:	
Swi Gleenback Q	any - would ridin			Singleton S	moke Scho	ool		10/11/2022	
Jun	niaden			Kodak. TN					
				1					

Source Name: BWI ETN LLC dba Blu	e Water Industries	Dide Water	Observatio	n Date:	Start Time	: Stor	o Time:	
Greenback Quarry					010-	0.0 0	TTA.	
Address: 2107 Big Hill Road			11/2/2	-2	2:25	PM 2	. 55 PM	
City: County:	State:	Zip:	Min/Sec	0	15	30	45	Comments
Lenoir City Loudon	TN	37772	1	0	0	0	0	
Phone: 865-986-5322	Facility ID No:	53-0074-03	2	0	0	0	0	
Process Equipment:	Operating Mode:		3	0	0	0	0	
AMTS FT3620 Screen & Conveyor	90-95	°6	4	0	0	0	0	
Control Equipment:	Operating Mode:		5	0	0	0	0	1st 6-Minute Avg.
Wet Suppression	100 %	2	6	0	0	6	6	0
Describe Emission Point:		Emission Pt. ID	7	0	0	0	0	
Conveyor AMS C3 feed to Conveyor AMS	C4	13	8	0	0	0	0	
Height Above Ground Level:	Height Relative to	Observer:	9	0	6	0	0	
Start: 6' End: 6'	Start: 6	End: 6	10	0	õ	0	0	
Distance from Observer:	Direction from Ob	server:	11	0	0	0	0	2nd 6-Minute Ava.
Start: 30 - End: 30-	Start: NE	End: NE	12	0	0	0	0	0
Describe Emissions:		1-0	13	0	0	0	0	
Start Nous	End: NAUA	,	14	0	~	0	0	
Emission Color:	Plume Type: Conti	nuous [ ]	15	0	0	0	0	
Class - Class			16	0	0	0	0	
Start: Clar End: Clar Water Droplets Present:	Fugitive [X] Inter	rmittent [ ] lume: N/A	47	00	0	0	0	Ord C Minute Ave
		5	17	0	0	0	6	3rd 6-Minute Avg.
No[X] Yes[]	Attached [ ]	Detached [ ]	18	0	0	0	0	0
Found in the Flume at which Opacity was	beterminet.		19	0	0	0	0	
Start: NA	End: NA		20	0	0	0	0	
Describe Background:	-		21	0	0	Ø	0	
Start: Equipment	End: tgupr	nent	22	0	0	0	0	
Background Color:	Sky Conditions:		23	0	0	0	0	4th 6-Minute Avg.
Start Black Ton End: Black Tan	Start: Over Cast	- End: Over Cast	24	0	0	0	0	0
Wind Speed:	Wind Direction:		25	0	Ø	0	0	
Start. Calm End: Calm	Start: NA	End: MA	26	6	0	0	0	
Ambient Temp:	Wet Bulb Temp:	RH, percent	27	0	0	0	0	
Start: 63° End: 64°	NA	NA	28	0	0	0	0	
Sun Source Layout Sketch:		North Arrow	29	0	0	0	0	5th 6-Minute Avg.
Wind			30	0	Ø	0	0	0
		$\bigcirc$	Highest sin	gle average	e of the five	-	0	
Stack			6-minute av	verages:			0	
Plume	6C3 KI		Average O 6-minute a	pacity of the	ne rive	C	2	
a x	DAMS P Observation Point		Number of	Readings A	Above: 7	%	Were C	)
Ansca			Range of C	Opacity Re	adings:			-
			Minimum:	0	% M	aximum:	0 %	
			Observer's	s Name: (p	rint)			
140	Observer's Position	า		Alis	a Hatmaker			
			Observer's	s Signature	ə:	Dat	ie:	0.000
	$\sim$		Geis	a Hat	make		1/2/2	-2
Sun Loc	cation Line		Organizati	on: Blue V	Vater Indust	ries	t .	
Comments:			]	Enviro	onmental Af	fairs Depar	tment	
BWI Greenback Quarry - Mobile Plant			Certified E	By:		Dat	te:	
Ship biddo			Singleton S	Smoke Sch	lool		10/11/2022	
Sur made	۱		Kodak, TN					

Source Name:	BWI ETN LLC dba Blu	e Water Industries	Diue Water	Observatio	on Date:	Start Time	: Sto	p Time:	
	Greenback Quarry			11/01		1110		1	
Address:	2107 Big Hill Road	•	-	11/2/	22	10.50	Am	. 20 Am	
City:	County:	State:	Zip:	Min/Sec	0	15	30	45	Comments
Lenoir City		Eacility ID No:	3///2	1	0	0	0	0	
Phone:	865-986-5322	Pacifity ID No.	53-0074-03	2	0	0	0	0	
Process Equipme	nt:	Operating wode:	×	3	0	0	0	0	
AMITS F13620 Scr	een	90-95	° (6	4	0	0	0	0	
Control Equipmen	nt:	Operating Mode:		5	0	0	0	0	1st 6-Minute Avg.
Wet Suppression		100 %		6	0	0	0	0	0
Describe Emissio	n Point:		Emission Pt. ID	7	0	0	0	0	
AMS S1 feed onto	Conveyor AMS C5		14	8	0	0	0	0	
Height Above Gro	ound Level:	Height Relative to	Observer:	9	0	0	0	0	
Start: 6	End: 6	Start: 6	End: 6	10	0	0	0	0	
Distance from Ob	server:	Direction from Ob	server:	11	0	0	0	0	2nd 6-Minute Avg.
Start: 60	End: 60	Start: 5W	End SW	12	0	0	0	0	0
Describe Emissio	ns:	0	100	13	0	0	0	0	
Start: NON	2	End:	None	14	0	0	0	0	
Emission Color:		Plume Type: Conti	nuous [ ]	15	0	0	0	0	
Start: Clear	End: Clear	Fugitive [X] Inter	mittent [ ]	16	0	0	0	δ	
Water Droplets Pr	resent:	If Water Droplet Pl	ume: N/A	17	0	0	6	0	3rd 6-Minute Avg.
No [ X ]	Yes []	Attached [ ]	Detached [ ]	18	0	0	0	0	0
Point in the Plum	e at which Opacity was	Determined:		19	0	0	0	0	
Start NA		End: NA		20	0	0	0	0	
Describe Backgro	ound:			21	0	0	0	0	
Start: Equ	oment	End Farino	ment	22	0	0	0	0	
Background Colo	r:	Sky Conditions:	1.1	23	0	6	0	0	4th 6-Minute Ava
Start Black 17	ALDEND RIACK TTA	Start: DV/V005	Find: Overcast	24	0	-	6	0	
Wind Speed:	avenue y actina	Wind Direction:	i Lind. D ver eusi	25	6	0	0	0	
Start: Calm	End: Calm	Start: NA	End: NA	26	0	0	0	0	
Ambient Temp:	End.	Wet Bulb Temp:	RH, percent	27	0	0	0	0	
Starts 540	500 TTO	NA	NA	28	0	6	0	0	
	Source Layout Sketch:	NA	North Arrow	29	0	0	0	0	Eth & Minuto Avg
			$\bigcirc$	30	0		0	0	Stri 6-Ivinute Avg.
				Highest sin	ale average	e of the five	0		0
Stack				6-minute a	verages:			0	
with O	AMOS			Average O 6-minute a	pacity of the pa	he five	0		
		Observation Point		Number of	Readings A	Above: 7	%	Were /	_
	R	AMISCS		Range of (	Opacity Re	adings:		-	
				Minimum:	0	% M	laximum:	0 %	
				Observer's	s Name: (p	rint)			
	140*	Observer's Positior	ı		Alis	a Hatmaker			
				Observer's	s Signature	ə:	Dat	te:	
			<	alise	Hatn	ralan		1/2/2	2
2	Sun Loc	ation Line		Organizati	ion: Blue V	Vater Indust	ries	1 (	
Comments:				]	Enviro	onmental Af	fairs Depai	tment	
BWI Greenback O	uarry - Mobile Plant			Certified E	By:		Dat	te:	
San IL	dd pa			Singleton S	Smoke Sch	lool		10/11/2022	
	aach			Kodak, TN					
				1					

Source Name:	BWI ETN LLC dba Blu	e Water Industries	Diue water	Observatio	n Date:	Start Time	: Stor	Time:	
	Greenback Quarry			11/01	22	2125	0.0.0.	-	
Address:	2107 Big Hill Road			11/2/	11	2:251	om 2:	SSPM	
City:	County:	State:	Zip:	Min/Sec	0	15	30	45	Comments
Lenoir City	Loudon	TN	37772	1	0	0	0	0	
Phone:	865-986-5322	Facility ID No:	53-0074-03	2	0	0	0	0	
Process Equipme	nt:	Operating Mode:	07	3	0	0	0	0	
AMTS FT3620 Scr	een	90-95	10	4	0	0	0	0	
Control Equipmer	nt:	Operating Mode:		5	0	6	0	0	1st 6-Minute Avg.
Wet Suppression		100 %	. <u>.</u>	6	Õ	0	0	0	0
Describe Emissio	n Point:		Emission Pt. ID	7	0	0	0	0	
AMS S1 feed onto	Conveyor AMS C6		15	8	0	0	0	0	
Height Above Gro	und Level:	Height Relative to	Observer:	9	0	0	0	0	
Start: 0	End: 6	Start: 6	End: 6	10	0	0	0	0	
Distance from Ob	server:	Direction from Ob	server:	11	0	0	0	0	2nd 6-Minute Ava.
Start: 31) -	End: 30 -	Start: NE	End: NE	12	$\overline{\mathbf{D}}$	0	0	0	0
Describe Emissio	ns:			13	D	0	0	6	
Start Nouco		End Nous	د	14	0	2	0	0	
Emission Color:		Plume Type: Conti	nuous [ ]	15	0	0	0	0	
Charthe Clans	- Cloar			16	0		0	2	
Water Droplets Pr	resent:	If Water Droplet Pl	ume: N/A	17	0	0	0	0	
NotX1		Attached ( )	Detected (1)	10	0	0	0	0	3rd 6-Minute Avg.
Point in the Plume	res[] e at which Opacity was	Attached [ ]	Detached	10	0	0	0	0	0
	o at million opuolity mad	, Dotominiou.		19	0	0	0	0	
Start: NA	aund	End: NA		20	0	0	0	0	
Describe Backgro	and.	· · ·		21	0	0	0	0	
Start: Equ	pment	End: tqupm	ent	22	0	6	0	0	
Background Colo	r:	Sky Conditions:		23	0	0	0	0	4th 6-Minute Avg.
Start: Back	End: Black	Start: Wercust	-End: Overcast	24	0	0	0	0	0
Wind Speed:	0	Wind Direction:		25	0	0	0	σ	
Start: Calm	End: Calm	Start: NA	End: NA	26	0	0	0	0	
Ambient Temp:		Wet Bulb Temp:	RH, percent	27	0	0	0	0	
Start: 43°	End: 640	NA	NA	28	0	0	0	0	
Sun	Source Layout Sketch:		North Arrow	29	0	0	0	0	5th 6-Minute Avg.
Wind			$(\uparrow)$	30	0	0	0	0	0
Stack			$\bigcirc$	Highest sin 6-minute av	gle average	e of the five		0	
with O	10	SSI		Average O	pacity of th	ne five	C	)	
		Observation Point		Number of	Readings A	bove: 7	%	Nere O	
		tms Clp		Range of C	Dpacity Rea	adings:	•0		-
				Minimum:	0	% M	aximum:	0 %	
				Observer's	Name: (pr	rint)			
	140	Observer's Position			Alis	a Hatmaker			
				Observer's	Signature	: ;	Date	):	
				ali	on Hat	meker		1/2/2	2
2	Sun Loc	ation Line	~	Organizati	on: Blue W	/ater Industr	ies	11	
Comments:				1	Enviro	nmental Aff	airs Depart	ment	
BW/I Greenback O	uara, Mobile Plant			Certified B	y:		Date	):	
Swi Greenback QU	budda			Singleton S	Smoke Scho	ool	1	0/11/2022	
SUN	naan			Kodak TN					

Source Neme	BW/LETN LLC dba Blu	e Water Industrias	Blue water	Observation	on Date:	Start Time	et eta	n Time:	
Source Name:	Greenback Quarry	ie vvatel muustries		Observatio	n Date:	Start TIME	5.0	h inne.	
Address:	2107 Big Hill Road			11/2/2	22	10:50A	m 11:	20 AM	
City:	County:	State:	Zip:	Min/Sec	0	15	30	45	Comments
Lenoir City	Loudon	TN	37772	1	0	0	0	0	
Phone:	865-986-5322	Facility ID No:	53-0074-03	2	0	0	0	Q	
Process Equipme	ent:	Operating Mode:		3	0	0	0	0	
AMTS FT3620 Scr	reen	90-95	-70	4	0	0	0	0	
Control Equipment	nt:	Operating Mode:		5	0	2	0	0	1st 6-Minute Ava.
Wet Suppression		100 %		6	6	0	0	0	0
Describe Emissio	on Point:	0 10	Emission Pt. ID	7	0	0	0	0	
AMS S1 feed onto	Conveyor AMS C7		16	8	0	0	0	0	
Height Above Gro	ound Level:	Height Relative to	Observer:	9	0	2	0	0	
Start: 12 /	End: 121	Start: 12'	End: 12 /	10	0	0	0	0	
Distance from Ob	oserver:	Direction from Ob	server:	11	0	6	0	0	2nd 6-Minute Ava
Start: 501	End: 501	Start: 5	End: 5	12	8	0	6	G	
Describe Emissio	ons:			13	0	0	0		0
ALANA		End Alour	2 .	14	0	0	6	0	
Emission Color:		Plume Type: Conti	nuous [ ]	15	0	2	0	0	
Plank	Diar			10	0	0	0	0	
Start: Water Droplets P	End: CUCC	Fugitive [X] Inter	rmittent [ ]	10	0	0	0	0	
Mater Droplets 1	lesent.	in Water Bropiet i		17	0	0	0		3rd 6-Minute Avg.
NO[X]	Yes []	Attached [ ]	Detached [ ]	18	0	0	0	0	0
	e at which opacity was	s Determineu.		19	0	0	0	0	
Start: NA		End: NA		20	0	0	0	0	
Describe Backgro	ouna:	C	1	21	0	0	0	0	
Start: Egup	ment	End: egup	ment	22	0	0	0	0	
Background Cold	br:	Party Clow	41	23	0	0	0	0	4th 6-Minute Avg.
Start: Black 10	in End: Black Tan	Start: OVE CAS	End: OVC VCaS	24	0	0	G	0	0
Wind Speed:	0 1	Wind Direction:	. 1. 4	25	0	0	0	0	
Start: Calm	End: Calm	Start: NA	End: NA	26	0	0	0	0	
Ambient Temp:		Wet Bulb Temp:	RH, percent	27	0	0	0	0	
Start: 54°	End: 55°	NA	NA	28	0	0	0	0	
Sun – 🔶 –	Source Layout Sketch:		North Arrow	29	0	0	0	0	5th 6-Minute Avg.
Wind —>				30	0	0	0	0	0
				Highest sin	igle averag	e of the five		0	
Stack				6-minute a	verages:	he five		U	
Plume				6-minute a	verages:			0	
	×	Observation Point		Number of	Readings /	Above: 7	%	Were 🔿	
	ANDCO			Range of (	Opacity Re	adings:			
				Minimum:	0	% M	aximum:	0 %	
				Observer's	s Name: (p	rint)			
	140*	Observer's Positior	1		Alis	a Hatmaker			
				Observer's	s Signature	ə:	Dat	te:	
				alisa	Ham	aker		1/2/2	2
	Sun Loc	cation Line		Organizati	ion: Blue V	Vater Indust	ries	11	
Comments:				1	Envir	onmental Af	fairs Depa	rtment	
BWI Groophook O	uarny - Mohile Plant			Certified E	By:		Dat	te:	
Sur Greenback G				Singleton S	Smoke Sch	ool		10/11/2022	
oun	nacien			Kodak, TN					
							- C.		



### **APPENDIX C**

#### Visible Emissions Evaluations Certification & Card

#### VISIBLE EMISSIONS CERTIFICATION

The Visible Emission Evaluations were completed by Alisa Hatmaker of the BWI - Environmental Affairs Department on November 2, 2022.

A copy of the Visible Emissions training certification card from the Singleton Smoke School course on October 11, 2022, located at Kodak, Tennessee is attached.

Alisa Hatmaker\_\_\_\_

		SINGLETON SMOKE SCHOO OF NASHVILLE, TN	)L	
h.		THIS CERTIFICATE IS TO ACKNOWLE	DGE THAT	4
		Alisa Hatmal	ker	
h		SUCCESSFULLY PARTICIPATED IN VISIBL TRAINING ON THE DATE BELOW, AND IS EVALUATE VISIBLE EMISSIONS FOR A F MONTHS FROM THE DATE OF CERTIN	E EMISSIONS QUALIFIED TO PERIOD OF 6 FICATION.	
	10/11/22	Kodak, TN	BISD Bradley Singleton	
	DATE	LOCATION	INSTRUCTOR	Ļ
		SERVICES@SINGLETONSMOKE.COM	615-572-2075	



STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION 9th Floor - L&C Annex 401 Church Street Nashville, Tennessee 37243-1531

January 16, 2008

Mr. L. Duff Boyd, Principal Riverbend Construction Materials Rutledge Quarry 605 Cherokee Explosives Drive Rutledge, TN 37861

Reference Number: 29-0039-01-S4

Dear Mr. Boyd:

This letter will acknowledge receipt of the eight one hour visible emissions evaluations submitted on the additional rock crushing equipment identified in construction permit #960817P. This letter will also acknowledge receipt of the five additional one hour visible emission evaluations submitted for the primary crusher, conveyors 1 and 2, feeder 1 and feeder belt 1 that was identified in construction permit #957049P. This equipment was not installed during the initial compliance demonstration. The evaluations were conducted on December 19, 2008.

Each of the visible emissions evaluations have been verified and have been found to be acceptable by the Division. The review of these visible emission evaluations determined that each of the thirteen emission points subject to the New Source Performance Standards for New Stationary Sources was achieving compliance with the applicable visible emission standard during the time period of the evaluations. This data will be forwarded to the Permitting Program for operating permit issuance.

If you have any questions concerning this matter, please contact Mr. Alvin E. Pratt at (615) 532-0554.

Sincerely,

Alvin E. Pratt Compliance Validation Program Division of Tennessee Air Pollution Control



cc: Knoxville EAC



CIVIL, MINING, & ENVIRONMENTAL ENGINEERING & LAND SURVEYING

December 20, 2007

Mr. Duff Boyd Riverbend Construction Materials, L.L.C. 600 Cherokee Explosives Drive Rutledge, TN 37861

Subject: Visible Emissions Test Report Riverbend Construction Materials Rutledge, Grainger County, TN

Dear Mr. Boyd:

Enclosed please find a copy of the Visible Emissions Report for your files. As we discussed, also included are the test results for the equipment added in 2005. If you have any questions or comments, please contact me at (770) 225-2121.

Sincerely,

Roger Franklin Project Manager

Enclosure

Submit separate summary sheet for each pollutant test report

Submit to:	Dewitt Logdon/Alvin Pratt			
	Tennessee Dept. of Environmental Control	Repo	ort Trackin	g Log
	Air Pollution Control Div.	Air Prot	ection Bra	nch Only
	401 Church Street, 9th Floor	<u>No.</u>		
	L & C Annex	Date:	Initial	
	Nashville, TN 37243			Report received by APB
Facility Nar	ne: <u>Riverbend Construction Material</u> s			Response Letter Sent SMP
and Locatio	n Rutledge, Grainger County, TN			Calculation Review Complete
				Report Review
Facility Cor	ntact: Duff Boyd			Complete
5				SSCP Associate
	(865) 828-8005			Notified
Emission P	oint (only one) Feeder FD1		-	
Pollutant (c	only one) <u>Dust</u> Date Test Performed:	12/19/2007	_	
Applicable	Rule (s), Regulation (s) or Permit Condition (s)	):		
(Indicate Po			957049P	
Maximum I	Expected Operating Capacity:		500	ТРН
Operating (	Capacity During Test:		450	TPH
Computed	Allowable Emission Rate(s) or Limitation(s):	-	10%	
(Determine	d for each applicable rule, regulation or permit	condition usi	ng same u	nits)
Reported E	mission to Atmosphere:		0.00%	
(In same u	nits as rule, regulation or permit conditions)			

## The test report should include a compilation of all CEMS data, control device

Emissions Test Field Data Included			
To Be Completed by Source Monitoring Program	Yes	No	N/A
Fuel analysis			2
Description of process			
Description of control device			
Control device operational parameters			
Properly documented process data			
Other:			
Assigned -SSCP			
Assigned - SMP			
		٢	

47) ×	SOURCE NAME RIVERBEND CONSTRUCTION MATERIALS ADDRESS					OBSERVATION DATE ST				TART TIME STOP TIME				
÷						12/19	/2007		4	:30 PN	Л	5:30 PM		
	ADDRESS				SEC	0	15	30	45	SEC	0	15	30	45
	605 CHEROKEE EXPLOSI	E ROAD	17	ID.				-		~ ~ ~	0	0	-	
()		STATE		07004		0	0	0	0	31	0	0	0	0
		SOURCE ID NU	IMBER	37861	2	0	0	0	0	32	0	0	0	0
	865/828-8005	FD1	SMBER	5 IL IN	3	0	0	0	0	33	0	0	0	0
	PROCESS EQUIPMENT	0	DPERAT	ING MODE	4	0	0	0	0	34	0	0	0	0
	FEEDER	c	CONTI	NUOUS	5	0	0	0	0	35	0	0	0	0
	CONTROL EQUIPMENT	0	OPERAT	ING MODE	6	0	0	0	0	36	0	0	0	0
	NONE					0		0	0	- 50	0		0	
	DESCRIBE EMISSION POINT				7	0	0	0	0	37	0	0	0	0
	FEEDER FD1 TO CRUSHE	R CR1			8	0	0	0	0	38	0	0	0	0
			5'	JOBSERVER	9	0	0	0	0	39	0	0	0	0
	DISTANCE FROM OBSERVER	DIRECTION FR		SERVER	10	0	0	0	0	40	0	0	0	0
	40'		ESE		11	0	0	0	0	41	0	0	0	0
	DESCRIBE EMISSIONS				10					10			-	
	ROCK DUST				12	0	0	0	0	42	0		0	0
	EMISSION COLOR	PLUME TYPE	CONT		13	0	0	0	0	43	0	0	0	0
	GREY		NTERM		14	0	0	0	0	44	0	0	0	0
8	WATER DROPLETS PRESENT	IF WATER DRC	OPLET	PLUME	15	0	0	0	0	45	0	0	0	0
			DETER		16	0	0	0	0	46	0	0	0	0
		IOFACITI WAS	DETER		10	0	0	0	0	40	0		0	0
1					17	0	0	0	0	47	0		0	- 0
1	SKY				18	0	0	0	0	48	0	0	0	0
( )	BACKGROUND COLOR	SKY CONDITIO	ONS		19	0	0	0	0	49	0	0	0	0
	LT. BLUE	PTL		ΣY	20	0	0	0	0	50	0	0	0	0
	WIND SPEED	WIND DIRECTI	ION		21	0	0	0	0	51	0	0	0	0
	0-5 MPH		SW		21									
	AMBIENT TEMP.	WET BULB TEN	MP.  R	H PERCENT	22	0	0	0	0	52	0	0	0	0
	52 DEGREES				23	0	0	0	0	53	0	0	0	0
	SOURCE LATOUT SKETCH	DRAWING			24	0	0	0	0	54	0	0	0	0
	EMISSION POINT	× G	$\square$	).	25	0	0	0	0	55	0	0	0	0
					26	0	0	0	0	56	0	0	0	0
			$\smile$		27	0	0	0	0	57	0	0	0	0
					28	0	0	0	0	58	0	0	0	0
					29	0	0	0	0	59	0	0	0	0
		OBSERVE	ER'S PO	DSITION	30	0	0	0	0	60	0	0	0	0
					AVERAG	SE OPACI	TY FOR H	IIGHEST	PERIOD	NUMBER	OF REA	DINGS A	BOVE	
	140 DI	EGREES					0.00%	)			10%	6 WEF	RE 0	
		&	<u>a</u>	>	RANG	E OF O	PACITY	' READ	INGS					
	SUN LOO	CATION				0%	MINIM	1UM			0%	MAXI	MUM	
					OBSE	RVERS	NAME							
	COMMENTS			ROG		RANKL								
	COMMENTS				UBSE	RVERS	SIGNA	TURE			JATE	14/2	.7	
2	<b>9</b>			ORGA	NIZATI	ON				14	( ] / "	/		
$\bigcirc$					HIGH		ENG	NFFF		INC				
	I HAVE RECEIVED A COPY OF T	HESE OPACITY	OBSEI	RVATION	CERTI	FIED B	Y				DATE			
	SIGNATURE													
	TITLE	D	DATE		VERIF	IED BY					DATE			
	120													

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. /	TEST REPORT	FRANSMISSI	ON SUMI	MARY	
/	Submit separate summ	nary sheet for eac	h pollutant te	st report	
$\bigcirc$	Submit to: Dewitt Logdon /Alvin Pro Tennessee Dept. of Enviro Air Pollution Control Div. 401 Church Street, 9th Flor	a. ↓ nmental Control or	Re <u>Air Pr</u> No.	eport Track otection Br	ing Log ranch Only
	Nashville, TN 37243		Date:		Report received
	Facility Name: Riverbend Constru	ction Materials			by APB Response Letter Sent SMP
	and Location Rutledge, Grainger	County, TN			Calculation Review Complete
	Facility Contact: Duff Boyd				Report Review Complete
	(865) 828-8005				Notified
	Emission Point (only one) Crusher (	CR1			
	Pollutant (only one) Dust Dat	e Test Performed	: 12/19/200	07	
	Applicable Rule (s), Regulation (s) or P (Indicate Permit # and Condition #s)	ermit Condition (s	s):		
				957049F	<b>)</b>
6	Maximum Expected Operating Capacit	y:		5	00 TPH
$\bigcirc$	Operating Capacity During Test:			4	50 TPH
	Computed Allowable Emission Rate(s) (Determined for each applicable rule, re	or Limitation(s): egulation or permi	it condition us	15 sing same	5% units)
	Reported Emission to Atmosphere: _ (In same units as rule, regulation or pe	rmit conditions)		0.00	)%

### The test report should include a compilation of all CEMS data, control device

Emissions Test Field Data Included			
To Be Completed by Source Monitoring Program	Yes	No	N/A
Fuel analysis			2
Description of process			
Description of control device			
Control device operational parameters			
Properly documented process data			
Other:			
1			
Assigned -SSCP			
Assigned - SMP			
		r	

IJIDLL	LINISSICIA	ODOLIN		
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1		VISIDEE	. LIVII.						OTADT			OTOD	TIMAT		
4									START				STOP TIME		
	ADDRESS		MALS		SEC	0	15	30	45	SEC	0	15	30	45	
~	605 CHEROKEE EXPLOSI	/E ROAD			MIN					MIN					
()	CITY	STATE		ZIP	1	0	0	0	0	31	0	0	0	0	
	RUTLEDGE	TN		37861	2	0	0	0	0	32	0	0	0	0	
	PHONE		NUMBE	:R	3	0	0	0	0	33	0	0	0	0	
	PROCESS EQUIPMENT		OPER	ATING MODE	4	0	0	0	0	34	0	0	0	0	
	CRUSHER		CON	TINUOUS	5	0	0	0	0	35	0	0	0	0	
	CONTROL EQUIPMENT		OPER	ATING MODE	6	0	0	0		26	0	0	0	0	
	NONE				0	0	0	0	0	30	0	0	0	0	
	DESCRIBE EMISSION POINT				7	0	0	0	0	37	0	0	0	0	
	CRUSHER CR1 TO CONVE	YOR C2			8	0	0	0	0	38	0	0	0	0	
			ATIVE	IO OBSERVER	9	0	0	0	0	39	0	0	0	0	
	O DISTANCE FROM OBSERVER	DIRECTION F	FROM	OBSERVER	10	0	0	0	0	40	0	0	0	0	
	50'		ESE		11	0	0	0	0	41	0	0	0	0	
	DESCRIBE EMISSIONS				12	0	0	0	0	12	0	0	0	0	
	ROCK DUST							0		72					
			E CON		13	0	0	0	0	43	0	0	0	0	
	GREY				14	0	0	0	0	44	0	0	0	0	
					15	0	0	0	0	45	0	0	0	0	
	POINT IN THE PLUME AT WHICH	OPACITY WA	AS DET	ERMINED	16	0	0	0	0	46	0	0	0	0	
	TRANSFER				17	0	0	0	0	47	0	0	0	0	
	DESCRIBE BACKGROUND				18	0	0	0	0	48	0	0	0	0	
()	SKY					0	0	0	0	40	0	0	0	0	
(_)	BACKGROUND COLOR	SKY CONDIT	TIONS		19	0	0	0	0	49	0	0	0	0	
			TLY C	LDY	20	0	0	0	0	50	0	0	0	0	
			SW		21	0	0	0	0	51	0	0	0	0	
	AMBIENT TEMP.	WET BULB T	EMP.	RH PERCENT	22	0	0	0	0	52	0	0	0	0	
	52 DEGREES				23	0	0	0	0	53	0	0	0	0	
	SOURCE LAYOUT SKETCH	DRAW	NORTH	ARROW	24	0	0	0	0	54	0	0	0	0	
		v	$\bigcap$	2	25	0	0	0	0	55	0	0	0	0	
	EMISSION FOINT	Î	(	)	26	0	0	0	0	56	0	0	0	0	
			$\subseteq$		20	0	0	0	0	57	0	0	0	0	
					21	0	0	0	0	57	0	0	0	0	
					28	0	0	0	0	50	0		0		
		OBSER	VER'S	POSITION	29	0	0	0	0	59	0	0	0	0	
		-			30					60			BOVE	0	
	140 D						0.00%		FERIOD	NONDER	150				
	140 D		8	>	RANG	E OF O	PACITY	, ' READ	INGS		107				
	SUN LOO	CATION	Ŭ			0%	MININ	1UM			0%	MAXIN	MUM		
					OBSE	RVERS	NAME								
	COMMENTS .				ROG	ER FF	RANKL	IN							
					OBSE	RVERS	SIGNA	IURE			DATE	14/1-	7		
1 .					ORGA	NIZATI	ON ON				19	1101			
$\cup$		۰.													
	I HAVE RECEIVED A COPY OF T	HESE OPACI	TY OBS	ERVATION	DATE										
	SIGNATURE														
	TITLE		DATE		VERIF	IED BY					DATE				
		LE DATE													

1.01	1	TEST REPORT TRANSMISS	SION SU	JMMARY	
l		Submit separate summary sheet for ea	ch polluta	nt test report	
	Submit to: De Ter Air 40 <sup>7</sup> L 8 Na	witt Logdon / A ly iN Pratf nnessee Dept. of Environmental Control Pollution Control Div. 1 Church Street, 9th Floor 3 C Annex shville, TN 37243	<u>Air</u> <u>No.</u> Date:	Report Tracki Protection Bra	ng Log anch Only Report received
	Facility Name:	Riverbend Construction Materials			Response Letter
	and Location	Rutledge, Grainger County, TN			Calculation Review Complete
	Facility Contact	:: <u>Duff Boyd</u> (865) 828-8005			Report Review Complete SSCP Associate Notified
	Emission Point	(only one) Conveyor C2			
	Pollutant (only	one) <u>Dust</u> Date Test Performe	d: <u>12/19</u>	/2007	
	Applicable Rule (Indicate Permi	e (s), Regulation (s) or Permit Condition t # and Condition #s)	(s):	957049	P
				<u>507040</u>	
()	Maximum Expe	ected Operating Capacity:		500	
	Operating Capa	acity During Test:		450	) TPH
	Computed Allor (Determined fo	wable Emission Rate(s) or Limitation(s): r each applicable rule, regulation or perr	nit conditio	10% on using same	units)
	Reported Emis (In same units	sion to Atmosphere: as rule, regulation or permit conditions)		0.00%	0

# The test report should include a compilation of all CEMS data, control device

Emissions Test Field Data Included			
To Be Completed by Source Monitoring Program	Yes	NO	N/A
Fuel analysis			
Description of process			
Description of control device			
Control device operational parameters			
Properly documented process data			
Other:			
Assigned -SSCP			
Assigned - SMP			
· · · · · · · · · · · · · · · · · · ·		1	

ISOURCE NAME			OBSEI			C				LOTOR	TIMAC	
	JRCE NAME /ERBEND CONSTRUCTION MATERIALS									STOP TIME		
ADDRESS	5 CHEROKEE EXPLOSIVE ROAD						45	1:30 P	VI	45	5:30 P	N'
605 CHEROKEE EXPLOSI							40	MIN	0	15	30	
CITY	STATE	ZIP	1	0	0	0	0	31	0	0	0	
RUTLEDGE	TN	37861	2	0	0	0	0	32	0	0	0	1
PHONE	SOURCE ID NUI	MBER	3	0	0	0	0	33	0	0	0	1
865/828-8005	C2							00				-
			4	0		0	0	34	0	0	0	-
		PERATING MODE	5	0		0	0	35	0	0	0	+
NONE	00000		6	0	0	0	0	36	0	0	0	
DESCRIBE EMISSION POINT			7	0	0	0	0	37	0	0	0	
CONVEYOR C2 TO FEED	R FD2		8	0	0	0	0	38	0	0	0	
HEIGHT ABOVE GROUND LEVEL	HEIGHT RELATI		8 9	0	0	0	0	39	0	0	0	Ι
DISTANCE FROM OBSERVER	DIRECTION FRO	/ OM OBSERVER	10	0	0	0	0	40	0	0	0	1
70'	F	SE	11	0	0	0	0	40	0		0	┫
DESCRIBE EMISSIONS			10				~	40				$\dagger$
ROCK DUST				0	0	0	0	42	0		0	+
EMISSION COLOR			13	0	0	0	0	43	0	0	0	4
GKEY			14	0	0	0	0	44	0	0	0	4
			15	0	0	0	0	45	0	0	0	
POINT IN THE PLUME AT WHICH	OPACITY WAS I	DETERMINED	16	0	0	0	0	46	0	0	0	
TRANSFER			17	0	0	0	0	47	0	0	0	t
DESCRIBE BACKGROUND			18	0	0	0	0	48	0	0	0	t
SKY			10	0	0	0	0	40	0		0	ł
			19	0	0	0	0	49	0	0	0	╀
WIND SPEED	WIND DIRECTIC		20	0	0	0	0	50	0	0	0	╀
0-5 MPH		SW	21	0	0	0	0	51	0	0	0	ļ
AMBIENT TEMP.	WET BULB TEM	P. RH PERCENT	22	0	0	0	0	52	0	0	0	
52 DEGREES			23	0	0	0	0	53	0	0	0	
SOURCE LAYOUT SKETCH	DRAW NO	RTHARROW	24	0	0	0	0	54	0	0	0	
EMISSION POINT	×	A	25	0	0	0	0	55	0	0	0	Ī
		`)	26	0	0	0	0	56	0	0	0	Ť
			27	0	0	0	0	57	0	0	0	t
			28	0	0	0	0	58	0	0	0	t
	0005015		29	0	0	0	0	59	0	0	0	t
	OBSERVER	R'S POSITION	30	0	0	0	0	60	0	0	0	t
×			AVERAG	E OPACI	TY FOR H	IGHEST I	PERIOD	NUMBER	OF REA	DINGS A	BOVE	
140 DE	EGREES		DANCE		0.00%	DEADI			10%	6 WEF	RE 0	_
SUNLOC		~~~~	NANGE				1462		00/		AL 16.4	
SUN LOC			OBSEF	RVERS	NAME				0%	INAXII		-
			ROGE	ER FR	ANKL	IN						
COMMENTS .	OMMENTS				SIGNAT	TURE			DATE	11	1	
	1	1/1	uh.			3	12	1191	T	_		
	ORGAN		N									
	HIGHLAND ENGINEERING, INC.					NC.	DATE			_		
I HAVE RECEIVED A COPY OF T	HESE OPACITY C	DBSERVATION	DN CERTIFIED BY DATE									
I HAVE RECEIVED A COPY OF T	HESE OPACITY C	DBSERVATION	CERTIF						Ditte			

Submit separate summary sheet for each pollutant test report

Submit to:	Dewitt	Logdon/Alvin Pratt			
	Tenne	ssee Dept. of Environmental Control	Rep	ort Trackir	ng Log
	Air Po	llution Control Div.	Air Prot	ection Bra	anch Only
	401 Cl	hurch Street, 9th Floor	<u>No.</u>		
	L & C .	Annex	Date:	Initial	
	Nashv	ille, TN 37243			Report received by APB
Facility Nar	ne:	Riverbend Construction Materials			Response Letter Sent SMP
and Locatio	on	Rutledge, Grainger County, TN			Calculation Review Complete
					Report Review
Facility Cor	ntact:	Duff Boyd	-		Complete
		(225) 222 2225			SSCP Associate
		(865) 828-8005			Notified
Emission P	oint (on	ly one) Conveyor C1		-	
Pollutant (o	nly one	) Dust Date Test Performed:	12/19/2007	-	
Applicable I	Rule (s)	, Regulation (s) or Permit Condition (s)	):		
(indicate Pe	2000 # 2			957049P	
Maximum E	Expected	d Operating Capacity:		250	) TPH
Operating C	Capacity	/ During Test:		225	5 ТРН
Computed /	Allowab	le Emission Rate(s) or Limitation(s):		10%	, ,
(Determine)	d for ea	ch applicable rule, regulation or permit	condition usi	ng same ι	inits)
Reported E	mission	to Atmosphere:		0.00%	
(In same ur	nits as ri	ule, regulation or permit conditions)			

## The test report should include a compilation of all CEMS data, control device

Emissions Test Field Data Included		1	
To Be Completed by Source Monitoring Program	Yes	No	N/A
Fuel analysis			
Description of process			
Description of control device			
Control device operational parameters		ά	
Properly documented process data			
Other:			
Assigned -SSCP			
Assigned - SMP			
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\*,<sup>13</sup>),

							~						
	SOURCE NAME			OBSE	RVATIO	N DATE		START	TIME		STOP TIME		
	RIVERBEND CONSTRUCT	ION MATERIA	ALS		12/19	/2007		4	:30 PN	Л	5	:30 PI	M
	ADDRESS			SEC	0	15	30	45	SEC	0	15	30	45
$\bigcirc$	605 CHEROKEE EXPLOSI\ CITY	/E ROAD	ZIP	1	0	0	0	0	31	0	0	0	0
3	RUTLEDGE	ти	37861	2	0	0	0	0	32	0	0	0	0
	PHONE	SOURCE ID NU	JMBER	2	0	0	0	0	22	0	0	0	0
	865/828-8005	C1		<u> </u>	- 0		0		- 33		0	0	0
	PROCESS EQUIPMENT	0	PERATING MODE	4	0	0	0	0	34	0	0	0	0
	CONVEYOR	C	CONTINUOUS	5	0	0	0	0	35	0	0	0	0
	CONTROL EQUIPMENT	0	PERATING MODE	6	0	0	0	0	36	0	0	0	0
	NONE			7	0	0	0	0	27	0	0	0	0
				/	0	0	0	0	37	0	0	0	
	FEEDER BELT FB1 TO CC	DNVEYOR C1		8	0	0	0	0	38	0	0	0	0
				9	0	0	0	0	39	0	0	0	0
	DISTANCE FROM OBSERVER	DIRECTION FR	COM OBSERVER	10	0	0	0	0	40	0	0	0	0
	40'		ESE	11	0	0	0	0	41	0	0	0	0
				12	0	0	0	0	42	0	0	0	0
~	EMISSION COLOR	PLUME TYPE		13	0	0	0	0	43	0	0	0	0
	GREY			14	0	0	0	0	44	0	0	0	0
	WATER DROPLETS PRESENT	IF WATER DRO	OPLET PLUME	15	0	0	0	0	45	0	0	0	0
	NO 🖾 YES 🗆					0	0	0	40	0		0	
	POINT IN THE PLUME AT WHICH	OPACITY WAS	DETERMINED	16	0	0	0	0	46	0	0	0	
	TRANSFER			17	0	0	0	0	47	0	0	0	0
7.5				18	0	0	0	0	48	0	0	0	0
( )	EQUIPIVIEN I BACKGROUND COLOR	ISKY CONDITIC	ONS	19	0	0	0	0	49	0	0	0	0
		DTI		20	0	0	0	0	50	0	0	0	0
	WIND SPEED	WIND DIRECTI	ION	20				-		-			
	0-5 MPH		SW	21	0	0	0	0	51	0	0	0	0
	AMBIENT TEMP.	WET BULB TE	MP. RH PERCENT	22	0	0	0	0	52	0	0	0	0
	52 DEGREES			23	0	0	0	0	53	0	0	0	0
	SOURCE LAYOUT SKETCH	DRAW N	ORTH ARROW	24	0	0	0	0	54	0	0	0	0
		× /	$\frown$	25	0	0	0	0	55	0	0	0	0
	EMISSIONTOINT	(*	<b>(</b> )	26	0	0	0	0	56	0		0	0
				20	0			0	57	0			0
				21	0			0	57	0			
				28	0				50	0			
		OBSERVE	ER'S POSITION	29	0	0	0	0	59	0	0	0	0
	· ·			30	0		0		60				0
				AVERA	JE OPAC		, ,	PERIOD	NUMBER	4 OF REA			
	140 D	EGREES		RANG	E OF O	PACITY	0 7 READ	INGS		107		NE U	
	SUNLO				0%	MININ	ЛИМ			0%	ΜΑΧΙΙ	мим	
	SUN LOCATION			OBSE	RVERS	NAME				070			
			ROG	ER FF	RANKL	.IN							
	COMMENTS			OBSĘ	RVERS	SIGNA	TURE			DATE	1	1	
/	Tested same point as conve	eyor F <sub>6</sub> B1.		U,	1 lu	h'				12/	1910	7	
$\bigcirc$		<u>қ</u>		ORGA	NIZATI	ON							
				HIGHLAND ENGINEERING, INC.									
	I HAVE RECEIVED A COPY OF T	HESE OPACITY	ODJERVATION										
	SIGNATURE TITLE		DATE	VERIF	IED BY	,				DATE			
	demotive and the second s												

The		IESI REPORT TRANSMISSI	ION SUM	VIARY							
1		Submit separate summary sheet for eac	h pollutant te	st report							
(	Submit to: Dev Ten Air 401 L &	witt Logdon Alvin Pratt Inessee Dept. of Environmental Control Pollution Control Div. Church Street, 9th Floor C Annex	Report Tracking Log <u>Air Protection Branch Only</u> <u>No.</u> Date: Initial								
	Nas	Nashville, TN 37243			Report received by APB						
	Facility Name:	Riverbend Construction Materials			Response Letter Sent SMP						
	and Location	Rutledge, Grainger County, TN			Calculation Review Complete						
	Facility Contact:	Duff Boyd			Complete						
		(865) 828-8005			SSCP Associate Notified						
	Emission Point	(only one) Feeder Belt FB1									
	Pollutant (only c	one) <u>Dust</u> Date Test Performed	: 12/19/200	07							
	Applicable Rule	Applicable Rule (s), Regulation (s) or Permit Condition (s):									
	(		957049P								
	Maximum Expe	250 TPH									
	Operating Capa	225 TPH									
	Computed Allov (Determined for	Computed Allowable Emission Rate(s) or Limitation(s): 10% (Determined for each applicable rule, regulation or permit condition using same units)									
	Reported Emiss (In same units a	sion to Atmosphere:as rule, regulation or permit conditions)	0.00%								

## The test report should include a compilation of all CEMS data, control device

Emissions Test Field Data Included			
To Be Completed by Source Monitoring Program	Yes	No	N/A
Fuel analysis			
Description of process			
Description of control device			
Control device operational parameters			
Properly documented process data			
Other:			
Assigned -SSCP			
Assigned - SMP			
		۲	

OURCE NAME	OBSERVATION DATE STAF			START	TIME		STOP TIME						
RIVERBEND CONSTRUCTI	<u> </u>	12/19/2007 4			1:30 PM		5	:30 PN					
DDRESS				SEC	0	15	30	45		0	15	30	45
	/E ROAD		7IP	1	0	0	0	0	31	0	0	0	0
			27961	2	0	0	0	0	32	0	0	0	0
	SOURCE ID N	UMBE	R	2	0		-		02		-	-	
5/828-8005			3	0	0	0	0	33	0	0	0	0	
PROCESS EQUIPMENT		OPER	ATING MODE	4	0	0	0	0	34	0	0	0	0
EEDER BELT CONTINUOUS				5	0	0	0	0	35	0	0	0	0
OPERATING MOD			ATING MODE	6	0	0	0	0	36	0	0	0	0
NONE	0	0			-	00		0					
DESCRIBE EMISSION POINT	7	0	0	0	0	37	0	0					
FEEDER BELT FB1 TO CONVEYOR C1				8	0	0	0	0	38	0	0		
			ATIVE TO OBSERVER		0	0	0	0	39	0	0	0	0
5'	DIRECTION				0	0	0	0	40	0	0	0	0
				11	0	0	0	0	41	0	0	0	C
40' ESE					-		0		40				
ROCK DUST					0	0	0	0	42	0	0		
				13	0	0	0	0	43	0	0	0	
GREY	FUGITIVE	INTER		14	0	0	0	0	44	0	0	0	0
WATER DROPLETS PRESENT	IF WATER DE	ROPLE	T PLUME	15	0	0	0	0	45	0	0	0	
NO 🖾 YES 🗆	ATTACHED I		DETACHED	10	-	0	0	0	40	0			
POINT IN THE PLUME AT WHICH	I OPACITY WA	AS DET	FERMINED	16	0	0	0	0	40	0	0		+
TRANSFER				17	0	0	0	0	47	0	0	0	+
				18	0	0	0	0	48	0	0	0	0
EQUIPMENT BACKGROUND COLOR	ISKY CONDIT	IONS		19	0	0	0	0	49	0	0	0	
			אם וי	20	0	0	0	0	50	0	0	0	C
	WIND DIREC	TION		20					54	-		0	
0-5 MPH		SM	1	21	0	0	0	0	51	0			+
AMBIENT TEMP.	WET BULB T	EMP.	RH PERCENT	22	0	0	0	0	52	0	0	0	
52 DEGREES				23	0	0	0	0	53	0	0	0	
SOURCE LAYOUT SKETCH	DRAW	NORT	HARROW	24	0	0	0	0	54	0	0	0	1
		$\bigcap$	2	25	0	0	0	0	55	0	0	0	(
EMISSION POINT			-)	26	0	0	0	0	56	0	0	0	(
		$\sim$		20	0	0	0	0	57	0		0	$\overline{7}$
				21				0	50	0	0	0	
				20	0				50	0	0	0	+
				00	0	1 0		1 0					1
	OBSER	RVER'S	POSITION	29	0	0	0	0	00	0	0	0	
	OBSEF	RVER'S	POSITION	29 30					60			0 ABOVE	(
	OBSER	RVER'S	POSITION	29 30 AVERA	0 GE OPAC		0 0 HIGHEST	0 0 PERIOD	60 NUMBE	0 R OF RE	0 ADINGS	ABOVE	
140 E	OBSER	VER'S		29 30 <sup>AVERA</sup>	0 GE OPAC	0 0 0 0.00%	0 HIGHEST 6 Y READ	0 PERIOD	60 NUMBE	0 R OF RE 10	0 ADINGS / % WE	0 ABOVE RE 0	
140 E	OBSER	RVER'S		29 30 <sup>AVERA</sup>	0 GE OPAC	0 0 0.00% 0.00% 0PACIT	0 HIGHEST V REAL	0 0 PERIOD	60 NUMBE	0 R OF RE 10	0 adings/ % WE	ABOVE RE 0	
140 D SUN LO	OBSER			29 30 AVERA RANG	0 GE OPAC BE OF C 0%	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 HIGHEST V READ	0 0 PERIOD	60 NUMBE	0 R OF RE 10	0 ADINGS / WE MAXI	ABOVE	
140 E SUN LO	OBSER	₹VER'S		29 30 AVERA RANG OBSE ROG	0 GE OPAC BE OF C 0% RVERS	0 0.00% 0.00% 0PACIT 0 MINII 0 NAME RANK	I 0 HIGHEST 6 Y READ MUM LIN	0 0 PERIOD	60 NUMBE	0 R OF RE 10	0 ADINGS WE MAXI	ABOVE	
140 E SUN LO COMMENTS	OBSER	RVER'S		29 30 AVERA RANG OBSE ROG OBSE	0 GE OPAC BE OF C 0% RVERS BER FI	0 0 0 0 0 0 0 0 0 0 0 0 0 0	U O HIGHEST WUREAL	0 0 PERIOD	60 NUMBE	0 R OF RE 10 0%	0 ADINGS / WE MAXI	ABOVE RE 0	
140 E SUN LO COMMENTS Tested same point as conv	OBSER	RVER'S		29 30 AVERAN RANG OBSE ROG OBSE	0 GE OF C 0% RVERS GER FI RVERS	0 0.00% 0.00% 0PACIT MINII NAME BANK S SIGN/	0 HIGHEST 6 Y READ MUM LIN ATURE	0 PERIOD	60 NUMBE	0 R OF RE 10 0%	0 ADINGS / WE MAXI	ABOVE RE 0 MUM	
140 C SUN LO COMMENTS Tested same point as conv	OBSER	≪		29 30 AVERA RANG OBSE ROG OBSE OBSE	0 GE OF C 0% RVERS GER FI RVERS	0 0.009 0.009 0PACIT 0 MINII 0 MINII 0 MANE BANK 5 SIGN/	I O HIGHEST W REAL Y REAL Y REAL Y REAL Y RE	0 0 PERIOD DINGS	60 NUMBE	0 R OF RE 10 0%	0 (ADINGS) (WE (MAXI) (MAXI)	ABOVE RE 0 MUM	
140 E SUN LO COMMENTS Tested same point as conv	OBSER	₹VER'S		29 30 AVERA RANG OBSE OBSE OBSE	0 GE OF C 0% RVERS GER FI RVERS ANIZAT	0 0 0 0 0 0 0 0 0 0 0 0 0 0		0 PERIOD DINGS	60 NUMBE	0 R OF RE 10 0% DATE 12,	0 (ADINGS) % WE (MAXI	ABOVE RE 0	
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