

From: [Air.Pollution Control](#)
To: [APC Permitting](#)
Subject: FW: Lawrenceburg Quarry Air Permit Renewal (50-0035-01)
Date: Wednesday, February 24, 2021 2:02:23 PM
Attachments: [Lawrenceburg Quarry Air Permit Renewal 2-24-21.pdf](#)

From: Erik Knowles <erik.knowles@rogersgroupinc.com>
Sent: Wednesday, February 24, 2021 13:25
To: Air.Pollution Control <Air.Pollution.Control@tn.gov>
Cc: Van Medlock <van.medlock@rogersgroupinc.com>
Subject: [EXTERNAL] Lawrenceburg Quarry Air Permit Renewal (50-0035-01)

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

Please find attached RGI's renewal request for our Lawrenceburg Quarry crushing plant. If you need any additional information or have any questions feel free to contact me at one of the numbers below.

Thanks,

Erik Knowles, P.E.
Environmental Manager

ROGERS GROUP INC.

421 Great Circle Road
Nashville, Tennessee 37228
Phone: (615) 780-5719
Cell: (615) 418-9474
Fax: (615) 564-5719
rogersgroupinc.com



February 24, 2020

Ms. Michelle Walker Owenby, Director
TDEC – Tennessee Division of APC
William R. Snodgrass Tennessee Tower 15th Floor
312 Rosa L. Parks Avenue
Nashville, TN 37243

**RE: Rogers Group, Inc. – Lawrenceburg Quarry
Facility ID 50-0035-01, Permit # 064407P
Renewal Request**

Dear Ms. Owenby:

Please find enclosed a copy of Rogers Group, Inc.'s renewal application for the above referenced facility. Included are forms APC100, APC109, emission calculations, and a flow diagram. No changes are being requested as a part of this renewal and RGI would request renewal based on what is currently approved.

If you have any questions or need additional information, please do not hesitate to contact me at (615) 780-5719.

Sincerely,

A handwritten signature in black ink, appearing to read 'Erik Knowles', is written over a light blue horizontal line.

Erik Knowles
Environmental Manager
Rogers Group, Inc.



DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF AIR POLLUTION CONTROL
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor, Nashville, TN 37243
Telephone: (615) 532-0554, Email: Air.Pollution.Control@TN.gov

APC 100

NON-TITLE V PERMIT APPLICATION
FACILITY IDENTIFICATION

Type or print and submit. Attach appropriate source description forms.

SITE INFORMATION

1. Organization's legal name and SOS control number [as registered with the TN Secretary of State (SOS)]

Rogers Group, Inc. - Lawrenceburg Quarry

2. Site name (if different from legal name)

Lawrenceburg Quarry

3. Is a construction permit application fee being submitted? Yes ☐ No ☒

(see instructions for appropriate fee to submit)

4. Site address (St./Rd./Hwy.)

2690 Waynesboro Highway

County name

Lawrence

City

Lawrenceburg

Zip code

38464

5. NAICS or SIC code

1422

6. Site location

(in lat. /long.)

Latitude

35-16-25

Longitude

87-23-10

CONTACT INFORMATION (RESPONSIBLE PERSON)

7. Responsible person/Authorized contact

Erik Knowles

Phone number with area code

615-780-5719

Mailing address (St./Rd./Hwy.)

421 Great Circle Road

Fax number with area code

City

Nashville

State

TN

Zip code

37228

Email address

erik.knowles@rogersgroupinc.com

CONTACT INFORMATION (TECHNICAL)

8. Principal technical contact

Same as above

Phone number with area code

Mailing address (St./Rd./Hwy.)

Fax number with area code

City

State

Zip code

Email address

CONTACT INFORMATION (BILLING)

9. Billing contact

Van Medlock

Phone number with area code

615-780-5781

Mailing address (St./Rd./Hwy.)

421 Great Circle Road

Fax number with area code

City

Nashville

State

TN

Zip code

37228

Email address

van.medlock@rogersgroupinc.com

AIR CONTAMINANT SOURCE(S) INFORMATION

- 10. Description of air contaminant source(s) and Unique Source ID(s).** List, identify, and briefly describe process emission sources, fuel burning installations, and incinerators that are contained in this application and include a Unique Source ID for each source. The Unique Source ID is a name/number/letter, which uniquely identifies the air contaminant source(s), like Boiler #1, Paint Line #1, Engine #1, etc. (see instructions for more details)

Rock Crushing and Sizing Equipment with Wet Suppression Control

- 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 10	Days/Week 5	Weeks/Year 40	Days/Year 200
13. Percent annual throughput	Dec. – Feb. 10	March – May 30	June – August 30	Sept. – Nov. 30

TYPE OF PERMIT REQUESTED (check appropriate box)

14. Operating permit <input checked="" type="checkbox"/>	Date construction started Permit Renewal	Date completed	Date of ownership change (if applicable)
	Last permit number(s) 064407P		Emission Source Reference Number(s) 50-0035-01
Construction permit <input type="checkbox"/>	Last permit number(s)		Emission Source Reference Number(s)

If you chose Construction permit above, then choose either New Construction, Modification, or Location Transfer

New Construction <input type="checkbox"/>	Starting date	Completion date
Modification <input type="checkbox"/>	Date modification started or will start	Date completed or will complete
Location Transfer <input type="checkbox"/>	Transfer date	Address of last location

15. Describe changes that have been made to this equipment or operation(s) since the last construction or operating permit application:

2/17/14 Op-Flex - Added a portable screening unit (MPF1, MPSCR1, MPC1-MPC7).

9/29/15 Op-Flex - Added portable crushing and screening unit (PCR3, PSCR3, PC33-PC37)

8/18/16 Op-Flex - Added portable crusher (PJCR1) and conveyor (PC1A). This unit was used in an emergency situation and is no longer needed at this location.

10/4/19 Op-Flex - Added a portable conveyor (PC1A) to the crushing plant.

1/13/20 Op-Flex - Added portable conveyor (C1B) to the crushing plant.

16. Comments

SIGNATURE

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.

17. Signature (application must be signed before it will be processed)

Date



2/24/21

Signer's name (type or print)

Title

Phone number with area code

Erik Knowles

Environmental Manager

615-780-5719



DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF AIR POLLUTION CONTROL
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor, Nashville, TN 37243
Telephone: (615) 532-0554, Email: Air.Pollution.Control@TN.gov

APC 109

**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 Secretary of State (SOS)] Rogers Group, Inc. - Hickman County Quarry	2. Emission Source Reference Number 41-0057-01
3. Is this air contaminant source subject to an NSPS or NESHAP rule? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If Yes, list rule citation, including Part, Subpart, and applicable Sections: 40 CFR part 60, subpart OOO	

EQUIPMENT INFORMATION

The applicant must submit an equipment list and flow diagram. The applicant may use the table below to list the equipment or attach a separate sheet of paper for the equipment list. The equipment list must include each crusher, screen, conveyor, bin, pugmill, feeder, agricultural lime, etc. The flow diagram must show each piece of equipment labeled with a reference number.

4. Equipment type (Note 1)	Flow diagram reference number (Note 2)	Size (Note 3)	Operating rate (Tons/Hr.)		Date of manufacture
			Design	Actual	
See Attached Emission Calculations					

EMISSION INFORMATION								
5. Air contaminants. Emission estimates for each air contaminant emitted from this point should be based on stack sampling results or engineering calculations. Calculations should be attached on a separate sheet. (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	CR1	0.74	0.74	0.74	3.00	3	061	90
Secondary crushing	CR2-CR3	0.87	0.87	0.87	3.5	3	061	90
Tertiary crushing								
Agricultural lime								
Open storage								
Enclosed storage								
Conveying & Transferring	*Em. Calc	2.05	2.05	2.05	43.99	3	061	90
Loading out								
Traffic dust								
Other (specify) Screen	SCR1, SCR2, MPSCR1	2.35	2.35	2.35	40.71	3	061	90
Other (specify)								
Totals		6.72	6.72	6.01	91.19			

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.

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.).
Wet suppression will be applied to the processing plant at key points to maximize efficiency and water carryover to the rest of the plant.

ROAD INFORMATION

7. Roads:	Paved (Miles of road)	Unpaved (Miles of road)	Watered (Miles & frequency)	Other control (specify)
Plant yard	0.0	0.5	As Needed	None
Access roads	0.0	2.5	As Needed	None

STOCKPILE INFORMATION

8. Stockpiles:	Estimated annual tons	Turnover rate (Tons/Month)	Wetted as piled	No. of sides enclosed	Other dust control	Loading method (e.g. loader, conveyor) Load in Load out	
Coarse: Over 1"	75,000	6,250	No	None		Conveyor	Loader
Fine: 1" to 1/4"	170,000	14,160	No	None		Conveyor	Loader
1/4" and less	195,000	16,250	No	None		Conveyor	Loader
MFG. Sand	50,000	4,160	No	None		Conveyor	Loader
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



2/24/21

Signer's name (type or print)

Title

Phone number with area code

Erik Knowles

Environmental Manger

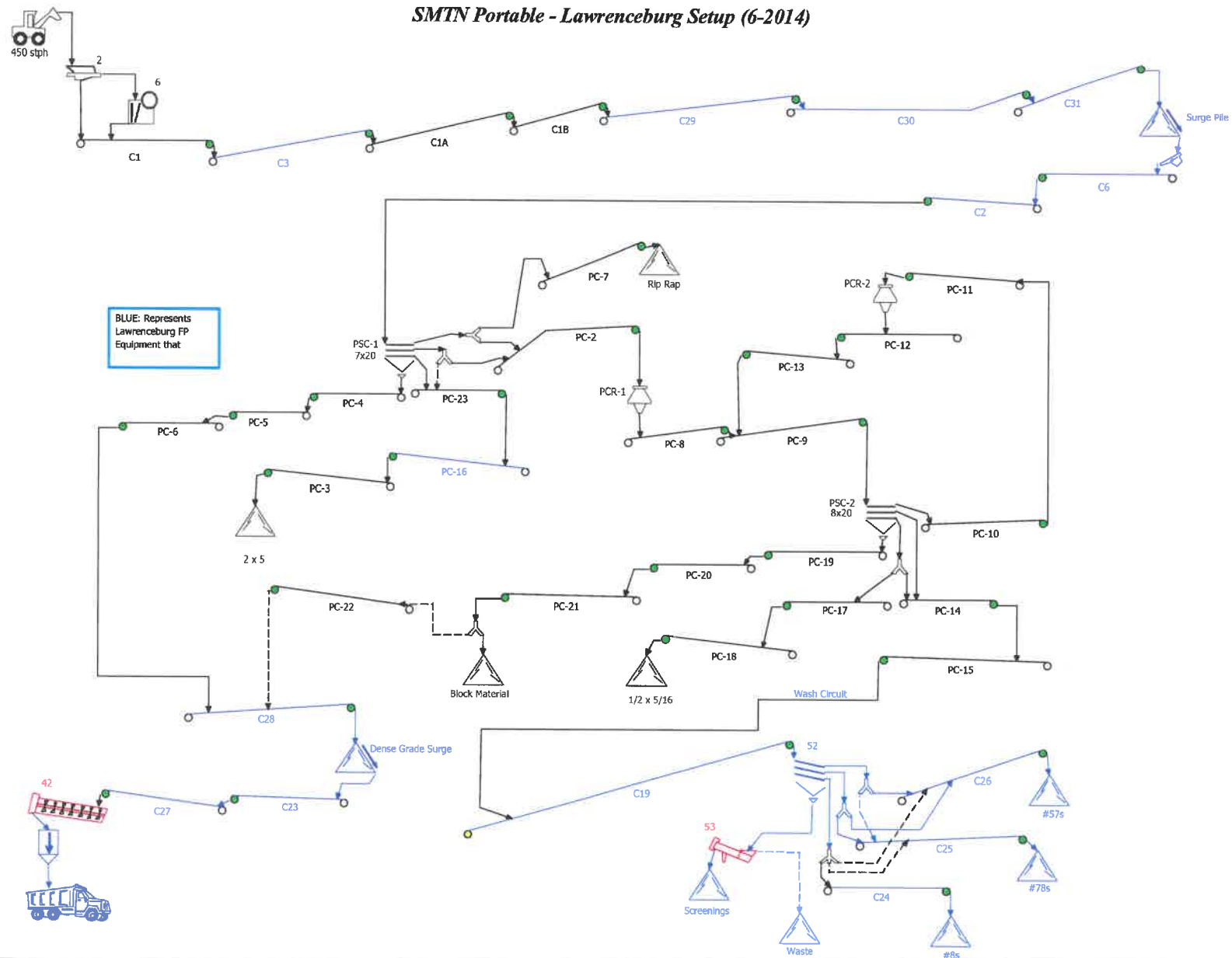
615-780-5719

EMISSIONS CALCULATIONS

Rogers Group, Inc. - Lawrenceburg Quarry										Emission Calculations									
Affected Facility	I.D. No.	RGI ID No.	DOM	NSPS	Qty.	Hours	Tons/Hr.	Tons/Yr.	Uncontrolled Emissions (lb/hr)		Uncontrolled Emissions (TPY)		Wet Suppression Control Efficiency		Controlled Emissions (TPY)		Comments		
									PM	PM-10	PM	PM-10	PM	PM-10	PM	PM-10			
PRIMARY CIRCUIT																			
Simlicity Feeder	2			NO	1	2,000	750	1,500,000											
Primary Jaw Crusher	6	CR1	2009	YES	1	2,000	600	1,200,000	3.00	1.44	3.00	1.44	90%	90%	0.74	0.324			
42" Conveyor	C1	C1	2009	YES	1	2,000	750	1,500,000	2.25	0.83	2.25	0.83	90%	90%	0.11	0.035			
36" Conveyor	C1A	C1A	2019	YES	1	2,000	750	1,500,000	2.25	0.83	2.25	0.83	90%	90%	0.11	0.035	Added In 10/4/19 Op Flex		
36" Conveyor	C1B	C1B	2019	YES	1	2,000	750	1,500,000	2.25	0.83	2.25	0.83	90%	90%	0.11	0.035	Added In 11/3/20 Op Flex		
36" Conveyor	C3	C101	2009	YES	1	2,000	750	1,500,000	2.25	0.83	2.25	0.83	90%	90%	0.11	0.035			
36" Conveyor	C29	C102	2009	YES	1	2,000	750	1,500,000	2.25	0.83	2.25	0.83	90%	90%	0.11	0.035			
36" Conveyor	C30	C103	2009	YES	1	2,000	750	1,500,000	2.25	0.83	2.25	0.83	90%	90%	0.11	0.035			
36" Conveyor	C31	C104	2009	YES	1	2,000	750	1,500,000	2.25	0.83	2.25	0.83	90%	90%	0.11	0.035			
36" Conveyor	C6	C105	2009	YES	1	2,000	750	1,500,000	2.25	0.83	2.25	0.83	90%	90%	0.11	0.035			
36" Conveyor	C2	C106	2009	YES	1	2,000	750	1,500,000	2.25	0.83	2.25	0.83	90%	90%	0.11	0.035			
New Portable Plant																			
7' X 20" Scalp Screen	PSC-1	SCR1	2009	YES	1	2,000	750	1,500,000	18.75	6.53	18.75	6.53	90%	90%	1.65	0.555			
Sandvik, 6800 - Cone Crusher	PCR-1	CR2	2007	YES	1	2,000	400	800,000	2.00	0.96	2.00	0.96	90%	90%	0.50	0.216			
42" Conveyor	PC-2	C11	2009	YES	1	2,000	400	800,000	1.20	0.44	1.20	0.44	90%	90%	0.06	0.018			
30" Conveyor	PC-23	C6	2009	YES	1	2,000	200	400,000	0.60	0.22	0.60	0.22	90%	90%	0.03	0.009			
30" Conveyor	PC-3	C7	2009	YES	1	2,000	200	400,000	0.60	0.22	0.60	0.22	90%	90%	0.03	0.009			
60" Conveyor	PC-4	C3	2009	YES	1	2,000	200	400,000	0.60	0.22	0.60	0.22	90%	90%	0.03	0.009			
30" Conveyor	PC-5	C4	2009	YES	1	2,000	200	400,000	0.60	0.22	0.60	0.22	90%	90%	0.03	0.009			
36" Conveyor	PC-6	C5	2009	YES	1	2,000	200	400,000	0.60	0.22	0.60	0.22	90%	90%	0.03	0.009			
36" Conveyor	PC-7	C8	2009	YES	1	2,000	200	400,000	0.60	0.22	0.60	0.22	90%	90%	0.03	0.009			
8' X 20" TD Screen	PSC-2	SCR2	2009	YES	1	2,000	600	1,200,000	9.45	4.50	20.08	9.56	90%	90%	0.53	0.252			
48" Conveyor	PC-8	C12	2009	YES	1	2,000	600	1,200,000	1.80	0.66	1.80	0.66	90%	90%	0.08	0.028			
48" Conveyor	PC-9	C13	2009	YES	1	2,000	600	1,200,000	1.80	0.66	1.80	0.66	90%	90%	0.08	0.028			
36" Conveyor	PC-10	C20	2008	YES	1	2,000	300	600,000	0.90	0.33	0.90	0.33	90%	90%	0.04	0.014			
42" Conveyor	PC-11	C21	2009	YES	1	2,000	300	600,000	0.90	0.33	0.90	0.33	90%	90%	0.04	0.014			
Sandvik, 6800 - Cone Crusher	PCR-2	CR3	2007	YES	1	2,000	300	600,000	1.50	0.72	1.50	0.72	90%	90%	0.37	0.162			
48" Conveyor	PC-12	C22	2009	YES	1	2,000	300	600,000	0.90	0.33	0.90	0.33	90%	90%	0.04	0.014			
36" Conveyor	PC-13	C23	2009	YES	1	2,000	300	600,000	0.90	0.33	0.90	0.33	90%	90%	0.04	0.014			
30" Conveyor	PC-14	C19	2009	YES	1	2,000	300	600,000	0.90	0.33	0.90	0.33	90%	90%	0.04	0.014			
36" Conveyor	PC-15	C26	2009	YES	1	2,000	300	600,000	0.90	0.33	0.90	0.33	90%	90%	0.04	0.014			
36" Conveyor	C109	C26	2009	YES	1	2,000	300	600,000	0.90	0.33	0.90	0.33	90%	90%	0.04	0.014			
30" Conveyor	PC-17	C18	2009	YES	1	2,000	200	400,000	0.60	0.22	0.60	0.22	90%	90%	0.03	0.009			
36" Conveyor	PC-18	C24	2009	YES	1	2,000	200	400,000	0.60	0.22	0.60	0.22	90%	90%	0.03	0.009			
60" Conveyor	PC-19	C14	2009	YES	1	2,000	200	400,000	0.60	0.22	0.60	0.22	90%	90%	0.03	0.009			
30" Conveyor	PC-20	C15	2009	YES	1	2,000	200	400,000	0.60	0.22	0.60	0.22	90%	90%	0.03	0.009			
36" Conveyor	PC-21	C16	2009	YES	1	2,000	200	400,000	0.60	0.22	0.60	0.22	90%	90%	0.03	0.009			
36" Conveyor	PC-22	C17	2009	YES	1	2,000	200	400,000	0.60	0.22	0.60	0.22	90%	90%	0.03	0.009			
Portable Screen	MPSCR1		2008	YES	1	500	300	150,000	7.50	2.61	1.88	0.65	90%	90%	0.03	0.009	Added In 2/17/14 Op Flex		
48" Conveyor	MPC1		2008	YES	1	500	300	150,000	0.90	0.33	0.23	0.08	90%	90%	0.04	0.014	Added In 2/17/14 Op Flex		
48" Conveyor	MPC2	PC1	2009	YES	1	500	300	150,000	0.90	0.33	0.23	0.08	90%	90%	0.04	0.014	Added In 2/17/14 Op Flex		
48" Conveyor	MPC3		2008	YES	1	250	300	75,000	0.90	0.33	0.11	0.04	90%	90%	0.04	0.014	Added In 2/17/14 Op Flex		
48" Conveyor	MPC4		2008	YES	1	250	250	62,500	0.75	0.28	0.09	0.03	90%	90%	0.04	0.012	Added In 2/17/14 Op Flex		
24" Conveyor	MPC5		2008	YES	1	250	250	62,500	0.75	0.28	0.09	0.03	90%	90%	0.04	0.012	Added In 2/17/14 Op Flex		
24" Conveyor	MPC6		2008	YES	1	250	250	62,500	0.75	0.28	0.09	0.03	90%	90%	0.04	0.012	Added In 2/17/14 Op Flex		
24" Conveyor	MPC7		2008	YES	1	250	250	62,500	0.75	0.28	0.09	0.03	90%	90%	0.04	0.012	Added In 2/17/14 Op Flex		
Existing Pugmill Circuit																			
24" Conveyor	C28	C107	2007	YES	1	2,000	200	400,000	0.60	0.22	0.60	0.22	90%	90%	0.03	0.009			
36" Conveyor	C23	PC1	2009	YES	1	2,000	500	1,000,000	1.50	0.55	1.50	0.55	90%	90%	0.07	0.023			
36" Conveyor	C27	PC2	2009	YES	1	2,000	500	1,000,000	1.50	0.55	1.50	0.55	90%	90%	0.07	0.023			
Pugmill	42	PM1	2005	YES	1	2,000	500	1,000,000											
Existing Wash Plant Circuit																			
30" Conveyor	C19	C113	1994	YES	1	2,000	300	600,000	0.90	0.33	0.90	0.33	90%	90%	0.04	0.014			
6' X 16" Washing Screen	52	SCR3	2000	NO	1	2,000	300	600,000											
Sand Screw	53	SS1	2010	NO	1	2,000	200	400,000											
24" Conveyor	C24	C110	2008	NO	1	2,000	200	400,000											
24" Conveyor	C25	C111	1994	NO	1	2,000	200	400,000											
24" Conveyor	C26	C112	1995	NO	1	2,000	200	400,000											
TOTALS										60.05	34.63	91.19	35.99		6.72	2.479	6.01	2.239	
NOTE:																			
Emission factors used in calculations are from AP-42 Table 11.19.2-2, 8/04																			

Emission factors used in calculations are from AP-42 Table 11.19.2-2, 8/04

SMTN Portable - Lawrenceburg Setup (6-2014)



Calculation results may differ due to variations in operating conditions and application of crushing and screening equipment. This information does not constitute an express or implied warranty, but shows results of calculations based on information provided by customers or equipment manufacturers. Use this information for estimating purposes only.

All calculations performed by AggFlow. <http://www.AggFlow.com>

Rogers Group Inc.

SMTN - Portable Plant - Lawrenceburg.agz

Erik Knowles

Plant Stage #1: Page #1

Project #: 86563 Revision #: 424938 Date: February/24/2021