#### **UPS NEXT DAY AIR**

Tracking Number: A377 343 7334

September 21, 2021

Tennessee Department of Environment and Conservation Division of Air Pollution William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 15th Floor Nashville, TN 37243

Subject:

Operating Permit 063205P Renewal

Emission Source 87-0023-01

O-N Minerals (Luttrell) Company d/b/a Carmeuse Lime & Stone

486 Clinch Valley Road Luttrell, Tennessee 37779

The O-N Minerals (Luttrell) Company d/b/a Carmeuse Lime & Stone is located at 486 Clinch Valley Road, Luttrell, Tennessee. Operations consist of both open pit and subsurface mining of limestone for the production of aggregate and various lime products. Limestone is transported from a surface pit and subsurface mine portal for further processing through crushing and screening operations.

The Site is operating under operating permit number 063205P (Permit) issued by the Tennessee Department of Environment and Conservation (TDEC) on February 1, 2012 with expiration of November 1, 2021. The Permit is related to fugitive emissions from crushing and screening operations as well as associated stockpiles and unpaved roadways. All other emission sources are covered by separate permits.

No major changes have occurred for this source since the last permit renewal. Carmeuse Lime & Stone wishes to renew the current operating permit.

Total Potential Annual Emissions and Average Annual Emissions of Particulate Matter (PM) for the crushing & screening operations, quarry stockpiles and unpaved roads are summarized in the tables below.

Table 1 – Potential Annual Emissions

Emission Type	PM (TPY)	PM <sub>10</sub> (TPY)	PM <sub>2.5</sub> (TPY)
Crushing & Screening Operations	39.82	21.04	14.33
Quarry Stockpiles	12.47	5.90	0.09
Unpaved Roads	16.02	4.56	4.56
Total	68.31	31.49	18.97

TDEC- DAP
O-N Minerals (Luttrell) Company d/b/a Carmeuse Lime & Stone
Operating Permit 065362P Renewal
Page 2
[DATE]

Enclosed with this letter are the following for renewal of the current Operating Permit 063205P:

- TDEC Form APC 100
- TDEC Form APC 101
- Emission calculations

If you have any questions, please do not hesitate to contact me at 205-601-7595 or Jackie.Padgett@carmeuse.com.

Sincerely,

Jackie Padgett

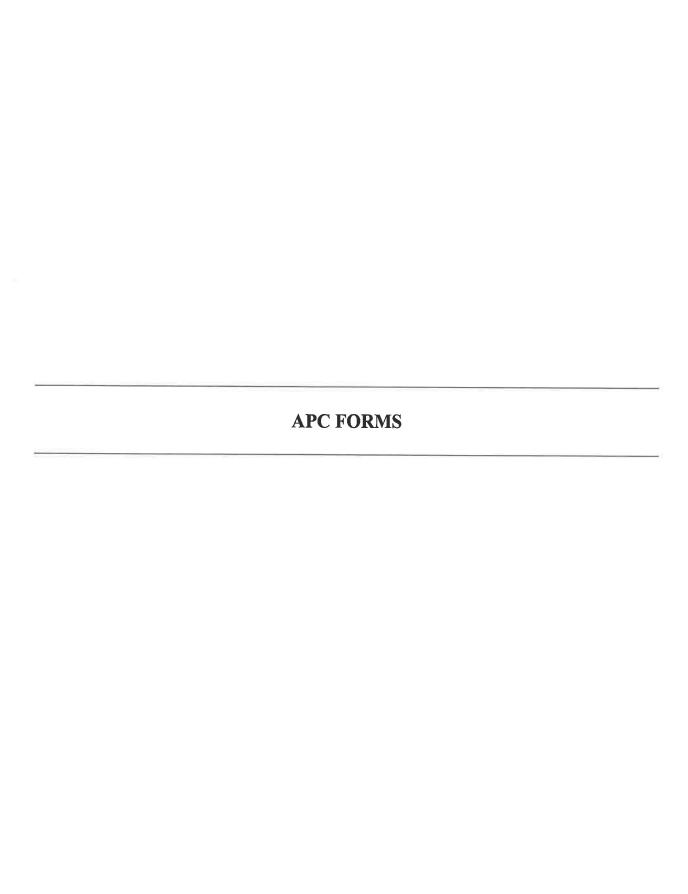
Senior Environmental Manager

Carmeuse Lime & Stone

Enclosure:

Attachment A – APC Forms

Attachment B – Calculations







# DEPARTMENT OF ENVIRONMENT AND CONSERVATION DIVISION OF AIR POLLUTION CONTROL

William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 15<sup>th</sup> Floor, Nashville, TN 37243

Telephone: (615) 532-0554, Email: Air.Pollution.Control@TN.gov

### NON-TITLE V PERMIT APPLICATION FACILITY IDENTIFICATION

Type or print an	d submit. Attacl	h appropriate s	ource description	n forms.
		NFORMATION		
<b>1. Organization's legal name and</b> : O-N Minerals (Luttrell) Company - dba	Carmeuse Lime	<b>mber</b> [as regist e & Stone	ered with the TN	Secretary of State (SOS)]
<b>2. Site name</b> (if different from legal Same				
<ol><li>Is a construction permit application (see instructions for appropriate frame).</li></ol>		submitted?	Yes No	
<b>4. Site address</b> (St./Rd./Hwy.) 486 Clinch Valley Road				County name Union
City Luttrell		ip code 7779		5. NAICS or SIC code 1422
6. Site location (in lat. /long.) Latitude 36 13' 12"			Longitude 83 43' 48"	
CONT	ACT INFORMATI	ION (RESPONS	IBLE PERSON)	
7. Responsible person/Authorized Ben Hopkins	contact		Phone numbe 865-230-8442	er with area code
<b>Mailing address</b> (St./Rd./Hwy.) 486 Clinch Valley Road			Fax number v N/A	vith area code
City Luttrell	State TN	Zip code 37779	Email address ben.hopkins@	s carmeuse.com
	ONTACT INFOR	MATION (TEC	HNICAL)	
8. Principal technical contact ackie Padgett			Phone numbe 205-601-7595	er with area code
Mailing address (St./Rd./Hwy.) P.O. Box 37			Fax number w N/A	vith area code
City Saginaw	State AL	Zip code 35137	Email address jackie.padgett@	e @carmeuse.com
	CONTACT INFO	RMATION (BIL	LING)	
9. Billing contact ackie Padgett			Phone numbe 205-601-7595	r with area code
<b>Mailing address</b> (St./Rd./Hwy.) P.O. Box 37			Fax number w N/A	rith area code
City aginaw	State AL	Zip code 35137	Email address jackie.padgett@	@carmeuse.com

Profession and the	THE P					FORMATION	
process emis and include uniquely ide instructions	ssior a Un ntifie for n	nir contaminant source in sources, fuel burning i nique Source ID for each es the air contaminant s more details) eening, and material har	installa source	ations, ai ce. The l c(s), like E	nd incinei Unique Sc Boiler #1,	rators that are containd ource ID is a name/num Paint Line #1, Engine #	ed in this application nber/letter, which 1, etc. (see
11. Is the air con addressed. \ [		inant source(s) in a no	natta	ainment	area? If	"Yes", then minor so	urce BACT must be
12. Normal operation:		Hours/Day 24	Days 7	:/Week		Weeks/Year 52	Days/Year 365
13. Percent annu throughput	al	Dec. – Feb. 25%	Marc 25%	h – May		June – August 25%	Sept. – Nov. 25%
		TYPE OF PERMIT	REQU	UESTED	(check a	ppropriate box)	
<b>14.</b> Operating permit	~	Date construction star			ompleted		change (if applicable)
		Last permit number(s) 063205P			87-0023		
Construction permit		Last permit number(s)				on Source Reference N	
lf you chose Const	ruct	ion permit above, then	choos	e either	New Con	struction, Modification	, or Location Transfer
New Construction					Completio		
<u>Mo</u> dification	Dat	e modification started o	or will:	start [	Date comp	oleted or will complete	
ocation Transfer	Trai	nsfer date		A	ddress o	f last location	

15. Describe changes that have been mor operating permit application:	nade to this equipment or op	peration(s) since the last construction
There has been replacement of a conveyor	and a sand screw, both of wh	ich TDEC was notified.
16. Comments		
	SIGNATURE	
Based upon information and belief formed mentioned facility, certify that the informat	after a reasonable inquiry, I, a	as the responsible person of the above
knowledge. As specified in TCA Section 39-1	6-702(a)(4), this declaration is	made under penalty of perjury.
17. Signature (application must be signed		Date
13/11/		9/20/21
Signer's name (type or print)	Title	Phone number with area code
Ben Hopkins	Site Operations Manager	865-230-4842





### DEPARTMENT OF ENVIRONMENT AND CONSERVATION DIVISION OF AIR POLLUTION CONTROL

William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 15<sup>th</sup> Floor, Nashville, TN 37243 Telephone: (615) 532-0554, Email: Air.Pollution.Control@TN.gov

# NON-TITLE V PERMIT APPLICATION EMISSION POINT DESCRIPTION

Туре	or	print and sub	mit for ea	ich :	stack or air con	taminar	nt s	ource	e. Submit with th	e AP	C 100.
					ENTIFICATION						
1. Organization											
O-N Minerals (Lut	tre	ll) Company (	dba Carm	eus	e Lime & Stone	- Luttre	ell C	Opera	tion) SOS: 0000	5115	54
2. Unique Sourc	e II	(name/num	ber/letter	wh	ich uniquely id	entifies	this	s air d	ontaminant sou	rce, l	ike Boiler #1)
Primary & Second	lary	Crushing, Sci	reening &	Wa	shing Operatio	n, with	Wei	t Sup	pression Control		,
<b>3. Unique Emiss</b> 37-0023-01	ion	<b>Point ID</b> (na	me/numb	er/	etter which uni	quely ic	den	tifies	this emission po	int, l	ike Stack #1)
<b>4. Brief descript</b> Primary crushing	i <b>on</b> and	<b>of air conta</b> l material har	<b>minant s</b> ndling.	our	<b>ce</b> (Attach a dia	igram if	ар	prop	riate):		
5. Emission poin	t	Latitude			Longitude		6	5. Dis	tance to neares	st pr	operty line (Ft.)
location		36 13 36.49N			83 42 50.13W		11	05.6	Ft	-	
	Euri		may to a	STA	CK AND EMISS	ION DA	TA	11/1			The state of the s
7. Stack or	Не	eight above gr		Di	ameter (Ft.)	Tempe			% of time	Dire	ection of exit (Up,
emission	(Ft	:.)		Fu	gitive	(°F)			over 125°F		vn or horizontal)
point data: →		ious				Ambier	nt		0	Hori	zontal
Data at exit	Flo	ow (actual Ft. <sup>3</sup>	/Min.)	Ve	locity (Ft. /Sec.)		М	oistu	re (Grains/Ft. <sup>3</sup> )	M	loisture (Percent)
conditions: →		gitive			gitive		N/	Ά		N/	'A
Data at		ow (Dry std. Fi gitive	³/Min.)		locity (Ft. /Sec.)		М	oistu	re (Grains/Ft. <sup>3</sup> )	М	loisture (Percent)
standard conditions:	rug	giuve		N//	Ą		N/,	Ά		N/	'A
→ →											
3. Monitoring de	vic	e and record	ing instr	um	ent (check all 1	hat ap	ply)	):			
Opacity		D <sub>2</sub>	$NO_X$		Strip	Electro			Other (specif	•	No monitor
monitor	m	<u>oni</u> tor	monitor		chart	dat <u>a k</u>	ggg	er	in comments	)	(none)
. Control devic	e. i	Description o	f propose	d m	onitoring, reco	rdkeepi	ing,	and	reporting to assu	ıre c	ompliance with
emission limit:	s. Ir	iclude operat	ing paran	nete	rs of control de	evice (flo	DW I	rate,	temperature, pre	essu	re drop, etc.).
et suppression c	OH	roi. Compilar	ice can pe	e ae	termine through	gn use o	)T VI	isible	emissions.		

**10. 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)

instructions for	more detail	S)						
Air contaminants	Average Emissions (Lbs./Hr.)	Maximum Emissions (Lbs./Hr.)	Concen- tration	Average Emissions (Ton/Yr.)	Potential Emissions (Ton/Yr.)	Emissions Estimation Method Code *	Control Devices	Control Effi- ciency %
Particulate matter (PM)	15.51	15.51	**	68.31	68.31	3	061	50-75
Sulfur dioxide (SO <sub>2</sub> )			***					
Carbon monoxide (CO)			PPM					
Volatile organic compounds (VOC)			PPM					
Nitrogen oxides (NO <sub>x</sub> )			PPM					
Hydrogen fluoride (HF)								
Hydrogen chloride (HCl)								
Lead (Pb)								
Greenhouse gases (CO <sub>2</sub> equivalents)								
Hazardous air pollutant (specify)								
Hazardous air pollutant (specify)								
Hazardous air pollutant (specify)								
Hazardous air pollutant (specify)								
Hazardous air pollutant (specify)								
Other (specify)								
Other (specify)								
Other (specify)								
Other (specify)								

11. Comments		
	SIGNATURE	
If this form is being submitted at the same Date this form regardless of whether a sign as an APC 100 form, then a signature is red	time as an APC 100 form, ther nature is provided. If this form Juired.	is NOT being submitted at the same time
Based upon information and belief formed mentioned facility, certify that the informat knowledge. As specified in TCA Section 39-	ion contained in this application	on is accurate and true to the best of my
12. Signature		9/30/21
<b>Signer's name</b> (type or print) Ben Hopkins	<b>Title</b> Site Operations Manager	Phone number with area code 865-230-4842

- Refer to the tables in the instructions for estimation method and control device codes.
- \*\* Exit gas particulate matter concentration units: Process Grains/Dry Standard Ft³ (70°F), Wood fired boilers Grains/Dry Standard Ft³ (70°F), all other boilers Lbs. /Million BTU heat input.
- \*\*\* Exit gas sulfur dioxide concentrations units: Process PPM by volume, dry bases, and boilers Lbs. /Million BTU heat input





### DEPARTMENT OF ENVIRONMENT AND CONSERVATION DIVISION OF AIR POLLUTION CONTROL

William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 15<sup>th</sup> Floor, Nashville, TN 37243 Telephone: (615) 532-0554, Email: Air.Pollution.Control@TN.gov

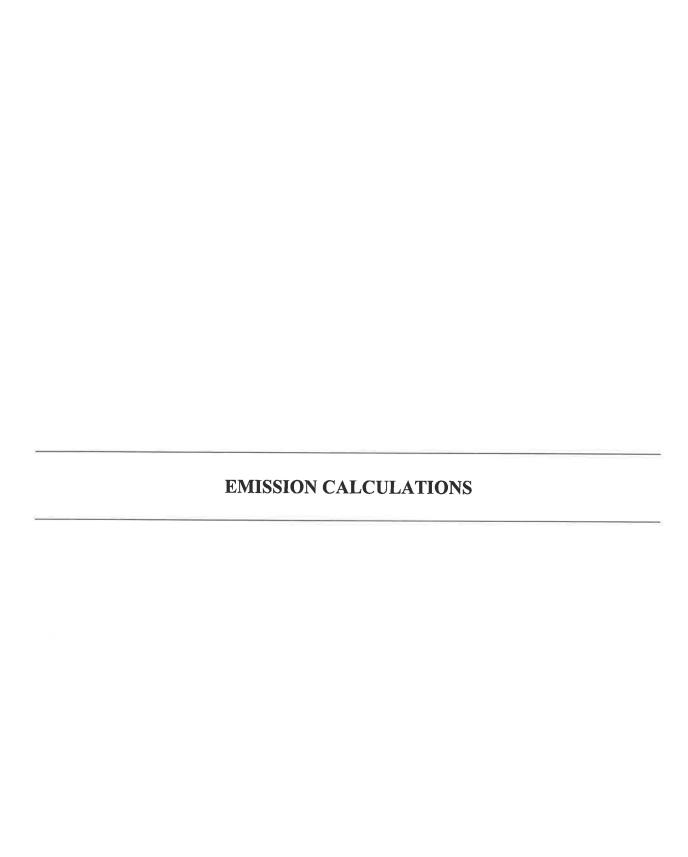
### NON-TITLE V PERMIT APPLICATION PROCESS OR FUEL BURNING SOURCE DESCRIPTION

	Type or print, Subm	nit with the APC 100.		
GE		ION AND DESCRIPTION	100	V(8) =0 (4-11- 12-18)
Organization's legal name and     Secretary of State (SOS)]     O-N Minerals (Luttrell) Company dba	SOS control numbe	<b>r</b> [as registered with the TN	1	sion Source ence Number
3. Is this air contaminant source			No	
If Yes, list rule citation, including		pplicable Sections:		
<b>4. Unique Source ID</b> (see instruction 87-0023-01	ens)	5. Unique Emission Poin	t ID (see ins	structions)
<b>6. Description of air contaminant</b> Primary & Secondary Crushing, Wasl		eration with Wet Suppression	on Control.	
7. Type of air contaminant source	(Check only one opt	tion to the right)		
Process Emission Source: For each p (Check at right and complete lines 8,	9, and 14)			<b>V</b>
Process Emission Source with in pro heated. For each process emission s complete lines 8 through 14)	ource, submit a sepa	arate application. (Check at i	right and	
Non-Process fuel burning source: Pr Complete this form for each boiler o Description Form (APC 101) for each	r fuel burner and coi	mplete a Non-Title V Emission	on Point	
PROCES	S EMISSION SOURC	E DESCRIPTION AND DATA		
8. Type of operation: Continuous	Batch	Normal batch time	Norr	nal batches/day
9. Process material inputs and	Diagram	Input rates	(pounds/ho	ur)
In-process solid fuels	reference	Design		Actual
A. Primary Crushing & Screening	SN001	1200 tons/hour	1200	) tons/hour
B. Secondary Crushing & Screeni	SN016	900 tons/hour	900	tons/hour
C. Tertiary Crushing & Screening	SN040	200 tons/hour	200	tons/hour
D,				
E.				
F.				
G.				
Totals				

<sup>\*</sup> A simple process flow diagram must be attached.

DESCR	IPTION OF B	OHE	RIIDN	ED ENGIR	IE OP OTH	ED ELLE	L BURNING S	01	IDCE
10. Boiler or burner of									
Serial Number	(2011)				e of firing**		TITTOT CACIT DO	JII C	ir, burner, etc.)
				1,75	5 01 III III B				
Rated horsepower		Rate	d input	capacity (1	0 <sup>6</sup> BTU/Hr.)	Othe	er rating (spec	ify	capacity and units)
Date constructed	Dat	e man	ufactur	ed	Date of last	modif	ication (explai	n i	n comments below)
** Source with a com									
*** Cyclone, spreader	(with or with	out re	injection	n), pulveriz	ed (wet or c	lry bott	om, with or w	ith	out reinjection),
other stoker (spec									
11. Fuel data: (Comple							BURNING SO		
Primary fuel type (s	specify)	C33 CII	1113310113	source with			e(s) (specify)	SI	uel burning source)
Fuels used	Annual usa	ige	Hour	ly usage	%	%	BTU value		(For APC use only)
		`  -	Design	Average		Ash	of fuel		SCC code
Natural gas:	10 <sup>6</sup> Cu. Ft.	_	Cu. Ft.	Cu. Ft.	1111111111	/////	1,000		Jee code
	3				1////////	/////	.,,		
#2 Fuel oil:	10 <sup>3</sup> Gal.		Gal.	Gal.		///// /////			
#5 Fuel oil:	10 <sup>3</sup> Gal.	-	Gal.	Gal.		/////			
		ľ				11111			
#6 Fuel oil:	10 <sup>3</sup> Gal.		Gal.	Gal.		,,,,,			
Coal:	Tons	l	_bs.	Lbs.					
Wood:	Tons	L	bs.	Lbs.	/////////	///// /////			
Liquid propane:	10 <sup>3</sup> Gal.		ŝal.	Gal.	///////	/////		Н	
					111111111	11/1/	85,000		
Other (specify type &		-						-	
units):									
12. If Wood is used as	a fuel, specif	y typ	es and	estimate	percent by	weight	of bark		
13. If Wood is used wit	h other fuel	s, spe	cify per	cent by w	eight of wo	od cha	arged to the l	bui	rner.

		APC 102
14. Comments		
	SIGNATURE	
If this form is being submitted at the sa	me time as an APC 100 form, the	n a signature is not required on this form.
Date this form regardless of whether a	signature is provided. If this form	n is NOT being submitted at the same time
as an APC 100 form, then a signature is	required	in is 1401 being submitted at the same time
Based upon information and belief form		as the responsible person of the above
mentioned facility, certify that the inform	mation contained in this applicat	ion is accurate and true to the best of my
knowledge. As specified in TCA Section	39-16-702(a)(4) this declaration i	s made under penalty of perium
15. Signature	55 10 702(d)(+), this decid ation 7	
13. Signature		Date
0~ 1dd	<del></del>	9/30/21
Signer's name (type or print)	Title	Phone number with area code
Ben Hopkins	Site Operations Manager	865-230-4842



Source Number	Unit Description	Process Flow
001	Telesmith Primary Crusher (42X48 Ploneer)	to SN004 (1Belt)
002	Grizzly #1	to SN003 (Grizzly #2)
003	Grizzly #2	to SN004 (1Belt)
004	1 Belt	to SN005 (2Belt)
005	2 Belt	to SN006 (3Belt)
006	3 Belt	to SN007(Roadrock) and SN008 (chemical)
007	Roadrock	to SN009 (3Bell)
800	Chemical	to SN010 (3ABelt)
009 010	3 Belt	to SN011 (4Belt)
011	4 Belt	to SN011 (4Belt) to SN012 (Near Screen) and SN013 (Far Screen)
		to SN012 (Near Screen) and SN013 (Far Screen)     to SN014 (5ABelt), SN025(6Belt R), and SN026(6ABelt R)     combined with Far Screen and through Flop Gate and split
012	Near Screen	between SN018(6BaltR) and SN019(8A Belt)
013	Far Screen	to SN015 (5Belt), SN025(6Belt R), and SN026(6ABelt R)
014	5A Belt	to SN015 (5Belt)
015	5 Belt Secondary Cone Crusher (Allis Chalmers 600	to SN016 (Allis)
016	Cone)	180
017	5B Belt	to SN017(5B Belt) to SN011 (4 Belt)
018	B Belt R	to SN020 (7 Belt) and to SN041 (301 Belt)
019	BA Beil	lo SN021 (8B Belt)
020	7 Belt	to SN023 (shed)
021	8B Belt	to SN022 (Radial Stacker)
)22	Radial Stacker	to SN024 (Shed)
)23	3/8 x 0 Shed	FINAL LOCATION
)24	3/8 x 0 Shed	FINAL LOCATION
025	5 Belt R	- to SN041 (301 Belt) and split between SN027 (505 Belt) and SN047 (7A Belt); - through flop gate and split between SN033 (101 Belt) and SN03 (309 Belt) - to SN041 (301 Belt) and split between SN027 (505 Belt) and SN047 (7A Belt);
26	6A Bell R 505 Belt	<ul> <li>through flop gate and split between SN033 (101 Belt) and SN03 (309 Belt)</li> <li>Io SN028 (506 Belt)</li> </ul>
		through flop gate and split between 5N029 (508 Belt) and SN030
28	506 Belt	(509 Belt)
30	508 Belt	lo SN031 (Unil Train)
31	509 Belt Unit Train	lo SN032 (Unit Train)
32	Unit Train	FINAL LOCATION FINAL LOCATION
33	101 Bell	
34	309 Belt	lo SN035 (102 Belt) through SN040 (VSI) to SN041 (301 Belt)
35	102 Belt	through flop gate to SN036 (103 Belt) and SN038 (A Pile)
36	103 Bell	to SN037 (B Pile)
37	B Pile	FINAL LOCATION
38	A Pile	FINAL LOCATION
39	210-1-HP02 Loading	to SN041 (301 Belt)
40	Tertiary VSI Crusher	to SN041 (301 Belt)
41	301 Belt	to SN042 (Wash Screen)
		lo SN043 (Sand Screw), SN045(302 Belt), SN056 (303A Belt), and
175.75	Wash Screen	SN051 (303 Belt)
	Sand Screw	lo SN044 (306 Redial)
	306 Radial	lo SN049 (Sand)
	302 Belt 305 Belt	to SN046 (305 Belt) and SN053 (302A Belt)
	7A Bell	to SN047 (7A Belt) to SN048 (13A Belt)
+	13A Belt	to SN050 (FGD)
	Sand	FINAL LOCATION
	FGD	FINAL LOCATION
51	303 Belt	through Diverter Gate to SN052 (308 Belt) and SN054 (304 Belt)
	308 Bett	lo SN058 (Drainfield Stone)
	302A Belt	to SN054 (304 Bell) and SN056 (307 Belt) to feed through flop gate at SN033 (101 Belt) and SN034 (309
	HARVE TO THE TOTAL THE TOTAL TO THE TOTAL TOTAL TO THE TO	Belt)
	303A Belt 307 Belt	(o SN056 (307 Belt)
	57's	Io 57's FINAL LOCATION
	Orainfield Stone	
- 11	annument Storie	FINAL LOCATION

<sup>\*</sup>Source #s are linked labels on ACAD drawing

## Emissions Summary Carmeuse Lime - Luttrell Operation

# Primary & Secondary Crusher, Sreening & Washing Operation and associated Material Handling

Emissions Source	Total PM (tpy)	PM <sub>10</sub> (tpy)	PM <sub>2,5</sub> (tpy)
Crushing & Screening Operations	39.82	21.04	14.33
Quarry Stockpiles	12.47	5.90	0.09
Unpaved Roads	16.02	4.56	4.56
TOTAL	68.31	31.49	18.97

#### Fug PM Emissions

		Material Inform	ntion									
Source Number	Emission Unit Description	Material Type	Tons/Yr	PM Emission Factor (lb/ton)	PM <sub>18</sub> Emission Factor (lb/ton)	PM <sub>2.5</sub> Emission Factor (lb/lon)	Emission Factor Reference	Number of Transfer Points	Control	PM Emissions (tons/year)	PM <sub>10</sub> Emissions (tons/year)	PM <sub>2.5</sub> Emissio (tons/ye
02	Grizzly #1	Limestone	\$254000	5.0324	0.0074	F.0634	AP-42 St. Ed. Sac. 11 19 2-2 2004		Miller	8.3072	6.1012	6.307
03	Grizzly #2	Limestone	5256000	0.00014	0,000048	0,000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004	1	Water	0.36792	0,120688	0,03416
04	1A Bett	Limestone	5256000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11.19,2-2, 2004	1	Water	0.36792	0.120688	0.0341
04A	1B Belt	Limestone	5256000	0,00014	0,000046	0,000013	AP-42, 5th Ed., Sec. 11.19,2-2, 2004	1	Water	0.36792	0,120888	0.0341
15	2 Belt	Limestone	5256000	0.00014	0,000046	0,000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004	1	Water	0,36792	0,120888	0,0341
06	3 Belt	Limestone	5256000	0,00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004	1	Water	0.38792	0.120888	0.0341
)9	3 Bett		5258000	0,00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11.19.2-2, 2004	1	Water	0.36792	0.120888	0.0341
10	3A Belt	Limestone	3066000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11,19.2-2, 2004	1	Water	0.21462	0.070518	0.0341
lt .	4 Belt	Limestone	3066000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11, 19,2-2, 2004	1	Water	0.21462	0.070518	0.0199
12	Neer Screen	Limestone	3088000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec, 11.19.2-2, 2004	1	Water	0.21462	0.070518	0.0199
13	Fer Screen	Limestone	3066000	0.0022	0.00074	0.00006	AP-42, 5th Ed., Sec. 11, 19,2-2, 2004		Water	3.3726	1,13442	0,078
14	SA Belt	Limestone	3055000	0,0022	0,00074	0.00005	AP-42, 5th Ed., Sec. 11,19,2-2, 2004	1	Water	3,3726	1,13442	0,076
15	5 Bett	Limestone	3066000	0.00014	0.000046	0,000013	AP-42, 5th Ed., Sec, 11, 19, 2-2, 2004	1	Water	0,21462	0.070518	0,0199
	September Come Commercially Cont.	Limesione	3066000	0,00014	0.000046	0,000013	AP-42, 5th Ed., Sec. 11.19.2-2, 2004	1	Water	0,21462	0.070518	0,0199
7	58 Bett	All residents	2000000	0.0012	© 500054	2,5001	AP-42, 58: 68, Sec. 11 10:2-2, 2014		West	1,8200	BARANE .	0.0199
8	8 Belt R	Limestone	3066000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11.19.2-2, 2004	1	Water	0.21462	0.070518	0,0199
9	8A Belt	Limestone	3066000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11, 19,2-2, 2004	1	Water	0.21462	0.070518	0,0198
20	7 Belt	Limestone	3066000	0.00014	0.000046	0,000013	AP-42, 5th Ed., Sec. 11.19.2-2, 2004	1	Water	0.21462	0.070518	0.0199
21	58 Belt	Limestone	3086000	0.00014	0.000048	0.000013	AP-42, 5th Ed., Sec. 11.19.2-2, 2004	1	Weter	0.21462	0.070518	0.0199
5	6 Belt R	Limestone	3066000	0,00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11,19.2-2, 2004	1	Water	0.21462	0.070518	0.0199
26	6A Belt R	Limestone	3086000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11.19.2-2, 2004	1	Water	0.21462	0.070518	
27	505 Belt	Limestone	3066000	0,00014	0,000046	0,000013	AP-42, 5th Ed., Sec, 11,19,2-2, 2004	1	Water	0.21462	0.070518	0.0199
28	506 Bell	Limestona	3066000	0.00014	0,000046	0.000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004	1	Weter	0.21462	0.070518	0.0199
29	508 Belt	Umestone	3086000	0.00014	0,000046	0.000013	AP-42, 5th Ed., Sec. 11,19.2-2, 2004	1	Water	0,21462	0.070518	-
30	The state of the s	Limestona	3066000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004	1	Water	0.21462	0,070518	0,0199
33	509 Bell	Limestone	3066000	0,00014	0.000046	0,000013	AP-42, 5th Ed., Sec. 11.19,2-2, 2004	1	Water	0,21462	0,070518	0.0199
34	101 Belt	Limestone	3086000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11.19.2-2, 2004	1	Water	0.21462	0.070518	0,0199
15	The state of the s	Limestone	3066000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11.19,2-2, 2004	1	Water	0.21482		0.0199
16	102 Belt	Limestone	3066000	0.00014	0.000048	0.000013	AP-42, 5th Ed., Sec. 11.19,2-2, 2004	1	Water	0.21462	0.070518	0.0199
	103 Belt	Limestone	3066000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11.19.2-2, 2004	1	Water	0.21462	0.070518 0.070518	0.0199
9	210-1-HP02 Loading	Limestone	3066000	0.00014	0.000045	0.000013	AP-42. 5th Ed., Sec. 11,19.2-2, 2004	1	Water	0.21462		0.0199
	Tetasy VSI Contest	Limitory	Someon	U.DES.	0.0017	6.00007	45 47, Sh. Ed., Sec. 11 (19:3-2, 2004)		Water .	0.21462	0.070618	0.0199
2	301 Belt	Limestone	3066000	0,00014	0,000046	0.000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004	1	Water	0,21462		0.000
3	Wash Screen	Limestone	3066000	0.0036	0,0022	0.0022	AP-42, 5th Ed., Sec. 13,2.4, 1/95		Water	5,5188	0.070518 3.3728	0,0199
4	Sand Screw	Limestone	3066000	0,0036	0.0022	0.0022	AP-42, 5th Ed., Sec. 11,19,2-2, 2004		Weter	5,5188	3,3726	3,372
5	306 Radial	Limestone	3066000	0,00014	0,000045	0.000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004	1	Water	0,21462	0,070518	3,372
6	302 Belt	Limestone	3066000	0,00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004	1	Water	0,21462	0,070518	0,0199
7	305 Belt	Limestone	3066000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004	1	Water	0.21462	0,070518	0.0199
	7A Belt	Limestone	3066000	0,00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004	1	Weter	0.21462	0.070518	0.0199
8	13A Belt	Limestone	3086000	0,00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004	1	Water	0.21462		0.0199
	303 Belt	Limestone	3066000	0.00014	0,000046	0.000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004	1	Water	0.21462	0.070518	0.0199
3	308 Belt	Limestone	3066000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004		Water	0.21462	0.070518	0,0199
4	302A Belt	Limestone	3066000	0.00014	0,000046	0.000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004	1	Water	0,21462	0.070518	0.0199
	304 Bell	Limestone	3066000	0.00014	0,000046	0.000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004	1	Water	0.21462	0.070518	0.0199
5	303A Beit	Limestone	3066000	0.00014	0,000046	0.000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004	1	Water	0.21462		0,0199
6	307 Belt	Limestone	3066000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11.19.2-2, 2004	1	Water	0.21462	0.070518	0.01993
								TOTAL EMISSIONS	T T T T T T T T T T T T T T T T T T T	U.Z1462	0.070518	0,01993

Legend

SCREEN/SIZING DROP POINT

#### **Fug PM Emissions**

	The second second second	Material Inform	ation									
Source Number	Emission Unit Description	Material Type	Tonsiye	PM Emission Factor (fb/ton)	PM <sub>18</sub> Emission Factor (Ib/ton)	PM <sub>13</sub> Emission Factor ((brton)		Number of	Control	PM Emissions	PM <sub>to</sub> Emissions	PM <sub>2,5</sub> Emission
004A	1A Bett	Limestone	5256000	0,00014	0,000046	0.000013	Emission Factor Reference	Transfer Points	Type	(tons/year)	(tons/year)	(tons/yes
H P ( 14 )	18 Belt	Limestone	5256000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11.19.2-2, 2004	1	Water	0.38792	0.120688	0.034184
005	2 Belt	Limestone	5256000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004	3	Water	0.36792	0.120888	0.034164
006	3 Belt	Limestone	5258000	0,00014	9.000046		AP-42, 5th Ed., Sec. 11,19,2-2, 2004	1	Water	0.36792	0.120888	0.034164
009	3 Bolt	Limestone	3066000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec, 11,19.2-2, 2004	1	Water	0.38792	0.120688	0.034164
010	3A Bult	Limestone	3066000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11.19.2-2, 2004	1	Water	0.21462	0.070518	0.019929
011	4 Beff	Limestone	3066000	0.00014		0.000013	AP-42, 5th Ed., Sec. 11.19.2-2, 2004	1	Weter	0.21462	0.070518	0.019929
014	5A Belt	Limestone	3088000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11.19.2-2, 2004		Water	0.21462	0.070518	0.019929
015	5 Belt	Limestone	3086000	0.00014	0.000946	0.000013	AP-42, 5th Ed., Sec. 11.19.2-2, 2004	1 7	Water	0.21482	0.070518	0.019929
017	58 Belt	Limestone	3066000	0.00014	0,000046	0.000013	AP-42, 5th Ed., Sec. 11.19.2-2, 2004	1	Water	0.21462	0.070518	0.019929
018	5 Belt R	Limestone	3086000		0.000046	0.000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004	1	Water	0.21462	0,070518	0.019929
019	EA Belt	Limestone	3066800	0.00014	0.000046	0,000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004	1	Water	0.21462	0.070518	0.019929
020	7 Belt	Umestone	3066000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11,19.2-2, 2004	1	Water	0.21462	0.070618	0.019929
021	88 Bett	Umestone	3066000	0,00014	0.000048	0.000013	AP-42, 5th Ed., Sec. 11,19.2-2, 2004	1	Weter	0,21462	0.070518	
025	5 Belt R	Umestone		0.00014	0.000048	0.000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004	1	Water	0.21462	0.070518	0.019929
026	6A Bett R	Limestone	3068000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004	1	Water	0.21462	0.070618	0.019929
	505 Belt	Limestone	3000000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11.19.2-2, 2004	1	Water	0.21462		0.019929
	506 Belt	Limestone	3066000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11.19.2-2, 2004	1	Water	0.21462	0.070518	0.019929
	508 Belt	Limestone	3066000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11, 19.2-2, 2004	1	Water	0.21462		0.019929
	509 Belt		3066000	0,00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004	1	Water	0.21462	0.070518	0.019929
333	101 Belt	Limestone	3066000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004	1	Water	0.21462	0.070518	0.019929
234	309 Belt	Limestone	3066000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004	1	Water	0.21462	0.070618	0.019929
	102 Belt	Limestone	3066000	0,00014	0,000046	0,000013	AP-42, 5th Ed., Sec. 11, 19.2-2, 2004	1	Water		0.070518	0.019929
	103 Belt	Limestone	3066000	0,00014	0.000046	0,000013	AP-42, 5th Ed., Sec. 11, 19.2-2, 2004		Water	0.21462	0,070518	0.019929
	210-1-HP02 Loading	Limestone	3068000	0.00014	0,000046	0.000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004	1	Water	0.21462	0.070518	0.019929
	301 Belt	Limestone	3066000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11,19.2-2, 2004	1	Water	0.21462	0.070518	0.019929
	306 Radial	Limestone	3088000	0,00014	0.000048	0.000013	AP-42, 5th Ed., Sec., 11.19.2-2, 2004	1	Water	0.21462	0.070518	0,019929
	302 Belt	Limestone	3066000	0.00014	0,000046	0.000013	AP-42, 5th Ed., Sec. 11.19.2-2, 2004	<del>'</del>		0.21462	0,070516	0.019929
	305 Belt	Limestone	3066000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11.19.2-2, 2004	<del></del>	Water	0.21462	0.070518	0.019929
	7A Belt	Limestone	3066000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11.19.2-2, 2004	1	Water	0.21462	0.070518	0.019929
	T. C. C. C. C.	Limestone	3066000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11.19.2-2, 2004		Water	0.21462	0.070518	0.019929
	13A Belt	Limestone	3066000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11.19.2-2, 2004	1	Water	0.21452	D.070518	0.019929
	303 Belt	Limestone	3086000	0.00014	0.000048	0.000013	AP-42, 5th Ed., Sec. 11.19.2-2, 2004	1	Water	0.21462	0.070616	0.019929
	308 Bett	Limestone	3066000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11.19,2-2, 2004		Water	0.21462	0.070518	0.019929
	302A Belt	Limestone	3086000	0.00014	0.000046	0.000013	AP-42, 5th Ed., Sec. 11.19.2-2, 2004		Water	0,21462	0.070518	0.019929
	304 Bett	Limestone	3066000	0.00014	0.000046	0,000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004		Water	0.21462	0.070518	0.019829
	303A Belt	Limestone	3066000	0.00014	0,000046	0,000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004		Water	0,21462	0.070518	0.019929
00	307 Bell	Limestone	3088000	0.00014	0,000046	0,000013	AP-42, 5th Ed., Sec. 11,19,2-2, 2004		Water	0.21462	0.070518	0,019929
						0,000,0	Jericu, Sec. 11,19,2-2, 2004	1	Water	0.21462	0.070518	0.019929

SCREEN/SIZING DROP POINT

#### Fug PM Emissions

		Material Informa	ition		A CONTRACTOR OF THE PARTY OF TH							
Source Number	Emission Unit Description	The second secon	Tons/Yr	PM Emission Factor (folton)	PM <sub>is</sub> Emission Factor (lb/ton)	PM <sub>2.5</sub> Emission Factor (lb/ton)	Emission Factor Reference	Number of	Control	PM Emissions	PM <sub>10</sub> Emissions	PM <sub>2,3</sub> Emissions
103	Grizzly #2	Limestone	5256000	0.00014	0,000048	0.000013	AP-42, 8th Ed., Sec. 11.19.2-2, 2004	Transfer Points	Type	(tonsiyear)	(tons/year)	(tons/year
112		Limestone	5256000	0.00014	0,000048	0.000013	AP-42, 5th Ed., Sec. 11.18.2-2, 2004		Water	0.38792	0,120888	0.034164
	Near Screen	Limestone	3066000	0.0022	0.00074	0.00005			White	0,36792	0.120868	0,034164
	Far Screen	Limestone	3066000	0.0022	0,00074		AP-42, 5th Ed., Sec. 11.19.2-2, 2004	1	Water	3.3726	1.13442	0.07065
	Wash Screen	Limestone	3066000	0.0036		0.00005	AP-42, 5th Ed., Sec. 11,19,2-2, 2004	1	Water	3,3726	1.13442	0.07865
43	Sand Screw	Limestone	_		0.0022	0.0022	AP-42, 5th Ed., Sec. 13.2.4, 1/95	1	Water	5,5188		
		Elimetone	3066000	0.0038	0.0022	0.0022	AP-42, 5th Ed., Sec. 11.19.2-2, 2004	4	Water		3.3726	3.3726
								-		6.5188	3.3726	3.3728
								TOTAL EMISSIONS		18.51884	9,255815	IN DERRY



4.228

#### **Quarry Stockpiles**

Point Point	Emission Unit Description	Comment	Moisture Content <sup>3</sup> (%)	Menn Wind Speed <sup>2</sup>	Annual Hours	Annual Production	PM Emission Factor	PM <sub>18</sub> Emission Factor	PM <sub>18</sub> Emission Factor	PM Emissions	PM <sub>is</sub> Emissions	PM <sub>2.5</sub> Emissions
	Roadrock	to SN009 (3Beft)	4.8	(mph)	of Operation	THE RESERVE AND ADDRESS OF THE PARTY OF THE	(lb/ton),	(fb/ton)	(lb/ton),	(tons/year)		
308	Chemical	to SN010 (3ABelt)		4,1	8,760	5256000	0.000537086	0.000254027	3.8467E-06	1.41	(tons/year)	(tonsiyear
22	Radial Stacker	to SN024 (Shed)	4.8	4.1	8,760	5256000	0.000537086	0.000254027	3,8467E-06	1.41	0.67	0.010
123	3/8 x 0 Shed	FINAL LOCATION	4.8	4.1	8,760	5256000	0.000537086	0.000254027	3.8467E-06		0.67	0.010
024	3/8 x 0 Shed	FINAL LOCATION	4.8	4.1	8,760	3066000	0.000537086	0.000254027	3.8467E-06	0.82	0.67	0.010
31	Unit Train	FINAL LOCATION	4.8	4.1	8,760	3066000	0.000537086	0.000254027	3.8487E-08		0.39	0.006
132	Unit Train	FINAL LOCATION	4.8	4,1	8,760	3066000	0.000537086	0.000254027	3.8467E-06	0.82	0.39	0.006
	B Pile		4,8	4.1	8,760	3066000	0.000537086	0.000254027	3.8467E-06	0.82	0.39	0.006
38	A Pile	FINAL LOCATION	4.8	4.1	8,760	3066000	0.000537086	0.000254027	3.8467E-06	0.82	0.39	0.006
	Sand	FINAL LOCATION	4.8	4.1	8,760	3066000	0.000537086	0.000254027		0.82	0,39	0.006
	FGD	FINAL LOCATION	4.8	4.1	8,760	3066000	0.000537086	0.000254027	3.8467E-06	0.82	0.39	0.006
	57's	FINAL LOCATION	4.8	4.1	8,760	3066000	0.000537086	0.000254027	3.8467E-06	0.82	0.39	0.006
	Drainfield Stone	FINAL LOCATION	4.8	4,1	8,760	3066000	0.000537086		3.8467E-06	0,82	0.39	0.006
	Drainipilo Stone	FINAL LOCATION	4.8	4.1	8,760	3066000	0.000537086	0.000254027	3.8467E-06	0.82	0.39	0.006
			1,		5,700	5000000	0.00037086	0.000254027	3.8467E-06	0.82	0.39	0.006
				May maighten canno due				Ti Ti	TAL EMISSIONS	12.67	5.90	0.0

 $E = k(0.0032) \left(\frac{U}{5}\right)^{1.3} / \left(\frac{M}{2}\right)^{1.4}_{\text{Eq. 1}}$ 

Where: E = Emission factor (lbs/ton)

k = Particle size multiplier (PM 0.74; PM<sub>10</sub> 0.35; PM<sub>25</sub> 0.053)

U = Mean wind speed (mile per hour)

M = Material moisture content (%)

Max moisture range due to water supression control (AP-42 Chapter 13, pg 13.2.4-4)

Average wind speed from Oak Ridge, TN (http://wwf.ncdc.noas.gov/oa/climate/online/ccd/avgwind.html)

From Equation 1 AP-42 Chapter 13, pg 13,2,4-4; A rating

#### **Unpaved Roads**

Material Hauled	Annual Material Throughput (tons)	Total Miles (roundtrip)	Mean Vehicle Weight (tons)	Suface Material Silt Content (%)	MINISTER HISTORIES	Mean Vehicle Speed (MPH) (S)	VMT (miles/year)		PM <sub>10</sub> Emission Factor	PM <sub>2.5</sub> Emission Factor	Control Efficiency		PM <sub>10</sub> Emissions	PM <sub>2.5</sub> Emissions
Limestone Aggregate	5,256,000	0.15	124.5	8.3	4		2.222	(IB/VMT)	(Ib/VMT)	(TE/VMT)	(%)*	(tons/year)	(tons/year)	(tons/year)
			12110	0.0		15	6,333	20.24	5.76	0.58	75%	16.0225927	4.5562479	0.4556248
										TOTAL	MISSIONS	15.02		

AP-42 Chapter 13 TBL 13.2.2-1

<sup>&</sup>lt;sup>2</sup> AP-42 Chapter 13 Figure 13.2.2-2



Where: Equation 1a (Industrial Roads) size specific emission factor (lb/VMT) Ε=

Particle size multiplier (PM 4.9; PM<sub>10</sub> 1.5; PM<sub>25</sub> 0.15) k =

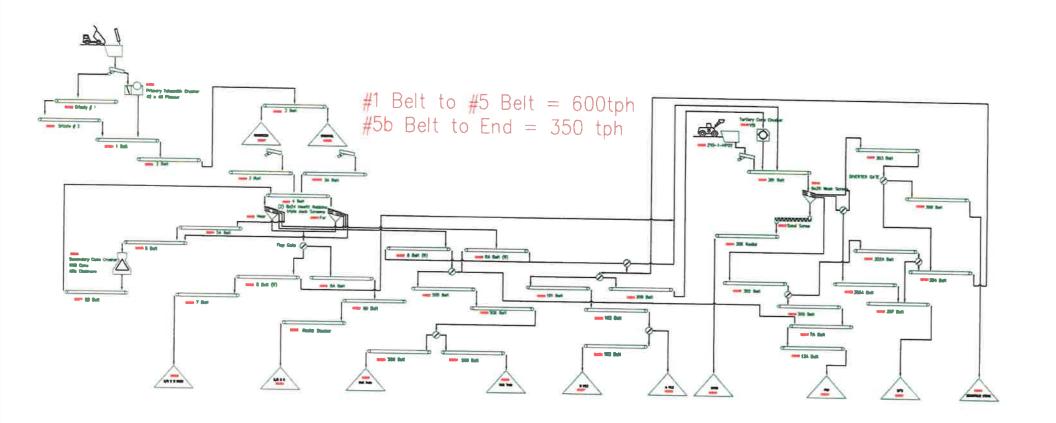
Surface silt content (%) s =

Particle size multiplier (PM 0.7; PM<sub>10</sub> 0.9; PM<sub>2.5</sub> 0.9) a =

W =

Mean vehicle weight (tons) Particle size multiplier (PM 0.45; PM<sub>10</sub> 0.45; PM<sub>2.5</sub> 0.45) b =

### Appendix C – Process Drawings



UPS NEXT DAY AIR

Tracking Number: A377 343 7334

September 21, 2021

1

Tennessee Department of Environment and Conservation Division of Air Pollution William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 15th Floor Nashville, TN 37243

Subject: Operating Permit 065362P Renewal

Emission Source 87-0023-07

O-N Minerals (Luttrell) Company d/b/a Carmeuse Lime & Stone

486 Clinch Valley Road Luttrell, Tennessee 37779

The O-N Minerals (Luttrell) Company d/b/a Carmeuse Lime & Stone is located at 486 Clinch Valley Road, Luttrell, Tennessee. Operations consist of both open pit and subsurface mining of limestone for the production of aggregate and various lime products. Limestone is transported from a surface pit and subsurface mine portal via haul trucks on unpaved haul roads. Additionally, material stockpiles onsite include both finished products and coproducts.

The Site is operating under operating permit number 065362P (Permit) issued by the Tennessee Department of Environment and Conservation (TDEC) on April 20, 2012 with expiration of November 1, 2021. The Permit is related to fugitive emissions from mine operation haul roads and stockpiles. All other emission sources are covered by separate permits.

No major changes have occurred for this source since the last permit renewal. Carmeuse Lime & Stone wishes to renew the current operating permit.

Total Potential Annual Emissions and Average Annual Emissions of Particulate Matter (PM) for the stockpiles and haul roads are summarized in the tables below.

Table 1 – Potential Annual Emissions

Emission Type	PM (TPY)	PM <sub>10</sub> (TPY)	PM <sub>2.5</sub> (TPY)
Stockpiles	15.74	7.87	1.18
Haul Roads	54.28	15.43	1.40
Total	70.02	23.31	2.58

TDEC- DAP
O-N Minerals (Luttrell) Company d/b/a Carmeuse Lime & Stone
Operating Permit 065362P Renewal
Page 2
[DATE]

Table 2 – Average Annual Emissions

Emission Type	PM (TPY)	PM <sub>10</sub> (TPY)	PM <sub>2.5</sub> (TPY)
Stockpiles	15.74	7.87	1.18
Haul Roads	24.42	6.95	0.63
Total	40.17	14.82	0.63

Enclosed with this letter are the following for renewal of the current Operating Permit 065362P:

- TDEC Form APC 100
- TDEC Form APC 101
- Emission calculations

If you have any questions, please do not hesitate to contact me at 205-664-7129 or Jackie.Padgett@carmeuse.com.

Sincerely

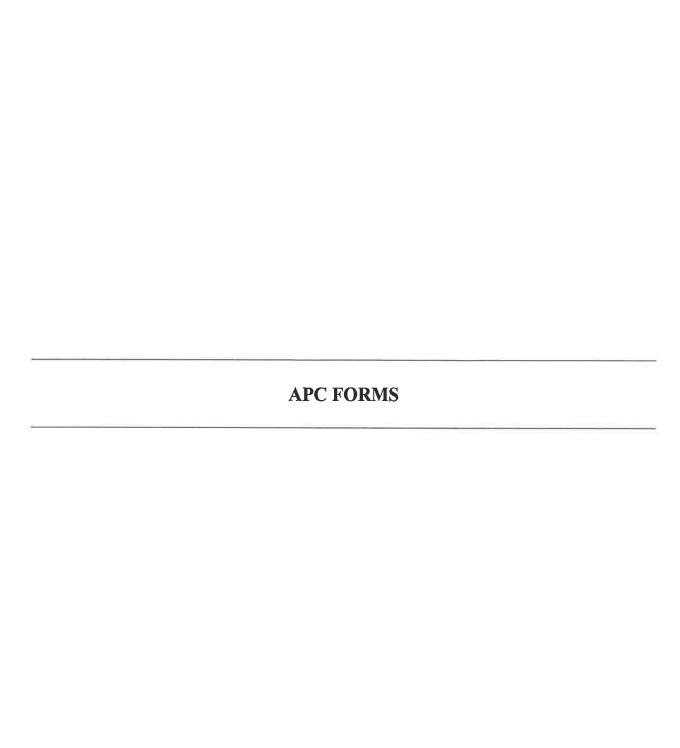
Jackie Padgett

Senior Environmental Manager

Carmeuse Lime & Stone

Enclosure: Attachment A - APC Forms

Attachment B - Calculations







# DEPARTMENT OF ENVIRONMENT AND CONSERVATION DIVISION OF AIR POLLUTION CONTROL William B. Spedgress Tannasses Tannasses

William R. Snodgrass Tennessee Tower

312 Rosa L. Parks Avenue, 15<sup>th</sup> Floor, Nashville, TN 37243 Telephone: (615) 532-0554, Email: Air.Pollution.Control@TN.gov

### NON-TITLE V PERMIT APPLICATION FACILITY IDENTIFICATION

	Тур	e or print and su	bmit. Attach	appropriate s	ource descriptio	n forms.
ality.				FORMATION		
1.	Organization's lega	I name and SOS	control nun	<b>nber</b> [as registe	ered with the TN	Secretary of State (SOS)]
_	l Minerals (Luttrell) Co			& Stone SOS:	000051154	
<b>2.</b> Sam	<b>Site name</b> (if differen	nt from legal nam	ne)			
3.	<b>Is a construction pe</b> (see instructions for			ubmitted?	Yes No	V
<b>4.</b> 486	<b>Site address</b> (St./Rd. Clinch Valley Road	/Hwy.)				County name Union
Lutt	City rell			p code 779		<b>5.</b> NAICS or SIC code 1422
6.	<b>Site location</b> (in lat. /long.)	Latitude 36 13' 12"			Longitude 83 43' 48"	
		CONTACT	INFORMATIO	ON (RESPONSI	BLE PERSON)	
<b>7.</b> Ben	<b>Responsible person</b> Hopkins	/Authorized con	tact		Phone numbe 865-230-4842	er with area code
486	Mailing address (St./ Clinch Valley Road	/Rd./Hwy.)			Fax number v N/A	vith area code
Lutti	City rell		State TN	Zip code 37779	Email address ben.hopkins@	s carmeuse.com
Ž.		CON	TACT INFOR	MATION (TECH	INICAL)	
	<b>Principal technical c</b> e Padgett	contact			Phone number 205-601-7595	er with area code
P.O.	<b>Mailing address (</b> St./ Box 37	Rd./Hwy.)			Fax number v N/A	vith area code
Sagir	City naw		State AL	Zip code 35137	Email address jackie.padgetto	g @carmeuse.com
		CON	NTACT INFO	RMATION (BIL	LING)	
	<b>Billing contact</b> e Padgett				Phone numbe 205-601-7595	er with area code
	<b>Mailing address</b> (St./ Box 37	Rd./Hwy.)			Fax number w N/A	ith area code
Sagir	City naw		State AL	Zip code 35137	Email address jackie.padgetto	@carmeuse.com

								APC 10
	AIR CONTAI	MINA	NT SOUR	CE(S) IN	FO	RMATION		
process emission and include a Un uniquely identified instructions for n The Luttrell Operation aggregate and various 065362P related to fug	ir contaminant source in sources, fuel burning in ique Source ID for each es the air contaminant s more details) in consists of both open p is lime products. This pe gitive emissions from m covered by separate per	nstalla source ource oit and rmit r ine op	ations, and ce. The Ur (s), like Bo d subsurfa enewal is peration h	d inciner nique So piler #1, l ace minii specifica	rati ur Pa ng ally	ors that are contained ce ID is a name/num int Line #1, Engine # of limestone for the y for the Operating P	ed in this application ber/letter, which is the control of the con	ation th
11. Is the air contam addressed. Yes	inant source(s) in a no	onatta	ainment a	area? If	· "Y	es", then minor so	urce BACT mus	st be
12. Normal	Hours/Day	Days	/Week			Veeks/Year	Days/Year	
operation:	24	7			52		365	
13. Percent annual throughput	Dec. – Feb. 25%	Marc 25%	ch – May			une – August 5%	Sept. – Nov. 25%	
manufacture in the second	TYPE OF PERMIT	-	UESTED (	heck a				April 1
14. Operating permit	Date construction star		Date cor		T	Date of ownership o	hange (if applic	:able)
	Last permit number(s) 065362P	· · · · · · · · ·		Emissio 87-0023		Source Reference No 1	umber(s)	
Construction permit	Last permit number(s)			Emissio	on	Source Reference No	umber(s)	

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

Date modification started or will start

Completion date

Date completed or will complete

New Construction Starting date

Modification

15. Describe changes that have been n	nade to this equipment or op	eration(s) since the last construction
or operating permit application: None.		
None.		
16. Comments		
	SIGNATURE	
Based upon information and belief formed		is the responsible person of the above
mentioned facility, certify that the informat	ion contained in this application	on 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
17 M.		11/2. /-
Signer's name (type or print)	Title	Phone number with area code
Ben Hopkins	Site Operations Manager	865-230-4842
	1 operations Manager	000 Z00 TOTZ





### DEPARTMENT OF ENVIRONMENT AND CONSERVATION DIVISION OF AIR POLLUTION CONTROL

William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 15<sup>th</sup> Floor, Nashville, TN 37243

Telephone: (615) 532-0554, Email: Air.Pollution.Control@TN.gov

### NON-TITLE V PERMIT APPLICATION EMISSION POINT DESCRIPTION

	Туре	or	print and	submit for ea	ıch	stack or air con	taminan	t source	e. Submit with th	e	APC 100.	
4		6.3		GENERA	LID	ENTIFICATION	AND D	ESCRIP'	TION	ğ		
1.	Organization'	s le	gal name	and SOS co	ntr	ol number [as	register	ed with	the TN Secretary	, 0	f State (SOS)]	
0-	N Minerals (Lut	tre	ll) Compai	ny (dba Carm	eus	se Lime & Stone	- Luttre	ll Opera	ation) SOS: 0000	)5′	1154	
87	'-0023-07 - Haul	Ro	ads						contaminant sou			
No	one - Fugitive								this emission po	oin	it, like Stack #1)	
4.	Brief descript	ion	of air co	ntaminant s	oui	<b>'ce</b> (Attach a dia	gram if	approp	riate):			
Lir	nestone is trans	spc	rted from	the surface	oit a	and mine portal	via hau	l trucks	on unpaved hau	ılr	oads.	
5.	<b>Emission poin</b>	t	Latitude			Longitude		6. Dis	stance to neare:	st	property line (Ft.)	
	location		36 13 36.	49N		83 42 50.13W		Appro	ximately 105 Ft			
Ŕ	TO SOUTH A SOUTH			No. of the	STA	ACK AND EMISS	ION DA	TA	r filmer ford	1/2		
7.	Stack or emission	He (F	eight abov t.)	e grade		iameter (Ft.) gitive	Tempe (°F)	rature	% of time over 125°F		Direction of exit (Up, down or horizontal)	
	point data: →		rious				Ambier		0	Н	Horizontal	
	Data at exit	Flo	ow (actual	Ft. <sup>3</sup> /Min.)	Velocity (Ft. /Sec.)			Moistu	ire (Grains/Ft.³)		Moisture (Percent)	
	$\rightarrow$		gitive 	2		gitive		N/A			N/A	
	Data at standard conditions: →		ow (Dry st gitive	d. Ft. <sup>3</sup> /Min.)	V€ N/	elocity (Ft. /Sec.) A		Moisture (Grains/Ft. <sup>3</sup> ) N/A			Moisture (Percent) N/A	
8.	Monitoring de	vic	e and rec	ording instr	um	ent (check all	that ap	oly):		_		
	Opacity		O <sub>2</sub>	$NO_X$		Strip	Electro		Other (specif	-	No monitor	
	monitor		onitor	monitor		chart	data lo		in comments		(none)	
9.											e compliance with	
									temperature, pr	es	ssure drop, etc.).	
As	required by the	cu	rrent ope	rating permit	, W	et suppression (	control i	s used o	on haul roads.			

**10. 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)

instructions fo	r more detail	s)						
Air contaminants	Average Emissions (Lbs./Hr.)	Maximum Emissions (Lbs./Hr.)	Concen- tration	Average Emissions (Ton/Yr.)	Potential Emissions (Ton/Yr.)	Emissions Estimation Method Code *	Control Devices	Control Effi- ciency %
Particulate matter (PM)	2.79 E-03	6.20 E-03	**	24.42	54.28	3	061	55
Sulfur dioxide (SO <sub>2</sub> )			***					
Carbon monoxide (CO)			PPM					
Volatile organic compounds (VOC)			PPM					
Nitrogen oxides (NO <sub>X</sub> )			PPM					
Hydrogen fluoride (HF)								
Hydrogen chloride (HCl)								
Lead (Pb)								
Greenhouse gases (CO <sub>2</sub> equivalents)								
Hazardous air pollutant (specify)								
Hazardous air pollutant (specify)								
Hazardous air pollutant (specify)								
Hazardous air pollutant (specify)								
Hazardous air pollutant (specify)								
Other (specify) PM 10	7.93 E-04	1.76 E-03		6.95	15.43	3	061	55
Other (specify) PM 2.5	7.21 E-05	1.60 E-04		0.63	1.40	3	061	55
Other (specify)								
Other (specify)								1

**APC 101** 

RDA-1298

11. Comments							
1							
	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.							
12. Signature		Date /					
15-11		9/30/21					
Signer's name (type or print)	Title	Phone number with area code					
Ben Hopkins	Site Operations Manager	865-230-4842					

- \* Refer to the tables in the instructions for estimation method and control device codes.
- \*\* Exit gas particulate matter concentration units: Process Grains/Dry Standard  $Ft^3$  (70°F), Wood fired boilers Grains/Dry Standard  $Ft^3$  (70°F), all other boilers Lbs. /Million BTU heat input.
- \*\*\* Exit gas sulfur dioxide concentrations units: Process PPM by volume, dry bases, and boilers Lbs. /Million BTU heat input



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Telephone: (615) 532-0554, Email: Air.Pollution.Control@TN.gov

### NON-TITLE V PERMIT APPLICATION EMISSION POINT DESCRIPTION

Type or print and submit for each stack or air contaminant source. 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)] O-N Minerals (Luttrell) Company (dba Carmeuse Lime & Stone - Luttrell Operation) SOS: 000051154													
2. Unique Source ID (name/number/letter which uniquely identifies this air contaminant source, like Boiler #1) 87-0023-07 - Stockpiles													
<b>3. Unique Emission Point ID</b> (name/number/letter which uniquely identifies this emission point, like Stack #1) None - Fugitive													
4.	Brief descript	ior	of air conta	minant s	oui	<b>'ce</b> (Attach a dia	gram if	a	ppropi	riate):			
Material stockpiles include both finished products and coproducts. The wind erosion emissions from the stockpiles are fugititive.													
5. Emission point Latitude			Longitude			Т	6. Distance to nearest property line (Ft.)						
	location		36 13 36.491	١		83 42 50.13W			Appro	ximately 105 Ft			
80			1 1 / 5 . d i	V- 157	STA	ACK AND EMISS	ION DA	AT.	A	No Carlotte	13		
7.	7. Stack or Height above grade				Diameter (Ft.) Tempe		_				Direction of exit (Up,		
	1 0 0		Fu			(°F)		over 125°F	down or horizontal				
	point data: →		rious				Ambier	mbient				Horizontal	
	Data at exit Flow (actual Ft. <sup>3</sup> /Min.)		Velocity (Ft. /Sec.)		N	Moisture (Grains/Ft. <sup>3</sup> )			Moisture (Percent)				
conditions: Fugitive →			Ů,				N/A			N/A			
Data at Flow (Dry std. Ft. <sup>3</sup> /Min.)			Velocity (Ft. /Sec.)				Moisture (Grains/Ft. <sup>3</sup> )			Moisture (Percent)			
	standard conditions:	Fu	gitive		N/	Ά					N/A		
0	→ Monitoring de		to and rocar	dina instr		ont (shock all	that an				_		
٥.	Opacity		50 <sub>2</sub>	NO <sub>x</sub>	um	Strip	eck all that apply): Description				f۰	No monitor	
	monitor	The second secon		1 W 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				in comments	-	(no <u>ne)</u>			
							0.200	T			•	~	
9.	Control device	ce.	Description (	of propose	ed r	monitoring, reco	rdkeep	in	g, and	reporting to ass	ur	re compliance with	
emission limits. Include operating parameters of control device (flow rate, temperature, pressure drop, etc.).													
There is no control equipment in place.													

APC 101

**10. 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)

Instructions for	more detail	5)						,
Air contaminants	Average Emissions (Lbs./Hr.)	Maximum Emissions (Lbs./Hr.)	Concen- tration	Average Emissions (Ton/Yr.)	Potential Emissions (Ton/Yr.)	Emissions Estimation Method Code *	Control Devices	Control Effi- ciency %
Particulate matter (PM)	1.80 E-03	1.80 E-03	**	15.74	15.74	3	000	NA
Sulfur dioxide (SO <sub>2</sub> )			***					
Carbon monoxide (CO)			PPM					
Volatile organic compounds (VOC)			PPM					
Nitrogen oxides (NO <sub>x</sub> )			PPM					
Hydrogen fluoride (HF)								
Hydrogen chloride (HCl)								
Lead (Pb)								
Greenhouse gases (CO <sub>2</sub> equivalents)								
Hazardous air pollutant (specify)								
Hazardous air pollutant (specify)								
Hazardous air pollutant (specify)								
Hazardous air pollutant (specify)								
Hazardous air pollutant (specify)								
Other (specify) PM 10	8.99 E-04	8.99 E-04		7.87	7.87	3	000	NA
Other (specify) PM 2.5	1.35 E-04	1.35 E-04		1.18	1.18	3	000	NA
Other (specify)								
Other (specify)								

11. 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.							
12. Signature		9/30 /ZI					
<b>Signer's name</b> (type or print) Ben Hopkins	<b>Title</b> Site Operations Manager	Phone number with area code 865-230-4842					

- Refer to the tables in the instructions for estimation method and control device codes.
- \*\* Exit gas particulate matter concentration units: Process Grains/Dry Standard Ft<sup>3</sup> (70°F), Wood fired boilers Grains/Dry Standard Ft<sup>3</sup> (70°F), all other boilers Lbs. /Million BTU heat input.
- \*\*\* Exit gas sulfur dioxide concentrations units: Process PPM by volume, dry bases, and boilers Lbs. /Million BTU heat input

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