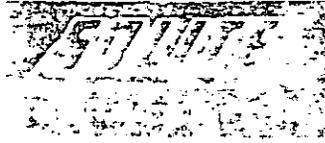


Note: This material is related to a section in AP42, *Compilation of Air Pollutant Emission Factors, Volume I Stationary Point and Area Sources*. AP42 is located on the EPA web site at [www.epa.gov/ttn/chief/ap42/](http://www.epa.gov/ttn/chief/ap42/)

The file name refers to the file number, the AP42 chapter and then the section. The file name "rel01\_c01s02.pdf" would mean the file relates to AP42 chapter 1 section 2. The document may be out of date and related to a previous version of the section. The document has been saved for archival and historical purposes. The primary source should always be checked. If current related information is available, it will be posted on the AP42 webpage with the current version of the section.

<b>AP42 Section:</b>	<b>11.20</b>
<b>Title:</b>	<b>Correspondence and comments 1993</b>



February 19, 1993

Mr. Ronald E. Myers  
Emission Factors and Methodologies Section  
Emission Inventory Branch  
U. S. EPA  
Research Triangle Park, NC 27711

Dear Mr. Myers:

Thank you for the time you spent with me in our telephone conversation today. I appreciate your allowing me to comment on the emissions factor documentation for AP-42 Section 8.25 after the time period for comments has passed.

As I told you, the references for Section 4, Items 5, 6, 7, 8 and 11 were tests of two Solite Corporation plants while burning RCRA hazardous waste. Since Solite Corporation and one other company are the only lightweight aggregate plants in the United States that burn waste as fuel, you may want to consider this for your determination of emission factors in Table 8.25-2 and 3.

I am enclosing the pertinent pages of tables and the cover sheet from the tests we ran recently. You may be able to obtain this full report from IEA since they are close by.

If I can be of further assistance, please do not hesitate to contact me.

Sincerely,

E. E. Martin  
Senior Vice President

EEM/slj  
Enclosures

040,



P. O. BOX 27211 • RICHMOND • VIRGINIA 23261 • PHONE AREA CODE 804 321-6761

March 19, 1993

**VIA FACSIMILE**

Mr. Bill Peske  
IEA Environmental Testing Co.  
P O Box 12846  
Research Triangle Park, NC 27709

Dear Mr. Peske:

This is to authorize you to release the test data on report numbers 192-92-67, 192-92-72 and 192-92-74 to the U.S. EPA Emission Inventory Branch. These reports are to be released at the expense of EPA.

Sincerely,

A handwritten signature in black ink, appearing to read "E E Martin", with a stylized flourish at the end.

E. E. Martin  
Senior Vice President

EEM/slj

c: Ron Myers  
E, F and M Section  
Emission Inventory Branch  
U. S. EPA  
Research Triangle Park, NC 27111



MIDWEST RESEARCH INSTITUTE

Suite 350

401 Harrison Oaks Boulevard

Cary, North Carolina 27513-2412

Telephone (919) 677-0249

FAX (919) 677-0065

February 26, 1993

Mr. Robert L. Virta  
Physical Scientist  
The Branch of Industrial Minerals  
U.S. Bureau of Mines  
810 Seventh Street, NW, MS 5209  
Washington, DC 20241-9384

Dear Mr. Virta:

As discussed with you on February 24, 1993, the United States Environmental Protection Agency is in the process of revising selected sections of the publication Compilation of Air Pollutant Emission Factors, otherwise known as AP-42. Since you expressed an interest in reviewing the sections on lightweight aggregate and perlite, I have enclosed a copy of the background reports for AP-42 Section 8.17, Perlite Processing, and Section 8.25, Lightweight Aggregate Manufacturing.

We would appreciate hearing your comments on these documents. Please note that the revised AP-42 sections, which are included as Section 5 of the respective background reports, must be finalized by the end of March. If you have any questions, you can reach me at (919) 677-0247, extension 5359.

Thanks for your help.

Sincerely,

A handwritten signature in dark ink, appearing to read "R. Marinshaw", written over a horizontal line.

Richard J. Marinshaw

2 enclosures

cc: Ron Myers, EIB (MD-14)

*Looks ok. Here are a few minor comments.*

*Bob Virta*

TABLE 4-2. SUMMARY OF TRACE ELEMENT ANALYSIS OF CLINKER COOLER  
SETTLING CHAMBER CATCH <sup>4</sup>

Elements	Captured particulate <sup>a</sup>		
	Test No. 1	Test No. 2	Test No. 3
Al	8.1	8.3	7.9
Sb	<7.1	<7.5	<7.5
As	26	25	24
Ba	680	660	630
Be	<0.13	<0.13	<0.13
Bi	<13	<13	<13
B	<2.2	<2.2	<2.2
Cd	3.7	3.7	3.5
Ca	5.7	5.3	7.4
Cr	78	79	75
Co	20	19	19
Cu	36	34	34
Au	<7.5	<7.5	<7.5
In	<13	<13	<13
Fe	4.6	4.5	4.4
Pb	100	120	100
Li	64	62	59
Mg	1.8	1.8	1.7
Mn	520	500	620
Hg	<8	<8	<8
Mo	<0.49	<0.50	<0.50
Ni	40	42	41
P	270	270	270
Pt	<7.5	<7.5	<7.5
K	3.0	3.0	2.9
Se	<20	<20	<20
Si	26	28	28
Ag	<0.49	<0.50	<0.49
Na	1.0	9,700	9,100
Sr	300	280	380
S	4,100	3,400	6,300
Te	<25	<25	<25
Tl	<23	<23	<23
Sm	290	300	280
Ti	4,600	4,500	4,300
U	<15	<15	<15
V	160	160	160
W	<7.5	<7.5	<7.5
Y	21	21	22
Zn	150	140	130

<sup>a</sup>Expressed as ppm except as where noted.

↓ No %'s like in table 1. Is this correct?

Also on Table 4-1, is the boron concentration 3.2% or 3.2 ppm? <sup>17</sup> 3.2% seems high for a clay or shale.

For Clay and Shale only.

TABLE 2-1. LIGHTWEIGHT AGGREGATE PRODUCTION IN 1990 BY STATE<sup>4</sup>

State	Amount Produced		Total value \$
	Mg	Tons	
Alabama and Arkansas	804,084	886,351	9,732,809
California	176,858	194,953	656,295
Florida and Indiana	283,637	312,656	1,752,382
Kansas, Kentucky, and Louisiana	556,594	613,540	1,759,347
Mississippi and Missouri	272,573	300,460	1,569,533
New York and Montana	300,106	330,810	1,876,954
North Carolina	326,587	360,001	3,319,616
Ohio, Oklahoma, and Pennsylvania	284,456	313,559	1,826,995
Texas	472,643	521,000	2,284,427
Utah and Virginia	326,793	360,228	1,635,545

TABLE 8.25-1 (ENGLISH UNITS)  
EMISSION FACTORS FOR LIGHTWEIGHT AGGREGATE PRODUCTION<sup>(a)</sup>

*superscript?*

All Emission Factors in lb/ton of Feed Unless Noted  
Ratings (A-E) Follow Each Emission Factor

*superscript?*

Process (SCC)	Filterable(b)				Condensable PM <sup>c</sup>				Lead	
	PM		PM-10		Inorganic		Organic			
Rotary kiln (305 )	130 <sup>d</sup>	D	e		0.82 <sup>f</sup>	D	.016 <sup>g</sup>	D	0.0015 <sup>h</sup>	D
Rotary kiln with scrubber (305 )	0.78 <sup>i</sup>	C	0.29 <sup>j</sup>	D	0.19 <sup>j</sup>	D	0.0092 <sup>j</sup>	D	e	
Rotary kiln with fabric filter (305 )	0.42 <sup>k</sup>	D	e		0.14 <sup>l</sup>	D	e		0.00030 <sup>h</sup>	D
Rotary kiln with ESP (305 )	0.67 <sup>m</sup>	D	e		0.031 <sup>m</sup>	D	e		e	
Clinker cooler with settling chamber (305 )	0.28 <sup>n</sup>	D	0.11 <sup>n</sup>	D	0.017 <sup>n</sup>	D	0.00067 <sup>n</sup>	D	e	
Clinker cooler with multiclone (305 )	0.30 <sup>o</sup>	D	0.12 <sup>o</sup>	D	0.0025 <sup>o</sup>	D	0.0027 <sup>o</sup>	D	e	

<sup>a</sup>Factors represent uncontrolled emissions unless otherwise noted.

<sup>b</sup>Filterable PM is that PM collected on or prior to the filter of an EPA Method 5 (or equivalent) sampling train.

PM-10 values are based on cascade impaction particle size distribution.

<sup>c</sup>Condensable PM is that PM collected in the impinger portion of a PM sampling train.

<sup>d</sup>References 3,7,14. Average of 3 tests that ranged from 13 to 340 lb/ton.

<sup>e</sup>No data available.

<sup>f</sup>Reference 3,14.

<sup>g</sup>Reference 3.

<sup>h</sup>Reference 7.

<sup>i</sup>References 3,5,10,12-14.

<sup>j</sup>References 3,5.

<sup>k</sup>References 7,14.

<sup>l</sup>Reference 14.

<sup>m</sup>References 15,16.

<sup>n</sup>References 3,6.

<sup>o</sup>Reference 4.

TABLE 8.25-1 (METRIC UNITS)  
EMISSION FACTORS FOR LIGHTWEIGHT AGGREGATE PRODUCTION<sup>a</sup>

All Emission Factors in <sup>English units not metric</sup> lb/ton of Feed Unless Noted  
Ratings (A-E) Follow Each Emission Factor

Process	Filterable <sup>b</sup>				Condensable PM <sup>c</sup>				Lead	
	PM		PM-10		Inorganic		Organic			
Rotary kiln (305 )	65 <sup>d</sup>	D	e		0.41 <sup>f</sup>	D	0.0080 <sup>g</sup>	D	0.00075 <sup>h</sup>	D
Rotary kiln with scrubber (305 )	0.39 <sup>i</sup>	C	0.15 <sup>j</sup>	D	0.10 <sup>j</sup>	D	0.0046 <sup>j</sup>	D	e	
Rotary kiln with fabric filter (305 )	0.21 <sup>k</sup>	D	e		0.070 <sup>l</sup>	D	e		0.00015 <sup>h</sup>	D
Rotary kiln with ESP (305 )	0.34 <sup>m</sup>	D	e		0.015 <sup>m</sup>	D	e		e	
Clinker cooler with settling chamber (305 )	0.14 <sup>n</sup>	D	0.055 <sup>n</sup>	D	0.0085 <sup>n</sup>	D	0.00034 <sup>n</sup>	D	e	
Clinker cooler with multiclone (305 )	0.15 <sup>o</sup>	D	0.060 <sup>o</sup>	D	0.0013 <sup>o</sup>	D	0.0014 <sup>o</sup>	D	e	

<sup>a</sup>Factors represent uncontrolled emissions unless otherwise noted.

<sup>b</sup>Filterable PM is that PM collected on or prior to the filter of an EPA Method 5 (or equivalent) sampling train.  
PM-10 values are based on cascade impaction particle size distribution.

<sup>c</sup>Condensable PM is that PM collected in the impinger portion of a PM sampling train.

<sup>d</sup>References 3,7,14. Average of 3 tests that ranged from 6.5 to 170 kg/Mg.

<sup>e</sup>No data available.

<sup>f</sup>Reference 3,14.

<sup>g</sup>Reference 3.

<sup>h</sup>Reference 7.

<sup>i</sup>References 3,5,10,12-14.

<sup>j</sup>References 3,5.

<sup>k</sup>References 7,14.

<sup>l</sup>Reference 14.

<sup>m</sup>References 15,16.

<sup>n</sup>References 3,6.

<sup>o</sup>Reference 4.

TABLE 8.25-2 (ENGLISH UNITS)  
EMISSION FACTORS FOR LIGHTWEIGHT AGGREGATE PRODUCTION<sup>a</sup>

All Emission Factors in kg/Mg of Product Unless Noted  
Ratings (A-E) Follow Each Emission Factor

*Metric units not English units*

Process (SCC)	SO <sub>x</sub>		NO <sub>x</sub>		CO <sub>2</sub>	
	Emission Factor	Rating	Emission Factor	Rating	Emission Factor	Rating
Rotary kiln (305 )	5.6 <sup>d</sup>	C	c		400	C
Rotary kiln with scrubber (305 )	3.4 <sup>d</sup>	C	1.9 <sup>e</sup>	D	c	
Clinker cooler with dry multicyclone (305 )	c		c		43 <sup>f</sup>	D

<sup>a</sup>Factors represent uncontrolled emissions unless otherwise noted.

<sup>b</sup>References 3, 4, 5, 8.

<sup>c</sup>No data available.

<sup>d</sup>References 3, 4, 5, 9.

<sup>e</sup>References 3, 4, 5.

<sup>f</sup>Reference 4.

*Not in table ?*

Also table 8.25-3 No reference C in footnotes

Perlite section

## 2. INDUSTRY DESCRIPTION<sup>1-3</sup>

Water content should be noted

nic rock with a pearl-like luster. It usually exhibits numerous  
to resemble an onion skin. A typical perlite sample is composed of 71  
1.5 to 18.0 percent alumina, 4 to 5 percent potassium oxide, 1 to  
oxides, and trace amounts of metal oxides. The Standard Industrial  
Classification (SIC) code for perlite processing is 1499, which is designated for miscellaneous  
nonmetallic minerals, except fuels. The Source Classification Code (SCC) for perlite processing is  
3-05-018, which addresses perlite processing under mineral products.

Expanded perlite usually has a density in  
(kg/m<sup>3</sup>) (7 to 15 pounds per cubic foot [lb/ft<sup>3</sup>]).  
ship the finished product long distances. Therefore  
near industrial areas.

more likely  
← 3 to 12  
lb/ft<sup>3</sup>

tons per cubic meter  
is not economical to  
in plants are located

Perlite is used by industry in many different ways. Construction-related uses (acoustical  
ceiling tile, pipe insulation, roof insulation board, etc.), which are the major market for expanded  
materials, increased 5 percent to 336,600 tons in 1989. Expanded perlite used as a filter aid, as  
fillers, and in agricultural markets (horticultural aggregate and fertilizer carriers) totaled 148,600 tons,  
an increase of 7 percent from 1988. Other uses for perlite include concrete aggregate, masonry and  
cavity fill insulation, plaster aggregate, low- and high-temperature insulation, paint texturizers, and  
refractories. Table 2-1 shows the amount of expanded perlite sold and used by producers in the  
United States in 1988 and 1989, by use.

In the United States, perlite rock deposits are widely distributed throughout six western States.  
The deposits found in New Mexico account for roughly 80 to 90 percent of the total U.S. crude  
perlite mined annually. The remaining tonnage comes from Arizona, California, Colorado, Idaho,  
and New Mexico.

### 2.1 CHARACTERIZATION OF THE INDUSTRY

In 1989, perlite mined for processing totaled 656,000 megagrams (Mg) (722,000 tons) and  
came from nine companies with 10 operations in 6 western States. A large majority of the total

SUMMARY OF TEST DATA FOR LIGHTWEIGHT AGGREGATE MANUFACTURING--NEW DATA

Process	Control	Pollutant	No. of runs	Data rating	Emission factor		Ref. No.
					range, kg/Mg (lb/ton)	average, kg/Mg (lb/ton)	
Kiln (coke)	mech. collector+ wet scrubber	Filterable PM	3	B	0.33 - 0.69 ( 0.65 - 1.4 )	0.50 ( 1.0 )	8
Kiln (gas)	wet scrubber	Filterable PM	3	D	0.63 - 1.09 ( 1.3 - 2.2 )	0.79 ( 1.6 )	9
		CO2	3	D	170 - 195 ( 340 - 390 )	185 ( 370 )	9
		SO2	3	D	0.05 - 0.21 ( 0.10 - 0.42 )	0.12 ( 0.23 )	9
Kiln (coke)	mech. collector+ wet scrubber	Filterable PM	3	B	0.60 - 1.45 ( 1.2 - 2.9 )	0.90 ( 1.8 )	11
Kiln (coal)	multiclone + wet scrubber	Filterable PM	3	B	0.26 - 0.30 ( 0.52 - 0.59 )	0.28 ( 0.56 )	12
		CO2	3	B	210 - 215 ( 420 - 430 )	210 ( 420 )	12
Kiln (coal)	wet scrubber	Filterable PM	3	B	0.37 - 0.43 ( 0.74 - 0.86 )	0.41 ( 0.81 )	13
		CO2	3	B	195 - 200 ( 390 - 400 )	195 ( 390 )	13
Kiln (coal)	none	Filterable PM	3	B	15 - 17 ( 29 - 34 )	16 ( 32 )	14
	none	Cond. inorg. PM	3	B	0.25 - 0.90 ( 0.49 - 1.8 )	0.50 ( 1.0 )	14
	none	CO2	6	B	40 - 120 ( 80 - 240 )	85 ( 170 )	14
	fabric filter	Filterable PM	3	B	0.12 - 0.45 ( 0.24 - 0.89 )	0.26 ( 0.52 )	14
	fabric filter	Cond. inorg. PM	3	B	0.033 - 0.10 ( 0.065 - 0.20 )	0.070 ( 0.14 )	14
Kiln (coal + No.2 oil)	ESP	Filterable PM	3	B	0.34 - 0.46 ( 0.67 - 0.91 )	0.40 ( 0.79 )	15
	ESP	Cond. inorg. PM	3	B	0.0080 - 0.020 ( 0.016 - 0.040 )	0.014 ( 0.028 )	15
	none	CO2	3	C	150 - 155 ( 300 - 310 )	155 ( 310 )	15
Kiln (coal + No.2 oil)	ESP	Filterable PM	3	B	0.21 - 0.33 ( 0.42 - 0.65 )	0.28 ( 0.55 )	16
	ESP	Cond. inorg. PM	3	B	0.012 - 0.026 ( 0.023 - 0.052 )	0.017 ( 0.033 )	16
	none	CO2	3	C	155 - 180 ( 310 - 360 )	170 ( 340 )	16

- Notes:
1. References 8 and 11 are for the same plant, same kiln .
  2. References 12 and 13 are for different kilns at same plant.
  3. References 15 and 16 are for different kilns at same plant.
  4. References 10 and 17 do not have process data and could not be evaluated.

3/12  
3/18/93

WARDEN PASCAL, IEA

460-0852

460-1785 FAX

SOLITE TEST REPORTS

FAX HIM COPY OF LETTER FROM SOLITE

3 TEST REPORT TITLE PAGES

FAXED TO HIM @ 11:10 AM

BILL PESKE, IEA CALLED

• IEA MUST HAVE CLEARANCE FROM PIANT TO RELEASE THE REPORTS

• WE NEED TO HAVE SOLITE FAX PESKE A LETTER ASKED FOR TO PHONE SOLITE CORP.

3/23/93

PHONED PESKE

- RECEIVED FAX FROM SOLITE ON 3/15/93

- SHEILA HATHAWAY IS FATHING UP THE REPORTS

SHE WILL CONTACT US

TIM PETRUS

BILL DEWEESE, DEECO

3612

PHONED KALL JOHNSON FERTILIZER INST.

REGARDING EXT. REVIEW COMMENTS ON SECTION 8.18 PG. 102  
- LEFT MESSAGE 3/24/93

3/30/93

- PHONED JOHNSON & EXPLAINED THAT WE OBTAINED THE  
TERASGUE TEST REPORTS FROM DSM & HIS HELD NO COUNSEL  
NEEDS

BACK  
TESTING

(Phone call to WALT BRYANS 3/30/93

GENERAL SCALE PRODUCTS CORP

(615) 282-4661

- WE DISCUSSED SETTING UP VISITS FOR NEXT WEEK APRIL 6-7  
TO MARION, VA & JOHNSON CITY, TN

WVA

CALL TO SOLITE CORP.

3/31/93

ED MARTIN, SENIOR VICE PRESIDENT

(804) 321-6761

CERTIFICATION OF COMPLIANCE

SENT TO EPA REGIONAL OFFICES - (III) FOR VA - PHILA.

HAS OPERATING RATES FOR TESTS - (IV) FOR KY - ATL.

HIS FUEL, RAW MATERIAL FEED RATES

CALL TO REGION III (215) 997-3989

3/31/93

FOR SOLITE TEST CERTIFICATION OF COMPLIANCE } Mike Markowski

- THEY WILL CALL ME BACK } Coordinator for Virginia

CALL TO REGION II

(404) 347-5014 COMPLIANCE BRANCH

ALEX PAVEL, NOT IN, LEFT MESSAGE

(404) GARY ASBY CALLED BACK HE WILL HAVE THE RIGHT PERSON

CALL TO LARRY BRISCON ALABAMA DSM

3/31/93

(205) 271-7700

ABOUT CHIVIT FEED PLANT

LEFT MESSAGE

LWA

CALL TO STATE OF VA. 4/5/93 (804) 786-2378  
 FOR PROCESS INFO ON SOLITE TESTS IN  
 HANOVER & CASCADE VA  
 (703) 676-5582 REGIONAL OFF.  
 ROB FEAGINS  
 AIR OFFICE  
 LYNCHBURG (804) 582-5120  
 CALL JOHN PETCHUL

LWA

Mr. PAT SPRINGSTON (502) 564-3358 REG. OFF. SUPERVISOR  
 KENTUCKY D. ENV. PROT.  
 → JERRY GOODEL (502) 564-3382  
 → ROGER COOK

FIL  
 TESTS DONE DEPT. OF WASTE MANAGEMENT  
 VA DEPT OF WASTE MGMT - TOM ROGERS (804) 786 6007  
 TESTS DONE UNDER BIF RULES  
 GIBBONS LANNER, SOLITE CASE (804) 798-7981  
 CALL BACK FROM KEITH SANDERSON 804 582-5126  
 PLANT CONTROLLED WITH BAGHOUSE

BRICK

CALL FROM WALT BANYAS 4/5/93  
 HOLIDAY INN @ JOHNSON CITY  
 I-77 NORTH THEN SOUTH ON 81  
 @ EXIT FOR LEFT ONTO Hwy 11E THEN  
 PLANT IS HALFWAY BETWEEN WHITFIELD & HANOVER

GROSECLOSE EXIT  
 EXIT AFTER <sup>400 586</sup> MOUNTAIN EMPIRE AIRPORT  
 NO SAFETY EQUIP REQUIRED  
 MIKE STACY, PLANT SUPERINTENDENT  
 (703) 783-3150  
 JOHNSON CITY  
 BUDDY ANTEL, PLANT SUPER.  
 (615) 926-9432

CALL TO TOM ROGERS 4/5/93  
 - GARY GROSS (213) 597-7940 RQ III SPA  
 - HE DOESN'T HAVE OF PROCESS DATA

LWA [ CALL TO REGION IV 4/5/93  
(404) (347) - 7603  
KALVIN DEBENEDICTIS

PO4 [ CALL TO BILL SCHIMMING, NOT IN 4/5/93  
TEXASGULF  
TALKED TO BRAD PEACOCK, AIR COMPLIANCE (919) 322-8262  
I ASKED ABOUT BRICK LIME ANALYSIS  
HE SAID TIMMY WOULD HAVE TO ANSWER QUESTION  
BUT HE IS OUT TILL MONDAY

CALL TO BRAD PEACOCK 4/5/93  
- WHEN IS ROCK SHOWN (COMMITMENT 1 ON LTR FROM  
FERT INST / SPECIAL TEXASGULF COMMENTS)  
- BRICK LIME SAME AS METHOD 202

LWA [ CALL BACK BY CARIN DEBENEDICTIS REG. III 4/5/93  
3 TESTS AVERAGE 8.64 TONS/HAL RUN 1.  
8.54 " " 2  
8.61 " " 3  
FEED RATE OF RAW MATERIAL  
SOLITE CORP TEST JULY 1992

CALL TO BRAD PEACOCK, TEXASGULF 5/5/93  
(DOCUMENTED IN TELECON)

CALL FROM PEACOCK 5/5/93  
- SAYS TELECON TAKEN TO HIM LOOKS FINE

Early Gross 2:5 597 7940 4/6/93

Early Gross BPA Reg. 3

3612

4/8/93

CALL FROM HOLACE WILLSON 783-4631  
MARTIN MARIETTA, (RIGHTS) STONE TESTS FOR AP-42

CRUSHING  
STONE

- NELLO TEER TEST ON CRUSHER DIFFERENT PROCESS  
↳ SHOULD BE CLASSIFIED AS FINE CRUSHING  
OTHER 2 TESTS SHOULD BE CLASSIFIED  
AS TERTIARY CRUSHING  
(781-4550 FOR HIS SECRETARY)

• HE IS ALSO ON ENVIRONMENTAL COMMITTEE, NATIONAL STONE ASSOC.

PALEONTOLOGISTS

BENITA BRANDT - Air Quality Div., MICHIGAN DNR  
517 373 7090  
BRUCE KUHNS' CONTACT @ STATE OF MICHIGAN  
PALAEOLOGIST

4/19/93

CALL TO REN MYERS  
LWA - LIQUID WASTE BURNING

LWA

- 2 SEPARATE TRIP REPORTS (YES)
- HESITANT TO USE CL, ORGANIC DATA
- COULD PUT IN BACKGROUND REPORT - ALL EFF'S  
IN AP-42 PM, CO<sub>2</sub>  
EMISSIONS OF ... HAVE BEEN MADE BUT DONE AT PLANTS  
BURNING WASTE DESIGNATED AS HAZARDOUS
- NEED TEST REQUEST FOR JOHNSON CITY  
FULL RANGE OF POLLUTANTS \$40,000  
ORGANICS INCLUDED 3 VOST, 3 SEM, VOST  
THC } or DLYSA (SEPARATE STACK)  
NEED TO SET UP SEPARATELY EPA TEST SERIES  
ETS SAYS THEY CAN RESUSPEND PM-10 FROM BH DUST

Call from Ron

4/19/93

CRUSHED  
STONE

- 2 TYPES OF STONE LIMESTONE & GRANITE
- INCORPORATE NEW TESTS
- IF SIG DIFF. THEN STATE THAT ON GOING TESTS  
; MAY CHANGE FOR LIMESTONE

4/21/93

LWA

PHONED ED MARTIN SOLITE CORP.

HE AGREES THAT SECT 4 OF BILL, PAR. 6, 7, 8 & 11  
PROBABLY WERE NOT FOR HAZ. WASTE FINAL RULING.  
- PROBABLY TELECON.

HAVE BEEN BURNING HAZ WASTE SINCE MID 70S/80S

5/3/93

MEET WITH RON HYDRO & MRI

DISCUSSED LABOUR SITUATION

- NOW ~ 100 HRS REMAIN
- RON SUGGESTED
  - BRITANNIC GLASS BUT NOT REVISING
  - CUTTING BACK ON CONCRETE BATCH PLANT TESTING  
TO MAKE UP FOR ADDITIONAL HOURS SPENT  
ON LWA, TACONITE, COAL, ABRASIVES

References For Section 11.20

1. *Calciners And Dryers In Mineral Industries-Background Information For Proposed Standards*, EPA-450/3-85-025a, U. S. Environmental Protection Agency, Research Triangle Park, NC, October 1985.
2. B. H. Spratt, *The Structural Use Of Lightweight Aggregate Concrete*, Cement And Concrete Association, United Kingdom, 1974.
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