## UNITED STATES DEPARTMENT OF LABOR MINE SAFETY AND HEALTH ADMINISTRATION

Southeastern District Metal and Nonmetal Mine Safety and Health

> Accident Investigation Report Surface Nonmetal Mine

**Fatal Falling/Sliding Material Accident** 

Bullitt County Stone Company Rogers Group, Incorporated-Bullitt County Stone Company Shepherdsville, Bullitt County, Kentucky I.D. No. 15-00008

July 17, 1996

By

J. B. Daugherty Supervisory Mine Inspector

And

E. G. Duarte Mine Safety and Health Inspector

Originating Office Mine Safety and Health Administration 135 Gemini Circle, Suite 212 Birmingham, Alabama 35209

> Martin Rosta District Manager

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Authority—This report is based on an investigation made pursuant to the Federal Mine Safety and Health Act of 1977, Public Law 91-173, as amended by Public Law 95-164.

Section A-Identification Data
1. Title of investigation: 2. Date MSHA investigation started:
Fatal Falling/Sliding Material Accident July 17, 1996
3. Report release date: 4. Mine:
<u>September 18, 1996</u> 5. Mine ID number: 6. Company: Rogers Group, Incorporated
Kogerb Group/ incorporated
15-00008 Bullitt County Stone Company
7. Town, County, State: 8. Author(s):
Shepherdsville, Bullitt County, KY J. B. Daugherty & E. G. Duarte
Section B-Mine Information
9. Daily production: 10. Surface employment:
N/A 17
11. Underground employment: 12. Name of coalbed:
N/A N/A
13. Thickness of coalbed:
N/A
Section C-Last Quarter Injury Frequency Rate (HSAC) for:
14. Industry: 15. This operation:
4.7 14.7
16. Training program approved: 17. Mine Profile Rating:
N/A N/A
Section D—Originating Office
18. Mine Safety and Health Administration Southeastern Address: 135 Gemini Circle, Suite 212
Mine Health and Safety District : District Birmingham, Alabama 35209
Section E-Abstract
A welder was asphyxiated by suffocation when she was
totally engulfed under a slough of material estimated at
40 tons. The pug mill operator was partially engulfed but
not seriously injured. The victim was in the process of
cutting out a metal plate at the end of the pug mill tunnel
when the slide of material occurred.

Section F-Mine Organization

Company officials:	Name	Address	
19. President:			
20. Superintendent:		Bells Mill Road, P. O. Box 310	
	George Newlin	Shepherdsville, KY 40165	
21. Safety Director:		P. O. Box 849	
	R. Dana Boyd	Bloomington, IN 47402	
22. Principle officer-H&S:		421 Great Circle Road	
	Philip J. Klober	P. O. Box 25250	
23. Labor Organization:		Nashville, TN 37202	
24. Chairman—H&S Committee:			
MSHA Form 2000-57. Apr 82	L2 (revised)		

### GENERAL INFORMATION

Joyce C. Gerwitz, welder, age 38, died of suffocation at about 5:05 p.m. on July 17, 1996, when she was engulfed by a slide of material while cutting an opening at the end of a pug mill surge tunnel. She had a total of 9 days mining experience, all with this company. The victim had received training in accordance with 30 CFR Part 48. Eight hours had been completed on July 10, 1996.

MSHA was notified at 5:20 p.m. on the day of the accident by a telephone call from Darin Matson, area production manager. An investigation was started the same day.

The Bullitt County Stone Company, a crushed limestone quarry, owned and operated by Rogers Group, Incorporated-Bullitt County Stone Company, was located just north of Shepherdsville, Bullitt County, Kentucky. The principal operating official was George Newlin, quarry superintendent. The quarry was normally operated two, 8-hour shifts a day, 5 days a week. A total of 17 persons was employed.

Limestone was mined by a multiple bench mining system using conventional quarrying methods to drill, blast, load, and haul the material to a plant where it was crushed and sized. The final product was used in road building material.

The last regular inspection of this operation was completed on March 13, 1996.

## PHYSICAL FACTORS

The surge pile where the accident occurred consisted of approximately 15,000 tons of dense graded aggregate material. A reclaim tunnel which was constructed of steel, measured 9 feet in diameter, 50 feet long and was under the surge pile. The tunnel declined at an approximate 10-12 degree angle, with the lower end enclosed and housed a conveyor belt which transported material from the surge pile to the pug mill.

Two Michigan front-end loaders, a L270 and a L320, were used to excavate an approximate 25 foot wide cut in the surge pile at the rear of the tunnel to expose the enclosed end of the tunnel. This excavation left vertical banks above and around the tunnel end which were approximately 35 feet high.

#### DESCRIPTION OF ACCIDENT

On the day of the accident, Joyce C. Gerwitz, (victim), reported for work at 7:00 a.m., her regular starting time. She was assigned to do routine maintenance and welding. Shortly after the shift started, Charles (Eddie) Weber, pug mill operator, informed Thomas Jewell, quarry foreman, that a major spillage had occurred which filled the inside lower end of the reclaim tunnel and covered the tail section of the conveyor belt. At about 9:30 a.m., Gerwitz and three other employees were instructed by Jewell to clean up the spillage. The employees reportedly were directed to enter the tunnel and take the spilled material out of the entrance in buckets.

Because this was tedious and time consuming, Weber suggested to Jewell that it would be faster to wash the spillage from inside the tunnel to the outside rather than carry the material out in buckets. Weber told Jewell that this had been done in the past when a spill occurred inside the tunnel. Weber further told Jewell that in order to wash the material out, a cut would have to be made in the surge pile to expose the lower end of the tunnel so the material would have room to flow out of the tunnel.

Shortly before noon, Jewell instructed two front-end loader operators to remove the material covering the surge pile end of the tunnel. While the area was being excavated, employees continued to carry material out to access the inside lower end of the tunnel to make the cut and wash out the spillage.

When Darin Matson, area production manager, and George Newlin, quarry superintendent, were making rounds, Weber informed them that the excavation was going well and that he could see the top of the tunnel. Weber further told them that once the area was clear, he would get the Bobcat loader to clean up the material that would be washed out of the tunnel. Matson and Newlin told Weber that he was not to use the Bobcat loader because the material would cover him if it sloughed. They instructed Weber that after the excavation was completed all work was to be done from inside the tunnel so employees would not be exposed to the unstable material.

At about 4:45 p.m., Gerwitz and Timothy Smolenski, quality control, were working inside the tunnel when John Williams, maintenance leadman, arrived with a welding truck at the tunnel entrance. Gerwitz, Smolenski, and Williams strung out cutting torch hoses into the tunnel in preparation to cut an opening at the rear of the tunnel. A short time later, Weber arrived at the tunnel entrance and told them to remove the hoses because he wanted them to cut the opening in the tunnel from outside, which was reportedly contrary to instructions previously given to Weber by Matson and Newlin. The hoses were placed back in the welding truck and Gerwitz and Weber drove around to the excavated area at the exposed end of the tunnel. Williams left the site and Smolenski stayed to take a water hose inside the tunnel before walking around to where Weber and Gerwitz were. Weber told Smolenski to go to the shop and bring back the Bobcat loader to be used to remove the washed out material, which again was not what Weber had been instructed by management to do.

Gerwitz walked about 50 feet into the excavated area toward the tunnel while Weber stayed about 15 feet behind her to watch for sloughing. After Gerwitz began cutting, Weber suggested that they make a trial run to ensure that she could get away from the area in the event the material sloughed. When Weber yelled, Gerwitz ran out of the excavated area. This exercise was done twice before she returned to the exposed end of the tunnel to continue cutting.

A short time later Smolenski returned and parked the Bobcat and Weber instructed him to also act as a spotter. Smolenski walked up and stood about 6 feet behind Weber.

Gerwitz had knelt down and began cutting when the right side of the bank sloughed. Smolenski yelled for Gerwitz to get out, but she was unable to escape and was covered by an estimated 40 tons of material. Weber was buried to his waist. Smolenski attempted to uncover him with his hands, but realized that he could not get Weber out. Smolenski ran to the area overlooking the shop and yelled to George Newlin, who immediately radioed for help. A front-end loader was used to free Weber. Approximately 30 minutes later, Gerwitz's body was recovered. She was pronounced dead at the scene by the county coroner. Cause of death was attributed to suffocation.

### CONCLUSION

The cause of the accident was the failure to properly slope or support the stockpile banks that surrounded the pug mill tunnel before entering the area.

### VIOLATION

Citation No. 4522006 was issued on July 19, 1996, under the provisions of 104(a) for a violation of Standard 56.9314:

A welder was fatally injured when she was buried under a slough of material estimated at 40 tons of dense graded aggregate. The pug mill operator was partially buried but not seriously injured. The welder was in the process of cutting out the metal plate at the end of the surge tunnel when the slide of material occurred. The back wall had not been sloped or supported in any manner.

This citation was terminated on July 19, 1996. The area was barricaded and filled in.

/s/ J. B. Daugherty
J. B. Daugherty
Supervisory Mine Inspector

/s/ E. G. Duarte
E. G. Duarte
Mine Safety and Health Inspector

Approved by: for Martin Rosta District Manager

# Appendices

- 1. List of Persons Present During the Investigation.
- 2. Data sheet, MSHA form 2000-58.

## Appendix 1

The following persons were present during the investigation:

## Rogers-Group, Incorporated-Bullitt County Stone Company

Leslie Geralds Philip J. Klober R. Dana Boyd Darin M. Matson George Newlin Thomas Jewell Charles (Eddie) Weber Timothy Smolenski John Williams

area vice president director, environmental services manager of safety area production manager quarry superintendent quarry foreman pug mill operator quality control maintenance leadman

## Mine Safety and Health Administration

J. B. Daugherty E. G. Duarte

supervisory mine inspector mine safety and health inspector

Data	Sheet
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# U.S. Department of Labor

APPENDIX 2	APPENDIX 2 Mine Safety and Health Administration		ninistration		
ection A-Victim Data					
Name	2. Sex	<b>3</b> . S	ocial Security Number		
Joyce C. Gerwitz	🗖 Male	🖾 Female	1798		
Age 5. Job Classification	<u></u>	<u> </u>			
38 Welder					
Experience at this Classification		7. Total Mining Experience	·····		
15 months		9 days			
What activity was being performed at time of accid	dent? 9. \	/ictim's Experience at this Activity	10. Was victim tr	ained in this task?	
Cutting with torch		Unknown	Yes		
ction B-Victim Data for Health and Safety Course	es/Training Received (	related to accident)	Date	Received	
New Miner Split Training	- 8 hours		7/10	/96	
		·····			
	····				
ction C-Supervisor Data (supervisor of victim)					
Name		16. Certified			
George Newlin		🛛 Yes 🛛 No N/A			
. Experience as Supervisor		18. Total Mining Experience			
16-1/2 years action D-Supervisor Data for Health and Safety Co	urres/Training Receiv	22 years	Date	Received	
).					
•					
•					
· · ·					
B. When was the supervisor last present at accident	scene prior to the	24. What did he do when he was t	here?		
accident?	, <b>.</b>				
4:20 p.m.					
		Instructed emplo the tunnel.	oyee to work	from insid	
. When was he last in contact with the victim?		26. Did he issue instructions relati approximately 11:00	ye to the accident?	7/06	
4.00 5 5		approximately 11:00 nstructed to work i			
4:00 p.m.					
. Was he aware of or did he express an awareness o	ot any unsafe practice of	or condition?			
No					