

COMMONWEALTH OF KENTUCKY
OCCUPATIONAL SAFETY AND HEALTH
REVIEW COMMISSION

KOSHRC NO. 2639-94

SECRETARY OF LABOR
COMMONWEALTH OF KENTUCKY

COMPLAINANT

VS.

ROSS BROTHERS CONSTRUCTION CO.
and
STEPHEN K. BENTLEY

REA DONDENTIL
AUTHORIZED EMPLOYEE *
REPRESENTATIVE

* * * * *

DECISION AND ORDER
OF THIS REVIEW COMMISSION

This case comes to us on complainant Secretary of Labor's
petition for discretionary review which we granted.¹ With the
exception of the authorized employee representative, we received
briefs from the parties.

As the enforcer of the Kentucky occupational safety and
health act (KRS chapter 338), the secretary issued one serious
citation with a proposed penalty of \$5,000. That citation charged
Ross with a violation of the general duty clause, KRS 338.031 (1)
(a), because the company "...did not use an accurate method to
identify the contents of an unmarked natural gas pipe...at Inco
Alloys International..." Ross Brothers contested the citation (KRS
338.141); following an evidentiary hearing conducted according to
our rules of procedure, our hearing officer issued a recommended
order dismissing the citation and penalty. The secretary of labor

¹ Section 48 (1) of our rules of procedure (ROP), enacted as
section 48 (1), 803 KAR 50:010.

then appealed that order to this commission which bears the ultimate responsibility for deciding contested occupational safety and health cases. KRS 338.071 (4) and ROP 47 & 48.

Inco Alloys International in Boyd County hired Ross Brothers to remove old fire brick and replace it with new brick in a pit where Inco poured molten metal into ingot molds. Transcript of the evidence (TE) 16. To facilitate its production operation, Inco moved various substances (gasses and liquids) around the plant in pipes which normally were color coded for safety:

natural gas	red	
compressed air	blue	
nitrogen	orange	
potable water	white	
plant water	yellow	TE 18._

Before beginning the work, Ross sent supervisors George Caudle (TE 53) and Glenn Hayes (TE 60) to Inco to look at the job. Mr. Caudle worked for Ross for many years with considerable time at Inco. TE 17. He testified he was experienced with the color coding of the pipes at Inco. TE 54. When Mr. Caudle and Mr. Hayes went to Inco, however, they discovered the pipes were all painted white. TE 67. Inco spray painted everything white and had not come back to color code the pipes. TE 18.

Mr. Hayes testified Mr. Caudle explained the pipe color system to him (TE 66) and that he and Caudle tried to trace the pipe they intended to use as a source of compressed air for tools. TE 67-68. They followed the supposedly compressed air pipe up 30 feet into the rafters and because of construction dust could not trace the pipe any further. TE 54.

Mr. Hayes testified that most companies using such pipes color code their lines. TE 66. We find Mr. Hayes and Mr. Caudle were familiar with marked pipes (TE 66) and we infer Mr. Hayes, a Ross Brothers supervisor, recognized the hazards of unmarked pipes because, as he testified, he was surprised the pipes were not painted or marked. TE 67.

Caudle and Hayes testified the line had a leVer operated valve usually found on compressed air lines. TE 17, 54 and 58. Natural gas pipes ordinarily have gate valves opened anti closed with a round handle much like a garden hose. TE 38.

Caudle and Hayes testified when they crackda the white line with the compressed air valve, they felt a flow, they associated with compressed air. TE 17 & 65. Natural gas (the type of gas used to heat houses) is pressured at less than one pound per square inch over the natural atmospheric pressure. TE 62. Compressed air for use with pneumatic tools, however, carries from 70 to 90 pounds of pressure. TE 62.

The first day of the work, August 27, 1994, a Saturday, four Ross employees used air from the supposed air line to power their tools. TE 19. Compressed air used to power the tools is expelled from a port on the tool. None of the employees reported being dizzy, sick at their stomachs or anything else associated with exposure to natural gas. No one reported any smell from the gas. TE 63 & Bentley deposition (D) 9. Neither had Mr. Hayes nor Mr Caudle reported any smell (created by a chemical added to the gas since it is otherwise odorless and tasteless) from the gas coming

out of the line when they cracked the valve some days before the work began. TE 54.

On Sunday, the second day of the job, Ross Brothers abandoned the powered tools and used pry bars and hammers to remove the old fire brick. Because it was quite hot in the pit where the work took place, Glenn Hayes decided to ventilate the pit using the compressed air.; TE 64. The employees ran a hose to the pit, turned on the "air" and began work. Very soon thereafter an explosion and fire burned the four employees working in the pit. D 18. Fortunately no one was killed. Mr. Hayes, a Ross Brothers supervisor on the scene, called in the alarm and;turned off the "air." He testified he saw a_12 foot flame burning at the end the hose which was used to bring the (supposed).. airto the: pit: TE_ 68.

Following an inspection triggered by an accident report, the secretary issued a general duty clause citation charging Ross with "...not using an accurate method to identify the contents of an unmarked natural gas pipe..."

Kentucky's occupational safety and health law places two basic requirements on employers. Employers must follow the safety and health standards (KRS 338.031 (1) (b) which are promulgated by the Kentucky occupational safety and health standards board. KRS 338.051. But a Kentucky employer shall also "...furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or likely to cause death or serious physical harm to his employees." KRS 338.031 (1) (a)

(emphasis added). This statute has come to be known as the general duty clause. When an employer has actual recognition of a hazard to his employees not covered by the specific standards or he works in an industry which itself recognizes that same hazard, the employer must take steps to eliminate the hazard or is in violation of the general duty clause. KRS 338.031 (1). (a).

The issue in this case is the definition of the hazard 'and whether it was recognized. Our hearing officer in his recommended order said natural gas was the hazard but that Ross Brothers would not recognize the hazard as there was had. no smell. On the other hand, the hazard according to the secretary of labor was Ross Brothers' failure to use "...an accurate method't,o identify the contents of an unmarked natural gas pipe.. ". Significant citation issued to Ross on November 11, 1994.

According to National Realty and Construction Co. v. OSHRC², 489 F.2d 1257, 1264 (DC CA 1973), CCH OSHD 17,018, in order to prove a general duty clause violation, the secretary of labor must show:

1. the employer failed to furnish a place of employment free of a hazard,
2. the industry or the employer recognized the hazard,
3. the hazard must be causing or likely to cause death or serious physical harm and
4. there must be a feasible way to abate the hazard.

² Although as a state occupational safety and health program we do not regard the federal law on the subject as binding on us, we often find the cases helpful in our analysis as we do here.

The secretary of labor of course has the burden of proof. ROP 43 (1). In order for the commission to affirm a citation under the general duty clause, the secretary must prove all elements as outlined in the National Realty case. We begin, then, with our analysis of the facts.

We find that Ross, as an employer, had an employee working at Inco who suffered third degree burns when an unexpected flash fire erupted. D 23. The fact that employees suffered burns compels a finding that injuries suffered were "...likely" to cause death or serious physical harm..." and that the workplace was not free from hazards.

Under National Realty, the secretary must **prove** the employer could take feasible steps to eliminate the hazard. Although the pipelines carrying natural gas and compressed air were supposed to be marked (red for natural gas and blue for compressed air), the lines at the time of Ross's work in the pit were painted white and we so find. Supervisors Caudle and Hayes could not trace the lines themselves because of dust, the white paint on the pipe, the height of the pipes leading up some 30 feet toward the roof of the building and poor lighting. But despite their inability to trace the lines, we find no one representing Ross Brothers inquired about the pipelines. We further find that during the inspection of the Inco work site by Messrs. Caudle and Hayes, an Inco employee (Mr. Lee Welch) accompanied them. TE 56-57. We find Caudle and Hayes could have asked Mr. Welch, as an Inco representative, to investigate the lines to establish their origins within the plant.

Besides asking Inco about the lines, Ross could have used a sniffer (a testing device) to test the air and natural gas lines for combustibility and the presence of oxygen. TE 46. Even Ross employee Stephen Bentley, burned when the natural gas ignited, worked with sniffers to test lines carrying compressed gas. D 27 and 33. We find Ross could have asked Inco about the lines or tested for themselves, proving feasible abatement.

That leads us to the most difficult issues in this case: one, what is the hazard and, two, was the hazard recognized by Ross or the construction industry?

The citation itself says the hazard is not identifying the unmarked pipes. But Mr. Majors, on hearing officer, in his recommended order focused on the lack of distinctive scent, normally associated with natural gas. Here, then, is the crux of the case. Either there is a hazard using unmarked pipes which is recognized by the construction industry and by Ross Brothers or we have a situation where the company was entitled to rely on the lack of the distinctive odor of natural gas. Mr. Majors dismissed the general duty clause citation, placing great emphasis on the employees' reliance on their sense of smell. But when we examine his logic in detail, it fails to persuade us.

In a letter to Columbia Gas, the supplier of the natural gas, Inco said it understood that "odorant fade" is not unusual. Ross exhibit 2. Although not defined further in the letter, we infer odorant fade means the characteristic smell of natural gas fades with the passage of time. Before the contract work began, Ross

supervisors Hayes and Caudle "cracked" open the line they believed was compressed air and intended to use on the job. They smelled no natural gas. Then, according to the facts of this case, Ross employees used the "air" from the unmarked pipe on the first day of their work at Inco to power their compressed air tools. Again no one smelled natural gas as they held the tools.³ Then on day two of the work (Sunday) Ross employees opened the line to ventilate the pit where they worked; no one smelled natural gas. The explosion and fire provided the very first indication the unmarked pipe contained natural gas, not air. We find that judging the presence or absence of natural gas by sense of smell is not a reliable test.

The hazard in this case, we find, is the use of the unmarked pipe without taking steps to ascertain its contents. That hazard led inexorably to the ignition of the natural gas. As employee Bentley testified, the application of steel tools to the fire brick produced sparks. D 15-16.

Finally, was the hazard recognized by Ross Brothers or the construction industry? The secretary may prove either to establish a general duty clause violation. Compliance officer Scott Conley testified he was familiar with construction companies that worked around hazardous pipes like those at Inco. TE 24 & 27. He said contractors generally understood the hazard of using substances from unmarked pipes. We find this testimony, by itself, proves

³ Neither did any employees become dizzy or sick from exposure to natural gas. TE 63.

industry knowledge of the hazard of using unmarked pipes. The testimony of supervisors Caudle and Hayes supports the testimony of the compliance officer. But we find the testimony of Caudle and Hayes also proves Ross, through its supervisors, has actual knowledge of the hazard of using unmarked pipes. Dover Electric Co, Inc., a federal review commission decision, CCH OSHD 30,148. Mr. Caudle, through his years working in the construction business and specifically at Inco, was familiar with the use of marked pipes. Mr. Hayes testified he was surprised the pipes at Inco were not color coded.

We will never know why the pipe containing compressed gas could be used on day one of the work. On day two caused almost immediately an explosion and fire. The pipe had compressed air type valves. The pressure the first day was sufficient to run power tools and did not cause nausea or dizziness. On neither day did the gas have the characteristic smell but on day two an explosion occurred. Stephen Bentley testified that removing the fire brick with steel tools caused sparks to fly. D 16. We are left without a full explanation of the accident.

But we do know working with unmarked pipes which might be carrying natural gas or compressed air is hazardous when a definitive answer as to which pipe is being used (natural gas or compressed air) is not sought.

We conclude the secretary of labor proved Ross Brothers violated the general duty clause when it exposed its employees to

the serious hazard of using unmarked pipes without testing for natural gas or oxygen. National Realty, supra. We further conclude the secretary proved feasibility. "The duty imposed by the general duty clause of the Act must also be capable of achievement." Empire Detroit Steel Division, Detroit Steel Corp. v. OSHRC and F. Ray Marshall, Secretary of Labor, 579 F.pd 378 (CA6, 1978), CCH OSHD 22,813. We therefore reverse the recommended order of our hearing officer and affirm citation 1, item 1.

The secretary proposed a penalty of \$5,000 in this case. KRS 338.991 (2) permits the secretary to levy a penalty of \$7,000 for a serious violation. As Scott Conley testified (TE 27-31), compliance officers use a standard for determining penalties. First he fixes a gravity-based penalty by determining the severity of any possible injury and the probability of an injury occurring. Severity of any injury may be high, medium or low; probability may be greater or lesser depending on the likelihood of an injury occurring.

Mr. Conley rated the injury as high since burns could lead to the death of an employee. Recall that employee Bentley suffered third degree burns. Because four employees were burned and because natural gas can be easily set off by a source of ignition, compliance officer Conley testified there was a greater probability of an injury occurring.

Depending on the facts of a case, a gravity based penalty can be \$5,000 because of high severity and greater probability or lower if based, for example, on low severity and lesser probability.

Here the compliance officer determined a gravity based penalty of \$5,000 because of high severity and greater probability.

Then the gravity based penalty can in certain circumstances be adjusted downward using three adjustment factors: size (the number of employees), good faith (the existence of safety programs or procedures) and history (the presence or lack of prior citations). Because **Ross** Brothers employed_251 employees at the time of the inspection, it received no credit for size. Because the accident revealed major flaws in **Ross's** safety program (as Mr. Conley testified), the company received no credit for good faith. Finally, because **Ross** Brothers had been cited within a three year period preceding_the accident, it received no credit for history either. Because no credit was awarded, the \$5,000 gravity based penalty became the proposed penalty. We find the penalty to have been figured appropriately. KRS 338.991 (6).

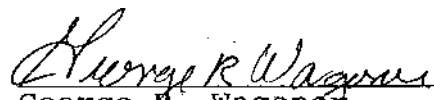
The hazard of using unmarked pipes at Inco is present for employees of **Ross** whether a fire and explosion occurred or not. If a connection were made to the white, unmarked pipe (without ascertaining its contents) which **Ross** thought contained compressed air, a violation of the general duty clause occurred whether an accident happened or not. So long as the secretary proves an accident "...could eventuate in serious physical harm..." then a serious violation may be found. Dorey Electric Co. v. OSHRC, 553 F2d 357 (CA4 1977), CCH OSHD 21,707.

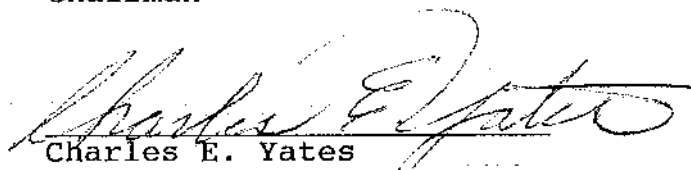
We reverse our hearing officer's recommended order. We affirm citation 1, item 1, as written and set the penalty at \$5,000.

If abatement has not already been accomplished by respondent,
we order it to do so within 30 days.

It is so ordered.

Entered November 13, 1996.


George R. Wagone
Chairman


Charles E. Yates
Member