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Secretary of Labor,  
Complainant,

v.

Black Micro Corporation,  
Respondent.

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OSHRC Docket No. **97-1413**

Appearances:

Cheryl L. Adams, Esquire  
Alan Raznick, Esquire  
U. S. Department of Labor  
Office of the Solicitor  
San Francisco, California  
For Complainant

Thomas C. Moody, Esquire  
Klemm, Blair, Sterling & Johnson  
Agaña, Guam  
For Respondent

Before: Administrative Law Judge Nancy J. Spies

**DECISION AND ORDER**

On July 8, 1997, the Secretary issued a citation to Black Micro Corporation (BMC) alleging serious violations of three separate construction standards of the Occupational Safety and Health Act of 1970 (Act). BMC contested the three-item citation and the proposed penalties.

This case went to hearing on March 15, 1999. BMC stipulated to jurisdiction and coverage (Tr. 6). At the beginning of the hearing, the Secretary withdrew items 1 and 2 of the citation, and the undersigned vacated those items (Tr. 6-7). Only item 3, alleging a serious violation of § 1926.652(a)(1) for failure to provide an adequate protective system in an excavation, remains for disposition. BMC argues in its defense that the excavation was made entirely in stable rock.

For the reasons set out below, the Secretary's position is accepted.

**Background**

On May 9, 1997, Occupational Safety and Health Administration (OSHA) compliance officers Randall White and Daniel Mooney conducted an inspection at BMC's construction site at the Saipan International Airport. Their inspection was a general scheduled programmed inspection in conjunction with a local emphasis program called "PAC Isles" (Tr. 10).

BMC was in the process of constructing a taxiway for the Saipan International Airport. To that end, BMC had excavated what White described as a "pit": "a shallow excavation that was fairly wide" (Tr. 14). The excavation was 5½ to 6 feet deep and approximately 6 feet across. The excavation was approximately 54 feet long. White observed PVC pipe, PVC glue, form work and a ladder in the excavation, along with some heavy equipment that was moving dirt near the excavation (Exh. C-2; Tr. 13-14, 62).

The walls of the excavation were vertical and were not sloped or shored. There was no benching or trench box, or any other form of protective system in the excavation to prevent a cave-in (Tr. 23). Christine Macam, the project engineer for BMC, testified that the excavation was not supposed to be more than 5 feet deep at any point (Tr. 130). BMC foreman Vianney Marquez testified that the excavation only exceeded a depth of 5 feet the previous evening and the day of the OSHA inspection and that he "was disappointed upon seeing that it was 5 feet deep" (Tr. 139-140).

Mooney took a soil sample from an area near the excavation. Mooney described how he took the sample (Tr. 63): "I walked to our car and got a bag out of the trunk and I walked over near the excavation, near some clumps of soil, and I tried to pick a clump of soil that I felt was representative of the most stable part of the trench." Mooney did not take the soil sample from the excavation itself. He stated that he took the sample from soil "near the excavation," which he assumed came from the excavation (Tr. 64): "I don't recall there being a spoil pile right next to the excavation. There were some clumps of soil around it that I thought came from the excavation, yes." White sent the soil sample to OSHA's analysis laboratory in Salt Lake City (Tr. 19). The lab classified the soil sample as Type B soil (Exh. C-4; Tr. 97).

BMC's foreman Ardor Penozza told the compliance officers that six employees had been working in the excavation the evening before (Tr. 17-18). The excavation had been opened for open for "a couple of days" (Tr. 47).

Item 3: Alleged Serious Violation of § 1926.652(a)(1)

The Secretary has the burden of proving her case by a preponderance of the evidence.

In order to establish a violation of an occupational safety or health standard, the Secretary has the burden of proving: (a) the applicability of the cited standard, (b) the employer's noncompliance with the standard's terms, (c) employee access to the violative conditions, and (d) the employer's actual or constructive knowledge of the violation (*i.e.*, the employer either knew or, with the exercise of reasonable diligence could have known, of the violative conditions).

*Atlantic Battery Co.*, 16 BNA OSHC 2131, 2138 (No. 90-1747, 1994).

In order to establish that a violation is "serious" under § 17(k) of the Act, the Secretary must establish that there is a substantial probability of death or serious physical harm that could result from the cited condition. In determining substantial probability, the Secretary must show that an accident is possible and the result of the accident would likely be death or serious physical harm. The likelihood of the accident is not an issue. *Spancrete Northeast, Inc.*, 15 BNA OSHC 1020, 1024 (No. 86-521, 1991).

The Secretary alleges that BMC committed a serious violation of § 1926.652(a)(1), which provides:

Each employee in an excavation shall be protected from cave-ins by an adequate protective system designed in accordance with paragraph (b) or (c) of this section except when:

- (i) Excavations are made entirely in stable rock; or
- (ii) Excavations are less than 5 feet (1.52m) in depth and examination of this ground by a competent person provides no indication of a potential cave-in.

Section 1926.652(a)(1) applies to BMC's construction site. It is undisputed that the excavation in question was greater than 5 feet in depth, that BMC's employees were working in the excavation with no form of protective system in place, and that BMC knew the conditions in which its employees were working. The standard requires some type of protective system in all excavations of this depth with vertical walls, regardless of whether the soil is Type A, B, or C, unless the excavation is dug in solid rock.

The only issue to be determined is whether the excavation was made entirely in stable rock. BMC contends that the excavation was made completely in Marianas limestone, and that

no protective system was required under § 1926.652(a)(1)(i). The Secretary contends that the excavation was made in a mixture of limestone, sandy silt, and clay, and thus was not "made entirely in stable rock." Each side presented an expert witness in soil analysis in support of its position.

The Secretary called Dr. Alan Peck as her expert witness. Dr. Peck is a soil specialist and chemist who has worked for the U.S. Department of Labor at its laboratory in Salt Lake City, Utah, for the past 24 years. Dr. Peck received a Bachelor's Degree in chemistry from Brigham Young University in 1953. He received a Master's Degree in 1955 and a Ph.D. in 1962, both from the University of Utah, in metallurgical engineering (Tr. 80-82). Dr. Peck was accepted at the hearing as an expert in soil analysis (Tr. 83).

BMC called Ukrit Siriprusanan as its expert witness. Siriprusanan has performed soil analyses and provided geotechnical services in Guam and Saipan since 1973 (Tr. 145-146). Siriprusanan received a Master's Degree in civil engineering from the University of California in Berkeley in 1968. He received a Master's Degree in civil engineering with a specialty in structural and geotechnical engineering in 1972, also from the University of California in Berkeley (Tr. 144-145). Siriprusanan was accepted at the hearing as an expert in soils analysis (Tr. 147).

Dr. Peck explained how he received the soil sample sent by White, and the process he used to analyze it (Tr. 94-96). Dr. Peck concluded that the soil sample he received was Type B soil (Exh. C-4; Tr. 97).

The evidence regarding the soil sample will not be considered in determining whether the excavation was in stable rock. Compliance officer Mooney stated that he took the soil sample from clumps of soil near the excavation, not from the excavation itself. The Secretary has not established that the soil sample taken by Mooney, sent by White, and analyzed by Dr. Peck was representative of the material in which the excavation was made.

The only other evidence the Secretary adduced to prove that the excavation was not in stable rock was Dr. Peck's observations upon viewing the videotape of the excavation. Dr. Peck stated, "All indications were that it was Type B material" (Tr. 85). Dr. Peck based his conclusion on "[t]he tendency for the material to break apart, into small pieces, as observed when it was

moved by the bulldozer, and also by examining the walls of the excavation, it appeared to be mainly fragments of different size" (Tr. 86). Dr. Peck pointed out what he considered to be cracks and breaks in the excavation walls which were consistent with instability (Tr. 120-122).

Siriprusanan also viewed the videotape. He disagreed with Dr. Peck's conclusion that the excavation was in Type B soil. Siriprusanan testified that he believed the excavation to be in limestone, a stable rock (Tr. 148-149). Siriprusanan did not offer an answer based on scientific reasoning for his conclusion. He stated that there was a lot of limestone in the Marianas Islands region and that, "We have cliffs rising hundreds of feet" (Tr. 149).

The experts discussed the cracks visible in the walls of the excavations. Dr. Peck thought they were fissures that indicated a weakness in the material of the walls (Tr. 122-123). Siriprusanan testified that it is not unusual to have irregularities in limestone formations due to water percolating through over millions of years. Siriprusanan stated that in limestone formations, "You have voids and fissures, so-called fissures, or sometimes we call it channels" (Tr. 158). Siriprusanan added that, "Occasionally, you do have cave-ins and caves" (Tr. 160). He also stated that he considered a limestone formation stable as a "whole mass. You can't just pick. You know, if you pick specific points, then obviously that's a weak spot, possibly" (Tr. 160).

GeoTesting, Inc., the company for whom Siriprusanan works, took bore samples in the area of the airport taxiway under construction by BMC (Exh. R-1). The plates of the bore samples show the composition of the samples. Siriprusanan testified regarding the substrata of the area (Tr.163-164):

Usually on an airport, the pavement would need to be supported by a base coat and a subbase. A base coat, by FAA standard, is 8 inches. That's minimum. And then as a base, usually maybe 2 or 3 feet, depends on the --how strong-- what's below that. So, you know, it could have been anywhere from like 1 or 2 feet perhaps maybe thicker. . . . The clay varies. There's some--what I call tubes that have gone pretty deep. I would say maybe like a foot or so to maybe 3 or 4 feet, possibly 4 or 5 feet deep in localized condition.

The Secretary's case is not overwhelming. Without the soil sample, the only evidence she has that the excavation is not in stable rock is Dr. Peck's judgment made from a videotape. While Dr. Peck's credentials are impressive, he based his conclusions on a viewing of a

videotape whose visual quality is typical of videotapes. However, the bore samples taken by GeoTesting, Inc., and Siriprusanan's testimony regarding the composition of the area's substrata establish that at least the top two feet of the excavation was made in material that is not limestone. Section 1926.652 (a)(1) requires a protective system in any excavation greater than 5 feet in depth that is not "made *entirely* in stable rock." The presence in the excavation, acknowledged by BMC, of gravel, clay, and silt makes the excavation subject to the protective system requirements of the cited standard.

The Secretary has established that BMC violated § 1926.652(a)(1). The hazard created by BMC's failure to comply with the standard is that of a cave-in. Cave-ins generally create a substantial possibility of death or serious physical injury. White testified that he did not consider death to be a substantial probability in the present case because of the 6-foot width of the excavation (Tr. 30): "[I]f it was 2-foot wide and it was 6-feet high, I would be more apt to go 'death,' because the employee would have nowhere to go. Plus, if it caved in, there'd be a narrower cavity and they could be buried." White testified that there was a substantial probability of an employee suffering a fracture if a cave-in did occur (Tr. 29-30, 49). The violation is serious.

#### Penalty Determination

The Commission is the final arbiter of penalties in all contested cases. Under § 17(j) of the Act, in determining the appropriate penalty, the Commission is required to find and give "due consideration" to (1) the size of the employer's business, (2) the gravity of the violation, (3) the good faith of the employer, and (4) the history of previous violations. The gravity of the violation is the principal factor to be considered.

No evidence was presented regarding the size of BMC. The Secretary had cited BMC for serious violations of the Act within the previous 3 years (Tr. 31). White testified that he credited BMC for good faith because the company "has a fairly effective safety program" (Tr. 54).

The gravity of the violation is moderate. The testimony of both expert witnesses established that the excavation was primarily in limestone, which is generally stable. The trench was 5½ to 6 feet deep and 6 feet wide. The dimensions of the excavation and the fact that it was made for the most part in limestone indicate that the gravity of the violation would be low.

However, heavy machinery was operating directly next to the excavation during the OSHA investigation (Exh. C-2). The runway of the Saipan International Airport was located just 200 to 300 yards away from the excavation (Tr.24, 39). The vibrations caused by the heavy machinery and the airplanes taking off increase the gravity of the violation.

Upon due consideration of these factors, it is determined that a penalty of \$1,000.00 is appropriate.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

The foregoing decision constitutes the findings of fact and conclusions of law in accordance with Federal Rule of Civil Procedure 52(a).

ORDER

Based upon the foregoing decision, it is hereby ORDERED that:

1. Items 1 and 2 of the citation are withdrawn by the Secretary and vacated, and no penalty is assessed; and
2. Item 3, alleging a serious violation of §1926.652(a)(1) is affirmed, and a penalty of \$1,000.00 is assessed.

NANCY J. SPIES  
Judge

Date: August 9, 1999