United States of America OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION 1924 Building - Room 2R90, 100 Alabama Street, SW Atlanta, Georgia 30303-3104

Secretary of Labor,

Complainant,

v.

OSHRC Docket No. 11-0466

B & B Underground Contractors, Inc.,

Respondent.

Appearances:

Charna C. Hollingsworth-Malone, Esq., U. S. Department of Labor, Office of the Solicitor, Atlanta, Georgia For Complainant

David A. Lester, Esq., Jones, Walker, Waechter, Poitevent, Carrère & Denègre, Birmingham, Alabama For Respondent; and

Stephen Decker, *Pro Se.*, West Palm Beach, Florida For Respondent

Before: Administrative Law Judge Sharon D. Calhoun

DECISION AND ORDER

B & B Underground Contractors, Inc. (B & B) performs jack and bore services for pipeline installation. On October 5 – 6, 2010, B & B was engaged in boring operations for the Beaver Creek Waste Water Treatment Project for the City of Dothan, Alabama when Occupational Safety and Health (OSHA) compliance officer Dale Schneider conducted an inspection of B & B's worksite on Highway 84 West & Green Valley Road in Dothan, Alabama. As a result of OSHA's inspection, the Secretary issued one serious citation and one other citation to B & B on January 21, 2011, alleging B & B committed violations of nine construction standards of the Occupational Safety and Health Act of 1970 (Act). Prior to the hearing, the parties entered into an agreement whereby the Secretary withdrew, citation 1, item 4 and citation 2, item 1. Further, Respondent contests only the classification of the violation cited in citation 1, item 1a. Citation 1, Item 1a alleges B & B committed a serious violation of 29 C. F. R. § 1926.350(a)(7), for failing to secure gas cylinders. It was grouped with item 1b which alleges a violation of 29 C. F. R. § 1926.350(a)(10), for failing to properly store oxygen and fuel cylinders. Item 2 alleges a serious violation of 29 C.F.R. § 1926.651(c)(2), for failing to provide a safe means of egress within 25 feet of where employees were working in the excavation. Item 3a alleges a serious violation of 29 C.F.R §1926.651(h)(1), for failing to utilize adequate precautions to protect employees against hazards posed by water accumulation in excavations. It was grouped with item 3b which alleges a violation of 19 C.F.R. § 1926.652(e)(2)(i), for failing to ensure trench boxes were placed no more than 2 feet from the bottom of the excavation. Item 5a alleges a serious violation of 29 C.F.R. § 1926.652(a)(1), for failing to provide an adequate protective system in the excavation. It was grouped with item 5b which alleges a violation of 29 C.F.R. § 1926.652(c)(2(iii), for failing to have tabulated data for trench boxes. The Secretary proposed total penalties of \$14,000.00 for these alleged violations.

B & B timely contested the citations. This case was designated for Simplified Proceedings under Subpart M, § 2200.203(a), of the Commission Rules. The undersigned held a hearing in this matter on May 10 - 11, 2011, in Abbeville, Alabama. The parties have filed post-hearing briefs.

For the reasons discussed below, Items 1b and 5b are vacated. Items 1a, 2, 3a, 3b and 5a are affirmed, and a penalty of \$8,000.00 is assessed.

Jurisdiction

At the hearing, the parties stipulated that jurisdiction of this action is conferred upon the Commission pursuant to Section 10(c) of the Act. The parties also stipulated at the hearing that at all times relevant to this action, B & B was an employer engaged in a business affecting interstate commerce within the meaning of section 3(5) of the Act, 29 U.S.C. § 652(5) (Tr. 10).

Background

B & B was engaged in boring operations for the Beaver Creek Waste Water Treatment Project for the City of Dothan, Alabama at a worksite on Highway 84 West & Green Valley Road in Dothan, Alabama (Tr. 46, 255). The Beaver Creek Waste Water Treatment Project involved the installation of 25,000 feet of 48-inch diameter trunk line running underground from the Beaver Creek Wastewater Treatment Plant to the Little Choctawhatchee Treatment Plant. To complete the project, it was necessary to cross underneath Highway 84. B & B was contracted by Eutaw Construction, general contractor on the jobsite, to perform the underground boring to enable the pipe to be installed without destroying the highway (Tr. 18).

Compliance Officer Schneider, was assigned by OSHA to conduct an inspection of the construction site for the Beaver Creek Wastewater Treatment Plant pursuant to the Dodge¹ report (Tr. 46). On October 5, 2010, Schneider initiated an inspection at the bore pit where B & B was working on the worksite (Tr.46-47). At the time of the inspection, B & B was working on the south side of the westbound lane of Highway 84 (Tr. 21-22). B & B had been working onsite for approximately 2 months at the time of the inspection (Tr. 51). Schneider testified that the conditions on the jobsite at the time of his inspection had not changed substantially from the conditions present 2 months prior, based on photographs taken in August, 2010 (Tr. 133-134). On the day of the inspection, B & B's employees had worked in the excavation from 10:00 a.m. until lunch (Tr. 51). Owner Oneal Bates was onsite until 10:00 that morning. Sean Rice was competent person and supervisor when Bates left the site (Tr. 50-51,148; Exh. C-3).

During his onsite inspection, Schneider observed a large excavation with a boring machine located in the bottom. The excavation was supported by two trench boxes with steel sheeting placed behind them. The excavation measured 18 feet wide, 45 feet long and was approximately 14 feet deep (Tr. 58). The excavation essentially consisted of two trenches, one on either side of the boring machine in the excavation, one to the east and one to the west of the casing of the boring machine. There was less than 15 feet from either side of the casing to the east or west wall of the excavation (Tr. 81). Unsecured oxygen and acetylene cylinders used for welding, were located at the bottom of the excavation (Tr. 82; Exhs. C-1, C-8). Also, an unsecured oxygen cylinder was located outside of the excavation (Tr. 83; Exhs. C-9, C-10). Schneider estimated the oxygen and acetylene cylinders in the bottom of the excavation were approximately six feet apart from each other (Tr. 90). The gas cylinders were for welding sections of pipe.

Schneider determined the soil in the excavation was Type C soil, based on his visual observation and the manual test he performed (Tr. 62). Schneider collected 2 soil samples from the spoil pile of the excavation and sent them to OSHA's Salt Lake City Laboratory for analysis

¹ A Dodge report identifies construction activities. It lists several employers, and several contracts that are occurring. The Dodge report is generated by OSHA (Tr. 46-47).

(Tr. 63). The OSHA laboratory analysis concluded both soil samples were Type C soil (Tr. 67).B & B does not dispute the Type C soil classification (Tr. 318-319). Boring reports reveal that rock was present in the excavation at a level of 6 - 8 feet below ground surface (Tr. 239-240).

Schneider observed a ramp leading into the excavation (Tr. 57). The ramp was used by the employees for access to and egress from the excavation (Tr. 92, 95). Schneider estimated the ramp to be 3 to 4 feet wide, and spanned 5 to 6 feet from the top to the bottom of the excavation. It was 35 to 40 degrees steep (Tr. 95-96, 188). The ramp contained loose dirt in the area where the employees entered, and the access point partially was blocked by a piece of wood which Schneider described as a 2 x 4, and Bates described as a 4 x 4. The wood went across the access point at an angle (Tr. 97). When Schneider was onsite, this ramp was the only means of access and egress, as there was no ladder or other means of egress in the excavation for employees working in the excavation (Tr. 99). Schneider determined the employees had to travel 35 to 40 feet from where they were working in the excavation to get to the ramp (Tr. 102).

Employees told Schneider that the ramp was how they accessed and exited the excavation, and that they did so approximately 2 to 3 times per day (Tr. 99-100). One employee told Schneider that he used a ladder to enter and exit the trench during the welding operation (Tr. 91, 221). No other employees stated they used a ladder for access and egress (Tr. 100, 191). Foreman Rice told Schneider that he considered the ramp to be a safe means of access and he was aware that employees used it (Tr. 99-101). Bates also identified the ramp as an access and egress area and stated he too was aware it was used by employees (Tr. 101). According to Bates, although a ladder was onsite, the employees probably did not use it because they accessed the excavation from the back (Tr. 291-292).

Schneider's visual observations revealed the east and west wall of the excavation contained a lot of erosion; water accumulation in the bottom of the excavation; and water trickling out of trench walls on the east and west sides (Tr. 61-63). His inspection revealed water had accumulated in both the east and west sides of the excavation (Tr. 108-109). Schneider determined the water was seeping through the west wall of the excavation in two locations, and could cause the wall to de-stabilize and collapse (Tr. 109). Schneider testified the water was being controlled by the use of a pump set up at the northeast corner of the excavation, however the employees were working between the boring machine and the west wall, and there was no pump

controlling the water in that area (Tr. 110-111). Schneider determined the water control to be inadequate because of the standing water on both the east and west floors of the excavation, and there was nothing to stop the trickling in or accumulation of the water in the excavation (Tr. 111).

In order to control the water in the excavation, B & B initially installed a well-point system which would allow water to flow into wells; however, water failed to migrate through the rock (Tr. 318-320). B & B then installed a pump which pumped water out of the excavation. A 6-inch bed of gravel was placed on the floor of the excavation to facilitate pumping water out of the excavation (Tr. 265).

The support system used by B & B was designed by its General Manager and Professional Registered Engineer Stephen Decker (Tr. 391). The support system consisted of two trench boxes placed end to end, but not touching, with steel plating placed behind them (Tr. 116-117, 283). Bates testified that one trench box was 10 x 24 and the other was 8 x 24 (Tr. 274, 279, 352). Schneider testified both were 8 x 24 (Tr. 116). The area behind the trench box on the west wall was not totally backfilled (Tr. 118). According to Mr. Bates, one trench box was 2 feet from the bottom of the excavation and the other was 5 to 6 feet from the bottom of the excavation (Tr. 119).

The protective system used by B & B was found to be inadequate by Schneider because the trench boxes did not go within 2 feet of the bottom of the excavation and one was not level. Also, Schneider testified that due to the depth of the excavation, a trench box should have been stacked on top of each trench box, or the top portion of the excavation should have been sloped. Schneider determined there was space between the trench boxes and the shields caused by erosion, and there was inadequate backfilling behind the trench boxes to eliminate the gaps (Tr. 135-139).

In order to assess whether the trench boxes were installed properly and whether they could provide adequate protection, Schneider requested B & B provide him with the tabulated data for the protective system (Tr. 143). Schneider made this request of Bates and Decker. They advised the data was maintained in the office and they would have to send it to him (Tr. 143-144). Although B & B provided other requested information, they did not provide the tabulated data, even after three requests from OSHA (Tr. 144-146).

The Citation

The Secretary has the burden of establishing the employer violated the cited standards.

To prove a violation of an OSHA standard, the Secretary must show by a preponderance of the evidence that (1) the cited standard applies; (2) the employer failed to comply with the terms of the cited standard; (3) employees had access to the violative condition; and (4) the cited employer either knew or could have known with the exercise of reasonable diligence of the violative condition.

JPC Group Inc., 22 BNA OSHC 1859, 1861 (No. 05-1907, 2009).

Applicability

The cited standards are found in Subpart P of the construction standards, which covers excavations, and Subpart J which covers welding and cutting. B & B was engaged in the installation of a 48 inch diameter trunk line running underground from the Beaver Creek Wastewater Treatment Plant to the Little Choctawhatchee Treatment Plant. In order to install the pipe, B & B dug an excavation approximately 14 feet deep, 45 feet long and 18 feet wide. B & B identified this excavation as bore pit number 3. Installing the pipe required B & B to weld together sections of pipe which were 20 feet long, after each piece of pipe was driven underground. Both the excavation standards and the welding standards apply to the activities performed by B & B at the jobsite. Applicability of the standards is established.

Knowledge

The conditions of the excavation were in plain view. Further, Foreman Rice and owner Bates supervised the employees working in the excavation. Bates directed the work of the employees when he was onsite, and when he was not, Rice assumed that task. Bates created the excavation by using an excavator, and was aware of the installation of the de-watering system for the excavation. Bates created the ramp used by employees for egress from the excavation and agreed to the type of protective system used onsite. The water and erosion in the excavation were in plain view and Bates testified it was 4 to 5 inches deep. Bates testified the employees used the gas cylinders in the excavation for welding pipes. Rice was left in charge on the day of the inspection and worked with the employees in the excavation. The owner's and foreman's knowledge of the conditions of the excavation and gas cylinders are imputed to B & B. Thus, knowledge is established.

Access to the Violative Conditions

There is no dispute that employees of B & B had access to the violative conditions. Rice's statement to Schneider reveals all five employees of B & B onsite were in the excavation when the pipe was driven underground (Exh. C-3). The Secretary has met her burden by showing B & B's employees had access to the violative conditions.

The only element of the alleged violations at issue is whether B & B failed to comply with the terms of the cited standards.

Item 1a: Alleged Serious Violation of 29 C. F. R. § 1926.350(a)(7)

Serious citation 1, Item 1a alleges:

On or about 5 October 2010 at the construction site on Hwy 84W and Green Valley Rd, Dothan: The employer failed to ensure the gas cylinders were properly secured which exposed employees to the hazards associated with being struck-by falling tanks.

Section 1926.350(a)(7) provides:

A suitable cylinder truck, chain, or other steadying device shall be used to keep cylinders from being knocked over while in use.

B & B does not dispute the violative conditions cited in item1a, however it contends the violation was not properly classified as a serious violation. Respondent contends that an employee would only sustain minor injuries if struck by a cylinder. The undersigned disagrees. There were 4 cylinders in the excavation, 2 of which were connected for use. The cylinders were 5 to 6 feet from the boring machine. When employees walked between the cylinders and the boring machine rail system the cylinders were 2 to 4 feet from the employees. The red cylinders weighed between 80-100 pounds empty and the cylinders were not secured in any way. Schneider testified unsecured cylinders were hazardous because they could tip over and fall or slide into an employee and could cause minor bruising or minor cuts. Further, Schneider testified, the cylinders could pose projectile hazards subjecting an employee to being struck by a cylinder, which could result in a serious injury such as broken bones, and more severe cuts. The undersigned agrees. The violation was properly classified as a serious violation.

Item 1b: Alleged Serious Violation of 29 C. F. R. § 1926.350(a)(10)

Serious citation 1, item 1b alleges:

On or about 5 October 2010 at the construction site on Hwy 84W and Green Valley Rd, Dothan: The employer failed to ensure extra oxygen and fuel cylinders in the excavation were removed and properly stored.

Section 1926.350(a)(10) provides:

Oxygen cylinders in storage shall be separated from fuel-gas cylinders or combustible materials (especially oil or grease), a minimum distance of 20 feet (6.1 m) or by a noncombustible barrier at least 5 feet (1.5 m) high having a fire-resistance rating of at least one-half hour.

Four cylinders were located in the bottom of the excavation. Two contained oxygen and the other two contained acetylene, a combustible material. These cylinders were for welding operations performed by B & B welders who were engaged in welding the pipes being installed. The photographs show four cylinders lying next to each other in the excavation. Three are inches from each other. The fourth cylinder was located approximately 6 feet away. Cords were wrapped around one of the oxygen cylinders, and two were connected for use.

The Secretary contends the cylinders were not stored properly, as they were closer than 20 feet. B & B asserts the cylinders were in use and were not being stored (Respondent's Brief, p. 20). Bates testified the cylinders were in use. Schneider testified that two of the cylinders were in use at the time of the inspection. According to Bates, the cylinders had been in the excavation for 3 to 7 days to cut and trim steel for 30 - 40 minutes on two occasions (Exh. C-4). Schneider never observed the cylinders being used while he was at the jobsite, however he testified two of the cylinders were hooked up to be used.

The Commission has addressed the issue of whether cylinders are "in storage" on numerous occasions. In the earlier cases, evidence that cylinders were either going to be used or were available for immediate use was found sufficient to withstand a finding that the cylinders were "in storage." *See MCC of Florida, Inc.,* 9 BNA OSHC 1895, 1897 (No. 15757, 1981); *Grossman Steel & Alum. Corp.,* 6 BNA OSHC 2020, 2023–24 (No. 76–2834, 1978). In later cases such as *American Bridge/Lashcon, J.V.,* 16 BNA OSHC 1867, 1869, (No. 91-633, 1994), aff'd, 70 F.3d 131 [17 BNA OSHC 1169] (D.C. Cir. 1995), the Commission considered other factors including the length of time the cylinders were not in use, to be determinative of the storage

issue. *See Newport News and Shipbuilding and Dry Dock Co.*, 16 BNA OSHC 1676, 1679–80 (No. 90–2658, 1994) (cylinders at site of ongoing burning operations which would not be used up in a day were "in storage"; *Hackney/Brighton Corp.*, 15 BNA OSHC 1884, 1887-88, (No. 88–610, 1992) (where acetylene cylinder kept together with oxygen cylinders in oxygen cylinder storage area between 3:00 p.m. one day and 9:30 a.m. next day, cylinders "in storage". Even later, the Commission held that based on "the evidence as a whole," cylinders were not "in storage" under section 1926.350(j)² where "it is unclear when the cited cylinders were last used or when they were to be used next." *Andrew Catapano Enterprises, Inc.*, 17 BNA OSHC 1776, 1781 (Nos. 90-0050, 90-0189, 90-191, 90-0192, 90-0193, 90-0071, 90-0772, 91-0026, 1996).

The record shows that it took 20 hours to install each segment of pipe. The pipe installation occurred 24 hours per day. The welding was a part of the pipe installation and the cylinders were used for the welding. It took approximately 4 hours to weld the pipes. The cylinders were located inside the excavation where the welding took place. Two cylinders were connected for use. A cylinder not intended for use was stored outside of the excavation. Bates's testimony that the cylinders were being used is credible and is consistent with Schneider's testimony that two of the cylinders were connected for use. No testimony was adduced as to exactly when the cylinders were used or when they were to be used next. This point is unclear. Consistent with the Commission's holding in *Andrew Catapano Enterprises, Inc., id.,* based on the evidence as a whole, it is unclear here when the cited cylinders were last used or when they were to be used next. Accordingly, the undersigned finds the cylinders were in use and were not in storage. The Secretary has not established a violation of § 1926.350(a)(10).

Item 2: Alleged Serious Violation of 29 C. F. R. § 1926.651(c)(2)

Serious citation 1, item 2 alleges:

a. On or about 5 October 2010 and times prior at the construction site on Hwy 84W and Green Valley Rd, Dothan: The employer failed to ensure there was no more than 25 feet distance to a means of egress in that the only means of egress was at the Southwest corner of the 45 foot long excavation.

² Section 1926.350(j) is a predecessor to § 1926.350(a)(10), with the same requirements for stored cylinders. Section 1926.350(j) adopted § 3.2.4.3 American National Standards Institute Z49.1-1967 which provides in part that: oxygen cylinders in storage must be separated from fuel gas cylinders . . . by a minimum distance of 20 feet or by a non-combustible barrier . . .

b. On or about 5 October 2010 and times prior at the construction site on Hwy 84W and Green Valley Rd, Dothan: The employer failed to ensure a safe means of egress was maintained in that the Southwest corner egress point had items such as but not limited to tripping hazards such as boring machine rails and gas cylinders, steep ramp, and narrow passage between two steel plates.

Section 1926.651(c)(2) provides:

Means of egress from trench excavations. A stairway, ladder, ramp or other safe means of egress shall be located in trench excavations that are 4 feet (1.22 m) or more in depth so as to require no more than 25 feet (7.62 m) of lateral travel for employees.

The Secretary contends that at the time of the inspection, the only means of egress from the excavation was a ramp which was not located so that employees would have no more than 25 feet of lateral travel. The Secretary also asserts that the ramp was unsafe in that it was too steep and was littered with debris. Respondent argues because this was an excavation and not a trench, a means of egress was not required. In the alternative, it argues if the excavation is deemed to be a trench, B & B provided a safe means of egress within 25 feet of where employees were working.

The standard defines excavation and trench as follows at § 1926.650(b):

Excavation means any man-made cut, cavity, trench or depression in an earth surface, formed by earth removal.

Trench (Trench excavation) means a narrow excavation (in relation to its length) made below the surface of the ground. In general, the depth is greater than the width, but the width of a trench (measured at the bottom) is not greater than 15 feet (4.6m). If forms or other structures are installed or constructed in an excavation so as to reduce the dimension measured from the forms or structure to the side of the excavation to 15 feet (4.6 m) or less (measured at the bottom of the excavation), the excavation is also considered to be a trench.

It is not disputed that the excavation was approximately 14 feet deep, 18 feet wide and 45 feet long. Nor is it disputed that the boring machine was placed slightly off center in the bottom of the excavation and that it was installed permanently for the boring operation. The boring machine weighed approximately 40,000 pounds and included a 6-foot diameter casing pipe. It was placed on a slab of concrete which was 6 inches thick and 8 feet wide. This concrete slab was placed on top of a 6-foot bed of gravel. Two tracks were situated underneath the boring machine. As depicted in the photographs, the boring machine consumed a significant portion of the

excavation. Schneider testified the placement of the boring machine created two trenches in the excavation, each measuring less than 15 feet wide. The undersigned agrees. The excavation is a trench excavation as defined by the standard.

As the trench excavation was more than 4 feet in depth, a safe means of egress pursuant to § 1926.651(c)(2) was required. A preponderance of the evidence reveals the ramp observed by Schneider during his inspection was the means of egress for employees working in the excavation, as there was not a ladder in the excavation at the time of his inspection. Although Bates testified that a ladder was onsite for ingress and egress to the boring pit, he testified "[i]n all honesty, did they use that ladder? Probably not. Because they were accessing the pit from the back" (Tr. 291-292). Bates's testimony is consistent with Schneider's inspection findings which revealed employees used the ramp for egress from the excavation. The undersigned finds the ramp was the means of egress for employees at the time of the inspection.

According to Schneider employees had to travel 35 to 40 feet from where they were working in the excavation to get to the ramp. This is supported by the evidence. The ramp was located at the rear of the 45-foot excavation. At the time of the inspection, employees were identified as having worked in the area under the umbrella near the front of the excavation, 8 feet or closer to the face of the north wall where the pipe was being installed. At the time of the inspection, there was no other means of egress for these employees. Accordingly, the undersigned finds the ramp used by employees for egress required more than 25 feet of lateral travel.

The Secretary also asserts the ramp was unsafe. Schneider estimated the ramp was 35–40 degrees steep, and was only 3 to 4 feet wide. To travel along the ramp, one had to maneuver sharp corners of the steel plate adjacent to it. The ramp was damp and contained loose soil and material. The access point of the ramp was blocked partially by a 2 x 4 piece of wood. B & B does not dispute that a piece of wood lay across the ramp, testifying that the next person using the ramp could have removed it. Although B & B disagrees with the degree of slope found by Schneider, no evidence was adduced to counter Schneider's measurement assessment, other than Bates testimony he had no difficulty walking on the ramp. The undersigned finds the debris, incline and proximity of the ramp to the sharp edges of the steel shield renders the ramp unsafe.

Accordingly, as the ramp was unsafe and was not within 25 feet of where employees worked, a violation of 1926.651(c)(2) is established.

Item 3a: Alleged Serious Violation of 29 C. F. R. § 1926.651(h)(1)

Serious citation 1, item 3a alleges:

On or about 5 October 2010 at the construction site on Hwy 84W and Green Valley Rd, Dothan: The employer failed to ensure employees working in an excavation in which water accumulated daily from both side walls were properly protected from the hazards associated with water accumulation. A pump was set up at the Northeast bottom of the excavation, but there was no means of collection or control in the West and Southeast areas.

Section 1926.651(h)(1) provides:

Protection from hazards associated with water accumulation. (1) Employees shall not work in excavations in which there is accumulated water, or in excavations in which water is accumulating, unless adequate precautions have been taken to protect employees against the hazards posed by water accumulation. The precautions necessary to protect employees adequately vary with each situation, but could include special support or shield systems to protect from cave-ins, water removal to control the level of accumulating water, or use of a safety harness and lifeline.

There is no challenge to the Secretary's claim that the excavation contained accumulated water. B & B argues, however that the water was controlled by the use of a pump and six-inch bed of gravel serving as a filter to pump out water. B & B asserts that adequate protections had been taken to protect the employees (Respondent's Brief, p. 24). Bates admits that on the day of the inspection approximately 4 to 5 inches of water had accumulated in the excavation at the deepest spot and that there was water down virtually both sides of the track. He also admits water had accumulated in both the east and west sides of the excavation and was seeping through the west wall of the excavation in two locations.

The standard does not preclude employees from working in an excavation in which water has accumulated where the employer has taken adequate precautions to protect employees against the hazards posed by water accumulation. B & B utilized a pump and 6-inch layer of gravel on the excavation floor as the de-watering system to control the water accumulation in the excavation. In addition, B & B installed trench boxes and shields to protect the employees from cave in. The question to be determined is whether these precautions were adequate. The undersigned finds they were not.

Schneider testified the water was being controlled by the use of a pump set up at the northeast corner of the excavation, however there was no pump controlling the water between the boring machine and the west wall where the employees worked. Photographs depict accumulated water in the west side of the excavation. Schneider testified that the water coming in through the west wall of the excavation could cause the soil to destabilize and force a blow out or cause a cave-in at the bottom of the excavation. The undersigned finds this to be a hazard directly related to the water accumulation. As it is undisputed 4 to 5 inches of water had accumulated in the excavation and water continued to seep in from two places on the west wall, the undersigned finds the dewatering system utilized by B & B was inadequate. Further, as discussed below regarding item 5a, the protective system in place was inadequate to protect the employees from the hazards The protective system in the excavation admittedly was placed posed by water accumulation. more than 2 feet from the bottom of the excavation, exposing employees to a blow-out related to the water in the excavation. The walls of the excavation supporting the protective system were washed away on the sides and underneath due to erosion, thereby decreasing the stability of the protective system, and increasing the potential for a blow out or cave-in. Further, the structural integrity of the trench box may have been compromised due to a bent structural support bar. A violation of § 1926.651(h)(1) is established.

Item 3b: Alleged Serious Violation of 29 C. F. R. § 1926. 652(e)(2)(i)

Serious citation 1, item 3b alleges:

On or about 5 October 2010 at the construction site on Hwy 84W and Green Valley Rd, Dothan: The employer failed to ensure trench boxes used as the protective system were not more than 2 feet from the bottom of the excavation exposing employees to the hazards associated with cave-ins.

Section 1926.652(e)(2)(i) provides:

Additional requirements for support systems for trench excavations. (i) Excavation of material to a level no greater than 2 feet (.61 m) below the bottom of the members of a support system shall be permitted, but only if the system is designed to resist the forces calculated for the full depth of the trench, and there are no

indications while the trench is open of a possible loss of soil from behind or below the bottom of the support system.

B & B admits the trench boxes placed in the excavation were placed higher than 2 feet from the bottom of the excavation. Bates testified that the trench box in the back of the excavation was probably placed within the 2 foot limitation; however, the front box was about 5 or 6 feet above the bottom. In addition, Bates admitted there was erosion around the trench boxes. Bates told Schneider he knew the placement of the trench boxes was not in compliance, but he did not consider it to be an unsafe hazard. The undersigned disagrees with the assertion that this was unsafe. Schneider testified that by not having the bottom of the trench boxes within 2 feet of the bottom, the potential for a cave-in or a blowout was greatly increased. Schneider's testimony is supported by the photographs depicting erosion around the support system (Exh. C-13). In addition, water had accumulated and was accumulating into the excavation posing a hazard of cave-in due to potentially weakening the walls of the excavation by washing away the soil supporting the trench boxes. The loss of soil at the bottom of one of the trench boxes is evident in the photographs (Exh. C-13). B & B's admissions and the photographic evidence substantiate a violation of § 1926. 652(e)(2)(i).

Item 5a: Alleged Serious Violation of 29 C. F. R. § 1926.652(a)(1)

The Secretary issued a serious citation to B & B for an alleged violation of

§ 1926.652(a)(1). The citation alleges:

On or about 5 October 2010 at the construction site on Hwy 84W and Green Valley Rd, Dothan: The employer failed to ensure proper protective systems such as trench boxes were used properly such as but not limited to the trench boxes not installed within 2 feet of the bottom, one support beam was bent/damaged, and no tabulated data was maintained for the protective systems, exposing employees to the hazards associated with cave-ins.

Section 1926.652(a)(1) provides:

Protection of employees in excavations. (1) 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 the ground by a competent person provides no indication of a potential cave-in.

The excavation at issue was not exempt from the cave-in protection requirements of § 1926.652(b) or (c). It is undisputed that the excavation was not made entirely in stable rock, and it was not less than 5 feet in depth.

The parties agree the excavation was approximately 14 feet deep, 45 feet long and 18 feet wide. To protect its employees, B & B installed a protective system designed in accordance with section (c) of the standard. Section (c) addresses the design of support systems, shield systems and other protective systems and sets forth four options from which an employer may select. The evidence shows B & B selected option 4 which provides for the design by a registered professional engineer. The protective system designed by Decker for B & B consisted of 8 x 24 ft. trench shields with 6 ft. spreaders and was designed for Type C soil (Exh. R-9).

B & B installed two trench boxes with steel shields placed behind each box to fill in the gaps and to provide additional support. According to Bates, one trench box was 8×24 feet and the other was 10×24 feet. The trench boxes were placed more than 2 feet from the bottom of the excavation. The spreader bar on one of the trench boxes was damaged. Bates admits that erosion was present behind the trench boxes and that 4 to 5 inches of water had accumulated in the bottom of the excavation. The parties agree that the soil in the excavation was Type C.

Although B & B agrees the soil in the excavation was Type C soil, it argues the excavation consisted of stable rock in the bottom 8 to 9 feet of the excavation and that this provided additional protection. B & B argues therefore, this is a layered system and since the more stable rock is below the Type C soil, the layers may be classified separately. The evidence however fails to substantiate Respondent's contention. Bates testified rock was encountered 8 to 9 feet into the excavation, however he indicated in his statement that the rock layers were sporadic or patchy, stating "there was a 3 ft. patch here, a 2 ft. patch there, it was not consistent" (Tr. 223, Exh. C-4). Accordingly, the undersigned finds that the layered system must be classified in accordance with the weakest layer, in this case Type C, as required by Appendix A to subpart P of Part 1926.

Schneider testified the water in the excavation could weaken the walls and cause a cave-in and the protective system put in place by B & B was inadequate to protect the employees. The undersigned agrees. The excavation was made in Type C soil, the least stable soil. There was no backfilling behind the support system to provide support. Significant erosion was present underneath and behind the trench boxes and metal shields. In some areas the trench box appeared unsupported from the bottom. Erosion or soil migration was exacerbated by water seeping in and accumulating in the excavation. B & B did not offer any evidence that it took any measures in consideration of the migrating soil underneath and behind the trench boxes and steel shields, reducing the support. The structural integrity of one of the trench boxes may have been compromised, as one of the support bars was bent. B & B offered no evidence that the structural integrity was unaffected by this defect. The undersigned finds the protective system inadequate. The Secretary has met her burden of establishing a violation of the cited standard. Accordingly, the citation alleging a violation of § 1926.652(a)(1) is affirmed.

Item 5b: Alleged Serious Violation of 29 C. F. R. § 1926.652(c)(2)(iii)

Serious citation 1, item 5b alleges:

On or about 5 October 2010 at the construction site on Hwy 84W and Green Valley Rd, Dothan: The employer did not have the tabulated data for the trench boxes either on/off site to establish if the trench boxes were properly assembled and installed.

Section 1926.652(c)(2)(iii) provides:

Manufacturer's specifications, recommendations, and limitations, and manufacturer's approval to deviate from the specifications, recommendations, and limitations shall be in written form at the jobsite during construction of the protective system. After that time this data may be stored off the jobsite, but a copy shall be made available to the Secretary upon request.

The Secretary contends she requested from B & B the tabulated data on the trench boxes, but was never provided the data. Initially, Schneider asked Rice about the tabulated data during his inspection. Rice told Schneider he did not have the tabulated data for the trench boxes (Exh. C-3). Subsequent requests for the data were made, but no data was provided.

The protective system for the excavation at issue was designed by B & B's Engineer, Decker. The standard sets forth four options an employer may select regarding the design of the support systems, shield systems, and other protective systems. (\$ 1926.652(c)). Option (4) of the standard provides for support systems, shield systems and other protective systems designed by a registered professional engineer, and sets forth the requirements. (\$ 1926.652(c)(4)). The evidence establishes that Decker was a registered professional engineer. Further, the evidence reveals B & B selected option 4, permitting the design of its protective system by a registered The Secretary issued a citation to B & B for an alleged violation of 652(c)(2)(iii), which is option (2). B & B did not design its protective system in accordance with the requirements of option (2), as it selected option (4). The Secretary did not move to amend the citation to allege a violation of § 1926.652(c)(4)(iii), therefore it is unnecessary for the undersigned to address whether the tabulated data required in § 1926.652(c)(2)(iii) also is required in § 1926.652(c)(4)(iii). The citation issued by the Secretary is not applicable. Accordingly, the Secretary has not met her burden as to this item.

Classification

A violation is serious under § 17 of the Occupational Safety and Health Act if it creates a substantial probability of death or serious physical harm and the employer knew or should have known of the violative condition. In determining whether a violation is serious, the issue is whether the result would likely be death or serious harm if an accident should occur. *Whiting-Turner Contracting Co.*, 13 BNA OSHC 2155, 2157 (No. 87-1238, 1989). Compliance Officer Schneider testified that the violations were serious because of the potential for death for employees working in the inadequately protected excavation in the event of a cave-in of soil into the excavation.³ Because serious injury or death could have resulted from a cave-in, the undersigned finds that B & B committed serious violations of the aforementioned standards.

Penalty Determination

The Commission is the final arbiter of penalties in all contested cases. *Secretary v. OSHRC and Interstate Glass Co.*, 487 F.2d 438 (8th Cir. 1973). The Commission must determine a reasonable and appropriate penalty in light of § 17(j) of the Act and may arrive at a different formulation than the Secretary in assessing the statutory factors. Section 17(j) of the Act requires the Commission to give "due consideration" to four criteria when assessing penalties: (1) the size of the employer's business; (2) the gravity of the violation; (3) the good faith of the employer; and

 $^{^{3}}$ The undersigned addressed the classification of the violation for failing to secure gas cylinders in the section addressing item 1a in this decision.

(4) the employer's prior history of violations. 29 U.S.C. § 666(*j*). Gravity is the primary consideration and is determined by the number of employees exposed, the duration of the exposure, the precautions taken against injury, and the likelihood of an actual injury. J. A. Jones Construction Co., 15 BNA OSHC 2201 (No. 87-2059, 1993).

In arriving at the proposed penalties Schneider determined that for item 1a the violation was of low severity and lesser probability (Tr. 148, 150). Items 3a, 5a and 5b were assessed as high severity and greater probability because of the potential for death due to a cave-in of soil into the excavation (Tr. 150-152). B & B was given a 30% penalty reduction for size since it was a small employer with 39 employees (Tr. 147, 152-153). Schneider testified that no good faith reduction was given because safety talks were not relevant to work being done on the site; B & B's program did not address the storage of cylinders; and there was no progressive enforcement. No reduction for history was given because B & B had been inspected within the previous 5 years (Tr. 148-149).

As to the violations of the excavation standards, the undersigned finds that a high gravity is appropriate here because the excavation was approximately 14 feet deep and did not have an adequate protective system, exposing 5 employees to potential cave-in and serious injury or death. As to the welding standard violations, the undersigned finds that a lower gravity is appropriate, as only 2 employees used the gas cylinders for welding. B & B is a small employer. This factor weighs in favor of a small penalty. Further, B & B corrected the conditions immediately. This good faith factor weighs against a large penalty. Considering these facts and the statutory elements, a proposed penalty of \$ 8,000.00 is appropriate.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

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

ORDER

Based upon the foregoing decision, it is ORDERED that:

- 1. Citation 1, item 1a, alleging a violation of § 1926.350(a)(7), is affirmed and a penalty of \$500.00 is assessed;
- 2. Citation 1, item 1b, alleging a violation of § 1926.350(a)(10), is vacated;

- 3. Citation 1, item 2, alleging a violation of § 1926.652(c)(2), is affirmed and a penalty of \$1,500.00 is assessed;
- 4. Citation 1, item 3a, alleging a violation of § 1926.651(h)(1), is affirmed;
- 5. Citation 1, item 3b, alleging a violation of § 1926.652(e)(2)(i), is affirmed;
- 6. A penalty of \$3,000.00 is assessed for citation 1, items 3a and 3b;
- 7. Citation 1, item 4, alleging a violation of § 1926.651(k)(1), was withdrawn;
- Citation 1, item 5a, alleging a violation of § 1926.652(a)(1), is affirmed and a penalty of \$3,000.00 is assessed;
- 9. Citation 1, item 5b, alleging a violation of § 1926.652(c)(2)(i), is vacated; and
- 10. Citation 2, item 1, alleging a violation of § 1926.251(b)(1), is withdrawn.

/s/ Sharon D. Calhoun SHARON D. CALHOUN Judge

Date: June 27, 2011 Atlanta, Georgia