United States of America
OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION
1120 20th Street, N.W., Ninth Floor
Washington, D.C. 20036-3457

SECRETARY OF LABOR,	:	
	:	
Complainant,	:	
	:	
v.	:	OSHRC DOCKET NO. 10-0220
	:	
TEICHERT CONSTRUCTION	:	
	:	
Respondent.	:	

APPEARANCES:

Susan Seletsky, Esquire.
U.S. Department of Labor
Office of the Solicitor
350 South Figueroa St.
Suite 370
Los Angeles, CA 90071-1202
For the Complainant

Robert D. Peterson, Esquire
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Sunset Whitney Ranch
Rocklin, CA 95677
For the Respondent

BEFORE: Dennis L. Phillips,
Administrative Law Judge

DECISION AND ORDER

Background

This proceeding is before the Occupational Safety and Health Review Commission ("the Commission") pursuant to section 10(c) of the Occupational Safety and Health Act of 1970, 29 U.S.C. § 651 *et seq.* ("the Act"). As a result of a fatality which occurred on August 20, 2009, the United States Occupational Safety and Health Administration ("OSHA") sent OSHA Compliance Officer ("CO") Van Arden Howell ("CO Howell") to a construction jobsite at Camp Roberts, Paso Robles, California. As a result of the inspection conducted by CO Howell in late August,

2009, Teichert Construction ("Teichert" or "Respondent") was issued a citation alleging four serious violations of the Act on February 1, 2010. On March 15, 2011, the parties filed a joint motion to withdraw Item 1, Citation 1. The motion was granted by the Court at the beginning of the hearing and is no longer before the Commission. (Tr. 7-8). Item 2 of the citation alleged a violation of 29 C.F.R. § 1926.601(b)(14) on the grounds that Respondent failed to check and correct a brake in need of adjustment in a dump truck before placing it into service on August 20, 2009. The truck was put in service with one of its brakes out of adjustment. The Secretary proposed a penalty of $1,125 for this alleged violation. Item 3 of the citation alleged a violation of 29 C.F.R. § 1926.651(j)(2) on the grounds that on August 20, 2009 a spoil pile was not kept at least two feet from the edge of the excavation, exposing employees working inside the excavation to the hazard of falling debris. A penalty of $2,625 was proposed by the Secretary. Item 4 of the citation alleged a violation of 29 C.F.R. § 1926.652(b) on the grounds that on August 20, 2009 Respondent failed to comply with the protective system designed for the excavation by a registered professional engineer ("RPE") that called for: 1) the entire length of the excavation to be sloped at ¾:1, 2) the trench to be dug with a 53 degree slope, 3) weld huts to be used, and 4) the spoil pile to be setback at least four feet from the edge of the trench wall. The Secretary proposed a penalty of $5,000 for this alleged violation.[1]

Stipulations

On February 24, 2011, the parties filed a Joint PreHearing Statement ("JPHS"). In Section III of the JPHS, the parties stipulated to the following facts:

> 1. Respondent stipulates to jurisdiction and service of the citation and complaint.
> 2. Respondent Teichert Construction ("Respondent") is and at all material times has been a corporation with an office and place of business located at 3500 American River Road, Sacramento, CA 95864.

[1] The RPE was Brian Wellington, J.M. Turner Engineering, Inc., located at Santa Rosa, California. (C-9).

3. At all times material, Respondent has been an employer engaged in a business affecting commerce who has employees within the meant [sic] of OSHA Act Section 3(5), 29 U.S.C. [§] 652(5).

4. Respondent was a contractor on the Nacimento pipeline project to install approximately 23 miles of a 45 mile pipeline to transport water from Lake Nacimento to the city of San Luis Obispo, CA.

5. During the dates of August 21, 2009 through August 27, 2009, an inspector from the Occupational Safety and Health Administration ("OSHA") conducted an inspection of a workplace of Respondent located at Camp Roberts, Paso Robles, CA 95654 ("Workplace").

6. Timothy Nelson ("Nelson") was an employee of Teichert Construction who worked on the Nacimento project from at least August 2008 to August 20, 2009.

7. Pursuant to 29 C.F.R. § [1926.]652(b)(4), Respondent opted to have the protective system for the trench designed by a registered professional engineer. The engineer's plan is identified as C. Exh. 1 and R-G.[2]

8. A test of a soil sample taken by the OSHA inspector established the soil as type B, sandy clay, cohesive.

(Tr. 14-17; JPHS).

In Section V of the JPHS, the parties also identified the following facts which remained to be litigated:

A. The Secretary contends that the following facts remain to be litigated:

1. Did Respondent comply with the requirements for a system to protect employees in a trench?

2. Was the excavation of the trench executed in accordance with the Plan prepared by the registered professional engineer (C. Exh.1, R. Exh. G)?

3. Was the spoil pile set back at least 4 feet from the edge of the excavation as required by the Plan?

4. Was the as-built west slope at the pipe bell location approximately 56.6 degrees, steeper than the slope required by the Plan of 53 degrees?

5. Were employees protected from the hazard of excavated or other material falling or rolling into the excavation?

6. Did the driver of the dump truck 183 (VIN 1HTGLAHT22H521416) inspect the brakes on the vehicle before driving it on August 20, 2009[?][3]

7. Was the brake push rod on the third axle, right side, of the dump truck 183 driven while out of adjustment on August 20, 2009? [4]

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[2] In the original JPHS, Respondent's exhibit was identified as R. Exh. 7. At the hearing, that exhibit was marked as R-G, and will be so identified in this decision.

[3] The Court finds that the dump truck that ran over Mr. Nelson was dump truck 193; and not 183. (R-C).

[4] The brake's push-rod is also referred to as the "slack adjustor." (Tr. 34, 36-37).

B. Respondent contends that it did not engage in any violation of any safety order; that the safety orders referenced in Citation 1, Items 2, 3, and 4 are without evidentiary support.

Also, in the JPHS, Respondent stated, in Section VI, that it was withdrawing any previously asserted affirmative defenses.[5] In Section VII, Respondent made the following request:

> Respondent's position is that consistent with pre-hearing requests of Teichert Construction, it requests Fed/OSHA identify those individuals of Teichert Construction who made alleged statements to the Fed/OSHA inspectors in this case and whose identity has been redacted on the forms completed by the inspectors as a part of his inspection.

Respondent did not pursue this request either at the hearing or in its post-hearing briefs, and it is deemed to be abandoned and denied by the Court.

Jurisdiction

Under the Act, each employer "shall comply with occupational safety and health standards promulgated under this Act. Section 5(a)(2) of the Act, 29 U.S.C.§ 654(a)(2). The Act defines an employer as "a person engaged in a business affecting commerce who has employees." Section 3(5) of the Act, 29 U.S.C. § 652(5).

In the JPHS, Teichert stipulated to jurisdiction and service of the complaint. (Stipulation #1). Teichert also stipulated that at all material times it has been a corporation with an office and place of business located at 3500 American River Road, Sacramento, CA 95864, and that, at all material times, it has been an employer engaged in a business affecting commerce that has employees within the meaning of Section 3(5) of the Act, 29 U.S.C. § 652(5) (Stipulations #2, 3). The record also establishes that Respondent filed a timely Notice of Contest to the citation. Accordingly, the Court finds that OSHA has jurisdiction over this matter. The Court finds that

[5] In its Answer, Respondent raised several affirmative defenses. These were explicitly withdrawn by Teichert in the JPHS.

under Section 10(c) of the Act, 29 U.S.C. § 659(c), this matter is properly before the Commission.

The Project

The purpose of the Nacimento construction project was to build a 45 mile pipeline to transport water from Lake Nacimento to the city of San Luis Obispo, California. (Tr. 15; JPHS Stipulation #4). Teichert was contracted to install approximately 23 miles of the 45 mile pipeline. (Tr. 142, JPHS Stipulation #4). This matter involves a portion of the Nacimento project located at Camp Roberts, Paso Robles, California.

The project required Teichert to construct a long excavation that measured 19 feet across and ranged from 13 feet to 9.5 feet in depth. (Tr. 110-11). The pipes being installed on August 20, 2009 were 44 feet long. (Tr. 225). Where two sections of pipe were joined, Teichert constructed a bell hole with sloped sides where employees entered the trench to place O-rings and perform other work to join the pipes. (Tr. 164, 248).

The excavation was dug in Type B, sandy clay cohesive soil. (JPHS, Stipulation #8). Under OSHA regulations, excavations dug in Type B soil are generally required to be sloped at a pitch of 1:1. However, as permitted by the OSHA regulations, Teichert chose to follow an option that allowed it to construct a shoring/sloping system designed by a RPE.[6] (JPHS, Stipulation #7; C-1).[7] The RPE's plan required Respondent to slope the sides of the entire length of the trench at ¾:1 starting after a vertical rise of three feet from the bottom of the excavation. (Tr. 188, 191; C-1). The RPE's plan also called for weld huts to be placed into the trench at the bell holes where

[6] The RPE's "Open Cut Shoring Plan" stated that the "plan is for worker protection only." The RPE's plan stated that Teichert was required to have a competent person at the jobsite who was also "responsible for making sure that all elements of this plan are adhered to …." (C-1, notes 1 and 7).
[7] The Secretary's exhibits are designated in this decision as C-#; Teichert's exhibits are designated R-#.

employees worked inside the trench.[8] (Tr. 189). To compensate for the liberal sloping requirements of the RPE's design, the plan required that the spoil pile and large equipment be set back four feet from the edge of the excavation to reduce the load and therefore the stress on the excavation walls. (Tr. 190-92). Because of the abundance of debris, some of the spoil was removed by dump truck to another area near the site. (Tr. 63).

Cited Standards

Item 2 of the citation alleged a violation of 29 C.F.R. § 1926.601(b)(14), which provides:

> **§ 1926.601 Motor Vehicles.**
> * * *
> (b) *General requirements.*
> * * *
> (14) All vehicles in use shall be checked at the beginning of each shift to assure that the following parts, equipment, and accessories are in safe operating condition and free of apparent damage that could cause failure while in use; service brakes, including trailer brake connections; parking system (hand brake); emergency stopping system (brakes); tires; horn; steering mechanism; coupling devices; seat belts; operating controls; and safety devices. All defects shall be corrected before the vehicle is placed in service. These requirements also apply to equipment such as lights, reflectors, windshield wipers, defrosters, fire extinguishers, etc., where such equipment is necessary.

Item 3 of the citation alleged a violation of 29 C.F.R. § 1926.651(j)(2), which provides:

> **§ 1926.651 Specific excavation requirements.**
> * * *
> (j) *Protection of employees from loose rock or soil.*
> * * *
> (2) Employees shall be protected from excavated or other materials or equipment that could pose a hazard by falling or rolling into excavations. Protection shall be provided by placing and keeping such materials or equipment at least 2 feet (.61 m) from the edge of excavations, or by the use of retaining devices that are sufficient to prevent materials or equipment from falling or rolling into excavations, or by a combination of both if necessary.

Item 4 of the citation alleged a violation of 29 C.F.R. § 1926.652(b), which provides:

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[8]A weld hut is a metal structure, commonly 8x8 feet, that is also called a manhole box and is placed inside an excavation to protect an employee from a cave-in. (Tr. 70). A weld hut may also be referred to as a "trench box" or "manhole shield." (Tr. 23, 70).

§ 1926.652 Requirements for protective systems.

* * *

(b) *Design of sloping and benching systems.* The slopes and configurations of sloping and benching systems shall be selected and constructed by the employer or his designee and shall be in accordance with the requirements of paragraph (b)(1); or, in the alternative (b)(2); or, in the alternative, paragraph (b)(3), or, in the alternative, paragraph (b)(4), as follows:

* * *

(4) *Option (4)-Design by a registered professional engineer.* (i) Sloping and benching systems not utilizing Option (1) or Option (2) or Option (3) under paragraph (b) of this section shall be approved by a registered professional engineer.

(ii) Designs shall be in written form and shall include at least the following:

(A) The magnitude of the slopes that were determined to be safe for the particular project;

(B) The configurations that were determined to be safe for the particular project; and

(C) The identity of the registered professional engineer approving the design.

(iii) At least one copy of the design shall be maintained at the jobsite while the slope is being constructed. After that time the design need not be at the jobsite, but a copy shall be made available to the Secretary upon request.

Relevant Testimony

1. Van Arden Howell

CO Howell currently is the Area Director of the Oakland area office of OSHA. He has held that position since August 2010. He has been employed at OSHA for about 25 years. Prior to that, he was a team leader, supervising the personnel within the Directorate of Enforcement Investigation. From 2003 to 2007, he was the Assistant Area Director in both the Boise, Idaho and Walnut Creek offices. Before that, CO Howell held various jobs including Compliance Assistant Specialist and CO. CO Howell testified that over the past 25 years he has conducted close to two thousand inspections both with OSHA and with the United States Navy as a Safety Manager. He has received training in shoring excavations and serves as instructor for the OSHA Ed Center, where he teaches trenching and excavation courses. (Tr. 25-27).

In 1972, CO Howell was trained and licensed by the Army for operation of semi-trucks and three-axle vehicles, which included air brake systems and air over hydraulics. Until his retirement from the Army in 2001, he was a Maintenance Officer in the United States Army Reserve/National Guard. He also served as a Shop Officer, Executive Officer, Detachment Commander, and Company Commander; all positions that included duties relating to the performance of wheel and track maintenance. He was responsible for maintenance of trucks with air brake systems and served on a committee where they found a solution for vehicles that were losing their air brakes that was adopted Army-wide. (Tr. 27-28).

The Nacimento pipeline project at Camp Roberts involved a trench that was being excavated for the laying of pipe. (Tr. 55). On August 20, 2009, OSHA received a report from Deputy Sheriff Steve Crawford ("Sheriff Crawford") that there had been a fatal industrial accident at Camp Roberts that occurred at about 10:00 a.m. earlier that day. Sheriff Crawford arrived at the jobsite shortly after the accident and initiated the Coroner's investigation on August 20, 2009. (Tr. 28-29; C-4).

CO Howell arrived at the site on August 25, 2009.[9] When he arrived at the jobsite, he stopped at the command center to inform the commanding officer of the installation that he was onsite. He then met with Nancy Moorhouse, Respondent's Vice-President and Director for Safety, and foreman Sean Kennedy, Jr. They proceeded to the jobsite and later went to look at the truck that was involved in the fatality. The truck had been impounded by the Sheriff's Office and taken to C&D Towing in Paso Robles, California.[10] (Tr. 28-29, 121, 152). CO Howell inspected

[9] Another OSHA CO, Felipe Lopez Kleinstiver, made an initial response to Teichert on August 21, 2009. (Tr. 28-29).
[10] Dump truck 193 was a 2002 green/white International, 3-axle dump truck, California license 8E90240, with 121,129.1 miles shown on its odometer as of August 25, 2009. In the truck's rear, each intermediate brake assembly was equipped with a Type-30/30 spring brake chamber, push-rods, slack adjustors, S-cam, S-cam bushings, upper and lower brake shoes, return springs, anchoring hardware, and flexible air brake hoses. (C-4, at p. 3, C-13, R-C, at p. 12). The Court finds that dump truck 193 was driven about 128 miles from August 12, 2009 through August 20, 2009.

the truck together with Sheriff Crawford and two officers from the California Highway Patrol ("CHP"), including Motor Carrier Specialist ("MCS") Dean Linnens, CHP Investigator Tony MacFarland, and several others. (Tr. 30; C-4, at pp. 12-14, C-13).

From August 25-27, CO Howell and Sheriff Crawford investigated the cause of the fatal accident where an International dump truck, driven by Respondent's George Marquez, struck and killed employee Tim Nelson while the dump truck was backing up.[11] The dump truck had an operating back- up alarm and was reportedly not moving at an excessive rate of speed.[12] The deceased was a grade checker and a front end loader operator. (Tr. 31). Just prior to the accident, Mr. Nelson entered the excavation to place a grade rod. After placing the rod to the right side of a ladder, he climbed outside of the trench. According to Mr. Marquez, Jason Sherman, the operator of a nearby Komatsu PC400LC excavator, told Mr. Nelson over the radio that it was time to drop a load of sand using the front end loader, Cat 930 G, at the jobsite into the excavation.[13] Mr. Nelson walked back to the front end loader, to do as instructed. Because the dump truck was adjacent to the excavator waiting to be loaded with some excavation spoil, Mr. Sherman ordered Mr. Marquez to move his dump truck to allow the front end loader to drive up and drop the sand. The dump truck, when backing up, struck Mr. Nelson and passed over him. No one was directing Mr. Marquez while he was backing up. Mr. Nelson was wearing a wide-

[11] Mr. Nelson was employed as a grade checker and front end loader operator. One of his duties was to check the grade of the excavation. (Tr. 31). Mr. Nelson was employed by Teichert for about 8 months and had been working at the Camp Roberts' workplace since the end of June, 2009. (C-4, at p. 2).

[12] On August 24, 2009, Mr. Marquez told Sheriff Crawford that he had driven dump truck 193 for one month before the incident, along with other trucks. There is no record that Mr. Marquez completed a Safety checklist for dump truck 193 during that one month period. Mr. Marquez had been previously written up for a safety violation by Foreman Kennedy for backing into a pipe during his first week of employment. (C-4, at pp. 12, 20). Mr Marquez did not testify at the hearing.

[13] On August 26, 2009, Mr. Sherman told CO Howell that he "told George [Marquez] to move [dump truck 193] out of the way on the radio." (C-10, at p. 2). Mr. Nelson was also carrying a functioning portable Motorola radio at the time of the accident. (C-4, at p. 4). On August 31, 2009, Mr. Sherman told Sheriff Crawford that he did not think that he told Mr. Nelson to get the sand over the radio; but that Mr. Nelson would know when to do it. (*Id*., at pp. 20-21).

brim white hard hat, approximately 11 inches in diameter, at the time of the accident.[14] According to CO Howell, Mr. Nelson's hard hat was apparently caught by the dump truck's axle as the truck rolled over him. This caused Mr. Nelson's neck to apparently break.[15] Mr. Marquez did not realize what had happened until he noticed two individuals running toward him.[16] (Tr. 32, 55, 103, 115-16; C-4, C-35, C-47).

Regarding Item 2, the alleged violation of 29 C.F.R. § 1926.601(b)(14), CO Howell testified that during his inspection he interviewed Mr. Marquez. Mr. Marquez told him that he conducted daily pre-operation inspections of vehicles he operated. Mr. Marquez said that he had a form and a log book.[17] Mr. Marquez told CO Howell there were too many forms in the log book. Mr. Marquez also stated that Teichert ran out of forms on August 11, 2009, and that was the last day he completed the form [Safety checklist] for the vehicle.[18] Mr. Marquez said that he inspected all items on the form [Safety checklist]; but that did not include getting underneath the dump truck and looking at the throw of the brakes. (Tr. 42, 127-28; R-C).

Mr. Marquez' safety inspections of dump trucks did not include getting under the dump

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[14] On August 27, 2009, Foreman Kennedy told Sheriff Crawford that Mr. Nelson still had his hard hat on his head when he saw him on the roadway immediately following the accident. When he arrived on the scene, Sheriff Crawford found the hard hat upside down, buckled on its right side, on the roadway. Pitting damage on the hard hat's left side was consistent with forcible compression with the roadway asphalt surface. (C-4, at pp. 4, 19).

[15] Dr. Walter determined at the autopsy that Mr. Nelson died from multiple blunt force trauma; with other significant conditions including one associated with dehydration. (C-4, at pp. 15, 23).

[16] OSHA does not allege that the maladjustment of the brakes cited in Citation 1, Item 2 caused the death of Mr. Nelson. (Tr. 21).

[17] The form is a simple checklist entitled "Operator's Report & Safety Check" ("Safety checklist"), where the operator can indicate if there is a problem with a listed item. It had questions about parking brakes, service brakes, and other parts and equipment related to safety.

[18] On August 24, 2009, Mr. Marquez told Sheriff Crawford that he did not complete any inspection form for the dump truck on the day of the accident because the book that logs the inspection was full. He also told Sheriff Crawford that he inspected the dump truck before leaving the yard and found nothing wrong. He said he made sure that the side mirrors were adjusted properly. (C-4, pp. 11-12). Sheriff Crawford obtained a compilation of Safety checklists for dump truck 193 for the period June 22 through June 27, 2009, June 29 through June 30, 2009, July 7, 2009, July 10, 2009, July 15, 2009 and August 12, 2009 from Respondent on August 25, 2009. None of these Safety checklists appear to contain Mr. Marquez's signature as the driver and the Court so finds. The August 12, 2009 Safety checklist reports that the fire extinguisher had expired as a vehicle deficiency. The Court also finds that Safety checklist for dump truck 193 reported that the dump truck had 121,021 miles as of August 12, 2009. (C-4, at p. 14, R-C).

truck and looking to see if the brakes needed any adjustment. Mr. Marquez told CO Howell that his part of the inspection was only to apply the service and parking brakes while inside the vehicle to ensure that they were functioning properly. He explained to CO Howell that he was not allowed to make brake adjustments. Making brake adjustments was a task that was performed by the maintenance department. This was later confirmed by Teichert's Maintenance Manager, Jeff Hughes. Mr. Marquez told CO Howell that he thought that the truck was in proper working order. (Tr. 41-42, 126-28).

CO Howell testified that the type of truck driven by Mr. Marquez requires a Class B California Commercial Driver's License ("CDL"). He further testified that the California licensing provisions require applicants to demonstrate how to properly conduct an air brake inspection. Also, there is a requirement in the Commercial Driver Handbook ("CDH") that requires operators to conduct an inspection of brake push-rods before every trip.[19] He pointed out that, to obtain a CDL Class B license, applicants must take a test that requires them to inspect the adjustment of the push-rod on the air brake system as part of the pre-operation inspection. CO Howell explained that an inspection of the brake push-rod adjustment requires two people and takes five to ten minutes to complete. (Tr. 42-45; C-14, at pp. 8, 24, 28).

CO Howell testified that OSHA requires that brakes be in proper service condition. To determine if the brakes are adjusted properly, OSHA uses the North American Out-of-Service Criteria ("NAOSC"), which is a document used throughout the nation for brake adjustments. (Tr. 33, 129; C-11). It is put out by the Commercial Vehicle Safety Alliance and is a national

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[19] The Pre-Trip Test section of the CDH also includes the following provision:

> **Brakes**
> **Slack Adjustors/Push-Rod** [Brake push-rod]
> …
> · When brakes are applied, the push rod from the brake chamber should not move more than two inches…. (Tr. 44-45; C-14, at p. 28).

consensus standard, used by the United States Department of Transportation. (Tr. 46-47). According to CO Howell, California has its own code, which is identical to the NAOSC. (Tr. 33).

CO Howell explained that an air brake system on a truck has a compressor and a reservoir. The compressor puts a prescribed amount of pressure inside the reservoir for the brake system. When the brakes are applied, air pressure pushes against the diaphragm that, as shown on the diagram at C-12, is on the left side of the S-cam brake release system. As air pressure is applied to the diaphragm, it pushes a rod called a brake push-rod or slack adjustor ("brake push-rod"). This moves the S-cam and applies brake pressure from the pads against the drums. (Tr. 34; C-12, at p. 3).

CO Howell testified that both he and CHP MCS Linnens measured and observed the brake adjustment on the impounded truck. They had the air pressure brought up, had the truck turned off and placed in neutral, the wheels chocked, and the keys taken out of the ignition so the dump truck could not be accidentally started. With both men underneath the truck, they marked the cam with chalk and had the brakes applied. CHP MCS Linnens then measured the distance that the brake push-rod actually travelled with CO Howell "right there visually looking over his shoulder at it."[20] CO Howell testified that the truck had a Type 30 brake can, which is the most common type.[21] According to CO Howell, the maximum adjustment, or permitted movement of the push-rod on a Type 30 brake can, is two inches. (Tr. 35-39; C-11; C-12, C-46).

CO Howell testified that there are numerous hazards involved when driving a truck with a brake push-rod that needed adjustment. One hazard is that the brakes apply unevenly, resulting in one brake grabbing more than the other. If attempting to stop, this could cause the vehicle to slide out of control. The other problem is that more air is needed to apply the brakes. Air brake

[20] CO Howell also referred to this distance in his testimony as the brake's "push rod throw." (Tr. 42).
[21] CO Howell testified that "can" referred to a "brake canister" shown at C-12, at p. 3.

systems seek to conserve air. When a push-rod is in need of adjustment, the more air applied to the brakes, the more the compressor has to work to replenish that air. This potentially could exceed the capacity of the compressor to replenish the air in the reservoir, resulting in a loss of brakes for trucks traveling on a grade. (Tr. 47-48).

Dump truck 193 had six brakes, two on the steering axle and four on the drive axles. The third, or very last axle, had one brake that was at the maximum adjustment of two inches. The push-rod on the other brake on the right side moved 2.5 inches, which exceeds the maximum adjustment for a Type 30 brake canister by half an inch. One brake was improperly adjusted. Under the OSHA regulations, all defects have to be repaired before a vehicle can be put into service.[22] (Tr. 35-36, 40-41, 47, 131-32; C-12, at pp. 3-4, C-13, p. 7).

CO Howell testified that the alleged violation constituted a serious violation of the Act because brake failure can cause an accident involving serious injuries. He also testified that the type of pavement or roadway could affect the hazard. For example, dry pavement might not be as hazardous as wet pavement and pavement is safer than a gravel road. CO Howell pointed out that there were numerous gravel and dirt roads at the jobsite. If the driver were to brake abruptly, the gravel and dirt roads made it more likely that the vehicle would slide than if were operating on dry pavement. (Tr. 48).

Regarding the proposed penalty, CO Howell testified that he rated the seriousness of the violation at the lower end of the spectrum. He opined that because the operator always wore seat belts and operated at a low speed, if there was an accident, the operator would survive. He also concluded that there was a lesser probability of an accident because the dump truck 193 was

[22] Under the NAOSC, a truck with six brakes, as here, must be taken out of service if it has two brakes that are out of adjustment. The truck was not required to be removed from service under the NAOSC. CO Howell testified that the OSHA standard is more stringent than the NAOSC. (Tr. 47, 130; C-12). The Court finds that Teichert was required to comply with the OSHA standard.

operated at a low speed, only one brake was out of adjustment, and a second brake was at maximum adjustment. CO Howell gave Respondent a 25% penalty reduction for good faith because, outside of a few minor deficiencies, it had a very well written safety program. (Tr. 49-50).

CO Howell testified that Item 3, which alleged a violation of 29 C.F.R. § 1926.651(j)(2), was issued because the spoil pile was located at the edge of the trench. The purpose of this standard is to prevent material from sloughing into the excavation. (Tr. 107). He noted that not having a spoil pile kept at least two feet from the edge of an excavation can result in material, such as rocks, rolling into the trench and striking an individual. During his inspection, CO Howell observed a spoil pile located at the west edge of the trench, leaving virtually no distance between the spoil pile and the bell hole. (Tr. 61, 118, 133; C-6, C-21, C-23, R-D). To determine that the spoil pile was located at the edge of the trench on August 20, 2009, CO Howell relied on photographs taken during the OSHA investigation on August 25, 2009 and those taken by the Coroner's Office on August 20-21, 2009. (Tr. 106, 119; C30, C-38). Because he was told that site conditions changed between August 20 and August 25 by Messrs. Sherman and Kennedy, CO Howell compared the two sets of photographs. (Tr. 106, 133-34). He testified that, although the bucket on the excavator was drawn closer to the excavator on August 20 than it was on August 25, he did not believe that any work was done on the excavation between those dates. CO Howell was told by Teichert's management that the job was shut down at the time of the fatal accident on August 20, and that they were told not to make any changes at the jobsite, but to keep the scene as it was.[23] (Tr. 134, 153). CO Howell testified that the photograph at C-47, supplied by Respondent during discovery, shows the spoil pile lying right at the edge of the

[23] On about August 27, 2009, CO Howell sent, at Teichert's request, an email to San Luis Obispo County informing the county that OSHA had completed its inspection and that Teichert was allowed to resume work at the jobsite. (Tr. 153). All dates refer to 2009, unless otherwise specified.

excavation, in the same location as depicted in the photographs taken by CO Howell. (Tr. 115). Also, CO Howell identified clumps of dirt that fell into the trench from photographs taken at the time of the accident. (Tr. 107-08; C-35, C-37). Based on his interview with the excavator operator who observed Mr. Nelson making grade checks and doing other work in the trench, CO Howell concluded that Mr. Nelson was in the trench and exposed to the spoil pile on August 20. (Tr. 116).

CO Howell testified that he characterized the violation as serious because it is not uncommon to suffer a fracture, or other serious injury, if a clump of earth or a rock struck an employee in an excavation. He rated the severity of the violation as medium because he did not believe that the hazard presented the hazard of permanent disability or death. The probability of an accident was rated as greater because the spoil pile was located at the edge of the excavation. He gave Teichert a maximum 25% credit for good faith due to the quality of the company's written safety program. (Tr. 117-18).

Regarding Item 4, which alleges a violation of 29 C.F.R. § 1926.652(b), CO Howell observed that the standard allows an employer options for developing a protective system to prevent an excavation from collapsing. One of those options, and the one chosen by Teichert, was to have a shoring/sloping system designed by a RPE. (Tr. 52-53).

CO Howell took measurements of the trench. According to those measurements, the depth of the excavation at one end was 13 feet. (Tr. 109-10; C-6) At the opposite end, the excavation measured 9.5 feet deep. He testified that the reason for the difference was that the shallower end was on the street side which had a natural slope. The spoil pile was placed on the sloping side of the street. (Tr. 110-11).

OSHA defines three types of soil: A, B, and C. A certain slope is required for each of

Types A, B, and C. (Tr. 52). CO Howell testified that the soil was a sandy clay cohesive Type B soil that, under OSHA standards, generally requires a 1:1 slope. OSHA regulations require that, in such soil, the walls have to start sloping from the bottom of the excavation. (Tr. 72). CO Howell also pointed out that the trench exhibited some fissures or cracks alongside the trench between virgin earth and recompacted earth. (Tr. 99; C-36). According to CO Howell, this indicated that the excavation was dug in previously disturbed soil. The CO explained that blowouts of excavation walls happen more often in an excavation dug in previously disturbed soil. (Tr. 99).

OSHA allows an employer to use a RPE to design a system based on the specifics of the trench being constructed. Teichert chose this option. (Tr. 53; C-1). The RPE's plan called for a combination of a sloping system along with, what the engineer called, a weld hut stacked for cave-in protection of employees working in the bell holes.[24] Employees work from inside the weld hut.[25] (Tr. 54, 70, 74). The plan also required that the slope was to be ¾:1 along the entire length of the excavation, beginning three feet from the bottom of the trench. The plan did not allow for any vertical sections, or for the trench to be sloped only at the bell holes. (Tr. 68-69, 147-48; C-1). CO Howell also testified that the RPE's plan contained a setback table. He explained that a setback table is the area where surface encumbrances, such as spoil piles, are kept away from the excavation to reduce the amount of pressure that these encumbrances put on the excavation wall. According to the RPE's plan, spoil piles were to be four feet from the edge of all portions of the trench. (Tr. 66-67; C-1). There is no deviation referenced in the RPE's plan that permits a spoil pile to be closer than four feet from the edge of the excavation. (Tr. 67). CO Howell agreed that the RPE's plan required a setback greater than required by OSHA standards.

[24] In C-1, the bell hole section is immediately below the area marked "A." (Tr. 54).
[25] Teichert did not use weld boxes in the area of the project CO Howell inspected and there were none onsite. (Tr. 70).

He explained that, when chosen, the RPE's plan must be followed where, as here, it designs an excavation method outside of recognized engineering-approved designs established by OSHA. (Tr. 148-49).

CO Howell testified OSHA sent a letter, dated September 14, 2009, to the RPE who designed the plan because OSHA had concerns that the RPE's plan deviated too far from OSHA standards. (Tr. 73; C-9). No response was ever received to that letter. With the RPE not responding, OSHA's concerns were raised with Messrs. Sherman and Kennedy. CO Howell also discussed the RPE's plan with Dr. Jau Scott Jin, an OSHA employee and RPE. Dr. Jin is recognized within OSHA as the agency expert in soil mechanics. (Tr. 73). While CO Howell had concerns about the sufficiency of the RPE's plans, he also found, based on his observations made in comparison with the observations and documentation of Sheriff Crawford, that Teichert failed to follow the plan prepared by its RPE. (Tr. 53, 74).

CO Howell explained that every time there was a pipe connection, Teichert would bell, or V out the trench (Tr. 55; C-1). At the bell location he inspected, the walls came up vertically 3.9 feet before sloping. From that level, Teichert sloped or V shaped the belled area where two lengths of pipe were connected. (Tr. 58-59; C-21).

CO Howell testified that the section of trench depicted at C-21 shows a bell hole. According to CO Howell, the right side of the bell hole was sloped at approximately 1:1 and the opposite side was sloped slightly greater than ¾ to 1, as required by the RPE's plan. (Tr. 68-69, 141-42).[26] He testified that, although the bell hole sections were sloped, he measured the slope of the side closest to the spoil pile to be 56.64 degrees, which is slightly steeper than ¾:1. (Tr. 69,

[26] According to CO Howell, soil classified as Type A requires a ¾ :1 slope. This means that the trench must be sloped back ¾ of a foot from the vertical for every one foot rise in the height of the trench. Type B soil requires a 1:1 slope; and Class C soil requires a slope of 1.5:1. (Tr. 69). Photograph C-19 shows an area where the walls of the trench were basically vertical for slightly less than 8 feet and then benched. (Tr. 56; C-19).

142). CO Howell stated that the bell holes were placed between 30-44 feet apart along the trench. (Tr. 149). In deviation from the RPE's plan, the sections between two bell sections were vertical. (Tr. 55, 61). No documentation was received from the engineer approving these deviations. (Tr. 74). Employees had to enter the bell holes to do grouting and other work related to the joining of the pipes. (Tr. 142-43). In further deviation from the RPE's plan, the bell holes were not provided with the weld huts within which employees were to perform their work. (Tr. 74). Employees typically only entered the excavation at the bell holes. (Tr. 143).

The area between the bell holes was cut in a series of benches topped with vertical walls. (Tr. 69, 142). The RPE's plan did not call for any benching. (Tr. 70). CO Howell explained that a bench is created by the bucket on the end of an excavator. As the excavator digs down, it creates the bench first on each side of the excavation. As the benches are created, the excavator starts cutting down the center to establish the center of the excavation. As the dirt is removed, the excavator takes the soil and places it on top of the excavation, or places it in a dump truck. The soil placed in dump trucks was taken to a nearby site and disposed of there. (Tr. 63, 146). CO Howell testified that he observed a spoil pile at the top of a bench, at the edge of the bell hole. (Tr. 61; C-21).[27] This constituted another deviation from the engineer's plan that required that the spoil pile be setback four feet from the edge of the excavation. (Tr. 74).

CO Howell explained why a four foot setback was required under Item 4, but only a two foot setback required for Item 3. According to CO Howell, the two items involve different hazards. The RPE's plan (Item 4), which requires a four foot setback, is designed to minimize the possibility of trench collapse and was part of the slope design of the trench. The two foot setback, required by Item 3, does not relate to the hazard of trench collapse, but is concerned with the possibility of debris falling into the trench and hitting employees. (Tr. 107, 150-51). CO

[27] CO Howell also drew a solid line indicating the edge of the trench at "H". (Tr. 64-65; C-21).

Howell testified that, even though no employee may be in those portions of the trench where there was no bell hole, had the trench failed, it could affect the belled out areas and cause the bell holes to fail. Also, if the trench failed, it could cause the pipes to move and crush an employee in the bell hole between the pipe and the wall. (Tr. 147-48).

CO Howell identified a signed statement by Mr. Sherman, in which he averred that, when he digs a trench, he makes sure that the spoil pile is placed two feet away from the vertical areas and four feet away from the bell holes. In the statement, Mr. Sherman also stated that any soil that is not two or four feet away resulted from sloughing of the spoil pile in the week since the accident.[28] (Tr. 97, 135; C-10, at p. 4). CO Howell noted that even if true, Mr. Sherman's statement that the spoil pile was placed two feet from the edge of the trench was not in accord with the RPE's plan which required a four foot setback along the entire length of the excavation. (Tr. 97).

CO Howell compared photographs taken by Sheriff Crawford on August 20-21, 2009 with those he took on August 25, 2009.[29] In CO Howell's opinion, there was no substantive difference between the two sets of photographs, establishing that conditions had not changed between the two dates. (Tr. 86-96, 105, 137, comparing photographs at C-24(taken by OSHA) with C-38 (taken by Sheriff Crawford); C-19 (taken by OSHA) with C-32 (taken by Sheriff Crawford); C-17 (taken by OSHA) with C-31 (taken by Sheriff Crawford), R- E (taken by OSHA) with R-F (taken by Sheriff Crawford)). He testified that on the photographs taken by himself and Sheriff Crawford, there was no evidence that the spoil pile was set back four feet on August 20. (Tr. 97-98, 118, 136; C-23, C-30, C-38).

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[28] The Court gives little weight to these statements by Mr. Sherman to CO Howell, as well as to his testimony to the same, in light of the photographic evidence to the contrary. (Tr. 86-98, 105, 118, 136-37, C-17, C-19, C-23, C-24, C-30, C-31, C-32, C-38, R-E, R-F).

[29] Sheriff Crawford told CO Howell to look at the sheriff's photographs because the conditions had not changed at all between the date of the fatal accident and the date of CO Howell's inspection. (Tr. 135).

CO Howell testified that constructing the excavation in accord with the RPE's plan would have saved the employer time over the OSHA procedures of sloping the trench 1:1. He also noted that sloping under the OSHA regulations would have resulted in 25% or more soil that had to be removed from the excavation, and would have taken a lot of extra time. He further testified that, using a trench box or shoring system would have taken additional time because, Teichert would have had to put stackable trench boxes at each bell hole where employees were performing work. (Tr. 98). CO Howell testified that Mr. Sherman informed him that Mr. Nelson entered the trench at the bell hole to check the grade on August 20, 2009. CO Howell also testified that Mr. Nelson placed a stake at the bottom of the trench and left a grade rod at the right side of a ladder in the trench as he exited the trench on August 20, 2009. (Tr. 100-03; C-35)

CO Howell testified that he characterized this alleged violation as serious because a cave-in could cause permanent injury or death. He rated the probability of an accident as greater because he found the excavation to be unsafe with a potential for failure. He noted that he evaluated a number of trench collapses that looked similar to the instant trench prior to collapse. No adjustments to the proposed penalties were made for size because Respondent is a large employer. Also, no credit was given for good faith because OSHA procedure does not allow good faith credit where there is a serious violation accompanied by a high probability of a fatal accident. Finally, no credit was given for history because, about eight or nine months before, Teichert received two willful citations for a double fatality resulting from a trenching violation. (Tr. 118).

2. Jason John Patrick Sherman

Mr. Sherman testified that, on August 20, 2009, he was working for Teichert as the excavator operator at the Nacimento Project when the fatal accident occurred. (Tr. 155, 163). At

the time, he had been an excavator operator for approximately 3-4 years. (Tr. 162). One of his jobs at the project was to remove the soil from the trench and put it on the spoil pile. He testified that some of the soil was placed on the bank on the side opposite the road, and some of it was put in trucks. According to Mr. Sherman, the spoil was to be placed two feet from the vertical sections of the trench and four feet from the edge of the bell hole sections. (Tr. 93, 156-58, 171; C-10, at p. 4).

Mr. Sherman testified that Mr. Nelson was the grade checker on the job. He checked the grade with a grade rod, painted the excavator's track line, and showed Mr. Sherman where the bell holes were to be located. (Tr. 159). Mr. Nelson also worked as an extra equipment operator, as needed. Mr. Sherman testified that he knew where to excavate a bell hole because Mr. Nelson, or another employee, had a "lazy sheet" which listed the pipe lengths. Teichert employees knew where the pipes were to be laid, and they would measure where the end of the pipe would be located. He would then dig a bell hole at that location. (Tr. 165).

Mr. Nelson also set the line pins, which were used to mark the end of the pipe and sometimes used to indicate a grade change, along with a yellow ribbon (also referred to as a grade break). To put the line pin into the ground, Mr. Nelson would go into the trench and hammer the line pin with a sledgehammer. Mr. Sherman's best recollection was that Mr. Nelson placed the line pin shown at photograph C-35 in the trench on August 20, 2009. (Tr. 159-62; C-35). According to Mr. Sherman, to check the grade, Mr. Nelson would enter the trench at the bell sections, while for the vertical sections he would check the grade from the edge of the trench. (Tr. 161). Mr. Sherman stated that employees would not be entering the areas between the bell holes. (Tr. 168).

Mr. Sherman testified that the 36-inch wide pipes came in 40 foot lengths while the 32-

inch wide pipes were somewhat shorter. The bell holes were the areas where two pipes came together and had to be joined. (Tr. 163). Employees were often working in the bell hole. There were also times when employees would guide him, and he would push the pipes together with the excavator. (Tr. 164). According to Mr. Sherman, benching is a form of sloping where one creates horizontal sections, then vertical sections, then horizontal sections. The overall effect is, in principle, a slope. (Tr. 167).

3. Dr. Jau Scott Jin

Dr. Jin is a professional engineer. He has a Ph.D. in civil engineering and did his dissertation on soil stabilization of dredged material as landfill. (Tr. 177-82; C-3). He has been working for OSHA for 21 years. He was hired as a geotechnical engineer, which was his area of training. Lately, however, he has been working more as a structural engineer. He explained that a geotechnical engineer studies soil and rock mechanics and also foundation engineering, which involves determining the size necessary for a foundation when building a tunnel, subway or bridge. Before coming to OSHA, he helped to build the Metro tunnels in Washington, D.C. in the late 1970's. With Metro, he worked on ground stabilization to prepare bad ground for tunneling. He then went to work with Delon Hampton & Associates for ten years where he did more tunnel work for the Washington, D.C. Metro system. (Tr. 176-78).

Dr. Jin testified that he works in the OSHA Directorate of Construction. Its function is to deal with major construction accidents, such as a crane or building collapse. The Directorate also assists OSHA area offices if they need engineering expertise. Dr. Jin currently spends one-third of his time with geotechnical issues and two-thirds of his time in structural engineering. Based on his years of education and experience, the Court found, without objection, Dr. Jin to be an expert qualified to render an opinion on the stability of the trench at the jobsite based upon the

RPE's plan at C-1. (Tr. 179-82).

Dr. Jin testified that, in December 2009, CO Howell asked him to render an opinion on the Nacimento project excavation and the RPE's plan because the RPE was not responding to his inquiries. (Tr. 180). After his evaluation, Dr. Jin highlighted five points in his expert report that, in his opinion, suggested weaknesses in the RPE's plan:[30]

1. The professional engineer did not do a decent soil sample. Rather than actually sampling the soil, the professional engineer relied on experience with adjacent construction and assumed that the soil is clay-like or silty sand. Dr. Jin pointed out that clay-like and silty sand is more like Type C material. However, Dr. Jin agreed that the soil that was sampled did test as grade Type B material. (Tr. 183).

2. The RPE's design was very close to the OSHA configuration for Type A soil, and in some instances, a little bit steeper. Dr. Jin pointed out that in Type A soil, the slope begins from the bottom of the trench. Here, however, the design allowed a three foot vertical before starting the ¾ horizontal to 1 vertical slope. (Tr. 184; C-1). Dr. Jin testified that he was uncomfortable with starting the slope after a three foot vertical rise. He explained that the result of this type of sloping results in a two to three foot thick layer of soil being suspended without support. This made the trench less stable than it would be under the OSHA regulations, which do not allow for an unsupported vertical area. He also noted that the RPE's plan provides for a square bottom. According to Dr. Jin, OSHA only allows for a square bottom when the soil is Type A. Here, the design was liberal and allowed for a square bottom in Type B soil. (Tr. 191-94).

3. The OSHA standard allows a maximum depth of 20 feet. The RPE's plan allowed for a maximum depth of 30 feet, which is a little risky. (Tr. 184).

[30] Dr. Jin's expert report entitled "Evaluation of the Stability of the August 20, 2009 Excavation at Camp Roberts, Paso Robles, CA" was admitted into evidence without objection. (Tr. 11; C-2).

4. The RPE's plan allowed for an internal dewatering system instead of a pre-construction dewatering system. An internal dewatering system differs from a pre-construction dewatering system. In a pre-construction dewatering system, the ground water table is drawn down before construction. There is no potential for seepage flowing into the excavation. Here, the dewatering method is basically a perimeter trench inside the excavation, with a sump pump to remove the water. The result is that the phreatic surface (water table surface) still has the potential to seep into the bottom of the excavation. (Tr. 185).

5. The RPE did not consider that the excavation was dug in California, which is a seismically active area. (Tr. 186).

In summary, Dr. Jin concluded that the trench was under-designed, unsafe, and a potential hazard. He found that the RPE overestimated the strength of the soil in the slope. He also concluded that Teichert did not comply with the RPE's plan because the as-built west slope was steeper than required and Teichert placed spoil directly to the side of the trench without any setbacks.[31] Dr. Jin pointed out that if the contractor encountered soil that was not as favored as that found during the OSHA inspection, the trench could fail. (Tr. 180-81, 186; C-2).

Based on measurements taken by the CO, Dr. Jin constructed a scale drawing of the excavation. He noted that the ¾:1 slope called for in the RPE's plan is equivalent to a 53 degree angle. (Tr. 187-88). He found that the west slope of the excavation at the bell hole was constructed at a 56 degree angle from horizontal, which is steeper than the RPE's design. (Tr. 187; C-2, at. p. 5, Figure 1, at p. 6, Figure 2). He also found that the walls in the non-belled areas of the excavation were nearly vertical. This was a discrepancy from the RPE's plan, which required a ¾ horizontal :1 vertical slope on both sides throughout the entire length of the

[31] Dr. Jin's report stated that "placing the spoil pile without setback will cause sloughing, raveling or failure of the sloped and benched trench." (C-2, at p. 3).

excavation, not just at the bell locations. Dr. Jin concluded that Teichert did not excavate or install the trenching configuration in accordance with its RPE's specification. The RPE's plan also called for weld huts at the bell holes, and there were no weld huts at the site. (Tr. 188-90; C-1, C-2).

Dr. Jin stated that "the setback is very important." He also explained the effect of a spoil pile on the stability of a trench. According to Dr. Jin, without a setback the weight of the spoil on top of the excavation will create additional stress and in turn additional horizontal force, which a slope surface cannot resist beyond its own tensile strength. A trench is less stable where there is no setback. Secondly, a setback prevents rolling and falling of the spoil into the trench onto employees working inside. The RPE's plan required a four foot setback. Dr. Jin noted that OSHA normally requires only a two foot setback. He speculated that the engineer required the extra distance to reduce the load on the excavation. (Tr. 191-92).

Dr. Jin testified that trench collapse is rarely two dimensional. Rather, collapses usually are three dimensional and result in deflection which could hurt an employee standing in the bell section of the trench. The hazard is increased if the soil is not set back four feet from the edge of the bell section due to the increase of the vertical force and the resultant increase in the potential for failure. (Tr. 192-93).

4. Sean Patrick Kennedy

Sean Patrick Kennedy was called as Teichert's only witness. Although no longer employed by Respondent, in August 2009, Mr. Kennedy was working for Teichert as foreman at the Nacimento pipeline project. (Tr. 212). At the time of the inspection, he had 17 years of experience in construction. (Tr. 228).

Mr. Kennedy testified that a Daily Pre-task Safety Plan ("Pre-task") form would be filled

out every morning that had sections called Today's Activities & Goals, Potential Hazards, and Prevention Measures. (Tr. 214; R-A). He testified that he usually completed the Pre-task form. To get a diversity of ideas, he occasionally delegated the task to another crew member. The Pre-task form contains a checklist with an item that asks: "Will operators do an Equipment Inspection?" Mr. Kennedy testified that the intent of the item was for operators to inspect their equipment before they start any machine. If they do not fill out the [Safety] checklist, they do not start the machine. Mr. Kennedy further testified that Respondent also has a Daily Excavation Inspection checklist ("Excavation checklist"). (Tr. 214-219; R-B, R-C). The Excavation checklist has to be completed, or at least observed, by a competent person on the crew. Mr. Nelson was one of these competent persons. According to Mr. Kennedy, Mr. Nelson held a lot of responsibility. He kept track of the soil conditions, changes in conditions, and monitored the items on the Excavation checklist. (Tr. 217). On the Excavation checklist completed by Mr. Nelson on August 19, 2009, the words "Sloped at Bellholes" are written below where it states "Type of protective system used." (Tr. 218; R-B, at p.6).[32] Mr. Kennedy testified that the handwritten entry meant the bell holes, which he stated were the only point where employees entered the trench to do work. These bell holes are dug with a sloped trench design in accord with the RPE's trench detail that was designed for the project. (T. 218). Mr. Kennedy also testified that the Excavation checklist did not indicate that the spoil pile is supposed to be set back 4 feet from the edge. He explained that, instead, he refers to the RPE's trench detail. (Tr. 242).

Mr. Kennedy next identified the Safety checklist. (Tr. 219; R-C). He testified that the Safety checklist calls for vehicle operators to make a visual and walkaround inspection of their vehicle to make sure that there are no unsafe items and that everything is in working condition

[32] Mr. Nelson also completed the Excavation checklist on the morning of his fatal incident. (R-B, at p. 7).

before the vehicle is placed in service. The Safety checklist is also a place to document deficiencies that can be submitted for repairs. (Tr. 219, 245). The Safety checklist includes items for service and parking brakes. The Safety checklists are completed by the operators. If there are no major issues, the operator retains the Safety checklist throughout the day and turns the Safety checklist in to him at the end of the day. In turn, Mr. Kennedy testified that he hands the Safety checklists to the superintendent, along with the rest of his paperwork. Mr. Kennedy testified that, if there are minor issues that do not affect the safety of the vehicle, they are noted on the Safety checklist. The Safety checklists are given to the mechanics who can fix the deficiency. If the deficiency is one that impairs the safety of the vehicle, it is red-tagged by the mechanic.[33] In such an instance, the mechanic is called directly to repair the vehicle onsite. (Tr. 220-21). During the walkaround, Mr. Kennedy testified that Teichert's operators do not go underneath the vehicle to check the push-rods on the brakes. Teichert operators check the brakes from inside the vehicle's cab. (Tr. 245).

Mr. Kennedy testified that, on the morning of August 20, 2009, Teichert employees were removing excess spoils from the site to some areas on the site that were already prepared. He entered the passenger seat of the cab to direct Mr. Marquez where to place the next round of spoils. During the time he was in the passenger seat, the dump truck appeared to be working fine. He had no conversation with Mr. Marquez concerning whether or not the brakes were in proper condition. (Tr. 222).

Mr. Kennedy explained that all the work joining the pipes is done at the bell holes with the excavator. If needed, employees enter the bell hole to lay the next run of pipe. Employees enter the bell holes to weld the pipes together at the joints. The employees stand on the ground of

[33] Mr. Kennedy explained that to "red-tag" a vehicle means to take it out of service. (Tr. 221).

the trench when doing so. Employees then shimmy a "diaper" over the joints.[34] Employees stand atop the pipes to pour the cement in. (Tr. 232-33, 247; C-38). On August 20, the pipes being installed were 44 feet long, and weighed 16 thousand pounds. There was 44 feet between each bell hole. Mr. Kennedy testified that employees did not enter the excavation along the length between bell holes until the pipe was laid and sand poured over the pipe up to three feet from the top of the trench. (Tr. 225-26, 248). Mr. Kennedy stated that while the bell holes were sloped, the areas between the bell holes were vertical. (Tr. 229).

Mr. Kennedy also testified that Teichert's practice was to place the spoil pile two feet from the edge of the excavation between the bell holes, and four feet away from the edge of the excavation at the bell holes. He explained that the area between the bell holes was not intended for entry. He stated that no employee entered the vertical portion of the trench until the pipe was laid. Mr. Kennedy testified that Mr. Nelson probably set the line pin holding a yellow ribbon indicating a grade change in the trench. Sand would then be placed on top of the pipe. Employees also entered the trench to compact the sand and thereafter lay conduit. (Tr. 229-32).

Mr. Kennedy explained that weld huts are a trench shield and shoring device, approximately 8X8 feet, with steel on either side. The faces are plated with plywood to protect from dirt runoff. He testified that weld huts would be used in those areas where the bell area could not be sloped at the required ¾:1. (Tr. 234). He stated that Weld huts were not used on location on August 20, 2009 because Teichert made bell holes. (Tr. 235, 242).

Mr. Kennedy explained that before trenching, the front-end loader cuts a right-of-way to make a flat bench for the excavator to work off. Employees first cut the side where the spoil pile is located to make the area flat so the loader can operate. (Tr. 237). Before the excavator leaves

[34] Rubber-gasketed joints that require no welding may also be used. A rubber gasket means there is an O-ring that is wiped with soap lubricate put on the spigot end of the pipe. (Tr. 248-49).

the location, he reaches out and swipes the material to clean off the top of the trench where the bell hole is located, creating a bench. (Tr. 226-28, 235-36, 239; R-D). Often, the excavator packs the spoil pile to keep the bench. He opined that it was a common practice to clean, heel, scrape, or wipe the top of the trench. (Tr. 235-36). Pointing to Exhibit R-D, he agreed that some material rolled down. He explained that it's a constant job to clear off the material that rolls off the spoil pile. (Tr. 226). In this instance, the excavator operator was "really struggling for room to put the material." That the spoil pile was located on a slope compounded the problem causing available space to run out quicker. (Tr. 236).

The bottom of the trench where Mr. Nelson placed the line pins was already dug to allow the line pin to be placed. Once the line pin is set, the rest of the trench is excavated. Mr. Kennedy testified that photograph C-19 shows that the excavator was still digging at the trench. The trench was a 12 to 18 inches from being at grade. (Tr. 239). The material is stacked on top of the excavation. The excavator then relieves some of that excess spoil before he leaves the area. (Tr. 243-45; R-B, C-23). Had the accident not occurred and the site shut down, excavator operator Sherman would have worked on flattening out the spoil pile on top of the bell hole. (Tr. 245).

According to Mr. Kennedy, the photograph at R–D was taken 5-7 days after August 20, 2009. He explained that during this period, ground dries out and starts to run down the spoil pile. (Tr. 227). Mr. Kennedy testified that no work was done on the trench after the accident on August 20. It was a couple of weeks after the accident before work resumed. (Tr. 243).

The Secretary's Burden of Proof

To establish a violation of an OSHA standard, the Secretary must establish that: (1) the standard applies to the facts; (2) the employer failed to comply with the terms of that standard;

(3) employees had access to the hazard covered by the standard, and (4) the employer knew or could have known of the existence of the hazard with the exercise of reasonable diligence. *Atlantic Battery Co.* 16 BNA OSHC 2131, 2138 (No. 90-1747, 1994).

Discussion

ITEM 2

Item 2 of the citation alleged a violation of 29 C.F.R. § 1926.601(b)(14) on the grounds that one of the brakes on a dump truck (VIN 1HTGLAHT22H521416) was out of adjustment and was not removed from service. The Secretary proposed a penalty of $1,125 for this alleged violation.

The cited standard has two separate requirements:

1. At the beginning of each shift, all vehicles to be placed in service must be inspected to assure that various parts, equipment and accessories, including service brakes, are in safe operating condition and free of apparent damage that could cause failure while in use; and

2. All defects shall be corrected before the vehicle is placed in service.

i. Applicability of the Standard

There is no dispute that the cited standard was applicable to Teichert. The evidence establishes that, on the construction site, Teichert employee, Mr. Marquez, was operating a dump truck 193 (VIN 1HTGLAHT22H521416). The standard applies to all motor vehicles "that operate within an off-highway jobsite, not open to public traffic" and applied to Respondent's dump truck. *See* 29 C.F.R. § 1926.601(a); *Gerard Leone & Sons, Inc.*, 9 BNA OSHC 1819, 1820 (No. 76-4105, 1981)(§ 1926.601 applies to dump truck that operated both on and off highway).

ii. Was the Standard Violated?

The Court agrees with the Secretary and finds that Mr. Marquez did not inspect the dump

truck before placing it into service on August 20, 2009.[35] (Sec'y Opening Br., at pp. 14-15). Respondent had a Safety checklist that was required to be completed and filled out by vehicle operators during the course of a vehicle's inspection that was to be conducted before the vehicle was placed into service. The Safety checklist included brakes as an item to be inspected. (Tr. 220, R-C). Neither Mr. Marquez, nor anyone else, completed the Safety checklist for dump truck 193 on August 20, 2009. No such Safety checklist exists. On August 24, 2009, Mr. Marquez told Sheriff Crawford that he did not complete the form [Safety checklist] because his log book was full. He told CO Howell that he last completed a form [Safety checklist] on August 11, 2009 because he had too many forms in his log book and that Teichert ran out of forms [Safety checklists] on August 11, 2009. (Tr. 42, 127-28; C-4, at pp. 11-12, R-C). Mr. Marquez's explanation is not persuasive. The record shows that someone other than Mr. Marquez completed a Safety checklist on dump truck 193 on August 12, 2009. Mr. Marquez told Sheriff Crawford that he had driven dump truck 193 for one month before the incident, along with other trucks, but there is no Safety checklist in the record that shows that Mr. Marquez ever completed a Safety checklist for dump truck 193; or any other vehicle. Mr. Marquez did not identify the form he was referring to as a Safety checklist. Mr. Marquez's explanations for the absence of a Safety checklist completed on dump truck 193 on August 20, 2009 are rejected. *See U.S. ex rel. Compton v. Midwest Specialties, Inc.,* 142 F.3d 296, 303 (6th Cir. 1998)(the absence of a record of an event is probative of the fact that the event did not occur); *Wiley v. United States*, 20 F.3d 222, 227 (6th Cir. 1994)(same). *See also Murray Roofing Co., Inc.,* No. 98-0923, 1999 WL 717820, at * 6 (O.S.H.R.C.A.L.J. Sept. 3, 1999)(Company's failure to respond to a subpoena *duces tecum* calling for all fall protection training records reasonable basis for concluding that

[35] The Court finds that Mr. Marquez did nothing more than adjust the side mirrors of dump truck 193 before placing it in service on August 20, 2009. (C-4, at pp. 11-12). The Court also finds that Mr. Marquez did not inspect the brakes of dump truck 193 in any meaningful way before placing it into service on August 20, 2009.

Murray did not prepare the required written record).

Aside from the Court's finding that Mr. Marquez failed to conduct any Safety inspection of dump truck 193 on August 20, 2009, Teichert argues that Mr. Marquez was somehow able to detect any "apparent" defects by simply applying the vehicle's brakes and, therefore, Marquez complied with the spirit and intent of the standard. (Resp't Opening Br., at p. 5, Resp't Reply Br., at p. 4). Respondent suggests that to require the operator to get underneath the vehicle constitutes an "unreasonable burden" upon the employer. (Resp't Opening Br., at p. 5). The Court finds no merit in Respondent's argument.

29 C.F.R. § 1926.601(b)(14) required dump truck 193 to be checked on the morning of August 20, 2009 to assure that its parts and equipment were in safe operating condition and free of apparent damage that could cause failure while in use, including service brakes. The standard required that all brake defects shall be corrected before dump truck 193 was placed in service that day. *Id.* Respondent failed to satisfy these requirements. Dump truck 193's brakes were neither in a safe operating condition nor free of apparent damage that could cause a brake's failure while in use.[36] While the standard does not specify what procedures an employer must follow to check a vehicle's brakes, an "employer is obligated to do those things which a reasonably prudent employer would do under similar circumstances." *Utility Builders, Inc.*, 5 OSHC 2016, 2017 (No. 76-3101, 1977).

The requirement that employers assure that equipment is in safe operating condition is an extension of the general obligation set forth in 29 C.F.R. § 1926.20(b)(1), which makes it the "the responsibility of the employer to initiate and maintain such programs as may be necessary to comply with this part." Under § 1926.20(b)(1), the Commission has held that "an employer may

[36] *See Mayo Homes Co.* 14 OSHC 1475, 1476 (No. 89-355, 1989) (violation of 29 C.F.R. § 1926.601(b)(14) affirmed for operating a dump truck without correcting defects).

reasonably be expected to conform its safety program to any known duties and that a safety program must include those measures for detecting and correcting hazards which a reasonably prudent employer similarly situated would adopt." *W.G. Fairfield Co.,* 19 BNA OSHC 1233, 1235-36 (No. 99-0344, 2000), *aff'd* 285 F.3d 499 (6th Cir. 2002); *Northwood Stone & Asphalt, Inc.*, 16 BNA OSHC 2097, 2099 (No. 91-3409, 1994), *aff'd*, 82 F.3d 418 (6th Cir. 1996); *J.A. Jones Constr. Co.*, 15 BNA OSHC 2201, 2206 (No. 87-2059, 1993).

In interpreting general standards such as these, the Commission specifically considers whether a "reasonable person," examining the generalized standard in light of a particular set of circumstances, can determine what is required, or if the particular employer was actually aware of the existence of the hazard and of a means to abate it. *W.G. Fairfield Co.,* 19 BNA OSHC at 1235; *R & R Builders, Inc.*, 15 BNA OSHC 1383, 1387 (No. 88-282, 1991). An employer can reasonably be expected to conform a safety program to any known duties. *Id.* at 1387. While the Commission has found industry practice relevant to such an inquiry, it has held that it is not dispositive "because to consider industry practice as determinative would permit an entire industry to avoid liability by maintaining inadequate safety." *W.G. Fairfield Co.*, 19 BNA OSHC at 1235; *Farrens Tree Surgeons, Inc.*, 15 BNA OSHC 1793, 1794 (No. 90-998, 1992).

To drive a truck in California a person has to obtain a Class B California CDL. (Tr. 42-43). The test for obtaining this license is set forth in the California CDH. One of the areas upon which applicants are tested is the pre-operation inspection. (Tr. 43; C-14, at p. 8). According to the CDH, part of the pre-operation inspection includes an inspection of the adjustment of the brakes' push-rods. The CDH instructs drivers on the configuration of the brakes and how to check a brake push-rod.[37] The CDH's Section 11: Pre-Trip Test sets forth the elements that

[37] The CDH states: **INSPECTING THE AIR BRAKE SYSYETM …**
WALKAROUND

establish that a driver properly performs the pre-trip inspection.[38] Also, the California Vehicle Code at § 26453, requires that the brakes be maintained in good condition and in good working order. In California, an operator is required to check the adjustment of the brake push-rods before placing the vehicle into service. The Court finds that evidence establishes that a reasonably prudent employer in California is required to have its dump truck operators check the adjustment of the brakes' push-rods as part of the pre-operation inspection. (Tr. 43-45, 131; C-14, at pp. 19, 27-28, C-15).

This evidence also refutes Teichert's assertion that simply applying the service brakes to assure that they were capable of stopping the vehicle was sufficient to discover any "apparent damage" and satisfies both the spirit and intent of the cited standard. "Apparent damage" is not limited to superficial damage. What constitutes "apparent damage" varies based on the content of the inspection. The more comprehensive the inspection, the more damage can become "apparent." Teichert's argument ignores the fact that the California CDH, which contains California requirements for pre-operation inspections, requires that the push-rods on all brakes be checked to assure proper adjustment. A determination that a brake's push-rods are not

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Check brake adjustment on S-cam brakes.
Park on level ground and chock the wheels to prevent the vehicle from moving. Release the parking brakes on the truck or tractor and the emergency brakes on the trailer so you can mark the push rod in the unapplied position. Make a mark on the push rod with a chalk or scribe close to the brake chamber where the push rod comes out of the air chamber. Apply the truck or tractor parking brake and the trailer emergency braking system. Measure the travel of the push rod from the brake chamber and the mark you made with the chalk or scribe at each brake chamber. The push rod should move less than two inches on most brakes. (smaller brake cams will have less push rod travel.) If the brake push rod exceeds the required adjustment, adjust it or have it adjusted. (You are not expected to adjust them during the pre-trip test but you are expected to describe how to check that the brake push rod is adjusted properly). Vehicles with too much brake slack can be very hard to stop. Out-of-adjustment brakes are the problem most often found in roadside inspections. Be safe-check the slack adjustors. (C-14, at p. 19).

[38] The CDH at Section 11: Pre-Trip Test states, in part:
Pre-trips are conducted to ensure that a vehicle is safe to operate. …
You will NOT have to crawl under the vehicle. …
VEHICLE OVERVIEW …
You may have to raise the hood, tilt the cab (secure loose objects so they don't fall and break something), or open the engine compartment door. … (C-14, at p. 24).

properly adjusted constitutes "apparent damage" within the meaning of the standard.

The Court also finds no merit in Teichert's contention that requiring employees to get under their vehicles to inspect the brakes constitutes an unreasonable burden upon the employer. Under established Commission and judicial precedent, an employer who fails to comply with the requirements of a standard may affirmatively defend against an alleged violation of the Act by demonstrating both that the means of compliance prescribed by the standard was infeasible *and* that alternative means of compliance were either being used or were unavailable. *Brock v. Dun-Par Engd. Form Co.*, 843 F.2d 1135, 1138-39 (8th Cir. 1988); *MJP Constr. Co.*, 19 BNA OSHC 1638, 1643 (No. 98-0502, 2001), *aff'd* 56 Fed. Appx. 1 (D.C. Cir. 2003).

The evidence establishes that inspection of the brakes takes two people 5-10 minutes to complete. (Tr. 45). Teichert adduced no evidence to support its assertion that this would be "unduly burdensome", or that there was an alternative method of assuring that the brakes were properly adjusted. The Court finds that Teichert has not established that requiring two people to spend 5-10 minutes to determine the integrity of the brakes on a dump truck imposes an "unduly burdensome" requirement upon the employer. The defense is rejected.[39]

The evidence also establishes that a push-rod on one of the air brakes was in need of adjustment and constituted a defect that needed to be corrected. The brake canister on the dump truck was determined to be a Type 30 canister, which is the most common type on trucks. (Tr. 36, 50; C-46). The NAOSC is considered a national consensus standard and is used by many police departments, industry and the United States Department of Transportation. (Tr. 33, 46; C-12).[40]

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[39] The Court finds that it is not unduly burdensome for OSHA to require dump truck operators to measure a brake's push-rod as part of the dump truck's pre-operation safety check. Brakes are fundamental to a dump truck's safe operation. The Court finds that the brake's push-rod is readily accessible and its movement can be easily measured by, and apparent to, vehicle operators. As the CDH says, an operator does not have to "crawl" under the dump truck to measure a brake's push-rod. It will be necessary for a person to look under a vehicle the size of dump truck 193 to perform the check. (C-14, at p. 14, C-46).

[40] The Court takes official notice of 49 C.F.R. § 390.5, a definitional section, which sets forth in pertinent part:

Also, CO Howell testified that California issues its own code which is identical to the NAOSC. (Tr. 33). According to the NAOSC section on "Brake Criteria", a properly adjusted brake push-rod on a Type 30 canister for a clamp type brake chamber should move no more than two inches when the brakes are applied. (Tr. 36; C-11, at p. 2).

CO Howell and CHP MCS Linnens inspected dump truck 193 at the towing yard. They both went underneath the truck, marked the cam, had the brakes applied and measured the distance that the brake push-rods actually travelled. (Tr. 35). The movement of the brake push-rod on the left rear axle was measured at two inches and the right side was measured at 2.5 inches. (Tr. 36, 40; C-13, at p.7). Based on the NAOSC Brake Criteria, both CO Howell and CHP MSC Linnens concluded that one brake was out of adjustment, at 2.5 inches, and the other brake was exactly at the maximum adjustment of two inches.[41] (Tr. 40-41; C-13, C-15).

Teichert does not dispute that one of the brake push-rods on dump truck 193 was in need of adjustment and defective as of August 25, 2009. (Resp't Opening Br., at p. 4). However, it notes that the measurements were taken on August 25, 2009, while the citation alleged that the defect existed on August 20, 2009. (Tr. 129; Resp't Opening Br., at p. 4). Respondent argues that there is no credible or reliable evidence regarding the condition of the truck on August 20, 2009. Implicit in Teichert's argument is that the brakes went out of adjustment while the truck was impounded.

> *Out-of-service order* means a declaration by an authorized enforcement officer of a Federal, State, Canadian, Mexican, or local jurisdiction that a driver, a commercial motor vehicle, or a motor carrier operation is out of service pursuant to 49 CFR 386.72, 392.5, 392.9a, 395.13, or 396.9, or compatible laws, or the North American Standard Out-of-Service Criteria.

[41] CHP MCS Linnens and CHP Officer McFarland concluded in their CHP report that the dump truck's "right rear brake was one half inch beyond the adjustment limit, a violation of § 26453 of the California Vehicle Code." (Tr. 40-41; C-13, at p. 8, C-15).

The Court is not persuaded. First, regardless of whether the brake push-rod was out of adjustment, the evidence establishes that Teichert failed to conduct a proper pre-operation inspection of the vehicle. On that basis, a violation of the standard was still established. Second, the evidence also establishes that, after the accident on August 20, 2009, the vehicle was impounded by the Sheriff's office and taken to the towing service where it remained until the inspection. (Tr. 29, 152). There is no evidence that the vehicle was otherwise moved or altered between the day of the accident and the day of CO Howell's inspection. Similarly, there is no evidence to suggest that the brakes went or could have gone out of adjustment while being towed to the impoundment lot. Accordingly, the Court finds that the evidence establishes that on the day of the inspection the vehicle was in the same condition as it was on the day of the accident and that the brake push-rod was in need of adjustment and the brake was defective on August 20, 2009.

In its Reply Brief, Teichert refines its argument by pointing out that the standard relates to the pre-operation condition of the vehicle. The vehicle was operated on August 20, 2009. (Resp't Reply Br., at p. 4). Respondent seeks to place an unfair burden of proof upon the Secretary. Once in service, Respondent could always argue that the brakes went out of adjustment between the time a vehicle was placed in service to the time it was inspected by OSHA. In effect, where it failed to conduct a pre-operation inspection, Respondent's argument would effectively render the "out of service" portion of the standard unenforceable and reward it for failing to properly inspect the truck before placing it in service. In any event, the record does not contain any evidence to support its contention that, prior to being placed in service, all of the brakes in dump truck 193 were properly adjusted. Absent such evidence, the Court finds that the right brake on the third axle of dump truck 193 was out of adjustment at the time of the August 25 inspection.

The Court further finds that this is sufficient to establish, by a preponderance of the evidence, that one of the brakes was out of adjustment before dump truck 193 was placed in service on August 20, 2009.

Having established that Respondent was required to inspect the brakes' push-rods before placing the truck in service, and that a push-rod on one of the brakes was in need of adjustment and defective, the next issue is whether Teichert violated the standard by failing to take dump truck 193 out of service. The NAOSC states that a vehicle must be taken out of service when two brakes are out of adjustment. (Tr. 130; C-11). CO Howell testified that the OSHA standard is stricter than the NAOSC requirements and that, under the OSHA standard, all defects must be corrected before a vehicle is put into service. (Tr. 47). The plain language of the OSHA standard supports CO Howell's conclusion.[42] The standard clearly states that "*All* defects shall be corrected before the vehicle is placed in service." (emphasis added). Since one misadjusted brake push-rod is a defect, the plain words of the standard require that it be corrected before the vehicle is placed into service. Respondent did not take the truck out of service in violation of the standard.

The Court also notes that the cited standard applies only to off-road vehicles. 29 C.F.R. § 1926.601(a). The NAOSC applies to all vehicles, whether operated off-road or on public highways. (Tr. 33, 46). As CO Howell testified, the likelihood of an accident resulting from improperly adjusted brakes is increased under conditions that off-road vehicles operate. (Tr. 48).

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[42] Evidence as to industry practice is appropriate only in applying a "reasonable person" test to cure potential vagueness in a standard; it should not be considered when the standard prescribes the required conduct in specific terms. *Cleveland Consol., Inc.*, 13 BNA OSHC 1114, 1117, and cases cited at nn. 3 & 4 (No. 84-0696, 1987). While the first part of the cited standard does not indicate what constitutes an acceptable pre-operation inspection necessitating reference to industry custom and practice, the second part of the standard plainly requires that *all* defects be fixed before a vehicle is placed into service. A misadjusted brake is a defect and must be fixed before the vehicle is placed into service. It is not dispositive here whether industry custom and practice, as set forth in the NAOSC, requires that a vehicle be kept out of service only if two brakes are out of adjustment.

The evidence establishes that Teichert did not require its vehicle operators to check the brakes' push-rods as part of its pre-operation inspection and that Mr. Marquez did not conduct an inspection of dump truck 193 on August 20, 2009. (Tr. 41, 126; R-C). The evidence also establishes that one of the push-rods on the air brakes was out of adjustment and constituted a defect, and that Teichert failed to remove dump truck 193 from service. The Court finds that the evidence establishes that Teichert failed to comply with the cited standard.

iii. Exposure

It is undisputed that Mr. Marquez drove dump truck 193 on August 20, 2009. (Tr. 42, 125-26, 222; C-4, at pp.3-4). He was exposed to the hazard presented by the failure to conduct a proper pre-operation inspection and by the failure to remove the defective truck from service.

iv. Knowledge

The Secretary satisfies her burden of showing knowledge by establishing that the cited employer knew, or with the exercise of reasonable diligence could have known, of the violative condition. *United States Steel Corp*., 12 BNA OSHC 1692, 1699 (No. 79-1998, 1986).

Teichert's pre-operation inspection did not include having the operator get under the truck to measure the adjustment of the brakes' push-rods. *See Lake Erie Constr. Co., Inc.,* 21 BNA OSHC 1285, 1287 (No. 02-0520, 2005)(Failure to either establish or communicate a work rule addressing the standard's requirement establishes constructive knowledge of the violative condition). As the Secretary properly observes, Teichert had actual or constructive knowledge that OSHA required its dump truck operators to conduct a pre-trip inspection that includes checking the push-rods on the brakes. (Tr. 42-43; C-4, at p. 3; Sec'y Opening Br., at pp. 16-17). Teichert knew, or with the exercise of reasonable diligence could have known, that its operators were required to check the adjustment on brake push-rods as part of the pre-operation inspection.

See Burford's Trees Inc., 22 BNA OSHC 1948, 1950-51 (No. 07-1899, 2010)(Failure to properly inspect conditions that could disclose violation establishes constructive knowledge). Had Teichert fulfilled its responsibility, it would or should have known that a brake push-rod was out of adjustment and defective, and that dump truck 193 was required to be removed from service.

The Court finds that on August 20, 2009, Respondent failed: 1) at the beginning of each shift to inspect all vehicles, *i.e.,* dump truck 193, being placed in service to assure that various parts, equipment and accessories, including service brakes, were in safe operating condition and free of apparent damage that could cause failure while in use, and 2) to correct all defects, *i.e.,* the brake that was out of adjustment on the third axle right side, before placing dump truck 193 in service.

Accordingly, the Secretary having established that: (1) the cited standard applied to Respondent, (2) its terms were violated, (3) Respondent's employees were exposed to the hazardous condition, and (4) Respondent knew or with the exercise of reasonable diligence could have known of the violative condition, Citation 1, Item 2 is affirmed.

ITEM 3

Item 3 of the citation alleged a violation of 29 C.F.R. § 1926.651(j)(2) on the grounds that Teichert failed to keep the spoil pile at least two feet from the edge of the excavation, thereby exposing employees working in the excavation to the hazard of rocks and other debris falling from the spoil pile. The Secretary proposed a penalty of $2,625 for this alleged violation.

i. Applicability

The evidence shows that employees entered the excavation at the bell holes. (Tr. 142-43, 217, 225, 232). The express purpose of the standard is to keep spoil piles far enough from the edge of the excavation to prevent rocks and other debris from falling into the excavation onto

employees working therein. Because employees entered the excavation where there was a hazard, the standard applied to Teichert's work at the site. *See Complete Gen. Constr. Co.*, 19 BNA OSHC 1321, 1322 (No. 99-1557)(standard requires that protection shall be provided by placing and keeping materials that pose a hazard at least 2 feet from the edge of excavations, or by the use of retaining devices that are sufficient to prevent such materials from failing or rolling into excavations, or by a combination of both, if necessary.).

ii. Was the Standard Violated?

CO Howell testified that, during his inspection of August 25, 2009, he observed that the spoil pile was located within inches of the edge of the excavation, clearly within four feet of the edge. (Tr. 61-62, 93, 115, 117, 119, 134-35; C-19, C-21, C-23, C-32, C-47). The spoil pile ran along the length of the trench between the bell hole and the vertical, unsloped portion of the trench. (C-21, R-D). The spoil pile was on a hill that sloped upward. (Tr. 63, 228). The photographs show that there was no retaining wall or device between the spoil pile and the trench.

Teichert argues that the spoil pile was properly located on August 20, 2009, but that between August 20 when the jobsite was shut down and the time of the inspection on August 25, it had shifted and sloughed down to the edge of the excavation. Messrs. Sherman and Kennedy told CO Howell that the soil on the pile shifted and sloughed down to the edge of the excavation between August 20 and August 25. (Tr. 134-35). Mr. Sherman testified that he placed the spoil piles two feet from the vertical sections of the trench and four feet from the bell holes. (Tr. 157). In his signed statement, he stated that the spoil that was not the requisite distance from the edge of the excavation as "the result of sluffing [sic] over the past week since the accident." (Tr. 97; C-10, at p. 4). The Court has given little weight to these assertions by Mr. Sherman. To establish

that the conditions at the excavation had not substantially changed between August 20 and August 25, the Secretary introduced photographs taken by Sheriff Crawford for the Coroner's office on August 20-21, 2009 and photographs of the same areas taken by CO Howell on August 25.[43] (Tr. 85-86). For example, CO Howell testified that OSHA photograph C-19 taken on August 25 shows no difference in the condition of the trench or the location of the spoil pile from photograph C-32 taken by the Coroner's office on August 20. Indeed, both photographs depict a rock or clump of dirt at the edge of a bench in the identical location on the excavation.[44] Had there been any significant sloughing of the spoil pile, the dirt would have surrounded, if not covered, the rock. CO Howell testified that, in both photographs, the spoil pile was located at the edge of the trench, in violation of the minimum two foot clearance required by the standard. (Tr. 56, 90-93).

CO Howell also compared OSHA photograph C-17 taken on August 25 with the Coroner's photograph C-31 taken on August 20. These photographs were taken near the belled section of the excavation. Both photographs depict the excavation taken from behind the excavator and both photographs show teeth marks made by the excavator bucket, a ladder in the same location, and the same benching pattern. (Tr. 95). Both photographs also depict the same placement of the spoil pile. (Tr. 95). CO Howell also noted that Coroner's photograph C-47, depicts the same spoil pile located along the edge of the excavation. (Tr. 115-16; C-47).

Respondent contends that the photographs taken by the Coroner's office do not depict with any certainty the condition of the spoil pile on August 20, 2009. First, Teichert objects that,

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[43] Photographs at C-30 through C-38 were taken by the Coroner's office on August 20, 2009, while the photographs at C-39 through C-45 were taken by the Coroner's office on August 21, 2009. (Tr. 85).

[44] To keep the spoil from running into the trench, Respondent's excavator cut benches into the dirt of the spoil pile to keep the soil from running down into the trench. (Tr. 61, 63, 226-27, 235; C-21). Also, Mr. Sherman would swipe the soil from the top of the bell hole at the end of his work on a section of the trench. (Tr. 227). According to CO Howell, each new bench formed the edge of the excavation. (Tr. 65; C-21). The bench is not part of the spoil pile. (Tr. 63).

although the Coroner's photographs were admitted into evidence, Sheriff Crawford did not testify at the hearing, denying it the opportunity to cross-examine the Sheriff and denying the Court the opportunity to assess his credibility. Teichert further points out that the Secretary offered no testimony of any measurements conducted by CO Howell regarding the distance of the spoil pile from the edge of the excavation because no measurements were taken. Respondent argues the record contains only estimates or opinions as to how far the spoil pile was located from the edge of the excavation on August 20, 2009. Teichert also contends that there is no evidence that employees entered the excavation between the bell holes. Therefore, even if a spoil pile between the bell holes was closer than two feet from the edge of the excavation, there could not have been a violation because no employee was exposed to the hazard of falling debris.

The Secretary introduced these photographs into evidence at the beginning of the hearing. At that time, the Court noted that Respondent did not raise any objections to those exhibits when identified in the Joint Prehearing Statement. The Court then asked Respondent if it had any objection to these exhibits. Respondent explicitly stated that it had none. (Tr. 11) Having failed to note any objections at that time, when there might have been a time to have those objections addressed, Respondent cannot now come forward and object to them for the first time at this late date in a post hearing brief. *Power Fuels, Inc.*, 14 BNA OSHC 2209, 2214 (No. 85-0166, 1991); Fed. R. of Evid. 103(a)(1).

Respondent also asserts that without the presence of Sheriff Crawford to explain the conditions in his photographs, no evidentiary weight should be afforded to the photographs. It points out that Coroner's photographs C-30, C-31, and C-44 are supposed to reflect the same conditions as that depicted in Coroner's photograph C-32. It asserts that C-32 appears to reflect entirely different conditions. The Court finds no merit to Respondent's arguments. The Court's

examination of these four photographs reveals that any difference in conditions depicted in C-32 from those in C-30, C-31 and C-44 can be readily explained by the fact that C-32 was taken from the opposite direction of the other three photographs and depict a different perspective of the jobsite.

Although Sheriff Crawford did not testify, his photographs were introduced to buttress CO Howell's conclusion that the conditions at the jobsite had not changed between August 20, the date of the accident, and August 25, the date of the OSHA inspection by CO Howell. Despite Respondent's contention that comparisons of the two sets of photographs display some significant changes, the Court finds that the photographs taken by OSHA on August 25 demonstrate that the location of the spoil pile remained the same as it was on August 20. The similarity can best be seen by comparing OSHA photograph C-19 with the Coroner's photograph C-32. In both photographs, a stone or clump of dirt is seen laying right at the edge of a bench. This stone provides a reference point from which the condition of the nearby spoil pile can be judged. As noted earlier, had there been any sloughing, the stone in the C-19 would have been covered or surrounded by soil. Also, in both photographs, just above the rock, and at the opposite end of the bench, the spoil begins with a layer of what appears to be a tamped down layer of lighter colored soil. Had there been any sloughing of material off the spoil pile between August 20 and August 25, the sloughed material would have been seen in C-19, which was taken on August 25. No such material is visible, leading to the conclusion that the condition of this spoil pile remained materially the same between August 20 and August 25.

Although not as clear, a comparison of OSHA photograph C-17 with Coroner's photograph C-32 similarly fails to reveal any sign of significant sloughing that would account for the spoil pile being located closer than two feet from the edge of the excavation. In both

photographs, the spoil pile is depicted adjacent to the bell hole. OSHA photograph C-17 shows no sloughing that would have brought the spoil pile closer to the bell hole.

In its reply brief, Respondent points to the testimony of excavator operator Sherman that his practice was to ensure that the spoil pile was placed two feet away from the edge of the non-belled areas and four feet away from the bell holes. (Resp't Reply Br., at pp. 9-10; Tr. 158, 171). It then points to the testimony of Messrs. Sherman and Kennedy that, between August 20 and August 25, material sloughed off the spoil pile giving it the appearance of having been placed closer to the edge of the excavation than was the case on August 20. (Tr. 171, 226).

A closer examination of the transcript, however, discloses this revealing exchange during the Secretary's cross-examination of Mr. Kennedy:

> Q. Now, your practice with respect to the spoil pile, or the practice that was practiced on the jobsite, was to remove the spoil from the excavation and put it two feet away on the portion of the trench between the bell holes, right?
>
> A. Yes.
>
> Q. And then the other practice was to put it four feet away at the area of the bell holes, is that right?
>
> A. Yes.
>
> Q. So the area of the trench between the bell holes was vertical, the spoil pile was two feet away, right? Or supposed to be?
>
> A. Yes.
>
> Q. Okay.
>
> A. If I can comment on that, the area between the bell holes, *even if it wasn't a full two feet, that's not intended for entry anyway*. But we still follow the two-try to follow the two foot rule. But once it gets to the point where people would enter the trench the sand would be placed to the top of the pipe and in most cases that's only three to maybe four feet deep.
>
> Q. *So the area between the trench, you try to keep it two feet but it wasn't as much of a concern because no employees entered the trench at those area, right?*
>
> *A. Yes.*
>
> Q. Now, the area between the bell holes, employees would enter that area to set the line pin?
>
> A. That would be one of the reasons. If there was a need to set a line pin. There is not always the need unless you have a change in grade.

(Tr. 229-30)(emphasis added).

This testimony establishes that Teichert had a complacent attitude toward maintaining the spoil pile a minimum of two feet from the edge of the excavation, at least in the non-belled areas of the trench and supports CO Howell's observation that the spoil pile was not kept at least two feet from the edge of the excavation at that location.

Finally, Respondent contends that the Secretary failed in meeting her burden of proof because CO Howell never measured the distance of the spoil pile. (Resp't Br., at p. 8, n.7). While this argument might have merit had CO Howell asserted that the spoil pile was inches within the two foot limit, the evidence indicates that the spoil pile was at the edge of the excavation. Indeed, photograph C-37, taken by Sheriff Crawford at the time of the violation, reveal clumps of dirt that had already fallen into the trench. (Tr. 107-08). The Court also notes that none of the exhibits show that Respondent used retaining walls or devices to prevent material from falling into the trench. Accordingly, the Court finds that the evidence demonstrates that Teichert failed to maintain its spoil piles at least two feet from the edge of the excavation on August 20, 2009.

iii. Exposure

The Court finds that employees were exposed to the hazard posed by the spoil pile. CO Howell testified that there was no way to place the line pin into the bottom of the trench without getting into the excavation. The evidence establishes that, on or about August 20, 2009, Mr. Nelson was in the trench to place a grade bar and a line pin in the trench. Mr. Nelson hammered the line pin shown in photographs C-35 and C-38, and had to enter the trench before that section was completed in order to set up the line pin. He also entered the trench to check the grade, which is done with the line pin, laser and grading rod. Because that section of trench was not yet completed, Mr. Sherman had not swiped the spoil pile by the bell hole. The spoil pile was located above the bell hole. Debris from the spoil pile could have fallen into the trench and onto Mr.

Nelson. Indeed, Mr. Kennedy testified that, on August 20, there was material that had rolled off the spoil pile and into the trench. The Court finds that the material on the spoil pile posed a hazard to anyone in the trench. The preponderance of the evidence establishes that Mr. Nelson was exposed to falling debris from the spoil pile that was located at the edge of the bell hole that could cause injury. (Tr. 107, 116, 159, 161, 226-27, 235-36, 243; C-28, C-35, C-37, C-38). *See also North Tex.Contracting Inc.,* 21 BNA OSHC 1419, 1423 (No. 05-0330, 2006) ("When a standard prescribes specific means of enhancing employee safety, a hazard is presumed to exist if the terms of the standard are violated.").

Foreman Kennedy also testified that no employee would get into the non-belled 44 foot section of trench between the bell holes "until the pipe was laid and sand was placed over the pipe. Which would bring it up, you know, three feet from the top of the trench." (Tr. 225). On cross-examination, when questioned whether employees would enter the area between the bell holes to set the line pin, Mr. Kennedy responded "That would be one of the reasons. If there was a need to set a line pin. There is not always the need unless you have a change of grade." (Tr. 230). Finally, Mr. Kennedy testified that employees will work in the area between the bell holes once the sand is placed around the pipe. "This is long after the pipe has been placed and we will come back and we will put sand to the top of the pipe. Employees will enter to compact the sand and then lay conduits, which were also part of the project." (Tr. 232).

Foreman Kennedy's testimony establishes that employees enter the non-belled areas of the trench. That employees enter the trench only after the pipe is laid and sand placed to raise the bottom of the trench does not excuse the employer from compliance with the cited standard, which applies regardless of the depth of the excavation. *See Ford Dev. Corp.,* 15 BNA OSHC 2003, 2011 (No. 90-1505, 1992), *aff'd,* 16 F.3d 1219 (6th Cir. 1994)("standard speaks of the

depth of the trench, not of the position of employees in the trench."). The Court finds the depth exception to the standard to be inapplicable in this instance. *Id.*

Accordingly, the Secretary established that Respondent's employees were exposed to the violative condition on August 20, 2009.

iv. Knowledge

Finally, the evidence establishes that Teichert knew, or with the exercise of reasonable diligence should have known, of the violative condition. To establish knowledge, the Secretary must prove that an employer knew or could have known with the exercise of reasonable diligence of the physical conditions constituting the violation. *Schuler-Hass Electric Corp.,* 21 BNA OSHC 1489, 1493 (No. 03-0322, 2006). The Commission has held that "[t]he conspicuous location, the readily observable nature of the violative condition, and the presence of [the employer's] crews in the area warrant a finding of constructive knowledge." *Kokosing Constr. Co*., 17 BNA OSHC 1869, 1871 (No. 92-2596, 1996). Here, the violative spoil pile was in plain view. Additionally, constructive knowledge may be found where a supervisory employee was in close proximity to a readily apparent violation. *KS Energy Servs. Inc.*, 22 BNA OSHC 1261, 1267-68 (No. 06-1416, 2008)(non-complying condition in plain view of foreman continuously present at site). Here, Foreman Kennedy was on the jobsite on August 20, 2009. (Tr. 223-24). The actual or constructive knowledge of the employer's foreman or supervisor is generally imputed to the employer. *Jersey Steel Erectors*, 16 BNA OSHC 1162, 1164 (No. 90-1307, 1993), *aff'd*, 19 F.3d 643 (3d Cir. 1994). Foreman Kennedy's knowledge of the violation is imputed to Teichert. The Secretary has established that Teichert had knowledge of the violative condition.

Having established by a preponderance of the evidence that: (1) the standard applied to

the conditions at the site; (2) the terms of the cited standard were violated; (3) employees were exposed to the hazard posed by the violation; and (4) Respondent had actual or constructive knowledge of the violative condition, the Secretary has established a violation of the standard and Citation 1, Item 3 is affirmed.

ITEM 4

Item 4 of the citation alleges a violation of 29 C.F.R. § 1926.652(b) on the grounds that Teichert failed to comply with the shoring and sloping system designed for the excavation by a RPE. The Secretary proposed a penalty of $5,000 for this alleged violation.

When an employer constructs an excavation, 29 C.F.R. § 1926.652(b) requires the employer to shore or slope the excavation to protect employees working in the trench from the hazard of collapse, except where the excavation is less than five feet in depth or dug in solid rock. The standard sets forth four options an employer can adopt to protect its employees. The fourth option, listed by the standard and the option chosen by Respondent, allows the employer to have a shoring/sloping system designed by a RPE and requires that the excavation be constructed in accordance with that design. The Secretary asserts that Teichert did not construct the excavation in accordance with the RPE's design.

i. Applicability of the Standard

By its terms, the standard is applicable to all excavations except those dug in solid rock or those less than five feet deep where examination by a competent person provides no indication of a potential cave-in. 29 C.F.R. § 1926.652(a)(1)(i) and (ii). The parties stipulated that the excavation was not dug in solid rock, but in Type B soil. (JPHS, Stipulation #8). Further, CO Howell provided undisputed testimony that the depth of the trench ranged from 9-13 feet. (Tr. 110-11; C-6). The evidence demonstrates that the cited standard was applicable to the excavation

constructed by Teichert.

ii. Was the Standard Violated?

In the citation, the Secretary asserted that:

> Teichert Constructed [sic] elected to follow the trench wall excavation specifications developed for and on behalf of Teichert Construction by Brian Wellington, a RPE in the State of California. The trench wall specification for this project was outlined in J.M. Turner Engineering's document which was identified as Job #140068. This plan specified that spoil pile was to be setback at least four (4) feet from the edge of the trench wall. The RPE's slope design took into consideration the four (4) foot setback of the spoil pile. Teichert Construction failed to comply with the requirements as specified in J.M. Turner's engineering specifications.

The evidence establishes that Respondent diverged from the RPE's plan in several respects:

(1) The plan called for the entire length of the excavation to be sloped at ¾:1, or an angle of 53 degrees. (Tr. 68, 74 188; C-1). Instead, between the bell holes, the trench was vertical and not sloped or shored. (Tr. 55, 58, 61, 69, 168-9; C-21). Respondent also employed a system of benching as part of their excavation process, although the plan did not provide for any benching. (Tr. 69-70, 167).

(2) Dr. Jin testified that, based on the scale drawing of the belled area, he calculated that the west wall of the bell hole was sloped at 56.64 degrees, which is steeper and therefore less stable than a trench dug with the 53 degree slope called for in the RPE's plan. (Tr. 142, 187-88; C-2).

(3) The plan required the use of weld huts in the bell holes when employees entered the trench to join the pipes. (T. 54, 70, 189; C-1). Respondent did not use weld huts at the cited location. (Tr. 70, 74, 189, 235). Foreman Kennedy testified that a weld hut would be used only at bell holes where the ¾:1 slope could not be achieved. (Tr. 234).

(4) The plan required that the spoil piles be set back four feet from the edge of the excavation throughout its entire length. (Tr. 66-67, 74, 149, 191; C-1). Respondent did not maintain the four foot setback. Rather, it was its practice to maintain the four foot setback only at the bell holes and a two foot setback at the vertical walled sections. (Tr. 157-58, 229; C-10, at p. 4). The evidence demonstrates that, even at the bell holes, Respondent failed to maintain a four foot setback. (Tr. 93, 97, 115, 119; C-19, C-23, C-30, C-38, C-47).

Respondent asserts that there is no evidence that the RPE's plan, as set forth in C-1, was in effect at GPS Grid Coordinates Latitude 35 42 40 N Longitude 120 46 43 W, the precise location which was subject to the inspection. It argues that there was no basis for the alleged violation because there was no certainty of what, if any, RPE plan may have existed for the specific location of the alleged violation; what such a plan may have required; and no evidence that the employer failed to comply with that plan. (Resp't Opening Br., at p. 14).

The argument is without merit. First, Stipulation #7, as set forth in the JPHS clearly states that:

> Pursuant to 29 C.F.R. § [1926.]652(b) (4), Respondent opted to have the protective system for the trench designed by a registered professional engineer. The engineer's plan is identified as C. Exh. 1 and R-G.

Second, Foreman Kennedy testified that the engineer's plan was present at the site, and that the work was being accomplished consistent with the plan. (Tr. 224). Significantly, the only plan Respondent introduced into evidence is identical to the RPE's plan introduced by the Secretary. (Compare C-1 with R-G).[45]

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[45] The Court also notes that the evidence establishes that the trench was more than five feet in depth and was not dug in solid rock, but rather in Type B soil. (Tr. 110-11; JPHS Stipulation #8). If Respondent was not operating under a RPE's plan, it was obligated to either comply with the 29 C.F.R. § 1926.652(b)(1) or (2), Appendix or use tabulated data as permitted under 29 C.F.R. § 1926.652(b)(3). None of these options allow for the construction of an excavation with vertical walls, or without shoring or other protective system in Type B soil. *See* Table B-1, Appendix B to Subpart P of Part 1926 – Sloping and Benching, that permits maintaining vertical trench walls when a trench is dug in Stable Rock. The citation explicitly states that Teichert failed to comply with 29 C.F.R. §

Teichert next repeats its argument that the Secretary failed to establish the state of the spoil pile on August 20, 2009. As it argued under Item 3, Respondent contends that it is not valid to compare Sheriff Crawford's photographs taken on August 20-21 with those photographs taken by CO Howell on August 25 because conditions had changed. Specifically, it argues that, between those dates, the spoil pile sloughed down toward the trench, making it appear that the spoil pile was closer than it actually was. For reasons set forth in the Court's discussion under Item 3, *supra*, the Court finds no merit in the argument.

Respondent also appears to find some inconsistency between the allegations of Item 3 and those of Item 4 insofar as it relates to the spoil pile. Respondent notes that Item 3 alleged that the spoil pile was located closer than two feet from the edge of the excavation, while Item 4 alleged that it was located closer than four feet from the edge. (Resp't Opening Br. at 16). Respondent observes that there is "no question that if the spoil pile had been placed within two feet of the excavation, it had not been placed more than four feet away." It then concludes that "Complainant may not have it both ways. If the 2-foot requirement had been violated, the 4-foot requirement had certainly been violated."

The Court finds nothing inconsistent in the Secretary's allegations. Items 3 and 4 address two separate hazards. [46] The only hazard addressed in Item 3 is that material in a spoil pile located closer than two feet from the edge of a trench can fall into the excavation and injure

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1926.652(b) in that it failed to comply with any of the four listed options. Since the trench was not in stable rock, Teichert was not permitted to have vertical walls on the trench under 29 C.F.R. § 1926.652. It has been Teichert's assertion, from the time of the inspection, that it chose to comply via Option 4, by obtaining and following an RPE's design. If it were not operating under an RPE's plan, Teichert failed to comply with the standard.

[46] *See J.A. Jones Constr. Co.,* 15 BNA OSHC at 2207 (two standards are not duplicative where directed at fundamentally different conduct). The Court finds that these two items are directed at fundamentally different conduct. *See also Flint Eng'g & Constr. Co.,* 15 BNA OSHC 2052, 2056-57 (No. 90-2873, 1992)(citations not duplicative where employer "could not meet two standards with one abatement effort."). Here, to abate the spoil hazard, Respondent would have to move the spoil pile so that it was at least two feet from the edge, or insert a retaining device. To abate the protective system violation, Respondent would have to comply with all aspects of its RPE's plan, or comply with OSHA standards for excavations made in Type B soil. (Sec'y Opening Br., at p. 32).

employees working within the trench. Item 4, allows the employer to have a RPE develop a shoring/sloping plan to protect employees inside from a trench collapse, and requires the employer to comply with that plan. Here, the RPE allowed a ¾ :1 slope, which is steeper than the 1:1 slope normally required. Under the RPE's plan, to permit this slope, the stress on the trench walls had to be reduced by requiring that the spoil pile be located four feet from the excavation edge. (Tr. 190). Also, the location of the spoil pile is but one in a list of items that the Secretary found failed to comply with the requirements of the RPE's plan.[47] The Court finds nothing inherently contradictory or otherwise inconsistent in the way the Secretary cited these two items. In addition to the problem with the spoil pile, Teichert failed to comply with the RPE's plan, and therefore violated the cited standard in several respects. It sloped only the bell hole, inadequately sloped the west wall of the bell hole, and failed to provide weld huts for employees working in the bell holes.

Finding no merit in Respondent's arguments, the Court finds that Respondent chose to comply with the cited standard by employing a RPE'S design and that the Secretary established that Teichert failed to construct the excavation in accordance with the RPE's plan, in violation of the standard.

iii. Exposure

As discussed under Item 3, the Secretary established that Mr. Nelson entered the excavation on August 20, 2009. Also, as discussed in Item 3, the evidence establishes that, on that date, the spoil pile was located at the edge of the excavation. Here, the location of the spoil pile added additional stress to the excavation walls increasing the hazard of a trench collapse. (Tr. 190). Mr. Nelson was exposed to the hazard caused by Teichert's failure to comply with the

[47] CO Howell testified that Item 4 "applied more to the supporting of the trench wall than the spoil issues." (Tr. 120-21).

RPE's plan. The evidence also establishes that employees entered the trench through the bell hole to place grout and do other work involved in joining the pipes. (Tr. 142, 164, 233). Contrary to the RPE's design, there were no weld huts at that location to protect employees working in the trench or the area of bell holes from the hazard of trench collapse.

Teichert contends that there was no evidence that the failure to slope the areas between the bell holes exposed employees working at the bell holes from any hazard. The evidence is to the contrary. CO Howell testified that a collapse in the vertical areas of the trench could cause the pipes to move, crushing employees in the bell hole between the pipe and the wall. He also testified that a collapse of the vertical wall could cause the belled area to fail. (Tr. 147-48). The risk of trench collapse was heightened because of the additional stress put on the belled area by the adjacent spoil pile and by the fact that the excavation was dug in previously disturbed soil containing fissures. (Tr. 99; C-36). Dr. Jin, a geotechnical engineer, was qualified as an expert on the evaluation of the stability of trenches based on education and experience in the field. (Tr. 182). According to Dr. Jin, if the vertical section collapsed, employees in the belled section would be endangered. He explained that a trench collapse occurs in three dimensions and, if there was any deflection, it would affect employees in the bell hole. (Tr. 193). Respondent did not rebut Dr. Jin's testimony.

The Court finds that the Secretary established that employees were exposed to the improperly shored/sloped trench.

iv. Knowledge

The evidence establishes that Teichert had actual or constructive knowledge that it was not constructing the excavation in accordance with the RPE's plan. Foreman Kennedy testified that the RPE's plan was always present at the jobsite, and that the work was being accomplished

consistent with the plan. (Tr. 224). Foreman Kennedy testified that it was the practice to place the spoil pile two feet from the edge of the non-belled sections and four feet from the edge of the bell holes rather than four feet from the edge of the entire trench. (Tr. 157, 229). Mr. Kennedy further testified that the bell holes were sloped according to the RPE's plan. (Tr. 218). The Court gives little credit to this testimony. He also testified that it was the practice at the site to slope only at the bell holes and to leave the areas between the bell holes vertical. (Tr. 229) This contravened the RPE's plan that required that the entire trench be sloped at ¾:1. The Court finds that the evidence established that Mr. Kennedy knew, or with the exercise of reasonable diligence should have known that the RPE's plan was not being followed. As foreman, Mr. Kennedy's knowledge is imputed to Teichert. *Jersey Steel Erectors*, 16 BNA OSHC at 1164. The Secretary established that Teichert had knowledge of the violative condition.

With the preponderance of the evidence demonstrating that: (1) the cited standard is applicable to Teichert's jobsite, (2) the standard was violated, (3) Teichert's employees were exposed to the violation, and (3) Respondent knew or with the exercise of reasonable diligence could have known of the violation, The Court finds that the Secretary established a violation of 29 C.F.R. § 1926.652(b) and Item 4 is Affirmed.

Characterization

The Secretary characterized these violations as serious. A violation is serious when "there is a substantial probability that death or serious physical harm could result" from the hazardous condition at issue. 29 U.S.C. § 666(k). As the Third Circuit has explained:

> It is well-settled that, pursuant to § 666(k), when the violation of a regulation makes the occurrence of an accident with a substantial probability of death or serious physical harm *possible,* the employer has committed a serious violation of the regulation. The "substantial probability" portion of the statute refers not to the probability that an accident will occur but to the probability that, an accident having occurred, death or serious injury could result, even in those cases in which

an accident has not occurred or, in fact, is not likely to occur.

Secretary of Labor v. Trinity Indus., 504 F.3d 397, 401 (3d Cir. 2007).

Regarding Item 2 of the citation which alleged a violation of 29 C.F.R. § 1926.601(b)(14), CO Howell testified that the failure to check the brakes' push-rods to assure proper adjustment could lead to an accident which could result in death or serious physical injury. (Tr. 48-49)

The evidence also establishes that Item 3, which alleged a violation of 29 C.F.R. § 1926.651(j)(2), was serious. According to CO Howell, it is common for an employee struck by a clump of dirt or a rock from a spoil pile to suffer a fracture or other serious injury. (Tr. 117).

Finally the Secretary also established that Item 4, alleging a violation of 29 C.F.R. § 1926.652(b), was serious. The evidence demonstrates that if the excavation collapsed due to Respondent's failure to comply with the RPE's design, employees could have suffered death or serious physical harm from being struck by falling debris or by being crushed by moving pipe. (Tr. 117-18, 148).

Based on this evidence, the Court finds that the evidence establishes that, for all three violations, had an accident occurred, employees could have suffered serious physical harm. The violations were properly characterized as serious.

Penalties

Section 17(j) of the Act, 29 U.S.C. § 666(j), requires that in assessing penalties, the Commission must give "due consideration" to four criteria: the size of the employer's business, the gravity of the violation, the employer's good faith, and its prior history of violations. *Specialists of the South*, *Inc.*, 14 BNA OSHC 1910 (No. 89-2241, 1990). These factors are not necessarily accorded equal weight; generally speaking, the gravity of a violation is the primary

element in the penalty assessment. The gravity of a particular violation, moreover, depends upon such matters as the number of employees exposed, the duration of the exposure, the precautions taken against injury, and the likelihood that any injury would result. *J. A. Jones*, 15 BNA OSHC at 2214.

For item 2, the violation of 29 C.F.R. § 1926.601(b)(14), the Secretary proposed a penalty of $1,125. Although the violation was serious, the Secretary considered the hazard to be of low severity. CO Howell testified that because the operator wore a seat belt and operated the dump truck at a low rate of speed, any injury to the operator would not result in permanent injury or death. The Secretary also determined that, because only one brake was out of adjustment and the truck was not operated at high speed, the probability of an accident occurring was "lesser." Finally, for this violation the Secretary allowed a 25% credit for good-faith because, despite some minor deficiencies, Teichert had a well-written safety program. (Tr. 49-50).

As to Item 3 for violation of violation of 29 C.F.R. § 1926.651(j)(2), a penalty of $2,625 was proposed by the Secretary. CO Howell testified that it was not likely that an incident would result in permanent injury or death. The violation was determined to be of medium severity because it is common for employees hit by debris falling from a spoil pile to suffer fractures or other serious injury. CO Howell also testified that the violation had a greater probability of occurring because the spoil pile was located at the edge of the trench. As with Item 2, the Secretary gave Teichert 25% credit for good faith due to the quality of its written safety program. (Tr. 117).

The Secretary proposed a $5,000 penalty for Item 4, which alleged a violation of 29 C.F.R. § 1926.652(b). CO Howell that the violation was considered to be of high severity because an accident could cause death. Also, he considered that the probability of an accident

was "greater." CO Howell further testified that he has seen many failed trenches that resembled this trench. Also, the danger of not following the RPE's plan was underscored by the Secretary's expert, Dr. Jin, who testified that the RPE under-designed the trench and over estimated the strength of the soil. (Tr. 186). CO Howell also testified that, for this item, no credit was given for good faith because of the high severity of the violation. (Tr. 118).

Finally, the record establishes that, for all three violations, the Secretary did not give any deduction for Respondent's size because it is a large employer. Also, no credit was given for Teichert's safety history because eight or nine months before this inspection, Respondent received two willful citations for a double trenching-related fatality. (Tr. 117-18).

Based on this evidence, the Court finds that the Secretary properly considered the statutory factors when determining the proposed penalties, and the Court finds those penalty proposals to be appropriate. Therefore, the proposed penalties are assessed.

Findings of Fact and Conclusions of Law

All findings of facts and conclusions of law relevant and necessary to a determination of the contested issues have been found and appear in the decision above. *See* Fed. R. Civ. P. 52(a).

ORDER

Based upon the foregoing findings of fact and conclusions of law, it is **ORDERED** that:

Citation 1, Item 2 for a violation of 29 C.F.R. § 1926.601(b)(14) is **AFFIRMED** and a penalty of $1,125 is **ASSESSED;**

Citation 1, Item 3, for a violation of 29 C.F.R. § 1926.651(j)(2) is **AFFIRMED** and a penalty of $2,625 is **ASSESSED;** and

Citation 1, Item 4 for a violation of 29 C.F.R. § 1926.652(b) is **AFFIRMED** and a penalty of $5,000 is **ASSESSED.**

SO ORDERED.

/s/
The Honorable Dennis L. Phillips
U.S. OSHRC Judge

Dated: February 9, 2012
Washington, D.C.