



WALTER J. HICKEL, GOVERNOR

DEPARTMENT OF LABOR

P.O. BOX 21149
JUNEAU, ALASKA 99802-1149
PHONE: (907) 465-2700

OCCUPATIONAL SAFETY & HEALTH REVIEW BOARD

FAX: (907) 465-2784

J. C. WINGFIELD
CHAIRMAN
DONALD F. HOFF, JR.
LAWRENCE D. WEISS

ROBERT W. LANDAU
HEARING OFFICER

RECEIVED
DEC 1
Law Offices of Robert W. Landau

STATE OF ALASKA,)
DEPARTMENT OF LABOR,)
)
Complainant,)
)
v.)
)
ROSS SERVICES,)
)
Contestant.)

Docket No. 91-881
Inspection No. Ho-6338-202-91

DECISION AND ORDER

This matter arises from an occupational safety and health inspection conducted by the State of Alaska, Department of Labor (Department) on May 20, 1991 at a worksite under the control of Ross Services located at 11152 Kenai Spur Highway, Kenai, Alaska.

As a result of the inspection, the Department issued a citation to Ross Services alleging three separate violations of the Alaska Construction Code. Citation 1a alleges a violation of Construction Code 05.162(a)(1) for exposing employees to an excavation with a 14-foot vertical wall without having any protective systems in place. Citation 1b alleges a violation of Construction Code 05.161(j)(2) for failing to place excavated material at least two feet from the edge of the excavation.

Citation 1c alleges a violation of Construction Code 05.120(a)(1)(K) for using a ladder in an excavation which did not extend at least 36 inches above ground level to provide safe access and egress from the excavation. The three alleged violations were grouped into a single "serious" citation and a monetary penalty of \$200 was assessed.

Ross Services timely contested the citation. A hearing was held before the Board in Kenai on October 15, 1991. The Department was represented by Assistant Attorney General Toby Steinberger. Ross Services was represented by its owner, Byron Ross. The parties presented witness testimony, documentary evidence and arguments to the Board. Upon review and consideration, the Board makes the following findings of fact, conclusions of law and order in this matter.

FINDINGS OF FACT

1. On May 20, 1991, Department compliance Dwayne Houck was on his way home when he saw an excavation located at 11152 Kenai Spur Highway, Kenai, Alaska.

2. Under the OSHA national emphasis program on excavations, compliance officers are required to stop and inspect any new excavations they observe at any time.

3. The excavation in question was located at a Chevron service station where an underground fuel tank was being replaced with a larger tank. Ross Services was the contractor responsible for digging the excavation.

4. The excavation was approximately 33 feet wide at the top and 50 feet long. Using a tape measure, Houck measured the average depth of the excavation at approximately 14 feet. He also took photographs of the excavation. See Exhibits 1-7. Ross Services took its own photographs of the excavation 1-2 days after the inspection. See Exhibits A-K.

5. The excavation had been open approximately two days before Houck's inspection. When he arrived, the excavation crew was waiting for the new fuel tank to be lowered into place. Houck saw no one at the bottom of the excavation but he did see a workman climbing out of the excavation on an extension ladder. The ladder did not extend three feet above the top of the excavation. He also saw numerous footprints at the bottom of the excavation. See Exhibits 1, 2 and 6. David Ross, an employee of Ross Services, admitted working at the bottom of the excavation as well as using the ladder to get in and out of the excavation.

6. Houck examined the soil in the excavation and concluded that it was "Type C" soil as classified in the Construction Code. Bob Lewis, a state construction engineer, reviewed soils information from test holes bored in 1967 as part of the Kenai Spur Highway construction project. See Exhibit 8. The Chevron station is located near test hole 22. Test hole 22 indicated a top layer of brown silt (Type B) from ground level to a depth of 0.8 feet; brown sandy gravel (Type C) from 0.8-2 feet; and green-brown sand (Type C) from 2-8 feet. From his review of the test hole information as well as Houck's photographs of the

excavation, Lewis agreed with Houck's conclusion that the soil in the excavation was principally Type C soil.

7. According to Houck, the Construction Code requires that the walls of an excavation with Type C soil must be sloped at an angle of at least 1-1/2:1. From visual observation, he determined that the walls of the excavation were sloped at varying angles ranging from 1:1 to nearly vertical and that none of the walls were sloped at an angle of 1-1/2:1 as required by the code. See Exhibit 10.

8. Houck acknowledged that a slope of 1-1/2:1 (angle "A" in Exhibit 10) would be partially obstructed by the building on one side and the pump island on the other. He stated, however, that a shoring system could be combined with sloping to comply with the code and still avoid the obstructions. The contractor could have used one of several shoring options described in the code, such as a trench box, sheet pilings or interlocking metal supports. He saw no evidence of shoring at the excavation site.

9. Houck also saw spoil piles of excavated material that had been placed at the top edge of the sides of the excavation. See Exhibits 3-6. The spoil piles consisted mostly of sandy soil with some rocks. Ross Services did not dispute the existence of the spoil piles.

10. Houck grouped the code violations pertaining to the excavation into a single citation. He classified the citation as "serious" because of the substantial probability of serious injury or death in the event of an accident such as a cave-in.

11. The unadjusted penalty for a serious citation is \$1,000. The unadjusted penalty was reduced by a maximum of 80% due to the company's small size, good faith in abating the violations and no history of prior violations, resulting in a final penalty assessment of \$200.

CONCLUSIONS OF LAW

Item 1a

Alaska Construction Code 05.162(a)(1) requires that each employee in an excavation must be protected from cave-ins by an adequate protective system. The code describes a number of sloping, shoring, shielding and other protective systems that may be used.

The evidence establishes that the soil at the excavation site consisted mainly of sand mixed with gravel. Under the soils classification in Appendix A of Construction Code 05.160, this soil would be classified as Type C soil. Under Appendix B, excavations with Type C soil must be sloped at an angle of no less than 1-1/2:1. While it is apparent from the photographs that some of the walls in the excavation were slightly sloped, it is beyond dispute that none of the walls were sloped to the angle of 1-1/2:1 as required by the code. See Exhibit 10. Nor did Ross Services use any other approved methods of shoring or shielding the walls of the excavation to protect employees. Accordingly, we conclude that Ross Services was not in compliance with the cited code provision.

Ross Services argues that no work was going on in the excavation during Houck's inspection and therefore there was no employee exposure to any hazards that may have been created. However, the evidence makes clear that at least one employee of Ross Services (by his own admission) had been in the excavation prior to the inspection despite the fact that no work was actually going on at the time of the inspection. It is not necessary that employee exposure actually be observed at the time of the inspection; evidence that employees had access to the excavation, such as footprints at the bottom and observation of an employee using a ladder to exit the excavation, is sufficient to conclude that employee exposure has been established. See Rothstein, Occupational Safety and Health Law § 103 (3d ed. 1990).

Ross Services further asserts that there was no feasible way to slope the sides of the excavation due to the presence of obstructions such as the service station building and the pump island. Impossibility or infeasibility of compliance is recognized as an affirmative defense on which the employer bears the burden of proof. See Rothstein, supra, at §§ 109, 119. While it may not have been possible to slope the side walls of the excavation at an angle of 1-1/2:1 beyond the service station building or the pump island, it is clear to us that the excavation could have been sloped considerably more than it was. Additionally, we agree with the compliance officer that shoring or benching systems could have been ^{used} at the perimeter of the excavation in areas where obstructions prevented sloping at the required angle. We do not believe that

such shoring or benching techniques would have interfered with the placement of the new 10-foot diameter tank at the center of the excavation. Even if there was interference, employees could be removed from the excavation prior to lowering the tank, thus eliminating any employee exposure. In short, Ross Services has failed to meet its burden of proof to show that proper sloping and/or shoring in compliance with the code would have been impossible or infeasible.

Item 1b

Construction Code 05.161(j)(2) provides that employees must be protected from excavated or other materials or equipment that could pose a hazard by falling or rolling into excavations. Protection must be provided by placing and keeping such materials or equipment at least two feet 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.

The Department's photographs clearly show excavated material that was placed right at the edge of excavation. See Exhibits 3, 4 and 6. Ross Services contends that there was no actual hazard created because the piles of excavated material were at their natural angle of repose and there was little danger they would fall in on an employee working in the excavation. These objections are without merit. First, once a code provision which establishes objective standards (i.e., two feet from the edge) has

been shown to have been violated, the Department is not required to additionally prove the existence of an actual hazard or the likelihood of an injury. The violation of the code provision by itself presupposes the existence of a hazard. See Rothstein, supra, at § 114.

Second, as noted by the compliance officer, the excavated material may have been moist and cohesive upon excavation but, after drying out, could more easily be prone to sloughing or sliding into the excavation. Third, the spoil piles place significant additional weight on the walls of the excavation and could actually promote a cave-in. Finally, even though most of the excavated material consisted of sand, there was evidence of rocks mixed with the sand that could cause injury by falling on an employee working at the bottom of the 14-foot-deep excavation. For these reasons, we conclude the Department has proved this violation by a preponderance of the evidence.

Item 1c

Construction Code 05.120(a)(1)(K) requires that side rails of ladders extend at least 36 inches above the landing. During his inspection compliance officer Houck saw an employee using a ladder that was not in compliance with the code. See Exhibit 4. The employee admitted working in the excavation and using the ladder to enter and exit the excavation. Based on these facts, we conclude that the Department has proved this violation by a preponderance of the evidence.

Classification And Penalty

Under AS 18.60.095(b), a violation is considered to be "serious" if the violation creates in the place of employment a substantial probability of death or serious physical harm. In the event of an accident involving any of the three violations cited -- e.g., a cave-in; spoil pile material falling on an employee in the excavation; or an employee falling from an unsafe ladder -- we agree with the Department that there is a substantial probability that serious physical harm or even death could result. For this reason, we believe the citation was properly classified as serious.

In addition, we have examined the Department's penalty calculations and find that Ross Services was given the maximum reduction for company size, good faith and no prior history of violations. Accordingly, we find the assessed penalty of \$200 to be appropriate under the circumstances.

ORDER

Based on the foregoing findings of fact and conclusions of law, the Board orders as follows:

1. Citation 1 is AFFIRMED as a "serious" citation.
2. The proposed monetary penalty of \$200 is also AFFIRMED.

DATED this 12th day of (December), 1991.

ALASKA OCCUPATIONAL SAFETY
AND HEALTH REVIEW BOARD

By:

Donald F. Hoff Sr.
Donald F. Hoff Sr.

By:

Lawrence D. Weiss
Lawrence D. Weiss