# FEDERAL MINE SAFETY AND HEALTH REVIEW COMMISSION

333W. COLFAX AVENUE DENVER, COLORADO 80204

2 9 JUL 1980

SECRETARY OF LABOR, MINE SAFETY AND )
HEALTH ADMINISTRATION (MSHA),

Petitioner,

DOCKET NO. WEST 79-196-M

V.

DUVAL CORPORATION,

Respondent.

Respondent.

#### DECISION

### Appearances:

Mildred L. Wheeler, Esq., Office of the Regional Solicitor, United States Department of Labor, 450 Golden Gate Avenue, Box 36017, San Francisco, California 94102 for the Petitioner,

Before: Judge Jon D. Boltz

#### STATEMENT OF THE CASE

This case, heard under the 'provisions of the Federal Mine Safety and Health Review Act of 1977, 30 U.S.C. § 801 et seq., arose out of inspections conducted at Respondent's mine in Sahuarita, Arizona on November 29, 1978, and March 20 and 21, 1979. As a result of those inspections, five citations were issued, of which only three were actually tried, since Respondent admitted at the hearing the violations alleged in Citations 378683 and 378684 (Tr. 9).

<sup>1/</sup> A \$130.00 penalty was initially proposed for each of these citations. Since Respondent did not contest the appropriateness of these penalties, they stand as final assessments.

Petitioner seeks an order assessing civil penalties for Respondent's alleged violations of 30 CFR § 55.12-13, 2 30 CFR § 55.14-1 3 and 30 CFR § 55.14-45.4

Citation number 378682 charges that Respondent violated 30 CFR §55.12-13 by using a permanently spliced cable which lacked a bonded outer jacket.

Respondent does not dispute Petitioner's allegation that the outer jacket was loose. Instead, it contends that the loose condition of the jacket presented no danger because the five cables bound by the jacket were individually wrapped and sealed; furthermore, Respondent argues, the cable was located in an isolated area.

Citation number 378685 charges that Respondent violated 30 CFR 955.14-1 by failing to adequately guard a pinch point between the belt drive and the pulley on a back-up water pump. Respondent contends that the standard is inapplicable because the pump was infrequently used and because the pinch point, due to the machine's construction and surroundings, could not be contacted except intentionally.

Mandatory. Permanent splices and repairs made in power cables, including the ground conductor where provided, shall be: (a) Mechanically strong with electrical conductivity as near as possible to that of the original; (b) Insulated to a degree at least equal to that of the original and sealed to exclude moisture; and (c) Provided with danger protection as near as possible to that of the original, including good bonding to the outer jacket.

<sup>3/</sup> Mandatory. Gears; sprockets; chains; drive, head, tail and take-up pulleys; flywheels; couplings; shafts; sawblades; fan inlets; and similar exposed moving machine parts which may be contacted by persons, and which may cause injury to persons shall be guarded.

<sup>4/</sup> Mandatory. Welding operations shall be shielded and well ventilated.

§55.14-45 because one of its employees was welding on the teeth of a shovel bucket without using a curtain to protect other persons from being harmed by the light flashes. Respondent contends that the welder was operating from inside the shovel bucket, with his back to the open end, and thus provided adequate shielding. Furthermore, Respondent argues, there was no danger presented regardless of the adequacy of the shielding because the sun's brightness diffused the welding flash and no one was close enough to be harmed.

### <u>ISSUES</u>

- 1. With regard to Citation Number 378682, the issue is whether the outer jacket of the permanently spliced cable was well bonded.
- 2. With regard to Citation Number 378685, the issue is whether the pinch point between the belt drive and the pulley on the back-up pump was adequately guarded.
- 3. With regard to Citation Number 377036, the issue is whether the welding operation at Respondent's shovel bucket was shielded.

#### FINDINGS OF FACT AND DISCUSSION

#### 'Citation 378682

- A trailing cable on one of Respondent's shovels was permanently spliced (Tr. 46).
- 2, The outer jacket of the cable was loose and the splice connection was exposed (Tr. 46 48, 120, 126).

## Violation:

This citation should be affirmed. The mandatory standard at 30 CFR §55.12-13 requires that all permanently spliced power cables have well

bonded outer jackets. The undisputed evidence is that the power cable in question was permanently spliced and had a loose outer jacket (see Tr. 120, 126). A violation of the standard was therefore shown.

Respondent's safety supervisor suggested that the jacket served no safety purpose because each wire within the cable was individually wrapped (Tr. 114 - 118). The same witness, however, admitted that one of the purposes served by the outer jacket is to prevent moisture from reaching the wires (Tr. 132 - 133).

Respondent also argues that its ground-fault system would automatically de-energize the cable in the event of a short circuit or upon contact with water, a vehicle or a piece of machinery (see Tr. 120-122). Assuming the system to be faultless, it does not relieve Respondent of its duty, under this standard, to make sure that its power cables are well bonded.

Furthermore, Respondent's Safety Supervisor conceded that the loss of the outer jacket coupled with another safety defect could present a "safety problem" (Tr. 127 ~ 128), characterizing the potential for an electrical accident even with the trip devices as "not impossible, but improbable" (Tr. 129).

# Penalty:

The parties stipulated to the following: Respondent is a large operator  $^5$  and had received 33 citations within the two years preceding the inspection which gave rise to this case.  $^6$ 

<sup>&</sup>lt;u>5/</u> The parties stipulated that Duval Corporation operates at 4,781,356 manhours per year, and that its Sierrita Mine, in Sahuarita, Arizona, operates at 1,379,444 manhours per year (Tr. 6). According to the tables found at 30 CFR \$100.3(b), these figures indicate that the mine and the controlling company are "large".

<sup>6/</sup> Using the table at 30 CFR §100.3(c), these figures indicate a relatively favorable prior history.

Respondent was negligent in that it failed to exercise reasonable care to prevent the violation.

The gravity of the violation was low. Although the thorough wrapping of each cable and Respondent's ground-fault system does not vitiate the violation, they are relevant to a determination of the danger posed by the violation. These precautions substantially reduced the possibility of harm.

Respondent demonstrated good faith by installing a new, watertight cable sleeve (Tr. 48).

Giving due consideration to the factors discussed above, I conclude that a reasonable and appropriate penalty is \$50.00.

## Citation 378685

- 3. Respondent has a back-up water pump which is used only when the automatic pump breaks down (Tr. 58, 137).
- 4. On the back-up-pump there is a pinch point created by the belt drive and the pulley (Tr. 54).
- 5. The pump is located in an isolated area and is surrounded by a walkway and a railing (Tr. 143, 136, **58).**
- 6. The machine itself guards the pulley (Tr. 139). A wire cover extends over the fan belt and a brace bar extends-diagonally from the top to the bottom of the machine (Tr. 138).

This citation should be vacated. The pinch point on Respondent's back-up water pump was not guarded with equipment specifically designed for that purpose. It was guarded by the location and design of the pump, however. The machine was located in an isolated area and was surrounded by a walkway which, in turn, was surrounded by a railing (Tr. 143, 136, 58; See Exhibit 'R-U). A wire cover extended over the fan belt and a brace bar extended diagonally from the top to the bottom of the machine (Tr. 138; See

Exhibits R-S and R-T and **Tr. 144-145.)** If a worker fell toward the pump, he would hit the cross-bar **(Tr.** 143).

There was no reason to attend the machine except to turn it on and off. When starting or stopping the pump, a worker stands on a walkway beside the engine; to reach the pinch point, he would have to purposely extend his arm toward the engine (Tr. 143). There is no need to approach-the pinch point except to replace the belt or to repair the alternator, in which case the machine would first be shut down (Tr. 147).

For these reasons I find that the guarding requirement imposed by 30 CFR 555.14-1 was met.

### Citation 37.7036

- 7. At Respondent's mine in Sahuarita, Arizona, on November 29, 1978, a worker was welding on the wear plates of a shovel bucket, used to pick up ore and load it into trucks (Tr. 12 13; 78 79).
- 8. Although the welding operation was not shielded by a curtain, the welder was inside the bucket, surrounded on all but one side by the bucket walls; and the welder himself was positioned at the open end, facing the bucket's interior (Tr. 13; 80 81).

This citation should be vacated. The standard at 30 CFR §55.14-45 states: "Welding operations be shielded and well ventilated." The standard does not specify how they must be shielded. In this case, the welding operation was shielded on three sides by the shovel bucket and on the fourth side by the welder himself. The standard was therefore met.

## CONCLUSIONS OF LAW

1. This Commission has jurisdiction over the subject matter and parties to these proceedings.

- 2. Respondent violated the regulations as alleged in Citations .  $$^{\circ}$$  370602, 378683 and 378684.
- 3. Respondent did not violate the regulations as alleged in Citations 378685 and 377036.

#### ORDER

Citations 378685 and 377036 are vacated. Citations 378682, 378683 and 378684 are affirmed, and penalties of \$50.00, \$130.00 and \$130.00 respectively, are assessed therefor.

It is further ordered that Respondent pay \$310.00 within 30 days of this decision.

Jon D. Boltz

Administrative Taw Judge

## Distribution:

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