United States of America
OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION
1244 North Speer Boulevard, Room 250
Denver, Colorado 80204-3582

Phone: (303) 844-3409 Fax: (303) 844-3759

SECRETARY OF LABOR, Complainant, v. DON BROWN LOGGING and AVERY LOGGING CO., INC., Respondent.	OSHRC DOCKET NO. 97-0394 & 97-1184

APPEARANCES:

For the Complainant:
Matthew L. Vadnal, Esq., Office of the Solicitor, U.S. Department of Labor, Seattle, Washington

For the Respondent:
Greg Tichy, Esq., Veradale, Washington

Before: Administrative Law Judge: Stanley M. Schwartz

DECISION AND ORDER

This proceeding arises under the Occupational Safety and Health Act of 1970 (29 U.S.C. Section 651 *et seq.*; hereafter called the "Act").

At all times relevant to this action, Respondents, Don Brown Logging and Avery Logging Co., Inc. (Don Brown), maintained places of business near Pinehurst, Idaho, where they were engaged in logging. Respondents admit they are employers engaged in a business affecting commerce and are subject to the requirements of the Act.

On February 18, 1997 and June 11, 1997 the Occupational Safety and Health Administration (OSHA) conducted inspections of Respondents' respective Pinehurst work sites. As a result of those inspections, Respondents were issued citations alleging violations of 29 CFR §1910.266 *et seq.*,together with proposed penalties. By filing a timely notice of contest Respondents brought this proceeding before the Occupational Safety and Health Review Commission (Commission). Partial settlement agreements resolving all but alleged violations of §1910.266(h)(2)(vii) were filed prior to the start of the hearing.

On November 18-19, December 16-17, 1997, and again on April 1, and May 8, 1998, hearings were held in Coeur D'Alene, Idaho and Seattle, Washington. The parties have submitted briefs on the issues and this matter is ready for disposition.

Alleged Violations

Docket No. 97-0394, serious citation 1, item 3 alleges:

29 CFR 1910.266(h)(2)(vii): The backcut of trees being felled was not above the level of the horizontal cut of the undercut:

> (a) Don Brown Logging, Frosty Peak Timber Sale: The faller was sawing the backcut at the same level as the horizontal cut of the undercut (match cut).

Docket No. 97-1184, serious citation 1, item 6 alleges:

29 CFR (h)(2)(vii)(sic): Manual felling techniques were not adequate in that the backcut was not above the level of the horizontal facecut in order to provide an adequate platform to prevent kickback:

> (a) An employee falling timber to clear road right-of-way at Trapper Creek was matching the backcut and facecut.

The cited standard states:

> The backcut shall be above the level of the horizontal facecut in order to provide an adequate platform to prevent kickback. Exception: The backcut may be at or below the horizontal facecut in tree pulling operations.

Facts

Virgle Howell, a Compliance Officer (CO) with OSHA, testified that he conducted an inspection of Don Brown's logging site in the Ross Gulch of the Pine Creek near Pinehurst Idaho (Tr. 29). Howell testified that he spoke with Greg Height, a Don Brown employee, who told him that Don Brown was downing timber using a Humboldt face cut with a matched back cut (Tr. 36, 40; G-4). When using the Humboldt method, the logger, or feller, removes a wedge from the tree by making a horizontal cut and a second, angled cut coming up from below the horizontal cut (Tr. 24; Exh. G-9A, p. 60). A back cut is made in the opposite side of the tree, away from the intended direction of the tree's fall (Tr. 25). In this case, Howell testified, the back cuts were even with the horizontal cut of the Humboldt face cut (Tr. 36). Howell stated that Greg Height told him that Don Brown used a matched back cut because it left a flush cut on the butt of the tree, making it unnecessary to trim the tree before sending it on to the mill (Tr. 36).

Howell testified that on June 11, 1997, he inspected Avery Logging's logging operation in the Trapper Creek area near Pinehurst, Idaho (Tr. 41). Howell testified that an Avery employee admitted that

Avery was matching its back cuts with the horizontal cut of a Humboldt face cut (Tr. 42; Exh. G-5 through G-9; *See also*; audio tape of Avery inspection, Tr. 584). Howell stated that Avery's employees had been trained to match their cuts (Tr. 47).

Howell testified that it is important to make the backcut above the level of the horizontal facecut in order to control the fall of the tree, and to keep the butt of the tree from leaving the stump and kicking back, possibly striking the faller (Tr. 59). Howell stated that he investigated an accident in Montana in which a tree left the stump and kicked back approximately 10-12 feet, striking and killing the faller (Tr. 60, 122, 64). Howell stated that the faller used a Humboldt face cut; the tree was felled downhill; the kickback was not caused by an obstruction in the tree's path as it fell (Tr. 61, 122).

During his April 2, 1998 rebuttal testimony, Howell stated that since his original testimony, he had investigated two more logging accidents involving kickbacks (Tr. 3, 6-7). Howell testified that in those two cases, large trees, approximately 100 feet high had struck dead fall as they fell, and kicked back 19 and 17 feet, respectively, striking the faller (Tr. 6-7). One faller was killed (Tr. 3, 5). The faller in the fatality investigation used a matched cut (Tr. 5). The faller involved in the other accident, however, left a one inch step (Tr. 15). In addition, both trees also kicked approximately two feet to the side of the stump (Tr. 8, 11).

Paul Cyr has been conducting logging inspections for OSHA since 1980 (Tr. 137). Cyr developed safety courses in logging for the OSHA training institute both before and after the publication of the final rule at §1910.266 *et seq.* (Tr. 141-42). Cyr testified that misdirected falls or kickbacks may create a hazard for the feller, depending on the lean of a tree, the total weight in the crown, and other factors such as ice, snow and wind, or obstructions in the fall path (Tr. 160-61). Cyr personally observed kickbacks caused by improper face cuts made by the faller; Cyr stated that an improperly felled tree may hit another tree in its path and kick back (Tr. 186). Cyr stated that a heavily leaning tree on a slope may kick back without hitting anything on the way down, though the percentage of such kickbacks is small (Tr. 187, 265-66).

Cyr testified that he was involved in drafting the current rule addressing these hazards, relying on a number of industry sources, including: state logging standards from Alaska, Washington, Oregon, and Michigan; "Professional Timber Falling," by D. Douglas Dent; the "Fallers and Buckers Handbook," a publication of the Workers Compensation Board of British Columbia; and the "Logging Professional's Safety Handbook," a publication of the American Pulpwood Association; (Tr. 154-55, 178-80; Exh.G-9, G-11 through G-17), all of which require placement of the backcut above the horizontal plane of the undercut.

In February, 1995, prior to its becoming a final rule, the cited section of the 1995 logging standards was temporarily stayed pending further comment. 60 F.R. 7448 (1995). The partial stay gave OSHA time to reexamine the record insofar as the rule affects loggers using the Humboldt cutting method. (Tr. 173; Exh. G-21). Following the notice and comment period, the Secretary determined that:

> Placing the backcut above the horizontal face cut is also necessary to provide a platform to block the tree from kicking back once the hinge does break. Where there is a potential that the face notch will close before the tree hits the ground, which is the case with most cutting using the conventional and Humboldt methods, this platform is necessary to prevent kickback. Where the backcut is at the same level as the horizontal cut, there is no platform to block the backward movement of the tree should kickback start to occur. 60 F.R. 47027 (1995).

The proposed rule became a final rule on September 8, 1995 (Tr. 174; Exh. G-23).

On September 27, 1996 OSHA issued a compliance directive discussing how the cited provision should be enforced, CPL 2-1.22 ¶(J)(11)(f)(8) (Exh. G-10, p. 25). The CPL notes that:

> OSHA has not specified in the final rule how far above the face cut the backcut must be placed. OSHA believes that a backcut placed at least one inch above the face cut creates an adequate platform to prevent kickback and to allow the hinge to direct the falling of the tree. OSHA believes that a one inch platform would provide an adequate margin of safety for the feller while still providing the contractor with a fairly square-end log.

The cited language was drawn directly from the preamble to the final rule at 60 F.R. 47028 (1995). Cyr testified that the one inch was a compromise between a number of state standards (Tr. 178).

Paul Cyr testified that the exemption contained in the cited standard for "tree pulling" refers to the use of mechanical means, usually a skidder with a line attached to it to pull a tree against the lean (Tr. 703-06). Cyr pointed out that 1910.266(h)(1)(iii) also refers to tree pulling, stating that "no yarding machine shall be operated within two tree lengths of trees being manually felled. Exception: This provision does not apply to yarding machines performing tree pulling operations." In regard to the tree pulling exception, the preamble states only that:

> The final rule allows the horizontal backcut to be placed at or below the horizontal cut in tree pulling operations. Various State logging standards also provide this exception to the backcut requirement (*e.g.*, Ex. 38K).[1] OSHA believes this exception covers those situations in which a special cutting technique may be required. . ..

Don Hull is a logging safety advisor for the State of Idaho, with 16 years of experience as a faller in Idaho (Tr. 371-74). Hull defined "tree pulling" as a technique used by fallers to direct the fall of a tree.

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[1] The Washington State logging standards discuss tree pulling at WAC 296-54-535 **Tree Pulling.** When pulling trees, the cutter works in conjuction with a pulling machine operator to down a tree with a choker or line.

Hull testified that the faller can literally pull the tree around and lay it in a particular spot by controlling the placement of the undercut and the amount of holding wood left on the tree (Tr. 371, 511). When pulling a tree, the faller uses a swing cut or Dutch cut (Tr. 487-88). Hull stated that he had never heard the term "tree pulling" used to describe felling a tree with a cable attached to a skidder or yarder (Tr. 487, 512).

Hull stated that a kickback, where the butt of the felled tree comes back across or alongside the stump, ending up behind the stump, will occur when the felled tree hits something or is being felled uphill (Tr. 380, 385). Hull testified, variously, that the platform created by the angled lower cut on a Humboldt face will prevent kickback (Tr. 381; Exh. R-6), and that during a kickback the butt of the tree will be launched up in the air, over any platform and/or step created by the faller (Tr. 382; Exh. R-7). Hull testified that in the former case, the tree will probably not fall, but be hung up in another tree (Tr. 489-91); in the latter, neither the angular cut nor the step will prevent the kickback (Tr. 471-72, 490-93).

Respondent videotaped Hull felling 25 trees (Tr. 392; Exh. R-17). Hull testified that in most cases the butt of the tree slid down the angular face cut; the angle cut on the undercut directed the direction of fall; and by the time the hinge wood broke, the tree was already committed to its fall (Tr. 467)

Hull admitted that the 1989 Idaho logging standards required that back cuts be made above the horizontal level of the face cuts (Tr. 497-99; Exh. G-12, p.4). The 1995 standards, which he helped formulate, allow back cuts to be made even with or above the level of the horizontal cut of the face cut (Tr. 499; Exh. G-25; p.7).

Don Brown, president of Don Brown logging (Tr. 539), testified that based on his 30 years of experience in logging, a one inch step would do nothing to prevent kickback (Tr. 549). Brown stated that trees are normally off the stump before they kick back (Tr. 550).

Jerry Avery, president of Avery Logging, testified that as he understood the cited standard, any backcut higher than the level of the horizontal face cut was in compliance (Tr. 594). Avery further testified that "tree pulling" refers to putting in a swinging undercut to pull the tree around and lay it in the right of way (Tr. 599). Avery admitted, however, that he had heard the term used in the context of using mechanical means, *i.e.* a tractor and cable, to bring a tree to the ground (Tr. 599). Avery testified that the OSHA standard provides a false sense of security, since a one inch step will do nothing to prevent the butt of a tree from kicking back (Tr. 594-95). Avery stated that he is having his fallers make their back cuts one inch above the face cut now because he can't afford to pay the OSHA fines, but that the requirement is unreasonable (Tr. 601).

Avery testified that the butt of a falling tree, hitting an obstruction halfway through its fall, at approximately 45E, will kick raise up over the stump (Tr. 602). Avery stated that should the tree hit an

obstruction earlier in its fall, it may still jerk off the stump; once the tree has left the stump, no step will prevent kickback (Tr. 603-04).

Toby Millard is the sole proprietor of Millard Cutting Company, an Idaho company, with 21 years of experience falling trees (Tr. 605-07). Millard agreed that the term "tree pulling" refers to placing a swing cut in a tree to pull it around during its fall (Tr. 619). Millard testified that a one inch step would not prevent kickback, because at the end of the fall the butt of the tree may go above the stump or beside it, but never kicks back into the stump itself (Tr. 613-14). If the falling tree were to hit another tree early in its fall, the hinge wood would keep it from kicking back, rendering the step redundant (Tr. 615-16, 627, 642). Millard stated that the standard is unnecessary when using a Humboldt face, because the face of the undercut provides a platform to prevent kickback (Tr. 622, 627, 643-46). According to Millard the tree pulls away from the apex, *i.e.* the point where the face cuts come together, as it falls; the one inch step never comes into play with the butt of the tree (Tr. 626, 657-59).

Millard stated that in the time he has been falling, he has never heard of a fatality resulting from a kickback (Tr. 630). The only fatality Millard was aware of resulted from a "barber chair," where the tree fell back away from the undercut, striking and killing the faller (Tr. 631). Millard believed that the one inch step requirement increases the chances of creating a barber chair (Tr. 647). The fatality Millard cited resulted from a back cut two feet above the undercut (Tr. 648).

Millard testified that he is aware that OSHA requires a one inch step, and that his employees have been instructed to comply, though he believes that the requirement is a safety hazard (Tr. 638, 671). According to Millard, a feller climbing through the underbrush with a chain saw to level the butt of the tree for milling is more likely to injure himself (Tr. 638-39, 652).[2]

Vernon Keinke is the sole proprietor of a logging company in Idaho with 40 years of experience in the industry (Tr. 677-78). Keinke agreed that a one inch step is unnecessary to prevent kickback when using a Humboldt face (Tr. 679-81). In addition, Keinke testified that the cutter increases the chances of creating a "barber chair" with a step; the larger the step, the greater the danger (Tr. 679). A barber chair is created when there is too much holding wood left on the stump. Instead of acting as a hinge and breaking off as the tree falls, the holding wood causes the tree to split vertically before it falls, creating an additional hazard for the faller (Tr. 679-80, 682; Exh. R-11).

[2] On April 2, 1998, in order to familiarize himself with cutting methods, this judge viewed Toby Millard using a Humboldt cut to fell a number of trees.

George Miller is the safety director for the Associated Logging Contractors of Idaho, Inc., a trade association to which Respondents and their witnesses belong (Tr. 601, 685, 689). Miller testified that Associated Logging provided input to OSHA during its promulgation of the cited logging standards. Miller testified that neither the organization nor its members objected to the cited standard as promulgated, believing that a back cut 1/16 to 1/8 inch above the horizontal face cut would be in compliance (Tr. 693). Miller stated that he learned about OSHA's interpretation approximately a year earlier, shortly before the OSHA inspections and citations (Tr. 701). Associated Logging believes that OSHA's clarification, at the enforcement level, which interprets the standard as requiring a one inch step, differs materially from the standard as written; the organization, therefore, decided to challenge OSHA's interpretation of the standard in this enforcement proceeding (694-95, 698).

Miller stated that most of the mills require a square butt on the trees they accept, *i.e.* the trees must be trimmed under an inch (Tr. 700). Toby Millard testified that where the cutter makes a flush cut, he has only to square the butt up by trimming the protruding hinge wood; if he leaves a one inch step, he must make an additional cut to trim off the step (Tr. 675).

Respondent introduced the testimony of Dar M. Sidiq, a PhD of applied mechanics (Tr. 776). Dr. Sidiq has no experience with actual tree felling, but created a mathematical model of a falling tree, and was "pleasantly amazed at how close [his model] came to the actual dynamics of a falling tree (Tr. 798-99; Exh. R-31). In Sidiq's model, the only function served by a one inch step was to slow the initial motion of the falling tree (Tr. 795).

Complainant introduced Muhammad El-Taha, who holds a PhD in operational research (Tr. 858). Dr. El-Taha, using a slightly different mathematical model, concluded that a one inch step increases the butt's adhesion to the stump (Tr. 879-85), and would absorb significant kickback forces in cases where the falling tree hits an object above the tree's center of gravity (Tr. 960-66; Exh. G-31, G-32).

Discussion

Fair Notice. Don Brown argues that the CPL is inconsistent with the standard, in that the one inch step requirement differs substantially from the requirement that the backcut be "above the level of the horizontal facecut" which is set out in the body of the standard. Don Brown further states that the standard fails to define terms, including "facecut," "adequate platform," and "tree pulling operations" that are crucial to the employer's understanding of the standard. Don Brown argues that the standard, as written, creates such ambiguity that the employer is not fairly apprised of what conduct is prohibited. This judge cannot agree.

The Commission has held that a standard is not impermissibly vague simply because it contains broad terms. The application of external objective criteria, including the knowledge and perceptions of a reasonable person may be used to give meaning to a broadly worded standard. *J.A. Jones Constr. Co.*, 15 BNA OSHC 2201, 1991-93 CCH OSHD ¶29,964 (No. 86-2059, 1993). It is clear from the testimony of Don Brown's witnesses that all understood the terms referred to by Respondent, with the possible exception of the term "tree pulling operations." At no time, however, do Respondents argue that they were involved in tree pulling operations, or that they believed they were in compliance because their operations fell under the tree pulling exemption. It is clear that none of the broad terms listed by Respondents rendered the standard unenforceably vague.

Similarly, the one inch requirement is not inconsistent with the cited regulation, and so does not render it ambiguous. Though not included in the text of the cited standard, the requirement was set forth in the preamble to the final rule at 60 F.R. 47029, issued September 9, 1995, in which the agency considered the differing height requirements in state standards and concluded that ". . . a backcut placed at least one inch above the face cut should provide an adequate platform to prevent kickback and to allow the hinge to help steer the falling of the tree. . .." *Id*. Moreover the one inch requirement was reissued as a CPL in September 1996, well before either of the inspections in this matter. Don Brown cannot fairly claim that OSHA's enforcement position is a departure from the Secretary's original intent, or that it was surprised by the challenged interpretation.

Reasonableness. Don Brown's real argument with the standard is that it feels the one inch step requirement[3] set forth in the preamble and in CPL 2-1.22 is unreasonable in that it fails to address a recognized hazard.

Every logger testifying agreed that kickbacks are a real hazard. CO Howell investigated two kickback accidents during the course of the hearing alone, one of which resulted in a fatality.

Respondents argue, however, that the one inch step is unreasonable because it will not prevent kickback as stated by the Secretary. Don Brown introduced substantial anecdotal and opinion evidence from experienced fellers, none of whom felt that a one inch step would prevent kickback. The testimony of these fellers was sincere, and I do not believe that it was driven, as suggested by the Secretary, solely by economic considerations. Moreover, Don Brown's evidence was supported, in part, by the testimony of CO Howell, who reported that in at least one of the kickback accidents he investigated, the butt of a tree

[3] Though Don Brown specifically objects to the one inch requirement, the witnesses uniformly agreed that no step, of any size, would prevent a tree from kicking back.

kicked back, striking the feller, even though the feller had left the required one inch step. The record establishes that a felled tree, striking a stationary object, may kick back over, or to the side of the tree's stump, away from any platform created by the back cut. In those instances, the platform fails to provide any kickback protection.

Don Brown's evidence is not, however, sufficient to establish that the OSHA acted unreasonably in adopting the one inch requirement as a guideline for enforcing the cited standard. It is well settled that a reviewing court should defer to an agency's own interpretation of its regulations where such interpretations are reasonable. *Martin v. OSHRC (CF&I Steel Corp.)*, 111 S.Ct. 1171, 1179 (1991). *Secretary of Labor v. American Cyanamid Company*, 15 BNA OSHC 1497, 1991-93 CCH OSHD ¶29,598 (No. 86-681, 1992).

Complainant showed that the logging industry in general, and Don Brown's trade organization specifically, were apprised of and took part in the rule making process. Complainant showed that in enacting the cited standard, the Secretary relied on substantial evidence, including industry publications and state logging standards. It is clear the agency considered the issues; there is no evidence that the Secretary acted improperly or arrived at its conclusions arbitrarily or irrationally. Rather the evidence supports the Secretary's determination that a platform is necessary to block the backward movement of a tree as it kicks back and to direct the tree's fall. *See; AFL-CIO v. Marshall*, 617 F.2d 636 (D.C. Cir. 1979), *aff'd sub nom. American Textile Mfrs.Inst., Inc. v. Donovan*, 452 U.S. 490 (1981)[discussing the proper scope of judicial review of Secretary's policy determinations].

Given the Secretary's finding that a step will aid in preventing kick back and in directing a tree's fall, OSHA acted reasonably in providing employers and enforcement personnel with clear guidance as to the requirements of the cited standard. A one inch step is measurable; it spells out the agency's position for employers, and allows OSHA CO's to apply the standard evenly. The Secretary specifically set forth her findings in support of a one inch step in the preamble to the final rule. While the Secretary's failure to include the one inch requirement in the actual text of the standard is inexplicable, I cannot find that OSHA acted unreasonably in adopting the compromise position set forth in the preamble and issuing it a CPL.

For the reasons stated above, I find that the Secretary's interpretation of the cited standard is reasonable.

Greater Hazard. Don Brown argues that use of the one inch step creates additional hazards, increasing the chances of creating a "barber chair," and necessitating a second cut to trim the butt.

In order to establish the affirmative defense of a greater hazard, the employer must show that 1) the hazards of compliance are greater than the hazards of non-compliance; 2) alternative means of protection

are unavailable; and 3) an application for a variance would be inappropriate. *See Walker Towing Corp.*, 14 BNA OSHC 2072, 2078, 1991-93 CCH OSHD ¶29,239, p. 39,161 (No. 87-1359, 1991). Where, as here, the employer fails to apply, or explain its failure to apply for a variance for regularly performed operations, it is unnecessary to address the first two elements of the defense. *Spancrete Northeast, Inc.*, 15 BNA OSHC 1020, 1991 CCH OSHD ¶29,313 (No. 86-521, 1991).

Don Brown regularly used matched cuts in felling operations; no attempt to apply for a variance from the operation of the cited standard was made. Respondent has failed to make out its affirmative defense.

Violations. The violations are established. Respondents trained their employees to use matched cuts; fellers were using matched cuts on the logging sites at the time of the OSHA inspections. The cited violations will be affirmed.

The record establishes that the cited violations are "serious," in that, were an accident to occur, there would be a substantial probability that death or serious physical harm would result. *Whiting-Turner Contracting Co.*, 13 BNA OSHC 2155, 1987-90 CCH OSHD ¶28,501 (No. 87-1238, 1989). I find that the assessed penalty is appropriate,[4] and will be assessed.

ORDER

Docket No. 97-0394

1. Citation 1, item 3, alleging violation of §1910.266(h)(2)(vii) is AFFIRMED, and the proposed penalty of $1,500.00 is ASSESSED.

Docket No. 97-1184

2. Citation 1, item 1, alleging violation of §1910.266(h)(2)(vii) is AFFIRMED, and the proposed penalty of $1,500.00 is ASSESSED.

Stanley M. Schwartz
Judge, OSHRC

Dated:

[4] This judge requested supplimental briefs discussing reclassification of the cited violations as *de minimis.* Based on the record, however, I cannot find that violation of the cited standard bears a negligible relationship to employee safety or health. *Cleveland Consolidated, Inc.*, 13 BNA OSHC 1114, 1987-90 CCH OSHD ¶27,829 (No. 84-696, 1987).