

62893-3
TWG

62893-3

NO. 62893-3-I

**COURT OF APPEALS, DIVISION I
OF THE STATE OF WASHINGTON**

BALFOUR BEATTY CONSTRUCTION, INC.,

Appellant,

v.

WASHINGTON STATE DEPARTMENT OF LABOR AND
INDUSTRIES,

Respondent.

BRIEF OF RESPONDENT

ROBERT M. MCKENNA
Attorney General

BEVERLY NORWOOD GOETZ
Senior Counsel
WSBA# 8434
800 Fifth Avenue, Suite 2000
Seattle, WA 98104-3188
(206) 464-6746

FILED
COURT OF APPEALS
STATE OF WASHINGTON
2009 JUL 17 AM 11:10
7/16/09

ORIGINAL

TABLE OF CONTENTS

I. INTRODUCTION.....1

II. COUNTERSTATEMENT OF THE ISSUES3

 A. Under RCW 49.17.180(6), a WISHA violation is “serious” when there is a substantial likelihood that, in the event of harm from a violation, the harm could be “death or serious physical injury.” This Court held in its 2009 *Mowat* decision that if hearing loss is the potential outcome of a WISHA violation, then the violation is “serious,” regardless of whether the workers were wearing hearing protection. Violation of WAC 296-817-20005’s requirement for monitoring of individual employee noise exposure could result in hearing loss for workers even if they wear hearing protection. Was Balfour’s violation of WAC 296-817-20005 therefore “serious”?.....3

 B. WAC 296-817-30010 and WAC 296-817-30015 together provide a “sound level meter” exception to WAC 296-817-20005’s requirement for individualized monitoring of employee noise exposure when noise levels are “constant” and a full-day noise dose for employees can be determined. Where noise level was not constant, where the employer used sound level meters only at street level, and not in the excavation where noise was greater, and where the employer did not determine a full-day noise dose, do WAC 296-817-30010 and 296-817-30015 exempt the employer from WAC 296-817-20005’s requirement for individualized monitoring of employee noise exposure?.....4

III. COUNTERSTATEMENT OF THE CASE5

 A. Balfour’s Operation5

 B. The Department’s Inspection.....7

 C. Balfour’s Community Noise Monitoring.....9

| | |
|---|----|
| D. Noise in the Excavation | 11 |
| E. Proceedings Below..... | 11 |
| IV. ARGUMENT | 13 |
| A. Standard of Review..... | 13 |
| B. WISHA And The Implementing Department Regulations Must Be Liberally Construed To Further Worker Health And Safety | 14 |
| C. Overview Of The Hearing Loss Prevention Regulations Relevant To The Factual Context Of This Case | 15 |
| 1. There need not be over-exposure to workplace noise to trigger the hearing loss prevention regulations, including the WAC 296-817-20005 requirement for individual noise exposure monitoring. | 15 |
| 2. Worker use of hearing protection does not eliminate the WAC 296-817-20005 requirement for monitoring individual employee noise exposure. | 18 |
| D. Balfour Violated WAC 296-817-20005 By Not Individually Monitoring Its Employees' Exposure To Noise | 19 |
| 1. It is undisputed that Balfour did not conduct individual employee noise exposure monitoring in the excavation, as required by WAC 296-817-20005, despite reasonable information indicating that employees may be exposed to noise levels exceeding 85 dBA TWA ₈ | 20 |
| 2. Balfour's street level noise measurements were not indicative of individual employee noise exposure in the excavation. | 21 |
| E. Violation Of The WAC 296-817-20005 Requirement For Individual Monitoring Was A "Serious" Violation | 24 |

| | | |
|----|--|----|
| 1. | High levels of noise are serious because they can cause permanent hearing loss. | 25 |
| 2. | The availability of hearing protection for workers is irrelevant to the question of whether the hearing loss prevention violation was serious. | 27 |
| 3. | That Balfour’s employees may have been at low risk for over-exposure to noise is accounted for in the penalty assessed. It does not result in a general, as opposed to a serious, violation. | 31 |
| F. | The WAC 296-817-30010 Exception For Sound Level Measurement Does Not Excuse Balfour From The WAC 296-817-20005 Requirement For Individual Monitoring Because: (1) Noise Was Not Constant, (2) No Measurement Was Done Inside The Excavation, And (3) Balfour Did Not Do Any “Noise Dose Computation” | 33 |
| 1. | Noise was not constant. It varied depending on the phase of construction, the equipment being used, and the location of the work, such as work inside the excavation. | 33 |
| 2. | When estimating employee noise exposure using a sound level meter under WAC 296-817-30010, employee noise dose must be computed as specified in WAC 296-817-30015. Balfour did not compute employee noise dose as specified in WAC 296-817-30015. | 37 |
| V. | CONCLUSION | 38 |

TABLE OF AUTHORITIES

Cases

| | |
|--|--------|
| <i>Aviation West Corp. v. Dep't of Labor & Indus.</i> , 138 Wn.2d 413, 980 P.2d 701 (1999)..... | 15 |
| <i>Centimark Corp. v. Dep't of Labor & Indus.</i> , 128 Wn. App. 368, 119 P.3d 865 (2005)..... | 3 |
| <i>Dep't of Labor & Indus. v. Kaiser Aluminum & Chemical Corp.</i> , 111 Wn. App. 771, 48 P.3d 424 (2002)..... | 14 |
| <i>Franciscus Roofing & Siding, Inc.</i> , OSHRC Docket No. 06-1551 *4, 2007 WL 1206989 (Mar. 01, 2007) O.S.H. Cas. (BNA) 2182 | 19 |
| <i>In re Mowat Construction Co.</i> , Dckt. No. 05 W0176 * 5, 2006 WL 4046210 (December 13, 2006) | 28, 31 |
| <i>Inland Foundry Co. Inc., v. Dep't of Labor & Indus.</i> , 106 Wn. App. 333, 24 P.3d 424 (2001)..... | 14 |
| <i>Lee Cook Trucking & Logging v. Dep't of Labor & Indus.</i> , 109 Wn. App. 471, 36 P.3d 558 (2001)..... | 25, 31 |
| <i>Martinez Melgoza v. Dep't of Labor & Indus.</i> , 125 Wn. App. 843, 106 P.3d 776, review denied, 155 Wn.2d 1015 (2005)..... | 13 |
| <i>Mid-Mountain Contractors, Inc. v. Dep't of Labor & Indus.</i> , 136 Wn. App. 1, 146 P.3d 1212 (2006)..... | 5 |
| <i>Mowat v. Dep't of Labor & Indus.</i> , 148 Wn. App. 920, 201 P.3d 407 (2009)..... | passim |
| <i>Nat'l Steel & Shipbuilding Co. v. Occupational Safety & Health Comm'n</i> , 607 F.2d 311 (9 th Cir. 1979) | 3 |

| | |
|--|----------------|
| <i>Roller v. Dep't of Labor & Indus.</i> , 128 Wn. App. 922, 117 P.3d 385 (2005)..... | 15 |
| <i>Sec'y of Labor v. Smith Steel Casting Co.</i> , OSHRC No. 80-2322 *6, 1983 WL 135575 (Jan. 3, 1983) 11 O.S.H. Cas. (BNA) 1118 | 26 |
| <i>Sec'y of Labor v. Trinity Indus., Inc.</i> , OSHRC Nos. 89-2168 and 89-2169 *8 (Jan. 11, 1991) 1991 O.S.H.D. (CCH) P 29211 | 25, 26 |
| <i>Sec'y v. Continental Can Company</i> , OSHRC Nos. 3973, 4397, 4501, 4853, 5327, 7122, 7910, 7920 at *4-5, 1976 WL 6188 (Aug. 24, 1976) 4 O.S.H. Cas. (BNA) 1541 | 18 |
| <i>Sec'y of Labor v. Miniature Nut & Screw Corporation</i> , OSHRC No. 93-2535 *2, 1996 WL 88763 (Feb. 23, 1996) 17 O.S.H. Cas. (BNA) 1557 | 29 |
| <i>Trinity Indus. v. Occupational safety and Health Review Com'n</i> , 16 F. 3rd 1455 (6th Cir. 1994)..... | 26 |
| <i>Washington Cedar & Supply Co. v. Dep't of Labor & Indus.</i> , 119 Wn. App. 906, 83 P.3d 1012 (2003)..... | 14, 15, 25, 31 |

Statutes

| | |
|-----------------------|--------|
| RCW 49.17.010 | 14 |
| RCW 49.17.050(2)..... | 14 |
| RCW 49.17.050(4)..... | 16 |
| RCW 49.17.150 | 12, 13 |
| RCW 49.17.150(1)..... | 13 |
| RCW 49.17.180(6)..... | passim |

Rules

RAP 10.3(a)(4)..... 5

Regulations

WAC 296-817-100..... 16

WAC 296-817-20005..... passim

WAC 296-817-20010..... 18, 28, 29

WAC 296-817-20015..... 18, 29

WAC 296-817-20020..... 29

WAC 296-817-20025..... 29

WAC 296-817-30010..... passim

WAC 296-817-30015..... 4, 33, 37, 38

WAC 296-900-14010..... 32

WAC 296-900-14020..... 31

Appendices

Appendix A - WAC 296-817-20005

Appendix B - Board Decision and Order

I. INTRODUCTION

This case arises under the Washington Industrial Safety and Health Act (WISHA), RCW 49.17, and WISHA's implementing regulations adopted and enforced by the Department of Labor and Industries, Division of Occupational Safety and Health (Department). The Department cited Balfour Beatty Construction, Inc. (Balfour) for a "serious" violation of the hearing loss prevention regulations, specifically WAC 296-817-20005,¹ which requires employers to monitor *individual* employee noise exposure to determine the employee's actual noise exposure when reasonable information indicates that *any* employee's exposure to noise may equal or exceed an eight-hour, time-weighted average of 85 decibels (85 dBA TWA₈).²

Balfour was constructing a 750-foot-long stub tunnel under Pine Street in downtown Seattle between 9th Avenue and Boren Street to tie into the existing bus tunnel for light rail access. Many pieces of noise-generating equipment were in use on the project – by Balfour and by other employers working on the project – down inside the 65-foot-deep excavation, and at street level along the excavation.

¹ Regulations and statutes addressed in this Brief of Respondent are set forth in full in Appendix A to this Brief of Respondent

² Decibels are referred to as dBA in WAC Chapter 296-817 (Hearing Loss Prevention) and an eight-hour time-weighted average is expressed as TWA₈. Thus an eight-hour time-weighted average of 85 decibels is expressed as 85 dBA TWA₈.

It is undisputed that Balfour conducted no monitoring of *individual* employee noise exposure. Balfour did do some non-individualized, community-noise measurements *at street level*. But Balfour did no measurements of noise *inside the excavation* where most of the work, including concrete pouring, occurred, and where the reverberating noise was greater than at street level. In its Brief of Appellant Balfour inconsistently (1) concedes in numerous places that it violated the individual-monitoring rule, but (2) appears to argue that its street-level community-noise measurements met an exception to the requirement for individual monitoring (though never explaining how any *street-level* monitoring could satisfy the requirement that it measure noise *inside the excavation*).

Balfour also argues that, in any event, any violation (conceded or otherwise) of the individual monitoring requirement is, as a matter of law, not a “serious” violation under RCW 49.17.180(6) because its employees wore hearing protection. This Court, however, has already rejected the argument that the availability of earplugs transforms a serious violation of WISHA’s hearing protection standards into a general one. *Mowat v. Dep’t of Labor & Indus.*, 148 Wn. App. 920, 931, 201 P.3d 407 (2009). The Court should reject that argument here as well.

The Board of Industrial Insurance Appeals and the superior court both rejected Balfour's strained legal arguments. So should this Court.⁴

II. COUNTERSTATEMENT OF THE ISSUES

Some guesswork is needed in trying to assess what issues are raised in the Appellant's Opening Brief (AB). Throughout the brief, Balfour affirmatively asserts that it violated WAC 296-817-20005, and hence only one issue is presented, i.e., whether that violation is "serious" or "general."⁵ See, e.g., AB 6, 12-13, 21-23, 26, 28. But, contrary to this concession, Balfour's brief also discusses the "sound level meter" exception to WAC 296-817-20005 (AB 21-23), and asks in its concluding sentence that the citation "*be vacated* or classification . . . be lowered to a 'general' violation" (AB 28) (emphasis added). In an abundance of caution the Department will address Balfour's assertion that its street-level, community-noise testing qualifies for an exemption from WAC 296-817-20005's individual monitoring requirement, and will show that the exception is inapplicable.

A. Under RCW 49.17.180(6), a WISHA violation is "serious" when there is a substantial likelihood that, in

⁴ A copy of the Board Decision and Order is included in Appendix B to this Brief of Respondent.

⁵ A "general" violation typically carries with it no penalty, see, e.g., *Centimark Corp. v. Dep't of Labor & Indus.*, 128 Wn. App. 368, 372-373, 119 P.3d 865 (2005), and is analogous to a "non-serious" violation under the federal Occupational Safety and Health Act. See generally *Nat'l Steel & Shipbuilding Co. v. Occupational Safety & Health Comm'n*, 607 F.2d 311, 315 n.6 (9th Cir. 1979) (discussing types of OSHA violations).

the event of harm from a violation, the harm could be “death or serious physical injury.” This Court held in its 2009 *Mowat* decision that if hearing loss is the potential outcome of a WISHA violation, then the violation is “serious,” regardless of whether the workers were wearing hearing protection. Violation of WAC 296-817-20005’s requirement for monitoring of individual employee noise exposure could result in hearing loss for workers even if they wear hearing protection. Was Balfour’s violation of WAC 296-817-20005 therefore “serious”?

- B. WAC 296-817-30010 and WAC 296-817-30015 together provide a “sound level meter” exception to WAC 296-817-20005’s requirement for individualized monitoring of employee noise exposure when noise levels are “constant” and a full-day noise dose for employees can be determined. Where noise level was not constant, where the employer used sound level meters only at street level, and not in the excavation where noise was greater, and where the employer did not determine a full-day noise dose, do WAC 296-817-30010 and 296-817-30015 exempt the employer from WAC 296-817-20005’s requirement for individualized monitoring of employee noise exposure?

The “Argument” portion of the employer’s brief also contains some unfocused, stray discussion, case citations, and quotes (and bolding therein) relating to such things as: (1) WISHA’s employer-knowledge requirement; (2) concerns that WISHA violations not be based on “strict liability” or “myopic” interpretations of rules; and (3) the various elements the Department is required to prove to make a prima facie case of a WISHA violation. *See, e.g.*, AB 13, 15-21. These discussions, and their accompanying case citations and quotes, appear to be cut-and-paste

boilerplate that is not relevant to this case and has no bearing on it. The Department will not respond to them.

Finally, Balfour's brief to this Court does not question that substantial evidence supports the Board's finding of fact that the employer failed to monitor noise in the excavation during excavation work or during concrete pouring operations. *E.g.*, AB 12. Balfour has thus waived any challenge to that finding of fact. *See Mid-Mountain Contractors, Inc. v. Dep't of Labor & Indus.*, 136 Wn. App. 1, 4, 146 P.3d 1212 (2006); *see generally* RAP 10.3(a)(4). Again in an abundance of caution, however, the Department will show below that the Board's finding is supported by substantial evidence and that the conclusions of law of the Board and Superior Court are supported by the Board's findings of fact.

III. COUNTERSTATEMENT OF THE CASE

A. Balfour's Operation

Balfour began a cut-and-cover tunnel construction project for Sound Transit Light Rail in downtown Seattle on January 2, 2005. BR 5/29/07 at 5.⁶ The project required excavation under Pine Street between 9th Avenue and Boren for a 750-foot-long stub tunnel to tie into the

⁶ The Certified Appeal Board Record will be cited as follows: References to the hearing transcripts in the Certified Appeal Board Record will be cited as "BR [date of hearing] at [page]," e.g. BR 05/29/07 at 4. References to the deposition testimony of Mary McDaniel, PhD will be cited "BR McDaniel at [page]." Exhibits in the Board Record will be cited as "Exhibit" and the Board exhibit number. References to the proposed decision of the Board's Industrial Appeals Judge and to the final decision of the 3-member will be to the stamped number in the lower right corner of the page of those Board documents.

existing bus tunnel for light rail access. BR 5/30/07 at 18. Construction of the stub tunnel was one part of Balfour's contract with Sound Transit. Balfour also contracted to retrofit three miles of track in the bus tunnel and retrofit upgrades to the four underground bus tunnel stations. BR 5/30/07 at 18.

Balfour removed one half of Pine Street at a time to install beams for a temporary roadway across it. BR 5/29/07 at 5; 5/20/07 at 19. Once the temporary roadway was in place, Balfour kept an area on the north side of Pine Street open for lowering materials into the excavation and for ventilation. BR 5/29/07 at 5. The excavation was 40 feet below street level at the west end, 85 feet below street level at the east end and less than 50 feet wide. BR 5/29/07 at 7, 8-9; 5/30/07 at 50; Exhibit Two. The majority of Balfour's work, including the concrete pouring, took place inside the excavation. BR 5/29/07 at 13, 22, 48; Exhibit One (twelve pictures of Balfour's work site); Exhibit Two (diagram of the stub tunnel.) The stub tunnel was divided into twelve areas. Construction began in the middle, areas six and seven, and then proceeded both east and west. BR 5/29/07 at 8; Exhibit Two.

Other employer/subcontractors were also present on site. BR 5/29/07 at 10; 5/30/07 at 19. Nuprecon did street demolition using jack hammers, a road buster to pulverize concrete, concrete saw cutters, and trackhoes. BR 5/29/07 at 10. DBM did drilling and pile driving for lagging to hold up the walls of the excavation, using a drill rig, concrete trucks, and a trackhoe. BR 5/29/07 at 11-12. Airplate Concrete used a

grout machine and hoses to blow shotcrete onto the walls of the excavation. BR 5/29/07 at 22. In the excavation, Balfour used such equipment as a Takeuchi trackhoe, clay spades, concrete vibrators when pouring concrete, and a pneumatic hammer. BR 5/29/07 at 13. Operating at street level were cranes to bring equipment down into and up from the excavation, and to remove dirt, plus a forklift, a wheel loader for loading dirt into a dump truck, a street sweeper, welders, compressors for air-powered equipment, and exhaust fans. BR 5/29/07 at 13-22.

B. The Department's Inspection

Michelle Czajka, an industrial hygienist and compliance safety and health officer with the Department, opened an inspection at Balfour's worksite on December 8, 2005 as part of the Department's noise-in-road-construction initiative. BR 5/29/07 at 73. As part of that initiative, compliance safety and health officers were asked to look at a variety of construction sites to ascertain that employers were requiring their employees to use hearing protection if the site was a noisy one. She noted that Balfour's site was loud, so she stopped and opened an inspection. BR 5/29/07 at 73.

Ms. Czajka took photographs of the site (Exhibit One) and measured noise based on the sound coming from several pieces of heavy equipment. BR 5/29/07 at 74-76. Noise coming from one of the street-level cranes, measured in the vicinity of a flagger working about 20 feet away, was measured at 87.1 decibels. BR 5/29/07 at 76. In the

excavation, noise from a clay spade measured 114.9 decibels, noise from a mini-loader measured 85.9 decibels, and noise from a TB 1785 excavator was measured at 85.2 decibels. BR 5/29/07 at 76. If those noise levels persisted throughout an eight-hour day they would exceed the permissible exposure limit of 85 dBA TWA₈ for employees operating that equipment, or working in the vicinity of it. BR 5/29/07 at 77-79; 5/30/07 at 118. Some employees in the excavation were wearing hearing protection, some were not, and at least one employee's earplugs were not worn properly. BR 5/29/07 at 76-77.

Ms. Czajka returned to Balfour's site to conduct full-shift individual employee noise exposure monitoring on December 15, 2006. BR 5/29/07 at 79. To monitor an individual employee's full-shift noise exposure the employee wears a dosimeter, a device that monitors noise levels for the individual worker throughout the day and computes the average noise level to which the worker was exposed over his or her full shift. BR 5/29/07 at 79.

Ms. Czajka monitored employees working in the excavation. Keith Porter, the clay spade operator, had a noise exposure of 107.5 dBA TWA₈. Don Coughman, a trackhoe and excavator operator, had a noise exposure of 87.9 dBA TWA₈. Pete Clockstine, a vibrator operator, had a noise exposure 95.4 dBa TWA₈. Don Juric, a concrete pourer, had a noise exposure of 93.0 dBA TWA₈. BR 5/29/07 at 79-80.

She also monitored employees working at street level. Phil Schlegal, a crane operator, had a noise exposure of 91.1 dBA TWA₈.

Mike McBride, another crane operator, had a noise exposure of 95.1 dBA TWA₈. Greg Brakus, a crane signalman, had a noise exposure of 84.0 dBA TWA₈. BR 5/29/07 at 79-80.

The noise exposure measurements indicated that Balfour's employees were exposed to noise that equaled or exceeded 85 dBA TWA₈, triggering the WAC 296-817-20005 requirement that an employer conduct individual employee noise exposure monitoring. BR 5/29/07 at 80.⁷

C. Balfour's Community Noise Monitoring

Sound Transit required Balfour to develop a noise control plan to ensure that the construction noise levels in the surrounding area did not violate City of Seattle noise ordinances. BR 5/29/07 at 8-9. In September, 2004, before beginning work either on the excavation, or in it, Balfour took noise level readings 50 feet from various pieces of equipment, many of which showed noise levels at 85dBa or above. BR 5/29/07 at 19; 5/30/07 at 20; Exhibit Five, pp 6/24, 7/24, 8/24, 10/24, 12/24, 14/24,

⁷ Balfour's brief to this Court states that the record "shows only *minimal* sound measurements performed by the Department inspector and there is no evidence presented showing that any of the measurements obtained during the inspection would in fact *directly* lead to loss of hearing." AB 25-26 (emphasis added). As shown above in this section, the Department's measurements were far from minimal, and they demonstrated Balfour's violation.

As for Balfour's criticism that the Department did not show that "measurements would directly lead to loss of hearing," the Department is unaware of any methods of measurement that cause hearing loss, and the Department is not aware of any reason one would wish to use methods of measurement that injure workers. If Balfour meant to say that measurements did not reflect levels of exposure that exceed the threshold of the hearing loss prevention regulations, that is simply not true. If, on the other hand, Balfour is suggesting that an average exposure to 93, 95, or 107 decibels of noise over an eight-hour shift cannot cause hearing damage, it is absolutely wrong. BR McDaniel at 10.

15/24, 18/24, 20/24, 22/24. So Balfour knew, at the beginning of the project, that sound levels on the site could be as high as 95 decibels. BR 5/30/07 at 34; Exhibit Five, p. 4/24. Prior to the Department's inspection, however, Balfour had not conducted monitoring of individual employee noise exposure to determine actual individual employee noise exposure. BR 5/29/07 at 10.

Nor was the work that Balfour actually performed, and all the equipment it used, reflected in Balfour's testing. For example, in December 2005, when work had begun in the excavation, Balfour was using clay spades, concrete vibrators, and a Takeuchi backhoe in the excavation. BR 5/29/07 at 13. But of the equipment in the excavation only the backhoe was on the list of pre-monitored equipment; the clay spade and the concrete vibrator were not. BR 5/29/07 at 19-20; Exhibit Five pp. 6/24, 7/24, 8/24, 10/24, 12/24, 14/24, 15/24, 18/24, 20/24, 22/24. The September 2004 "equipment inventory" noise level readings for Phase V, the tunnel construction, does not list a backhoe, the clay spade or the concrete vibrator. BR Exhibit Five, p. 22/24.⁸ Balfour knew that employees using all of this equipment, or working in the vicinity of it, would be closer to the equipment than 50 feet. BR 5/29/07 at 20.

A Balfour employee also took 20-minute noise measurements, approximately weekly, with a hand-held sound level meter at five points

⁸ Sound level readings for the week of October 17-21, 2005 do show the Takeuchi back hoe, but not the clay spade nor the concrete vibrator. BR 5/29/07 at 19-20; Exhibit Four.

along the street level, not in the excavation, as part of the Sound Transit-required community noise control plan. BR 5/29/07 at 7, 9, 23-24, 28; 5/30/07 at 22, 30-31, 41; Exhibits Two, Three and Five. The plan measured construction noise in the surrounding neighborhood, not worker exposure in the excavation. BR 5/29/07 at 8-9, 80; 5/30/07 at 33; McDaniel at 10, Exhibits Two, Three and Five. The plan did not include monitoring of *individual* employee noise exposure, either at street level or inside the excavation. BR 5/29/07 at 10, 80; McDaniel at 10.

D. Noise in the Excavation

In December 2005, at the time of the inspection, Balfour employees were working in excavation area 12, 65 feet below street level. BR 5/29/07 at 8, 12-13, 48; Exhibit Two. Area 12 is a full city block away from the closest street level noise measuring point – point five in front of the Paramount Theatre. BR Exhibit Two. Noise will measure higher in a confined space like excavation area 12, rather than at street level. BR 5/30/07 at 90, 118-119; McDaniel at 12. Noise will bounce around considerably, enhancing its reverberant characteristics. BR 5/30/07 at 90, 119; McDaniel at 12.

E. Proceedings Below

The Department cited Balfour for three violations, including item 1-1, a serious violation of WAC 296-817-20005, for failing to conduct individual employee noise exposure monitoring during excavation and concrete pouring to ensure that employees were properly protected against

injurious noise exposures. BR 91 (copy of citation); 5/29/07 at 81-82. The Department assessed a \$750 penalty for item 1-1. BR 91. Balfour appealed the Department's citation. The Department conducted a reassumption hearing as authorized by RCW 49.17.150 and withdrew one citation item, 1-2. The Department issued a Corrective Notice of Redetermination which Balfour appealed to the Board of Industrial Insurance Appeals.

The Board's Industrial Appeals Judge issued a proposed decision recommending that the Board vacate both remaining citations. BR 79-86. The Department petitioned the 3-member Board for review. BR 28-37.

The Board granted the petition and issued its final Decision and Order determining that the Department's Corrective Notice of Redetermination Item 1-1 should be affirmed. The Board's final decision explained that, whatever possible merit Balfour's theories about its community-noise measurement might have regarding street-level noise, Balfour's defense must fail because of the lack of any measuring of noise inside the excavation.

The Board's findings included a factual determination supporting the above-noted analysis:

On or about December 8, 2005, the employer, Balfour Beatty Construction, Inc., did not conduct noise exposure monitoring to determine employee noise exposure during excavation and concrete pouring operations as required by WAC 296-817-20005. The employer conducted noise exposure readings, using a noise level meter, to determine noise exposures in certain locations on and near the

worksite. The monitoring was designed to measure noise exposure in the vicinity to ensure that the project complied with City of Seattle noise ordinances. The monitoring did not cover certain areas where the Balfour Beatty Construction, Inc., employees were actually working at the time of the inspection. The employer was performing an excavation that was 65 feet deep at the time of the inspection. There was no monitoring performed within the excavation. Several pieces of loud equipment were operating within the excavation at the time of the inspection.

BR 5 (finding of fact # 2).

Balfour sought judicial review in King County Superior Court. CP

1-4. The Superior Court affirmed the Board's decision. CP 42-44.

IV. ARGUMENT

A. Standard of Review

Judicial review of the Board's findings is governed by RCW 49.17.150. Under WISHA, the Board's findings of fact must be affirmed if they are supported by substantial evidence. "The findings of the board . . . if supported by substantial evidence on the record considered as a whole, shall be conclusive." RCW 49.17.150(1) (emphasis added). Substantial evidence is evidence in sufficient quantum to persuade a fair-minded person that a finding is true. *Mowat*, 148 Wn. App. at 925; *Martinez Melgoza v. Dep't of Labor & Indus.*, 125 Wn. App. 843, 847, 848, 106 P.3d 776, review denied, 155 Wn.2d 1015 (2005).

The Board's conclusions of law are reviewed in the context of its findings of fact. More specifically, the conclusions must be affirmed if they are supported by the findings. *See Inland Foundry Co. Inc., v. Dep't of Labor & Indus.*, 106 Wn. App. 333, 336, 24 P.3d 424 (2001); *Washington Cedar & Supply Co. v. Dep't of Labor & Indus.*, 119 Wn. App. 906, 912, 83 P.3d 1012 (2003); *Dep't of Labor & Indus. v. Kaiser Aluminum & Chemical Corp.*, 111 Wn. App. 771, 773, 48 P.3d 424 (2002). Legal issues, such as construction of WISHA regulations and RCW 49.17.180(6), are reviewed de novo. *Washington Cedar & Supply Co., Inc.*, 119 Wn. App. at 912.

B. WISHA And The Implementing Department Regulations Must Be Liberally Construed To Further Worker Health And Safety

The purpose of WISHA is to assure safe and healthful working conditions for every man and woman working in the state of Washington. RCW 49.17.010. "WISHA is to be liberally construed to carry out this purpose." *Inland Foundry*, 106 Wn. App. at 336. More specifically, any WISHA regulation must be accorded an interpretation which furthers worker health and safety. *Stute v. P.B.M.C.*, 114 Wn.2d 454, 464, 788 P.2d 545 (1990).

RCW 49.17.050(2) requires the Department to adopt occupational health and safety standards that are at least as effective as those

promulgated by the United States Secretary of Labor under the federal Occupational Safety and Health Act of 1970 (OSHA). “Thus, [WISHA rules] can be more protective, although not less, of worker safety than rules promulgated under OSHA.” *Aviation West Corp. v. Dep’t of Labor & Indus.*, 138 Wn.2d 413, 424, 980 P.2d 701 (1999).

Washington courts accord substantial deference to an agency’s interpretation of statutes and regulations within its area of expertise. Accordingly, courts will uphold an agency’s interpretation of a regulation “if it reflects a plausible construction of the language of the statute and is not contrary to the legislative intent and purpose of the enabling statute.” *Roller v. Dep’t of Labor & Indus.*, 128 Wn. App. 922, 926-27, 117 P.3d 385 (2005). Therefore, the Department’s interpretation of WISHA, and its interpretation of the regulations adopted to implement the statute, are of considerable importance in determining their meaning. *Id.* The Board’s interpretations of WISHA and WISHA regulations are also given deference by the courts. *Washington Cedar & Supply Co, Inc.*, 119 Wn. App. at 912.

C. Overview Of The Hearing Loss Prevention Regulations Relevant To The Factual Context Of This Case

- 1. There need not be over-exposure to workplace noise to trigger the hearing loss prevention regulations, including the WAC 296-817-20005**

requirement for individual noise exposure monitoring.

RCW 49.17.050(4) directs the Department to:

Provide for the promulgation of health and safety standards and the control of conditions in all work places concerning . . . harmful physical agents which shall set a standard which most adequately assures, to the extent feasible, on the basis of the best available evidence, that no employee will suffer material impairment of health or functional capacity . . . any such standards shall require where appropriate the use of protective devices or equipment and for *monitoring or measuring* . . . such harmful physical agents.

The hearing loss prevention/noise regulations have a twofold purpose: (1) to prevent employee hearing loss by minimizing employee noise exposures; and (2) to make sure employees exposed to noise are protected. WAC 296-817-100. These goals are accomplished in two ways: (1) by “[*m*]easuring and computing the *employee* noise exposure from all equipment and machinery in the workplace, as well as any other noise sources in the work area;” and (2) by “[*p*]rotecting employees from noise exposure by using feasible noise controls.” *Id.* Emphasis added.

To that end, the regulations require each employer to determine whether employees are in fact exposed to injurious levels of noise, to train employees about hearing loss prevention, to make sure employees use hearing protection if the employer cannot feasibly control the noise, to evaluate its hearing loss prevention efforts by tracking employee hearing or periodically reviewing controls and protection, and to make corrections to its hearing loss prevention program as appropriate. *Id.*

WAC 296-817-20005, the WISHA regulation under which Balfour was cited, implements that portion of the hearing loss prevention regulation directing employers to “[m]easur[e] and comput[e] the employee noise exposure” by conducting *individual* employee noise exposure monitoring. WAC 296-817-20005 Emphasis added. Monitoring, as required by WAC 296-817-20005, determines the potential for exposure so that employers know what steps to take to timely protect against actual exposure.

Balfour does not appear to suggest that individual employee noise exposure monitoring is required only when there is actual damage through exposure to injurious workplace noise. If Balfour were to make that suggestion, it would be missing the point.⁹ As this Court recently held:

[T]he hazard of hearing loss is presupposed by the standard itself. The Department is not required to prove, every time there is a citation for a serious violation, that exposure to loud noise causes hearing loss. Nor is the Department required to wait for someone to go deaf before citing the employer.

Mowat, 148 Wn. App. at 931.

⁹ In *Sec’y of Labor v. Miniature Nut & Screw Corporation*, OSHRC No. 93-2535 *2, 1996 WL 88763 (Feb. 23, 1996) 17 O.S.H. Cas. (BNA) 1557, the Federal review agency, OSHRC, explained that it does not make sense for an employer to argue that its own failure to conduct audiometric testing, perform training, and provide employees with certain information does not *directly* cause hearing loss. Such an argument *misses the point* of the hearing loss prevention regulations. *Id.* Emphasis added. The point of the regulations is to prevent hearing loss by giving employers an incentive to implement protective measures for workers. *Id.* Failure to implement protective measures can cause hearing loss, and, in that way violation of the regulations by definition can cause hearing loss. *Id.*

2. Worker use of hearing protection does not eliminate the WAC 296-817-20005 requirement for monitoring individual employee noise exposure.

It is undisputed that noise levels for some employees on Balfour's site exceeded the permissible exposure limit (PEL). BR 5/29/07 at 76, 79-80. *See supra* at 8-9. Balfour, however, contends that it makes no difference how much noise was present at its jobsite since some of its workers had "protection." *E.g.*, AB 10, 14, 23-24.

Hearing protection may provide a barrier to noise but it is not a control of the noise-level hazard. WAC 296-817-20010; *Mowat*, 148 Wn. App. at 930. The effectiveness of earplugs depends on whether the earplugs are properly maintained, properly fitted, and properly seated and worn. *See* WAC 296-817-20015; *Sec'y v. Continental Can Company*, OSHRC Nos. 3973, 4397, 4501, 4853, 5327, 7122, 7910, 7920 at *4-5, 1976 WL 6188 (Aug. 24, 1976) 4 O.S.H. Cas. (BNA) 1541. Use of hearing protection is subject to employee error. *Id.* Employees may find earplugs uncomfortable, or take them off to hear their fellow employees, or lose them when they are physically active. *Id.* Some employees are unable to use earplugs because of deformed or unusually shaped ears and because of ear infections. *Id.* *See also Mowat*, 148 Wn. App. at 930 ("Hearing protection reduces the risk of hearing loss but does not eliminate it because earplugs are not always effective and may not always be worn.")

This case amply demonstrates the potential shortcomings of relying on hearing protection instead of conducting the noise monitoring

that the regulation requires. Balfour's own environmental health and safety manager, Mr. Gershey, acknowledged that hearing protection was *not mandatory* except for certain tasks such as jackhammering, rivet-busting, and operating the clay spade which was a pneumatic tool. BR 5/30/07 at 3-4. Indeed, at the time of the inspection, Ms. Czajka observed employees that were not wearing hearing protection and at least one employee whose hearing protection was not worn properly. BR 5/29/07 at 77.¹⁰

Failure to identify hazards leads to increased exposure to danger. *See, e.g., Franciscus Roofing & Siding, Inc.*, OSHRC Docket No. 06-1551 *4, 2007 WL 1206989 (Mar. 01, 2007) O.S.H. Cas. (BNA) 2182 (employer's absence of any kind of safety program to identify hazards on site deemed to be a serious violation). The potential for hazardous exposure to injurious levels of noise was present for Balfour employees who did not wear hearing protection, or who wore it incorrectly. *See also* BR 5/30/07 at 88-89. Dr. McDaniel testified, "the potential for hazardous noise was there [on Balfour's job site] in a great degree." BR McDaniel at 10.

D. Balfour Violated WAC 296-817-20005 By Not Individually Monitoring Its Employees' Exposure To Noise

Balfour recognized from the outset that its tunnel project would be very noisy. Its Noise Control Plan, prepared before work began, reveals a

¹⁰ Throughout its brief Balfour pretends that its employees were consistently using hearing protection. *E.g.*, AB 10, 23-24. There is no evidence to support this fictional description of jobsite conditions.

high level of projected noise. At 94 to 95 decibels, the “unmitigated” overall sound level was calculated at well above the WISHA permissible exposure limit (PEL) of 85 dB for employees. BR 5/30/07 at 33-34; Exhibit Five p. 4/24.

With sound barrier attenuation, the “mitigated” noise level was projected at just below the PEL. BR 5/29/07 at 19; 5/30/07 at 34. Sound level measurements, taken 50 feet away from the equipment (but not the clay spade or concrete vibrator) the week of October 17, 2005, also documented noise levels from 74 to 81 decibels. Exhibit Four. It is undisputed, however, that the decibel levels experienced by the operators of the equipment, the employees working nearer to the equipment than 50 feet, and the employees working in the excavation, would be higher. BR 5/29/07 at 20, 90-92; 5-30-07 at 91; McDaniel at 11-12.

The only noise monitoring evidence presented by Balfour was a Noise Control Plan implemented to make sure that noise levels did not exceed the City of Seattle community noise ordinance. BR 5/29/07 at 9. A review of Exhibit Five shows that Balfour planned to monitor the construction noise in the community, not to monitor individual employee noise exposure. Balfour’s Noise Control Plan measured noise at five points *at the street level* using sound level meters, even though the majority of the work was conducted in the excavation. BR 5/29/07 at 7, 9, 28, 48; Exhibits Two, Three and Five.

- 1. It is undisputed that Balfour did not conduct individual employee noise exposure monitoring**

in the excavation, as required by WAC 296-817-20005, despite reasonable information indicating that employees may be exposed to noise levels exceeding 85 dBA TWA₈.

Balfour was cited for failing to monitor “employee noise exposures during excavation and concrete pouring operations.” BR 91. Balfour admitted that it did no employee noise exposure monitoring *in the excavation* at all, even though at the time of the inspection the majority of the work being performed by Balfour was done in the excavation. BR 5/29/07 at 10, 48.

WAC 296-817-20005 states that:

Examples of information or situations that can indicate exposures which equal or exceed 85 dBA TWA₈, include:

Use of tools and equipment such as the following:

Heavy equipment or machinery
Fuel-powered hand tools
Compressed air-driven tools or equipment in frequent use.

All of these types of tools and equipment were present on Balfour’s site, including in the excavation. *See supra* Part III.

2. Balfour’s street level noise measurements were not indicative of individual employee noise exposure in the excavation.

Both Michelle Czajka, the Department’s industrial hygienist, and Mary McDaniel, PhD., testified that Balfour’s street-level noise measurements were not adequate to determine individual employee noise exposure in the excavation. Dr. McDaniel has a doctorate in audiology.

She has worked exclusively in audiology for 23 years consulting with companies regarding compliance with both OSHA and WISHA occupational employee noise exposure regulations. Michelle Czajka, an industrial hygienist with a B.S. in Environmental Health Science, has conducted over 100 inspections of construction sites similar to the Balfour site and over 50 noise-related inspections. BR 5/29/07 at 72; BR McDaniel at 4, 6-8.

Dr. McDaniel reviewed Ms. Czajka's inspection report, Balfour's Noise Control Plan, Balfour's noise measurement documents, and the discovery deposition of Mark Gershey. BR McDaniel at 9-10. She testified that Balfour's noise measurements were concerned with community noise rather than individual noise exposure, but even that data documented noise levels that "clearly could be hazardous to human hearing." BR McDaniel at 10. With respect to Balfour's equipment noise measurements, Dr. McDaniel explained that the measurements underestimated the noise exposure:

The measurements that I reviewed in the study, and the documentation, was that most measurements were taken anywhere from 100 to 50 feet from the piece of equipment. I would have every reason to believe that the operator of the equipment that could be four to five feet from the actual noise generator of that piece of equipment would have a higher exposure level. You cannot equate a measurement taken 50 feet from a piece of equipment and extrapolate and say, well, it would be the same for the operator that's in closer proximity. *The closer you get to the noise source, the more hazardous the exposure.*

BR McDaniel at 11. Emphasis added. Michael Smith, testifying for Balfour, agreed. BR 5/30/07 at 91. Exhibits Four, Five and Six all document that noise measurements were taken at least 50 feet from the equipment, far from the employees who would actually be operating the equipment, or working near it. Balfour's noise measurements were not indicative of individual employee noise exposure.

Nor were Balfour's noise measurements indicative of noise in its excavation. As reflected in the Noise Measurements Report Forms (*see* Exhibits Five and Six) all the measurements were made at the five "noise sensitive locations" that Balfour identified in its Noise Control Plan, i.e., at the street level in front of the Paramount hotel (location one), the Grand Hyatt Hotel (location 2), Tower 801 (location 3), the Pande Cameron Building (location 4), and the Paramount Theater (location 5). BR 5/29/07 at 9; Exhibits Two, Three and Five. Dr. McDaniel explained that noise exposure was greater for those working in the excavation:

Being in a more of a confined space is going to change the reverberant characteristics of the noise, it will give the noise more opportunity to bounce around. I would have every reason to believe that the noise exposure would be different than what you would measure in an open, unobstructed area, typically, higher than in an open area.

BR McDaniel at 12. Dr. McDaniel also opined that noise measurements taken at street level would not accurately represent the individual employee noise exposure in the excavation:

. . . if you are measuring for community noise or boundary levels of noise, I would have no reason to think that that would be representative of an individual's exposure, be it at street level or in the excavation.

BR McDaniel at 34.

Ms. Czajka, the Department's industrial hygienist, testified that the equipment noise levels documented in Exhibit Four (describing the October 2005 equipment pre-measurement from a 50-foot distance) would understate individual employee noise exposure. BR 5/29/07 at 92. Like Dr. McDaniel, Ms. Czajka explained that, due to reverberation, noise levels in an excavation are different than on the surface:

Noise is going to come off of the source and it can reflect against other surfaces in an excavation such as hard clay wall or sand or other pieces of equipment, so you can't directly look at just the noise from a single piece of equipment. You need to look at all of the factors surrounding that single piece of equipment.

BR 5/29/07 at 90. She agreed with Dr. McDaniel that generally the closer one is to operating equipment the louder the noise output from that equipment will be. BR 5/29/07 at 90-91. But being in an excavation increases the likelihood of over-exposure to noise. BR 5/29/07 at 119.

E. Violation Of The WAC 296-817-20005 Requirement For Individual Monitoring Was A "Serious" Violation

RCW 49.17.180(6) states, in pertinent part, "a serious violation shall be deemed to exist in a workplace if there is a substantial probability that death or serious bodily injury could result from a condition which

exists, or from one or more practices, means, methods, operations, or processes which have been adopted or are in use in such work place.” The Court of Appeals considered the definition of a serious violation in *Lee Cook Trucking & Logging v. Dep’t of Labor & Indus.*, 109 Wn. App. 471, 36 P.3d 558 (2001). At issue in *Lee Cook* was the interpretation of the “substantial probability” language of the statute. *Id.* at 477.

The employer in *Lee Cook* asserted that a violation is not serious absent proof of a “substantial probability” that harm *will* result from the violation. *Id.* The Court of Appeals disagreed, holding that the employer misapprehended the statutory definition of “serious.” Specifically, the Court held that a “serious” violation does not require a “substantial probability” that an injury will occur. It refers instead to the likelihood that such injury, regardless of the likelihood of occurrence, would be serious or fatal if it in fact occurred. *Lee Cook*, 109 Wn. App. at 482; *see also Washington Cedar*, 119 Wn. App. at 917; *Mowat*, 148 Wn. App. 929-32.

1. High levels of noise are serious because they can cause permanent hearing loss.

It has long been recognized that over-exposure to noise can cause hearing loss. *Sec’y of Labor v. Trinity Indus., Inc.*, OSHRC Nos. 89-2168 and 89-2169 *8 (Jan. 11, 1991) 1991 O.S.H.D. (CCH) P 29211 (“Noise-

induced hearing loss is a likely consequence from exposure to high noise levels.”). In *Trinity*, the Occupational Safety and Health Review Commission found a serious violation when employees were given audiograms but were furnished no information regarding their test results.¹¹

Here, the Department inspector industrial hygienist Czajka testified that exposure to elevated noise levels could result in hearing loss. BR 5/29/07 at 81. This Court has agreed. “[I]f the violation of noise standards does cause harm, there is a substantial probability that the nature of the harm will be permanent hearing loss. . . We conclude the Board did not err in affirming the citation as a serious violation.”¹² *Mowat*, 148 Wn. App. at 932; *see also Sec’y of Labor v. Smith Steel Casting Co.*, OSHRC No. 80-2322 *6, 1983 WL 135575 (Jan. 3, 1983) 11 O.S.H. Cas. (BNA) 1118 (Hearing loss is a progressive process, gradual rather than sudden

¹¹ Trinity Industries challenged the Review Commission’s decision, claiming that the OSHA inspection violated its Fourth Amendment rights, but not the Commission’s finding that Trinity’s violation was “serious.” The Commission’s decision was affirmed. *Trinity Indus. v. Occupational safety and Health Review Com’n*, 16 F. 3rd 1455 (6th Cir. 1994).

¹² In the underlying Board decision, *In re Mowat Construction Co.*, Dckt. No. 05 W0176 * 5, 2006 WL 4046210 (December 13, 2006), the Board said: “[A]lthough it is unlikely that high levels of noise would result in death, we are unwilling to determine that hearing loss is not, per se, ‘serious physical harm.’

and not life-threatening. Continuous exposure nonetheless could possibly result in the serious physical harm of total loss of hearing).¹³

As this Court pointed out in *Mowat*, the hazard of hearing loss is presupposed by the Department's hearing loss prevention regulations. *Mowat*, 148 Wn. App. at 930. The Department is not, therefore, "required to prove, every time there is a citation for a serious violation, that exposure to loud noise causes hearing loss. Nor is the Department required to wait for someone to go deaf before citing the employer." *Id.*

2. The availability of hearing protection for workers is irrelevant to the question of whether the hearing loss prevention violation was serious.

In *Mowat*, this Court explained that, in light of the nature of harm caused by hearing loss and the potential for injury even to those wearing earplugs, worker use of earplugs does not make a violation of the hearing loss prevention regulations any less serious:

Although using earplugs may make it less likely that an employee will suffer harm as a result of exposure to excessive noise, the violation is still serious because if the violation of noise standards does cause harm, there is a substantial probability that the nature of the harm will be permanent hearing loss.

¹³ Balfour dismissively refers to "the notion that hearing loss can be a serious physical harm." AB at 24. Workers who have lost their hearing would hardly consider the severity of their condition to be a "notion." *Cf.* United States Department of Labor, Occupational Safety and Health Administration, "Noise and Hearing Conservation: Health Effects" stating that noise-induced hearing loss causes "a progressive loss of communication, socialization, and responsiveness to the environment." See http://www.osha.gov/SLTC/noisehearingconservation/health_effects.html (last visited 7/8/09).

Id. at 932.

As did the employer in *Mowat*, Balfour alleges that its workers were wearing earplugs (an assertion that is not completely accurate), and that this “reduced their actual noise exposure” (an assertion supported by no evidence), such that the violation was not serious. AB 25. Balfour does not mention this Court’s decision in *Mowat*. But Balfour does address the *Board’s* decision in *Mowat*, which reached a similar conclusion to that reached by this Court. AB 24-25 (citing *In re Mowat Construction*, 2006 WL 4046210).

Balfour attempts to distinguish the *Mowat* Board decision based on: (1) the “fact” that the injurious noise spiked at higher decibels than the measurements of injurious noise show here; and (2) the ground that a different hearing loss prevention regulation was at issue there (WAC 296-817-20010 requiring abatement of noise) than here (WAC 296-817-20005 requiring individual measurement of noise);. AB 24-25. First, as to Balfour’s proffered factual distinction about noise spikes, Balfour offers no logical reason why that factual distinction should make any difference, and the Department can think of none.¹⁴

¹⁴ Furthermore, the “distinction” on which Balfour relies is no distinction at all. Balfour describes “spikes up to one hundred and twenty decibals” from the *Mowat* decision, but ignores the fact that one of its own workers was exposed to an eight-hour *average* noise level of 107 decibels. Balfour presents no evidence that eight hours of

Second, Balfour’s proffered distinction based on the difference in the hearing loss prevention regulations at issue “misses the point.” See *Miniature Nut & Screw* *2, 1996 WL 88763 (failure to implement prevention measures causes hearing loss, and, in that way violation of the regulations causes hearing loss).¹⁵ The results of WAC 296-817-20005 individual employee noise exposure monitoring may trigger additional hearing loss prevention requirements, e.g., WAC 296-817-20010 – requiring employers to control noise that equals or exceeds 90 dBA TWA₈; WAC 296-817-20015 requiring employers to “make sure employees use hearing protection” when their noise exposure exceeds the PEL; WAC 296-817-20020 – requiring employers to provide employee training about noise and hearing protection; WAC 296-817-20025 – requiring employers to post warning signs when noise equals or exceeds 115 dBA.

Furthermore, under WAC 296-817-20005, an employer must, among other things, “[n]otify each employee whose exposure equals or exceeds 85 dBA TWA₈ of the monitoring results within five working days

exposure to an average of 107 decibels might cause less hearing loss than periodic exposures to “spikes” of 120 decibels.

¹⁵ Balfour attempts to distinguish *Miniature Nut & Screw* by conclusorily asserting that Balfour “took every effort to detect [*sic*] and implement proactive measures” AB 26. Balfour’s assertion is simultaneously bold and baffling in light of the wealth of uncontroverted evidence described above showing that Balfour violated WAC 296-817-20005, to say nothing of the firm’s own concession of this violation.

of when you [the employer] receive the results;” and “[p]rovide exposed employees and their representatives with an opportunity to observe any measurements of employee noise exposure that are conducted.”

Given the exposures that Ms. Czajka measured, many of which exceeded 85 dBA TWA₈, Balfour *would* have had to take additional steps to protect its employees’ hearing if it had taken the measurements the rules require. Of course, this did not happen because Balfour failed in its threshold duty to ascertain the risks of its jobsite by conducting individual employee monitoring. It does not matter that Balfour violated a different hearing protection rule than did Mowat – both firms endangered their employees’ hearing by failing to comply with hearing loss prevention regulations, and both committed serious violations.

Finally, as noted *supra* Part IV.C.2 in the discussion of WAC 296-817-20005, this Court explained in *Mowat* that “[h]earing protection reduces the risk of hearing loss but does not eliminate it because earplugs are not always effective and may not always be worn.” *Mowat*, 148 Wn. App. at 930. The evidence here is undisputed that Balfour did not require its employees to wear their earplugs consistently throughout the day, and that not all its employees were wearing their earplugs correctly. *See supra* at 8, 19. The use of hearing protection is thus irrelevant to the issue here – whether Balfour’s undisputed violation of WAC 296-817-20005, a

violation that as a matter of fact and law created a risk of hearing loss, was serious.

3. That Balfour’s employees may have been at low risk for over-exposure to noise is accounted for in the penalty assessed. It does not result in a general, as opposed to a serious, violation.

As noted, “the substantial probability” provision in RCW 49.17.180(6) does not refer to the possibility of injury, but instead refers to the likelihood that such injury, if it did occur due to a violation, would be serious or fatal. *Lee Cook*, 109 Wn. App. at 482; *see also Washington Cedar*, 119 Wn. App. at 917; *Mowat*, 148 Wn. App. 929-32. *In re Mowat Construction Co.*, 2006 WL 4046210 *5, *affirmed*, *Mowat*, 148 Wn. App. at 932. In *Mowat*, the Board explained that the employer’s argument based on worker use of ear plugs failed to recognize that the lowering of risk is accounted for in the penalty provisions of WISHA,¹⁶ not in the classification of the violation as “serious” or “general”:

Although appropriate to reduce the probability rating based on the employees wearing hearing protection, the severity should remain unchanged. The use of hearing protection should be limited to reducing gravity by a lowering of probability. It should not result in double reduction by reducing both the severity and the probability. The potential outcome of noise production violations is

¹⁶ Penalties under WISHA are calculated by multiplying a “probability” and a “severity” factor to establish “gravity,” which is then used to determine the “base penalty.” That penalty is, in turn, subject to adjustment based on several other factors. *See* WAC 296-900-14010 - 14020. A reduction in the “probability” factor necessarily results in a decreased penalty.

hearing loss and, therefore, the severity should be unchanged, even when evidence demonstrates exposed employees were using hearing protection. The potential outcome of the violation should be considered serious and merits a severity rating of 5.

Id. at *6 (Emphasis added).

Balfour's penalty was assessed in the same way here. Ms. Czajka assessed the probability (*see* WAC 296-900-14010) at low, 2 on an escalating scale from 1 to 6. BR 5/29/07 at 81. But the severity rating, 5 out of 6, as in *Mowat*, reflects the seriousness of the harm that could occur.

Id. Dr. McDaniel pointed out that:

It's important to not put too much emphasis on the effectiveness of a hearing protector, because of the wide variation in use, the consistency of the use. I have observed people that are wearing hearing protectors on a job site in an industrial environment and based on the effectiveness of the way they wear the protector, you may have a hearing protector that has a noise reduction rating of 30 and measure and find they are getting essentially 2 decibels of noise reduction.

BR McDaniel at 17. *See also* BR 5/30/07 88-89. Dr. McDaniel went on to state that even if an employee's exposure to noise is reduced below the PEL, employees can still suffer permanent hearing loss. BR McDaniel at 24. "[P]eople that have tender ears can be susceptible to permanent noise damage [when] exposed to levels below 85." *Id.*

The Board and superior court correctly concluded that this was a serious violation.

F. The WAC 296-817-30010 Exception For Sound Level Measurement Does Not Excuse Balfour From The WAC 296-817-20005 Requirement For Individual Monitoring Because: (1) Noise Was Not Constant, (2) No Measurement Was Done Inside The Excavation, And (3) Balfour Did Not Do Any “Noise Dose Computation”

Without any citation to, or support in, the record, Balfour conclusorily asserts that noise levels at its site were “constant,” and therefore its sound level readings were sufficient to document employee noise exposure via the alternative hearing test method set forth in WAC 296-817-30010.¹⁷ AB 22, 23, 27. Balfour’s unsupported argument is without merit because: (1) the noise levels were not constant; (2) Balfour took no measurements in the excavation; and (3) Balfour did not compute its employees’ noise dose as set out in WAC 296-817-30015¹⁸ and required by WAC 296-817-30010.

- 1. Noise was not constant. It varied depending on the phase of construction, the equipment being used, and the location of the work, such as work inside the excavation.**

¹⁷ WAC 296-817-30010 provides in relevant part: “A noise dosimeter is the basis for determining total daily noise exposure for employees. However, where you have constant noise levels, you may estimate employee noise exposure using measurements from a sound level meter. Calculation of the employee noise exposure must be consistent with WAC 296-817-30015.”

¹⁸ WAC 296-817-30015 provides in relevant part: “Compute employee’s full-day noise exposure by using the appropriate equations from Table 3 “Noise Dose Computation” when using a sound level meter to estimate noise dose.” This provision is followed by a complex formula for computing noise dose. Nothing in the record suggests that Balfour ever did such a computation.

WAC 296-817-30010 allows an employer to estimate employee noise exposure based on sound level measurements only when the noise is “constant.” The work site here was not like many assembly lines in manufacturing plants where noise levels are often constant. Here, employee exposure to noise varied throughout the work site and during the course of each day.

Virgil Curtis, Balfour’s project manager testified that Balfour’s sound level measurements would only “represent general exposure to the employees” because each employee’s distance from the noise source varied throughout the project. BR 5/30/07 at 22-23, 25. Mr. Gershey testified that noise levels “depended on the operations that were going on that day.” BR 5/29/07 at 48. It is also obvious from both the testimony and the exhibits that the work being done changed as the project progressed.¹⁹ As Ms. Czajka pointed out, construction activities change daily, even hourly. BR 5/29/07 at 122.

The types of equipment in use also changed as the project progressed. See “Quarterly Noise Control Plan-Construction Activities” forms in Exhibit Five. For example, Mr. Gershey testified that Balfour had a vibratory roller which it used for compacting dirt, but only when

¹⁹ Exhibit Five documents the changing activity. Phase 1 comprised demolition of the sidewalks and surface streets. Phase 2 comprised installation of soldier piles. Excavation did not begin until Phase 4.

concrete was being poured, not every day, and then only for a couple of hours at a time. BR 5/29/07 at 16-17; *see also* Exhibit Four. Both Mr. Gershey and Mr. Curtis admitted that Balfour did not require its employees to wear hearing protection throughout the whole project, only during certain tasks, which also acknowledges that noise levels on the project changed. BR 5/30/07 at 4; 28. And the Manitowoc crane only came to the job site in November 2005. BR 5/20/07 at 9. This is another example of the changing, not constant, noise levels.

Mr. Curtis testified: “[Y]ou might have a pile drilling rig during one phase of the operation and a [concrete] mixture [sic] truck at a later phase.” BR 5/30/07 at 21. Moreover, the distance between the construction activity and the noise monitoring point also varied as construction changed. BR 5/20/07 at 22. The noise source varied – it could be a backhoe or a jackhammer. BR 5/30/07 at 25. And the distance between the noise source and the exposed employees also varied. BR 5/30/07 at 25. Mr. Curtis’s testimony also shows that the amount of noise varied. *See, e.g.*, BR 5/30/07 at 51-52.

Thus, the amount of noise employees were exposed to was not constant. It varied throughout the project, throughout the site, and depended upon the types of equipment in use and the task in which the employee was involved. The Board and Superior Court properly found

that there was no foundation for Balfour's argument that its sound level readings were sufficient to document employee noise exposure via the alternative noise measurement method set forth in WAC 296-817-30010.

Finally, as the Board explained, even assuming for the sake of argument that noise was constant at street level, Balfour's argument under WAC 296-817-30010 fails because Balfour took no measurements in the excavation:

Even when sound level meter monitoring is permitted, this provision mandates that "actual exposure" be determined whenever possible. In this case, there was no adequate attempt to measure the exposure of the workers inside the Balfour Beatty jobsite.

The employer, at the very least, was required to conduct noise monitoring with sound level meters within the excavation. The excavation is a critical part of the job site. At the time of the inspection, Balfour Beatty employees were working a full block away from the nearest street level noise monitoring point. Regardless of the initial reason for the sound monitoring, it must comport with the safety and health regulations once it is undertaken. While the employer may have been entitled to use sound level meters for monitoring, the employer failed to use these monitors to effectively monitor the noise within the excavation itself. Monitoring the noise in the adjacent neighborhood is not sufficient.

BR 3.

- 2. When estimating employee noise exposure using a sound level meter under WAC 296-817-30010, employee noise dose must be computed as specified in WAC 296-817-30015. Balfour did not compute employee noise dose as specified in WAC 296-817-30015.**

As discussed above in this section, estimating employee noise exposure under WAC 296-817-30010 and WAC 296-817-30015 still requires calculation of a daily noise dose for employees. Even if Balfour could have used its street level community noise measurements to estimate individual employee noise exposure, it would *still* not have been in compliance with WAC 296-817-30010 because it did not meet the WAC 296-817-30010 requirement for calculating the daily employee noise dose based on the formula in WAC 296-817-30015.

In sum, not only did the noise levels vary, and not only were the street level community noise measurements not indicative of noise exposures in the excavation, but also there is no evidence that individual employee daily noise dose was computed as required by WAC 296-817-30015. The “Noise Measurement Procedure” specified in Exhibit Five makes no mention of noise dose computation. Nor does the “Noise Measurements Report Form” contained in Exhibit Five contain any noise dose computations.

The testimony clearly documents some short term noise exposures greater than 85 decibels when noise was measured using a sound level meter. BR 5/30/07 at 52, 58. But Balfour did not use those measurements to calculate a daily noise dose. Balfour cannot invoke WAC 296-817-30010 and WAC 296-817-30015 as an alternative to the individual employee noise monitoring required by WAC 296-817-20005.

V. CONCLUSION

For the foregoing reasons, this Court should affirm the Board and the Superior Court decisions affirming the Department's citation.

RESPECTFULLY SUBMITTED this 13th day of July, 2009.

ROBERT M. MCKENNA
Attorney General



Beverly Norwood Goetz
Senior Counsel
WSBA # 8434
Attorney for Respondent

APPENDIX A

WAC 296-817-20005 Conduct employee noise exposure monitoring.

You must:

- Conduct employee noise exposure monitoring to determine the employee's actual exposure when reasonable information indicates that any employee's exposure may equal or exceed 85 dBA TWA₈.

| | |
|--------------|--|
| Note: | • Representative monitoring may be used where several employees perform the same tasks in substantially similar conditions |
| | • Examples of information or situations that can indicate exposures which equal or exceed 85 dBA TWA ₈ , include: |
| | • Noise in the workplace that interferes with people speaking, even at close range |
| | • Information from the manufacturer of equipment you use in the workplace that indicates high noise levels for machines in use |
| | • Reports from employees of ringing in their ears or temporary hearing loss |
| | • Warning signals or alarms that are difficult to hear |
| | • Work near abrasive blasting or jack hammering operations |
| | • Use of tools and equipment such as the following: |
| | – Heavy equipment or machinery |
| | – Fuel-powered hand tools |
| | – Compressed air-driven tools or equipment in frequent use |
| | – Power saws, grinders or chippers |
| | – Powder-actuated tools. |

You must:

- Follow applicable guidance in WAC 296-817-300 when conducting noise exposure monitoring
- Make sure your sampling for noise exposure monitoring identifies:
 - All employees whose exposure equals or exceeds the following:
 - 85 dBA TWA₈ (noise dosimetry, providing an average exposure over an eight-hour time period)
 - 115 dBA (slow response sound level meter, identifying short-term noise exposures)
 - 140 dBC (fast response sound level meter, identifying almost instantaneous noise exposures).
 - Exposure levels for selection of hearing protection.

APPENDIX B

BEFORE THE BOARD OF INDUSTRIAL INSURANCE APPEALS
STATE OF WASHINGTON

1 IN RE: BALFOUR BEATTY) DOCKET NO. 06 W1190
2 CONSTRUCTION, INC.)
3 CITATION AND NOTICE NO. 309489292) DECISION AND ORDER

4 APPEARANCES:

5 Employer, Balfour Beatty Construction, Inc., by
6 AMS Law, P.C., per
7 Aaron K. Owada

8 Employees, Laborers Local #440,
9 None

10 Employees, Operating Engineers Local #302,
11 None

12 Employees, Carpenters Local #131,
13 None

14 The Department of Labor and Industries, by
15 The Office of the Attorney General, per
16 Beverley Norwood-Goetz, Assistant Attorney General.

RECEIVED
MAR 13 2008
AGO L&I DIVISION
SEATTLE

17
18 The employer, Balfour Beatty Construction, Inc., (Balfour Beatty) filed an appeal with the
19 Board of Industrial Insurance Appeals on May 24, 2006. The employer appeals Corrective Notice
20 of Redetermination No. 309489292 issued by the Department on May 5, 2006. In this corrective
21 notice, the Department affirmed two serious violations and vacated one serious violation, assessing
22 a total penalty of \$900 as follows: Item No. 1-1: Failure to conduct noise exposure monitoring to
23 determine employee noise exposure during excavation and concrete pouring operations in violation
24 of WAC 296-817-20005, a serious violation with a \$750 penalty assessed; Item No. 1-3: Failure to
25 ensure Manitowoc 3900 V crane operations noise exposure was controlled to below 90 dba TWA-8
26 using feasible controls, in violation of WAC 296-817-20010, a serious violation with a \$150 penalty.
27 The Corrective Notice of Redetermination is **AFFIRMED AS MODIFIED**.

1 when constant noise levels are present, a sound level meter may be used to take measurements.
2 Even when sound level meter monitoring is permitted, this provision mandates that "actual
3 exposure" be determined whenever possible. In this case, there was no adequate attempt to
4 measure the exposure of the workers inside the Balfour Beatty jobsite.

5 The employer, at the very least, was required to conduct noise monitoring with sound level
6 meters within the excavation. The excavation is a critical part of the job site. At the time of the
7 inspection, Balfour Beatty employees were working a full block away from the nearest street level
8 noise monitoring point. Regardless of the initial reason for the sound monitoring, it must comport
9 with the safety and health regulations once it is undertaken. While the employer may have been
10 entitled to use sound level meters for monitoring, the employer failed to use these monitors to
11 effectively monitor the noise within the excavation itself. Monitoring the noise in the adjacent
12 neighborhood is not sufficient.

13 We agree with our industrial appeals judge that the employer explored feasible means to
14 reduce noise exposure within the Manitowoc friction crane, which had been identified as a specific
15 source of excessive noise. The Department inspector, Michelle Czajka, did not know if there were
16 feasible administrative or engineering controls available for the reduction of noise in the Manitowoc
17 crane cab. Based on these facts, we agree that the employer was permitted to use personal
18 protective equipment to protect the crane operator.

19 Based on the inadequacy of the noise monitoring, we affirm Item No. 1-1 of the Corrective
20 Notice. Since hearing conservation is at stake, we agree with the classification of Item No. 1-1 as a
21 serious violation and we affirm all of the penalty calculations.

22 Based on the employer's efforts to find a feasible way to control noise exposure within the
23 crane cab, we agree with our industrial appeals judge that Item No. 1-3 be vacated.

24 FINDINGS OF FACT

- 25 1. On December 8, 2005, a compliance safety and health officer from the
26 Department of Labor and Industries conducted an inspection of a
27 Balfour Beatty Construction, Inc., worksite located at 1618 8th Avenue,
28 in Seattle, Washington. On March 6, 2006, the Department issued
29 Citation and Notice No. 309489292, alleging the following violations:
30 Item No. 1-1, a serious violation of WAC 296-817-20005, with a penalty
31 of \$750; Item No. 1-2, a serious violation of WAC 296-817-20020, with
32 a penalty of \$750; and Item No. 1-3, a serious violation of
WAC 296-817-20010, with a penalty of \$150; for a total proposed
penalty of \$1,650.

1 On March 6, 2006, Balfour Beatty Construction, Inc., mailed its appeal
2 from Citation and Notice No. 309489292, to the Safety Division of the
3 Department of Labor and Industries. The Department elected to
4 reassume jurisdiction and, on May 5, 2006, issued Corrective Notice
5 of Redetermination No. 309489292. The Corrective Notice of
6 Redetermination affirmed Item No. 1-1, with a penalty of \$750; vacated
7 Item No. 1-2; and affirmed Item No. 1-3, with a penalty of \$150; for a
8 total proposed penalty of \$900. On May 24, 2006, Balfour Beatty
9 Construction, Inc., filed its appeal from Corrective Notice of
10 Redetermination No. 309489292 with the Board of Industrial Insurance
11 Appeals.

12 On May 25, 2006, the Board issued a Notice of Filing of Appeal for the
13 appeal, which had been assigned Docket No. 06 W1190.

- 14 2. On or about December 8, 2005, the employer, Balfour Beatty
15 Construction, Inc., did not conduct noise exposure monitoring to
16 determine employee noise exposure during excavation and concrete
17 pouring operations as required by WAC 296-817-20005. The employer
18 conducted noise exposure readings, using a noise level meter, to
19 determine noise exposures in certain locations on and near the worksite.
20 The monitoring was designed to measure noise exposure in the vicinity
21 to ensure that the project complied with City of Seattle noise ordinances.
22 The monitoring did not cover certain areas where the Balfour Beatty
23 Construction, Inc., employees were actually working at the time of the
24 inspection. The employer was performing an excavation that was
25 65 feet deep at the time of the inspection. There was no monitoring
26 performed within the excavation. Several pieces of loud equipment were
27 operating within the excavation at the time of the inspection.
- 28 3. As of December 8, 2005, the employer attempted to find feasible
29 administrative or engineering controls to ensure that the operator of a
30 Manitowoc 3900V crane was not exposed to noise levels in excess of
31 90 decibels on an 8-hour time-weighted average.
- 32 4. For the violation of 296-817-20005, the probability that hearing loss
would occur was low (rated 1 on a scale of 1 to 6) and the severity was
high (rated 5 on a scale of 1 to 6), yielding a gravity factor of 5. The
base penalty amount was \$2,500 and deductions were allotted for good
faith (\$500) good history (\$250) and employer size (\$1,000). With these
deductions the appropriate penalty is \$750.

CONCLUSIONS OF LAW

1. The Board of Industrial Insurance Appeals has jurisdiction over the
parties to and subject matter of this appeal.
2. On December 8, 2005, Balfour Beatty Construction, Inc., committed a
serious violation of WAC 296-817-20005. The total penalty for this
violation is \$750.
3. On December 8, 2005, Balfour Beatty Construction, Inc., did not commit
a serious violation of WAC 296-817-20010.

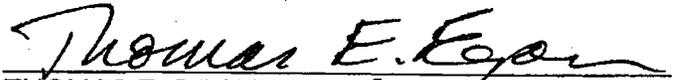
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

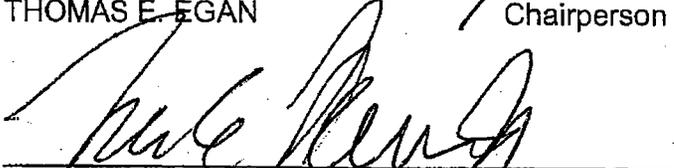
4. Item 1-3 of Corrective Notice of Redetermination No. 309489292 issued by the Department on May 5, 2006, is vacated and the Corrective Notice of Redetermination is affirmed as modified.

It is so **ORDERED**.

Dated March 12, 2008.

BOARD OF INDUSTRIAL INSURANCE APPEALS


THOMAS E. EGAN Chairperson


FRANK E. FENNERTY, JR. Member


CALHOUN DICKINSON Member

CERTIFICATE OF SERVICE BY MAIL

I certify that on this day I served the attached Order to the parties of this proceeding and their attorneys or authorized representatives, as listed below. A true copy thereof was delivered to Consolidated Mail Services for placement in the United States Postal Service, postage prepaid.

EM1
BALFOUR BEATTY CONSTRUCTION INC
1618 8TH AVE
SEATTLE, WA 98101

AG1
BEVERLY NORWOOD-GOETZ, AAG
OFFICE OF THE ATTORNEY GENERAL
800 5TH AVE #2000
SEATTLE, WA 98104

EA1
AARON K OWADA, ATTY
AMS LAW PC
975 CARPENTER RD NE #201
LACEY, WA 98516

EU1
LABORERS LOCAL #440
565 13TH AVE
SEATTLE, WA 98122

EU2
OPERATING ENGINEERS LOCAL #302
18701 120TH AVE NE
BOTHELL, WA 98011-9514

EU3
CARPENTERS LOCAL #131
209 VINE ST
SEATTLE, WA 98121

Dated at Olympia, Washington 3/12/2008
BOARD OF INDUSTRIAL INSURANCE APPEALS

By: 
DAVID E. THREEDY
Executive Secretary

In re: BALFOUR BEATTY CONSTRUCTION INC
Docket No. 06 W1190

WAC 296-817-100 Scope

The purpose of this chapter is to:

- * Prevent employee hearing loss by minimizing employee noise exposures

AND

- * Make sure employees exposed to noise are protected.

These goals are accomplished by:

- * Measuring and computing the employee noise exposure from all equipment and machinery in the workplace, as well as any other noise sources in the work area
- * Protecting employees from noise exposure by using feasible noise controls
- * Making sure employees use hearing protection, if you cannot feasibly control the noise
- * Training employees about hearing loss prevention
- * Evaluating your hearing loss prevention efforts by tracking employee hearing or periodically reviewing controls and protection
- * Making appropriate corrections to your program.

Table 1 will help you determine the hearing loss prevention requirements for your workplace.

Table 1
Noise Evaluation Criteria
Criteria Description Requirements

| Criteria | Description | Requirements |
|--------------------------------------|--|---|
| 85 dBA TWA ₈ | Full-day employee noise exposure dose. If you have one or more employees whose exposure equals or exceeds this level, you must have a hearing loss prevention program. | Hearing protection Training Audiometric testing |
| 90 dBA TWA ₈ | Full-day employee noise exposure dose. If you have one or more employees whose exposure equals or exceeds this level, you must reduce employee noise exposures in the workplace. | Noise controls and Hearing protection Training Audiometric testing |
| 115 dBA measured using slow response | Extreme noise level (greater than one second in duration). | Hearing protection Signs posted in work areas warning of exposure |
| 140 dBC measured using fast response | Extreme impulse or impact noise (less than one second in duration). | Hearing protection |

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, and 49.17.060. 03-11-060, § 296-817-100, filed 5/19/03, effective 8/1/03.]

WAC 296-817-30015

Use these equations when estimating full-day noise exposure from sound level measurements.

You must:

- Compute employee's full-day noise exposure by using the appropriate equations from Table 3 "Noise Dose Computation" when using a sound level meter to estimate noise dose.

Table 3

Noise Dose Computation

| Description | Equation |
|--|---|
| Compute the noise dose based on several time periods of constant noise during the shift | <p>The total noise dose over the work day, as a percentage, is given by the following equation where C_n indicates the total time of exposure at a specific noise level, and T_n indicates the reference duration for that level.</p> $D = 100 * ((C_1/T_1) + (C_2/T_2) + (C_3/T_3) + \dots + (C_n/T_n))$ |
| The reference duration is equal to the time of exposure to continuous noise at a specific sound level that will result in a one hundred percent dose | <p>The reference duration, T, for sound level, L, is given in hours by the equation:</p> $T = 8 / (2^{((L - 90)/5)})$ |
| Given a noise dose as a percentage, compute the equivalent eight-hour time weighted average noise level | <p>The equivalent eight-hour time weighted average, TWA_8, is computed from the dose, D, by the equation:</p> $TWA_8 = 16.61 * \text{Log}_{10}(D/100) + 90$ |

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, and 49.17.060. 03-11-060, § 296-817-30015, filed 5/19/03, effective 8/1/03.]

WAC 296-817-30010 Measure employee noise exposure.

IMPORTANT:

A noise dosimeter is the basis for determining total daily noise exposure for employees. However, where you have constant noise levels, you may estimate employee noise exposure using measurements from a sound level meter. Calculation of the employee noise exposure must be consistent with WAC 296-817-30015.

You must:

- Include all:
 - Workplace noise from equipment and machinery in use
 - Other noise from sources necessary to perform the work
 - Noise outside the control of the exposed employees.
- Use a noise dosimeter when necessary to measure employee noise dose
- Use a sound level meter to evaluate continuous and impulse noise levels
- Identify all employees whose exposures equal or exceed the Noise Evaluation Criteria in Table 1:

**Table 1
Noise Evaluation Criteria**

| Criteria | Description | Requirements |
|--------------------------------------|---|--|
| 85 dBA TWA ₈ | Full-day employee noise exposure dose. If you have one or more employees whose exposure equals or exceeds this level, you must have a hearing loss prevention program | <ul style="list-style-type: none"> – Hearing protection – Training – Audiometric testing |
| 90 dBA TWA ₈ | Full-day employee noise exposure dose. If you have one or more employees whose exposure equals or exceeds this level, you must reduce employee noise exposures in the workplace | Noise controls (in addition to the requirements for 85 dBA TWA ₈) |
| 115 dBA measured using slow response | Extreme noise level (greater than one second in duration) | <ul style="list-style-type: none"> – Hearing protection – Signs posted in work areas warning of exposure |
| 140 dBC measured using fast response | Extreme impulse or impact noise (less than one second in duration) | Hearing protection |

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, and 49.17.060. 03-11-060, § 296-817-30010, filed 5/19/03, effective 8/1/03.]

WAC 296-900-14010 Base penalties.

- WISHA calculates the base penalty for a violation by considering the following:

- Specific amounts that are dictated by statute;

OR

- By assigning a weight to a violation, called "gravity." Gravity is calculated by multiplying a violation's severity rate by its probability rate. Expressed as a formula:

$$\text{Gravity} = \text{Severity} \times \text{Probability}$$

Note: Most base penalties are calculated by the gravity method.

- Severity and probability are established in the following ways:

Severity:

- Severity rates are based on the most serious injury, illness, or disease that could be reasonably expected to occur because of a hazardous condition.

- Severity rates are expressed in whole numbers and range from 1 (lowest) to 6 (highest). Violations with a severity rating of 4, 5, or 6 are considered serious.

- WISHA uses Table 3, Severity Rates, to determine the severity rate for a violation.

| Table 3 | |
|-----------------------|---|
| Severity Rates | Most serious injury, illness, or disease from the violation is likely to be: |
| Severity | |
| 6 | • Death |
| | • Injuries involving permanent severe disability |
| | • Chronic, irreversible illness |
| 5 | • Permanent disability of a limited or less severe nature |
| | • Injuries or reversible illnesses resulting in hospitalization |
| 4 | • Injuries or temporary, reversible illnesses resulting in serious physical harm |
| | • May require removal from exposure or supportive treatment without |

| | | |
|---|---|---|
| | | hospitalization for recovery |
| 3 | • | Would probably not cause death or serious physical harm, but have at least a major impact on and indirect relationship to serious injury, illness, or disease |
| | • | Could have direct and immediate relationship to safety and health of employees |
| | • | First aid is the only medical treatment needed |
| 2 | • | Indirect relationship to nonserious injury, illness, or disease |
| | • | No injury, illness, or disease without additional violations |
| 1 | • | No injury, illness, disease |
| | • | Not likely to result in injury even in the presence of other violations |

Probability:

Definition:

A probability rate is a number that describes the likelihood of an injury, illness, or disease occurring, ranging from 1 (lowest) to 6 (highest).

– When determining probability, WISHA considers a variety of factors, depending on the situation, such as:

- Frequency and amount of exposure.
- Number of employees exposed.
- Instances, or number of times the hazard is identified in the workplace.
- How close an employee is to the hazard, i.e., the proximity of the employee to the hazard.
- Weather and other working conditions.
- Employee skill level and training.

- Employee awareness of the hazard.
- The pace, speed, and nature of the task or work.
- Use of personal protective equipment.
- Other mitigating or contributing circumstances.

– WISHA uses Table 4, Gravity Based Penalty, to determine the dollar amount for each gravity-based penalty, unless otherwise specified by statute.

| Table 4 | |
|------------------------------|---------------------|
| Gravity Based Penalty | |
| Gravity | Base Penalty |
| 1 | \$100 |
| 2 | \$200 |
| 3 | \$300 |
| 4 | \$400 |
| 5 | \$500 |
| 6 | \$1000 |
| 8 | \$1500 |
| 9 | \$2000 |
| 10 | \$2500 |
| 12 | \$3000 |
| 15 | \$3500 |
| 16 | \$4000 |
| 18 | \$4500 |
| 20 | \$5000 |
| 24 | \$5500 |
| 25 | \$6000 |
| 30 | \$6500 |
| 36 | \$7000 |

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. 06-06-020, § 296-900-14010, filed 2/21/06, effective 6/1/06.]

WAC 296-900-14020 Increases to adjusted base penalties.

• WISHA may increase an adjusted base penalty in certain circumstances. Table 6, Increases to Adjusted Base Penalties, describes circumstances where an increase may be applied to an adjusted base penalty.

| <p align="center">Table 6</p> <p align="center">Increases to Adjusted Base Penalties</p> <p>For this circumstance:</p> | <p>The adjusted base penalty may be increased as follows:</p> |
|---|--|
| <p>Repeat violation</p> <p>When the employer has been previously cited for a substantially similar hazard, with a final order for the previous violation dated no more than 3 years prior to the employer committing the violation being cited.</p> | <ul style="list-style-type: none"> • Multiplied by the total number of citations with violations involving similar hazards, including the current inspection. <p>Note: The maximum penalty can't exceed seventy thousand dollars for each violation.</p> |
| <p>Willful violation</p> | <ul style="list-style-type: none"> • Multiplied by ten with at least the statutory minimum penalty of five thousand dollars |
| <p>An act committed with the intentional, knowing, or voluntary disregard for the WISHA requirements or with plain indifference to employee safety.</p> | <p>Note: The maximum penalty can't exceed \$70,000 for each violation.</p> |
| <p>Egregious violation</p> <p>If the violation was willful and at least one of the following:</p> | <ul style="list-style-type: none"> • With a separate penalty issued for each instance the employer fails to follow a specific requirement. |
| <ul style="list-style-type: none"> • The violations resulted in worker fatalities, a worksite catastrophe, or a large number of injuries or illnesses. | |
| <ul style="list-style-type: none"> • The violations resulted in persistently high rates of worker injuries or illnesses. | |
| <ul style="list-style-type: none"> • The employer has an extensive history of prior violations. | |

| | |
|---|--|
| • The employer has intentionally disregarded its safety and health responsibilities. | |
| • The employer's conduct taken as a whole amounts to clear bad faith in the performance of his/her duties. | |
| • The employer has committed a large number of violations so as to undermine significantly the effectiveness of any safety and health program that might be in place. | |
| Failure to abate (FTA) Failure to correct a cited WISHA violation on time. | • Based on the facts at the time of reinspection, will be multiplied by: |
| Reference: For how to certify corrected violations, go to Certifying violation corrections, WAC 296-900-15005 through 296-900-15030 . | – At least five, but up to ten, based on the employer's effort to comply. |
| | – The number of calendar days past the correction date, with a minimum of five days. |
| | Note: The maximum penalty can't exceed seven thousand dollars per day for every day the violation is not corrected. |

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. 07-03-163, § 296-900-14020, filed 1/24/07, effective 4/1/07; 06-06-020, § 296-900-14020, filed 2/21/06, effective 6/1/06.]

RCW 49.17.010**Purpose.**

The legislature finds that personal injuries and illnesses arising out of conditions of employment impose a substantial burden upon employers and employees in terms of lost production, wage loss, medical expenses, and payment of benefits under the industrial insurance act. Therefore, in the public interest for the welfare of the people of the state of Washington and in order to assure, insofar as may reasonably be possible, safe and healthful working conditions for every man and woman working in the state of Washington, the legislature in the exercise of its police power, and in keeping with the mandates of Article II, section 35 of the state Constitution, declares its purpose by the provisions of this chapter to create, maintain, continue, and enhance the industrial safety and health program of the state, which program shall equal or exceed the standards prescribed by the Occupational Safety and Health Act of 1970 (Public Law 91-596, 84 Stat. 1590).

[1973 c 80 § 1.]

NOTES:

Industrial insurance: Title 51 RCW.

RCW 49.17.050

Rules and regulations -- Guidelines -- Standards.

In the adoption of rules and regulations under the authority of this chapter, the director shall:

(1) Provide for the preparation, adoption, amendment, or repeal of rules and regulations of safety and health standards governing the conditions of employment of general and special application in all work places;

(2) Provide for the adoption of occupational health and safety standards which are at least as effective as those adopted or recognized by the United States secretary of labor under the authority of the Occupational Safety and Health Act of 1970 (Public Law 91-596; 84 Stat. 1590);

(3) Provide a method of encouraging employers and employees in their efforts to reduce the number of safety and health hazards at their work places and to stimulate employers and employees to institute new and to perfect existing programs for providing safe and healthful working conditions;

(4) Provide for the promulgation of health and safety standards and the control of conditions in all work places concerning gases, vapors, dust, or other airborne particles, toxic materials, or harmful physical agents which shall set a standard which most adequately assures, to the extent feasible, on the basis of the best available evidence, that no employee will suffer material impairment of health or functional capacity even if such employee has regular exposure to the hazard dealt with by such standard for the period of his working life; any such standards shall require where appropriate the use of protective devices or equipment and for monitoring or measuring any such gases, vapors, dust, or other airborne particles, toxic materials, or harmful physical agents;

(5) Provide for appropriate reporting procedures by employers with respect to such information relating to conditions of employment which will assist in achieving the objectives of this chapter;

(6) Provide for the frequency, method, and manner of the making of inspections of work places without advance notice; and,

(7) Provide for the publication and dissemination to employers, employees, and labor organizations and the posting where appropriate by employers of informational, education, or training materials calculated to aid and assist in achieving the objectives of this chapter;

(8) Provide for the establishment of new and the perfection and expansion of existing programs for occupational safety and health education for employers and employees, and, in addition institute methods and procedures for the establishment of a program for voluntary compliance solely through the use of advice and consultation with employers and employees with recommendations including recommendations of methods to abate violations relating to the requirements of this chapter and all applicable safety and health standards and rules and regulations promulgated pursuant to the authority of this chapter;

(9) Provide for the adoption of safety and health standards requiring the use of safeguards in trenches and excavations and around openings of hoistways, hatchways, elevators, stairways, and similar openings;

- (10) Provide for the promulgation of health and safety standards requiring the use of safeguards for all vats, pans, trimmers, cut off, gang edger, and other saws, planers, presses, formers, cogs, gearing, belting, shafting, coupling, set screws, live rollers, conveyors, mangles in laundries, and machinery of similar description, which can be effectively guarded with due regard to the ordinary use of such machinery and appliances and the danger to employees therefrom, and with which the employees of any such work place may come in contact while in the performance of their duties and prescribe methods, practices, or processes to be followed by employers which will enhance the health and safety of employees in the performance of their duties when in proximity to machinery or appliances mentioned in this subsection;

(11) Certify that no later than twenty business days prior to the effective date of any significant legislative rule, as defined by **RCW 34.05.328**, a meeting of impacted parties is convened to: (a) Identify ambiguities and problem areas in the rule; (b) coordinate education and public relations efforts by all parties; (c) provide comments regarding internal department training and enforcement plans; and (d) provide comments regarding appropriate evaluation mechanisms to determine the effectiveness of the new rule. The meeting shall include a balanced representation of both business and labor from impacted industries, department personnel responsible for the above subject areas, and other agencies or key stakeholder groups as determined by the department. An existing advisory committee may be utilized if appropriate.
[1998 c 224 § 1; 1973 c 80 § 5.]

RCW 49.17.180

Violations -- Civil penalties.

(1) Except as provided in **RCW 43.05.090**, any employer who willfully or repeatedly violates the requirements of **RCW 49.17.060**, of any safety or health standard promulgated under the authority of this chapter, of any existing rule or regulation governing the conditions of employment promulgated by the department, or of any order issued granting a variance under **RCW 49.17.080** or **49.17.090** may be assessed a civil penalty not to exceed seventy thousand dollars for each violation. A minimum penalty of five thousand dollars shall be assessed for a willful violation.

(2) Any employer who has received a citation for a serious violation of the requirements of **RCW 49.17.060**, of any safety or health standard promulgated under the authority of this chapter, of any existing rule or regulation governing the conditions of employment promulgated by the department, or of any order issued granting a variance under **RCW 49.17.080** or **49.17.090** as determined in accordance with subsection (6) of this section, shall be assessed a civil penalty not to exceed seven thousand dollars for each such violation.

(3) Any employer who has received a citation for a violation of the requirements of **RCW 49.17.060**, of any safety or health standard promulgated under this chapter, of any existing rule or regulation governing the conditions of employment promulgated by the department, or of any order issued granting a variance under **RCW 49.17.080** or **49.17.090**, where such violation is specifically determined not to be of a serious nature as provided in subsection (6) of this section, may be assessed a civil penalty not to exceed seven thousand dollars for each such violation, unless such violation is determined to be de minimis.

(4) Any employer who fails to correct a violation for which a citation has been issued under **RCW 49.17.120** or **49.17.130** within the period permitted for its correction, which period shall not begin to run until the date of the final order of the board of industrial insurance appeals in the case of any review proceedings under this chapter initiated by the employer in good faith and not solely for delay or avoidance of penalties, may be assessed a civil penalty of not more than seven thousand dollars for each day during which such failure or violation continues.

(5) Any employer who violates any of the posting requirements of this chapter, or any of the posting requirements of rules promulgated by the department pursuant to this chapter related to employee or employee representative's rights to notice, including but not limited to those employee rights to notice set forth in **RCW 49.17.080**, **49.17.090**, **49.17.120**, **49.17.130**, **49.17.220(1)** and **49.17.240(2)**, shall be assessed a penalty not to exceed seven thousand dollars for each such violation. Any employer who violates any of the posting requirements for the posting of informational, educational, or training materials under the authority of **RCW 49.17.050(7)**, may be assessed a penalty not to exceed seven thousand dollars for each such violation.

(6) For the purposes of this section, a serious violation shall be deemed to exist in a work place if there is a substantial probability that death or serious physical harm could result from a condition which exists, or from one or more practices, means, methods, operations, or processes

which have been adopted or are in use in such work place, unless the employer did not, and could not with the exercise of reasonable diligence, know of the presence of the violation.

(7) The director, or his authorized representatives, shall have authority to assess all civil penalties provided in this section, giving due consideration to the appropriateness of the penalty with respect to the number of affected employees of the employer being charged, the gravity of the violation, the size of the employer's business, the good faith of the employer, and the history of previous violations.

(8) Civil penalties imposed under this chapter shall be paid to the director for deposit in the supplemental pension fund established by **RCW 51.44.033**. Civil penalties may be recovered in a civil action in the name of the department brought in the superior court of the county where the violation is alleged to have occurred, or the department may utilize the procedures for collection of civil penalties as set forth in **RCW 51.48.120** through **51.48.150**.

[1995 c 403 § 629; 1991 c 108 § 1; 1986 c 20 § 2; 1973 c 80 § 18.]

NOTES:

Findings -- Short title -- Intent -- 1995 c 403: See note following **RCW 34.05.328**.

Part headings not law -- Severability -- 1995 c 403: See **RCW 43.05.903** and **43.05.904**.

RCW 49.17.150

Appeal to superior court -- Review or enforcement of orders.

(1) Any person aggrieved by an order of the board of industrial insurance appeals issued under RCW 49.17.140(3) may obtain a review of such order in the superior court for the county in which the violation is alleged to have occurred, by filing in such court within thirty days following the communication of the board's order or denial of any petition or petitions for review, a written notice of appeal praying that the order be modified or set aside. Such appeal shall be perfected by filing with the clerk of the court and by serving a copy thereof by mail, or personally, on the director and on the board. The board shall thereupon transmit a copy of the notice of appeal to all parties who participated in proceedings before the board, and shall file in the court the complete record of the proceedings. Upon such filing the court shall have jurisdiction of the proceeding and of the question determined therein, and shall have power to grant such temporary relief or restraining order as it deems just and proper, and to make and enter upon the pleadings and the record of proceedings a decree affirming, modifying, or setting aside in all or in part, the decision of the board of industrial insurance appeals and enforcing the same to the extent that such order is affirmed or modified. The commencement of appellate proceedings under this subsection shall not, unless ordered by the court, operate as a stay of the order of the board of industrial insurance appeals. No objection that has not been urged before the board shall be considered by the court, unless the failure or neglect to urge such objection shall be excused because of extraordinary circumstances. The findings of the board or hearing examiner where the board has denied a petition or petitions for review with respect to questions of fact, if supported by substantial evidence on the record considered as a whole, shall be conclusive. If any party shall apply to the court for leave to adduce additional evidence and shall show to the satisfaction of the court that such additional evidence is material and that there were reasonable grounds for the failure to adduce such evidence in the hearing before the board, the court may order such additional evidence to be taken before the board and to be made a part of the record. The board may modify its findings as to the facts, or make new findings, by reason of additional evidence so taken and filed, and it shall file such modified or new findings, which findings with respect to questions of fact are supported by substantial evidence on the record considered as a whole, shall be conclusive, and its recommendations, if any, for the modification or setting aside of its original order. Upon the filing of the record with it, the jurisdiction of the court shall be exclusive and the judgment and decree shall be final, except as the same shall be subject to review by the supreme court. Appeals filed under this subsection shall be heard expeditiously.

(2) The director may also obtain review or enforcement of any final order of the board by filing a petition for such relief in the superior court for the county in which the alleged violation occurred. The provisions of subsection (1) of this section shall govern such proceeding to the extent applicable. If a notice of appeal, as provided in subsection (1) of this section, is not filed within thirty days after service of the board's order, the board's findings of fact, decision, and order or the examiner's findings of fact, decision, and order when a petition or petitions for review have been denied shall be conclusive in connection with any petition for enforcement which is filed by the director after the expiration of such thirty day period. In any such case, as well as in the case of an unappealed citation or a notification of the assessment of a penalty by the director, which has become a final order under subsection (1) or (2) of RCW 49.17.140 upon

application of the director, the clerk of the court, unless otherwise ordered by the court, shall forthwith enter a decree enforcing the citation and notice of assessment of penalty and shall transmit a copy of such decree to the director and the employer named in the director's petition. In any contempt proceeding brought to enforce a decree of the superior court entered pursuant to this subsection or subsection (1) of this section the superior court may assess the penalties provided in **RCW 49.17.180**, in addition to invoking any other available remedies.
[1982 c 109 § 1; 1973 c 80 § 15.]

NO.62893-3-I

**COURT OF APPEALS FOR DIVISION I
STATE OF WASHINGTON**

BALFOUR BEATTY
CONSTRUCTION, INC.,
Appellant,

v.

WASHINGTON STATE
DEPARTMENT OF LABOR AND
INDUSTRIES,
Respondent.

CERTIFICATE OF
SERVICE

(Brief of Respondent
Department of Labor and
Industries)

FILED
COURT OF APPEALS DIVISION I
STATE OF WASHINGTON
2009 JUL 14 AM 11:10

I certify under penalty of perjury under the laws of the State of Washington that on the 13th day of July, 2009, I caused the **Brief of Respondent Department of Labor and Industries** and this **Certificate of Service** to be filed and served via United States mail, to the following:

ORIGINAL: Richard D. Johnson
Court Administrator/Clerk
Court of Appeals Division I
600 University Street
One Union Square
Seattle, WA 98101-1176

COPY: Aaron K. Owada, Attorney
AMS Law
975 Carpenter Road NE, Suite 201
Lacey, Washington 98516

DATED this 13th day of July, 2009, at Seattle, Washington.


Erlyn R. Gamad, Legal Assistant

ORIGINAL

TWg



Rob McKenna
ATTORNEY GENERAL OF WASHINGTON

Labor & Industries Division

800 Fifth Avenue • Suite 2000 • MS TB-14 • Seattle WA 98104-3188 • (206) 464-7740

July 13, 2009

Richard D. Johnson
Court Administrator/Clerk
Court of Appeals Division I
600 University Street
One Union Square
Seattle, WA 98101-1176

RE: Balfour Beatty Construction, Inc. v. Washington State Department of Labor and Industries
Court of Appeals No. 62893-3 I

Dear Mr. Johnson:

Enclosed for filing are the originals and one copy of the Brief of Respondent Department of Labor and Industries with attachments and Certificate of Service. Also enclosed is a front-page copy of the brief and certificate of service to be conformed and returned to me in the envelope provided.

Thank you for your attention to this matter.

Sincerely,

Beverly Norwood Goetz
WSBA No. 8434
Senior Counsel
Labor and Industries Division
(206) 464-6746

Enclosures

cc: Aaron K. Owada, Attorney

FILED
COURT OF APPEALS DIVISION I
STATE OF WASHINGTON
2009 JUL 14 AM 11:10