OCCUPATIONAL SAFETY
AND HEALTH STANDARDS BOARD
2520 Venture Oaks Way, Suite 350
Sacramento, CA 95833
(916) 274-5721
FAX (916) 274-5743
Website address www.dir.ca.gov/oshsb

SUMMARY
PUBLIC MEETING/PUBLIC HEARING/BUSINESS MEETING
March 19, 2009
Costa Mesa, California

I. PUBLIC MEETING

A. CALL TO ORDER AND INTRODUCTIONS

Chairman MacLeod called the Public Meeting of the Occupational Safety and Health Standards Board (Board) to order at 10:00 a.m., March 19, 2009, in the Costa Mesa City Council Chambers, 77 Fair Drive, Costa Mesa, California.

ATTENDANCE

Board Members Present
Chairman John MacLeod
Jonathan Frisch, Ph.D.
Bill Jackson
Jack Kastorff
Josè Moreno
Willie Washington

Board Members Absent

Board Staff
Marley Hart, Executive Officer
David Beales, Legal Counsel
Mike Manieri, Principal Safety Engineer
Tom Mitchell, Senior Safety Engineer
Bernie Osburn, Staff Services Analyst
Chris Witte, Executive Secretary

Division of Occupational Safety and Health
Vicky Heza, Deputy Chief, Enforcement
Steve Smith, Principal Safety Engineer
Bob Barish, Senior Industrial Hygienist

Others present

Richard Morford, Enviro Tech International
Art Gillman, Unique Equipment Corp.
David Pyrzenski, Thermal Ceramics, Inc.
Barbara Kanegsburg, BFK Solutions
Joanne Bonnot, St. Jude Medical Center
Eric Brom, SCE
Daniel Cunninham, Metal Finishing Association
Larry Pena, Southern California Edison
J. Alan Schumann
George Alvarez, Thermal Ceramics
Matt Colbert, Unifrax
Bob Hornauer, NCCCO
Katy Wolf, IRTA
Bill Johnson, Petrochem, Inc.
Dan Leacox, Greenberg Traurig
Jim Mueller, Enviro Tech International
Michael Hall, Pacific Maritime Association
Richard Gallade, Gallade Chemical, Inc.
Kevin Bland, Granado Bland
Jay A. Weir, AT&T
Tom Walters, Thermal Ceramics
Bruce Wick, CalPASC
Dean Venturin, Unifrax
Julia Quint

Steve Johnson, ARC-BAC
Elizabeth Treanor, Phylmar Regulatory Roundtable
Chuca Meyer, Pillsbury Winthrop
Michele Wierzbicki, Unifrax
Jeremy Saum, J.F. Shea Co., Inc.
Leo Vortouni, CIHC
Howard Spielman, Health Science Associates
Bob D'Amato, American Safety Institute
Kate Symmonds, CPIL USD
Bill Kelly, Unifrax Corp.
James Matte, UOPLLC
LaVaughn Daniel, Danco Metal Surfacing
Michael Smith, Worksafe

B. OPENING COMMENTS

Chair MacLeod indicated that this portion of the Board's meeting is open to any person who is interested in addressing the Board on any matter concerning occupational safety and health or to propose new or revised standards or the repeal of standards as permitted by Labor Code Section 142.2.

There was no public comment.

C. ADJOURNMENT

Chair MacLeod adjourned the meeting at 10:04 a.m.

II. PUBLIC HEARING

A. PUBLIC HEARING ITEM

Chair MacLeod called the Public Hearing of the Board to order at 10:04 a.m., March 19, 2009, in the Costa Mesa City Council Chambers, 77 Fair Drive, Costa Mesa, California.

Chair MacLeod opened the Public Hearing and introduced the item noticed for public hearing.

1. TITLE 8: **GENERAL INDUSTRY SAFETY ORDERS**
Division 1, Chapter 4, Subchapter 7, Article 10
Section 3400
Medical Services and First Aid

Mr. Smith summarized the history and purpose of the proposal and indicated that the package is now ready for public comment and the Board's consideration.

Kevin Bland, representing the California Framing Contractor's Association, Residential Contractors Association, and on behalf of Bo Bradley of the Associated General Contractors of California, spoke in support of mandated compliance with the American National Standards Institute's (ANSI) standard as opposed to physician-approved supply lists. He stated that the ANSI standard for first aid supplies is very common throughout industries in California, and there are a number of experts on the ANSI panel that assist in assembling a list of what they believe is the best range of first aid supplies necessary for employers to have on hand. Mr. Bland believes that the "approved consulting physician" language is somewhat outdated, as ANSI has developed a comprehensive standard. He stated that in the past, he has been opposed to the incorporation of ANSI standards by reference in California occupational safety and health regulations; however, this is not adopting the ANSI

requirement itself, but rather that the first aid kit purchased from a retailer must have ANSI approval, which is different than incorporating ANSI requirements as long as the kit is noted by the manufacturer to be ANSI compliant.

Dr. Frisch asked Mr. Bland how often medical doctors recommend first aid kits or require first aid kits that are not ANSI compliant. He believes that most employers are purchasing first aid kits off the shelf, and physicians are going to recommend a kit that is ANSI compliant. Mr. Bland responded that physician approval is almost a rubber-stamp process. As long as the first aid kit in question is ANSI compliant, the physician will approve it, in his experience.

The following commenters supported Mr. Bland's remarks:

- Bruce Wick, Director of Risk Management for the California Professional Association of Specialty Contractors.
- Elizabeth Treanor, Director of the Phylmar Regulatory Roundtable. Ms. Treanor also suggested the inclusion of a training requirement in subsection (f).
- Steve Johnson, Director of Safety and Compliance Services for the Associated Roofing Contractors of the Bay Area Counties, Inc. Mr. Johnson suggested that basing the supplies required on the number of employees is impractical and confusing.

J. Alan Schuman, the author of Petition File No. 481, stated that the decision to close Petitions 481 and 483 is premature, and the provision of first aid instructional materials (Petition 481) and physician approval of first aid kits (Petition 483) should receive further consideration. He stated that fire departments and nurses have indicated that even for them, it is necessary to reference materials in order to render proper first aid care in certain emergencies.

Mr. Kastorff asked why the supplies required in a first aid kit vary by the number of employees. Mr. Smith responded that the amount of first aid supplies necessary is different for an employer with 100 employees than it is for two employees. He also stated that even in the ANSI standard, the list of supplies varies by employer size, but that it is left to the employer to supplement the basic supplies with those recommended by ANSI for employers of a certain size.

Mr. Kastorff commented that the varying requirements are confusing. He further stated that commenters have indicated that it is difficult for employers to know what should be supplied in the first aid kit.

Dr. Frisch stated that Petition File No. 483 had not received adequate consideration and suggested that the two sections referenced in the petition are overdue for consideration and more clarification is necessary. He asked that the Division continue work on Petition 483, as the need for medical review and the need of a list of supplies that are practically necessary to render first aid in an emergency in various work environments needs further consideration.

Dr. Frisch asked why the posting of alternative emergency communication methods from dialing 911 was dropped. He expressed concern that if 911 is blocked on an employer's phone, for whatever reason, instructions for use of alternate method of summoning emergency assistance should be posted. Mr. Smith expressed his belief that there had been some discussion of the issue, but it had not resulted in a consensus.

Dr. Frisch further stated that the proposal contains terms that are open to interpretation, such as "prompt medical transport" and "avoiding unnecessary delay." He asked whether it was the intention of the standard to hold the employer to a higher standard than that provided by 911 service. Mr. Smith responded that that was not the case. The terms mentioned are existing terms of art that have existed in both the California standard and the federal standard for some time. Dr. Frisch asked whether there was a clear, general understanding of the definitions of those terms. Mr. Smith responded that there is a body of appellate cases and other documentation that have upheld the language over time.

Dr. Frisch asked for an explanation of the three- to four-minute response time requirement. Mr. Smith responded that those measures are to be provided only in isolated locations, and there had been some discussion in the advisory committee about what determines an isolated location. The concept both in the federal and in the California standards was that for urgent care needs, three to five minutes is the average time frame, and there is a 30-minute response window for less urgent care. Thus, isolation was interpreted with those time periods in mind. Dr. Frisch expressed concern about unintended consequences, as it is his belief that the proposal could be interpreted to be broadening the standard to all locations, rather than just isolated locations. Mr. Smith stated that the petition addressed workplaces in which employees were unable to dial 911, as it has been blocked. Dr. Frisch stated that the proposed language seems to apply to the response time rather than the phone call. Mr. Smith responded that the term "effective provision shall be made" is a reference to 911 service or the equivalent. Dr. Frisch asked whether, if 911 cannot provide a three to five minute response time, the employer has to provide other emergency care. Mr. Smith responded that the intention was that if the employee was unable to dial 911 from the work location, then an alternate, equally effective method of summoning emergency care must be provided.

Dr. Frisch stated that after reading the advisory committee minutes regarding Petition File No. 481, he did not feel that it requires further consideration. He commented that there appeared to be diverging opinions on the level of reference material necessary, and that when a nurse refers to consulting a manual, he or she is not referring to the performance of basic CPR, but rather to more complicated procedures. Mr. Smith responded that he recalled that a nurse had stated during the advisory committee that she would reference a basic first aid manual when treating a patient.

Mr. Washington asked whether having an alternate method of summoning emergency care would in any way relieve the employer of having to have an employee trained in first aid on site. Mr. Smith responded that the trained employee requirement is in a different subsection from the 911 or equivalent requirement, so it would not override the requirement to have a first aid kit and somebody trained to render first aid.

Chair MacLeod asked whether the proposal would create any overlap or duplication with existing standards. Mr. Smith answered that, while there are other first aid standards that might apply to specific industries such as construction and agriculture, the proposal would not overlap or duplicate those standards.

Chair MacLeod agreed with Dr. Frisch's suggestion to re-review the two sections referenced in Petition File No. 483, and he asked whether the practice of blocking 911 was a common practice among employers. Mr. Smith responded that employers have alternatives to dialing 911, citing specific industrial environments such as prisons and schools. Chair MacLeod stated that the cited examples are institutional, and he asked whether there are places of employment outside of institutions where 911 is blocked.

Mr. Smith responded that there had been very little, if any, discussion of specific instances where a traditional office or industry location blocked 911. Dr. Frisch stated that there are employers that deliberately modify their telephone system, such a large campus, to ensure that their security department is between caller and 911, so that responding personnel can be directed to the correct location.

2. TITLE 8: **GENERAL INDUSTRY SAFETY ORDERS**
Division 1, Chapter 4, Subchapter 7, Article 107
Section 5155
Airborne Contaminants

Mr. Barish summarized the history and purpose of the proposal and indicated that the package is now ready for public comment and the Board's consideration.

Daniel Cunningham, Executive Director of the Metal Finishing Association of Southern California, San Diego, and Northern California, read his written comments into the record.

Dean Venturin, President of the Refractive Ceramic Fibers Coalition (RCFC), expressed support for the occupational exposure threshold of .5 fibers per cc for refractive ceramic fibers (RCF). He stated that over the past two decades, the industry has supported a product stewardship program, which is designed to assist customers and end users of RCF understand, control, and reduce their exposure. RCFC recently published, in conjunction with federal OSHA and the National Institute for Occupational Safety and Health (NIOSH), a 17-year retrospective of exposure monitoring for RCF, which was included with Mr. Venturin's written comments. The results of this study are that exposures to RCF are extremely low and that over time, those exposures have been decreasing.

Mr. Venturin then explained the method by which exposure to fibers of any type is measured, which is called phase contrast optical microscopy. An individual looks at a sample of the fiber under a microscope. Using this method, one can see only approximately 14% of the asbestos fibers in the air, for example. That represents an actual exposure of .74 fibers per cc, which is rounded up to a maximum exposure level of .1 fiber per cc. Using the phase contrast optical microscopy method for RCF, one can see 94% of the fibers in the air. Thus, if there is a measurement of .2 fibers per cc, it actually represents .21 fibers per cc.

RCF has been studied extensively and has not been known to cause disease. The proposed exposure limit of .2 fibers per cc, which represents a real exposure of .21, as compared to the maximum exposure level of .1 fibers per cc, is three and a half times more stringent than that for asbestos, which is known to cause disease. In light of the exposure study, the stewardship program, and the fact that RCF has not been shown to cause disease, the recommended PEL is unrealistic, unnecessary, and three and a half times that of asbestos, a known carcinogen.

Dr. Frisch asked whether the time weighted average exposure shown in Mr. Venturin's diagram (figure 3) as .2 is correct. When Mr. Venturin assured him that it is correct, Dr. Frisch asked why an exposure limit of .1 is unrealistic. Mr. Venturin responded that, of the fibers that can be controlled, in 17 years of trying in conjunction with OSHA and NIOSH, it is impossible to reduce the exposures below .15. The control technologies do not exist in the current applications. He stated that the .5 fiber per cc level is still lower than the level allowed for asbestos.

Tom Walters, Operations Manager of Thermal Ceramics, spoke in support of Mr. Venturin's comments, using statistics and studies, which were also included in the written comments submitted by Mr. Venturin. He stated that studies on RCF exposure had been performed on rats and mice in the early 1980's that suggested potential harmful effects in humans. He stated that human studies were started at approximately the same time as a long-term medical surveillance study on RCF workers, which began in 1987 at the University of Cincinnati. This study has continued for more than 20 years, including respiratory questionnaires, lung function tests, chest x-rays, and worker mortality.

The results of the RCF worker study, in which workers were exposed to RCF from as early as 1953 to the present, have shown no excess mortality related to all deaths, all cancers, or lung cancer; no statistically significant increase in the interstitial findings, and no mesotheliomas. Through 1996, some elevated pleural plaques associated with RCF exposure was observed, but since then the prevalence of the pleural plaques has remained relatively constant over time, perhaps as a result of the lower RCF exposure levels that the industry has been able to achieve. Although pleural plaques are a marker of disease, they are not actually disease.

An initial cross-sectional lung function test study revealed lung functions detriments in RCF-exposed [inaudible], which was associated with higher historical exposures. There has been a subsequent longitudinal study, which is to be published soon by the University of Cincinnati, that reveals no RCF-related detriment in lung function. This long-term epidemiology study has noted the absence of interstitial fibrosis, no increased mortality risk, and no detriment in lung function associated with current exposures in California workers, which is the largest group of highly exposed individual in the country.

Since there has been no human disease associated with exposure to RCF, a risk assessment based on cancer end-points is impossible, but a risk assessment study was conducted by Sciences International in 1998, based on the RCF inhalation animal studies. The calculated risk from this study was for a 70-year-old worker with 30 years of exposure to one fiber per cc. Using this study, Turkin Brown in 2003 summarized the lifetime risk for nonsmoking workers at approximately the same numbers. Separately, there was another risk assessment study performed by Fairweather in 1997 that extrapolated rat data to human data using a different statistical model versus the biological model, and it showed very similar findings.

From these studies, the risk of developing excess lung damage would be a PEL that is currently part of RCFC's product stewardship program and supported by federal OSHA at .5 fiber per cc is below the federal OSHA standard.

Dr. Frisch asked whether the epidemiology study was the only study of [inaudible]. Mr. Walters responded that it was the only study in North America. There was an IOM study performed in Europe that showed very similar conclusions, but it is not a continuing study like the Cincinnati study that has been ongoing for more than 20 years.

Dr. Frisch asked if these studies had been submitted as part of the advisory committee process. Mr. Walters responded affirmatively.

Bill Kelly, Chairman of the Board for Unifrax, stated that the proposal is too stringent for RCF. RCFC provided technical and economic impact feasibility information to the advisory committee, and that information was discounted to a substantial degree in the Initial Statement of Reasons (ISOR). RCFC then submitted further data regarding perceived discrepancies between the data

submitted and that reported in the ISOR. The technical and economic feasibility to meet the .3 standard would be roughly $4,000 per worker per year, but the difference is that the Health Expert Advisory Committee (HEAC) performed an analysis and said the amount was closer to $400. Those figures are based on the assumption that the exposure level can be reduced to .3 or lower. In 2005, the Health and Safety Executive in the United Kingdom took a look at what it would cost to institute a maximum exposure limit, and they estimated that it would cost approximately $1,800 per worker to meet a standard of .5. This study has been included in RCFC's written comments.

Mr. Kelly stated that the epidemiology study showed that there is no disease associated with exposure to RCF either in California, the country, or around the world. The proposed standard is approximately three and a half times more stringent than that of a known human carcinogen, asbestos, and other carcinogenic agents such as arsenic and cadmium. In its analysis, the Hazard Evaluation System and Information Service (HESIS), taking into account feasibility as they saw it and the state of risk analysis, recommended that the industry PEL of 0.5 fibers per cc should be the considered standard in the state of California.

Mr. Kelly further stated that RCF has been in use since the 1940s, and there is a lot of experience using it. The body of data demonstrates that approximately 85% of exposures, including users, workers, and manufacturers, are below .5 fibers per cc. A standard of .2 per cc means that it must be controlled at a much lower level. Today, not only in California but around the world, workers are using RCF judiciously. The exposures are low, and there has been no evidence of long-term disease. Given the available data, a level of .5 fibers per cc appears to be technically and economically feasible.

Dr. Frisch commented that the exposure study presented in RCFC's written comments indicates that most employers are already using the .2 fiber per cc standard. Mr. Kelly stated that 85% of the current exposures are below .5 fiber per cc among manufacturers and users. If those manufacturers and users were to drop down to the .2 fiber per cc, in order to assure that they were at or below that level, they would have to control to a much lower level, such as .1 fiber per cc. There are not people operating at that level currently.

Dr. Frisch asked what percentage of exposures are below .2 fiber per cc currently. Mr. Kelly responded that it was included in the written comments submitted by RCFC.

Dr. Frisch asked Mr. Barish whether the technical and economic feasibility information submitted by the industry was discounted in the analysis provided in the ISOR. Mr. Barish responded that the Division had used RCFC's data to reach the conclusion in the ISOR. He stated that it appeared, from information he had received the previous day, that RCFC has made some corrections to the cost estimates. He stated that it was difficult to determine what criteria were used to reach the amounts listed in RCFC's submission.

Dr. Frisch asked how the advisory committee considered the human health overlay with the animal studies when they came to the .2 fiber per cc level. Mr. Barish responded that those studies were considered as part of the assessment of RCF. The committee indicated their concern with the epidemiology and with the risk assessment. He stated that the proposed PEL was based on the totality of the information available. Mr. Kelly stated that NIOSH had studied RCF for over ten years before publishing its study.

Dr. Frisch stated that RCFC is making an enormous extrapolation in their written comments when using animal studies to determine RCF levels that are safe for humans. He expressed his discomfort with that extrapolation. He asked that the Final Statement of Reasons provide a clear, detailed explanation the rationale for the .2 fiber per cc level.

George Alvarez, Regional Sales Manager of the Pacific Northwest Region for Dermal Ceramics, stated that the Los Angeles basin is second only to the Gulf Coast in terms of concentration of petrochemical furnaces, and each of the stacks from those furnaces are lined with and have been designed for the last 25 years to use RCF. To reduce the PEL of RCF to .2 fiber per cc, every single petrochemical furnace in use today would have to be redesigned, because they were designed originally with the weight-savings of RCF in mind. RCF weighs eight to ten pounds per cubic foot, as opposed to a dense castible (?) lining, which weighs between 65 pounds to 170 pounds per cubic foot. It costs $500,000 per day per unit to take a unit out of service.

Dr. Frisch stated that there was no proposal to ban RCF, and he asked for human exposure data that would require getting rid of all of the vessels lined with RCF. Mr. Alvarez responded that it would be nearly impossible to repair or reline existing vessels without exceeding the .2 fiber per cc PEL.

Dr. Frisch asked why it would be so difficult, if not impossible, to do so. Mr. Alvarez responded that the fiber concentration is between .5 and .8 fiber per cc when performing repairs to vessels lined with RCF. He stated that there are methods of reducing fiber content in the air, such as respirators or wetting the material down with water. However, the exposure level when installing RCF is higher than .2 fiber per cc.

Dr. Frisch stated that he has difficulty believing that it is not possible to reduce exposure levels. He stated that he does not see an articulate explanation of why it is not feasible. Mr. Alvarez responded that he has not seen a fiber installation that is below .5 fiber per cc in 28 years of working with the product. He stated that the industry has been trying to reduce exposure levels since 1984, when it was first reported to the EPA.

Dr. Julia Quint commented that she was chief of HESIS for 15 years and she provided the RCF recommendation of .5 fiber per cc. It was not based on feasibility, but rather on the NIOSH risk assessment. She stated that quantitative risk analysis is used to show significance of risk. She stated that the RCF industry has done a tremendous job of working with NIOSH, performing studies, and trying to reduce exposure, and they should continue to do that. However, she expressed support for the PEL of .2 fiber cc, although she thinks that is high.

Dr. Quint went on to summarize her written comments.

Dr. Frisch asked Dr. Quint what the cancer risk of RCF is at an exposure level of .2 fiber per cc. Dr. Quint responded that although she had not calculated it, as it is outlined in the NIOSH document. She stated that she would be happy to perform those calculations and submit them to supplement her previously submitted written comments, as she believes that that information is important in assisting the Board to make a decision whether to adopt the proposal.

Hudson Bates, Toxicologist and Director of the Nickel Producers Environmental Research Association, spoke in support of the proposed PEL for nickel, stating that it is a scientifically justified PEL. However, he stated that the PELs for no one compound involved in welding are going to be sufficient to protect for the risks encountered; therefore, welding should be considered as an

independent process and risks for welding materials should be calculated dependent on what those materials are. He stated that comments submitted by a third party appear to try to differentiate inside the liberal category that is being proposed. While that information is undoubtedly correct, it does subdivide the category even further, and at this point in time, the data are insufficient to support a further reduction or a further speciation of nickel compounds. Therefore, the proposal sets forth the proper PEL based upon the sum total of the available science.

Dr. Frisch said that some written comments indicated that the numbers are still going to lead to considerably high cancer burdens, notably for nickel metal. Mr. Bates responded that any calculation with regard to nickel metal is an excessive calculation, given the fact that recent animal studies published in the literature have demonstrated no carcinogenic effect of metallic nickel exposure up to the maximum tolerated dose and that the available human epidemiology studies are also negative.

Dr. Frisch asked how recent the animal studies are, and whether they would have been incorporated into the Division's documentation. Mr. Bates responded that, while he was unsure whether it was included in the Division's documentation, it was published in peer review literature in December 2008.

Barbara Kanegsburg, President of BFK Solutions, Inc., summarized her written comments, stating that the current, formalized HEAC process is a preferable method to the advisory committee meetings convened for this proposal.

Dr. Quint returned to respond to Ms. Kanegsburg's comments, stating that she is a member of the current HEAC, and she was also involved in the advisory committee meetings for the chemicals in this proposal. She stated that the HEAC process is no different from what was done by the advisory committee for this proposal. They did not have the structure and the policy and procedures in written form, but the advisory committee proceedings were conducted in the same manner.

Dr. Frisch stated that Mr. Barish indicated in his briefing that the rigor that was established in the prior advisory committee meetings was equivalent to the rigor of the HEAC. He stated that the important point made by Dr. Quint is that the HEAC has written down the process that is being followed, and that process is being followed carefully. He asked Dr. Quint to summarize the qualifications of the members of the advisory committee for the proposal. Dr. Quint responded that the people on the committee were occupational medicine physicians with a focus in toxicology; epidemiologists, one of whom is currently working with the California Environmental Protection Agency performing rigorous risk-assessment work; and industrial hygienists, because Cal-OSHA typically staffs advisory committees of this type with industrial hygienists.

Dr. Frisch emphasized the point that the individuals on the advisory committee were highly technical individuals dealing with highly technical information. He also stated that the industry representatives are also highly technical individuals in the field of public health. He stated that there was substantial rigor associated with the process of establishing PELs for the chemicals addressed in the proposal, and he stated that he fully realizes the difficulty in performing this work. He expressed his appreciation for the work performed by the advisory committee members who volunteered their time to do this work in addition to their normal duties. He stated that people can argue about the value ultimately recommended, but the process is beyond argument.

Richard Morford, General Counsel for Enviro Tech International, summarized his written comments, stating that Enviro Tech was the first to bring n-propyl bromide (nPB) into the marketplace, and it

has funded toxicological research. In addition, Enviro Tech has worked with the U.S. Environmental Protection Agency (EPA) and OSHA regarding safe workplace exposure levels. Enviro Tech's corporate policy is that exposure to any chemical should be kept as low as possible. He stated that, based on feasibility and the need of "headroom," the PEL for nPB should be approximately 10 parts per million (ppm) and perhaps as much as 15 ppm. He stated that there was no clear rationale provided for dropping the PEL from the American Council of Industrial Hygienists' (ACGIH) recommendation of 10 ppm, and there was no reference to the EPA's recommendation of 18 or 25 ppm. He indicated that there have been approximately 70 articles published since the original advisory committee meetings that support a higher PEL.

Dr. Frisch asked that the Division include more recent scientific studies in the Final Statement of Reasons. He also requested a more complete estimation of why the PEL was rounded up to 5 ppm rather being rounded down to 3 ppm or up to 4 ppm.

Bob D'Amato, from the American Safety Institute, stated that he could see no basis for any adverse human effects from RCF. He stated that, based on the fact that there has been no standard in the past, no standard is necessary, as it cannot be proved that there is any apparent hazard.

Mr. Kelly returned to state that RCFC endorses the new HEAC process, stating that the earlier advisory committee meetings did not take feasibility into account in regard to RCF. There was not adequate explanation of the feasibility phase of the analysis. He also stated that the industry has used all available technologies to drive the exposures down to the levels they are.

Mr. Beales noted that the proposal development process is a secondary issue and may not be relevant to the purpose of the public hearing; the public hearing is an opportunity for the Board to receive comments, to which the Division will respond as a matter of law, and it is not a forum for debate among commenters.

Dr. Quint returned to state that, as part of her preparation for developing her written comments, she performed a literature search on a number of the chemicals addressed in the proposal, but in particular nPB, as she feels that it has been a while since the committee has considered a PEL for this chemical. In addition, she looked at the new EPA significant new alternatives policy (SNAP) program's final rule, which is fairly recent, having been adopted in 2007. That review provided an idea of the new data available. She stated that she finds it remarkable that in the studies and articles that serve as the basis for the EPA recommendation, the data have not changed. She asked the Board to examine risk assessment procedures that are consistent with those that are used by government agencies because they are guidelines for risk assessment. One of the ways in which the different recommendations vary is the use of uncertainty factors to look at what is uncertain in a database and to determine whether there is any certainty that humans are more or less sensitive than animals or whether the fetus of a pregnant woman will not be harmed in a way that is different from the harm the mother might suffer. The justification for the range of recommendations is not always obvious to people who do not perform risk assessments.

Mr. Morford returned and asked that the Board review the EPA publication of May 2003, in which it disagreed with and criticized the HESIS publication from 2003 on the issue of the process used to derive workplace exposure factors and the use of uncertainty factors. He stated that this reflects a rampant problem in the derivation of corporate exposure records, of what research to use and what criteria to use to establish an uncertainty factor. He stated that it is a contentious issue among toxicologists.

Chair MacLeod stated that, although the instruction at the beginning of the meeting was not clear, the purpose of the public hearing is for the public to testify on the proposal before the Board, and the meeting was veering into the territory of public debate.

Dr. Katy Wolf, Director of the Institute for Research and Technical Assistance, spoke in support of the proposed PEL for nPB and summarized her written comments. In addition, she suggested that rather than instead of setting the PEL at 5 ppm, it should be set at 3 ppm or lower. She requested that the Board consider establishing a ceiling for nPB of 10 or 15 ppm.

Dr. Frisch asked Dr. Wolf whether there is a basis for her recommendation of a ceiling of 10 to 15 ppm. Dr. Wolf responded that there really is no real quantitative basis for her recommendation.

Michael Smith, from Worksafe, summarized his written comments.

Mr. Bates returned to state that the Office of Environmental Health Hazard Assessment has speciated nickel calculations for risk values in chronic reference exposure levels, so it is not a "one size fits all" recommendation.

B. ADJOURNMENT

Chair MacLeod adjourned the Public Hearing at 12:48 p.m.

III. BUSINESS MEETING

Chair MacLeod called the Business Meeting of the Board to order at 12:48 p.m., March 19, 2009, in the Costa Mesa City Council Chambers, 77 Fair Drive, Costa Mesa, California.

A. PROPOSED SAFETY ORDERS FOR ADOPTION

1. TITLE 8: **GENERAL INDUSTRY SAFETY ORDERS**
Division 1, Chapter 4, Subchapter 7, Article 69
Section 4530
Bakery Ovens—Inspections
(Heard at the June 19, 2008, Public Hearing)

Mr. Manieri summarized the history and purpose of the proposal and indicated that the package is now ready for public comment and the Board's consideration.

MOTION

A motion was made by Mr. Kastorff and seconded by Mr. Jackson that the Board adopt the proposal.

A roll call was taken, and all members voted "aye." The motion passed.

B. PROPOSED VARIANCE DECISIONS FOR ADOPTION

Mr. Beales stated that the three matters are encompassed in two proposed decisions, one of which involves Kone pit ladder and governor access issues, and in Item C of that proposed decision the word “was” has been corrected to read “were.” He asked that, with that correction, the Board approve and adopt the proposed variance decisions on the consent calendar.

MOTION

A motion was made by Dr. Frisch and seconded by Mr. Kastorff to adopt the consent calendar as proposed.

A roll call was taken, and all members voted "aye." The motion passed.

C. OTHER

1. Heat Illness Update

Ms. Heza stated that last year the Division conducted nearly 2,300 inspections in outdoor places of employment, where they evaluated the employers’ compliance with Section 3395. They identified violations in 866 of those inspections. Since some employers received more than one citation for violation, the Division has issued 1,141 alleged heat illness violations to date and proposed initial penalties of $1,827,000.

The most frequently cited section of the regulation last year, as in previous years, was a deficiency or a lack of a written program. The second most frequently cited section was inadequate, insufficient, or absence of employee training. The third most frequently cited section was access to shade; that does not necessarily mean that shade was absent, but it may have been determined that the amount of shade was inadequate.

In addition, the Division conducted a lot of outreach last year through worker advocates and media events to educate the regulated community as well as the affected employees. When they were conducting that outreach, the Division received questions regarding the percentage of workers for which shade must be required or at what temperature shade must be provided. In light of these questions, Chief Len Welsh convened several stakeholder meetings earlier this year in an attempt to establish a trigger temperature at which the standard would go into effect. The outreach efforts from last year are being continued this year, and the Division has developed a question and answer document entitled The Heat Illness Prevention and Outdoor Places Employment Enforcement Questions and Answers. It is meant to serve as an instructive and interpretive document on DOSH policies for DOSH enforcement and consultation personnel and to inform employers and employees how DOSH interprets and enforces the standard.

The question and answer document addresses such issues as the trigger temperature where shade must be present, the location of water and how close to the worksite it is required to be, and the maximum distance from the worksite that shade can be maintained. She stated that she would let Ms. Hart know when the document had been posted on DOSH’s website, and the Board could refer to it at that time. If they have any questions after reviewing it, Ms. Heza or Mr. Welsh could answer them at a future meeting.

Chair MacLeod asked what trigger temperature had been established. Ms. Heza responded that the trigger temperature is 85˚. Chair MacLeod then asked about the maximum distance from shade, and Ms. Heza responded that it is the same as the traveling distance that toilets and hand-washing facilities must be located according to the field sanitation regulation, which is ¼ mile or five minutes.

Mr. Moreno asked about the basis for the 85˚ trigger temperature. Ms. Heza responded that in the heat illness investigations conducted, the temperatures typically were above 85˚, and that was one of the suggested ranges. The conclusion was that in order to prevent heat illness, 85˚ would be a logical trigger temperature to put in place. Mr. Moreno stated that, based on his personal experience, 85˚ is quite high, and he suggested a much lower trigger temperature. Ms. Heza responded that the trigger temperature was calculated based on whether all other elements of the standard are being met and employees are trained to recognize the symptoms of heat related illness.

Chair MacLeod asked how the regulation is working with respect to keeping agricultural employees safe. Ms. Heza responded that there will probably be more reports of heat illness, only because there is a hyper-awareness. Last year there was an increase in the number of reports that employers thought related to heat illness. In terms of the statistics, the number of fatalities started off higher in 2005 and has declined in subsequent years, although the numbers went up a little bit in 2008. The rate of heat illness complaints is dependent upon the extent of heat waves in the summer. The temperatures in 2007, for instance, while they were certainly hot, they did not have quite the impact of the heat wave in 2006. Ms. Heza stated that, based on the feedback she has received from some of the growers and other employers, there are many employers that are committed to protecting their employees and enlightened regarding the prevention of heat related illness.

Ms. Heza stated that the Division will be out in force again this summer. The Division's experience with the heat illness standard is similar to the field sanitation standard. When they first started enforcing the field sanitation standard in the 1990s, they found that the majority of employers were in violation of the regulation, in part or in whole. The numbers of those violations steadily decreased for the first six to eight years. She expressed her belief that there will be an increased level of compliance with the heat illness standard over the next year or two.

Chair MacLeod commented that, based on the Division's experience with the field sanitation standard, they are still on a "learning curve" regarding heat illness. Ms. Heza responded affirmatively.

Mr. Moreno complimented and thanked the Division for their outreach to the Spanish-speaking community. Ms. Heza stated that there are ten Spanish-language meetings scheduled with the industry representatives, and there is ongoing outreach on all sides, with employers, employees, employee advocates, etc. She stated that that has been very helpful in getting the word out to employers and employees that they should be drinking their water, etc. In a study of the violations investigated to date performed by Amalia Neidhardt, one of the Division's analysts, with Dr. Prudhomme of the California Department of Public Health Occupational Health Unit, 96% of the investigations conducted into heat illness fatalities, although water was available, the medical evidence indicated that the victim was dehydrated.

Ms. Heza stated that there should be much more encouragement to consume water and encouragement to seek shade when an employee feels it is necessary.

Dr. Frisch asked whether there are any sections of the regulation that are difficult to enforce. Ms. Heza responded that the main questions have related to how much shade is enough and the question of whether or not shade has to be up at a certain temperature or is it okay for the shade to be present but not deployed. That was part of the rationale to develop the question and answer document so that it would be consistent among enforcement, consultation, and employers.

Dr. Frisch asked whether any of the citations have been challenged on the basis of the language of the regulation. Ms. Heza responded that there are several coming up.

Dr. Frisch asked whether, given the present scope of the regulation, there is a need to modify the language or whether the existing language is sufficient from an enforcement standpoint. Ms. Heza responded that the existing language is sufficient from an enforcement standpoint, and the Division is trying to provide a policy and procedure for its own staff to make the job of the enforcement staff easier and also to provide the same level of information to employers so they know the minimum expectations.

Dr. Frisch asked whether the enforcement issues related more to how to enforce the regulation rather than how to change the regulation. Ms. Heza responded affirmatively.

2. Legislative Update

Mr. Beales stated that in addition to the bills mentioned in the written list in the Board packet, there are two other bills to mention. The first, AB 1561, introduced by the Committee on Labor and Employment on March 11, would require the Division to collaborate with the Appeals Board in order to "prepare an annual report analyzing the outcomes of citations and other notifications to employers appealed by those employers to the Board by the employers during the immediately prior calendar year." The other bill pertains to the Bagley-Keene Open Meeting Act. AB 1494, introduced by Assembly member Ang on February 27, makes a change in the wording of the Serial Meeting Act provision of the Bagley-Keene act. Whether that wording change has an impact or effect or the exact nature of that effect are matters for some speculation.

3. Executive Officer's Report

Ms. Hart stated that, although the office is no longer closed on the first and third Fridays of the month, each employee is required to take two furlough days a month. The days are selected by the employees with supervisor approval. Union negotiations are still continuing on that as well, and Ms. Hart will update the Board with any changes.

Ms. Hart then addressed the Title 8 reform project. Hans Boersma has been dedicating approximately 75% to 85% of his work hours to that. Bernie Osburn is assisting Mr. Boersma.

At this point, all of the graphics have been redrawn and submitted to the Office of Administrative Law (OAL). They are not all approved yet, and they are not all published yet,

but it is just a timing issue now. There have been many submittals to OAL and a lot of work at the library to define what those drawings entailed. That portion of the project is complete, and it is ahead of schedule.

Now, Mr. Boersma and Ms. Osburn are working on the indexing. Mr. Boersma is doing each subsection individually and working with Ms. Osburn to put them in the proper format, and they are then being transmitted to the appropriate person at DOSH. There is a lead person at DOSH over the project, but then the pressure vessel terminology goes to pressure vessel, elevator terminology goes to elevators, etc. It will all come back to one person at DOSH who returns it to Board staff. That process is currently underway, and there are approximately a dozen subchapters currently out for review.

Once Board staff hears from DOSH, the information will be compiled and submitted to stakeholders for review and to identify anything Board staff may have missed or to identify further cross-referencing. This portion of the project is on schedule to meet the deadline at the end of this calendar year, dependent upon the involvement of DOSH and the stakeholders. It is a time-consuming, comprehensive process.

4. Future Agenda Items

Dr. Frisch asked whether there was consensus from the Board to ask the Division to reconsider continue working on Petition File No. 483. The Board members concurred. Mr. Smith responded that the Division would revisit the petition. He asked whether the Board would like for the Division to broaden their examination of the issue or to keep a narrow focus on incorporating the relevant ANSI standard.

Mr. Beales stated that that is not an issue the Board should consider at this time, as the Board members who voted on the petition are different than those currently on the Board. The Division has the option of listening to the comments made today and determining the depth to which consideration of Petition File No. 483 can and should be brought into the present rulemaking based on the scope of the Notice of the current proposal. That is something that can be done without either a vote or even getting a consensus from the Board. It is something the Division will have to do in responding to at least one of the comments made during the public comment period.

D. ADJOURNMENT

Chair MacLeod adjourned the Business Meeting at 1:19 p.m.