

DRAFT MEETING SUMMARY

Advisory Meeting on Development of Permissible Exposure Limits in California Code of Regulations Title 8 Section 5155

**Monday December 12, 2005
Elihu Harris State Building
1515 Clay Street
Oakland, California**

Attendees

David Baltz, Commonweal
Heather Borman, State Compensation Insurance Fund
Michael Boyle, BBU
Paul Brownson, Dow Chemical Company
Dan Chia, Office of Assemblymember Sally Lieber
Lara Cushing, Center for Environmental Health
Cheryl Christenson, Edwards Life Sciences
Steve Derman, MediShare
Marti Fisher, Associated General Contractors
Adrienne Fitch-Frankel, CalCOSH
Barry Foose, Kaiser Permanente
Judi Freyman, Organization Resources Counselors
Dan Goldstein, CalCOSH
Ron Hutton, Allergan
Karen Jenkins
Anne Katten, California Rural Legal Assistance Foundation
Jim Kegebein
Lynn Knudtson, Future Foam and Polyurethane Foam Association
Betty Kreeger, Environmental Health Network
Angela Kung, Office of Assemblymember Wilma Chan
Artie Lawyer, Technology Sciences Group
Dan Leacox, Greenberg Traurig,
Etta Mason, Southern California Edison
Marcie McClean
Chuca Meyer, Pillsbury Winthrop
Catherine Porter, CalCOSH
Patty Quinlan, University of California San Francisco
Julia Quint, HESIS
Joan Reinhardt Reiss, Breast Cancer Fund
Susan Ripple, Dow Chemical Company
Jason Schmelzer, California Manufacturing and Technology Association
Fran Schreiber, WorkSafe
Jeremy Smith, California Labor Federation
Jack Snyder, Styrene Institute and Research Center
Howard Spielman, California Industrial Hygiene Council
Kevin Thompson, Cal/OSHA Report
Elizabeth Treanor, Phylmar Regulatory Roundtable
Julie Trost, California Conference of Mason Contractor Associations
Vickie Wells, San Francisco Department of Public Health
Sherri White, American Chemistry Council
Chad Wright, Laborers Union

2001-2004 PEL Advisory Committee Members in Attendance

Richard Cohen, Occupational medicine physician, (Committee member since 1997)
Robert Ku, Toxicologist, Safebridge Consultants, (Committee member since 2001)
Patty Quinlan, Industrial hygienist, University of California San Francisco, (Committee member since 1993)
Craig Steinmaus, Occupational medicine physician, UC Berkeley (Committee since 2001)

Cal/OSHA Staff

Len Welsh, Acting Chief, DOSH
Steve Smith, Supervising Industrial Hygienist, DOSH
Tom Mitchell, Senior Industrial Hygienist, Cal/OSHA Standards Board
Bob Barish, Senior Industrial Hygienist, DOSH
Mike Horowitz, Senior Industrial Hygienist, DOSH

Summary of Major Discussion Items

Len Welsh opened the meeting by noting that many of the recent issues with the PEL development process were related to the Division's staff resources for this activity which have been severely limited since its inception.

Steve Smith noted that the Division uses an advisory committee of technical experts for most of the scientific review activity required. He said the Division attempts to populate this PEL Advisory Committee with experts in toxicology, epidemiology, occupational medicine and industrial hygiene who may bring an industry or labor perspective but are not acting as representatives of particular interests. He noted that with controversy about recent committee recommendations follow-on meetings and discussions on certain recommendations were held in 2004 and 2005.

Vickie Wells gave an overview of the process used by the American Conference of Governmental Industrial Hygienists (ACGIH) in developing Threshold Limit Values (TLVs). She noted that the ACGIH TLV Committee had developed written policies and procedures and an operating manual.

Len Welsh said he hoped out of the meeting the Division could develop written guidelines for its PEL development process. Suggestions for elements to be addressed from the meeting included: operating procedures for the PEL Advisory Committee, documentation of recommendations, worker populations intended to be protected, prioritizing substances, resources to be used (especially already available from other state agencies), staff functions and the process for gathering written comments on costs and feasibility.

Howard Spielman suggested there be a separate advisory process for consideration of cost and feasibility issues after the release of the PEL Advisory Committee's health-based recommendations. There was discussion and general agreement that a follow-on process to discuss recommendations of the PEL Advisory Committee should take place, with the focus being on gathering information on cost and feasibility issues.

There was discussion of whether a range of recommendations from the PEL Advisory Committee was needed to fully elaborate issues and facilitate discussion. It was generally agreed that single PEL recommendations for individual substances would continue to be the product of the committee, provided the rationale for how the recommendations are reached is clearly documented in language reasonably accessible to non-technical readers. There was agreement on the importance of transparency in all phases of the PEL development process.

There was discussion of what is meant by the term "to the extent feasible" in Labor Code section 144.6.

There was discussion of the importance of the PEL Advisory Committee assessing the significance of health endpoints for PELs. Committee members in attendance said that this was always done when they decided on a PEL recommendation in the most recent round of its activities.

Judi Freyman of ORC said that members of her organization generally supported adoption of PELs at the level of the TLV, and that committee recommendations and Division proposals below the TLVs should include more extensive evidence and review.

There was discussion in the afternoon about prioritization of substances for consideration for new or amended PELs. Labor representatives suggested that carcinogens and substances on the Proposition 65 list without PELs should receive priority. There was also a suggestion for use of a standardized risk assessment process such as that used by the Office of Environmental Health Hazards Assessment (OEHHA) in Cal/EPA.

There was discussion in the afternoon about the selection and adequacy of resources for the PEL Advisory Committee. Fran Schreiber said that more Division staff assistance to the committee was needed and offered to work with employer and industry representatives to advocate for this. There was also a suggestion for an increase in the number of members on the committee to better handle its workload of substances.

Len Welsh concluded the meeting by saying that in early 2006, before any additional advisory meetings were scheduled related to PELs, the Division would develop a draft proposal for the PEL development process and circulate it to meeting attendees and others on its PEL interest list for informal comment

Meeting Summary

Len Welsh opened the meeting and thanked everyone for their participation. He said that this meeting was different from other meetings in not focusing on regulation of a particular hazard but rather on the process the Division uses to develop proposals for amendments to the list of Permissible Exposure Limits in Title 8 section 5155. He noted that particularly with proposals below the ACGIH TLV there had been some controversy in the last two of years with the PEL process. He also said that legislation had been proposed in the 2005 session on the PEL process (AB 815, Lieber). Len Welsh said that recent concerns with the PEL process have reflected, in part, the limited resources available to the Division for the extensive work required for PELs. He said that those limitations make it essential for the Division to think seriously about how to set priorities for the PELs to work on and how to conduct the proposal development process so that it promotes greater stakeholder participation and makes efficient use of limited staff resources.

Steve Smith gave an overview of the advisory committee process that has been used by the Division for the last 25 to 30 years to develop recommended proposals for PEL amendments. He said the committee is typically technically oriented and has consisted of experts from the fields of industrial hygiene, toxicology, epidemiology, and occupational medicine. Although the committee is intended to be populated by experts rather than representatives of particular interests, he said that an attempt is made to obtain experts with at least different perspectives and affiliations (industry, labor, academia). He said the committee typically assigns each substance under consideration to one or two members who then research the scientific literature and make an initial presentation to the whole committee for further discussion.

Steve Smith said that in response to comments received on recent proposals for PELs less than the ACGIH TLV the Division held additional advisory meetings in 2004 and 2005 specifically to take comments on health effects from stakeholders who had not participated in the meetings of the committee, as well as on cost impacts and feasibility. Steve noted that in both years a few substances generated many comments, some generated a few, and on some there were no comments at all even though stakeholders with a specific interest had been contacted and informed of the special meeting.

Steve Smith also noted development within the last year of the Division's health advisory committee web page where announcements of upcoming meetings, as well as documents from meetings on current topics can be found. He said the intent of the website was to help keep stakeholders up-to-date on the various health advisory processes. Steve Smith finished by saying that with limited staff resources as noted by Len Welsh, the Division relied heavily on the PEL Advisory Committee of experts to develop health-based recommendations for PEL proposals.

ACGIH TLV Process

Len Welsh then opened the discussion to attendees. Dan Leacox said it was important to recognize that the ACGIH TLV development process is neither a government process nor a consensus process. Len Welsh asked Vickie Wells, ACGIH Board Member and a recent former Chairperson of the ACGIH Board, to describe the TLV development.

Vickie Wells started by noting that the TLV Committee begins its process by announcing substances as being “under study” in the TLV Book released annually. She made the following points:

- ACGIH sometimes holds a symposium on a substance or group of substances under consideration.
- Like the Division’s process, each substance is assigned to a member or team of members to research. She said the assigned team seeks out the published peer-reviewed articles on the substance and then presents their findings to the assembled TLV Committee which consists of 30 members. She also said they may use unpublished and reports not peer reviewed if the authors provide permission for the document to be openly circulated and made available to the public. She said the committee’s work is not intended to be an exhaustive review of all of the scientific literature on a substance but rather an assessment of risk based upon the studies deemed to be the most credible and relevant.
- The TLV Committee does not do quantitative risk assessment like EPA and other agencies but may use such assessments in their process. She said the committee generally uses a LOAEL/NOAEL approach (Lowest Observed Adverse Effect Level/No Observed Adverse Effect Level).
- For each substance the entire committee will discuss what studies are most credible and the conclusions they suggest with respect to an appropriate TLV.
- The committee’s research is not intended as a review of all of the scientific literature on a substance but rather as an assessment of risk based upon the studies deemed to be most credible and relevant.
- The committee generally favors human over animal data when it is available
- As indicated in the TLV Book, the TLV is set with the intention of being protective of most workers exposed for a lifetime. She said that the TLV is not set to protect sensitive populations or to take into account cost and feasibility issues.

Patty Quinlan noted that unlike the PELs in Title 8 section 5155, the TLVs include designations for carcinogens and sensitizing substances.

Jeremy Smith asked Vickie Wells how particular substances are chosen for consideration for a new or amended TLV. Vickie Wells said that factors include the availability of new studies and production and use volumes. She said the current focus of the committee is more on updating the existing TLVs rather than adding new substances to the TLV list. She noted that there is a specific substance selection subcommittee.

California Process and Resources

Len Welsh said that Labor Code section 144.6 requires that when workplace standards are promulgated for chemical and physical agents that they be as protective as possible of worker health, to the extent feasible. He said that what he hoped would come out of looking at the PEL process would be a written document that describes the whole procedure including how priorities are set in determining substances to work on, and what other technical resources are available for assistance in California state government. He noted that HESIS has consistently provided staff assistance in the process over the years and that risk assessments from the Office of Environmental Health Hazard Assessment have been used and OEHHA staff consulted. He said that resources for assessing feasibility were more difficult. He said that the Division typically relies on industry and employers to provide their assessment of costs and feasibility which is then evaluated to the extent possible. He said that organized labor will sometimes also provide information or comment on industry information on feasibility. He said that industry and employers generally comment that a new or amended PEL will be unreasonably costly but detailed information on costs is not usually provided.

Dan Leacox said that industry and employers don't necessarily have cost and feasibility information assembled and readily available to provide. Len Welsh said that when information is available to indicate that substantial reductions in exposures can be easily accomplished at low cost then that reduces the difficulty of the advisory committee's work in deciding on a particular health level. However, he said this was generally the exception and not the usual situation.

Vickie Wells said that TLVs are strictly health-based and don't take into account cost, feasibility, or availability of measurement technology. She said that a low TLV was sometimes adopted with an eye toward spurring development of new technology for control and measurement.

Howard Spielman suggested addressing the health and feasibility issues separately. He said the PEL Advisory Committee should first develop a health-based recommendation for the PEL and then there should be a separate follow-on process to focus on costs and feasibility. He said that even if arriving at a health-based recommendation is difficult it should be addressed before feasibility.

Vickie Wells said that even if the risk assessment is difficult it should be addressed before feasibility. She said that much of the difficulty in risk assessment is deciding on an appropriate health effect endpoint from the various studies on a substance. Dan Leacox said that in many cases a single number recommendation doesn't adequately detail uncertainty inherent in the PEL Advisory Committee's recommendations.

Fran Schreiber said it sounded like deciding on relevant health endpoints could bog down the process. Len Welsh said that it did not have to bog down the process, that this inherent in what the PEL Advisory Committee already does. Patty Quinlan agreed that the committee already addresses this. Fran Schreiber said that risk assessments and endpoint determinations in many cases are already available, such as from OEHHA.

Catherine Porter asked how "feasibility" was defined in terms of the PEL process. She said that Labor Code section 144.6 says that the most protective standard should be adopted to the extent feasible, which appears to her to mean the lowest level that is feasible. Len Welsh acknowledged that what is meant by "feasibility" in 144.6 is not necessarily clear. He said that one aspect of feasibility is the availability of a method to reliably measure employee exposures to the substance at the level proposed.

Anne Katten said that as technology advances so does feasibility in terms of both control and measurement, supporting the need to keep the health and feasibility assessments as separate steps.

Len Welsh suggested it appeared there was general agreement that the assessments of health risk and feasibility should be separate processes.

Susan Ripple said she agreed it was important to decide on what degree of protection PELs were intended to provide, as well as deciding on relevant health endpoints. For example, she said that while TLVs for sensitizers are intended to protect from development of sensitization, they are not set so low that they are intended to protect a worker already sensitized to a substance from possible reaction to it.

Dan Leacox agreed with Susan Ripple that it was important to decide if physiological changes associated with exposure to a substance are truly significant. He said that policy considerations related to feasibility should be kept out of the deliberations of the PEL Advisory Committee. But he went on that when the committee makes a single recommendation it can involve uncertainty factors which amount to public policy conclusions and therefore should be fully elaborated in the interest of transparency of the process. To address this potential problem he recommended that the product of the committee, at least in the more difficult cases, be a range of recommendations with details provided for each level on the tradeoffs between health protection and costs.

Vickie Wells said that for the TLV process, the Documentation published for each adopted TLV detailed not only the available science but also the basis for the conclusion on the level decided upon by the TLV Committee. She thought that this approach by the PEL Committee could address the concern of Dan Leacox. She noted also that the TLV Documentation was intended to review the studies the TLV Committee found most important for the particular substance rather than being an exhaustive review of all available published studies.

Vickie Wells also noted there are times when the TLV Committee decides that it does not have enough information to recommend a TLV. She said that this might not always be an option for the Division as a regulatory agency.

Vickie Wells said also that it would be helpful for the Division to define how it does its search of the scientific literature. She said that in addition to sources usually used, information from the European Union SCOEL (Scientific Committee on Occupational Exposure Limits) and German MAK groups should also be included in the literature review of the PEL Advisory Committee. She also said it would be important for the Division to develop a conflict of interest policy for committee members as ACGIH has done.

Lynn Knudtson said it was important to be aware that some articles are being posted on the Internet as pre-publication documents and at this stage might not be fully reviewed.

Joan Reinhart Reis also noted the importance of looking at information from IARC (International Agency for Research on Cancer) and NTP (National Toxicology Program).

Craig Steinmaus said that in its latest round of meetings the PEL Advisory Committee had done thorough literature reviews for each substance but that full risk assessments were not available for most substances.

Judi Freyman said that regardless of what process the Division uses, if a recommended PEL is below the TLV the process of adoption will be difficult. Len Welsh acknowledged this but said also that the Division cannot simply ignore credible science that suggests that additional protection of employee health can be obtained with a PEL below the TLV.

Ron Hutton of Allergan said that he applauded the PEL Advisory Committee's work but said that more visibility was needed for the process. He said that more explanation was needed of uncertainty factors used by the committee or in studies it used to reach its conclusions. He said that for some substances recent Statements of Reason for PEL proposals made reference to application of safety factors without further elaboration or explanation as to how they were arrived at.

Len Welsh said he agreed that transparency in the PEL Advisory Committee's process, and all aspects of the process leading to development of proposed PELs would be key. He said he hoped that consensus could be reached at today's meeting on recommended elements of a written document detailing the process to be used by the Division for PEL development.

Bob Ku, a member of the most recent PEL Advisory Committee, said that yes sometimes there is not enough information available to reach conclusions on a safe level of exposure. Vickie Wells said that the TLV Committee Operations Manual addresses this. Len Welsh said the Division process should address this situation.

Craig Steinmaus acknowledged that the rationale for PELs recommended by the committee as explained in the minutes of its meeting sometimes did not reflect the entire discussion in detail. He said that the PEL Advisory Committee that he participated on (since 2001) thoroughly reviewed and evaluated the scientific literature in developing its recommendations. But he said it was important to recognize that fully exploring the most relevant scientific literature and addressing points made by other attendees above for some substances could require 40 or 50 pages. Len Welsh acknowledged these difficulties of the PEL development process but said that the public needs to be provided with more information both on how to participate in and understand the process and also how the committee's recommendations are reached.

Dan Leacox reiterated concerns that the process be transparent and thought that providing a range of recommended levels with an explanation for each could help with that. Len Welsh said that if the process includes careful documentation of how the single number recommendation was reached that would obviate the need for a range of recommendations and associated explanations to explain the process.

Beth Treanor said that even with its extensive documentations and detailed process it is sometimes hard for the public to understand how ACGIH reached a particular conclusion for a TLV recommendation. Len Welsh said that it was always desirable if there could be general consensus resulting from transparency on a PEL proposal, especially because it can help with employers' understanding the importance of compliance and feeling they were, or at least could have been, part of the process. He acknowledged that consensus on individual substances was sometimes difficult but said he hoped that consensus could be reached on the elements of the process.

Jason Schmelzer agreed with Dan Leacox that a recommendation for a single level, especially if not well-explained, made it difficult to have a meaningful public discussion.

Len Welsh asked attendees if there were any objections to the idea, at least for difficult substances, if the PEL Committees recommendation was a range of levels and associated explanations rather than a single level. Howard Spielman said that mirroring the TLV process, where the Documentation includes discussion of different potential levels and their implications, was fine but that the final recommendation should be a single number in the interest of simplicity. Vickie Wells reiterated the idea of having the first part of the PEL proposal development process be limited to looking at the science on health risk and developing a recommended PEL if possible and have a separate second part to look at feasibility.

Jason Schmelzer reiterated that a range of recommendations could facilitate the discussion in the second phase on feasibility. Howard Spielman said that a detailed rationale for a single recommended level should be sufficient for effective use in the feasibility discussions. Dan Leacox said that if uncertainty factors used in the process of generating the single number recommendation were fully explained that would serve the same function as a range of recommendations.

Len Welsh summarized the discussion by reiterating the importance of providing a clear explanation of how a single number recommendation is reached.

Vickie Wells said that it in the interest of simplicity it was better to avoid a range of recommendations, that such a range of recommendations would add unnecessary complication. Fran Schreiber said that labor agreed with this view.

Jason Schmelzer said that a single number recommendation from the PEL Committee was acceptable as long as a Ph.D. wasn't needed to understand the explanation.

Richard Cohen, an occupational physician who was a member of the last two PEL Advisory Committees, said he was glad to see the Division trying to develop a documented process for PEL development. He said the committee worked on this as well. He agreed that there needed to be better documentation produced for the committee's recommendations for PELs.

Catherine Porter said it sounded like the Division would look at the ACGIH process and try to replicate that. Len Welsh responded that the Division would look at the ACGIH TLV development process, include appropriate elements in the health assessment phase and develop a separate process for feasibility assessment.

Catherine Porter asked why the PEL Advisory Committee needed to duplicate the work of ACGIH. Len Welsh said that the committee uses the TLVs and associated documentation as a starting point and then conducts its own independent review of the literature including looking at additional sources such as OEHHA that the TLV Committee might not consider. Fran Schreiber said it would be important to use already existing risk assessments such as those done by OEHHA in the interest of efficiency in the process.

Vickie Wells said one important decision that needed to be made regarding sources to be used would be whether "robust" reviews of the scientific literature could be used if the underlying studies are not available for review. She said it would also be important to decide how even very robust scientific review articles might be used where the underlying studies are not available.

Len Welsh asked whether going into the afternoon was needed. Fran Schreiber said she wanted to have discussion on how substances for review were chosen, particularly potential carcinogens. Don Hutton was also

interested in how substances were chosen. Dan Chia said he would like to have discussion of assuring transparency of the process for assessment of feasibility.

LUNCH BREAK

Steve Smith chaired the meeting in Len Welsh's absence. He said the topics to discuss in the afternoon would be: setting substance priorities, selection of the PEL Committee members, and the process for assessing feasibility.

Prioritization of Substances

Steve Smith said that to date the PEL Committee's work had focused on new and updated TLVs, with some substances being considered based on requests from field staff or the public. He asked attendees if this was a good approach for the future and if so how should the substances chosen be prioritized in terms of when worked on and how much resources devoted.

Fran Schreiber said it was important to focus on potential cancer-causing substances, but that use volume was important as well both in terms of volume of use and numbers of workplaces where used. She said she didn't want the process to be limited just to new and updated TLVs especially since there are many Proposition 65 substances without PELs and because the PEL Committee doesn't really have a process for addressing carcinogens.

Mandy Hawes said that AB 816 vetoed by the Governor would have helped identify a lot of chemical usage. But she said that even in its absence HESIS had sources of information that needed to be used. Julia Quint of HESIS clarified that her unit does not have special sources but rather researches usage by looking at generally available sources of information.

Betty Kreeger said there had been no discussion in the meeting about looking at synergistic effects of substances. Steve Smith said that synergistic effects were more likely to be looked at in individual worksite evaluations where the presence of mixtures can potentially be recognized.

Judi Freyman said that usage levels should be a consideration in priority setting but that such information could be difficult to obtain. She also asked how stakeholders in substances would be identified. Steve Smith said that the Division used various approaches in the 2004 and 2005 follow-on meetings to identify potential stakeholders, and judging from industry participation in those meetings he felt the Division had succeeded. However he noted that getting sufficient labor participation remained a problem.

Mandy Hawes suggested environmental hazard level as a factor in prioritization so that reductions in the PEL augmented environmental as well as worker protection. Fran Schreiber said that information from the Air Resources Board (ARB) as well as ARB's own priorities might be considered.

Steve Smith said it was likely the Division would continue to focus on TLVs as its primary source for substances to work on. Judi Freyman reiterated that proposals for PELs below the TLV would need a very robust process.

Betty Kreeger asked if there would be a way for the general public to participate in the process. Steve Smith said that would be detailed in the written procedure to be developed and would be a focus of the process going forward.

Julia Quint said she thought the morning discussion had suggested use of a standardized risk assessment. She said that since particularly the most recent PEL Advisory Committee had to take substantial time to struggle with the development of an appropriate risk assessment process she felt it would be important to develop and document a standardized risk assessment process to be used. She said especially since the OEHHA risk assessment went through a public review process it should be considered for use by the PEL Committee.

Dan Leacox asked how many substances were considered in the most recent PEL Advisory Committee process. Patty Quinlan, who has been a member of the PEL Advisory Committee since the 1980s, said that about 55 substances were looked at in 18 meetings from 2001-2004. Steve Smith acknowledged that the committee did a tremendous amount of work, especially as volunteers. He said it appeared meeting attendees generally supported the process but that it needed to be better documented and streamlined if possible.

Vickie Wells suggested that spending time on substances with no or minimal use in California should be avoided. Anne Katten agreed but said that substances to which even a small number of workers might be highly exposed should not be ignored.

Selection of PEL Advisory Committee Members

Fran Schreiber asked how members have been chosen in the past. Steve Smith said the Division's first priority has been identifying true experts in the various disciplines with the time to participate. He said it has always been a struggle to obtain experts from labor. Fran Schreiber said yes that unlike industry, labor generally does not have experts available to contribute to the process. Richard Cohen said that in the last round of the committee's work from 2001-2004 there had been some attrition during the process, partly due to the amounts of work expected.

Fran Schreiber said it was important for the Division to provide enough paid staff to assist the committee. She said that if the Division develops a written procedure and there are petitions to develop PELs for carcinogens these could form the basis for the Division to request a Budget Change Proposal for additional staff positions to support work on the PELs.

Patty Quinlan said that whatever is done with the process more staff resources are definitely essential to supporting the work of the PEL Advisory Committee. She said that in the interim until more resources are available the committee should nonetheless move ahead with its work on the next round of substances.

Vickie Wells said that in the interest of workload the PEL Advisory Committee should have more members. She said that the committee's workload should be reduced by Division staff doing initial work of reviewing the TLV Documentations, gathering reference documents, etc. Fran Schreiber agreed and reiterated her view that more staff resources are needed to address the PEL project. Steve Smith acknowledged that the workload for a committee of volunteers is substantial and sustained over several years each round. Fran Schreiber said that with passage of Proposition 65 staffing was established to meet the needs of the mandate whereas for PELs, Hazard Communication and other Division projects there has been little additional staffing added and in some cases capabilities have been reduced. She said the Division at one time had a toxicologist and an epidemiologist. And she noted the Division no longer has any occupational medicine physicians on staff. She said that the Division should have staff expertise in the form of occupational medicine physicians, toxicologists and epidemiologists, in addition to the current industrial hygiene staffing and assistance from HESIS. She suggested that labor and management get together to push for these resources for the Division so that acceptable PELs could be developed.

Ron Hutton reiterated his concern that the process and rationale for recommendations and proposals be clear and well documented. Vickie Wells said it was important to continue the PEL Advisory Committee as a committee of individual experts rather than interest group representatives. Fran Schreiber said that concept reinforces the notion of separate processes for the health and cost assessments.

Feasibility Process

Fran Schreiber suggested that the feasibility process should start with distribution to the public of the PEL Advisory Committee's recommendations with provision of time before the feasibility assessment process for submission of written comments. She said that simply having an advisory meeting at which various sides would voice their opinions on feasibility of recommended PELs for individual substances often without providing written details would not be constructive.

Len Welsh said that even if only written comments were accepted the arguments and disagreements would come out at the Standards Board meeting if nothing else so it was better to have them on the table and discussed at an advisory meeting if practical. He said though that the Division should ask for written comments prior to the meeting so that they can be prepared to ask questions and hold meaningful discussions with attendees.

Fran Schreiber said that in addition to receiving written comments the Division should develop responses to those and distribute them for discussion at the feasibility meeting and to identify the key points of contention. Ron Hutton said this sounded something like the federal regulatory process with its "Advanced Notice of Proposed Rulemaking."

Howard Spielman said that it would be important to try to define what is meant by "feasible" in Labor Code 144.6. He said that feasibility could be thought of in terms of cost (economic feasibility) or in terms of availability of control and measurement technology (technical feasibility).

Fran Schreiber said that federal OSHA law is different from the state. She said that the language of Labor Code 144.6 is more favorable to workers than are the statutes and case law under which federal OSHA operates. California law does not require assessment and balancing of costs and benefits. However she thought that federal law does provide for consideration of technology-forcing regulations. She said she would be willing to research this question if it could contribute to the process.

Vickie Wells asked if the process developed for PELs, if found to be effective, might be used to address other issues. Len Welsh said yes if it was successful in more clearly defining and communicating the process in advance.

Fran Schreiber reiterated her call for labor and management to advocate for additional staffing to support the PEL development process.

Steve Smith said the Division would work to develop a written process that included the elements suggested in the meeting. Len Welsh said the Division would try to have a draft process available to distribute for comment early in 2006. He said that before any more PEL-related meetings were held the draft process would be distributed and comments reviewed. He said that there were no PEL-related meetings currently scheduled, but that topics for which meetings were planned in 2006 included sensitizers, crystalline silica, and possibly starting on the next round of PELs.

Len Welsh thanked meeting participants for their ideas on the Division's PEL process and wished everyone a happy holiday season.

END