

## YPSW 2017 Meeting Summary

The 42<sup>nd</sup> meeting of Yuma Pacific Southwest (YPSW) was held January 18-20, 2017 at The Bay Hotel and Marina, and once again, demonstrated the YPSW talents and commitment to the industrial hygiene profession. We had 46 participating in the 2 day meeting, with a number of new members attending for the first time.

President Larry Gibbs opened the event with the annual business meeting where the YPSW elected Frank Renshaw, President-Elect, and new Directors Denise Daggett and Frank Hearl. Tom Slavin continues as the third Director. Anna Davis was reelected Secretary/Treasurer by unanimous acclamation. Larry passed the President's gavel to Bob Lieckfield at the close of our meeting on Friday.

The meeting started with a brief presentation by our 2017 Program Chair, Bob Lieckfield, describing the origins and context of our 2017 theme — The Wisdom Gift: Thought Leaders Passing on Sage Advice to Future Industrial Hygienists. Bob started out thanking the Program Committee members, Terry Thedell and Tom Slavin, for their valuable assistance. He also made special mention of the dedication of Anna Davis and Nicole Browning, a colleague of Bob's at Bureau Veritas, and their contributions to making the meeting a success.

The objective of our 2017 conference was leveraging the knowledge and leadership of prominent members of the industrial hygiene and safety profession, and passing our wisdom to future generations of industrial hygiene professionals. The meeting provided YPSW with the opportunity to "create a wisdom legacy" through examination of pertinent topics through the lens of history (good and bad) and use that lens to provide counsel on ways to move forward and improve the profession. Since the YPSW was formed in 1975 by the standard bearers of the modern industrial hygiene profession (George Clayton, Frank Patty, Lester and Lewis Cralley, James Sterner, Herbert Walworth) and YPSW membership has included virtually all of the leaders in the IH profession from Corporate and Academia to Government, the YPSW is well qualified for this project. We are proud of our unique membership and the opportunity to provide a legacy for its members and a lasting benefit to the profession.

The origin of the theme was inspired by Bob's discussion with YPSW members Del Malzahn and Terry Thedell centered around the perception that the industrial hygiene profession was straying from our scientific roots. The responsibility of bringing it back on course was dependent on the current thought leaders to speak up on the future direction of the profession. In addition to the all-star list of speakers that would be providing background and their own wisdom on various topics, Bob stressed the importance that YPSW members in attendance participate in the discussions. Our goal for proposing the collective YPSW Wisdom Gift is publishing the YPSW Wisdom Gift in the AIHA Synergist. This is planned for later in 2017.

Terry Thedell put together a wonderful "Keynote Speech" that provided more context to the theme describing the evolution of the industrial hygiene profession, the responsibility of the elders to provide leadership, and the many contributions of YPSW members over the course of modern industrial hygiene. Terry's talk was thought provoking and an inspirational start to the program.

*A Blind Hog's Acorns*, by Dr. Carey McCord, was the source of Barbara Dawson's presentation. Barbara did a masterful job comparing the current IH profession with the days of Dr. McCord's early investigations into the occupational health and industrial hygiene profession. She left us with the question — Is the focus of the industrial hygiene profession still recognition, evaluation, and control? Are we still as curious and tenacious as Dr. McCord was describing his pioneering, investigative work in industrial hygiene?

The Thursday session concluded with the YPSW wisdom on Industrial Hygiene Education encompassing curriculum, evaluation of curriculum, and qualification and certification of industrial hygiene professionals. Del Malzahn started the session with Educating the Next Generation of Industrial Hygienists. Del provided a thorough overview of the current state of affairs in industrial hygiene graduate education programs. Del recommended that public health educators add requirements for non-traditional IH courses that fit the demands of employers. He cited as examples education and training relating to leadership and various forms of communication, and training in one or more of the other disciplines such as advanced scientific/engineering concepts versus a pure compliance approach. He urged educators to jazz up the

message combining IH research with employer driven needs, and pushing internships and field courses to gain practical experience. Based on a study by NIOSH (2011), the profession needs to continue addressing the most frequently cited obstacles for students — financial aid and lack of knowledge of the industrial hygiene program. Del concluded his session by asking the questions — (1) Are there fewer opportunities for undergraduate engineers and discovery driven scientists to seek IH graduate education since there are fewer challenging technical problems in US workplaces, and (2) Have our educational programs painted a picture that industrial hygiene is now a nanny profession?

Bob Soule then discussed “teaching the right things the right way.” Bob summarized the ABET certification model and the benefits to students, universities, and employers. For students, ABET certification verifies that a program meets professional standards, enhances employment opportunities, supports entry into a technical profession, establishes eligibility for scholarships, ABIH certification and other financial advantages, and paves the way to work professionally and on a global basis. Universities can demonstrate that their program has received recognition of quality, promotion of “best practices” in education, directly involves faculty/staff in continuous quality improvement processes, and since ABET accreditation are based on “learning outcomes” rather than “teaching inputs,” universities can easily determine acceptability of transfer credits. Employers can have assurance that their applicant has met educational requirements necessary to enter the profession, provides opportunity for guidance to the program by reflecting current and future needs, and enhances professional mobility of employees. As we move forward, Bob urged the profession to support expansion of accreditation into global academic programs, encourage a move toward implementation of “virtual” evaluations of academic programs and other experiential activities, and welcome the inclusion of natural/basic sciences in the accreditation process; these often are foundations for industrial hygienists.

Lynn O'Donnell wrapped up the session with a summary of the current state of certification programs and recommendations for the future of industrial hygiene certification and credentialing. Lynn offered improvements to our certification through expanded use of micro-credentialing which is similar to Subspecialties/Registries where applicants prove their mastery on specific knowledge and/or skill area. While this may be less rigorous than our current certification program, it may be more attractive to the next generation of industrial hygiene professionals. She added the concept of web based digital badges allowing online verification of credentials that could be used by employers to verify an applicant's skills, certifications, academic degree, or achievements. Lynn urged us to continue to support and promote ABIH CIH certification, while asking the questions — Do CIHs provide better outcomes? Does CIH certification meet the needs of employers?

Our traditional technical outing was a Docent lead tour of the USS Midway. The 20 YPSW members attending were treated to an amazing first-hand account of life on an aircraft carrier and the demands of flying off and on a ship in sometimes less than ideal conditions. Our Docent, John, was an aviator second seat guy like Goose in the Top Gun movie. He was stationed on the Coral Sea, the sister ship of the Midway, so his experiences resonated and brought our tour to life. John and the other Docents who took part in the YPSW tour did a fantastic job of providing the back story and experience of being at sea.

Our Friday session opened with presentations by representatives of our professional associations. Steve Lacey, AIHA President covered the AIHA initiatives and current activities. We also had the privilege of introduction to Larry Sloan, AIHA new Executive Director. In fact Larry attended our entire meeting, so he got an introduction to the YPSW and our rich history in industrial hygiene. The morning session was completed with presentations by Susan Ripple (Chair ABIH), Susan Arnold (Chair, ACGIH), and Stephen Hemperly and Denise Daggett (AIHA Local Section Regional Representatives). This meeting also marked the hand off between Stephen and Denise as the leader of the AIHA Pacific Region Local Section Council. Stephen stepped down after 6 years at the helm. The YPSW thanked Stephen for his excellent representation and annual update. Stephen is not going anywhere, as he remains an active member of YPSW.

Aaron Trippler provided his last legislative update to YPSW. Aaron officially retired from AIHA at the end of 2016. As you may recall, last year (2016) the YPSW presented Aaron with a plaque commemorating Aaron's contributions and participation in YPSW meetings for more than 25 years. His update this year provided Aaron's personal opinions on the future of health and safety legislation and government activity

under the new administration. In his opinion, OSHA will not be a priority, but will remain funded. Other opinions included the combining of OSHA/MSHA into a single agency and putting the cost savings to use on health and safety initiatives, health and safety agency budgets will not be increased, and that there needs to be more involvement at the State level and use of private sector stakeholders. Aaron also proffered that NIOSH would be more effective if they became a separate agency breaking off of CDC.

David Zalk started off our Friday technical program with an inspiring summary of Workplace Health Without Borders (WHWB) and their work at promoting the industrial hygiene profession outside of the those geographic boundaries where industrial hygiene and worker safety and health are well established. David pointed out that there are nearly 3 billion workers in the world and that nearly 2 billion work in unhealthy or unsafe environments. Globally, 2.34 million workers die each year from workplace causes and 2 million of these die from occupational disease. That translates into one death every 15 seconds. The occurrence of occupational injuries, sickness, and disease costs the world economy \$2.8 trillion/year USD. David urged the industrial hygiene profession to get involved in training and mentoring programs, promote both professional and public awareness of workplace health and safety, support International non-governmental organizations' industrial hygiene projects, and assist with funding for PPE and other safety equipment.

Dr. John Howard provided a thought provoking presentation on Nonstandard Work Arrangements and The Future of Work. Over the past 100 years, the workforce has gone from *stability* to *precariousness*. The growth of companies created by industrial revolution established a vertical structure and differentiated jobs from one another. A "good" job was being an employee of a particular company for your entire working life (until age 65). The government built social welfare laws along the same lines. Workers got security, benefits, protections, and steady wage increases. In return, companies benefitted from a stable workforce in which they could invest with fair expectation of positive returns. Now that model is changing with the erosion of the traditional employer-employee relationship, declining unionization, loss of private sector employment at a greater rate than the public sector employment, increasing life expectancies and threats to social benefits solvency, and the rise of the virtual workplace. The latter is the new norm as workplace "locations" are technologically connected via a private network or the Internet without regard to geographic boundaries or time zones. Dr. Howard described the evolution of employment from historical — where the employer has directive control, generally with one employer and multiple employees — then moving to more Contract Work — where the employer lacks directive control — and then the rise of the Independent Contractor for project based and shorter term assignments. In this new work paradigm, employees no longer exist according to our traditional definition. We are now seeing a rapid growth in "Gig Work" where neither the employer nor employees exist. Dr. Howard challenged the industrial hygiene profession to stay focused on the health and safety impacts on the "new type" of work arrangement. The risks from the new arrangements are real. There is evidence that employers are shifting the burden of health and safety to the worker resulting in a higher for occupational safety and health risks than workers in direct employment arrangements or direct contracting. The industrial hygiene profession needs to create better surveillance and derive new research methods into promoting health and safety of the new worker.

John Henshaw presented his views on protecting workers through government regulation and penalties. He started with a summary of the OSH Act debated in Congress ~50 years ago with only slight modifications, mostly with respect to penalties. A significant issue is that the OSH Act lacks teeth in criminal sanctions. After 45 years of court rulings and additional laws, standards development under the Act cannot keep up with the science or needs. John compared the differences in OSHA and EPA regulations with respect to enforcement and penalties. Improving health and safety of the workforce will require up to date Standards and strong, fair, and effective enforcement. There must be compliance assistance — Education, Training, and Outreach, and consultation programs. We also need to look at cooperative programs such as Voluntary Protection Programs/SHARP, Strategic Partnerships, and Alliances.

Shannon Gaffney provided a thought provoking case study into consumer exposures to diacetyl and how we need to resolve any conflicts and inconsistencies between policy and science. She reviewed studies showing diacetyl concentrations associated with cigarette smoke, coffee making, and exhaled breath that are well above the NIOSH recommended exposure level. Her presentation evoked an engaging discussion, centered on various mixed hypotheses, and left the question — How do we reconcile this?

Michael Rosenow presented an entertaining approach on getting the industrial hygiene message out to GenX and Millennials. He began by sharing the communication message from John Spence —

*“The key to successfully overcoming this ever challenging issue is simply to over communicate using every channel available; one-on-one meetings, town halls, weekly meetings, email, social media, video... any way you can think of to share important information with your employees, vendors and customers.”*

The industrial hygiene profession needs to continue embracing social media, since it is not going away. He urged each of us to challenge ourselves to experiment with social media, and engage with millennials on what they see as their most useful mode of communication.

Carter Ficklen rounded off the afternoon session with discussion of leadership and the future of the industrial hygiene profession. He provided a history of leadership in the industrial hygiene profession and updated the definition of leadership as “motivating and organizing a group of individuals to achieve a common goal.” As industrial hygiene leaders we need to have a mastery of our profession, understand management skills and business acumen, and employ both individual and organizational leadership skills. He provided a list of the top 10 leadership skills of the industrial hygiene leader. The list started with character and technical competence, and emphasized communication, decision making, business acumen, and innovative problem solving. He ended by stressing the importance of active listening and challenged the audience to maintain the YPSW position as leaders of the industrial hygiene profession.

President Gibbs adjourned the meeting to the YPSW annual banquet and handed over the gavel to Bob Lieckfield, as incoming YPSW President. The banquet was well attended with great conversation, food, and wine. The wine was generously donated by Chris Laszcz-Davis and The Environmental Quality Organization, LLC. We were also honored to have Grant Davis, Chris’ son, join in the festivities. We trust that he will return for next year’s banquet.

A highlight of the banquet, through complete serendipity, came from an apple pie specifically baked by Anna Davis for our Program Chair, Bob Lieckfield. As Bob described to the banquet attendees, through an off-hand conversation earlier in the year, Anna told Bob she would bring one of her family favorite apple pies, since that also happened to be his favorite dessert. As we all know, Anna is absolutely true to her word, and presented Bob with her hand-made apple pie. The dilemma for Bob was how to get it back to Detroit — or he could have eaten the entire pie before departing on Saturday morning. Through various conversations amongst the attendees, it was determined that “The Pie” should be auctioned off with the proceeds going to the AIHF. With Bob providing a rather poor impression of an auctioneer, the YPSW or perhaps we should say “The Pie” raised \$1,230 for The Stephen C. Davis Leadership Institute Memorial Grant. So thanks to Anna (sorry you will have to bring another pie again next year), the YPSW members again demonstrated our commitment to excellence in industrial hygiene and encourage the future generations of occupational health leadership to excel and attain the leadership status of so many of our YPSW members.

The YPSW Executive Committee thanks all of the speakers and attendees for their enthusiastic support of the YPSW and commitment to the industrial hygiene profession. We can be proud that we continue the legacy started by the YPSW Founders.