

NIOSH Workshop

Making Green Jobs Safe: Integrating Occupational Safety & Health into Green and Sustainability

**Washington, DC
Wednesday, December 16, 2009**

Introduction of Dr. David Michaels by Dr. John Howard, Director, National Institute for Occupational Safety and Health

[Dr. John Howard]

It's a pleasure for me to introduce our closing speaker today, both a friend and a colleague.

Dr. David Michaels is the Assistant Secretary for Labor for Occupational Safety and Health. Newly minted, he started his first day on December ninth of this very month.

Dr. Michaels for many of us is a familiar figure in Washington. He has been an Assistant Secretary of Energy for Environment, Safety and Health from 1998 to 2001.

From 2001 to December 9th, he was a research professor at the George Washington University School of Public Health and Health Services, interim chair of the Department of Occupational and Environmental Health, and a colleague from the university. I am also on the faculty there.

He leaves a great void at the university. He was a tremendous professor there, head of the doctoral program, and a prolific writer. For anyone who reads anything in environmental or occupational health, you run across Dr. Michaels' articles, his book, and numerous other contributions.

An award winner, I could go on and on but I think all of us join in wishing David a warm welcome here today and much, much success in his tenure as the OSHA Administrator.

Thank you.

Remarks by Dr. David Michaels, Assistant Secretary of Labor for Occupational Safety and Health

[Dr. David Michaels]

I want to express my thanks to NIOSH for organizing this timely and visionary workshop, and for inviting OSHA to be a participating partner.

Thanks to all the participants for your hard work, innovative thinking and contributions over the past two days. As we tackle the challenging issues discussed in this workshop, OSHA will continue to solicit your ideas.

As you're aware, I was just sworn in last week as Assistant Secretary of Labor for OSHA. I think it's very fitting and proper that my first speech as Assistant Secretary should address the issue of green jobs — what green jobs mean for the earth, for our economy and for American workers.

We're all aware of the job opportunities that green jobs offer, and in the present economy, new technologies with the potential of new jobs are especially welcome.

Secretary of Labor Hilda Solis recently announced nearly \$55 million in green job grants, authorized by the American Recovery and Reinvestment Act of 2009. These grants will support job training and labor market information programs to help workers, many in underserved communities, find jobs in expanding green industries and related occupations.

But in addition to job opportunities, there are many concerns that we need to consider — which is why you have gathered here this week.

Secretary Solis has provided the Department of Labor with her vision, which is simply and profoundly: “Good jobs for everyone.” And everyone at this conference understands all too well that green jobs cannot be good jobs unless they are safe jobs.

This goes for sustainable jobs as well. They, too, must also be safe jobs.

Dr. Christine Branche challenged us all in her remarks to begin the process of integrating safety and health into green jobs by taking critical steps: defining categorizing and tracking green jobs; evaluating green jobs, processes, and products; planning for early prevention; and adding safety and health to green benchmarks.

From what I've just heard this morning, you've taken that challenge seriously. You've identified a full agenda of research, policy, practices, and educational solutions to advance each of these steps, not just in workplaces where green jobs occur but in *all* workplaces.

I'd like to echo what many speakers here have said: Tackling green jobs, which are a priority for this administration, provides us an opportunity to transform — not just change — *all* workplaces. I believe we must take this bold approach.

Repeatedly at this conference, a possible solution cited was “Life cycle assessments” and consideration for worker exposure throughout a “green product's life cycle” or a “green technology's life cycle.” This is a powerful way to integrate worker safety and health into short- and long-term decision making. I'll be very interested to see how this concept is practically applied in each of the industries that you examined over the last few days.

I've heard that, during this conference and during breakout sessions, you discussed ways to engage workers in occupational safety and health — in construction, infrastructure and re-

purposing; manufacturing and emerging technologies; energy and mining; agriculture, forestry and fishing; and waste management and recycling

I agree with you. Workers should play a central role in safety and health.

I also heard that you worked in small groups to better understand the full scale of the “green” economy. We could say that we’re witnessing a Green Revolution where new applications and emerging technologies promise to transform the economy.

We could also say that we’re witnessing the blossoming of a Green Movement. More and more citizens here and around the world are developing awareness and demanding long-term stewardship of resources. As occupational safety and health professionals, it’s our mandate to ensure that worker health and safety is not left out of this historic change.

Speakers noted a sense of rush in the green economy. Employers who race into this green economy without paying attention to worker safety will blunder into many preventable injuries and deaths.

We can’t afford this. We can’t allow this to happen

We must use our knowledge and skills to identify potential hazards as they emerge. We can’t wait years for hazards to be completely characterized, to let industries shift their responsibility or defer workplace protections by producing “doubt” instead of actively practicing prevention.

It is vital, now, that we integrate worker safety and health concerns into green manufacturing, green construction and green energy. Most importantly: We must push worker health and safety as a critical, necessary, and recognized element of green design, green lifecycle analysis and green contracts.

It’s not a matter of choosing *either* a green future *or* safe jobs. It’s both. It’s all or nothing, and NIOSH, OSHA and everyone else needs to play a role in building this sustainable economy — an economy that will provide sufficient jobs, green jobs, *and* jobs that are safe for all workers.

Here is where we start: Most people instinctively see green jobs as safe. But at OSHA, when we hear “weatherization and renovation,” we see exposure to lead and asbestos. When we hear insulation, we think isocyanate exposure. When we hear rooftop solar power, we see fall hazards. When we hear wind energy, we see lockout hazards.

It’s small wonder that some call OSHA the “Debbie Doubter” of federal agencies.

But there are even more fundamental issues — and these present problems as well as opportunities. You’re all aware of the industrial hygiene hierarchy of controls. What’s at the very top of that hierarchy? Substitution.

This means exchanging a safe, clean chemical for a hazardous one. But, we also all know that, all too often, substitution is an unreachable panacea — because the safer chemical

may be too expensive or may not quite fit the job's technical needs, or because we don't have enough information to know which chemicals are actually safe.

Let me give one example that's causing our standards people fits: Diacetyl. We know that exposure to certain levels of this chemical — used in food flavorings like popcorn — destroy workers' lungs. Some companies have introduced "substitutes." You can't see it in my notes, but I've put "substitutes" in quotes, because some of these "substitutes" are so chemically close to diacetyl that they really need to be classified as diacetyl. Other food flavoring additives may be further away chemically; they're not diacetyl, but they haven't been tested adequately to determine the health hazards they may present.

So, then, does it make sense to regulate diacetyl alone? Does it make sense to develop a standard or Permissible Exposure Limit, or just require engineering controls? Does it make sense to do all this work on diacetyl when we really need to be addressing a broader class of chemicals: "food flavoring additives"?

This is piecemeal protection. It's inefficient, incomplete, and inadequate.

I have a vision of a greener world where there is full and complete hazard information available for every chemical and every chemical mixture; where science is at work not only to make more effective and more profitable chemicals, but safer chemicals, too. I dream of a world where workers can collaborate on an equal basis with management to find safe chemicals and develop and implement processes that won't put workers in danger.

There's an enormous chasm to bridge between the ideal future and the imperfect present. Today we suspect that at least a couple of thousand high-use chemicals out there may present some threat to worker health. Yet, OSHA currently regulates about 500 chemicals, based mostly on science from the 1950s and 1960s. How many chemical standards has OSHA issued in the past 12 years? Two — and one of these two only came about because of a court order! We haven't been keeping up with the science.

So, not only are we lacking critical information about the hazards of many chemicals, but we have virtually no information about the hazards of chemical mixtures.

If we don't pay attention at the dawn of this new green revolution, we'll be replicating past problems as we move into future industries. I'm making it my mission and OSHA's mission to ensure this doesn't happen.

Clearly one of the best ways to move forward on worker safety at the same time that we move forward on green jobs is to ensure that workers are more engaged in the work process and in the development of green jobs. It's clear that we must move toward a permanent system where employers and workers come together, on a basis of mutual respect, to assess and abate hazards. This is OSHA's "**Green Reform Principle Number One.**"

I've long advocated that every employer establish a Comprehensive Workplace Safety and Health Program that features management leadership, worker participation, and structure

that fosters continual improvement. While thousands of responsible employers already operate this way with excellent results, many other employers haven't gotten the message.

Another part of the big picture is chemical safety, as I outlined earlier. This is **Principle Number Two**. For example, the European Community's REACH program will provide industry and American workers with more and better information about the chemicals they are exposed to. More important, REACH is also, finally, challenging the old paradigm where chemicals are considered innocent until proven guilty — and all too often proven guilty by the sick and dead bodies of American workers.

The Globally Harmonized System of Classification and Labeling of Chemicals will also contribute consistency, efficiency, and more and better information — leading to greater worker safety and health.

Congress is working closely with the EPA and Lisa Jackson to reform the Toxic Substances Control Act (TSCA). Now, if this administration and this Congress can see fit to move forward with TSCA reform, is there any reason we shouldn't move forward at the same time to reform the way worker exposure to chemicals is regulated and controlled? I don't think so, and I hope to ensure that OSHA participates with NIOSH and EPA in all discussions about chemical regulation in this country.

Progress has not come easy for American workers. Improvements in safety conditions did not come because a politician thought it would be a good idea, or a scientist decided that a chemical was too dangerous.

Every incremental improvement in working conditions has been earned with the blood and broken bones of working people, as a result of the battles fought — some won and some lost — in thousands of workplaces and union halls across the country.

Too many of those advances came too late, only after we counted the bodies destroyed by workplace hazards that could have been prevented.

As we build the green industries of the future, we can break this tragic pattern; we can learn from history; we can move from reaction to prevention.

As green industries grow, OSHA will be fully involved in the movement toward Prevention through Design. This is OSHA's **Green Reform Principle Number Three**. Prevention through Design is about fundamental change that integrates safety efficiently and thoroughly.

Prevention through Design asks: Why should we go back and expend precious time and resources retrofitting hazardous industries to make them safer when we have the ability and the opportunity to begin fresh and make work safe from start to finish?

I don't have the answers to all these problems. In fact, right now I'm still concentrating on the questions. But it's clear that your help is absolutely essential to ensure that we're not only asking the right questions but also using this important time in our history to make major progress toward good answers.

Once we have some of those answers, what will we do with this knowledge?

OSHA has been fortunate in 2010 to receive a substantial budget increase — enough to significantly increase the number of inspectors we can put into the field. Armed with answers to some of the problems we've finding in green jobs, this can save a lot of lives and prevent many illnesses.

Still, we haven't nearly enough inspectors to visit even high hazard workplaces on any kind of a regular basis — unless you count decades as a “regular basis.” In addition despite the best daily efforts of our able field staff, workplace hazards are changing while our standards haven't kept up.

There's only so much a dedicated inspector can do when many of our standards are out of date.

This leads us to **Principle Number Four**: Where, and when possible, OSHA must move ahead on rulemaking for urgently needed standards — and to create good standards, we'll need the input of scientists and engineers, academics, students and workers. We'll also need allies in the progressive business community who will say “yes” to sensible changes and participate in the rulemaking process with constructive comments and insight.

OSHA's **Green Reform Principle Number Five**: Enhancing workers' voice in the workplace. To get us up to date and move into a safer, healthier future, it's also clear that workers must have a stronger voice in workplace safety than they have now. Giving that voice impact and value means that workers must have much better information about their rights, the hazards they face and controls for those hazards.

OSHA is trying to make this happen. Very soon, we'll announce a new round of Susan Harwood training grants. One major new subject of these grants will be Green Jobs.

Another way to enhance workers voices is to ensure that they receive accurate information. Accurate injury and illness statistics are essential for workers and employers to be able to identify workplace hazards. OSHA also needs accurate numbers to ensure that we focus our scarce resources where the most problems are.

As you may be aware, numerous studies and Congressional hearings have cast serious doubt on the accuracy of workplace injury and illness reporting.

A recent Government Accountability Office study confirmed those problems, but also noted serious concerns about incentive and disciplinary programs that discourage workers from reporting injuries and illnesses.

Most upsetting was a GAO finding that a high percentage of health care providers reported being pressured by employers to under-diagnose and under-treat workers and otherwise manipulate information to avoid reporting injuries and illnesses on the OSHA log. This is irresponsible and unacceptable.

To ensure the accuracy of injury and illness numbers, OSHA has launched a focused National Emphasis Program. We'll also take a hard look at incentive and disciplinary programs to ensure that they do not discourage workers from reporting.

Ultimately, of course, counting injuries, illnesses and fatalities is counting failure. The more we design safety into the workplace the less we'll have to worry about injury and illness statistics.

So, here we have some overarching principles to carry us and carry OSHA into the future.

It's been OSHA's pleasure to participate in this workshop. Thanks to your contributions now and in the future, we can look forward to developing a reliable roadmap to help employers drive their industries in the proper direction — toward a safe and healthful future.

The challenge now is to get everyone else on board across the Nation. We need to make the expression "green jobs" synonymous with "safe jobs" — because green jobs are good jobs only when they are safe jobs.

Thank you.