

# **Practical Paths to Clean Air Governor's Conference on Air Quality in the Treasure Valley September 30 – October 1, 2003, Nampa, Idaho**

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## **Organized by:**

Office of Governor Dirk Kempthorne

Idaho Council on Industry and the Environment (ICIE), Pat Barclay, Executive Director

Idaho Department of Environmental Quality, Steve Allred, Director

## **Overview**

Over 200 participants attended the *Practical Paths to Clean Air – Governor's Conference on Air Quality in the Treasure Valley* held at the Nampa Civic Center in Nampa, Idaho on September 30 and October 1, 2003. Recent growth in the Treasure Valley has led to increased concerns over air quality. Continued degradation of air quality will jeopardize the health of our citizens, and could severely impact the economy and development of the region. Understanding that there are many sources of air pollution and that each source has the potential to help protect air quality, conference organizers designed the conference to help local business leaders, government officials and citizens to:

- Understand the air quality issues in the Treasure Valley, roles of the players involved, and potential consequences of future action or inaction;
- Consider available options for managing air quality in the Treasure Valley including costs, technology, lessons of other communities, and existing resources and programs that help fund the options; and
- Chart a path forward for implementation of community-based solutions, building on existing partnerships and infrastructures.

Participants included a diverse cross-section of the Treasure Valley, including local government officials and representatives, private industry, small business, individual citizens, state and federal government agencies, and not-for-profit organizations. Through working sessions, participants were invited to explore and identify common issues and common solutions to protect air quality. The conference was intended to serve as a catalyst to encourage participants to work together to chart a path for addressing air quality in the short and long-term.

## **Conference Proceedings**

The conference included plenary sessions and seven breakout sessions designed to engage participants in championing proactive solutions to protect air quality in the Treasure Valley. Plenary sessions focused on the impacts of poor air quality on growth, manufacturing, public health and agriculture. Keynote speakers called for proactive solutions and challenged all stakeholders to become involved. A representative from the Houston Chamber of Commerce

discussed how that city has been impacted economically by a non-attainment designation and provided examples of proactive air quality solutions implemented by the community and its business leaders.

Two pollutants, fine particulate matter (PM<sub>2.5</sub>) and ozone, are of particular concern in the Treasure Valley. Speakers for the breakout sessions were asked to share their strategies for protecting air quality. After the presentations, participants were invited into an open dialogue to evaluate how the strategies could be applied to the Treasure Valley. Following is a summary of these discussions.

#### ***Air Quality and Regulatory Education: Moderated by Trent Clark, Monsanto***

The session on *Air Quality and Regulatory Education* featured speakers from the private and public sectors addressing permitting and regulatory issues affecting air quality. Participants were provided with a background in regulatory mechanisms, which fostered discussion of options for protecting air quality through existing and new regulatory measures.

The session began with an overview of DEQ's Air Quality program by Martin Bauer, DEQ Air Quality Division Administrator. Mr. Bauer discussed the basics of the Clean Air Act and permitting requirements in Idaho. He reviewed trends in air quality emissions from industrial and mobile sources, noting that protecting future air quality will depend on mobile source reductions, public education, and creative incentives programs.

Two other presentations by Krista McIntyre, Stoel Rives attorney and Aaron Day, Manager of Consulting Practices for Trinity Consultants, focused on permits and regulations. Ms. McIntyre presented an overview of the Title V permitting program. Title V permits are issued to major sources of air emissions and are designed to combine all air quality operating requirements and permit conditions under a single permitting umbrella. Mr. Day focused on the new New Source Review rules, finalized by the U.S. Environmental Protection Agency (EPA) in August, which provide greater flexibility to facilities in meeting air quality regulations.

Armed with an overview of the Clean Air Act and existing and changing regulations, participants undertook the task of identifying how regulatory and permitting tools could be applied to protect air quality in the Treasure Valley to prevent non-attainment. Participants suggested that we might want to:

- Investigate the feasibility of emissions trading programs between mobile and industrial sources in the Treasure Valley.
- Consider using company investments in mass transit as an offset for industrial emissions.
- Use computer modeling to demonstrate reduced emissions from industrial controls.

#### ***Lead by Example: Moderated by Kelli Fairless, Valleverde***

This session provided participants with examples of how agencies and municipalities have adopted innovative approaches to air quality issues. Presentations focused on how government can adopt internal procedures and encourage research to become more "green." Catherine Chertudi and Beth Baird of the City of Boise, Public Works Department presented information on what the city has done to protect air quality. Routine activities include visibility monitoring,

public education, and participation in air quality planning efforts. The city has developed local ordinances, such as burning restrictions, to protect air quality and conducts associated education to make the initiatives effective. The city also uses its purchasing power to effect change, working with its recycling contractor and bus service to use alternative fuels in their vehicles. Lastly, the city leads by example by purchasing low-emissions vehicles, hosting a strong employee commuting program, and minimizing solvent use at city maintenance shops.

Moving to the federal level, Dr. Harold Blackman from the Idaho National Engineering and Environmental Laboratory (INEEL) presented examples of how a major federal facility also can lead by example in both its mission and its operations. He emphasized that clean energy can lead to cleaner air which is why much of INEEL's research focuses on developing cleaner fuels, new fuels, and fueling infrastructure. For example, INEEL has been integral to the success of Yellowstone National Park's green fleet program, providing technical assistance and helping develop specialized alternate-fuel vehicles for park activities. Research in hydrogen has led to a hydrogen fueling station in Arizona. In Idaho, INEEL employees enjoy a low-emission commute on natural gas buses. These buses are maintained at a green maintenance shop that promotes efficiency and conservation.

After learning of the various roles government can play in protecting air quality, participants suggested the following actions to protect air quality:

- Build local coalitions that foster and support proactive planning.
- Develop a clearinghouse for effective and uniform information exchange.
- Identify incentives and disincentives to good air quality when making local decisions.

#### **Air Quality and Transportation: Moderated by Clair Bowman, COMPASS**

Transportation is a major influence on air quality. This session focused on how emissions can be reduced by ensuring maximum vehicle efficiency or by changing behavior to reduce vehicle miles traveled. Presentations focused on effective emission testing programs and commuter programs.

Joe Thomas of the Utah Division of Air Quality spoke about emissions testing programs in Utah and how they have impacted air quality. Mr. Thomas discussed the two emissions testing methods available, traditional tail-pipe testing and newer on-board diagnostic technologies, and the pros and cons of each. The most effective test type for a given region will depend on many factors including the age and technology of the vehicle fleet, maintenance habits, and public awareness.

Matt Hansen of King County in Washington state discussed how that county's *Flexpass* program has increased participation in commuting programs and reduced vehicle miles traveled. A *Flexpass* covers several alternative-commuting services under one employer-paid transit pass. The cost of the pass depends on the services offered and can include such options as unlimited bus rides, vanpool subsidies, guaranteed ride home service and even discounts at local merchants. By pooling services, resources are leveraged and costs reduced.

After hearing these presentations, participants discussed options for the Treasure Valley to reduce the impact of transportation on air quality. Participants concluded that to protect air quality, we should:

- Develop a broadly supported long-term vision for air quality in the Treasure Valley.
- Review and evaluate the effectiveness of existing programs designed to protect air quality.
- Build coalitions that can create open, creative, and innovative solutions to the air quality problems.
- Support further scientific study and data gathering to define and better understand the problems facing the Treasure Valley and the most effective solutions.

### **Agricultural Best Management Practices-moderated by Steve Johnson, Idaho Grain Producers**

The session on *Agricultural Best Management Practices* featured John Crockett of the Idaho Department of Water Resources (IDWR) and Dr. Ron Sheffield of the University of Idaho, who discussed new technologies that may help mitigate air emissions from agricultural sources.

As a result of recent increases in the number of dairy farms in Idaho, concerns have risen over air quality, odors and waste. Anaerobic digestion technology represents an opportunity to reduce waste, and minimize air pollution and odors from dairies, according to Mr. Crockett, while creating a valuable resource – energy. In 2000, the Energy Division of IDWR launched a five-year effort to educate the dairy and livestock industry on anaerobic digestion processes and help them incorporate these technologies into their operations. Mr. Crockett provided details on this innovative technology, the initiative, and its implications for Idaho.

Dr. Sheffield discussed practices that the dairy industry can undertake to reduce odors and emissions, stressing the role of planning and proactively managing odors. Suggestions included comprehensive site-wide solutions, as odors have many emissions sources at a typical dairy. Other options include developing odor management plans, process specific technologies and controls, and monitoring. Dr. Sheffield called for more funding and research to develop, evaluate and demonstrate new technologies and to quantify emissions from various sources.

After the presentations, participants explored proactive solutions to minimize air impacts from agriculture and dairies and concluded that research, administrative options, and resources are needed. Tasks include:

- Work with the Idaho Public Utilities Commission to explore the possibility of a rate structure for anaerobic digesters that would provide an incentive to sell energy from dairy operations back to the grid.
- Support research and development for anaerobic and aerobic digestion processes.
- Explore ways to minimize confusion about political jurisdictions and regulation of agricultural burning in the Treasure Valley.
- Study the processes to improve dust control.

## Engaging Citizens/Communities: Moderated by Judy Peavey-Derr, Ada County Commissioner

This session provided participants with examples of how other areas have used voluntary community actions to help solve air quality problems.

Ray Mohr of the Colorado Department of Public Health discussed how Colorado towns, both large and small, have developed community-based solutions to local air quality issues. Tools used in community-based programs include facilitated discussions and meetings, simplified models and displays for complicated information, community surveys, and special-purpose monitoring. Mr. Mohr presented case studies of successful programs that included:

- Avoidance of non-attainment designation for PM<sub>10</sub> in Crested Butte and Cripple Creek through increased monitoring and local controls.
- Development of a positive relationship between the public and an industrial source through public involvement and interagency assessment of the source, resulting in adoption of voluntary dust control measures by the facility.

Denise Kearns of the EPA introduced participants to *It All Adds Up to Cleaner Air*, a national public education and partnership-building initiative implemented at the local level. The initiative is a network of over 80 communities, agencies, businesses and associations which share information and resources on transportation, traffic congestion and air quality. Participation is free. Tools available to participants include tested marketing messages, outreach materials, and media advertisements ready to customize for local audiences. Participants also can view case studies, share information, and receive timely updates on national initiatives related to air quality and transportation.

The third presenter at this session was Randy Grant of the City of Scottsdale. Scottsdale has addressed growth and air quality concerns through proactive planning, land use management, and public education. From the EcoGecko, a public information mascot of a “green” lizard to a citywide environmental management system, Scottsdale has continued to be a nationwide leader in community-based initiatives.

Participants concluded that, to protect air quality through community based solutions, we need to:

- Identify key players in the community and plan now to avoid a non-attainment designation in the future.
- Identify funding to support community activities, such as local-option taxing.
- Develop a regional entity with authority to set agendas and make decisions for an entire regional area.
- Use innovation in decision-making first and employ command-and-control style only as a last resort.

## Alternative Fuels: Moderator Catherine Sanchez, Ada County Highway District (ACHD) Commuteride

Alternative fuels such as bio-diesel, ethanol, and hydrogen may help reduce vehicle emissions. This session hosted experts in alternative fuels research from Idaho and the nation.

Dr. Shaine Tyson of the National Renewable Energy Lab discussed the role of biodiesel as an alternative or blend to reduce air emissions from diesel fuel. The Treasure Valley has an active biodiesel program. Many local fleets including the Nampa School District and the local trash hauler are fueling vehicles with biodiesel/diesel blends, and commercial pumps are being established throughout Idaho. Dr. Tyson's presentation covered the basics of biodiesel including the types of blends, manufacturing trends, and current prices. She discussed the air quality impacts of using biodiesel which depending on blend can reduce certain air pollutants. However, she noted that blends that use 20% biodiesel and 80% diesel may actually increase nitrogen emissions. Dr. Tyson also discussed current research to reduce nitrogen emissions including various fuel formulations, technologies, and chemical additives.

Dr. Judy Steciak of the University of Idaho discussed the role of ethanol blends in protecting air quality. Ethanol is alcohol commonly derived from corn that can be blended with traditional fuel. Benefits include less reliance on imported oil and potential reductions in air emissions. Depending on engine type and ethanol blend, Dr. Steciak explained that this fuel additive may lower some pollutants while raising others compared to conventional or reformulated gasoline. Research is underway in Idaho to understand the role of ethanol in air quality.

Dr. Bruce Reynolds of the INEEL discussed changes in current and future infrastructure needed to make alternative fuels publicly available, while assessing existing and emerging fuels, emissions, maturity, and cost. Dr. Reynolds featured INEEL projects and research that show progress toward developing and using natural gas and hydrogen. To have cleaner air, the transition to an alternative fuel economy needs to begin soon, he concluded.

Noting that vehicle emissions contribute to the Valley's air pollution problem, participants discussed short and long-term options to minimize emissions through alternative fuels. Participants suggested:

- Build coalitions to create a market for maximum participation in the use of alternative fuels.
- Conduct an education campaign to enable citizens and decision-makers to better understand the benefits of alternative fuels.
- Study infrastructure needs locally and develop an alternative fuel system for the Treasure Valley.
- Provide incentives to citizens and businesses that "do the right thing" by taking proactive steps to use alternative fuels.

### **Community Leadership: Moderator Matt Beebe, Canyon County Commissioner**

The session on *Community Leadership* focused on how companies and organizations can take the lead in reducing air emissions through their own practices and public/private partnerships. Participants listened to examples of how Treasure Valley organizations have stepped up to the plate to protect air quality.

St. Luke's Regional Medical Center employs 4,300 people in the Treasure Valley and serves over 325,000 patients a year. Faced with limited parking and concerns over air quality, St. Luke's supports an Employee Transportation Alternatives program (ETA), which offers incentives to encourage alternative commuting practices. Warren Crosby, ETA manager, shared information on the structure and benefits of the ETA program. Employees are given subsidies for vanpool and bus passes and assistance in locating ride-sharing opportunities. Bikers are issued secure locks and parking, and shower and locker facilities. Bikers enrolled in the ETA program who participate more than 60% of the time are offered an annual credit of \$40 toward bike tune-ups or equipment. Walkers are offered similar incentives of shower/changing facilities and gift certificates toward walking shoes. ETA participants also are enrolled in a guaranteed-ride-home program. Many of the services offered by St. Luke's are managed in conjunction with the ACHD Commuteride program.

SMSgt Phil Jones of the Idaho Air National Guard discussed that group's environmental activities including the creation of an Environmental Protection Specialist position, a recycling and materials exchange program that encourages reuse and minimizes waste, and other efforts. Transportation emissions are minimized through the use of golf carts and bicycles for base travel and participation in local vanpool and commuting services. Emissions from solvents and painting operations have been reduced by switching to aqueous washers, using self-closing containers, and evaluating and changing processes as appropriate.

Through its role in the community and partnerships, Idaho Power promotes energy conservation throughout the Valley. Darlene Nemnich discussed Idaho Power's conservation projects that engage citizens to become actively involved in energy conservation. From coupons for efficient compact florescent lights to newsletters with energy conservation tips and low energy recipes, Idaho Power provides customers incentives to adopt efficient practices. Idaho Power also asks ratepayers to partner on projects such as a recent air conditioning load study in which homeowners turned over control of their air conditioners to Idaho Power, which experimented with various cycles and settings to achieve maximum efficiency. Idaho Power also offers customers a power choice through its green power purchase program.

The session was then opened to discussion of how to engage businesses to take the lead in their own operations and community. Suggestions included:

- Achieve a political consensus among leaders in the region to prompt and attain regional benefits to air quality.
- Identify scientific experts in the region and develop supportive and trusting partnerships between decision-makers and scientific experts.
- Conduct active educational outreach efforts to attain public "buy-in" and participation.

## **Conclusions and Call to Action**

Results from breakout sessions were reported back to conference participants and a final “call to action” session was held to identify next steps for the Valley. Participants concluded that:

1. The Treasure Valley experiences periods of degraded air quality caused by a combination of natural and manmade sources. Climate and topographic barriers influence air quality as do urbanization, growth and land-use practices. Human causes of air pollution include vehicle emissions, agricultural practices, industrial practices, and everyday actions by citizens and homeowners. The projected growth rate in the Valley indicates that the airshed will face greater challenges ahead to protect this vital resource and that failure to do so will hamper the economic vitality of the region.
2. Partnerships, education, research, and leadership are needed to solve this problem. During the breakout sessions, conference participants explored a wide range of actions that may be used to protect air quality and identified many specific ideas and actions. Four primary themes – partnership, education, research and leadership – emerged as essential components of any proactive effort to protect air quality in the Treasure Valley.

**Partnerships** Air pollution in the Treasure Valley comes from many sources. Each source contributes to the air quality problem. No single business, agency or organization can solve the air quality problem. Inclusive partnerships and coalitions are essential.

Solutions identified included:

- Form a steering committee or coalition of air quality partners to lead the effort and keep it on track.
- Develop programs and initiatives to encourage the business community, including small businesses, to become invested and involved beyond regulatory requirements.
- Use and build upon existing partnerships. While a number of successes and actions to improve air quality are taking place in the Valley, a more consolidated and visible effort must be undertaken to use and expand these efforts.

**Education & Outreach** Education and outreach emerged as a critical element of any concerted effort to protect air quality. Public awareness is essential to gain support for and implement new air quality protection strategies and to respond quickly to unhealthy air quality episodes.

Ideas for improving education and outreach included:

- Focus on educating children through the schools (K – 12) in an effort to inform and influence necessary lifestyle changes and choices early.
- Enhance outreach to major air quality stakeholder groups including Chambers of Commerce, service groups, citizens, and the small business community.
- Identify readily available information and fill existing data gaps to allow for “real-time” information sharing and reporting.
- Develop a clearinghouse of readily available information.

- Coordinate outreach activities among agencies, citizens, media, the business community, and other stakeholders.
- Assist the media to ensure that air quality information is thorough, accurate, and readily available. Partner with the media in engaging the public during critical air quality episodes.

**Research and Technology Transfer** The need for more extensive research, sound science, and technology transfer was explored in most of the sessions. Efforts to expand our knowledge of air pollution in the Treasure Valley and its impacts on health, environment and the business community depend on funding and research commitments from higher education institutions, trade and industry associations, and federal installations or facilities such as INEEL. More monitoring, better modeling, and additional study in the areas of alternative fuel sources, renewable energy, and air quality monitoring and modeling are needed, as well as an improved use of technology in solving air quality issues.

In addition to scientific and technological research, participants called for research into other mechanisms to protect air quality such as regulations, fiscal incentives and infrastructure development to encourage the use of technological solutions. Suggestions focused on developing pollution trading programs between mobile and industrial sources, researching funding sources, and exploring regulatory and tax incentives. Such programs can produce an economic climate that encourages better use of available technology and quicker infusion of new technologies. Participants also expressed a potential need to examine existing policies and programs and to develop new programs designed to better protect air quality in the Valley.

**Lead by Example** Government, the business community, and other Treasure Valley groups can be important catalysts in the effort to improve air quality by taking the lead in their everyday operations. Government agencies employ many people and have access to unique resources. Better utilization of existing resources, coupled with innovative approaches to managing those resources, could produce immediate and substantive results.

Suggestions included exploring and reducing the emissions impact of large vehicle fleets managed by state or local governments by such means as reducing the size of the fleets, changing the types of vehicles purchased, and encouraging reduced employee use of these vehicles within the Valley. A substantive change that could be implemented in a short period of time would be to revise existing policies to encourage procurement of ultra-low emission and fuel-efficient vehicles and use of alternate fuels (biodiesel, ethanol, compressed natural gas, hydrogen, etc.). Such a challenge, if responded to by state and local governments within the Valley, could serve as a meaningful demonstration of commitment to individuals and the business community that “government is serious” about doing its part to improve air quality in the Valley.

Additional suggestions focused on the need to re-examine mass transit opportunities, modify existing fixed mass transit options, and inject air quality considerations into a number of public and private sector projects (e.g., transportation projects, siting of development or industrial projects, new developments, employee programs, etc.) Government, with its partners in the

Treasure Valley, can impact these decisions by considering air quality in its planning processes, contracts, policies, and laws.

## **The Challenge and Future**

Discussion during the *Practical Paths to Clean Air – the Governor’s Conference on Air Quality in the Treasure Valley* was both stimulating and engaging. It benefited from practical and thoughtful insight from a wide representation of community leaders and concerned citizens. The consensus recommendation was to chart a path forward to protect air quality in the Treasure Valley. The vision was inspired by Governor Kempthorne’s call to action as he kicked off the two-day event.

Strategies must be developed for both the short and long-term. Actions by both coalitions of stakeholders and individuals are needed.

In summary, *Practical Paths to Clean Air* means:

- A regional vision and commitment for protecting air quality
- Participation by all
- Partnerships
- Education and outreach
- Lead by example
- Practical Path – Sensible Solutions
- Results

For more information, to view the conference agenda, conference presentations, and a list of sponsoring organizations, visit [www.getf.org/pp2ca](http://www.getf.org/pp2ca).