



P2 NORTHWEST

YOUR QUARTERLY SOURCE FOR UNBIASED POLLUTION PREVENTION NEWS AND INFORMATION

WINTER 2005

The Future of P2, Part One

2005 is a big year for PPRC—it’s our 15th birthday! It has also been that long since the P2 movement started in earnest. What better time is there to take a long look back and plan for the future? This newsletter marks the first in a two-part series looking at how national and Northwest pollution prevention leaders view the future of P2. The author of this edition’s feature article, Dr. Kenneth Geiser, is an internationally recognized expert on environmental law and policy, pollution prevention and sustainable development, and has been involved with P2 from the start. We’ve started out with this somewhat controversial piece to get you thinking, hopefully rile you up a little bit so you can write us and tell us what **you** think about “The Future of P2”! Keep reading!



From Pollution Prevention to Sustainable Production and Consumption

by Dr. Kenneth Geiser, Lowell Center for Sustainable Production

Pollution prevention today, is not what pollution prevention was in 1990. We, the founding group of

mostly state level professionals, struggled long in defining and defending pollution prevention; it was to be a force of change, not simply a means of accommodation. The concept of pollution prevention was new and underdeveloped, but we saw it as a “paradigm shift”. This was not simply an adjustment on the conventional practices of pollution control; this was a totally new approach. We had an opposition: a large and well funded chemical industry, a successful pollution control technology industry, and federal and state agency officials tied by statute to media specific regulations. For years we struggled to protect the distinctiveness of the definition from erosion and encroachment. We fought state by state to get legislation passed and technical assistance programs established. We strove through regulations, technical assistance, awards and training to convince industries of the value of adopting the perspective. We fought for a federal statute

that enshrined the concept, although it did little to mandate it. And we fought for funding from state and federal sources. Those were exciting years. There was energy, debate and struggle.

Today, we can look back at that history with pride and admiration. Pollution prevention has been about the taming of industrial production. We have sought to reinterpret industrial production; to change it from a force of aggression to one of balance and compatibility. There is substantial evidence of success. Hundreds of professionals provide pollution prevention services. Thousands of firms have adopted pollution prevention practices. Many state and federal agencies have adopted the language and concepts of pollution prevention. There are professional journals and academic courses on pollution prevention. Students learn the techniques of pollution prevention as they learn about chemical engineering and process management.

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What's New at PPRC?

Profitability in the 21st Century

PPRC is proud to host an EPA-sponsored conference titled "Profitability in the 21st Century: Using Environmental Programs to Increase Your Bottom Line" on March 16-17, 2005 in Portland, Oregon. This invitation-only meeting is a valuable opportunity for targeted businesses to receive training, tools and strategies to identify money-saving opportunities at industrial facilities. Speakers include EPA Regional Directors Mike Bussell and Rick Albright, and P2 expert Robert Pojasek. The Oregon Department of Environmental Quality will also host a free training specifically for technical assistance providers on March 15, 2005. For more information on this training, turn to page 8.

Northwest Paper Forum

Interested in increasing the market availability and lowering the price of environmentally preferable (EP) copier paper in the region? If you are a public sector purchaser or end-user of copier paper, or are involved with the supply of EP paper, join us at the Paper Forum on March 3-4, 2005 to discuss how best to stimulate the market for high-quality post-consumer, processed chlorine-free copier paper in the Northwest. Building on the understanding of key market conditions and leverage points, participants will develop a road map of specific actions that public sector organizations and vendors can take to flip the market from traditional copier papers to EP copier papers. For more information, contact Crispin Stutzman at cstutzman@pprc.org or (206) 352-2050.

MARK YOUR CALENDARS!

Don't forget to make your travel arrangements for the upcoming Northwest P2 Regional Roundtable on June 1-2, 2005, in beautiful Victoria, BC! PPRC and the Canadian P2 Roundtable are joining forces this year to make this a vibrant event. This is your annual opportunity to network with your peers, discuss current P2 topics such as small business P2, energy efficiency, green chemistry and more! For more information, check out www.pprc.org/networking/rrt.cfm

Spray Paint Efficiency

Ken Grimm, PPRC's Industry Outreach Lead, will attend Iowa Waste Reduction Center's Train-the-Trainer course and be a regional training resource for the Spray Technique Analysis and Research (STAR®) program. The STAR® program is dedicated to improving the overall efficiency of manual spray coating operations by enhancing the techniques of spray technicians around the country. PPRC will provide three training sessions in coordination with state and/or local P2 programs. These training sessions will be for TAPs and businesses. If your business or government technical assistance program wants to have this educational opportunity provided to you, then contact Ken Grimm at (206) 352-2050 or kgrimm@pprc.org.

Next Generation P2 Planning

PPRC will research state environmental excellence programs, sustainability management systems, state and federal performance partnerships, manufacturing excellence award programs and other business efficiency initiatives to develop or make recommendations to the Washington State Department of Ecology for the next generation of P2 planning. This research will focus primarily on cataloging the successful attributes of each program in order to determine what elements should go into a planning system for environmental and economic success. In order to impact all the Northwest P2 programs with this effort, PPRC will also scope out the feasibility of creating a Northwest manufacturing performance excellence program that would be modeled after the recommendations made to Ecology. For more information, contact Chris Wiley at cwiley@pprc.org or (206) 352-2050.

New Year, New Look

PPRC turns 15 this year! Just like any other adolescent, we decided to change our look. We modernized our logo, and revamped our website and newsletter. Got an opinion about it? Then let us know what you think! Feel free to sound off to Christine Guiao at cguiao@pprc.org or (206) 352-2050.

The Future of P2 (continued...)

As pollution prevention became more accepted other concepts arose. Materials and energy efficiency and the management of environmental factors have altered and expanded the purview of pollution prevention. Pumped and expanded, the concept of pollution prevention has strained, but held its own. However, the challenges now emerging threaten to blow apart or blow by the concept.

Drivers for Change

Of these challenges four are worth considering here: the transition from processes to products, the role of international drivers, the transition from regulatory push to market pull, and the re-conceptualization of the corporation.

The transition from processes to products. Pollution prevention was born in a waste worried world. Waste dumps, waste liability and waste management created a context for doing something “upstream.” However, twenty years of history has changed the context of production. First, industrial production is less wasteful. Pollution is down and chemicals are better managed. Second, there is much less industrial production. The long term “off-shoring” of production means that, today, most products Americans consume are made somewhere else. The primacy of production as a source of waste and pollution

is rapidly being substituted by consumption. Increasingly, it is the products of commerce that swell our waste streams and it is their persistent, bioactive and hazardous constituents that create our most intimate exposures and health risks.

Product management has become big business. Product stewardship means that firms claim some responsibility for their products once their customers are finished with them. Xerox for years took back photocopiers to reclaim useable parts. Interface and Shaw Carpets are working to reintegrate used carpet into their new carpet production. California and Sherwin Williams are piloting programs to take back unused paint.

The role of international drivers. Not so long ago, United States environmental law and science were the standard for the world. The early promoters of pollution prevention worried little about foreign markets and international laws. National statutes on clean air and water and solid and hazardous waste management provided an ample context for motivating an attack on waste and pollution. However, two decades of Congressional stalling, presidential rollbacks and agency deregulation have left their mark on the culture of compliance. Even more noteworthy has been globalization of the domestic market: successful U.S. firms, today, manufacture products for the world market.

When European or Asian governments move to phase out a chemical or restrict the sales of a product, American firms must take notice. While it is still possible for some producers to design one product for the American market and another, more restricted product, for a foreign market, the practice is disappearing. The European directives on electronics and automobile take back and chemicals in cosmetics are already shaping those markets while the proposed REACH initiative will likely phase out a substantial number of chemicals. Recently, it has been European directives that has promoted reconsideration of flame retardants in plastics and lead and mercury in electronics.

The transition from regulatory push to market pull. While it was comforting to claim that pollution prevention was voluntary and did not require legal regulations, this was only partially true. It was often tightening regulations that motivated firms to reduce

The Future of P2: Tell Us What YOU Think!

In order to make this series as robust and thought-provoking as possible, we want to hear your thoughts about where you see the P2 movement going. Do you think that P2 needs to somehow be incorporated into the sustainability movement in order to stay relevant? Or do you think it can stand on its own merits? What do you think of Dr. Geiser’s proposed name change? Tell us exactly what you think of the provocative ideas expressed in this issue and we will publish your ideas in the next newsletter. Christine Guiao truly awaits your insights at cguiao@pprc.org or (206) 352-2050.

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pollution. Indeed, it was regulations on the treatment and disposal of solid and hazardous wastes that drove up the cost of disposal options and made investments in pollution prevention appear economical.

Today, the federal government has little appetite for tightening regulations. In a political atmosphere where companies are courted and wooed, most state governments are also reluctant to increase regulatory controls for fear of losing businesses. However, the market itself has become a driver. Increased consumer awareness of the health and environmental aspects of products is raising corporate interests. Organic food is now common in many cosmopolitan super markets. Small “eco-friendly” product retail shops have opened across the country. Kaiser Permanente, California’s largest health care provider, is phasing out several of the most concerning materials in its hospital construction. The U.S. Green Building Council has developed green building criteria that are rapidly becoming a standard for modern construction.

Product labeling has become more robust. The cancer and reproductive hazard warnings on products in California are now well recognized and the Environmental Protection Agency’s “Energy Star” label is proudly displayed on many electronic products. Retail products bear a multitude of private labels and descriptors intended to attract environmentally conscious shoppers.

Environmentally preferred purchasing programs are also making their mark. Only a few years ago trade associations were threatening litigation against government sponsored “green purchasing” program. Today many leading states have “green lists” to guide contract purchasing and hundreds of municipalities and school districts maintain local programs.

The re-conceptualization of the corporation. What began as simple company programs such as 3M’s “3-P Program,” has steadily swelled over the years into a rising tide of corporate environmental responsibility. Corporations, once safely satisfied with regulatory compliance, have progressively moved from green marketing to embracing environmental performance as a competitive advantage. No longer comforted by mantras such as “profit is our bottom line,” new, progressive business leaders have grasped the economic significance of the environment.

Less Need for P2

Our world is changing. What once created the need for pollution prevention is eroding and diffusing. Pollution prevention has provided a valuable umbrella for years of dedicated work and proud achievements. However, times have changed. Today, pollution prevention is an accepted form of practice. The movement has produced substantial successes, but its role as a force for change is waning. Today many firms do pollution prevention by convention, not on the scale we would like and not all firms participate, but much of the “low hanging fruit” has been picked and we do not need a broad-based movement to proselytize about reduction at source. The term pollution prevention feels too conventional, too limited and too...well, old.

During the past several years there is growing evidence of movement senescence. There is less literature about pollution prevention. Industry offers fewer case studies and examples. The states have cut back on their pollution prevention offices and budgets. Membership in the National Pollution Prevention Roundtable is declining. Attendance by pollution prevention staff at meetings of the National Pollution Prevention Roundtable is decreasing. (The 2004 conference was well attended and successful, but that was because it was combined with compliance assistance professionals.)

As we look around, we can see the emergence of a diverse set of new initiatives. Today, leading firms are practicing eco-efficiency, lean production, clean production, industrial ecology or sustainability. Pollution prevention may play a part, but, as a term, it is no longer comprehensive enough to describe the cutting edge of environmental industrial development. Some of the most innovative firms such as Interface, Herman Miller, Ikea, Volvo, and Electrolux are being driven by the big term, sustainable development. Firms are adopting sustainable development goals and experimenting with measures of sustainability. In 2002, 75 percent of companies responding to a Price Waterhouse Cooper survey reported that they had begun to adopt sustainable business practices. Hundreds of local governments and community-based organizations across the country are piloting local sustainable development programs. New organizations have appeared to promote sustainability in everything from agriculture to consumption.

From P2 to Sustainability

In these new initiatives there is plenty of energy and struggle. “What is sustainability?” “How do you define sustainable development?” “How do you measure it?” “What is not sustainable?” Pollution prevention is not central to any of this discussion. There are workshops and workgroups on sustainability within pollution prevention conferences. But, this is more accommodating than fully embracing the concept of sustainable development.

However, I believe that the big vision of sustainability could be a central engine for development and growth for those of us who have championed pollution prevention. The term sustainable development is probably too big and ambiguous. It means too many things to be encompassed and it is too distant from the strengths and experiences of those who promote pollution prevention in their daily practice. There is a risk in being too ambiguous. What we need is a conceptual organizing focus and a term that aptly captures what technicians of environmentally sound enterprises and governments can and should do within the larger field of sustainable development.

The approach and the term that I would suggest is “sustainable production and consumption.” The European Roundtable on Cleaner Production (in many ways, a parallel organization to the National Pollution Prevention Roundtable) has re-named itself the European Roundtable on Sustainable Production and Consumption. The term addresses the concept of sustainability, but stays rooted in the industrial and productive enterprise that the Roundtable participants know and are well experienced in. The term suggests more than pollution prevention, but less than a sustainable society or a sustainable economy. It maintains a sense of our special technical capacity but marries it to a larger vision for industry and commerce. Finally, it links directly to international movements, yet retains a special sense of our site specific focus.

I respect the arguments against change. Pollution prevention is a well respected term. It is comfortably legitimated in state and national statutes. We need not abandon our pollution prevention work. Indeed, there is plenty of conventional industrial pollution that still needs attention. However, we should look more broadly at what we are doing today. Much of our work at the federal, state and local levels goes well beyond the traditional definition

of pollution prevention. Many of the organizations we work with today promote environmentally enlightened management, product design and management, renewable energy sources, green chemistry, green buildings, extended producer responsibility, smart growth strategies, and sustainable cities.

I believe that the handwriting is on the wall. The pollution prevention movement needs to act and act soon or increasingly risk irrelevancy. We can ignore the historical trends and carry on our conventional practice, or we can learn from our own history and continue to change to meet the needs of an evolving history. It is time for the pollution prevention movement to re-conceive itself once again as an advocate for the cutting edge of industrial environmental activism.

Dr. Geiser is the director of the Toxics Use Reduction Institute in Lowell, Massachusetts. His most recent book, “Materials Matter”, looks at the history of America’s industrial materials and the environmental aftermath. For more information, check out www.sustainableproduction.org.

For Further Reading



Although published in 1997, the following chapter from EPA’s report *Pollution Prevention 1997: A National Progress Report* provides insight on the future of P2 from industry leaders and former EPA employees involved early on in the process. Contributors include retired 3M Vice President Joseph T. Ling and INFORM Inc. President Joanna Underwood.

The Future of Pollution Prevention:

<http://www.epa.gov/p2/pubs/chap8.pdf>

The Washington Department of Ecology recently issued its progressive Beyond Waste plan. Included in this document are helpful background papers that include a rich analysis of Washington and Northwest industry trends; and a look into current hazardous waste issues.

Moving Toward Beyond Waste with Industries:

<http://www.ecy.wa.gov/pubs/0407025.pdf>

Current Hazardous Waste Issues:

<http://www.ecy.wa.gov/pubs/0407030.pdf>

Good News in the Northwest

Green Manure Potato Expo Held in Idaho

On July 20, 2004 a Green Manure Potato Expo was held on the Fort Hall Reservation in Idaho targeted at area potato growers. Green manuring involves the tilling of fresh plant material into the soil to improve the soil and thus crop growth. Studies indicate that in addition to reducing the use of toxic pesticides (like metam sodium), the practice can save money, improve soil health, improve water filtration, reduce weeds, and prevent wind erosion.

The Expo included information on the results of the Fort Hall green manure demonstration project. Growers and others attending the expo heard from researchers about how to grow green manure and what results to expect. They also heard presentations from the Tribes and a number of potato growers on their experience in using green



manure. This project marks the beginning of a body of research into green manures, particularly into the optimization of green manure production methods to minimize additional fertilizer and water inputs.

The Expo and demonstration project were initiated by Shoshone-Bannock tribal leaders to address tribal members' concerns with the impacts of potato farming on the environment and human health. Tribal members understand the dangerous effects of water contamination from pesticides and nitrates.

Support for the Expo/workshop was provided by the Northeast Coalition for Alternatives to Pesticides, Idaho GEMStars and a number of other organizations.

For more information on this ongoing project, you can contact Jennifer Miller from the Northwest Coalition for Alternatives to Pesticides at (208) 850-6504.

PPRC's 2004 Carbon Emissions Part 1, The Totals...

Here at PPRC, our staff commutes to work, we turn on our lights and computers, and occasionally we travel on PPRC business. All these activities contribute to global warming, and we wanted to find out how much carbon dioxide (CO₂) we emit to do business.

We gathered relevant data for 2004 and used a workbook and set of spreadsheets developed by WRI: "Working 9 to 5 on Climate Change: An Office Guide" (www.safeclimate.net/business/measuring/) to crunch our numbers.

Drumroll, please... We found that PPRC emits a total **29.08** metric tons of carbon emissions, including our commuting (by car and public bus), the emissions from the electricity we use, and our business travel.* We also looked at how much we avoided by encouraging telecommuting and found

that we avoided 2.61 metric tons of CO₂ – nearly 9% of our total emissions – through PPRC's telecommuting policy.

Since this is our first analysis, we don't have a sense of how we compare to similar organizations. But we think there are some good opportunities to try to reduce our footprint for 2005. In our next issue we'll provide another update of our climate thoughts, including:

- * a breakdown on where we emit the most emissions;
- * how our office could "offset" our emissions, and what it would cost; and
- * opportunities to reduce our emissions.

For more information, and discussion of the nuts and bolts of our calculation, contact Crispin Stutzman at 206-352-2050 or cstutzman@pprc.org.

* One staff person commutes regularly by ferry, and PPRC wasn't able to find conversion data for this mode of travel. However, given the small number of miles, and high ridership on ferries, we would expect the carbon impact from this to be quite small.

News Digest

Washington's "Beyond Waste" Final Plan Released

After much collaboration with interested parties, the Washington State Department of Ecology has issued the Beyond Waste Plan. This plan, along with related background papers, comprises the state Hazardous Waste Plan and the state Solid Waste Plan. The goals of implementing the plan will be: to influence significant reduction of wastes and toxic substances used, to shift toward a system where resources are used more efficiently, and excess materials are reused as resources; to support efforts in Washington state to make sure businesses' needs are met, while protecting the environment; and to incorporate sustainability principles into waste-related decisions. For more information, go to:

www.ecy.wa.gov/beyondwaste/finalplan.html.

EPA Removes Chemicals from Lists of Regulated Pollutants

The U.S. Environmental Protection Agency (EPA) has finalized several actions that will create incentives for industry to use solvents that are less toxic and may help decrease the formation of ground-level ozone or smog. Each of these actions is based on extensive scientific and technical review over a period of years. These reviews concluded that the chemicals pose less risk than previously thought and that reclassifying them would not compromise public health, and may even benefit public health if they are substituted for more toxic or environmentally damaging chemicals.

Under the authority of the Clean Air Act, EPA has delisted or exempted six chemicals: the solvent ethylene glycol mono-butyl ether (EGBE) has been removed from the list of air toxics (also known as hazardous air pollutants) and the chemical t-butyl acetate (TBAC) and four others exempted from control as volatile organic compounds (VOCs). EPA last delisted an air toxic (caprolactam) in 1996. (Note: The air toxic BEGBE being delisted remains regulated as a VOC and therefore will continue to be reported in the Toxics Release Inventory.) For more information, go to <http://releases.usnewswire.com/GetRelease.asp?id=39944>.

California Retailers Tack On Computer Recycling Fees

California retailers began collecting an advanced recycling fee on computer monitors and televisions Jan. 1, 2005, according to the California Integrated Waste Management Board. The fee will support the state's electronics recycling program, which requires any entity selling TVs, computer monitors or laptop computers in the state to collect a \$6 to \$10 fee. The payments will fund a system to collect and recycle end-of-life electronics throughout the state.

Allstate Connects Safety, P2 and Quality

Allstate, the nation's second largest auto insurer, is asking the more than 3,200 auto body repair facilities across the country that participate in its direct repair program to complete an auto body specific environmental and safety-training program. The non-profit Coordinator Committee for Automotive Repair's Safety and Pollution Prevention (S/P2) training is an online training program that focuses on safety and environmental issues specific to the repair industry, including proper material handling and disposal. According to Allstate, new environmental standards strengthen the power of its referral program for those customers that request help in choosing a repair facility.

Database of North American Sustainable Consumption Activities Launched

The Commission for Environmental Cooperation launched a new online database cataloguing information about sustainable consumption and production initiatives in North America. Website visitors will learn about sustainable consumption projects that they can support, join or replicate in their own community.

Approximately 200 initiatives and programs are listed in the searchable database, covering such issues as pollution prevention, consumer products, procurement, poverty, tourism, trade, transport, and waste. The database is an initiative of the North American Sustainable Consumption Alliance, a strategic partnership of people and organizations working to promote more sustainable consumption patterns in Mexico, Canada and the United States. Check out: <http://nasca.icspac.net/db/>

Upcoming Events and Seminars

Conference on Sustainability in the Inland Northwest

This conference, to be held March 2-3, 2005 in Boise, ID, will feature practical innovative solutions to achieve thriving communities, a strong economy and a healthy environment. This conference will feature stories from farmers, ranchers, business people, scientists, nonprofit organizations, professors, architects, energy professionals, community leaders and others. Network with peers and take home practical ideas that you can put into practice. For more information, check out: www.sustainableidaho.org

Pollution Prevention Through Process Mapping

The Oregon Department of Environmental Quality (DEQ) is hosting a one-day workshop for state agencies on March 16, 2005 in Portland, Oregon. Dr Robert Pojasek, a well-known speaker in the P2 field, will provide agency inspectors and technical assistance providers with tools that can help businesses and organizations identify and reduce pollution at its source through an improved process mapping approach. Other sponsors include Idaho DEQ, PPRC, Washington Department of Ecology, and the US Environmental Protection Agency. If you would like

more information about the workshop or want to register, please contact David Livengood with Oregon DEQ at (503) 229-5181 or by email at livengood.david@deq.state.or.us.

Systems Thinking for High Performance Organizations

To be held on April 22, 2005 in Eugene, Oregon, this seminar will focus on the theory and practice of how to use systems thinking to understand and resolve sustainability problems in private and public organizations and community settings. The adoption of sustainable production systems and organizational designs requires a basic understanding and skills in systems thinking. We live in a world of events. Without a sound understanding of the underlying causes of these events, each creates another event and an endless stream of cause-and-effect relationships unfolds. However, if we understand the systems that shape our organizations and communities, it becomes possible to see what creates the events and crisis we observe. This awareness allows us to change the source of the problem rather than just dealing with symptoms. This is the focus of systems thinking. For more information, check out <http://sustain.uoregon.edu>.



Practical solutions for environmental and economic vitality

PPRC, a non-profit organization, is the Northwest's leading source of high quality, unbiased environmental solutions information. Through a collaborative approach, we focus on solutions that integrate resource efficiency and environmental health into business, government and communities.

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