

G2P2C

GOLDEN GATE POLLUTION PREVENTION COMMITTEE

TO: Golden Gate Pollution Prevention Committee Members

FROM: Stan Archacki, Chair
East Bay Municipal Utility District, Source Control Division
510-287-0333
Susan Blachman, Co-Chair
EFC Region 9

SUBJECT: G2P2C MEETING MINUTES

DATE: Tuesday, May 17, 2005

PLACE: Alameda County Computer Resource Center (ACCRC)
1501 Eastshore Highway
Berkeley, CA 94710
510-528-4052

MINUTES

In attendance: Stan Archacki, Susan Blachman, Rob Ludwig, Virginia St. Jean, Marlena Dufresne, Mike Wall, Christy Blackman, and Ilana Gauss.

- Tour of ACCRC

The Alameda County Computer Resource Center, www.ACCRC.org, has been in existence for 11 years; they accept used electronics. They try as much as possible to encourage reuse, donating computers to schools and non-profits all over the world. They have facilities and contacts in Berkeley, Marin County, Mexico and Germany and are planning to expand to Canada and Venezuela. They recycle everything that comes in their doors. 10% of the donated computers are refurbished and are donated for reuse. Half their tonnage consists of old TVs. TV CRTs will be obsolete as they are being replaced by HDTV.

When Microsoft comes out with new software, ACCRC gets lots of computers because the new software often won't run on the old computers. They use open source software on the computers—Lynxx, Open Office Suite & Mozilla on the computers they distribute.

ACCRC likes developing innovative technology. They are hoping to set up a digital animation studio using donated machines and freeware. They have a community internet lab and provide training. They have the capability of extracting petroleum from plastics, but get lots of grief about this from environmental groups which calls this process incineration. They have a diesel generator that runs on used vegetable oil and in the event of an emergency could run the facility. Another project they are pushing is converting muscle cars to run on propane (a kind of green “pimp my ride” project).

They are a totally self-funded non-profit. They make money from selling scrap. They do not resell the computers they refurbish. Only 3% of their budget comes from grants.

We learned that SB20 provides stronger incentives for recycling than reuse—the state pays certified electronics recycler \$25 for each destroyed CRT as opposed to \$5 for reused TVs (even if the electronics are reuseable). So ACCRC loses money promoting reuse. The state will end up with lots of leaded glass and no one knows how it will be used (besides being used for making vases).

The Agenda was approved; the minutes from the previous meeting were not since they were not distributed.

Literature and Information Exchange

Susan Blachman, EFC9

EFC9 is working on a project promoting placement of environmental products and behavior in television shows. Any contacts readers of this may have in the television industry would be appreciated. Please send them to susan.blachman@csueastbay.edu The EFC9 website will be moving. The new URL will be: www.etc9.csueastbay.edu

Robert Ludwig DTSC/OPPTD, rludwig@dtsc.ca.gov or 916-324-2659

National Pollution Prevention Week 2005 (NP2W 05): NP2W 05 will be September 19-25 and the theme is “Capture the Spirit!” The poster will be available in late June and also available in a jpg format on DTSC's web page www.dtsc.ca.gov/PollutionPrevention/index.html). Updated NP2W 05 materials will be available on the web page in May.

Western Regional Pollution Prevention Network (WRPPN) www.wrppn.org:

WRPPN 2005 Conference: The 2005 WRPPN Conference will be held from September 28-30 at the Granlibakken Facility in Tahoe City. Training and session topics were selected at the WRPPN Advisory Board meeting on March 10th in San Diego. The session and training general headings are as follows:

Technical Sessions

- * Air & Transportation (Diesel)
- * Plastic
- * Nanotechnology
- * Tribal P2
- * P2 Ed
- * Collaborative Partnership
- * REACH (Registration, Evaluation, Authorization of Chemicals – European Commission)
- * Ag and Air
- * Green Building
- * Restaurants. FOG
- * Health Drivers
- * Alt to VOCS
- * Emerging Pollutants
- * Public Sector Sustainability
- * Border P2
- * Hospitality & Casinos
- * Management Systems
- * Dental P2

Training

- * Measurement of P2 methods for businesses managers and inspectors
- * Life Cycle Assessment (LCA)
- * P2 Basics
- * Energy Efficiency (E2)
- * BMPs for Stormwater Inspectors
- * EMS

WRPPN Rapid Response Reminder: Don't forget WRPPN's "Rapid Response" service found on the WRPPN home page to provide a timely response with the answers you need. If you have any questions about the service, contact Ed Gonzalez at raulg@unr.edu or (775) 689-6675.

WRPPN Updates

Smart Communities Network <http://www.sustainable.doe.gov/> _Smart Communities Network - This network offers information and services on how a community can adopt sustainable development as a strategy for well-being. On this website, you'll be able to: 1) Read about other communities that have discovered the benefits of sustainable development; 2) Locate technical and financial resources that can help your community plan and carry out sustainable development projects; and 3) Access model codes and ordinances other communities have used to implement sustainable development.

NIST's BEES Model (version 3.0) <http://www.bfrl.nist.gov/oae/software/bees.html> _NIST's BEES Model (version 3.0) - The BEES (Building for Environmental and Economic Sustain-ability) software brings to your fingertips a powerful technique for selecting cost-effective, environmentally-preferable building products. Developed by the NIST (National Institute of Standards and Technology) Building and Fire Research Laboratory with support from the U.S. EPA Environmentally Preferable Purchasing Program, the tool is based on consensus standards and designed to be practical, flexible, and transparent. Version 3.0 of the Windows-based decision support software, aimed at designers, builders, and product manufacturers, includes actual environmental and economic performance data for nearly 200 building products.

DOE High Performance Building Database

<http://www.eere.energy.gov/buildings/highperformance/> The High Performance Buildings Database is research sponsored by the U.S. Dept. of Energy that seeks to improve building performance measuring methods by collecting data on various factors that affect a building's performance, such as energy, materials, and land use. The database collects information from buildings around the world, ranging from homes and commercial interiors to large buildings and even whole campuses and neighborhoods. These may be certified green projects, or simply projects that have one or more notable environmental features.

Construction and Demolition Debris <http://www.epa.gov/epaoswer/non-hw/debris/reduce.htm>

Reducing the amount of C&D debris disposed of in landfills or combustion facilities provides numerous benefits. Less waste can lead to fewer disposal facilities, potentially reducing associated environmental issues including methane gas emissions, which contribute to global climate change. Reducing, reusing, and recycling C&D debris offsets the need to extract and consume virgin resources. In addition, generators of C&D debris benefit by not having to pay tipping fees for disposal. In addition, the U.S. General Services Administration and the National Institute of Standards and Technology created a searchable database of C&D debris recycling firms nationwide, <http://cwm.gsa.gov>.

Whole Building Design Guide <http://www.wbdg.org/> Whole Building Design Guide - The guide provides an Internet resource to a wide range of building-related design guidance, criteria, and technology, including sustainable energy design. The guide is a public/private-sector collaboration

and is maintained by the National Institute of Building Sciences with support from GSA, DOE, the Navy and other public and private agencies.

GSA's Sustainable Design Website

http://www.gsa.gov/Portal/gsa/ep/contentView.do?P=PXE&contentId=8154&contentType=GSA_OV **ERVIEW** GSA's Sustainable Design Website - GSA, the Federal government's landlord, is committed to incorporating principles of sustainable design and energy efficiency into all of its building projects. It is GSA's intent that sustainable design will be integrated as seamlessly as possible into the existing design and construction process. GSA's Sustainable Design webpage includes guidance, standards, and solicitations geared toward attaining an optimal balance of cost, environmental, societal and human benefits while meeting the mission and function of the intended facility.

Three Strategies to Overcome the Limitations of Life-Cycle Assessment

http://mitpress.mit.edu/journals/pdf/jiec_8_3_19_0.pdf Many research efforts aim at an extension of life-cycle assessment (LCA) in order to increase its spatial or temporal detail or to enlarge its scope. This is an important contribution to industrial ecology as a scientific discipline, but from the application viewpoint other options are available to obtain more detailed information, or to obtain information over a broader range of impacts in a life-cycle perspective. This article discusses three different strategies to reach these aims: (1) extension of LCA—one consistent model; (2) use of a toolbox—separate models used in combination; and (3) hybrid analysis—combination of models with data flows between them.

Improving Environmental Performance Assessment

http://mitpress.mit.edu/journals/pdf/jiec_8_1-2_143_0.pdf Managers, management scholars, regulators, nonprofit organizations, and the media are increasingly using emissions inventory data to measure organizations' environmental performance. Whereas some analysts use total mass emitted, others have applied one or more of the growing number of toxicity weighting databases aimed at predicting the environmental and health impacts of emissions. Little research is available to guide analysts in selecting among these databases. This article compares 13 methods in terms of their sophistication, complexity, and comprehensiveness. Seven of these methods are then evaluated as to their usefulness in weighting emissions data from the U.S. Environmental Protection Agency's (U.S. EPA's) toxic release inventory, and three pair-wise comparisons are conducted. We recommend the U.S. EPA's Risk Screening Environmental Indicators for estimating impacts to human health. We recommend the Tool for the Reduction and Assessment of Chemical Impacts (http://www.epa.gov/ORD/NRMRL/std/sab/iam_traci.htm) for estimating impacts to human health and the environment.

LCA 101 - Introduction To LCA

http://www.epa.gov/ORD/NRMRL/lcaccess/LCA101_printable.pdf

<http://www.epa.gov/ORD/NRMRL/lcaccess/lca101.htm> The following document provides an introductory overview of Life Cycle Assessment (LCA). The uses of and major components of LCA are discussed. This document is designed to be an educational tool for someone who wants to learn

the basics of LCA, how to conduct an LCA, or how to manage someone conducting an LCA. Companies, federal facilities, industry organizations, or academia can benefit from learning how to incorporate environmental performance into their decision-making processes.

Life-Cycle Inventory Database <http://www.nrel.gov/lci/> NREL, along with the Athena Sustainable Materials Institute (<http://www.athenasmi.ca/>), is leading an effort to develop a publicly available U.S. life-cycle inventory (LCI) database to track the environmental impact of commonly used materials, products, and processes. The project objective is to provide a central source for critically reviewed LCI data that is developed in accordance with a common research protocol, is consistent with international standards, and is maintained by a credible agency.

Federal Government P2 Links

Joint Service Pollution Prevention (P2) Library: <http://p2library.nfesc.navy.mil/>

The primary purpose of the Joint Service P2 Library is to provide a source of information sharing throughout the Department of Defense (DoD) so that duplication of effort is minimized and funding is used as effectively and efficiently as possible. The EMS Library is designed as a clearinghouse for Joint Service EMS resources. As a resource that specifically addresses EMS issues and fosters information sharing, success stories, and lessons learned, the EMS Library enables Joint Service personnel to access pertinent and timely information in a rapidly emerging field that will continue to change and evolve.

As one of the Navy's leading environmental centers, their environmental mission is to offer their customers aggressive and professional assistance in complying with environmental regulations. Their objective is simple--they want to help you solve your environmental cleanup, compliance, and pollution prevention problems. The Library includes:

- * P2 Opportunity Topics
- * Sustainability Issues
- * Emerging Environmental Issues
- * General P2 Resources
- * Featured Resource of the Week
- * Specific P2 Resources
- * Shared Success Stories

Federal Network for Sustainability <http://www.federalsustainability.org>

The Federal Network for Sustainability (FNS) is a voluntary, collaborative network of Federal agencies in the Western United States focused on fostering and furthering the concept of sustainability within the government through our individual programs and group initiatives.

The Federal Network for Sustainability promotes cost-effective, energy- and resource-efficient operations across all branches of government. Through individual initiatives and joint ventures, they shall strive to better our understanding of the interrelationship between energy use, economics, and environmental impact. They are mindful of their heirs and successors, who will rely on their responsible stewardship today. By leadership and example, they intend to educate and guide others in reducing Federal expenditures, while simultaneously advancing the principles of sustainability throughout the public and the private sectors.

FedCenter.gov <http://www.fedcenter.gov/> is the Federal government's home for comprehensive environmental stewardship and compliance assistance information.

New Documents from DHS Hazard Evaluation System & Information Service (HESIS)

Three new publications are now available from HESIS: a brochure entitled "Injury, Illness, & Pollution Prevention In Auto Repair", a fact sheet "Aerosol Cleaner Use in Auto Repair", and a Health Hazard Alert "1-Bromopropane (n-Propyl Bromide)." The brochure identifies auto repair hazards and how workers, their families, and the communities around auto repair shops may be exposed. Risks and a plan on how to protect against common health hazards and prevent injuries from common safety hazards are identified in easy to understand language. The fact sheet is on aerosol cleaners provides information on exposure symptoms, a guide on identifying hazardous solvents used in cleaners, and ways to reduce exposure to these cleaners by the use of safety equipment and alternative products. The Health Hazard Alert discusses how 1-Bromopropane can harm reproductive system and the nervous system, how to find out if employees are working with this solvent, how it enters your body, how it affects your health, and how to reduce exposure. Multiple copies of these documents can be obtained from Robert or from HESIS by calling 510-622-4138 or visit their website at www.dhs.ca.gov/ohb.

New Documents from the Institute for Research and Technical Assistance (IRTA)

Two new publications are now available from IRTA. The first is entitled "Safer Adhesive and Cleanup Alternatives for Countertop Manufacturing" and highlights the work with seven companies that adopted adhesives and cleanup materials that are protective of human health the environment. Chemicals that were replaced included trichloroethylene, methylene chloride, toluene, xylene, methyl ethyl ketone, hexane, and heptane. The second publication, "Alternative Low-VOC, Low-Toxicity Cleanup Solvents for the Lithographic Printing Industry", identifies low-VOC and low-toxicity alternatives used in twenty lithographic printing facilities (newsprint, coated and uncoated paper, metal, and plastic) to replace more hazardous chemicals. Both publications are available on IRTA's website at www.irta.us. OPPTD will be making copies of these reports on CDs in April and placing this on their website in April.

General Information Item

U.S. PAPER RECYCLING REACHES A RECORD HIGH CONTRA COSTA TIMES, Page 11, February 9, 2005 By FRANK GREVE: WASHINGTON - Americans are recycling paper at an all-time high, recapturing 300 pounds per person each year. That's more than half the paper produced in the United States. In addition to improvements in the tactics of waste-paper collection, recycling is gaining from China's suddenly ravenous appetite for U.S. scrap paper. Its hunger for recycled paper is fueled by its own shortage of wood pulp and a mushrooming need for boxes in which to ship its exports.

U.S. papermakers, who need scrap themselves, are struggling to compete against China's mills, which made off with about 6 million tons of American scrap paper in 2004. That's from a total U.S. paper recovery of about 50 million tons. Mills in India, Indonesia, Japan and South Korea also are ardent bidders for American scrap paper. "American mills are scared. They're pulling out their hair," said Mark Arzoumanian, the editor of Official Board Markets, an industry price newsletter. "It's as though we're a Third World country, providing raw materials to manufacturing countries," fretted Stanley Lancey, an economist at the American Forest & Paper Association, a Washington-based industry trade group.

Recovery rates are steady but prices are soaring for other U.S. recycled products, mainly fibers, metallics and plastics, said Jerry Powell, the editor of Resource Recycling, a monthly magazine for municipal recyclers. "China's key to all three," Powell said. Exports of U.S. scrap of all kinds grew to \$8.4 billion last year, according to the Commerce Department. That's more than double the 1999 total. Scrap paper is now the top American export by volume, according to the paper industry. It's growing faster than traditional U.S. exports such as advanced technology products, farm products, manufacturing, and goods and services.

What's keeping U.S. and Chinese papermakers stocked with scrap is the eagerness of Americans to recycle. Curbside collection, for instance, is up. So is corrugated cardboard collection, especially by grocery and department stores, who have found they can make money on it. To bolster recycled-paper supplies to U.S. mills, the forest and paper trade group, which has long pushed recycling, aims to recover 55 percent of the paper produced nationwide by 2012. That's far below the rate in Germany and Finland, which recover nearly 75 percent. But it's another big step up for the United States, which recovered only a third of its paper as recently as 1990.

"It's the mind-set now," said Rod Park, the chairman of the Portland, Ore., Metro Council's Solid Waste Advisory Committee. The eco-sensitized Portland area recovered almost 550 pounds of paper per person last year, thanks to a policy of charging for garbage pickups but not for recycling. By maximizing recycling, homeowners can save \$73 to \$170 a year on their garbage-collection bills. Targeted pitches to the property managers of office buildings and apartment buildings - and attractive scrap prices - helped, too. The hardest-to-recover paper remains printing-writing paper and office paper, as well as the kind that catalogs, magazines and newspaper inserts are printed on. Homeowners will pitch them in, Portland discovered, but only if given additional 14-gallon recycling bins or bigger wheeled ones.

The demand for scrap paper in China, which is so deforested that it produces little of its own pulp, is growing at about 50 percent a year, according to the paper industry. To meet that demand, U.S. collection agents for China's mills offer higher prices than many American papermakers, market analysts report. Because shipping costs relatively little - \$10 to \$15 on scrap paper that costs around \$100 a ton - China's surging demand is turning even East Coast cities such as Miami, Fort Lauderdale, Fla., Savannah, Ga., Baltimore and Philadelphia into paper-export ports to Asia. Los Angeles leads, followed by New York, San Francisco, Laredo, Texas, and Seattle.

Much U.S. scrap paper ends up in the massive new Nine Dragons recycled paper mill in Dongguan, China, north of Hong Kong. It's the world's largest, and is unique in its ability to turn low-quality mixed papers into respectable paperboard for boxes and packaging. Another factor in China's favor: Its workers, who are paid about \$3.40 a day to sort mixed paper manually, are far cheaper than American workers, who are paid at least the \$5.15 an hour federal minimum wage. China's low wages have helped many U.S. communities to collect recyclables with little or no sorting.

While strong offshore demand helps keep supplies up and prices in the \$80 to \$120 a ton range, some environmentalists worry that U.S. mills are getting priced out of recycled paper. "I don't object to exporting some of our recovered paper overseas," said Susan Kinsella, the executive director of Conservatree, a San Francisco-based forest conservation and paper-recycling group. "At the same time, I think it's important to continue to support our own mills, too."

- Next Meeting: July 12, 2005: Location to be determined.