

**ENVIRONMENTAL FORUM OF MARIN'S "TOWARD A SUSTAINABLE MARIN"  
2007 WORKSHOP SERIES**

**TOXIC SUBSTANCES AND THE 3RS**

Members, and their guests, are welcome to attend classes, as visitors, but conditions apply.

**Permission from the Director is mandatory prior to attendance.**

Please inquire three days minimum prior to class date: [Workshop@MarinEFM.org](mailto:Workshop@MarinEFM.org) – thank you!

**Session #5:** Saturday, March 10, 2007, 9:00 a.m. – 2:00 p.m.

**Coordinators:** Trip Allen (2A), Louise Gilbert (2A)

**Location:** Dominican University, Caleruega Hall/The Creekside Room, Magnolia Avenue, San Rafael  
Directions to Dominican: <http://www.dominican.edu/about/campus/directionstocampus.html>  
Campus Map: (<http://www.dominican.edu/about/campus/campus-tour/campusmap.pdf>)

**OBJECTIVES:**

1. Understand how current policies for using, handling and disposing of toxic substances affect the health of the Marin citizenry and its environment.
2. Understand the concept of and issues surrounding the Precautionary Principle in relation to toxic substances policies used by local governments to address these health and environment concerns.
3. Learn how plastic recycling works, and how recycling markets and waste are linked to energy prices.
4. Learn about energy policies that would enable landfills to be more sustainable.
5. Learn about the goals of "zero waste" and what can be done to reduce the quantity of materials we use. Learn about the "3Rs" and the hierarchy of Reduce, Reuse, and Recycle.
6. Learn how our local recycling structure works.

**SPEAKERS:**

|                 |   |
|-----------------|---|
| Sharyle Patton  | Director, Health and Environment Program, and the Biomonitoring Resource Center, Commonwealth |
| Debbie Raphael  | Manager, Toxics Reduction/Green Bldg Program, SF Dept of The Environment                      |
| Hilary Gans     | Facility Operations Contract Manager, South Bay Waste Management Authority                    |
| Trip Allen      | President, Energy Anew, Founder MBA Polymers  |
| Gary Liss       | President, Liss and Assoc., Zero Waste Advocate   |
| Patty Garbarino | President, Marin Sanitary Service   |

**SCHEDULE:**

|               |  |
|---------------|--|
| 8:45 a.m.     | Meet and Greet   |
| 9:00          | Introduction of Coordinators (Donna Miller)                          |
| 9:05 – 9:40   | Toxics in the Environment (Sharyle Patton)                           |
| 9:40 - 10:20  | Local Implementation of the Precautionary Principal (Debbie Raphael) |
| 10:20 – 10:35 | Break  |
| 10:35 – 11:20 | Advanced Composting with Methane Recovery (Hilary Gans)              |
| 11:20 - 12:00 | The link between recycling, waste and energy prices (Trip Allen)     |
| 12:00 – 12:30 | Lunch  |
| 12:30 – 1:15  | How to achieve Zero Waste and better resource management (Gary Liss) |
| 1:15 – 2:00   | Marin Recycling Center Overview (Patty Garbarino)                    |

## **RECOMMENDED READING/WEB RESOURCES**

1. [http://www.recyclenow.org/CoWMP/Ch4\\_SRRE\\_Introduction.pdf](http://www.recyclenow.org/CoWMP/Ch4_SRRE_Introduction.pdf)
2. Read the solid waste management requirements placed on local governments at <http://www.ciwmb.ca.gov/lgcentral/default.htm>
3. Peruse the web site <http://www.commonweal.org/>
4. Peruse the web site <http://www.ecycle.org>
5. Peruse the web site <http://www.zerowaste.ca.gov>
6. Peruse the web site <http://www.mbapolymers.com>
7. Read the article "Recycling Is Garbage" at <http://www.nrdc.org/cities/recycling/recyc/appenda.as>
8. US EPA, Product Stewardship Home Page <http://www.epa.gov/epaoswer/non-hw/reduce/epr/>
9. California Integrated Waste Management Board  
Local and Regional Summaries <http://www.ciwmb.ca.gov/LGCentral/Summaries/default.htm>
10. Product Stewardship <http://www.ciwmb.ca.gov/WPIE/Stewardship/>
11. Californians Against Waste <http://www.cawrecycles.org/>

## **SPEAKERS' BIOGRAPHIES**

### **Sharyle Patton**

Sharyle Patton is director of the Commonweal Health and Environment Program, in Bolinas, CA., and directs the Commonweal Biomonitoring Resource Center, a program that assists non-governmental organizations and community groups in designing, implementing, and sharing information about biomonitoring projects.

Biomonitoring is the testing of human biospecimens for the presence of toxic chemicals. Data from biomonitoring studies can be used to assess chemical trends, identify vulnerable populations or populations at risk, and provide information about the effectiveness of regulations designed to protect public health.

Biomonitoring data can also be used to inform public health policy, and to raise public awareness about the need for toxic chemical policy reform. Patton is one of a small group of individuals within the United States who has been tested for a broad panel of chemicals and has used her experience to push for legislation in California mandating state-based biomonitoring. Governor Schwarzenegger signed into law such a program in the summer of 2006.

Patton is also director of Special Projects for the Collaborative on Health and Environment, a Commonweal-sponsored network that seeks to raise the level of awareness about possible linkages between environmental threat and health outcomes. Patton co-founded and served as the Northern Co-Chair of the International Persistent Organic Pollutants (POPs) Network, a network of over 300 public-interest groups around the globe who are active in UN negotiations dealing with toxic chemical regulation. Working closely with governments, this network participated in creating the Stockholm Convention, a legally binding UN treaty that bans or severely restricts the use of POPs chemicals. The Convention entered into force in May 2004. Patton is currently co-chaired of the Community Monitoring Working Group for this public interest network.

Patton serves as co-chair for the Advisory Group for the California Health Tracking Program, a CDC-funded project to develop infrastructure and processes for tracking chemical hazards, pathways of exposure and health outcomes in California.

In 1995, 1996, and 1997, Patton was the public sector representative on the United States Delegation to the UN Commission on Sustainable Development. Patton was also a public sector representative on the United States Delegation to the UN Summit, Habitat II, as well as on the US Delegation to Rio Plus Five. Patton was active as an NGO representative at the UN summits on women's issues in Cairo and Beijing, supporting women's reproductive and sexual rights and the right of women to live in environments conducive to the highest possible standard of good health.

Patton serves on the board of the Barbara Smith Fund, and the board of The Endocrine Disrupter Exchange.

### **Debbie Raphael**

Debbie Raphael is the Program Manager for the City & County of San Francisco's Toxics Reduction and Green Building Programs. In this capacity she is responsible for working with City agencies, local businesses, and San Francisco residents to reduce the use of toxic chemicals and implement the City's award-winning Integrated Pest Management, Environmentally Preferable Purchasing, and Green Building programs. Debbie was part of the team of City staff and community members that crafted San Francisco's Precautionary Principle Ordinance and is helping to lead the effort to implement the principle within City government.

Debbie also worked for the City of Santa Monica and implemented that city's far-reaching Toxics Reduction Programs. She has presented her work at numerous professional and technical meetings and has helped public agencies and school districts across the country institute similar environmental programs. Debbie received her Masters degree in Plant Physiological Ecology from the University of California, Los Angeles. She has also worked as an exhibit designer at the Exploratorium Science Museum and as a high school instructor of science and computer technology.

### **Hilary Gans**

Hilary Gans is now the Facility Operations Contract Manager for the South Bayside Waste Management Authority, a position that he took in January 2007.

Hilary spent the past 10 years of his career at the BFI Newby Island Recyclery Facility near San Jose California. Built in 1999, the facility is one of the original and largest recycling and composting operations in California.

Hilary worked as business development manager for BFI of Northern California where he developed markets for recycled materials and created new manufacturing techniques to produce new products from recycled content materials.

Recently Hilary has expanded markets for products manufactured from recycled construction & demolition debris and for compost product manufactured from organic wastes. Innovative market development projects include: working with Caltrans to adopt compost for roadside revegetation projects throughout the State, creating markets for compost in agriculture, erosion control and horticulture; developing new markets for wood waste derived landscape products.

Prior to this, from 2000-2004, Hilary was General Manager of the Newby Island Recyclery, which includes a 1,000 ton/day organics processing facility and the 250 ton/day (MRF) materials recovery facility -- the combined operations employ over 100 people and process recyclables from much of the Peninsula and South Bay. In addition to managing the ongoing operations, Hilary undertook the following projects:

- Doubling the organics recycling operation from 8 to 20 acres and purchasing over 2.5 million dollars of new processing equipment.
- Redesigning a 10 ton/day pilot food waste composting system to handle over 100 tons/day.
- Directing the selection, installation and successful startup of a 3 million dollar single-stream facility retrofit to process co-mingled curbside and commercial recyclables.

Hilary has also worked in market development for MBA Polymers, a startup plastics recycling company in Richmond, California. While at MBA, Hilary evaluated business and market opportunities for MBA's recycling

technology. A national survey of auto shredders, computer recyclers, and plastic manufacturers was conducted with the goal of identifying new business opportunities for MBA.

### **Trip Allen**

Trip Allen is the President and Founder of Energy Anew, Inc., which works to develop solar energy and resource recovery technology. He also founded MBA Polymers where as Chief Technical Officer he developed technology to separate and recycle plastics. MBA is now operating plants in Austria, China and Richmond, California. MBA's technology has won it numerous distinctions including recognition as a World Economic Forum Technology Pioneer and the Edison Award for Innovation from YEO. Trip holds a masters degree in Chemical Engineering from Clemson University and undergraduate degrees in Chemistry and Chemical Engineering. He is a member of the Executive Committee of the Sierra Club Marin Group and Bay Chapter.

### **Gary Liss**

Mr. Liss has over 32 years of experience in the solid waste and recycling field. Gary Liss is now President of Gary Liss & Associates. He was a founder and past President of the National Recycling Coalition and was Solid Waste Manager for the City of San Jose, CA. In San Jose, Mr. Liss developed their recycling programs into national models, which are currently diverting 62% of the overall waste stream.

Mr. Liss is a leading advocate of Zero Waste, and a special Zero Waste advisor to the GrassRoots Recycling Network (GRRN). For GRRN, he has documented Zero Waste Businesses, developed Zero Waste Business Principles (see <http://www.grrn.org/zerowaste/business/>) and helped organize Zero Waste Business conferences. He helped write Zero Waste Plans for Del Norte County, CA, Nelson, British Columbia, Palo Alto, CA and Oakland, CA. He also helped write a Zero Waste Communities Strategy for the Zero Waste Task Force of Santa Clara, San Mateo and San Benito Counties (<http://www.crra.com/grc/articles/zwc.html>). He is also on the Planning Group for the new Zero Waste International Alliance (<http://www.zwia.org>) and was certified last year in Zero Emissions Research & Initiatives (<http://www.zeri.org>). The California Resource Recovery Association (CRRA) selected him as Recycler of the Year in 2005.

Mr. Liss also previously worked as Executive Director for the CRRA, Resource Recovery Director for the U.S. Conference of Mayors, Assistant Administrator for Alternative Technologies for the New Jersey Department of Energy and Environmental Programs Manager for the City of Newark, New Jersey. He has a Masters in Public Administration from Rutgers University in Newark, New Jersey and a Bachelor's in Civil Engineering (Environmental Engineering major) from Tufts University in Boston, Massachusetts.

### **Patty Garbarino**

Marin Sanitary Service has been locally owned and operated since 1948. Marin Resource Recovery Center is a division of Marin Sanitary Service. Marin Sanitary Service provides solid waste, recyclable and yard waste collection in Marin County, debris boxes, provides safe and secure document shredding services, and operates Marin County's only indoor dump. It also contracts with the San Rafael Fire Department to provide household hazardous materials reception services.

Patty Garbarino has been president of Marin Sanitary Service since 2000. She is responsible for policy development and implementation, along with the overall management and oversight of the operations of the company. In addition to her administrative and management responsibilities, Patty remains directly involved in all aspects of the company's governmental relations, the Public Education Program and community relations.

Prior her appointment as company president, Patty has served as Vice President of Community Relations and Compliance, Company Development and Human Resources Office, and Public Policy and Community Liaison Officer. She was instrumental in creating the Environmental Classroom and education program for the company, and worked closely with the Fire Department in beginning the hazardous waste reception program at Marin Resource Recovery Center.

**Professional memberships:**

- Marin Recycling and Resource Recovery Association 1987 to present
- County of Marin Waste Management Advisory Committee 1987-1993
- County of Marin Source Reduction & Recycling Subcommittee 1987-1993
- County of Marin Hazardous Materials Management Subcommittee 1977-1993
- National Waste Recyclers Council 1989-1993
- County of Marin, AB 939 Task Force Member 1993 to present

**Community involvement:**

- Marin Women's Hall of Fame Inductee 1999
- MARC (Marin Association of Retarded Citizens) Board Member 1984 to present; Board Chair from 1985-1987 and 1995 to 1997
- Marin Conservation League, Board Member 1990-1997
- Marin County Planning Commission, Member 1995 to 2003; Board Chair in 1998 and 2002