

# TPSA 2011

## Agricultural Plastics Stewardship Conference

Summary of What Happened and What's Next

**Lois Levitan**

**Recycling Agricultural Plastics Project**

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<http://environmentalrisk.cornell.edu/AgPlastics>

<http://tpsalliance.org>



Cornell University

Prepared for the Great Lakes Commission Atmospheric Toxics Webinar Series, March 31, 2011

Photo: Lois Levitan, RAPP



**February 13-15, 2011**

The Westin Riverwalk Hotel  
420 West Market Street  
San Antonio, Texas USA 78205

**<http://tpsalliance.org>**

## **Pesticide and Agricultural Plastics Stewardship**

11<sup>th</sup> Annual Conference

The Pesticide Stewardship Alliance (TPSA) is a non-profit organization that brings together technical experts, researchers, pesticide applicators, regulators, educators, crop protection industry, hazardous waste industry, agricultural plastic recyclers, environmental and public health constituents, students, and others to promote and support improvements in stewardship of pesticides and agricultural plastics in the United States and internationally.



1B and 1C.

## **Current Minibulk Pesticide Container Recycling**

- **ACRC/AAI Minibulk Recycling Pilot Program**
- **Pilot Project in California to Recycle Minibulk Containers**
- **IFCA 2009 Illinois Mini-Bulk Recycling Project**
- **An Ongoing Minibulk Collection and Recycling Program**
- **Clean Tide Containers Ongoing Pesticide Container Collection and Recycling Program**

Moderator: Cam Davreux, Vice President, CropLife Canada





2C.

## **Network with Stakeholders in Agricultural Plastics Production and Stewardship**

**Participants were given 5 minutes to tell the group:**

- **name and company/organization affiliation**
- **products or services company/organization provides**
- **resources and contacts needed to move plastics stewardship mission to the next level**

Moderators: Mark Jordan, VP Sales & Marketing, Techmer PM,  
and James Garthe, Agricultural Engineer, Dept. Agricultural  
and Biological Engineering, Pennsylvania State University



3C.

## **The Backstory on Insecticide-Impregnated Netting Used for Vector Control**

- **Material and chemical composition of nets and packaging materials**
- **Life cycle of insecticide-impregnated netting**
- **Quantity used and thrown away**
- **Disposal plans and challenges**
- **Avenues and impediments for better stewardship**
- **Possible exposure points for humans/environment in reverse distribution**

Panel coordinated by Robert L. Denny II, Arrowchase, Inc.,  
Environmental Project Management, Vilnius, Lithuania



4C.

## **Product Stewardship of Agricultural Films**

- **What's happening?**
- **What's possible?**
- **What's needed to move forward?**

**Forum with agricultural plastics product manufacturers and distributors.**

Moderators: Mark Jordan, VP Sales and Marketing, Techmer PM, and Barry Friesen, General Manager, CleanFARMS™ Inc.



5C.

## **Completing the Circle: Promoting Purchase of Products Made from Recycled Agricultural Plastics**

- **Discussion of proposal for a campaign to identify, brand, and promote these products**
- **Consider creating an ecolabel for finished products that use recycled agricultural plastic as feedstock**
- **Discuss how these products and the ecolabel will be publicized and gain traction**

Proposal and background: Lois Levitan, Program Leader,  
Recycling Agricultural Plastics Project, Cornell University



6C.

## **Cement Kiln Fuel: Potential, Reality, and Constraints of Agricultural Plastics as a Fuel Alternative to Coal**

- **Agricultural Film Management in Florida** – Eugene B Jones, CEO, Southern Waste Information eXchange, Tallahassee, FL
- **Alternative Energy Sourcing in the Portland Cement Production Industry** – Max Lee, Principal Engineer, Koogler Assoc
- **Waste Agricultural Plastics as Fuel in Production of Cement in Guatemala** – Keith Williamson, VP, Guardian Agricultural Plastics
- **A New Look at an Old Technology: Cement Kilns and the Challenges Remaining for Destruction of Pesticide-Tainted Resins** – Robert L Denny II, Arrowchase Inc, Vilnius, Lithuania

Organized by Eugene Jones and Keith Williamson





7C.

## **Getting Agricultural Plastics to the Marketplace: In-Field & In-Plant Equipment/Process Options**

- **Shredders and Granulators for Agricultural Plastics** – Scott White, Sales Manager, GranuTech Saturn Systems, Grand Prairie TX
- **Collecting and Processing Agricultural Plastics** – Richard Marberger, Marketing Director, USAg Recycling, Waller TX
- **Some Experiences with On-Farm Handling of Silo Film in WI** – Brian Holmes, Prof Biological Systems Engineering, U Wisconsin
- **Survey of Compaction Equipment Commercially Available for On-Farm Baling of Dairy and Horticultural Film** – Keith Williamson, VP, Guardian Agricultural Plastics, and Lois Levitan, Program Leader, Recycling Agricultural Plastics Projects, Cornell U

Organized by Roger Springman, Ag Plastics Management Consultant



8C.

## Roundtable: What's Next for TPSA's Agricultural Plastics Stakeholder Group?



### Types of Topics Discussed on Monthly Conference Calls:

- Emerging markets for used ag films
- Plastic waste to oil
- Appropriate end uses for recycled ag plastics
- Contamination & chain-of-custody
- Collection program logistics
- Cost effective strategies
- Working with farmers to adopt BMPs for handling ag plastics
- Engaging stakeholders

**AG PLASTIC MANAGEMENT WORKGROUP**  
Where Stewardship Is the Agenda



# What's Next for TPSA's Agricultural Plastics Workgroup

## TASKS & PROJECTS

- Update/Expand TPSA Website
- Cement Kiln Fuel Standards
- Recycling Markets Database
- Promote Recycled Products
- Netting Experiments
- “Manual” for Agricultural Plastics Recycling Programs
- Workgroup Communication Plan



## Update/Expand TPSA Website

Revise TPSA Website, adding language and visuals to better showcase the agricultural plastics arena.

- Project contacts: Roger Springman <hotpeppers2@frontier.com> and Lois Levitan <lcl3@cornell.edu>, TPSA Communication Committee



## Cement Kiln Fuel Standards

Develop standards to support classification of agricultural plastics as a commodity, per EPA definition.

*Objective:* Be able to use mulch film and other very difficult-to-recycle plastics as fuel alternative to coal in cement kilns.

- Sub-committee contacts: Gene Jones <gene@swix.ws> and Max Lee <mlee@kooglerassociates.com>



## Recycling Markets Database

Develop a means to publicize recycling/manufacturing markets that will accept agricultural plastics. Begin by surveying potential markets to assess willingness, readiness and terms.

- Project contacts: Lois Levitan <lcl3@cornell.edu> and Gene Jones <gene@swix.ws>



# Promote Products Made from Recycled Agricultural Plastics

Explore options and create means to identify, brand and promote products made from recycled agricultural plastics. Consider creating an ecolabel for these products.

- Sub-committee contact: Lois Levitan <lcl3@cornell.edu>.  
Members: Heather Barr, DAF Greenwood; Sandra Keil, Earth 911; Maria Mirsky, Mirsky Associates. Others welcome!



## Netting Experiments

Work with processors to gain understanding of any issues/difficulties in processing plastic netting (e.g., hay and cotton bale nets, mosquito nets, grape vine netting, 'secure covers', etc.) and learn/disseminate information about equipment and processes that work (or don't).

- Project leaders: Roger Springman <hotpeppers2@frontier.com> and Brian Holmes <bjholmes@wisc.edu>



# **“Manual” for Setting Up Agricultural Plastics Recycling Programs**

Collect and codify the information and experience that a number of workgroup members have gained. Develop a ‘manual’ comprised of decision points and the various approaches/models being taken.

- Project contact: Lois Levitan <LCL3@cprnell.edu>



## Workgroup Communication Plan

- Objectives:*
- continue networking between conferences
  - tangible progress on projects and tasks
  - learn and disseminate information relevant to the field

- To add your name to the group list, contact Lois Levitan <LCL3@cprnell.edu>





Photo: Lois Levitan, RAPP