



**U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)
Office of Research and Development (ORD)
National Center for Environmental Research (NCER)**

**U.S. EPA Workshop on
Fate and Effects of Hormones in Waste From
Concentrated Animal Feeding Operations**

**U.S. EPA Region 5, Chicago, IL
August 20–22, 2007**

AGENDA

Monday, August 20, 2007: Background and Stakeholder Perspectives

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| 11:30 a.m. – 12:00 p.m. | Registration |
| 12:00 p.m. – 12:15 p.m. | Welcome
<i>Susan Laessig, EPA, ORD, NCER</i> |
| 12:15 p.m. – 12:30 p.m. | Opening Address
<i>Eric Weber, Acting Director of the Office of Science Policy, EPA, ORD</i> |
| 12:30 p.m. – 1:15 p.m. | U.S. Environmental Protection Agency Perspectives on Concentrated Animal Feeding Operations (CAFO) Waste Issues
<i>John Haines, EPA, ORD, National Risk Management Research Laboratory (NRMRL)</i> |
| 1:15 p.m. – 1:45 p.m. | CAFO Rule and Future Resource Needs
<i>Roberta Parry, EPA, Office of Water</i> |
| 1:45 p.m. – 2:45 p.m. | Session I: Stakeholder Involvement in CAFO Environmental Issues
<i>Session Moderator: Steve Jann, Deputy Branch Chief, National Pollutant Discharge Elimination System (NPDES) Programs Branch</i> |
| 1:45 p.m. – 2:15 p.m. | EPA Regional CAFO Waste Issues
<i>Matthew Gluckman, EPA Region 5 CAFO Coordinator</i> |
| 2:15 p.m. – 2:45 p.m. | Environmental Assessment for Veterinary Pharmaceuticals
<i>Charles Eirkson, U.S. Food and Drug Administration (FDA), Center for Veterinary Medicine</i> |
| 2:45 p.m. – 3:00 p.m. | Break |

3:00 p.m. – 4:20 p.m.	3:00 p.m. – 3:40 p.m.	<p>Overview of U.S. Department of Agriculture (USDA) Research on Hormones <i>Mary Ann Rozum, USDA, Cooperative State, Research, Education and Extension Service</i></p> <p><i>Cliff Rice, USDA, Agricultural Research Service</i></p>
	3:40 p.m. – 4:20 p.m.	<p>U.S. Geological Survey (USGS) Research on Emerging Water-Quality Issues Related to CAFOs: Research Themes, Capabilities, and Opportunities for Collaboration <i>Sheridan Haack, USGS, Toxic Substances Hydrology Program</i></p> <p><i>Sarah Gerould, USGS, Contaminant Biology Program</i></p>
4:20 p.m. – 5:00 p.m.	Question and Answer Session	
5:00 p.m.	Adjournment	

Tuesday, August 21, 2007: Highlights of EPA ORD and STAR Research

8:00 a.m. – 8:30 a.m.	Registration	
8:30 a.m. – 8:45 a.m.	<p>Introduction—Endocrine Disruptor Research Program and CAFOs <i>Elaine Francis, EPA, National Program Director for Endocrine Disruptors</i></p>	
8:45 a.m. – 10:30 a.m.	<p>Session II: Current CAFO Contaminant Research at EPA <i>Session Moderator: Gary Ankley, EPA, ORD, National Health and Environmental Effects Research Laboratory (NHEERL)</i></p>	
	8:45 a.m. – 9:15 a.m.	<p>Cell-Based Assays for Monitoring EDC Activity in Complex Environmental Samples, Including CAFO Discharges <i>Vickie Wilson, EPA, ORD, NHEERL</i></p>
	9:15 a.m. – 9:45 a.m.	<p>Assessing Ground and Surface Water Impacts From Hormones in CAFOs <i>Steve Hutchins, EPA, ORD, NRMRL</i></p>
	9:45 a.m. – 10:30 a.m.	<p>Overview of the EPA, ORD, CAFO Research Project <i>Gary Ankley, EPA, ORD, NHEERL</i></p>
10:30 a.m. – 11:00 a.m.	Break	

11:00 a.m. – 12:00 p.m.	Session III: New EPA STAR Awards on Fate and Effects of Hormones in CAFO Waste <i>Session Moderator: Susan Laessig, EPA, ORD, NCER</i>	
	11:00 a.m. – 11:30 a.m.	Linda Lee, Purdue University <i>Fate of Hormones in Tile-Drained Fields and Impact to Aquatic Organisms Under Different Animal Waste Land-Application Practices</i>
	11:30 a.m. – 12:00 p.m.	Jocelyn Hemming, University of Wisconsin–Madison <i>Assessing Occurrence, Persistence, and Biological Effects of Hormones Released From Livestock Waste</i>
12:00 p.m. – 1:15 p.m.	Lunch	
1:15 p.m. – 2:45 p.m.	1:15 p.m. – 1:45 p.m.	Daniel J. Fisher, University of Maryland <i>Transport/Fate/Ecological Effects of Steroids From Poultry Litter, and Evaluations of Existing/Novel Management Strategies</i>
	1:45 p.m. – 2:15 p.m.	Miguel L. Cabrera, University of Georgia <i>Fate of Hormones in Waste From Concentrated Broiler Feeding Operations</i>
	2:15 p.m. – 2:45 p.m.	Seth W. Kullman, North Carolina State University <i>(new position)</i> <i>An Integrated Approach To Developing a Total Facility Estrogen Budget at a Swine Farrowing CAFO</i>
2:45 p.m. – 3:15 p.m.	Break	
3:15 p.m. – 4:15 p.m.	3:15 p.m. – 3:45 p.m.	David Sedlak, University of California–Berkeley <i>Transport and Transformation of Natural and Synthetic Steroid Hormones at Beef Cattle and Dairy CAFOs</i>
	3:45 p.m. – 4:15 p.m.	Daniel Snow, University of Nebraska–Lincoln <i>Effects of Cattle Manure Handling and Management Strategies on Fate and Transport of Hormones in the Feedlot and the Field</i>
4:15 p.m. – 5:30 p.m.	Guided Discussion <i>Question and Answer Session With STAR Principal Investigators</i>	
5:30 p.m.	Adjournment	

Wednesday, August 22, 2007: Collaborations—Making Connections

8:00 a.m. – 8:20 a.m.

Grants and Cooperative Agreements: Opportunities for Collaboration

Susan Laessig, EPA, ORD, NCER

8:20 a.m. – 10:30 a.m.

Collaboration Discussions

Participants will have the opportunity to interact with EPA ORD and STAR researchers to discuss approaches to collaboration and cooperation to achieve the stated goals of the presented research.

- ◆ STAR Cooperative Agreements
 - Purdue University
 - University of Maryland
 - University of Nebraska–Lincoln
- ◆ STAR Grants
 - University of California–Berkeley
 - University of Wisconsin–Madison
 - North Carolina State University
 - University of Georgia
- ◆ ORD Collaborative Project
- ◆ EPA Regional Projects
 - EPA Region 10

10:30 a.m. – 11:30 p.m.

Informal Breakout Networking Groups

As needed, participants who are pursuing or wish to pursue collaborations will break into small work groups to discuss mutual interests and potential roles and responsibilities.

11:30 a.m. – 12:00 p.m.

Summary of Collaborative Discussions and Wrap-up

12:00 p.m.

Adjournment