

# POTW Nutrient Reduction and Efficiency Conference

Evansville, Indiana  
January 12-14, 2010

# POTW Nutrient Reduction and Efficiency Conference

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- Co – sponsored by US EPA and ORSANCO
- Second such conference
- Associated with Gulf Hypoxia Effort
- Similar conference planned for Mississippi/ Louisiana area

# Session Topics

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- ◉ Drivers of Ongoing Nutrient Reduction and Efficiency
- ◉ Actions in Agriculture to Address Nutrients
- ◉ Federal Technical Resources on Nutrient Control and Removal
- ◉ Case Studies: Nutrient Control and Performance Improvement

# Session Topics

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- ◉ Biosolids Reduction
- ◉ Treatment Process Efficiency
- ◉ Nutrient Trading
- ◉ Wetland Applications

# KRÜGER

Kruger specializes in advanced and differentiating technologies providing high-efficiency, small footprint processes for water and wastewater treatment

## Biological

Advanced nutrient removal: BOD, TSS, ammonia, Total Nitrogen and phosphorus removal



## Biosolids and BioEnergy

Class A biosolids, solids minimization, renewable energy and green solutions



## Clarification

NOM, TOC, color, turbidity, solids, algae, pathogens and metals removal, taste and odor, prevention of disinfection by-products formation



## CSO/SSO

High rate treatment of wet weather flows; biological and/or solids removal



## Micro and Ultra Filtration

Color, turbidity, solids, pathogen removal, taste and odor, disinfection by-products treatment



ment  
removal, water reuse,

 **VEOLIA**  
WATER

# Conference Info

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- 116 registered participants
- Good participation by all three states (IL, IN, KY)
- Continuing Education credits
- Drained our grant funds



# Follow Up

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- ◉ Presentations available
- ◉ Learn something – do something
- ◉ POTW Committee speakers
- ◉ Need for continued communication of emerging developments
- ◉ Try to hold additional workshops – Upper River area?

# Special Thanks

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- ◉ Bill Franz, Russ Martin – EPA Region 5
- ◉ EPA OWOW – grant, Tetra Tech services
- ◉ Indiana WEA, IDEM
- ◉ Illinois Rural Water Association
- ◉ Alex Novak, Louisville MSD
- ◉ Randy Sovic





# *EPA's MUNICIPAL NUTRIENT REMOVAL TECHNOLOGIES REFERENCE DOCUMENT*

WASTEWATER NUTRIENT REDUCTION AND EFFICIENCY CONFERENCE  
JANUARY 12-14, 2010  
EVANSVILLE, INDIANA

Pirol Zahreddine  
EPA Office of Wastewater Management

