

# Worldwide Pollution Control Association

WPCA-Southern Company  
Wastewater Treatment  
Seminar

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**Ash & Wastewater  
Treatment Considerations  
at TVA**

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April 2013

# December 22, 2008...

- ❑ Ash release at TVA's Kingston Plant
- ❑ TVA CEO commitment to handle CCRs dry
- ❑ CCR disposal rules proposed/pending
- ❑ NPDES permits changed - TN started requiring ash pond closure plans
  - ❑ Submit plan for review and approval by state
  - ❑ Flexible, iterative process
  - ❑ No set process fixed yet to close ponds: SW & H<sub>2</sub>O
- ❑ TN incorporated inspections and reporting - dam safety requirements in permits

# Other Reactions...

- ❑ Environmental groups begin challenges to NPDES permits re-issuance
  - ❑ Allege states should develop own ELGs for scrubber wastewater/ash ponds for metals
  - ❑ Expensive for states to develop BTA, especially when EPA is in process
  - ❑ Could result in more stringent requirements than national BTA
  - ❑ Valley states (AL, KY, TN) in holding pattern

# TVA's ELG Balancing Act:

## Waiting for ELGs...

- ❑ Draft Effluent guidelines Friday (4/19/13)
  - ❑ Wet FGD wastewater treatment
  - ❑ Fly Ash – no discharge of transport water?
  - ❑ Bottom Ash – no discharge of transport water?
  - ❑ Landfill leachate treatment?
- ❑ When ELGs actually available for review & how long to comment?
- ❑ Merrimack Permit limits: good indicator of ELGs?
  - ❑ Extensive industry comments on the Merrimack draft
  - ❑ Previous C&D ELG history
  - ❑ 316b rule, remand, rewrite

# TVA's ELG Balancing Act:

## Planning for ELG/CCR rules...

- ❑ Sampling/characterizing component flows
- ❑ Active UWAG/EPRI participation
- ❑ Future considerations – Dry FGDs
- ❑ Projects to convert to dry handling
  - ❑ Kingston fly ash conversion
  - ❑ Kingston gypsum dewatering system
  - ❑ Bull Run bottom ash/gypsum dewatering system – not a zero discharge but can be retrofitted
- ❑ Pond footprints shrinking – Free water volume requirements getting removed
  - ❑ Use of polymers to facilitate solids removal
  - ❑ Decrease in pond volume – pH issues?

# Ash & ELGs – Other Issues

- ❑ Dry handling not the same as “no ponds”
  - ❑ Storm water runoff?
  - ❑ Polishing?
  - ❑ Lined basins (e.g., cement ponds)
- ❑ What about plant closures? Same ELGs?
- ❑ Low volume wastes vs transport water: washes?
- ❑ Non-chemical metal cleaning wastes “clarification”
- ❑ How is “leachate” defined?
- ❑ How is “No discharge of PCBs” defined