

REINHOLD ENVIRONMENTAL Ltd.



**2014 APC Round Table
& Expo Presentation**

July 14-15, 2014, in Louisville, KY / Hosted by LG&E/KU

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Welcome to Louisville, KY 2014 APC / PCUG Conference



Pollution Control User's Group (PCUG)

What is the PCUG?

- The PCUG is an informal group of pollution control equipment users from coal-fired power plants.

What is its purpose?

- The PCUG works as an invaluable networking tool. It enables you to connect with other users from across the world who may be able to assist in maintenance issues and problem solving.

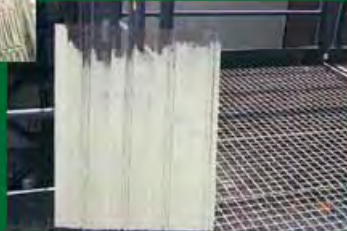
How can I access the PCUG network?

- The PCUG network is available through this PCUG website (www.pcug.info) and through PCUG meetings like those shown in the Conferences and Library sections of this website.

How do I become a member of the PCUG?

- When you register to attend a PCUG meeting, you are automatically added as a member. If you know a user who would like to join but cannot attend a meeting, ask him or her to go to the Membership section of this website and click on the Membership Application link.

PCUG Membership Benefits



PCUG Timeline

APC / PCUG Conference

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2008	2009	2010	2011	2012	2013	2014
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Particulate Matter: Electrostatic Precipitators, Fabric Filters

Auxiliary Equipment: Fans, Dampers, Expansion Joints, Corrosion

Flue Gas Desulfurization: Wet FGD, Dry FGD

SO₃, DSI, MATS, Hg adsorption

PCUG NOx Conference

2002	2003	2004	2005	2006	2008	2009	2010	2011	2012	2013	2014
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Combustion NOx: LNB, OFA

Post Combustion NOx : SCR, SNCR

SO₃, DSI, MATS, Hg⁺²

Coal to Gas PCUG

2012	2013
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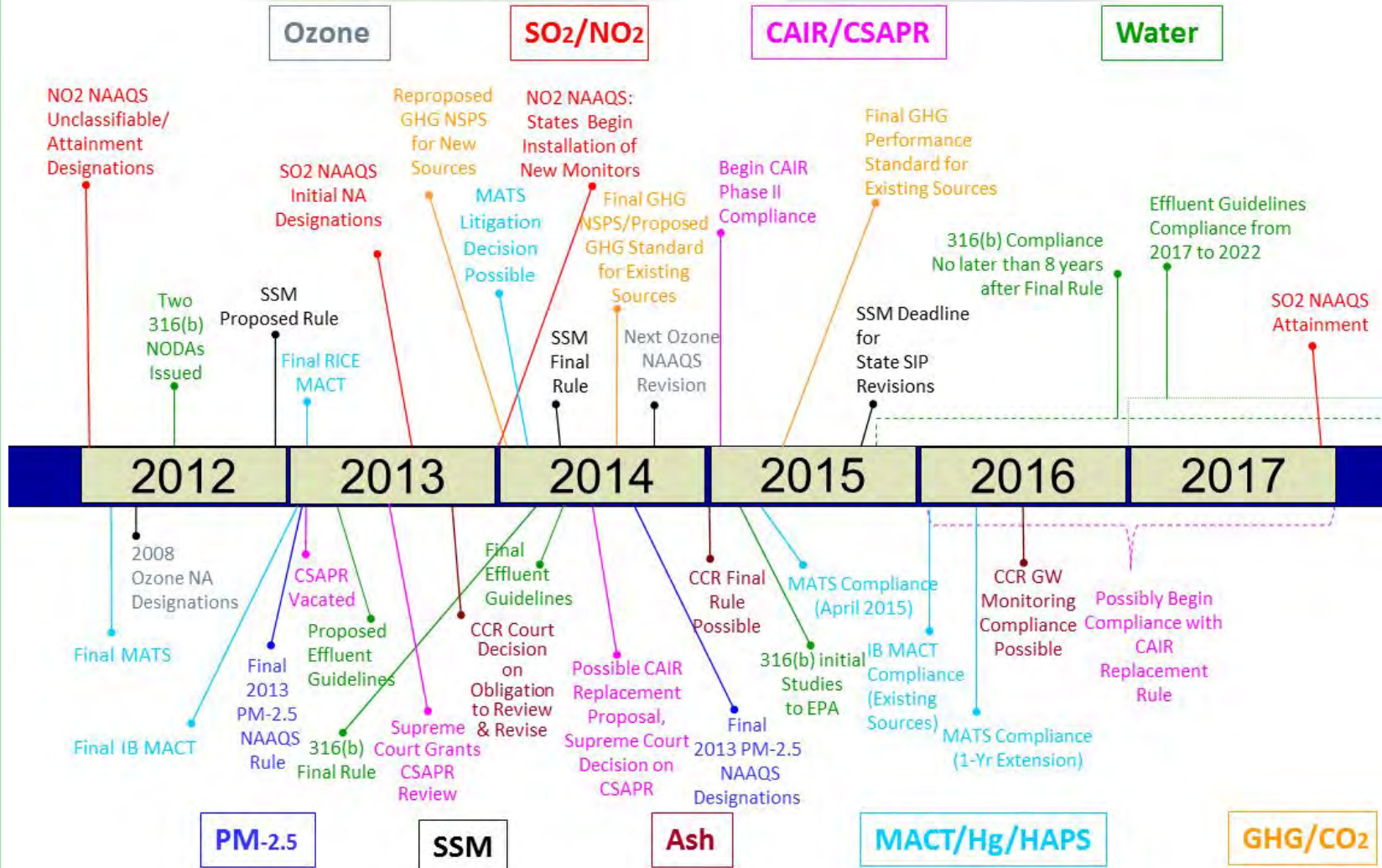
Coal to Gas

ELG / CCR PCUG

2014	2015
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ELG / CCR

EPA Regulatory Timeline



EPA Regulations

- **Utility MACT Rule (MATS)** – Stringent emission limits for PM, acid gases, and mercury for coal- and oil-fired plants.
- **CCR Rule** – Federal regulation of coal combustion residuals or byproducts: groundwater monitoring, dry ash handling, pond closures, new landfills.
- **Section 316(b) Rule** – Regulation of cooling water intake structures: impingement and entrainment studies, fish-protective screens, new intake structures, cooling tower retrofits.
- **Effluent Guidelines** – Revised limits for wastewater discharges / prohibition of discharges: FGD wastewater treatment (stringent metals and nutrient limits), no discharge of ash transport water, pond closures, LVWW and leachate treatment.
- **CSAPR** – Vacated CAIR replacement rule. Additional SO₂ and/or NO_x reductions in 27 states with limited interstate emission allowance trading program. CAIR remains in place.
- **NAAQS** – Ongoing particulate and ozone nonattainment issues as well as evaluation and determination of nonattainment areas for new short-term standards for NO₂ and SO₂.
- **SSM SIP Call** - Proposed rule eliminating exemptions from emission limits for all fossil units during periods of non-normal operation.
- **GHG Regulation** – Permitting requirements for new and modified sources / Performance standards for new electric utility steam generating units and guidelines for existing.

Host City: Louisville, KY

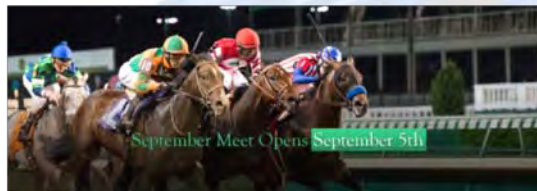


- City of Louisville was founded in 1778 by George Rogers Clark and is named after King Louis XVI of France.
- Largest city in Kentucky and 16th largest city in the United States.
- The University of Louisville, founded in 1798, is the oldest city-supported college in the United States.



- The Hot Brown originated at The Brown Hotel in downtown Louisville in the 1900s. The open-faced turkey and bacon sandwich

- The Louisville Slugger baseball bat was made by Andrew "Bud" Hillerich in his father's woodworking shop in Louisville in 1884. The brand name "Louisville Slugger" was first used in 1893
- Since 1875, Churchill Downs has been the home of the Kentucky Derby, the first leg of the Triple Crown of thoroughbred horse racing.



Churchill Downs

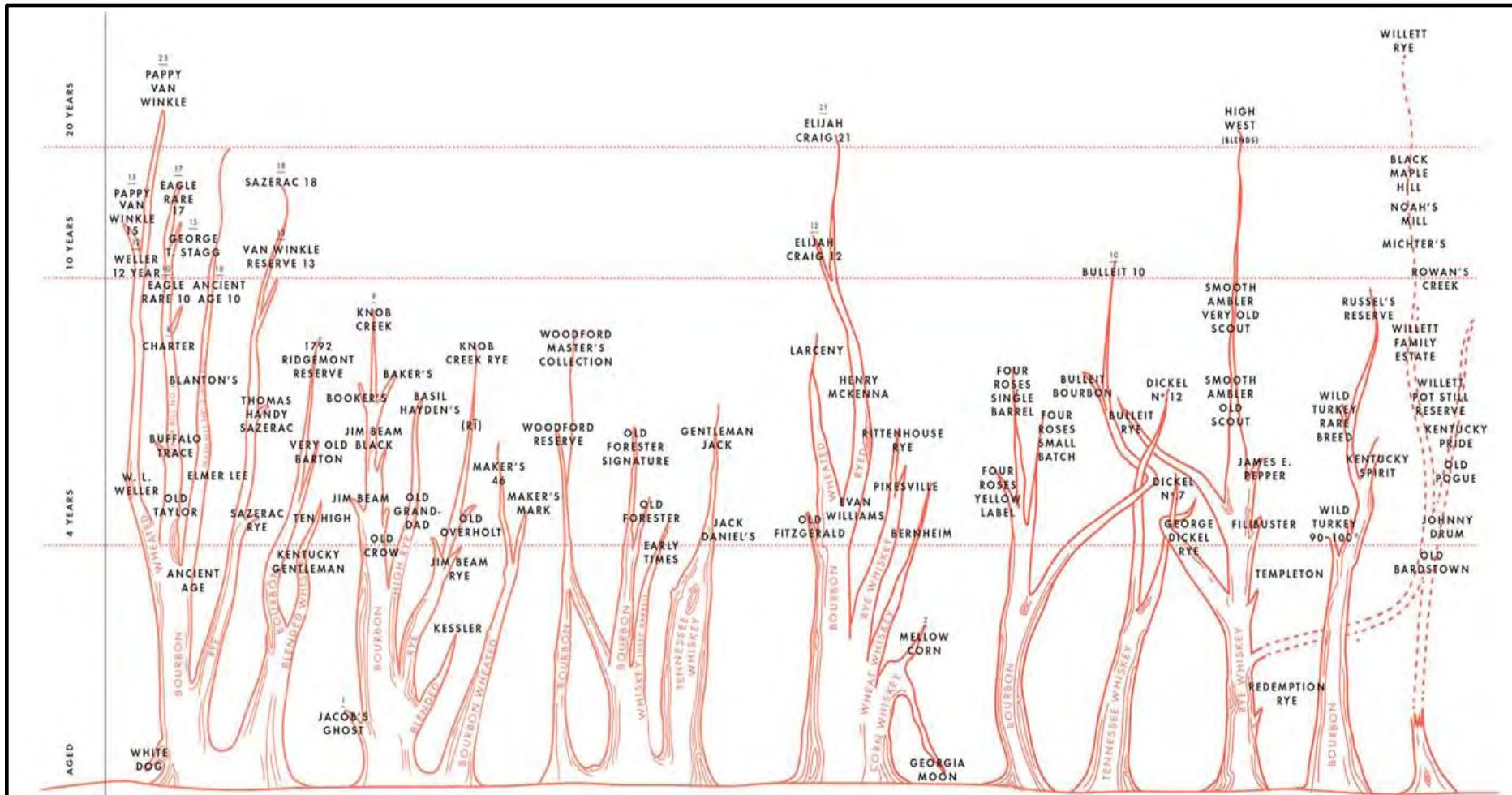


APC / PCUG Conference Event
Churchill Downs Museum and Race Track
Dinner & Tour
Tuesday, July 15, 2014 from 7:00 pm – 8:30 pm

Bourbon: A Kentucky Tradition

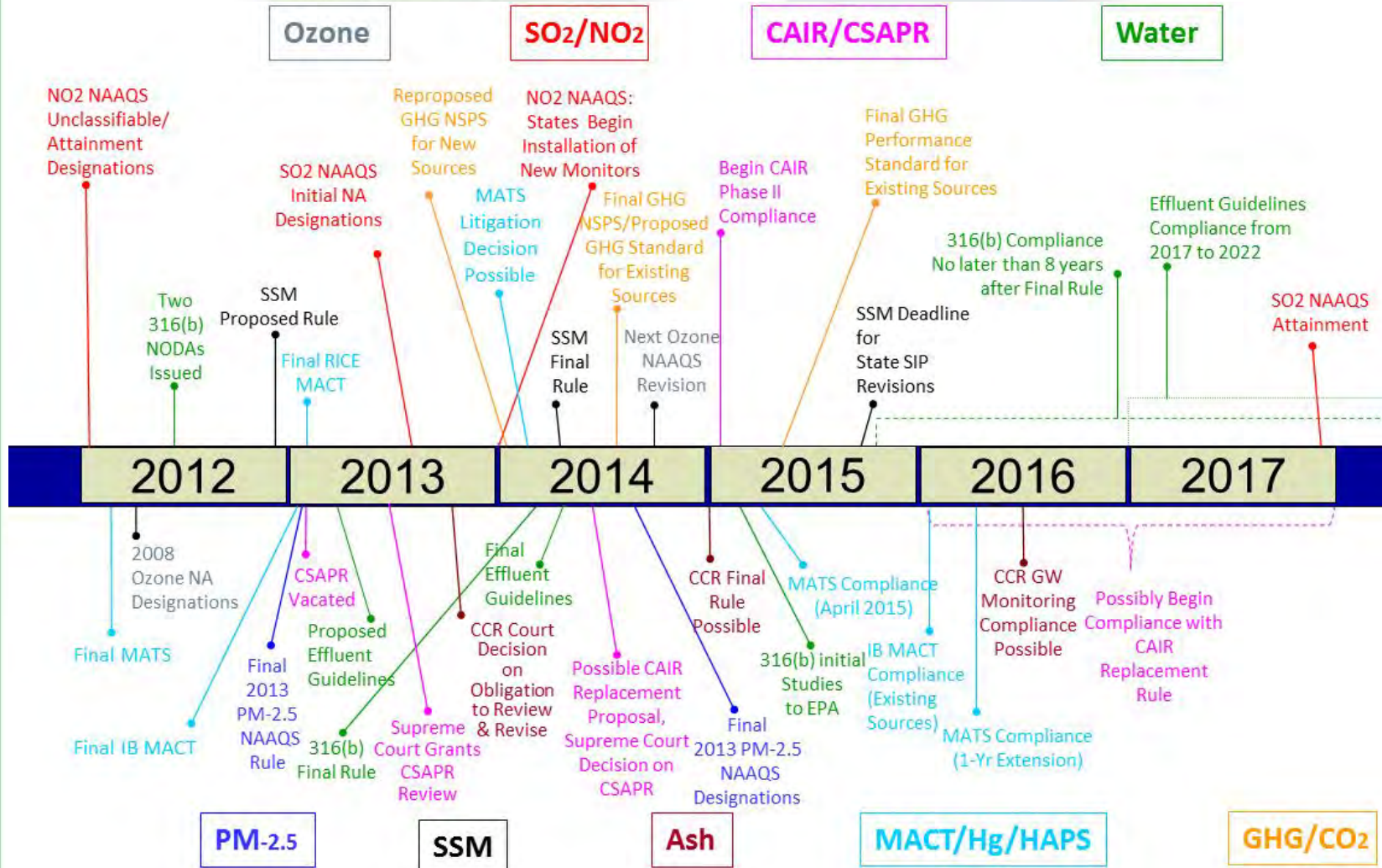


Bourbon Tree



DISTILLERY	BUFFALO TRACE	BARTON	JIM BEAM	MAKER'S MARK	WOODFORD RESERVE	B.F. SHIVELY	JACK DANIEL'S	HEAVEN HILL	FOUR ROSES	GEORGE DICKEL	LDI (MGP)	WILD TURKEY	WILLETT*
CORPORATE OWNER	SAZERAC		BEAM, INC.		BROWN-FORMAN			HEAVEN HILL	IRVIN	DIAGEO	MIDWEST GRAIN PRODUCTS	CAMPARI	*BOTTLED BY KENTUCKY BOURBON DISTILLERS

EPA Regulatory Timeline





Enjoy the Conference!

