

2016 Midwest Environmental Compliance Conference November 2, 2016

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Topics

- ▶ Clean Power Plan
- ▶ Ozone
- ▶ Startup, Shutdown & Malfunction SIP Call
- ▶ Permitting Update (as time permits)



Clean Power Plan

U.S. EPA Carbon Regulation of Power Sector

Two actions designed to significantly reduce carbon emissions from the power sector

- Carbon Pollution Standards –new, modified and reconstructed sources
- Clean Power Plan (CPP) –existing sources
 - Federal Plan proposal and model rule
- ▶ **U.S. EPA's stated CPP goals are to**
 - Achieve significant carbon emission reductions in 2030
 - Deliver an approach that gives states and utilities time to preserve ample, reliable and affordable power
 - Spur increased investment in non-carbon based renewables

U.S. EPA's Clean Power Plan

Final Rule – October 23, 2015

- ▶ U.S. EPA rule requires a 32% reduction in emissions of CO₂ across the country.
- ▶ Establish carbon dioxide emissions rates for coal and gas power plants that reflect “best system of emission reduction” (BSER)
- ▶ In the final rule, U.S. EPA identified three “Building Blocks” and calculated performance rates using these assumptions
 - Block 1: Improve heat rate efficiency at individual units
 - Block 2: Increase existing NGCC generation
 - Block 3: Increase non-carbon based generation

Block 4: Energy Efficiency has been removed from consideration as BSER in the final CPP.

Ohio's CPP Goals

Each state is tasked with developing a plan to reach their respective target.

	Rate Based <u>(lbs CO₂/MWh)</u>	Mass Based <u>(tons CO₂)</u>
▶ <u>2012 Baseline</u> 102,239,220	1,900	
▶ Proposed CPP	1,338	–
▶ Interim Period 2022–2029	1,383	82,526,513
▶ Final Goal 2030+	1,190	73,769,806

Between 2005 and 2014 Ohio has already experienced a reduction in CO₂ emissions of 30% as a result of market forces and federal regulations including the Mercury and Air Toxics Standard (MATS).

ORDER LIST: 577 U.S.)

TUESDAY, FEBRUARY 9, 2016

ORDER IN PENDING CASE

15A773 WEST VIRGINIA, ET AL. V EPA, ET AL.

The application for a stay submitted to The Chief Justice and by him referred to the Court is granted. The Environmental Protection Agency's "Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units," 80 Fed. Reg. 64,662 (October 23, 2015), is stayed pending disposition of the applicants' petitions for review in the United States Court of Appeals for the District of Columbia Circuit and disposition of the applicants' petition for a writ of certiorari, if such writ is sought. If a writ of certiorari is sought and the Court denies the petition, this order shall terminate automatically. If the Court grants the petition for a writ of certiorari, this order shall terminate when the Court enters its judgment.

Justice Ginsburg, Justice Breyer, Justice Sotomayor, and Justice Kagan would deny the application.

Clean Energy Incentive Program (CEIP)

- ▶ On June 30, 2016 US EPA proposed the CEIP
- ▶ Provides for “extra allowances” to states for programs that start early and provide energy efficiency programs to low income homes
- ▶ 300 million allowances nationwide
- ▶ Any additional allowances that can be obtained help regulated entities to comply
- ▶ US EPA methodology to prove energy savings appears overly rigorous – need to prove that less energy is needed on the grid.
- ▶ Comments due November 1, 2016

What are we doing/not doing?

- ▶ Continue to assess landscape after U.S. Supreme Court stay
- ▶ Not going forward with listening sessions/not developing compliance plans/not working on extension request
- ▶ Returned borrowed staff back to other assignments
- ▶ Assist AG's office with litigation
- ▶ Waiting on D.C. Circuit Court of Appeals

OZONE

Ozone Formation

- ▶ Complex atmospheric chemistry (O_3)
- ▶ Combination of hydrocarbons (VOCs), nitrogen oxides, and sunlight plus higher temperatures
- ▶ Summer conditions – ozone exceedances occur May through mid-September in Ohio

2008 Ozone Standard

- ▶ U. S. EPA adopted a standard of 0.075 ppm for ozone in 2008
- ▶ As of summer 2015, Cleveland, Columbus and Cincinnati areas met standard
- ▶ Submitted redesignation packages for Cleveland, Columbus, and Cincinnati for 2008 standard
- ▶ However, before we can have areas redesignated, U.S. EPA adopts more stringent standard of 0.070 ppm

2015 Ozone Standard Implementation Timeline

- ▶ October 1, 2015 – U.S. adopts new standards – 0.070 ppm
- ▶ October 1, 2016 – States submit recommendations for nonattainment areas
- ▶ October 1, 2017 – U.S. EPA finalizes nonattainment areas
 - Effective date “usually” 60 days later ...~December 1, 2017

2015 Ozone Standard Implementation Timeline

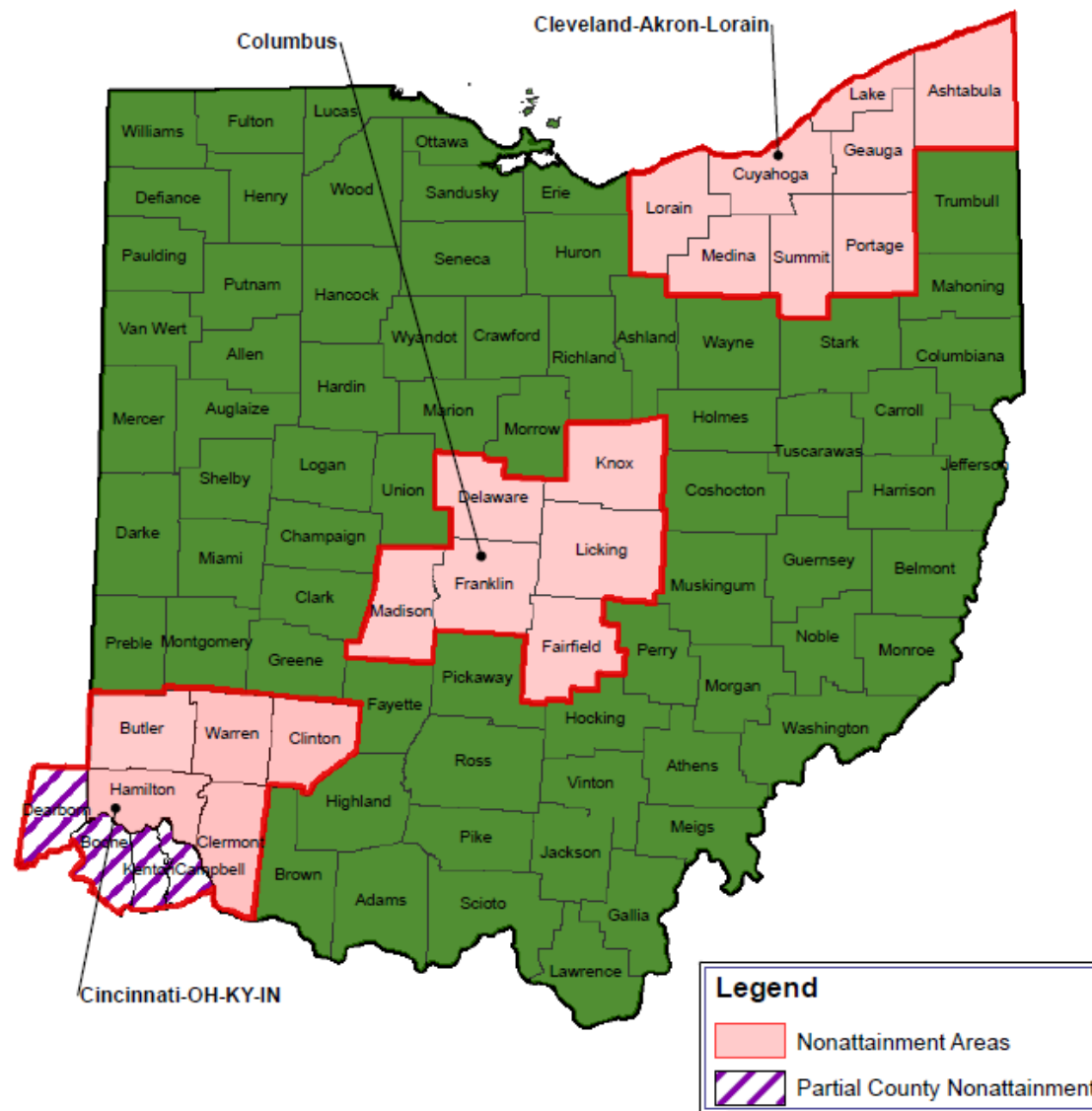
- ▶ ~December 1, 2019 – Emission inventory and emission statements due for marginal nonattainment areas.
 - Two years from effective date of designations
 - Based on previous classifications and ambient air quality data, all Ohio areas should be marginal nonattainment
- ▶ ~December 1, 2020 – Attainment date for marginal
 - Three years from effective date of designations

Ozone Exceedances by Year (through September 24, 2016)

Year	0.125 ppm 1-Hour	0.084 ppm 8-Hour	0.075 ppm 8-Hour	0.070 ppm 8-Hour
2005	5	192	688	1193
2006	None	39	236	505
2007	None	110	541	1037
2008	None	32	171	419
2009	None	4	31	138
2010	None	20	162	387
2011	None	38	215	434
2012	None	96	329	701
2013	None	2	14	65
2014	None	0	11	69
2015	None	1	16	91
2016	None	2	38	148

Revised Ozone Standard				
				% above standard (2014-2016) (thru 7/20/16)
City	2012-2014 Data (ppb)	2013-2015 Data (ppb)	2014-2016 Data (ppb)	at 70 ppb
Canton	70	69	69	
Cleveland	78	73	75	7.1%
Columbus	75	71	71	1.4%
Cincinnati	75	71*	72	2.8%
Dayton	72	69	70	
Lima	71	66	66	
Toledo	71	65	65	
Youngstown- Warren	72	67	68	

*monitor in Northern
Kentucky measures 71 ppb



Startup, Shutdown & Malfunction SIP Call

Startup, Shutdown & Malfunction SIP Call

- ▶ U. S. EPA settled a lawsuit with the Sierra Club that addresses rules associated with startup, shutdown and malfunctions in 36 states
- ▶ U.S. EPA proposed a “SIP Call” in 36 states (including Ohio) that require that states modify their rules because these rules contain language “inconsistent with the Clean Air Act”
- ▶ These states rules were previously approved by U.S. EPA – but are now objectionable
- ▶ State rule allow “Director’s discretion”
- ▶ U.S. EPA claims citizens suits are prevented

Startup, Shutdown & Malfunction SIP Call

- ▶ U. S. EPA went further in Ohio.....
- ▶ Even though not part of the lawsuit, U.S. EPA identified the Scheduled Maintenance Rule as also one of the objectionable rules
- ▶ U.S. EPA did not ask questions on how Ohio rules operate
- ▶ U.S. EPA did not consult with Ohio EPA prior to lawsuit settlement
- ▶ U.S. EPA made incorrect errors and assumptions

Startup, Shutdown & Malfunction SIP Call

- ▶ Objectionable Rule 1: OAC 3745-15-06(C) – Malfunction of equipment
 - The Director retains the responsibility to evaluate any report submitted pursuant to this rule. The Director shall take appropriate action upon a determination that the reporting requirements of this rule have not been satisfied, that the equipment was not properly operated and maintained prior to breakdown, that shutdown of the source or operation during the period of maintenance or breakdown was or has become practicable, that the shutdown or breakdown was or has become avoidable, or was induced or prolonged in bad faith, or that the emissions endanger or tend to endanger the health or safety of the public.

Startup, Shutdown & Malfunction SIP Call

- ▶ Objectionable Rule 1: OAC 3745–15–06(C) – Malfunction of equipment
- ▶ Where is Director’s discretion” “Director shall take appropriate action...”
- ▶ U.S. Southern District of Ohio found that the Ohio rule contains objective standards and are enforceable.

Startup, Shutdown and Malfunction SIP Call

- ▶ Objectionable Rule 2: OAC rules 3745-17-07(A)(3)(c) and 3745-17-07(B)(11)(f) – Visible Emission Rules
 - The malfunction of any air contaminant source or the malfunction/shutdown of air pollution control equipment associated with any air contaminant source, if the owner or operator of said air contaminant source or air pollution control equipment complies with the requirements of rule 3745-15-06 of the Administrative Code and none of the conditions listed in paragraph (C) of rule 3745-15-06 of the Administrative Code exists.

Startup, Shutdown and Malfunction SIP Call

- ▶ Objectionable Rule No. 2: OAC rules 3745–17–07(A)(3)(c) and 3745–17–07(B)(11)(f) – Visible Emission Rules
 - These rules exempt visible emission requirements during malfunctions – does not exempt the malfunction
 - Visible emission standard is not directly related to ambient air quality standard
 - Sources must still meet conditions in OAC 3745–15–06(C)

Startup, Shutdown and Malfunction SIP Call

- ▶ Objectionable Rule 3: OAC 3745-15-06(A)(3): Scheduled maintenance
- ▶ Ohio EPA issues Director's Letter that allows the shutdown of air pollution control equipment under certain conditions;
 - "In cases where a complete source shutdown may result in damage to the air pollution sources or is otherwise impossible or impractical, the owner or operator may request authorization to continue operating the sources during the scheduled maintenance of air pollution control equipment."

Startup, Shutdown and Malfunction SIP Call

- ▶ Objectionable Rule 3: OAC 3745-15-06(A)(3): Scheduled maintenance:
 - U. S. EPA says we cannot allow this. Source should shutdown or state develop individual rules for each source
 - Not realistic – many examples of impracticality – glass furnaces, coke ovens, etc...
 - Not practical to develop individual rules/not enough time

Startup, Shutdown and Malfunction SIP Call

- ▶ Does not “exempt” emission exceedances – still must be reported as a deviation for Title V purposes
- ▶ Ohio EPA processes about 2 – 3 requests each week
- ▶ Not practical – not enough time to wait two years to develop individual rules to be part of SIP

Startup, Shutdown and Malfunction SIP Call

- ▶ Objectionable Rule 4: – OAC 3745–14–11(D) – NOx from Cement Plants
 - The requirements of this rule shall not apply to the following periods of operation:
 - (1) Start-up and shutdown periods and periods of malfunction, not to exceed thirty-six consecutive hours; and
 - (2) Regularly scheduled maintenance activities
- ▶ Not our language – U.S. EPA suggested we add this during the rulemaking process

Startup, Shutdown and Malfunction SIP Call

- ▶ U.S. EPA has not shown that Ohio's rules cause air quality violations
- ▶ Clean Air Act puts responsibility on states to meet air quality standards
- ▶ Clean Air Act also gives primary authority to enforce air quality rules to states, not U.S. EPA – states should be able to interpret/apply their own rules

Startup, Shutdown and Malfunction SIP Call

- ▶ Ohio EPA provided detailed response to U.S. EPA on the proposal
- ▶ Requested that the Ohio Attorney General appeal SIP Call – being done in conjunction with several other states

Startup, Shutdown and Malfunction SIP Call

- ▶ US EPA has gone further and has proposed to modify Title V permit requirements to remove ability by states to include SS&M protections into Title V permits.
- ▶ US EPA Comment period ended August 15, 2016 – <https://www.gpo.gov/fdsys/pkg/FR-2016-06-14/pdf/2016-14104.pdf>

Startup, Shutdown and Malfunction SIP Call – State Rule Revision Process

- ▶ Several draft of rules sent to stakeholders
- ▶ Wide range of comments
- ▶ Received comments on “Early Stakeholder Outreach” solicitation.
- ▶ Have issued “Interested Party Package” with comments due November 29, 2016
- ▶ <http://epa.ohio.gov/dapc/regs/regs.aspx>

Permitting Update

- ▶ Construction Permits remain priority for agency
- ▶ Ohio EPA specifically focused on resolving some of the “older” permits
- ▶ Goal is to have no construction permits older than 180 days – have made progress but not yet reached goal
 - May 2015 had 40 late pending permits > 180 days; October 2016 there were 18 permits
 - In 2015, average permit issuance time was 80 days, in 2016 the average is 74 days

Permitting Update

- ▶ May need to send back permits with incomplete data
- ▶ Scheduling a LEAN event to look at ways to improve processing internally
- ▶ Continuing to utilize the rush list to help meet company goals
 - a. Company contacts Mike Hopkins (person in charge of permitting) – ask to be put on rush list
 - b. Helps us know about timing needs of company for important permits
 - c. Makes sure staff are aware of the timing needs and whether additional staff is needed for processing permit
 - d. Helps ensure permit issuance meets company requirements
 - e. Can be paired with periodic biweekly calls to monitor progress on permit review

Questions?