

Current & Emerging CCR Regulatory Issues

(Noteworthy Impacts to Engineering)

Harold D. Register, Jr., P.E.

Principal Engineer

Environmental Services



Regulatory Framework Hierarchy



Laws

- Legislature – enact laws, defined by court rulings, appropriation
- Example: Resource Conservation and Recovery Act (RCRA)

Rules

- Regulatory Agency – establishes standards through legal process
- Example: Title 40 Code of Federal Regulations

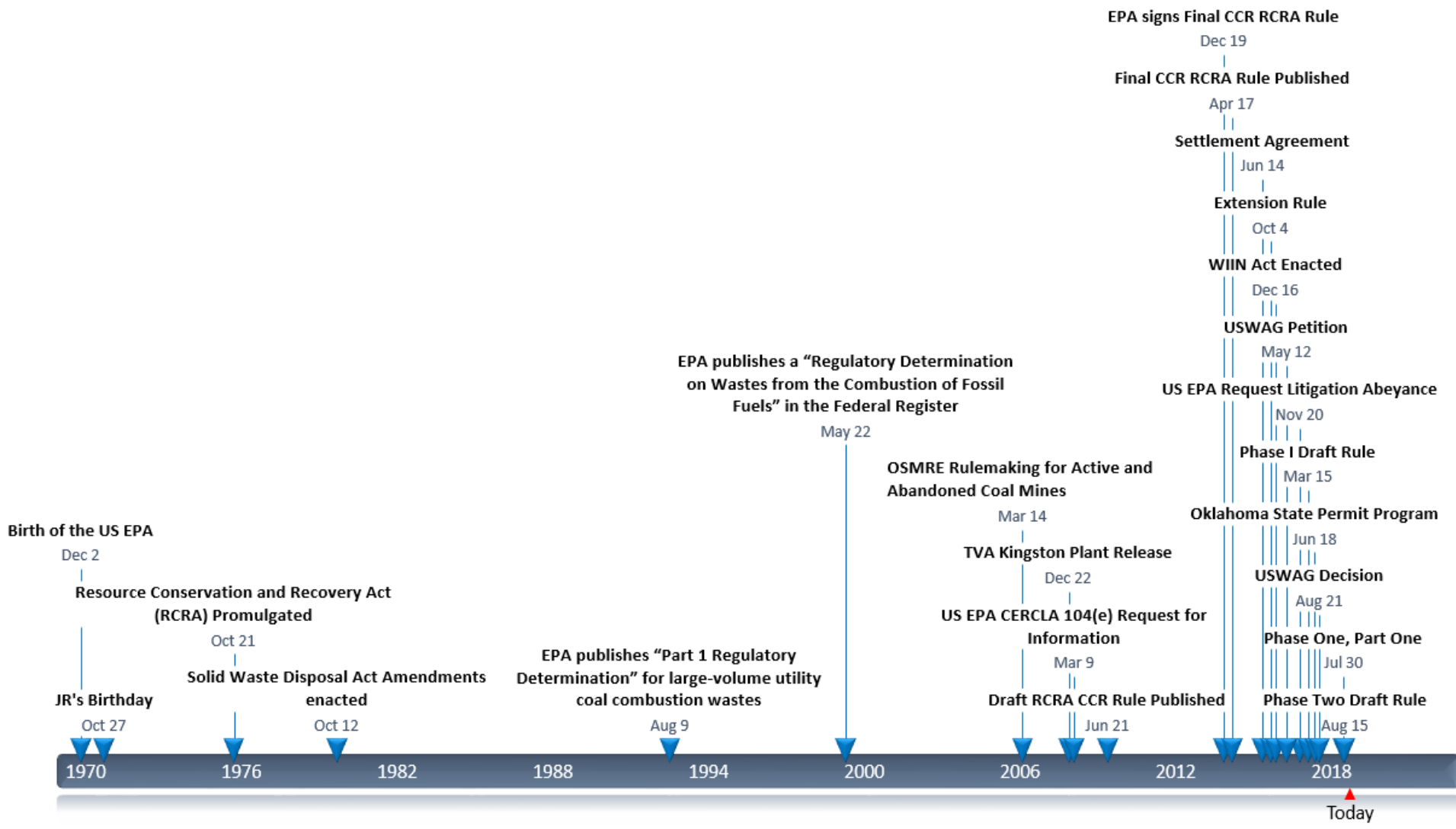
Policy

- Designed on the basis or rules and gives vision and direction
- Example: Risk-Based Clean Closure Memo (March 16, 1998)

Procedures

- Series of steps for a repetitive function to achieve consistency
- Example: Process for Authorizing a State CCR Permit Program

CCR Regulatory Timeline



Bevill Amendment

Section 3001(b)(3)(A) Solid Waste Disposal Act of 1980

- Hazardous waste requirements deferred until further studies could be completed

Fossil Fuel Combustion Waste

- Large-volume coal combustion wastes generated at electric utility and independent power producing facilities that are managed separately.
- Large-volume coal combustion waste generated at electric utility and independent power producing facilities that are co-managed with certain other coal combustion wastes (referred to as "co-managed wastes").
- Coal combustion wastes generated at non-utilities.
- Coal combustion wastes generated at facilities with fluidized bed combustion technology.
- Petroleum coke combustion wastes.
- Waste from the combustion of mixtures of coal and other fuels.
- Waste from the combustion of oil.
- Waste from the combustion of natural gas.

Final Regulatory Determination on Four Large-Volume Wastes From the Combustion of Coal by Electric Utility Power Plants

(58 FR 42466, August 9, 1993)

Determined Subtitle C Regulation inappropriate

Potential for damage determined by site or region specific factors

Current state approach to regulation is appropriate

Notice of Regulatory Determination on Wastes from the Combustion of Fossil Fuels **(65 FR 32213, May 22, 2000)**

Continued to uphold Subtitle C regulation unwarranted

National regulations under Subtitle D warranted when managed in landfills or surface impoundments

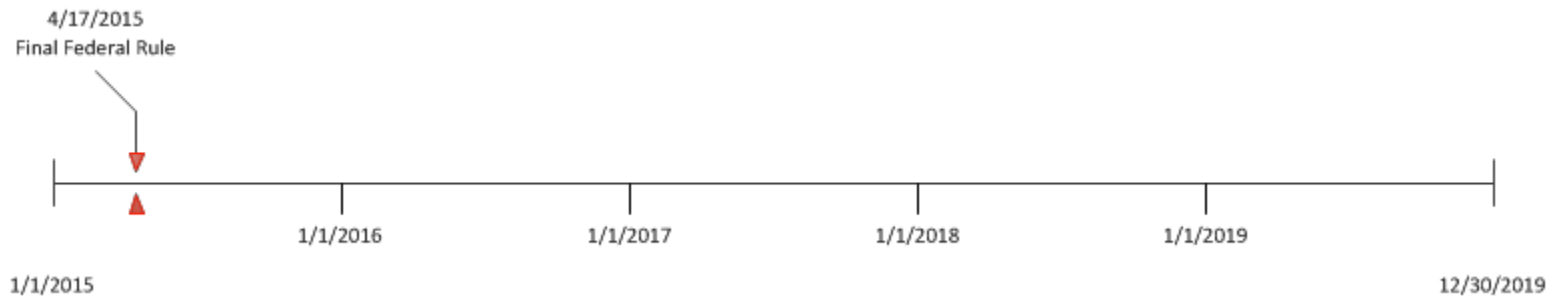
Possible modifications to existing regulations established under Surface Mining Control and Reclamation Act (SMCRA)

Hazardous and Solid Waste Management System;
Identification and Listing of Special Wastes; Disposal of Coal
Combustion Residuals From Electric Utilities

(75 FR 35128, June 21, 2010)

Proposes three potential regulatory frameworks:

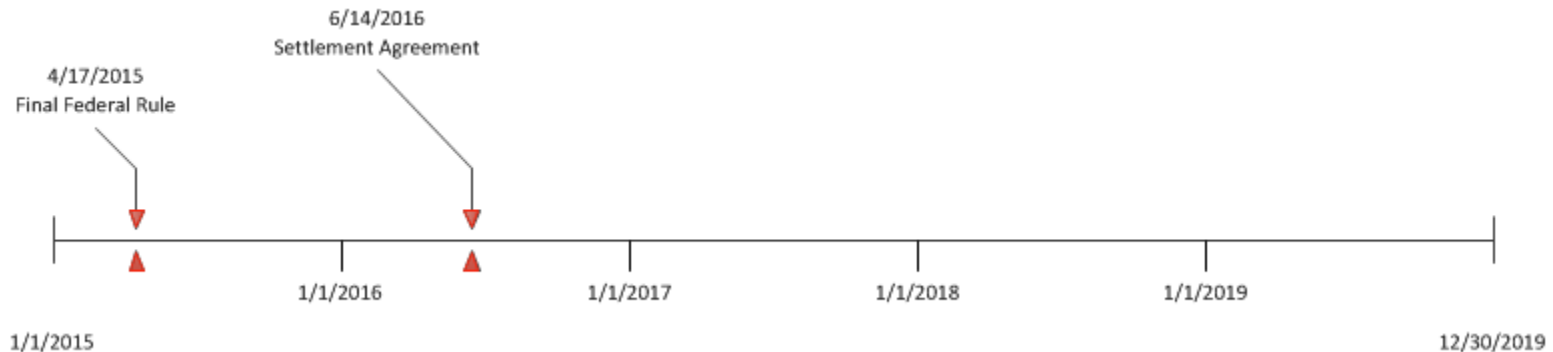
- Subtitle C – Special Waste (S001)
- Subtitle D – Self Implementing
- “D Prime” – Maintain Operation of Surface Impoundments



Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities

(80 FR 21301, April 17, 2015)

- Minimum Requirements Codified under 40 CFR 257
- Schedule of Compliance Milestones
- Self-Implementing
 - Certifications by Owners or Operators
 - Certifications by Qualified Professional Engineers
- Performance and Standards justified by Risk Analysis
- "no reasonable probability of adverse effects on health or the environment from the disposal of solid waste ..."



Inactive Surface Impoundments

- Extension of Compliance Deadlines for Certain Inactive Surface Impoundments; Response to Partial Vacatur (**81 FR 51802, August 5, 2016**)
 - Remand in Response to Partial Vacatur
 - Extension in Response to Settlement Agreement

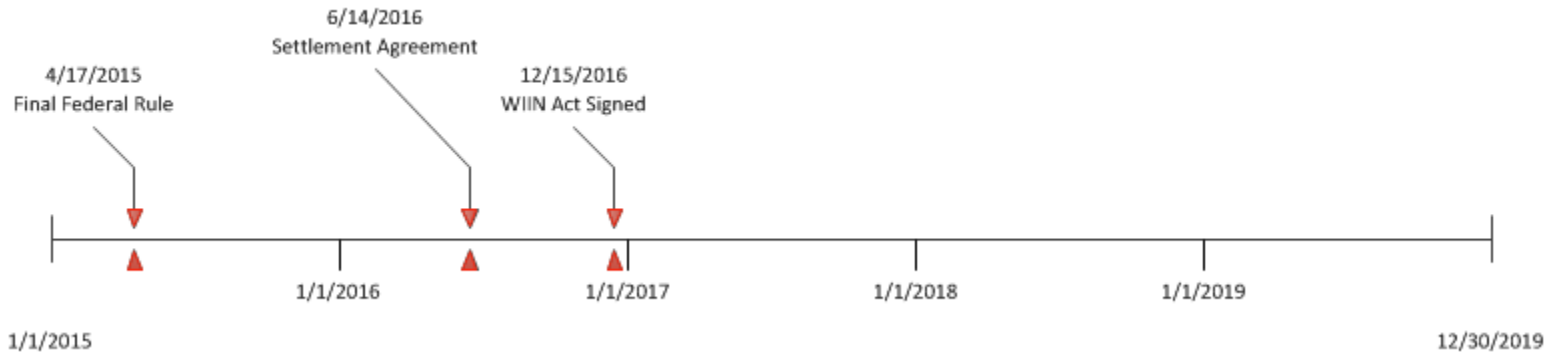
Consideration of Other Standards (Voluntary Remand)

- Height of Vegetative Cover
- Non-groundwater Releases/Corrective Action Measures

Consideration of Additional Standard

- Add Boron to Appendix IV Constituents (Necessitates Remediation)

Alternative Closure (§257.103) Revisited for Non-CCR Waste Streams



S. 2301 Water Infrastructure Improvements for the Nation (WIIN) Act

The central feature of the legislation is :

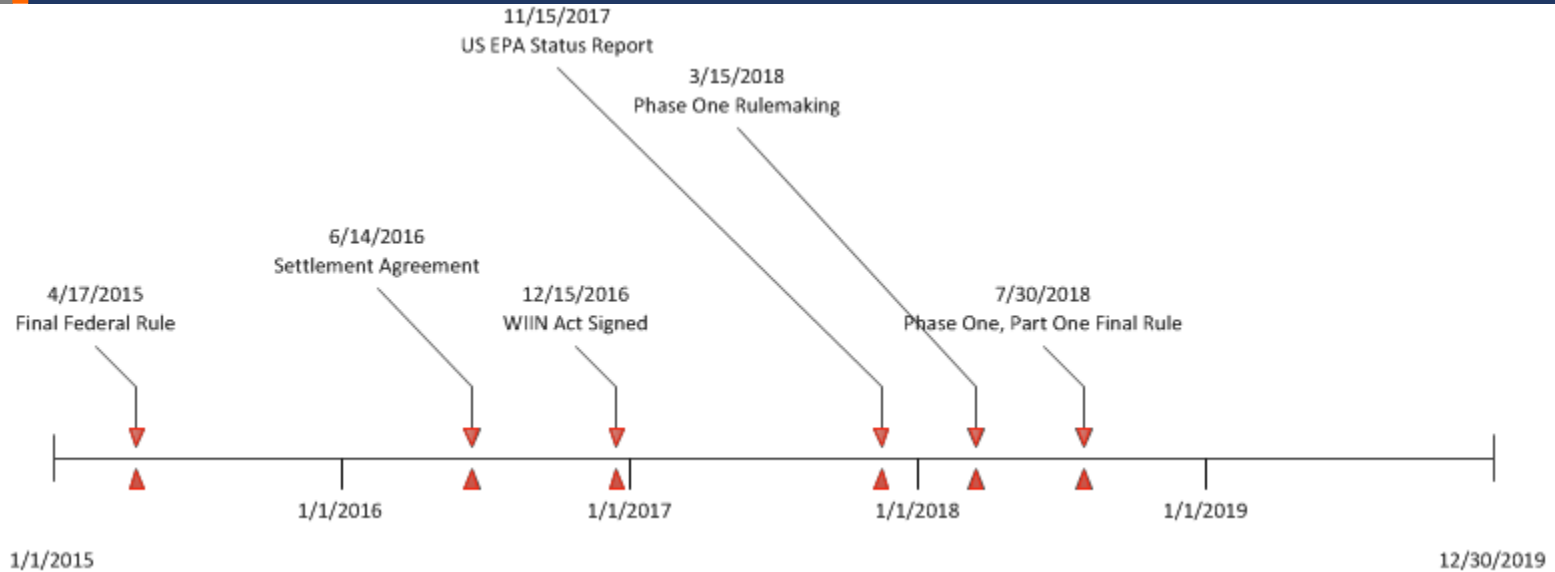
- a State’s ability to submit an application to EPA requesting approval to administer the CCR rule through a State permit program; or
- other system of prior approval (collectively “State permit program”) in lieu of the self-implementing federal CCR rule.

EPA is required to implement the CCR rule through a federal permit program, provided Congress specifically appropriates funding for EPA to do so.

Submit to EPA, in such form as EPA may establish, evidence of a State CCR permit program to operate in lieu of the federal CCR rule:

- Not later than 180 days after the State's submission, and after notice and opportunity for public comment, EPA shall
- approve a State's application in whole or in part if EPA determines that the State CCR permit program requires each CCR unit in the State to comply with:
 - (1) criteria applicable to CCR units under 40 C.F.R. Part 257 (*i.e.*, the CCR rule); or
 - (2) such other criteria that EPA determines, after consultation with the State, are at least as protective as the criteria in the federal CCR rule.

Post-WIIN Act Rulemaking

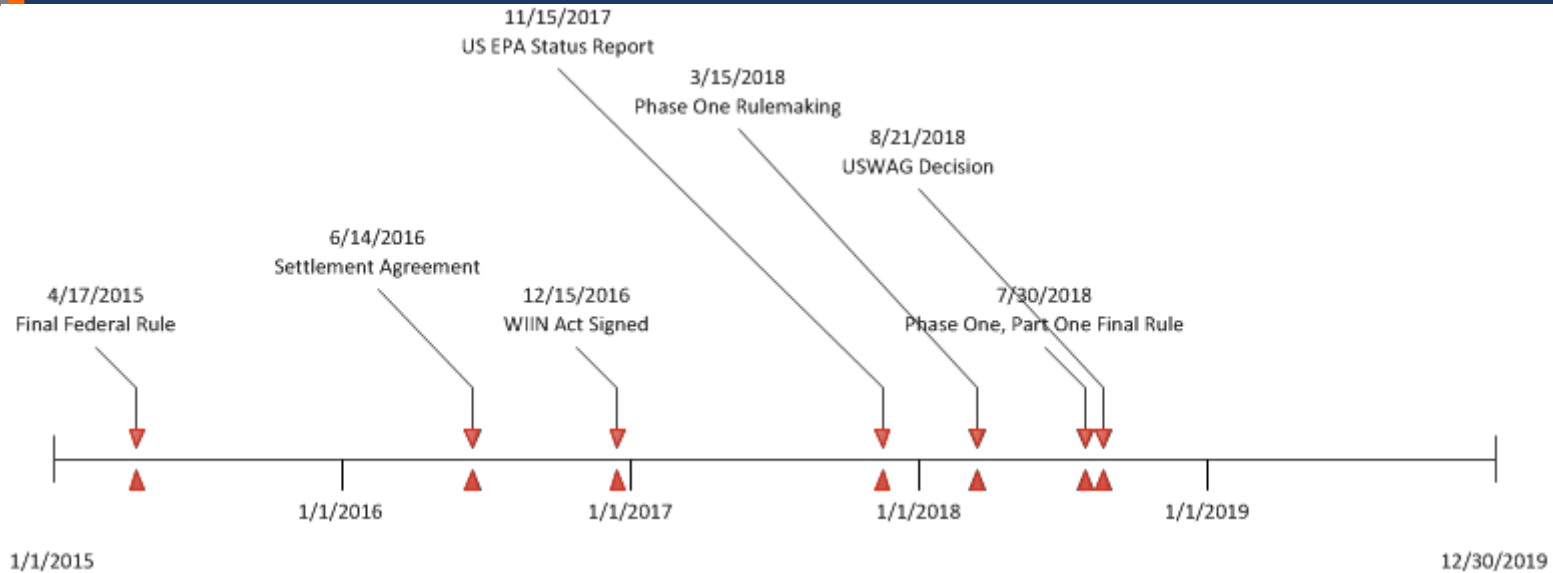


US EPA – Two Phases of Rulemaking

- Phase One Rulemaking (**83 FR 11584, March 15, 2018**)
- Phase One, Part One (**83 FR 36435, July 30, 2018**)
- Phase One, Part Two (*Not Published Yet*)

Phase Two Rulemaking (**84 FR 40353, August 19, 2019**)

DC Circuit Judgement



DC Circuit Renders Decision on Remaining Points of Litigation

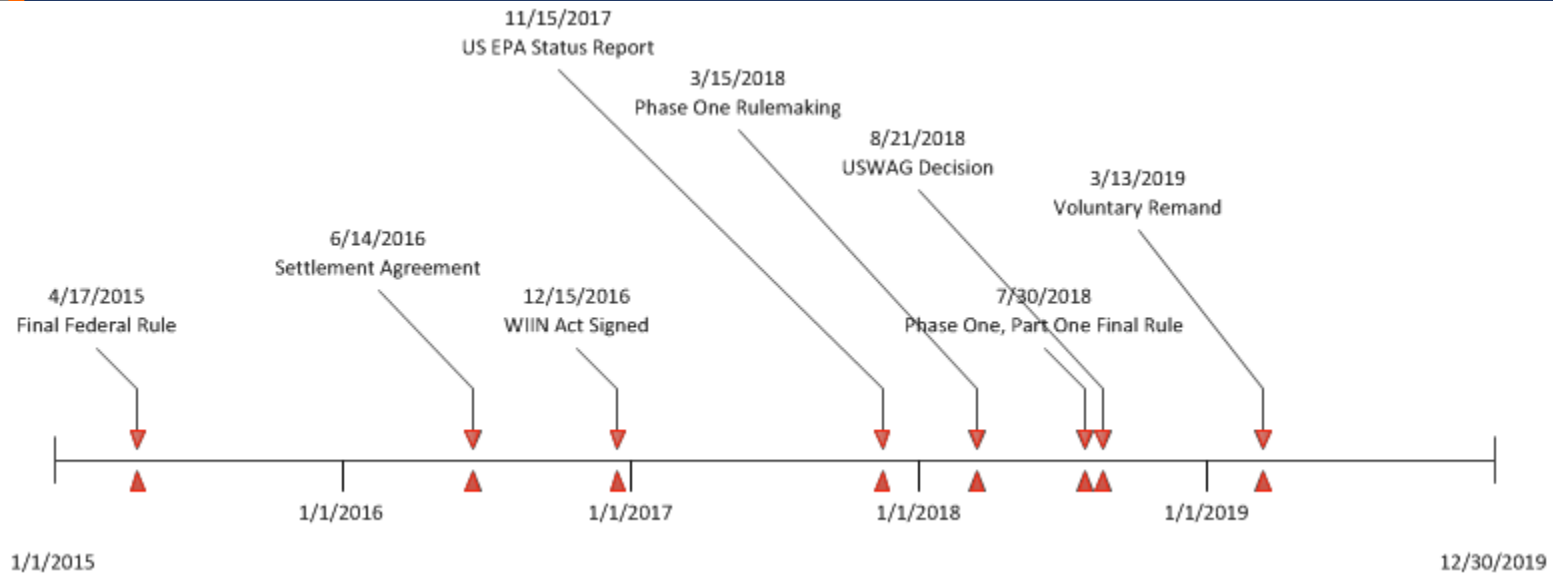
- Forced Closure of Unlined Impoundments
- “Clay” only is not considered a liner material
- Decision renders moot “D Prime” Solution

Record Evidence

- Natural Damage Cases
- US EPA Risk Assessment

[Court Opinion on WIIN Act Relief \(Page 38 of Opinion\)](#)

US EPA Reconsideration

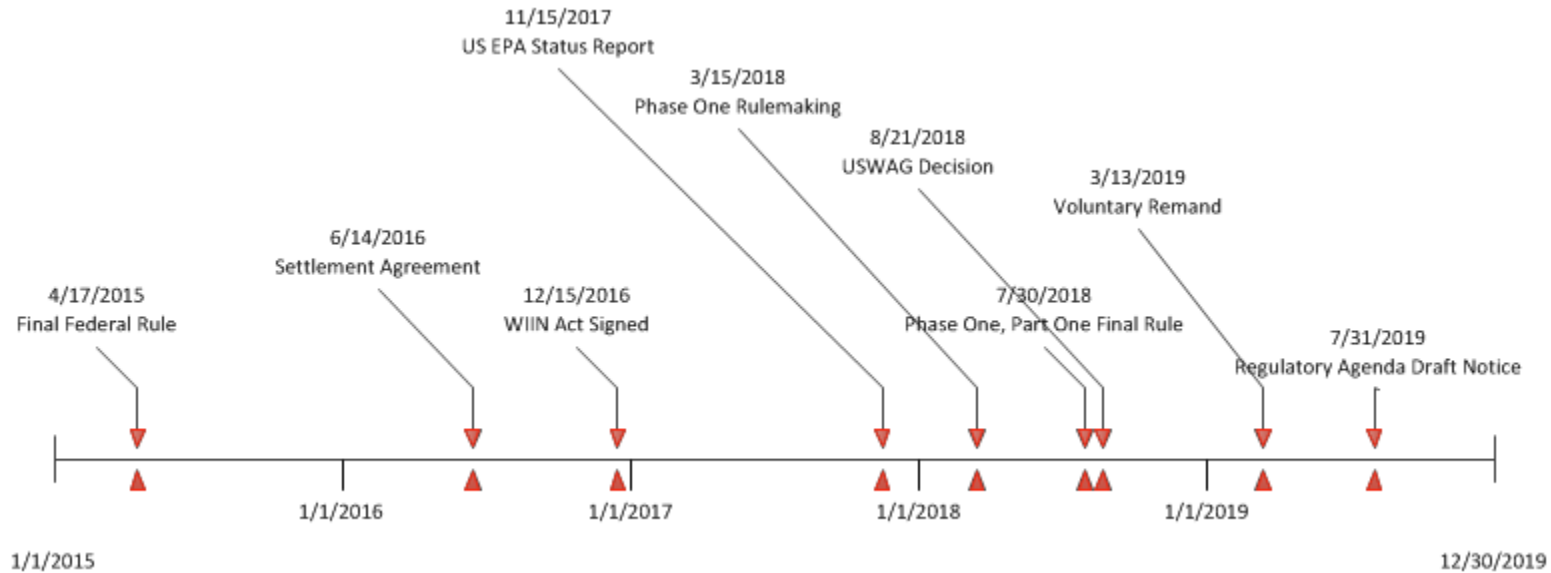


US EPA Implementation of Circuit Court Decision

- Motion for Voluntary Remand without Vacatur (December 17, 2018)
- Affidavit from Barnes Johnson, US EPA Administrator

US District Court Grants Motion (March 13, 2019)

US EPA Spring 2019 Regulatory Agenda

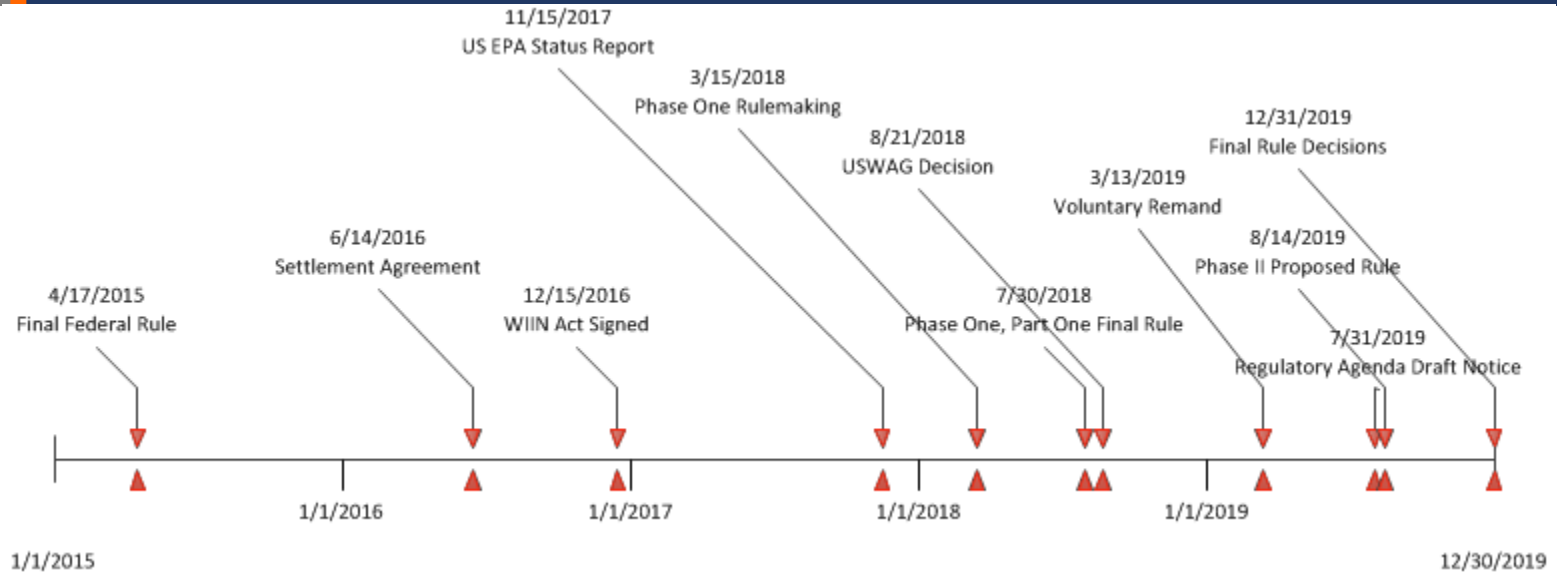


US EPA Spring 2019 Regulatory Agenda

- Phase II (**84 FR 40353, August 19, 2019**)
- Revision of Cease Receipt of Waste Deadline for CCR Surface Impoundments; Response to Court
- Federal Coal Combustion Residuals Permitting Program
- Alternative Demonstration for Unlined Surface Impoundments/ Request for Comment on Legacy Units; Response to Court Part B



What's Next?



Future Rulemaking

Future Litigation

Thank You For Attending!

Harold D. Register, Jr., P.E.

Cell Phone (517)740-0655

harold.registerjr@cmsenergy.com



Consumers Energy