COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF NORTHERN KENTUCKY WATER DISTRICT AND STOLL KEENON OGDEN PLLC FOR ACCREDITATION AND APPROVAL OF A PROPOSED WATER DISTRICT MANAGEMENT TRAINING PROGRAM	**)**	**CASE NO. 2024-00090**

NOTICE OF FILING

Pursuant to the Public Service Commission's Order of April 1, 2024, Northern Kentucky Water District and Stoll Keenon Ogden PLLC give notice of the filing of the following documents concerning the water district management training program that is the subject of their application in this proceeding:

1. A sworn statement attesting that the proposed course of instruction entitled "Northern Kentucky Water Training 2024" was conducted on May 8, 2024 and that the materials found at Tab 4 of this Notice were provided to each attendee **(Tab 1)**;

2. A description of all changes in the presenters and the proposed curriculum that occurred after the submission of the application for accreditation **(Tab 2)**;

3. The name of each attending water district commissioner, his or her water district, and the number of hours that he or she attended **(Tab 3)**;

4. The materials provided to each program attendee **(Tab 4)**;

5. Approval of the program for continuing legal education accreditation by the Kentucky Bar Association **(Tab 5)**; and,

6. Approval of the program for accreditation by the Kentucky Board of Certification of Water Treatment and Distribution System operators **(Tab 6)**; and

7. Approval of the program for accreditation by the Department of Local Government **(Tab 7).**

Dated: May 13, 2024

Respectfully submitted,

Gerald E. Wuetcher
Stoll Keenon Ogden PLLC
300 West Vine Street, Suite 2100
Lexington, Kentucky 40507-1801
gerald.wuetcher@skofirm.com
Telephone: (859) 231-3017
Fax: (859) 259-3517

Damon R. Talley
Stoll Keenon Ogden PLLC
P.O. Box 150
Hodgenville, Kentucky 42748-0150
damon.talley@skofirm.com
Telephone: (270) 358-3187
Fax: (270) 358-9560

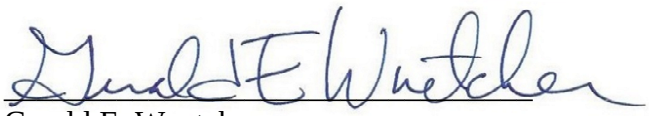
Counsel for Stoll Keenon Ogden PLLC

Tom Edge
General Counsel
Director of, Compliance, Communications and Regulatory Affairs
Northern Kentucky Water District
P.O. Box 18640
Erlanger, KY 41018
tedge@nkywater.org
Telephone: (859) 578-5457
Fax: (859) 426-2770

Counsel for Northern Kentucky Water District

CERTIFICATE OF SERVICE

In accordance with 807 KAR 5:001, Section 8, and the Public Service Commission's Order of July 22, 2021 in Case No. 2020-00085, I certify that this document was transmitted to the Public Service Commission on May 13, 2024, and that there are currently no parties that the Public Service Commission has excused from participation by electronic means in this proceeding.



Gerald E. Wuetcher

TAB 1

COMMONWEALTH OF KENTUCKY)
) ss
COUNTY OF WOODFORD)

AFFIDAVIT

Gerald E. Wuetcher, being duly sworn, states that:

1. He is Counsel to the Firm of Stoll Keenon Ogden PLLC, and served as the organizer of the water management training program entitled "Northern Kentucky Water Training 2024;"

2. The Northern Kentucky Water Training 2024 was held on May 8, 2024 at the offices of Northern Kentucky Water District, 2835 Crescent Springs Road, Erlanger, Kentucky;

3. The presentations listed in the proposed program agenda submitted to the Kentucky Public Service Commission were conducted by the presenters and for the length of the time set forth in the Applicants' Application; and.

4. The materials found at Tab 4 of this Notice of Filing were distributed to all attendees at the Northern Kentucky Water Training 2024.

Gerald E. Wuetcher
Stoll Keenon Ogden PLLC
300 West Vine Street
Suite 2100
Lexington, Kentucky 40507

Subscribed and sworn to before we by Gerald E. Wuetcher, on this May 13, 2024.

Notary Public

No. KYNP50602

My Commission expires 05-11-2026

JOSEPH STEWART
COMM EXPIRES
05/11/2026
NOTARY
PUBLIC
ID # KYNP50602
STATE AT LARGE, KENTUCKY

TAB 2

DESCRIPTION OF PROGRAM CHANGES

All presentations listed in the application were made. However, the presenters for the following topics revised or updated their presentations:

Recent Developments in Utility Regulation
Environmental Regulations Update
Reducing Unaccounted-For Water Loss – Part 1
Reducing Unaccounted-For Water Loss-Part 2
Practical Suggestions for a Successful Rate Filing

The revised presentations are found at Tab 4 of this Notice. In additional Rosemary Tutt, Manager of the Kentucky Public Service Commission's Consumer Services Branch, provided presentations to utility customer service personnel on the requirements of the Commission's regulation on customer relations.

TAB 3

WATER DISTRICT COMMISSIONERS ATTENDING
NORTHERN KENTUCKY WATER TRAINING PROGRAM 2024

LAST NAME	FIRST NAME	WATER DISTRICT	HRS
ALEXANDER	TIM	BOONE COUNTY WATER DISTRICT	6.0
GIVEN	CHUCK	BULLOCK PEN WATER DISTRICT	6.0
HOLLAND	GARY	NORTHERN KENTUCKY WATER DISTRICT	6.0
KOESTER	JOE	NORTHERN KENTUCKY WATER DISTRICT	6.0
LANGE	JODY	NORTHERN KENTUCKY WATER DISTRICT	6.0
MACKE	FRED	NORTHERN KENTUCKY WATER DISTRICT	6.0
PARSONS	JAMES	BOONE COUNTY WATER DISTRICT	6.0
SHEPERSON	GERALD	NORTH MERCER WATER DISTRICT	6.0
SLAUGHTER	BRYAN	BULLOCK PEN WATER DISTRICT	6.0
WILLIAMS	RAYMOND	WEST SHELBY WATER DISTRICT	6.0
WINNIKE	NICK	NORTHERN KENTUCKY WATER DISTRICT	6.0

TAB 4

PRESENTATIONS

HOT LEGAL TOPICS

May 8, 2024

Damon R. Talley
Stoll Keenon Ogden PLLC
damon.talley@skofirm.com

SPONSORED BY Northern Kentucky Water District

1

DISCUSSION TOPICS

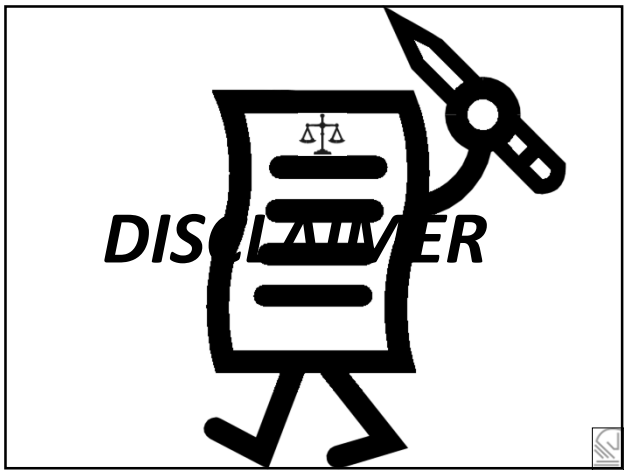
1. PSC Filings
2. Comply with PSC Orders
3. Minutes
4. Notable PSC Cases

2

DISCUSSION TOPICS

5. Borrowing Money
6. 2024 General Assembly
7. Cases to Watch

3



4

PSA for PSC

5

Reporting Requirements

- Must Notify PSC if . . .
  - Vacancy Exists
  - Appointment Made
- When? Within 30 Days
- Consequences

6

Vacancy

- Inform CJE 60 Days Before Term Ends (KRS 65.008)
- CJE / Fiscal Court – 90 Days
- Then, PSC Takes Over
  - ➢ CJE Loses Right To Appoint

7

8

E-Mail Address Regs.

- All PSC Orders Served by E-mail
- Duty to Keep Correct E-mail Address on file with PSC
  - ➢Default Regulatory E-mail Address
- Duty to List E-mail Address in Application & All Other Papers
  - ➢Utility Official
  - ➢Its Attorney

9

E-Mail Address

- Who is Covered?
  - Water Districts
  - Water Associations
  - Investor Owned Utilities
  - **Municipal Utilities**

10

Why Municipals?

- Contract Filing
- Tariff Change (Wholesale Rate)
- Protest Supplier's Rate Increase
- Acquiring Assets of Another Utility
- Avoid Delays

11

12

Default Regulatory E-mail Address

- Send E-mail to PSC
  - psc.reports@ky.gov
  - PSCED@ky.gov
- Send Letter to PSC
  - Linda C. Bridwell, Executive Director

13

PSC Case No. 2016 - 00310

Opened:	9-09-2016
Utility:	**Unlucky** WD
Type:	Show Cause Case
Issue:	Ignored PSC Order & Wrong Email Address
Settled:	$500 Fine

14

PSC Case No. 2023 - 00125

Opened:	6-07-2023
Utility:	**Uninformed** WD
Type:	Investigation Case
Issue:	Board had no access to Email Account. Manager did not inform Board of Order.
Hearing:	1-18-24
Decided:	4-02-24

15

Comply With All PSC Orders

16

". . . for allegedly failing to comply with the Commission's March 10, 2020 Order in Case No. 2019-00458. The willful failure to comply presents prima facie evidence of incompetency, neglect of duty, gross immorality, or nonfeasance, misfeasance, or malfeasance in office sufficient to make [the District's] officers and manager subject to the penalties of KRS 278.990 or removal pursuant to KRS 74.025. The Commission finds that a public hearing should be held on the merits of the allegations set forth in this Order."

17

PSC Case No. 2022 - 228

Date:	08-22-2022
Type:	Failure to Comply with PSC Order
Issue:	Did Not Timely File Rate Application
Decided:	12-08-2022

18

PSC Case No. 2022 - 228

(cont.)

Facts:

- PWA Case 2 Penny 
- Must File Rate Case by 04-15-2022 (6 Months)
- Nothing Filed by 08-22-2022
- PSC Opened Case

19

PSC Case No. 2022 - 228

(cont.)

Manager's Defense:

- Honesty
- I Never Read the Order
- I Never Told the Board
- Fell on His Sword 

20

PSC Case No. 2022 - 228

(cont.)

Board's Defense:

- Ignorance is Bliss
- Manager Never Told Us
- Manager's Job to Tell Us
- Acknowledged Ultimate Responsibility

21

PSC Case No. 2022 - 228

(cont.)

Affirmative Steps to Mitigate:

- Adopt New Procedure
  - All PSC Orders Forwarded to Board Members
- Engaged Services of RCAP to File Rate Case

22

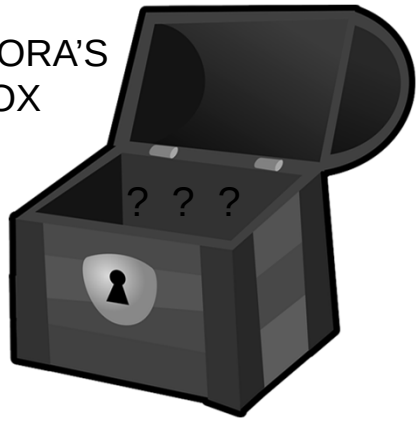
PSC Case No. 2022 - 228

Outcome:

- No Hearing
- Commissioners & GM
  - Fined $250
  - Waived
    - 12 Hours PSC Training
    - Good Behavior

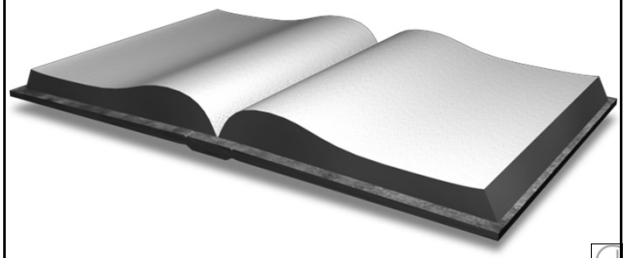
23

PANDORA'S BOX



24

MINUTES



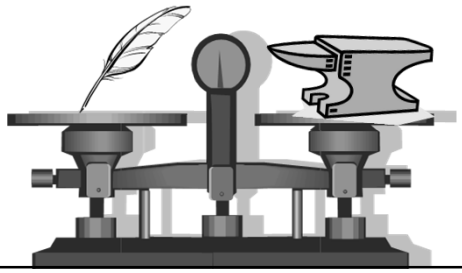
25

What Are MINUTES?

- Official Record
- Much, Much More . . .

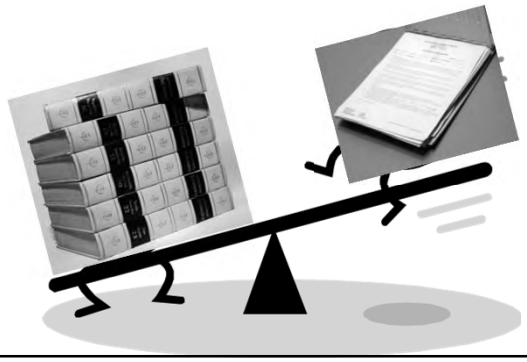
26

AN OUNCE OF PREVENTION = **A POUND OF CURE**



27

How much information **SHOULD** be included in the MINUTES?



28

Minutes

How MUCH is too MUCH?

- No definitive answer
- Art not a science

Cont.

29

Minutes …

How MUCH is too MUCH?

- Guidelines . . .
  - Minutes are **NOT** a transcript
  - Minutes are **NOT** the Congressional Record
  - Include rationale for action taken if it might avoid lawsuit

30

"Conversations are NOT official actions of the Board."

Virginia W. Gregg
Former PSC Staff Attorney

31

WHY Include Summary of Conversations in Minutes?

- Document Board's Due Diligence (e.g. Water Loss)
- Document Board's Oversight Role (e.g. Compliance with PSC Orders)
- Avoid or Win Litigation

32

TALLEY'S TIPS

33

Talley's Tips

Prepare Minutes for a Reader . . .

1. Who did not attend the meeting.
2. Who will not read the Minutes until at least one year later.
3. Who is employed by PSC.
4. Who will access Minutes via www.

34

Notable PSC Orders

35

PSC Case No. 2023-306

Filed:	09-15-2023
Utility:	Bullock Pen WD
Type:	Declaratory Order
Issue:	Is CPCN Needed To Buy Land?
Decided:	10-06-2023
Answer:	NO

36

Oldham County Water District

WHO?	Oldham Co. W.D. (OCWD) versus PSC
WHERE?	Franklin Circuit Court Case No. 23-CI-00630
WHEN?	07-10-23
WHAT?	Declaration of Rights

37

Oldham County Water District

WHY? OCWD Is Seeking a Court Ruling Whether It is Lawful or Unlawful to Pay Water District Commissioners Benefits (e.g. Health Insurance)

38

Oldham County Water District

Legal Issue:

- Whether "salary" limits of KRS 74.020 include the cost of "benefits" paid to water district commissioners
- Are Benefits Considered Salary?

39

Oldham County Water District

Not An Issue:

- Whether Cost of Commissioners' Benefits Can Be Recovered Through Rates
- PSC Decides This

40

Oldham County Water District

Oral Arguments: 03-10-24
Decision: 04-15-24
Holding:

(1) Benefits are Not "Salary"
(2) OK to Pay Benefits to Water District Commissioners

41

Oldham County Water District

Not Decided:	Can PSC Disallow Cost of Commissioners' Benefits in Rate Case?
Answer:	Yes (Read Page 8 of Order)

42

43

Caution !

1. Do Not Vote to Provide Benefits to Yourself !
   - KRS 74.020(3) Voting on Matter which Results in Direct Financial Benefits Is Grounds for Removal from Office
   - Delay Effective Date

44

Caution !

2. Commissioners' Benefits Should be same as Employees' Benefits
3. PSC May Disallow Recovery of Cost of Benefits in Rate Case
   - Is this Expenditure "Fair, Just, & Reasonable?"
     - PSC is Fact Finder

45

PSC Case No. 2023 - 257

Filed: 09-23-2023

Utility: Harrison Co. W. A.

Type: (1) Financing Approval
(2) CPCN – Rehab of 3 Tanks
or
(2A) Declaratory Order

Decided: 11-28-23

46

PSC Case No. 2023 - 257

Facts: Water Tank Maintenance Contract

- 3 Contracts with Utility Service
- Rehab 3 Tanks
- Cost: $524,335
- Initial Term: 5 Years
- Level Payments for First 5 Years
- Auto Annual Renewal Thereafter
- Much Lower Annual Fee

47

PSC Case No. 2023 - 257

Issues:

1. Is the Tank Maintenance Contract an Evidence of Indebtedness ?
   Answer: Yes
2. Is CPCN Needed ?
   Answer: No

48

Evidence of Indebtedness

- Significant Work in Year 1 & 3
- Level Payment each Year for 5 Years
- Work Now; Pay Later
- If Terminated, Still Must Pay for 5 Years

49

Change the Facts

- Initial Term Still 5 Years
- Pay as Work is Performed
- No Longer an Evidence of Indebtedness

50

Is a CPCN Needed ?

- NO
- Why? Ordinary Extension in the usual course of Business
  - Looked at Each Tank Separately
  - Not a Sufficient Capital Outlay

51

PSC Case No. 2023 - 417

Filed: 12-18-2023

Utility: Breathitt Co. W.D.

Type: CPCN or Declaratory Order

Holding: No CPCN Needed

Decided: 03-13-24

52

PSC Case No. 2023 - 417

Facts:

- Construct 11 Miles of Waterline
- Install Pump Station
- 27,000 Gallon Storage Tank
- Cost: $3.5 Million
- Grant: $3.6 Million
  Cleaner Water Grant

53

PSC Case No. 2023 - 417

Holding: No CPCN Needed

Rationale:

- Exempt Under KRS 278.020(1)(a)(3)(b)
- No Borrowed Money
- No Rate Increase
- Cleaner Water Grants

54

PSC Case No. 2022 - 065

Filed:	3-29-2022
Utility:	Southeastern Water Assoc.
Type:	CPCN – New Office Bldg.
Issue:	Reasonable Alternatives Considered
Decided:	8-30-22

55

PSC Case No. 2022-065

- CPCN: Standard of Review
  - Need
  - Absence of Wasteful Duplication

56

PSC Case No. 2022-065

- Proving Lack of Wasteful Duplication:
  - All Reasonable Alternatives Considered
  - Cost is Not Sole Criteria
    - Initial Cost
    - Annual Operating Cost

57

PSC Case No. 2023 - 192

Filed:	6-09-2023
Utility:	Ohio Co. WD
Type:	CPCN – Raw Water Intake Rehab
Issue:	Reasonable Alternatives Considered
Decided:	7-31-23

58

PSC Case No. 2023-192

- Preliminary Engineering Report
  - Alternative 1: Cadillac
  - Alternative 2: Chevrolet
- Final Engineering Report
  - Only Discussed Alt. 2

59

PSC Case No. 2023-192

- Extensive Discovery Alt. 1
  - Initial Cost
  - Depreciation Expense
  - Annual Operating Cost
  - Rate Increase Needed
- Comparison of Both Alternatives

60

Borrowing Money

61

KRS 278.300(1)

No utility shall issue any securities or evidences of indebtedness . . . until it has been authorized to do so by order of the Commission.

62

Practical Effect

- Must Obtain PSC Approval Before Incurring Long-term Debt (Over 2 Years)
- Exception:
  - 2 Years or Less
  - Renewals
    (3 X 2 = 6 Years)
    (6 X 1 = 6 Years)

63

Violation

64

Show Cause Cases

65

Show Cause Cases Borrowing Money

First Case:	2022-197
Second Case:	2022-252
Third Case:	2023-344

66

Case # 1

Case No.	2022 - 197
Opened:	08-11-2022
Issues:	Violated:
	➢KRS 278.300
	➢KRS 278.020
Hearing:	07-06-2023
Decided:	03-04-2024

67

Case # 1

Background Facts:

- 11-18-21: Purchased Office Bldg.
- 11-18-21: Financed Portion of Cost with a 7 year Loan
- 03-15-22: Applied for Retroactive Approval of Loan

… continued

68

Case # 1

Background Facts (continued):

- 05-13-22: PSC Issues DR
- 05-19-22: Bank Loan PIF
- 05-27-22: PSC Application Withdrawn by Utility

… continued

69

Case # 1

Background Facts (continued):

- 06-20-22: PSC Dismisses Case & States Intent to File Show Cause Case
- 08-11-22: PSC Opens Show Cause Case

70

Case # 1

Utility's Defenses:

- Loan Paid Off
- No CPCN Needed Since Building was Purchased & Not Constructed
- Relied Upon Advice of Counsel
- Good, Honest & Decent People

71

Case # 1

Case Status:

- Multiple Rounds of DR
- Hearing: 07-06-2023
- Post Hearing Data Request
- Brief Filed: 09-08-2023
- Decided: 03-04-2024

72

Case # 1

Outcome:

- CPCN Needed to Buy & Remodel Office Building
- Cost $206,000 (12% of Net Utility Plant)
- Headquarters Facilities Closely Scrutinized

. . . Continued

73

Case # 1

Outcome:

- Board Members
  - Fined $500 (Waived)
  - 12 Hours of Training
- GM Retired
  - No Fine

74

Case # 2

Case No. 2022 - 252

Opened: 02-16-2023

Issue: KRS 278.300
(4 Violations)

Hearing: 08-01-2023

Decided: 10-17-2023

75

Case # 2

Facts: Leased 4 Trucks
4 & 5 Year Terms

Issue: Is Long Term Lease
An evidence of
Indebtedness ?

Holding: Yes

76

Case # 2

Outcome:

- GM & Directors (Water Assoc.)
  - Fined $250 (Waived)
  - 12 Hours of Training
  - 6 More Hours Annually
- Future Directors
  - 6 Hours Training Annually

77

Case # 3

Case No. 2022 - 344

Opened: 04-14-2023

Issue: KRS 278.300
(4 Violations)

Hearing: 07-06-2023

Decided: 10-31-2023

78

Case # 3

Defenses:

- Advice of Counsel
  - No Opinion Letter from Counsel
- No Answer Filed
- Lawyer Mea Culpa Letter

79

Case # 3

Case Status:

- 3 Rounds of DR
- Hearing: 07-06-2023
- Very Interesting Hearing
- Post Hearing DR
- No Brief Filed

80

Case # 3

Outcome:

- Board Members
  - Fined $250
  - Not Waived
  - 12 Hours of PSC Conducted Training

81

2024 General Assembly

82

Notable Bills

- HB 1 Budget Bill
- HB 563 Funds for Capital and Non-Capital Expenses

83

HB 1 Budget Bill

Outcome:

- Water & Wastewater: $340 Million
  - KIA: $ 150 Million
  - Earmarks $ 174 Million
  - DLG $ 16 Million

  Total $ 340 Million

84

HB 563

- Ky. Water & Wastewater Assistance for Troubled or Economically Restrained Systems
- Ky. WWATERS Program

85

Ky. WWATERS Program

- Purposes:
  - Provide Funds to Assist "Troubled" Systems
  - Emergency Funds
- Both Non-Capital & Capital Expenses

86

Ky. WWATERS Program

- Application Process
- KIA Board Evaluates & Scores Each Applicant
- General Assembly Makes Final Decision

87

Ky. WWATERS Program

- Eligibility Criteria:
  - MHI < Ky. MHI
  - User Rates > 1.0% of MHI
  - Missing Audits
  - Negative Income (2 of last 5 years)

88

Eligibility Criteria (continued)

- DSC Ratio < 1.1 (In 3 of Last 5 Years)
- High Accounts Receivable (Greater Than 45 Days)
- NOV or Agreed Order
- Water Loss > 30%

89

Eligibility Criteria (continued)

- Use Funds to Regionalize, Consolidate or Joint Management
- Funds Will Solve the Problem
- Other Criteria

90

Ky. WWATERS Program

- Not Necessary to Meet All Criteria
  - One Is Enough
  - More You Meet - Higher Your Score

91

Ky. WWATERS Program

- Funds:
  - Grants
  - Loan
  - No Interest Loans
  - Forgivable Loans

92

Cases To Watch

93

PSC Case No. 2023 - 252

Filed:	08-18-2023
Utility:	Oldham Co. W.D.
Type:	ARF Case
Issue:	Full Recovery of Cost of Employee Benefits
Hearing:	04-19-24
Decided:	Before 06-18-24

94

PSC Case No. 2023 - 247

Filed:	09-29-2023
Utility:	Hardin Co. W.D. No. 2
Type:	General Rate Case
Issue:	Full Recovery of Cost of ➢ Employee Benefits ➢ Commissioners' Benefits

(cont. . .)

95

PSC Case No. 2023 - 247

Hearing:	01-11-2024
Brief:	02-16-2024
Statutory Deadline:	07-29-2024

96

QUESTIONS?

damon.talley@skofirm.com

270-358-3187

STOLL KEENON OGDEN PLLC

97

Northern Kentucky Water District

Northern Kentucky Water Training 2024

ENVIRONMENTAL REGULATIONS UPDATE

Presented by Amy Stoffer & Tom Edge

1

PRESENTATION DISCLAIMER

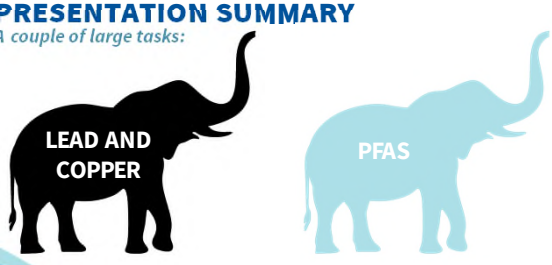
The materials provided in this presentation and any comments or information provided by the presenters are for educational purposes only and nothing conveyed or provided should be considered legal, engineering or technical advice nor replace independent professional judgment.

Statements of fact and the views, thoughts and opinions expressed are those of the presenter and not opinion or position of the Northern Kentucky Water District.

2

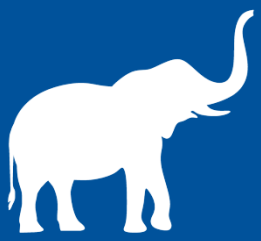
PRESENTATION SUMMARY

A couple of large tasks:



3

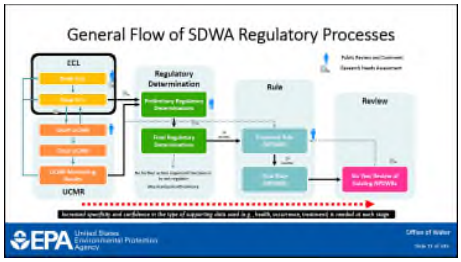
LEAD AND COPPER RULE



4

PREPARING TO EAT AN ELEPHANT

Background on SDWA Regulatory Process:



5

BACKGROUND –

Lead & Copper Rule

- EPA authorized to establish standards under the *Safe Drinking Water Act*.
- Lead and Copper Rule began in 1991.
- Maximum Contaminant Level Goal (MCLG) for lead: 0 µg/L
- Test water at the tap in homes that have lead service lines or copper with lead solder.
- Action Level for lead: 15 µg/L
  - >AL - Install corrosion control treatment; and
  - Replace lead service lines at a rate of 7%

6

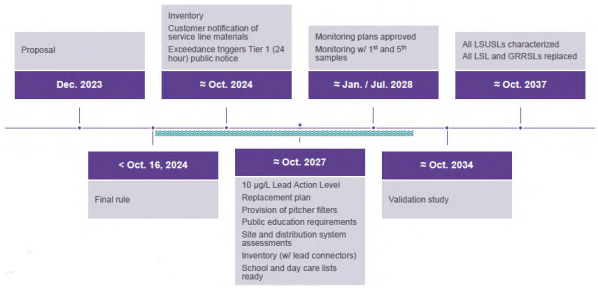
BACKGROUND –
Lead & Copper Rule Revisions (LCRR)

LCRR promulgated on January 15, 2021 and created new requirements **THAT BECOME EFFECTIVE OCTOBER 16, 2024:**

- Lead Service Line Inventory
- Tap Sampling
- Trigger Level
- Corrosion Control Treatment
- Lead Service Line Replacement
- Schools/Child Care Facilities

7

LCR Schedule (assuming rulemaking proceeds on schedule)



8

BACKGROUND –
Lead & Copper Rule Improvements (LCRI)

Final Rule Expected October 2024, then 3 years to comply.

Lead and Copper Rule Improvements major areas of change:

- Tap Sampling
- Communications
- Inventory
- Lead Service Line Replacement

9

PROPOSED LCRI COMPLIANCE

Tap Sampling

- Reduce action level from 15 to 10 ug/L
- Requires use of 100% lead service lines in sample pool
- Use higher of 1st and 5th liter samples

Communications

- Requires several new communications and outreach efforts for various compliance levels
  - *Example: 3-calender day notification of lead testing results.*

10

ACTION LEVEL EXCEEDANCE

EPA is proposing systems with first and second action level exceedances must:

- Notify customers within 24 hours
- Conduct system-wide public education outreach, such as conducting a townhall meeting or participating in a community event, to raise additional awareness of the health effects of lead in drinking water, identify steps consumers can take to reduce their exposure, and provide information about how the water system is addressing the issue.

EPA is proposing systems with three action level exceedances must:

- Make filters certified for lead reduction available to all consumers served by the system.
- Conduct at least one additional system-wide public education outreach activity, such as conducting a townhall meeting or participating in a community event, to raise additional awareness of the health effects of lead in drinking water, identify steps consumers can take to reduce their exposure, and provide information about how the water system is addressing the issue.
- Repeat the public education activity every 6 months

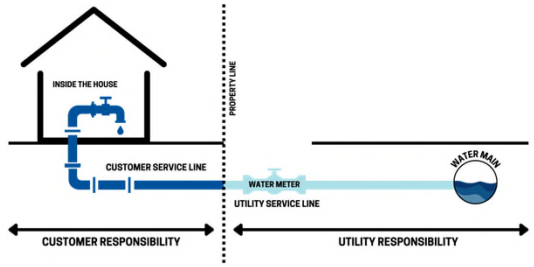
11

PROPOSED LCRI RULE COMPLIANCE OUTLOOK - INVENTORY

- ***Under LCRR***
  - Publish map online by October 16, 2024
  - Submit initial inventory to state by October 16, 2024
  - Send letters to selected customers within 30 days of state submittal
- ***New LCRI Requirements***
  - Add connector material for each service line
  - Resolve all unknown lines within 10 years (est. October 2037)

12

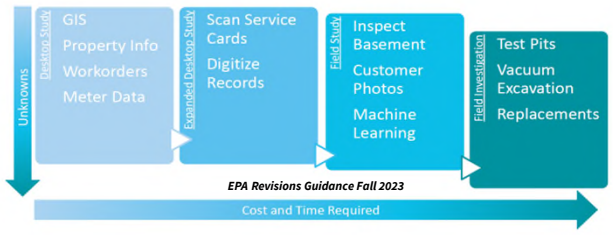
TYPICAL SERVICE LINE CONFIGURATION – EXTERIOR METERS



13

INVENTORY DEVELOPMENT PROCESS

Inventory Due October 16, 2024



14

NKWD CASE STUDY

15

INVENTORY STATUS

~86,000 Total Active Services

Known Lead or GRR (Galvanized Requiring Replacement)
3,536(4%)
Utility : 1,251 (1%) Private : 2,628 (3%)

Lead Status Unknown
49,992 (58%)
Utility : 32,006 (37%) Private : 49,982 (58%)

Non-Lead
32,442 (38%)
Utility : 52,753 (61%) Private : 33,359 (39%)

16

INVENTORY ACTIVITIES

Customer Engagement

- Mailed letters to several disadvantaged communities
- Placed material identification instructions on website for customer-owned service line
  - Over 200 customers have submitted response
- Passed out flyers at several community events
- Put article in January "What's Happening" publications
- Including bill stuffers January – April

17

INVENTORY ACTIVITIES

18

PROPOSED LCRI RULE COMPLIANCE OUTLOOK

Lead Service Line Removal

- Remove all lead service lines within 10 years *in control of utility;*
- Must fully replace 10% annually on three-year rolling average.

Outlook: NKWD is not "in control" of private service lines

Kentucky Administrative Regulation, 807 KAR 5:066 Section 12 lays ***ownership of service lines past the meter and meter box with the customer****. After the point where NKWD's ownership ends,* ***NKWD****, as a special purpose government entity whose statutory purpose under Kentucky Revised Statute 74.012* ***is limited to furnishing public water supply****, is prohibited from seizing ownership of the service line beyond that point in accordance with Kentucky Constitution Sections 10, 13 and 242.*

In limited circumstances, NKWD may arguably replace private lead service lines with consent as an implied power when reasonably incidental and indispensable to its power of furnishing a public water supply (i.e., as part of water main replacement project). See e.g., Commonwealth v. Fayette County, 39 S.W.2d 962 (Ky. 1931); OAG 84-148 (water district could probably require hook up in interest of public health, safety and welfare).

Consent only applicable in limited circumstances, but in any case, funding is open question . . .

19

SERVICE LINE REPLACEMENT

What is required by utility to obtain consent and what does that mean?

- EPA is proposing that where customer consent is required by State or local law or tariff agreement that system must make a reasonable effort to obtain property owner consent.
  - A minimum of 4 attempts using at least 2 different methods.
- If unable to obtain consent, then system would not be required to conduct full service line replacement because, under those circumstances, the full service line would not be "under the control" of the system.
- EPA does not propose any type of funding requirement by the utility, but only that the utility submit a plan that includes a funding strategy.

20

WHAT IS THIS GOING TO COST?

NKWD CASE STUDY

21

PROJECTED COSTS

Rough Estimated Compliance Costs under Proposed LCRI

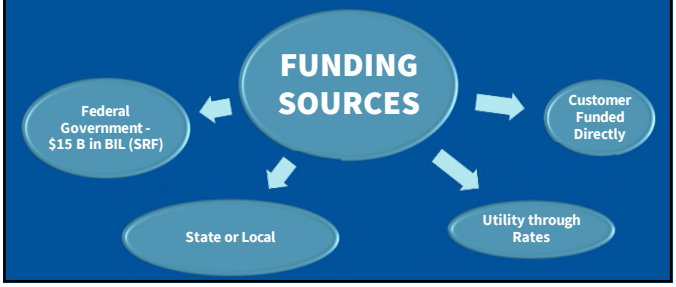
Option Description	Estimated Cost		
	Service Line Replacement	Water Main Replacement	Total
Conduct LSLR with Water Main Replacement	$240 M	$636 M	$876 M
Conduct LSLR First and Water Main Replacement Later	$424 M	$636 M	$1,060 M

Estimated average annual cost for other components of LCRI $1 M to $2 M

22

HOW DO WE PAY FOR IT?

FUNDING SOURCES OVERVIEW



23

FEDERAL FUNDING

Significant funding for lead service line replacement with $15 B under BIL and additional under SRF:

Roughly 15% to 20% funding may be available through PF and SRF loans

Kentucky

$111 M LSLR (49% PF)

$100 M SRF (49% PF)

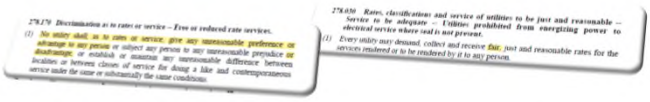
$211 M Total

Need to recover rates to pay back loan portion

24

OTHER FUNDING OPTIONS

- ***State or Local*** – No additional monies currently expected from grants by Legislature.
- ***Customer Funded Directly*** – Customer either pays:
  (1) lump sum of costs for replacement at or before time of replacement; or
  (2) through a surcharge program similar to NKWD's subdistricts (if PSC would approve such a program).
- ***Utility Through Rates*** – Utility pays and recoups through rates.
  Legal Opinion: PSC would approve for utility owned portion but may not approve recovery of rates for private side.



25

NKWD CASE STUDY

26

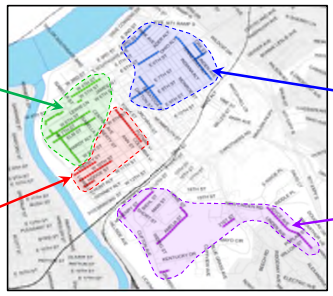
NEWPORT OVATION

- Replacing nearly 5 miles of water main.
- Various funding sources:
  - Cleaner Water Grant - $5.2M
  - BIL and ARPA - $7.1M
- Full Lead Service Line Replacement is a grant requirement – ***only grant and principal forgiveness funds*** used for Private Lead Service Line Replacement.

27

NEWPORT OVATION PROJECT:

591 Possible LSL's



28

NEWPORT OVATION PROJECT

Contractor Responsibilities:

- Inspect service line to confirm its material type prior to work and coordinate work with property owner.
- Furnish all labor, equipment, materials, plumbing permits, restoration.
- New service line will be copper and utilize trenchless construction methods if possible.
- Reinstall interior electrical grounding system (if applicable).

Property Owner Responsibilities:

- Sign agreement to allow private service line replacement; continue to own and maintain new service line; and waive all claims for damages if items not removed prior to work.
- Remove/replace any exterior obstacles (walls, fences, sculptures, furniture, sidewalks, driveways, landscaping) and interior obstacles (furniture, drywall, paneling) obstructing access to or impeding work.
- Conduct flushing as recommended by NKWD.
- Property Owner may decline; in such event, NKWD to do partial replacement only to meter pit.

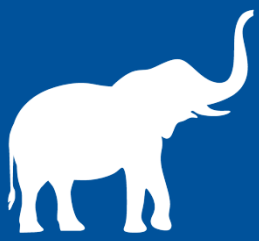
29

QUESTIONS?

CHANGING GEARS

30

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)



31

32

33

PFAS EXPLAINED

What are Per- and Polyfluorinated Substances (PFAS)?

- Synthetic chemicals used in industry and consumer products since the 1940s.
- Thousands of different PFAS (9,000+), some more widely used and studied than others.
- Used in firefighting foams, coating additives for non-stick cookware (Teflon™), paper and cardboard food packaging (microwave popcorn bags), dental floss, stain-resistant carpets and fabrics, and cleaning products.

PFAS are found in many consumer products due to water- and grease- resistant properties. Examples of its use in products include:

Nonstick Cookware | Takeout Containers | Stain Resistant Products | Furniture & Textiles | Firefighting Foam | Waterproof Apparel

34

PFAS EXPLAINED

Why are PFAS of concern?

- These chemicals break down very slowly, called "forever chemicals".
- Studies show exposure to PFAS is widespread.
- Can accumulate in people, animals, and the environment over time.
- Toxicity data show negative health effects from exposure to PFAS.

How are people exposed to PFAS?

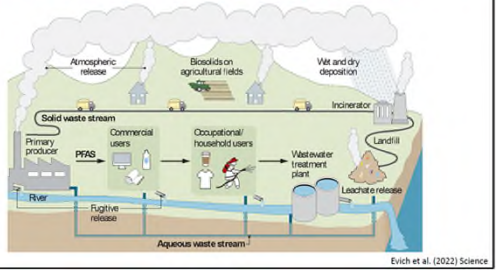
- Most people are exposed to PFAS primarily through drinking beverages or eating food made with contaminated water or exposure to PFAS in dust or consumer products.

Working in an industrial facility where PFAS chemicals were produced or used | Eating fish caught from water contaminated by PFAS chemicals | Drinking contaminated municipal water or private well water | Eating food that has been contaminated during growing, packaging, and/or processing | Accidentally swallowing contaminated soil or dust

35

PFAS EXPLAINED

PFAS enter the environment through multiple pathways



36

PFAS EXPLAINED

What is the financial impact of PFAS?

- "Early estimates of the cost of removing PFAS from drinking water nationwide are about $400 billion —dwarfing the cost of settlements and cleanup costs from environmental contamination like asbestos and lead pipes or other public health settlements tied to tobacco and opioids."
  -See R. Rivard& J. Wolman, *'Forever chemicals' are everywhere. The battle over who pays to clean them up is just getting started*, Politico (Sep. 13, 2022).
- EPA has estimated annual costs of compliance with its new proposed standards for utilities nationwide at $1.5 billion.
- It is estimated that compliance costs to reduce PFAS compounds of PFOA and PFOS only to under 4 parts per trillion at over $3.8 billion annually, with a life cycle cost of $40 billion.

37

REGULATORY HISTORY

May 2, 2012	***May 9, 2016***	***February 13, 2019***	***December 27, 2021***	***June 15, 2022***
EPA required collection of finished drinking water samples for 6 PFAS (PFOA, PFOS, PFNA, PFHxS, PFHpA, PFBS) in UCMR3.	*EPA issued Drinking Water Health Advisories for PFOS/PFOA at 70 parts per trillion (ppt).*	*EPA released PFAS Action Plan to address PFAS in drinking water, identify and clean up PFAS contamination, expand monitoring of PFAS in manufacturing, increase scientific research, and exercise effective enforcement tools.*	*EPA published UCMR5 to require sampling of 29 PFAS.*	*EPA released health advisory levels (EPA's advised level where no adverse health effects are expected to occur over a lifetime of exposure): PFOA (0.00 ppt), PFOS (0.00 ppt), GenX (10 ppt), PFBS (2,000 ppt)**

*These levels are trace amounts. The ability to test compounds at these minute levels is recent.

38

REGULATORY HISTORY

August 26, 2022	***March 14, 2023***	***April 10, 2024***	***April 19, 2024***
EPA proposed rule to designate PFOA and PFOS as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).	*EPA proposed rule to regulate 6 PFAS compounds in drinking water.*	*EPA enacts final rule to regulate 6 PFAS compounds in drinking water.*	*EPA enacts final rule to designate PFOA and PFOS as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). EPA also issued a PFAS Enforcement Discretion and Settlement Policy under CERCLA.*

39

PFAS – NEW RULES

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- On April 19, 2024, EPA designated perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS), as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Safe Drinking Water Act

- On April 10, 2024, EPA enacted a final rule to regulate 6 PFAS compounds in finished drinking water.

40

PFAS – CERCLA

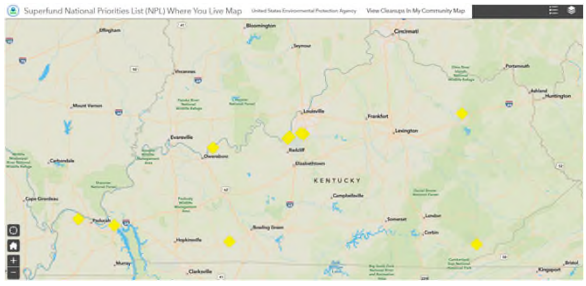
Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

CERCLA stands for the Comprehensive Environmental Response, Compensation, and Liability Act, which is often referred to as Superfund. It's a United States federal law passed in 1980. The main purpose of CERCLA is to address the cleanup of sites contaminated with hazardous substances and pollutants.

What CERCLA entails:

41

PFAS – CERCLA



42

PFAS – CERCLA

With hazardous designation of PFOA and PFOS under CERCLA, what relief is there for water utilities that through raw water acquisition have PFOA and PFOS contamination?

- EPA issued PFAS Enforcement Discretion and Settlement Policy Under CERCLA
  - Elaborates that EPA does not intend to pursue water systems.
  - Outlines the basis for the enforcement discretion decision.
- Currently, Congress is considering H.R. 7944, the Water Systems PFAS Liability Protection Act, which will codify protection of water systems from CERCLA liability.

Summary – there are protections, but they are not absolute.

43

PFAS – SDWA

Regulatory Levels

The regulatory standards apply to producing community & non-transient, non-community water systems.

Compliance is determined by running annual averages at the sampling point at the entry to the distribution system.

Changes from the 2023 proposed rule:

- Individual MCLs set for PFHXS, GenX, & PFNA.
- HI MCL requires presence of two or more PFAS in the mixture.
- Additional flexibility for reduced monitoring based on sample results.

CHEMICAL	MAXIMUM CONTAMINANT LEVEL GOAL (MCLG)	MAXIMUM CONTAMINANT LEVEL (MCL)
PFOA	0	4.0 ppt*
PFOS	0	4.0 ppt
PFHxS	10 ppt	10 ppt
HFPO-DA (GenX Chemicals)	10 ppt	10 ppt
PFNA	10 ppt	10 ppt
Mixture of two or more: PFHXS, HFPO-DA, PFNA, and PFBS.	Hazard Index of 1 (unitless)	Hazard Index of 1 (unitless)

*ppt (parts per trillion) = ng/L

$$\text{Hazard Index (HI)} = \left(\frac{[\text{GenX}_{\text{water}}]}{[10\ \text{ppt}]}\right) + \left(\frac{[\text{PFBS}_{\text{water}}]}{[2000\ \text{ppt}]}\right) + \left(\frac{[\text{PFNA}_{\text{water}}]}{[10\ \text{ppt}]}\right) + \left(\frac{[\text{PFHxS}_{\text{water}}]}{[10\ \text{ppt}]}\right)$$

44

RUNNING ANNUAL AVERAGE

Equation:

$$\text{Hazard Index (1 unitless)} = \left(\frac{[\text{HFPO-DA}_{\text{ppt}}]}{[10\ \text{ppt}]}\right) + \left(\frac{[\text{PFBS}_{\text{ppt}}]}{[2000\ \text{ppt}]}\right) + \left(\frac{[\text{PFNA}_{\text{ppt}}]}{[10\ \text{ppt}]}\right) + \left(\frac{[\text{PFHxS}_{\text{ppt}}]}{[10\ \text{ppt}]}\right)$$

Chemical	Quarter 1		Quarter 2		Quarter 3		Quarter 4	
	Sample	Q1 Formula	Sample	Q2 Formula	Sample	Q3 Formula	Sample	Q4 Formula
HFPO-DA (ppt)	5 ppt	5 ppt/10 ppt = 0.5	5 ppt	5 ppt/10 ppt = 0.5	Not detected	0 ppt/10 ppt = 0	Not detected	0 ppt/10 ppt = 0
PFBS (ppt)	5 ppt	5 ppt/2000 ppt = 0.0025	5 ppt	5 ppt/2000 ppt = 0.0025	Not detected	0 ppt/2000 ppt = 0	5 ppt	5 ppt/2000 ppt = 0.0025
PFNA (ppt)	Not detected	0 ppt/10 ppt = 0	Not detected	0 ppt/10 ppt = 0	4 ppt	4 ppt /10 ppt = 0.4	Not detected	0 ppt/10 ppt = 0
PFHxS (ppt)	4 ppt	4 ppt/10 ppt = 0.4	Not detected	0 ppt/10 ppt = 0	4 ppt	4 ppt /10 ppt = 0.4	6 ppt	6 ppt/10 ppt = 0.6
Hazard Index (unitless)	0.5 + 0.0025 + 0 + 0.4 = 0.9025		0.5 + 0.0025 + 0 + 0 = 0.5025		0 + 0 + 0.4 + 0.4 = 0.8		0 + 0.0025 + 0 + 0.6 = 0.6025	

$$\text{Running Annual Average} = \left\{\frac{0.9025 + 0.5025 + 0.8 + 0.6025}{4}\right\} = 0.6769 \approx 0.7$$

The Hazard Index Running Annual Average result is 0.7 (rounded to one significant digit). Because this result does not exceed 1, the water system has not exceeded the MCL. Therefore, no violation of the Hazard Index MCL has occurred.

45

INITIAL MONITORING

- The final rule requires that all community water systems and non-transient, non-community water systems complete initial monitoring within three years after the date of the final rule promulgation. The monitoring must be conducted at all entry points to the distribution system. Based on their system size and source water at an entry point to the distribution system, systems must conduct initial monitoring either twice or quarterly during a 12-month period as follows:
  - **Surface water systems.** All surface water systems are required to initially monitor quarterly within a 12-month period. Samples are required to be collected 2 to 4 months apart.
  - **Groundwater systems serving greater than 10,000 customers.** Initially, these systems are required to monitor quarterly within a 12-month period. Samples are required to be collected 2 to 4 months apart.
  - **Groundwater systems serving 10,000 or fewer customers.** EPA is requiring that these systems initially only monitor twice within a 12-month period, with each sample collected 5 to 7 months apart.
- In order to reduce costs for systems, primacy agencies can allow systems to use previously collected monitoring data to satisfy some or all of the initial monitoring requirements, if the sampling was conducted using EPA Methods 533 or 537.1 as part of UCMR 5 or other state-level or other appropriate monitoring campaigns.

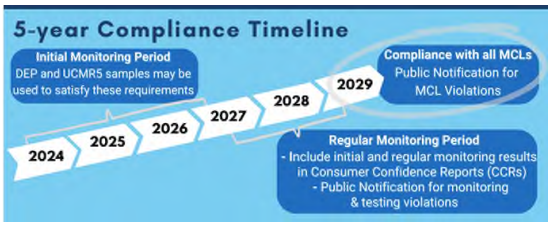
46

ONGOING COMPLIANCE MONITORING

- Three years following the date of rule promulgation, community water systems and non-transient, non-community water systems are required to begin quarterly compliance monitoring at all entry points.
- Based on initial monitoring, primacy agencies have the authority to reduce compliance monitoring frequency at a systems' applicable entry points to once every three years (for all sizes of systems and water source types) if initial monitoring results are below rule trigger levels for all regulated PFAS.
- The trigger levels are used for establishing appropriate monitoring frequency. For certain regulated PFAS, they are set at a defined threshold that shows if these PFAS are present or absent. The trigger levels are set at one-half of the MCLs for regulated PFAS (i.e., 2.0 ppt for PFOA and PFOS, 5 ppt for PFHxS, PFNA, and GenX Chemicals) and one-half of the Hazard Index MCL (0.5 unitless) for mixtures of PFHxS, GenX Chemicals, PFNA, and/or PFBS.
- Systems with multiple entry points to the distribution system may establish different compliance monitoring schedules for each entry point depending on their monitoring results.

47

PFAS –SDWA TIMELINE



48

TREATMENT OPTIONS

EPA has found that the best treatments for PFAS are Granular Activated Carbon (GAC), Anion Exchange Resin (IEX), High Pressure Membranes. The use of Powdered Activated Carbon (PAC) may be helpful in select applications.

Mixing different source waters can be used to reduce PFAS levels

NKWD Treatment includes:

- FTTP – GAC (PAC as needed)
- MPTP – GAC (PAC as needed)
- TMTP – PAC and mixing/blending with FTTP

Here is a short video on GAC:

49

PFAS – SDWA

Implementation Challenges

Lab Capacity Challenges – New rule will require many systems to test quarterly after initial testing and may overwhelm labs with capacity for PFAS testing.

Supply Chain Limitations – availability of materials and resources including workforce to construct and operate treatment systems such as GAC.

Communication Challenges – Hazard index and risk communications will be difficult to convey; UCMR5 results also occurring simultaneously.

Funding Difficulties – advanced treatment systems are costly to design and construct; tight timelines further limit ability to budget.

50

PRIOR TESTING

51

KY DIVISION OF WATER

What is Kentucky Energy & Environment Cabinet doing?

- **2019 Study of Finished Water** at 81 Drinking Water System - tested for 8 PFAS (PFOA, PFOS, PFNA, PFHxS, PFHpA, PFBS from UCMR3 plus GenX and ADONA)
  - Each chemical was found throughout state except ADONA.
- **2020 Study of Raw Water** – tested same 8 PFAS in source waters
  - Each chemical was found throughout state except ADONA.
  - South Fork of Licking River – detected PFOA at 1.82 ppt; PFOS at 3.12 ppt
- **January 2023** – initiated workgroup under the Drinking Water Advisory Council
- **March through June 2023** – collecting finished water samples at ~113 water systems
- **April 2023** – filed lawsuits against DuPont, Chemours, 3M and other PFAS manufacturers for PFAS contamination to Kentucky lands and waterways. State cases removed to federal court and eventually transferred to MDL.

52

UCMR 5

Unregulated Contaminant Monitoring Rule

- The Safe Drinking Water Act (SDWA) requires that once every five years the EPA issue a list of unregulated contaminants to be monitored by public water systems (PWSs).
- UCMR 5 requires sample collection for 30 chemical contaminants between 2023 and 2025 using analytical methods developed by the EPA and consensus organizations.
- Consistent with the EPA's PFAS Strategic Roadmap, UCMR 5 will provide new data that will improve the agency's understanding of the frequency that 29 per- and polyfluoroalkyl substances (PFAS) and lithium are found in the nation's drinking water systems, and at what levels.
- The monitoring data on PFAS and lithium will help the EPA make determinations about future regulations and other actions to protect public health under SDWA.

53

ORSANCO STUDY

The Ohio River Valley Water Sanitation Commission

June 17, 2022 – ORSANCO published report for PFAS sampling at 20 sites along the Ohio River in 2021.

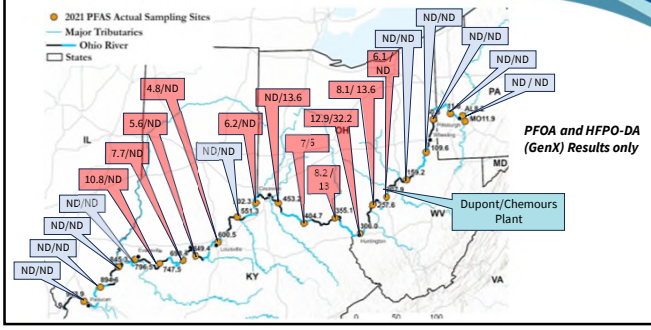
Findings for the 10 sites upstream of NKWD Ohio River intakes:

- PFOA: 5.51 – 12.90 ppt (MCL 4 ppt)
- PFOS: non detect (MCL 4 ppt)
- GenX: 5.43 – 32.20 ppt (MCL 10 ppt)
- PFNA: non detect (MCL 10 ppt)
- PFHxS: non detect (MCL 10 ppt)
- PFBS: 5.66 - 5.75 ppt (Hazard Index 2,000 ppt)

Photo Source: ORSANCO

54

ORSANCO TESTING



55

2021 ORSANCO TESTING

PFOA and HFPO-DA (GenX) Results only.

Green – Non-Detection
Red - Detection

56

LITIGATION OVERVIEW

57

PFAS LITIGATION SUMMARY

- The PFAS Multidistrict Litigation (a special type of proceeding used for judicial efficiency or MDL for short) started in December 2018 and is currently home to over 15,000 cases.
- Cases that involve PFAS-containing aqueous film-forming foam (AFFF) are primarily litigated on the consolidated docket although many claimants, such as NKWD, have expanded to all PFAS related claims, directly and indirectly.

There are four categories of cases that are currently on the MDL:

(1) Water Utilities seeking costs of necessary testing and remediation technology for PFAS;

(2) States, for environmental PFAS pollution (broadly, not limited to only drinking water issues) within state borders seeking monetary relief for necessary testing, natural resource damages, and remediation;

(3) Individual Persons for personal injury claims and medical monitoring brought alleging that PFAS in the AFF products used by the fire fighters led to an injury; and

(4) Property damage claims of individuals, governmental entities and others for PFAS impacts to real property, including but not limited to, private wells, airports, wastewater systems, and fire training locations.

PFAS problem is bigger than Defendants and what can be recovered from the litigation. This is only one piece to the solution of PFAS problem which will likely also include funding from various government entities and our rate payers.

58

MULTIDISTRICT LITIGATION PROCESS

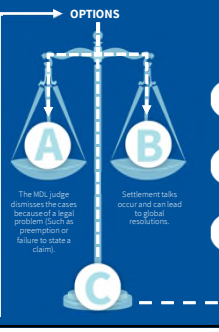
1. Civil lawsuits with common questions of fact are filed in at least two federal district courts in different judicial districts.
2. An involved party or the US Judicial Panel on Multidistrict Litigation (JPML) moves to centralize cases into a multidistrict litigation (MDL) proceeding.

The panel votes to approve or disapprove the creation of an MDL.

4. Venue and judge of the multidistrict litigation selected by JPML.

The panel transfers cases to the MDL or cases are filed directly. Cases can be continually added during the MDL's lifecycle.

Consolidated pretrial procedures such as discovery, motions, and hearings take place.



9. JPML closes MDL once all cases are settled or remanded to the originating courts.
8. Occasionally cases are returned to their originating court for trial.
7. One or more lawsuits are chosen as bellwether cases and proceed to trial.

59

PFAS LITIGATION

60

PFAS MANUFACTURERS

Defendants include:

3M Company (F/K/A Minnesota Mining and Manufacturing, Co.)	AGC Chemicals Americas Inc.	Archroma U.S. Inc.	Arkema Inc.	Buckeye Fire Equipment Company
Chemguard, Inc.	Corteva Inc.	**DuPont De Nemours, Inc.**	Dynax Corporation	**EIDP, Inc. (F/K/A Du Pont De Nemours and Company)**
	Kidde-Fenwell (F/K/A National Foam, Inc.)	**The Chemours Company L.L.C. (F/K/A The Chemours Company)**	Tyco Fire Products LP (successor-in-interest to the Ansul Co.)	

And other unknown defendants TBD.

61

ATTORNEY SERVICES

KRS 74.030 authorizes Water Districts to employ legal counsel. Authority is further affirmed under KRS 74.070 as water district has all corporate powers, ability to prosecute and defend suits, and ability to do all acts necessary to carry on the work of the water district.

Generally, contingency fees for litigation of this nature range from 25% to 40% of the fee. However, KRS 45A.717 sets the maximum fees as follows:

- Twenty percent (20%) of the amount recovered up to ten million dollars ($10,000,000);
- Fifteen percent (15%) of the amount recovered between ten and fifteen million dollars ($10,000,000 - 15,000,000);
- Ten percent (10%) of the amount recovered between fifteen and twenty million dollars ($15,000,000 - $20,000,000); and
- Five percent (5%) of the amount recovered of twenty million dollars ($20,000,000) or more but in no instance the fee will exceed twenty million dollars ($20,000,000) regardless of the amount recovered.

62

CURRENT STATUS

- Global Settlements being accepted and processing for 3M and Dupont/Chemours.
  - If you did not opt out, you will need to submit claim forms soon (**June 16, 2024** for phase 1 utilities)!
- Cases in MDL for other Defendants still moving forward and currently unclear on how or if they will reach a similar resolution.
  - Tentative resolution for TYCO/Chemguard announced April 2024 but awaiting final agreement and court approval.

63

SETTLEMENT AMOUNT DETERMINATION

- Proceeds to each utility determined by the participating utility's score as a percentage of total of all participating utilities scores.
- **Scores arrived at through complex formula** primarily based on flow rates, prior PFAS test results, and EPA estimated capital/O&M costs.
- Each utility may also be eligible for the following enhancement adjustments:
  - Litigation Bump – for those who filed litigation before the Settlement Dates
  - Bellwether Bump – for the utilities who served as Bellwether Plaintiffs
  - Regulatory Bump – for those whose PFAS contamination exceeds certain state or proposed federal maximum contaminant levels.
- Exact numbers cannot be determined until actual claim forms are submitted and reviewed.

64

GOING FORWARD

- Lead and Copper Rule Improvements Final Rule is anticipated in **October 2024.**
- New PFAS Rules published **April 2024.**

Each present unique compliance requirements.

65

QUESTIONS?

66

Northern Kentucky Water Training 2024

REDUCING UNACCOUNTED-FOR WATER LOSS

Presented by Amy Stoffer & Tom Edge

1

PRESENTATION DISCLAIMER

The materials provided in this presentation and any comments or information provided by the presenters are for educational purposes only and nothing conveyed or provided should be considered legal, engineering or technical advice nor replace independent professional judgment.

Statements of fact and the views, thoughts and opinions expressed are those of the presenter and not opinion or position of the Northern Kentucky Water District.

2

PRESENTATION SUMMARY

- What is Water Loss?
- Why is Water Loss a Problem?
- Regulatory Requirements for Water Loss
- Best Practices for Reducing Water Loss
- Case Study - NKWD

3

WHAT IS WATER LOSS?

From the PSC (November 2019 Investigative Report):

Water loss - difference between quantity of water a utility produces or purchases and total amount of water that is sold, used by the utility, used for fire protection or otherwise accounted for.

Utility water loss can be classified into two categories:

1. **Apparent Losses** due to customer meter inaccuracies, billing system data errors, and/or unauthorized consumption (theft)
   - Water is used by the end user but **does not** generate revenue
2. **Real Losses** - water that escapes the distribution system from leaks, breaks, or storage overflows.
   - Water never reaches the end user and increases the water utility's production costs (energy and chemicals needed to treat water) but **generates zero revenue**

4

WHY IS WATER LOSS A PROBLEM?

From the PSC (November 2019 Investigative Report):

- Water loss and failing water infrastructure are nationwide problems facing water utilities.
  - In a 2017 report, the Kentucky Chamber of Commerce estimated $6.2B will be required over the next 20 years to address the state's drinking water infrastructure needs.
  - ASCE report card gave Kentucky a grade of **"C"** on water infrastructure.
- Some district boards have lacked the will to raise rates to generate the revenue needed to maintain system reliability.
- Delaying or ignoring the need for regular, gradual rate adjustments, results in a deterioration of system integrity and failing infrastructure.

Ultimately, customers are shocked with a much higher rate increase to fix deferred problems than they would have if the water utility had maintained the system over time.

5

REGULATORY REQUIREMENTS

807 KAR 5:066 Section 6 (3) Unaccounted-for water loss.

Except for purchased water rate adjustments for water districts and water associations, and rate adjustments pursuant to KRS 278.023(4), for rate making purposes **a utility's unaccounted-for water loss shall not exceed fifteen (15) percent of total water produced and purchased**, excluding water used by a utility in its own operations.

Upon application by a utility in a rate case filing or by separate filing, or upon motion by the commission, an alternative level of reasonable unaccounted for water loss may be established by the commission. A utility proposing an alternative level shall have the burden of demonstrating that the alternative level is more reasonable than the level prescribed in this section.

KRS 278.030 (2) - Every utility shall furnish adequate, efficient and reasonable service. . .

6

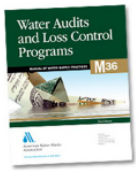
BEST PRACTICES FOR REDUCING WATER LOSS

From the PSC (November 2019 Investigative Report):

- Well-run utilities establish **metrics to gauge performance over time, adopt policies and internal controls** to ensure that business best practices are followed, and maintain complete and accurate records relating to their operations.

From American Water Works Association:

- Water loss control includes auditing water supplies and implementing controls to minimize system losses



7

SOLUTION: WATER LOSS PREVENTION PLAN

Components of a Water Loss Prevention Plan should include, but not be limited to:

- Monthly Tracking Report
- Leak Detection Program
- Infrastructure Renewal
- Meter Testing Program
- Fire Lines Unmetered Usage
- Fire Department Reporting
- Water Audit per AWWA Method

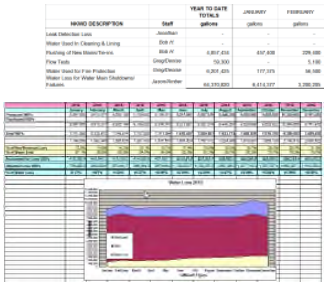
8

CASE STUDY - NKWD

9

MONTHLY TRACKING REPORTS

- Data input by staff monthly
- Use 12-months of data
- History presented monthly



10

WHAT IS THE WATER LOSS SOURCE?

NON-REVENUE WATER

ACCOUNTED FOR – 5%

UNACCOUNTED FOR – 15%

OPERATIONAL USES 2%

METERING INEFFECIENACIES

FLUSHING & FIRE PROTECTION 2 to 3%

BREAKS & LEAKS

BILLING ADJUSTMENTS

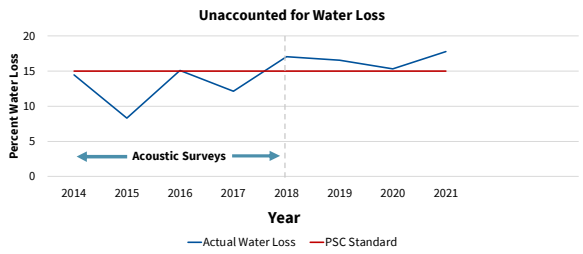
THEFT

11

11

THE PROBLEM

Water loss was increasing after 2018 . . .



12

WHAT DOES WATER LOSS EQUAL?

Non-Revenue Water - 2021

PROD & PURCH 9.713 billion gallons
- WATER SOLD 7.556 billion gallons
2.157 billion gallons

$\frac{2.157}{9.713}$ = **22.21%**

PSC Unaccounted for Water

PROD & PURCH 9.713 billion gallons
- WATER SOLD 7.556 billion gallons
2.157 billion gallons

- ACCOUNTED 0.428 billion gallons
UNACCOUNTED 1.729 billion gallons

$\frac{1.729}{9.713}$ = **17.80%**

4,700,000 gallons a day (4.7 MGD)
~3,200 gpm equals 3 or 4 fire hydrants flowing non-stop

13

THE SOLUTION

NKWD attacked the problem from multiple angles:

- Leak Detection – ASTERRA
- Large Meter Changeout Program
- Fire Service Audit
- Continue Ongoing Efforts
  - Water Main Renewal
  - AWWA M36 Audit

14

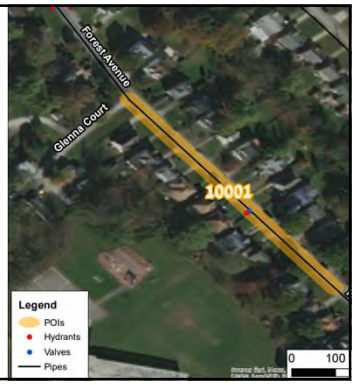
LEAK DETECTION - ASTERRA

- Leak detection through satellite imagery is newer technology that takes aerial scans about 300 miles above the Earth's surface.
- Images are analyzed using proprietary algorithms that can detect the unique signature of treated water in saturated soils around the area of the leak.
- The results are compiled to a report that identifies the leak to an area within a 300-foot radius

15

LEAK DETECTION – ASTERRA

- Case studies using satellite scans combined with acoustic surveys suggests that using this approach will find over 2.5 times more leaks per day as compared to using acoustic surveys alone.
- Finds leaks 60% of the time within the targeted area.

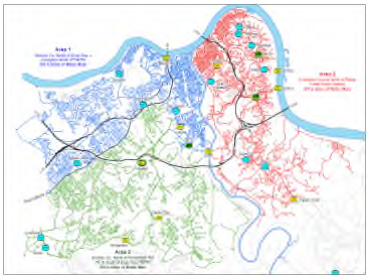


16

LEAK DETECTION - ASTERRA

The approach:

- Split 65% of service area where leaks predominantly found in past acoustic surveys into 3 areas and conduct satellite scans.
- Based on initial results, proceed to conduct satellite scans of remaining service area.



17

LEAK DETECTION - ASTERRA

The Results:

Survey Area	# of Miles Surveyed	# of Points of Interest	# of Leaks (leaks per 100 miles surveyed)	Gallons per Year Water Loss Discovered	Cost per Leak Found	Realized Savings (Annually)
Area 1	297.5	99	52 (23)	94,608,000	$880	$62,000
Area 2-3	551.1	168	27 (5)	26,595,360	$3,568	$18,000
Area 4	464.2	152	27 (6)	36,739,440	$2,768	$24,000
TOTAL	**1,312.8**	**419**	**98**	**157,942,800**		**$104,000**

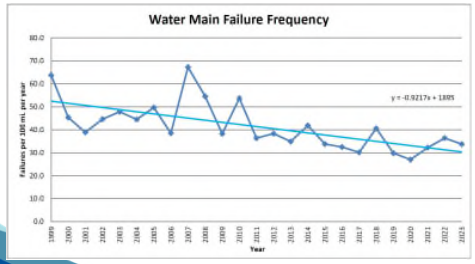
Comparison to 2010 to 2018 acoustic surveys:
Leaks per 100 miles = 9
Cost per leak found = $1,544

For work completed in 2022 and 2023

18

INFRASTRUCTURE RENEWAL

Renewed 138 miles of water main since 1999



19

METER TESTING PROGRAM REQUIREMENTS

- Customer Meters Tested by PSC regulations
  - 5/8" & 1" meters tested every 10 years
  - 1 ½" & 2" meters tested every 4 years
  - 3" every other year
  - 4" and larger every year
- Quarterly Reporting to PSC

20

REGULATORY REQUIREMENTS

- 807 KAR 5:066 Section 15 outlines the accuracy requirements for which vary by type of water meters at labeled maximum, intermediate and minimum flow rates. Generally these are in the range of +/- 1.5% with larger variations for minimum flows.
- 807 KAR 5:066 Section 15 (4) goes onto instruct "[w]hen upon periodic, request or complaint test, a meter is found to be in error in excess of the limits allowed by the commission's administrative regulations, **three (3) additional tests shall be made: one (1) at seventy-five (75) percent of rated maximum capacity; one (1) at fifty (50) percent of rated maximum capacity; one (1) at twenty-five (25) percent of the rated maximum capacity.** The average meter error shall be the algebraic average of the errors of the three (3) tests.

Note: 807 KAR 5:006 Section 11 outlines billing adjustment requirements for meters that average test is outside of 2%.

21

REGULATORY PROCESS OVERVIEW

Conduct Tests per 807 KAR5:066 (15)(2):
- Max Rate (15 GPM) with variance of 98.5 to 101.5,
- Mid Rate (2 GPM) with variance of 98.5 to 101.5,
- Min Rate (.25 GPM) with variance of 95 to 101.

If Pass all three, determine whether to reuse or junk. Consideration may include whether meter measures to 100 cubic foot or 1 cubic foot.

If Fail at any of three rates, then conduct 3 more tests per 807 KAR 5:066(15)(4):
- 75% max capacity (apx 18.75 GPM)
- 50% max capacity (apx 12.5 GPM)
- 25% max capacity (apx 6.25 GPM)

Average results of all 3 tests per 807 KAR 5:006(11)(2)(a).

KRS 278.210(3) only requires adjustment if more than 2% disadvantage to patron;

If meter is more than 2 percent fast or slow (below 98 or above 102), proceed to billing adjustment per 807 KAR 5:006(11)(2)(a).

If meter is less than 2 percent fast or slow (between 98 and 102), document and determine whether to junk meter (in most cases likely junk/scrap)

Check warranty.

First, determine period which the error existed per 807 KAR 5:006(11)(2)(a)(1).

If unknown, estimate using data since last meter test and historical usage for customer 807 KAR 5:006(11)(2)(b)(1). For recoupment of underbilling, do not exceed 2 years per KRS 278.255.

Second, Recompute and adjust the customer bill adding or subtracting water usage for time period to provide refund or collect additional revenue for underbilled customer and readjust account based per 807 KAR 5:006(11)(2)(a)(2-3).

Third, Send notice to customer per customer and re-adjust account based per 807 KAR 5:006(11)(5).

Keep meter for minimum 6 months in case of customer dispute per 807 KAR 5:006(11)(4)(c).

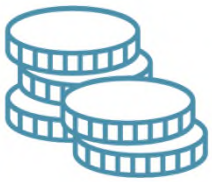
22

QUARTERLY REPORT - LAW

807 KAR 5:006, Section 4,

"(4) Report of meters, customers, and refunds. Each gas, electric, or water utility shall file quarterly either a Quarterly Meter Report-Electric, Quarterly Meter Report, or a Quarterly Meter Report-Electric-Gas-Water, of meter tests, number of customers, and amount of refunds."

"(7) Transmittal letter. Each report shall be accompanied by a transmittal letter describing the report being furnished."



23

QUARTERLY REPORT – PART 1/2

METER STATISTICS

CUSTOMER TYPE	METERED	NON-METERED	TOTAL
RESIDENTIAL	0	0	0
COMMERCIAL	0	0	0
INDUSTRIAL	0	0	0
OTHER	0	0	0
TOTALS	0	0	0

STATUS OF METER TEST PROGRAM	QUANTITY
METERS TO BE TESTED THIS YEAR	0
METERS TESTED THIS YEAR (TO DATE)	0
METERS STILL TO TEST THIS YEAR	0

METER TESTING

YEARS SINCE METER WAS LAST TESTED	METER TEST RESULTS				METERS TESTED	METERS NOT TESTED
	WITHIN ±2%	> 2% FAST	> 2% SLOW	NR*		
NEW - 5 YEARS	0	0	0	0	0	0
5 - 8 YEARS	0	0	0	0	0	0
9 YEARS	0	0	0	0	0	0
10 YEARS	0	0	0	0	0	0
10+ YEARS	0	0	0	0	0	0
UNKNOWN	0	0	0	0	0	0
TOTALS	0	0	0	0	0	0
PERCENT						

* Non-Registering

24

QUARTERLY REPORT – PART 2/2

CUSTOMER AND REFUND INFORMATION	
NUMBER OF TESTS MADE AT CUSTOMER'S REQUEST	0
NUMBER OF TESTS MADE AT COMMISSION'S REQUEST	0
NUMBER OF METERS ON WHICH REFUNDS WERE MADE	0
TOTAL AMOUNT OF REFUNDS MADE DURING THIS QUARTER	$0.00
NUMBER OF CUSTOMERS BILLED FOR SLOW METERS	0
TOTAL AMOUNT BILLED ON SLOW METERS	$0.00
NUMBER OF CUSTOMERS BILLED FOR NON-REGISTERING METERS	0
TOTAL AMOUNT BILLED ON NON-REGISTERING METERS	$0.00

METER TESTING INFORMATION APPROVED BY:

SIGNED

TITLE

CUSTOMER & REFUND INFORMATION APPROVED BY:

SIGNED

TITLE

25

QUARTERLY REPORT – INTERPRETATION NOTES

- Report Template last revised July 11, 2017
- Template Excel spreadsheet has pages that provide prompts with questions. Template then auto populates onto final form the answers to each question.

Data requirements:

- Years since last tested including 9 years, 10 years and 10+ (11 or more).
- Meter Test Results give options of within 2%, fast, slow or non registering
  - **Non-registering** - not defined specifically but in context of regulation and report means no read.
  - **2% error limit** - not specifically defined in form; logical assumption is 2% of error on average of three test required under 807 KAR 5:066 Section 15 (4).

26

LARGE METER TESTING

The Secret: Many large meters allow lots of water and money to go unaccounted for during low flows.

Even though the existing meters were meeting the testing requirements, does not mean the meters are picking up all the usage.

Specified Low Flow Testing Rates:

Meter Size	Ultrasonic (gpm)	Turbine (gpm)	Compound (gpm)	Fire (gpm)
3"	1	8	0.75	
4"	1.5	15	0.75	0.75
6"	3	30	0.75	1.5
8"	5	40		2
10"	14	55		2

LOSE ACCURACY AT LOWER FLOWS

27

HOW IS THAT POSSIBLE?

My PSC Required Test says it's accurate?

28

LARGE METER REPLACEMENT PROGRAM

- Large Meter Review
  - Reviewed list of 3" and larger meters (350+)
    - Turbine and Compound style meters
    - Fireline meters
  - Researched technology of meters that would meet requirements
    - Ultrasonic meters selected

3" Turbine

29

LARGE METER REPLACEMENT PROGRAM

Results so Far:

Year	Change Outs	Usage Increase (Gallons)	Overall % Increase	Cost of Improvements	Annual Increase Revenue	5 Year Projected Revenue
2019	9	5,868,060	37%	$71,853.00	$161,607.00	$808,035.00
2020	12	4,081,088	22%	$136,046.00	$112,393.60	$561,968.00
2021	7	9,529,520	53%	$62,008.00	$262,444.00	$1,312,220.00
2022	15	6,665,428	35%	$134,085.40	$183,566.60	$917,833.00
*2023	11	4,738,580	32%	$72,146.49	$32,625.25	$163,126.25
Totals:	**60**	**30,882,676**	**45%**	**$476,138.89**	**$752,636.45**	**$3,763,182.25**

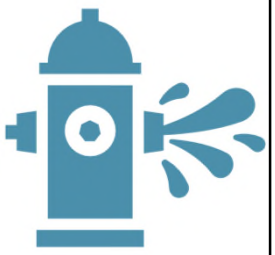
Payback on meters is 2 years or less.

**2023 Data not yet complete*

30

FIRE SERVICE AUDIT

- NKWD has approximately **632** private fire service lines.
- NKWD has **27** fire departments in the service area.



31

FIRE SERVICE AUDIT

Applicable Law:

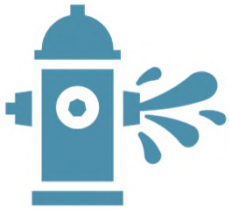
- KRS 278.170(3) provides that a utility may provide free or reduced rate water service to any city, county, urban-county, fire protection district or volunteer fire protection district for fighting fires or training firefighters under a tariff that is approved by the commission and that requires the water user to provide water usage reports to the utility on a regular basis.
- 807 KAR 5:095 outlines PSC regulation of Fire Protection Service for Water Utilities. Addresses:
  - Rates for Private Fire Protection Service Lines (non sprinkler systems)
  - Reporting of estimated usage annually if unmetered
  - Requiring double back flow preventers
  - Fire Sprinkler Systems
  - Reporting of Fire Department Usage at least quarterly

32

FIRE SERVICE AUDIT

Actions Taken:

- Audit of fire line usage on detector check meters. Detector check meters not on all fire lines.
- Additional Inspection and Investigation into largest estimated usage users. Investigation found numerous fire lines with outside leaks.
- Enforcement of Regulation as adopted by Tariff for Fire Departments.



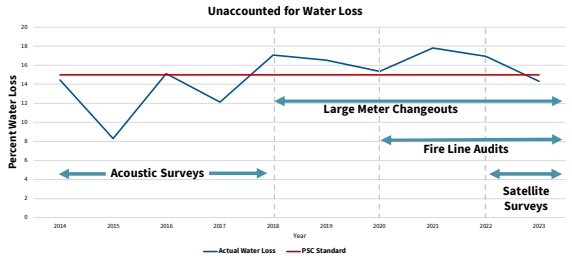
33

DID IT MOVE THE NEEDLE?

34

THE RESULTS SO FAR

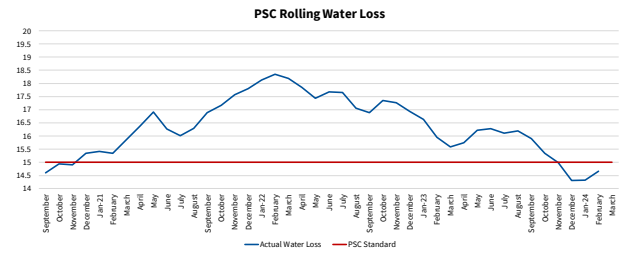
Water loss decreasing since 2021 . . .



35

NEED TO REMAIN VIGILANT

Through March 2024 have seen good results…



36

QUESTIONS?

"Whether we are weighing in or wading in, we should always do so with a goal in mind. We cannot continue to ignore our problem and hope it resolves itself. Just as there are various diets to control an individual's weight, there are various methods for controlling water loss."

- Components of a Water Loss Prevention Plan, Barry Back, Circuit Rider, Kentucky Rural Water Association

37

Unaccounted-For Water Loss

May 8, 2024

Tina Frederick
Stoll Keenon Ogden PLLC
tina.frederick@skofirm.com

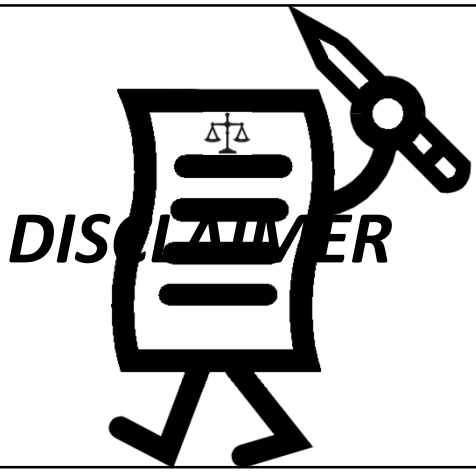
SPONSORED BY Northern Kentucky Water District | Stoll Keenon Ogden PLLC

1

Under Discussion

1. What is Unaccounted-for Water Loss
2. Current Statistics
3. Alternative Terminology and Methodology
4. PSC's November 2019 Report
5. Water Loss Reduction Surcharges

2



3

Kentucky
Division of Water

"Unaccounted for water" means water that is withdrawn and not used for commercial, residential, industrial, or municipal purposes.

401 KAR 4:220

4

Kentucky
Public Service Commission

“Unaccounted for water” means the volumetric sum of all water purchased and produced less the volume of water: (a) Sold; (b) Provided to customers without charge as authorized by the utility’s tariff; and (c) Used by the utility to conduct the daily operation and maintenance of its treatment, transmission, and distribution systems.

807 KAR 5:067

5

Unaccounted-For Water

- Water that is <u>not:</u>
  - Sold
  - Provided without charge
  - Used in maintenance of the system

6

“Accounted-For” Water

- **Sales**
  - Residential
  - Commercial
  - Industrial
  - Bulk Loading Station
  - Wholesale
  - Public Authorities
  - Other sales (PSC forms require an explanation)

7

“Accounted-For” Water

- **Other Water Used**
  - Water Treatment Plant
  - Wastewater Plant
  - System Flushing
  - Fire Department
  - Other Usage (PSC forms require an explanation)

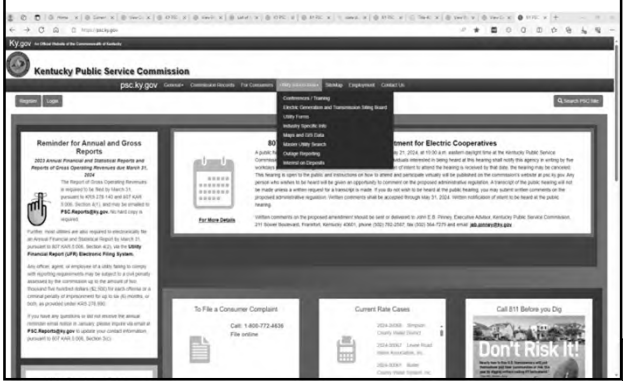
8

“Unaccounted-For” Water

- **Water Loss**
  - Tank Overflows
  - Line Breaks
  - Line Leaks
  - Excavation Damages
  - Theft
  - Other Loss (PSC forms require an explanation)

9

Water Loss Calculation Form



10

Water Loss Calculation Form

11

UNACCOUNTED-FOR WATER AND UTILITY RATES

807 KAR 5:067, Section 6(3):

"[F]or rate making purposes a utility's unaccounted-for water loss shall not exceed fifteen (15) percent of total water produced and purchased, excluding water used by a utility in its own operations."

12

Effect of 807 KAR 5:066, §6(3)

- Water Utility may not recover cost of unaccounted-for water exceeding 15 percent of total water produced or purchased
- Disallowance based upon:
  - Total production cost of water
  - Water purchase costs
  - Pumping costs (purchased power)

13

Reasons for the Regulation

- Protect Ratepayers from excessive losses
- Encourage Management to take reasonable actions to control water loss

14

Criticism of the Regulation

- No profit incentives for non-profit water utilities
- Incentives to under-report or falsely report water usage
- Percentage based system misleading

15

Criticism of the Regulation Con't

- Failure to limit water loss to no more than 15% is a failure to provide adequate service per 807 KAR 5:066, § 7
  - Results in inspection violations for PSC jurisdictional utilities
  - Repeated inspection violations can lead to investigation proceedings and result in financial penalties for utilities

16

807 KAR 5:066, Section 7

"The utility's facilities shall be designed, constructed and operated so as to provide adequate and safe service to its customers and shall conform to requirements of the Natural Resources Cabinet with reference to sanitation and potability of water."

17

2022 Water Loss Statistics
116 PSC- Regulated Utilities

- 10 utilities reported < 10%
- 35 utilities reported 10%-15%
- More than half reported > 15%
- 18 utilities reported > 30%
- Highest reported 73.30%
- Lowest reported 5.03%

18

A Brief Note About Terminology & Methodology

- In 2003 the American Water Works Association (AWWA) adopted the concept of "**Non-Revenue Water.**"

The **volume of water** that is produced/purchased by the utility, but is not reflected in customer billings

Source: *Water Loss Control: Water Loss Control Terms Defined,* AWWA, 2012

19

Why?

Because ALL water entering a distribution system can be defined as a component of either authorized consumption or water loss…nothing is really "unaccounted-for."

20

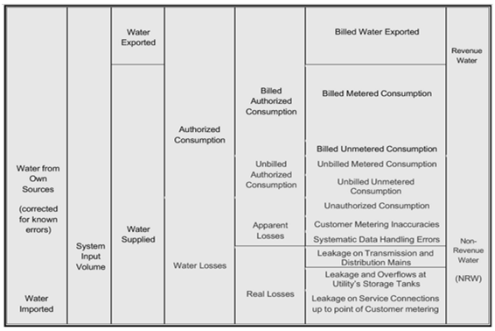
AWWA Terms

- **Water Losses-** The Difference between System Input **Volume** and Authorized Consumption, consisting of Apparent Losses and Real Losses.
- **Apparent Losses-** Unauthorized consumption, metering inaccuracies, systematic data handling errors.
- **Real Losses-** Annual **volume** lost through leaks, breaks and overflows, up to the point of the customer meter

- Source: *The Water Audit Handbook for Small Drinking Water Systems,* EFCN, 2013

21

AWWA Water Audit Methodology



All data in volume for the period of reference, typically one year

Figure 1 *Water Balance: AWWA Water Audit Methodology*[4]

22

AWWA Methodology

Focuses on:

- **<u>Volume</u>** of annual losses, apparent and real
- **Value** of annual losses (uncaptured revenue and excessive production costs)
- **Validity** of data quality

Source: *Key Performance Indicators for Non-Revenue Water,* AWWA, November 2019

23

AWWA Methodology

- Attempts to Answer:
  - Where was the water lost?
  - What <u>volume</u> of water was lost?
  - How much did the lost water cost?
  - Why was the water lost?

24

Adopted
AWWA Water Audit Methodology

Fully Adopted:

- California
- Georgia
- Hawaii
- Indiana
- Canadian Province of Quebec

Source: *Governmental Policies for Drinking Water Utility Water Loss Control,* AWWA, January 2022.

25

Adopted
AWWA Water Audit Methodology

Partially Adopted:

- Texas
- Florida
- Colorado
- New Mexico
- Nevada
- Tennessee
- Wisconsin
- Minnesota

Source: *Governmental Policies for Drinking Water Utility Water Loss Control,* AWWA, January 2022.

26

Good to Know, but. . .

Most states, including Kentucky, still use a percentage to express "unaccounted-for water loss," and determine regulatory requirements

27

Better to Understand

What Guides the Kentucky PSC's Approach?

Report in Case No. 2019-00041

Commission examined 13 water utilities with the highest percentage of water loss and issued a report of the factors contributing to water loss and made recommendations for addressing the issue.

28

November 2019 Report

- A water utility is a business, and should be run accordingly;
  - Remove/minimize political pressure
- Boards and General Managers must be trained;
- Regular review of rate sufficiently;
  - Utility to review annually
  - Rate cases every 3-5 years, generally

29

November 2019 Report

- Water utilities should develop Infrastructure Improvement Plans;
  - Capital spending plan designed to reduce water loss
- Merger or consolidation through operating agreements should be considered for very small water utilities;
  - Economies of scale result in greater efficiency
  - Short of merger or joint management, consider sharing the cost of employing a staff engineer

30

November 2019 Report

- Annual Financial Audits should be performed;
  - All districts and associations
  - Include a discussion of internal controls, operating procedures, and any deficiencies in management practices
  - Utilities to bid out auditing services and change auditors every 3 years
- Surcharges should be assessed to devote funds exclusively to infrastructure improvement and replacement to address water loss;
  - Use of funds guided by the Infrastructure Improvement Plan
  - Subject to PSC review and approval

31

November 2019 Report

- Acknowledged need for state regulatory agencies to work together in reducing water loss
  - Reduce reporting redundancy with shared databases
  - Other aspirational recommendations

32

Post-Case No. 2019-00041

- PSC is ordering Rate Cases to be filed
- If Rate Case is ordered, but not filed, Investigation proceeding is started
- PSC Staff is including Water-Loss Reduction Surcharge recommendation in Alternative Rate Filing (ARF) Staff Reports when water loss exceeds 15%

33

Why Use a Surcharge

- Excessive Water Loss requires $$ to implement control measures
- No funds to take corrective measures
- Disallowance creates “Death Spiral”
- Q: How can corrective measures be funded if not through general rates

34

Water-Loss Reduction Surcharge

- Collect Disallowed Water Expense as Surcharge
- Surcharge Proceeds used only for water loss control measures
- PSC must approve measures
- Strict accounting and reporting requirements

35

Accounting and Reporting Requirements

- Surcharge proceeds deposited into **interest-bearing account** used only for surcharge proceeds
- A “Qualified Infrastructure Improvement Plan” (**QIIP**) must be filed within **120 days**
  - This plan is intended to guide water-loss reduction efforts and spending of surcharge proceeds

36

Accounting and Reporting Requirements

- Utility must file monthly reports of:
  - Water loss
  - Surcharge billings, collections, and deposits
    - » Forms on PSC website
  - Surcharge bank statement
  - List of payments made from the account
    - Include payee,
    - Description of the purpose of the purchase,
    - Invoice supporting payment

37

Understand All of 807 KAR 5:006, Section 6(3)

- Utility may propose an alterative level of water loss
- Proposal may be made in rate case or separate proceeding
- Burden of proof on Utility to demonstrate alternative level is **more reasonable**

38

More Reasonable?

- Case No. 2022-00366
  - Utility proposed 22%
    - Large service area
    - Challenging topography
    - Significant efforts made to reduce water-loss already
- PSC denied request
  - o "More Reasonable" yet to be determined

39

QUESTIONS?

Tina.frederick@skofirm.com

40

PRACTICAL SUGGESTIONS FOR SEEKING A GENERAL RATE ADJUSTMENT FROM THE PUBLIC SERVICE COMMISSION

May 8, 2024

Gerald Wuetcher
Stoll Keenon Ogden PLLC
gerald.wuetcher@skofirm.com
(859) 231-3017

1

1

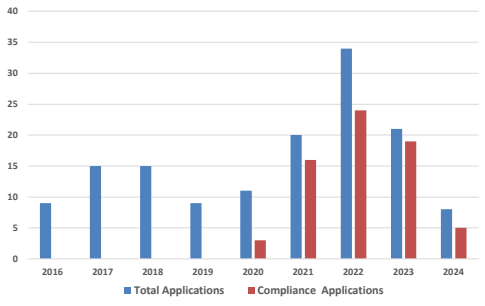
Confronting the Problems Plaguing Kentucky's Water Utilities

- **"Every water district and association should be subjected to a rate and operations review every three years** to ensure that revenue is adequate to properly operate the system over the long term. **Rate increases recommended by Commission Staff should be required to be implemented in full by the utility.** The Commission further recommends that its authority to require that the portion of rates applicable to infrastructure replacement be utilized only for that purpose and be specifically codified."

2

2

Water District Applications for Rate Adjustment (2016-2024)



3

3

Order of Presentation

- Planning Considerations
- Pre-Application Preparations
- Preparing Application
- Post-Application Actions

4

4

PLANNING CONSIDERATIONS

5

5

When To File For Adjustment

- PSC Directive
- Periodic Filings (3 – 5 Years)
- Utility's Financial Condition
  - Rates Generating Sufficient Revenues?
  - Ability to Meet Debt Obligations
  - Net Loss v. Positive Cash Flow

6

6

Revenue Requirements

CASH NEEDS METHOD (Rural Development)

Operating Expenses + **Principal** + **Interest** + **WC**

PSC METHOD – Water Districts

Operating Expenses + **Principal** + **Interest** + **Depreciation Expense** + **WC**

UTILITY METHOD (IOUs)

Operating Expenses + **Interest** + **Depreciation Expense** + **ROI**

7

7

Difference in Approaches

- Cash Needs: CapEx recovered through Principal (No Depreciation Recovery)
- Utility Approach: CapEx recovered through Depreciation
- PSC Method (WD): CapEx **over-recovered** thru Principal **AND** Depreciation

8

8

Significance of Depreciation

"**[D]epreciation** is the loss, not restored by current maintenance, which is due to all the factors causing the ultimate retirement of the property. These factors embrace wear and tear, decay, inadequacy, and obsolescence. **Annual depreciation** is the loss which takes place in a year. In determining reasonable rates for supplying public service, it is proper to include . . . an allowance for consumption of capital . . ."

Lindheimer v. Illinois Bell Tele. Co., 292 U.S. 151, 167 (1934)

9

9

Effect of Depreciation: Example

- Assumptions:
  - Asset Purchase Price: $1,000,000
  - Loan Principal: $1,000,000
  - Loan Term: 40 years
  - Interest Rate: 3%
  - Asset Useful Service Life: 50 years
  - Asset Salvage Value: None
  - Annual Depreciation Expense: $20,000

10

10

Effect of Depreciation: Example

Approach	Principal	Interest	Deprecation	Total Revenue Requirement	Recovery Period
Cash Method	$1,000,000	$719,330	$0	$1,719,330	40 years
Utility Method	$0	$719,330	$1,000,000	$1,719,330	50 years
PSC Method (Water District)	$1,000,000	$719,330	$1,000,000	$2,719,330	50 years

PSC Method Generates An Additional $1,000,000

11

11

Use of Depreciation Funds

"The Kentucky Supreme Court has held that the Commission must permit a water district to recover its depreciation expense through its rates for service to provide internal funds for renewing and replacing assets. See *Public Serv. Comm'n of Kentucky v. Dewitt Water Dist.*, 720 S.W.2d 725, 728 (Ky. 1986). Although a water district's lenders require that a small portion of the depreciation funds be deposited annually into a debt reserve/depreciation fund until the account's balance accumulates to a required threshold, neither the Commission nor the Court requires that revenues collected for depreciation be accounted for separately from the water district's general funds or that depreciation funds be used only for asset renewal and replacement. The Commission has recognized that the working capital provided through recovery of depreciation expense may be used for purposes other than renewal and replacement of assets."

12

12

Timing Considerations

- Rates that fail to generate sufficient cash to meet Cash Needs will result in default – **Immediate Action Required**
- PSC Approach: Apply for adjustment when rates fail to generate revenues required by PSC Method
- When rates fail to generate PSC Approach level – Planning for Application **Should Begin**

13

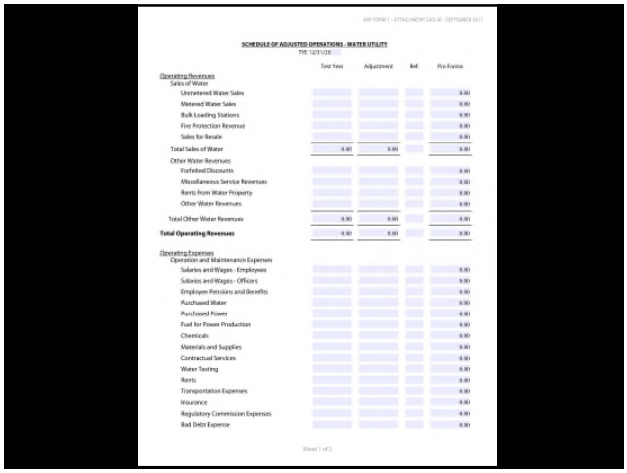
13

Planning for Rate Adjustment

- Continuous monitoring of financial condition and need for rate adjustment
- Incorporate ARF Forms SAO-W and RR-DC into planning and to assess financial condition
- Prepare Projections 2X yearly – short-term and long-term projections
- Projections should include known/expected adjustments

14

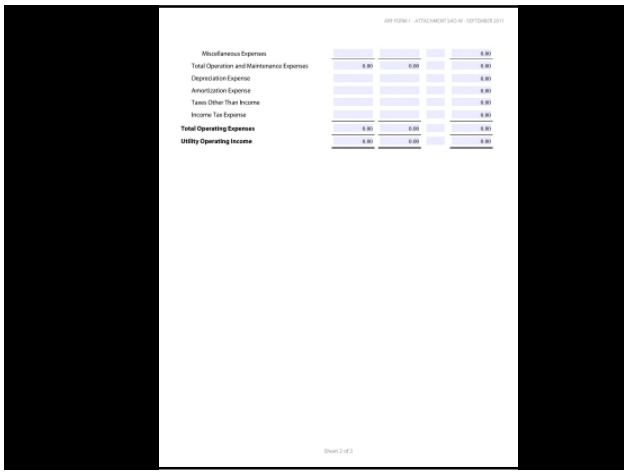
14



SCHEDULE OF ADJUSTED OPERATIONS - WATER UTILITY

	Test Year	Adjustment	Ref.	Pro Forma
Operating Revenues				
Sales of Water				
Unmetered Water Sales				0.00
Metered Water Sales				0.00
Bulk Loading Stations				0.00
Fire Protection Revenue				0.00
Sales for Resale				0.00
Total Sales of Water	0.00	0.00		0.00
Other Water Revenues				
Forfeited Discounts				0.00
Miscellaneous Service Revenues				0.00
Rents from Water Property				0.00
Other Water Revenues				0.00
Total Other Water Revenues	0.00	0.00		0.00
Total Operating Revenues	0.00	0.00		0.00
Operating Expenses				
Operation and Maintenance Expenses				
Salaries and Wages - Employees				0.00
Salaries and Wages - Officers				0.00
Employee Pensions and Benefits				0.00
Purchased Water				0.00
Purchased Power				0.00
Fuel for Power Production				0.00
Chemicals				0.00
Materials and Supplies				0.00
Contractual Services				0.00
Water Testing				0.00
Rents				0.00
Transportation Expenses				0.00
Insurance				0.00
Regulatory Commission Expenses				0.00
Bad Debt Expense				0.00

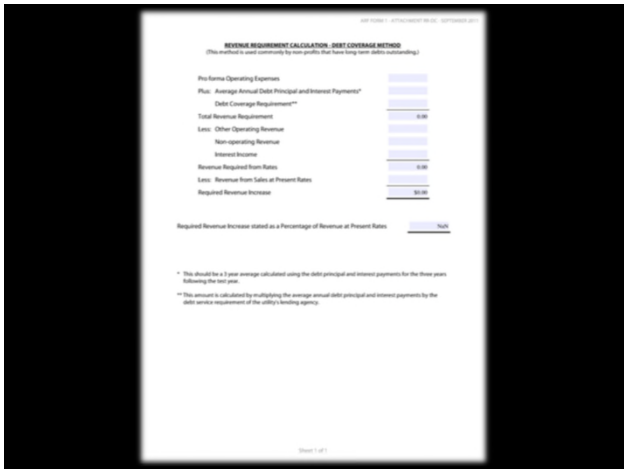
15



Miscellaneous Expenses				0.00
Total Operation and Maintenance Expenses	0.00	0.00		0.00
Depreciation Expense				0.00
Amortization Expense				0.00
Taxes Other Than Income				0.00
Income Tax Expense				0.00
Total Operating Expenses	0.00	0.00		0.00
Utility Operating Income	0.00	0.00		0.00

Sheet 2 of 3

16



REVENUE REQUIREMENT CALCULATION - DEBT COVERAGE METHOD

(This method is used commonly by non-profits that have long-term debts outstanding.)

Pro forma Operating Expenses	
Plus: Average Annual Debt Principal and Interest Payments*	
Debt Coverage Requirement**	
Total Revenue Requirement	0.00
Less: Other Operating Revenue	
Non-operating Revenue	
Interest Income	
Revenue Required from Rates	0.00
Less: Revenue from Sales at Present Rates	
Required Revenue Increase	$0.00

Required Revenue Increase stated as a Percentage of Revenue at Present Rates N/A

* This should be a 3 year average calculated using the debt principal and interest payments for the three years following the test year.

** This amount is calculated by multiplying the average annual debt principal and interest payments by the debt service requirement of the utility's lending agency.

Sheet 1 of 1

17

STOLL KEENON OGDEN PLLC

Planning for Rate Adjustment

- Document Results & Discuss with Board
- Consider Periodic Filings to Reduce Rate Shock and Increase Customer Acceptance
- Consider Phasing-In Rate Adjustment to allow for more gradual increases

18

18

PRE-APPLICATION PREPARATIONS

19

19

What Type of Application?

- **Alternative Rate Filing**
- **Application - PSC Rules of Procedure**
- ~~RD-Financing Statute~~
- ~~Purchased Water Adjustment~~

20

20

Who Will Prepare Application?

- What Application process governs?
- Is Cost-of-Service Study Required?
- How Complex Are the Issues Presented?
- How Familiar Is Utility Staff with Ratemaking Methods & KPSC Precedent?

21

21

Selecting Consultant: Factors to Consider

- Accounting/Ratemaking Experience
- Familiarity with KPSC Methodology/ Ratemaking Practices/Precedent
- Past work before KPSC
- KPSC treatment of Past Work

22

22

Is An Attorney Required?

- ARF Filings: No Attorney Required
- 807 KAR 5:001 Filings: Atty Required
- What are Expected Issues?
- Familiarity with KPSC Methodology/ Ratemaking Practices/Precedent
- Role of An Attorney

23

23

PREPARING THE APPLICATION

24

24

Preparing the Application

- Follow PSC Methodology
- Need for Cost-of-Service Study
- Need for Written Testimony
- Cost Allocations
- Provide Additional Supporting Materials
- Identifying Supporting Witnesses (ARF Applications)

25

25

Preparing the Application

- Timing Concerns
- Requesting Lower Revenue Requirement

26

26

Adjustments

- Make Adjustments to Reflect Known & Measurable Changes Regardless of Effect on Revenue Requirement
- Evaluate Likelihood of Acceptance
- Proof for Proposed Adjustment
- Timing

27

27

Types of Adjustments

- Wages
- Increase Insurance/Pension/Fringe Benefits
- Property Insurance
- New Construction
- Purchased Power
- Unusual/Out-of-Ordinary Expenses
- Rate Case Expenses

28

28

Contested Issues

- Employer Contribution for Health Insurance
- Commissioner Fringe Benefits
- Donations
- Employee Bonuses
- Excessive Wage Increases
- Useful Lives of Utility Assets
- Excessive Water Loss

29

29

Skeletons In the Closet

- Debt Issuances Not Authorized
- Chargining Unfiled/Unauthorized Rates
- Construction without CPCNs
- Derogatory Comments in Board Minutes
- Open Meeting Issues
- Nepotism/Non-Arms-Length Transactions
- Improper/Unlawful/Embarrassing Expenditures

30

30

Responses To Skeletons In the Closet

- Adjust test period expenses to remove unlawful/embarrassing expenditures
- Correct problems and note corrections Taken when questioned
- Report violations prior to filing application

31

31

Packaging The Application

- Make the Application easy to navigate/use
- Use Bookmarks
- Paginate Exhibits
- Hyperlinks
- Prepare an Index for Application
- Include Built-in Index for Quick Searching
- Provide Spreadsheets for Exhibits based on Spreadsheets

32

32

REQUESTS FOR INFORMATION

33

33

Responding To Requests for Information

- Expect Extensive Requests
- Answer Requests Directly
- Provide Context for Your Responses/Do Not Assume Knowledge Of Past History
- Use Response to Buttress Position
- Request Clarification when necessary

34

34

STAFF REPORT/HEARING

35

35

Responding To Staff Report

- Read Report Carefully
- Identify Any Errors in Calculations or Assumptions
- Identify Proposed Staff Adjustments with which Utility Disagrees
- Identify the Effect of Those Adjustments on Requested Revenue Requirement

36

36

Responding To Staff Report

- Before contesting any proposed Staff adjustment, considered the cost of delay in final decision vs. the revenue at issue and likelihood of successfully challenging
- If cost of delay is greater or challenge unlikely to succeed, accept the recommended revenue requirement level but . . .

37

37

Responding To Staff Report

- Accept only the recommended revenue requirement level and reserve right to contest the remaining issues in future proceedings
- If Staff proposes a higher level of revenue than utility proposed, notice of acceptance must be published in newspaper of general circulation
- Requesting a hearing on disputed issues will generally result in extensive delay

38

38

Responding To Staff Report

- If disputed issue is factual or resulted from "lack of evidence," consider submitting additional evidence as part of response and requesting a conference with staff to provide additional proof
- Request a hearing on disputed issues only if utility has witnesses to support its position

39

39

Responding To Staff Report

- Request that any hearing be limited to the disputed issue
- Water Loss Surcharges

40

40

Preparation for Hearing

- (Application Under 807 KAR 5:001) Assume Hearing Will Not Be Limited to Issues Presented in Rate Application
- Witness should limit their testimony to the issues to which he/she provided testimony or response to information request

41

41

Preparation for Hearing

- Prepare Witnesses for their testimony (Mock hearing)

42

42

FINAL ORDER AND BEYOND

43

43

Final Order

- Carefully review Final Order
- Review calculations and assumptions in the Order for errors/misstatements
- Confirm that the approved rates will produce the determined revenue requirement
- Phase-In of Rates not requested

44

44

Final Order

- Application for Rehearing must be filed within 23 days of date of final order
- Rehearing granted only for new evidence not reasonably available at time of hearing or for legal or factual errors

45

45

QUESTIONS?

46

46

Contact Information:

Gerald E. Wuetcher
Stoll Keenon Ogden PLLC
300 W. Vine Street, Suite 2100
Lexington, Kentucky 40507
gerald.wuetcher@skofirm.com
(859) 231-3017

47

47

HANDOUTS

COMMONWEALTH OF KENTUCKY
FRANKLIN CIRCUIT COURT
DIVISION I
CIVIL ACTION NO. 23-CI-00630

OLDHAM COUNTY WATER DISTRICT, ET AL. **PLAINTIFFS**

v. **ORDER**

KENTUCKY PUBLIC SERVICE COMMISSION **DEFENDANT**

This matter is before the Court on Plaintiff's Petition for Declaratory Judgment. The Plaintiffs in this matter are the Oldham County Water District ("OCWD") and its commissioners, in their official capacities, Glenna J. Curry, William R. Durbin, Ronald Fonk, Jason L. Greer, and Joseph W. Hall III (collectively, "the Commissioners"). *See Pls.' Compl.*, at 1. The Defendant in this case is the Public Service Commission ("PSC"). *See Def.'s Answer*, at 1. The main issue presented by the Plaintiffs is whether the salary limitations in KRS Chapter 74.020 prohibit a water district from offering health insurance or other fringe benefits to its commissioners? *See Pls.' Compl.*, at 3.

This case arises from a series of PSC rulings that held KRS 74.020(6) exhibited a Legislative intent to prohibit "water districts from receiving additional benefits to compensate them for their work on the board…" *Id*. at 5. The main ruling whose interpretation is challenged is the 2019 PSC case involving the Knott County Water and Sewer District's application in Case No. 2019-00268 (the "Knott Case") for a requested increase in rates for water service. *Id*. at 4. Without diving too deep into the details of the Knott case, the Court notes that the PSC relied on the language of KRS 74.020(3) to rule that the Knott Commissioners' action in approving health insurance coverage for themselves was sufficient conduct to remove them from office. *Id*. at 5.

The Plaintiffs challenge the interpretation of Health Insurance benefits offered to water commissioners as counting toward the statutory cap of salary in KRS 74.020(6) on several grounds. *See Pls.' Compl., supra* at 5. First, the Plaintiffs note that the Knott Order conflicts with a prior PSC Staff Opinion in 2013-012 that stated "health insurance is not considered salary for purposes of KRS 74.020(6)." *Id*. *See* also *Ex. B, Pls.' Compl.* Second, the Plaintiffs note that the PSC has subsequently relied on its Knott Order interpretation that health insurance coverage counts toward the statutory cap on salary in KRS 74.020(6) in several subsequent PSC proceedings. *Id*. at 5-6. (internal citations to Case No. 2021-00454, which dealt with expenses related to the Barkley Lake Water District, and Case No. 2022-00044, with regard to a case involving expenses of the Big Sandy Water District).

The Plaintiffs further argue this PSC interpretation of KRS 74.020(6) is a violation of long-standing Kentucky legal precedent, expressed in the *Caldwell County Fiscal Court* case from the Court of Appeals. *Id*. at 6. (internal citation to *Caldwell County Fiscal Court v. Paris*, 945 S.W.2d 952, 954 (Ky. App. 1997)). In *Caldwell County Fiscal Court*, the Court of Appeals squarely held that "providing health insurance under a group policy covering county officials and employees does not constitute the payment of "compensation" or "salary" to those officials…" *Id*. *See Caldwell Cnty., supra* at 954. In that case, a county surveyor alleged that the County could not discontinue his participation in the county's group health insurance program because it would diminish his compensation during his term of office, in violation of Section 161 of the Kentucky Constitution. The Court of Appeals held that group health insurance was a fringe benefit that does not constitute payment of compensation for purposes of the statutory caps on public officials' compensation or the restrictions on altering compensation during a public officials' term of office.

The *Caldwell County* case appears to be controlling as to whether participation in a county's group health insurance policy can be considered compensation within the meaning of the statutory caps set forth in KRS 74.020. First, the Court of Appeals explained that health insurance coverage is a fringe benefit, rather than compensation, explaining:

> These benefits, which include such things as retirement plans, health and disability insurance, and even life insurance, are commonly known as "fringe benefits." While these benefits certainly cost the employer, they are not considered to affect the pay, wages, or compensation of the employee but are considered an additional benefit.

See Caldwell Cnty. Fiscal Ct. v. Paris, 945 S.W.2d 952, 954 (Ky. Ct. App. 1997). The Court of Appeals further explained that:

> If the "fringe benefits" paid to such public officials amounted to "compensation" in the constitutional sense, then the annual compensation of every public official who received the maximum salary permitted under Section 246 would have to be reduced by the value of the "fringe" benefits received each year. For this court to embark upon a new interpretation of the constitution in the face of that so long accepted by all branches of our government would not only be irresponsible, but jurisprudentially unwarranted.

Id. Last, the Court of Appeals noted a very narrow exception to its ruling that fringe benefits, like health insurance, do not count toward the statutory caps of "compensation," noting:

> It should be understood that we are not holding that the payment of a "fringe benefit" to a public official can never amount to "compensation" under the constitution. If, for example, some scheme were devised to raise the salary of a particular official through the subterfuge of paying certain benefits for him not uniformly available to similarly situated officials, that scheme would not likely pass constitutional muster.

Id. at 955. The Court notes that the hypothetical narrow exception allowing for the counting of health insurance premiums as compensation would require a discriminatory or fraudulent motive, clearly a more nefarious set of circumstances than the facts of this instant case.

The Plaintiff's legal basis for seeking Declaratory Judgment under KRS 418.040 is that:

> An actual controversy exists between Plaintiffs and the PSC regarding whether the PSC's interpretation of KRS 74.020 could lead to the PSC (1) ordering OWCD to cease offering insurance benefits to its Commissioners; (2) removing OCWD's Commissioners from their position; (3) imposing a financial penalty on OCWD and its Commissioners or (4) all three.

See Pls.' Compl., *supra* at 7. The Plaintiffs ultimately seek a ruling that KRS 74.020 does not prohibit a water district from offering health insurance or other fringe benefits to its commissioners, and that fringe benefits are not within the meaning of "salary" for the purposes of KRS 74.020. *Id*. at 8-9.

The PSC claims the basis of its "Knott Order" ruling relied on its interpretation of the *Caldwell County* case. *See Def.'s Resp. Br.*, at 6. Specifically, the PSC argues that case failed to establish a bright line rule defining the terms "compensation" and "salary" in all circumstances. *Id*. While the PSC relies on the above-referenced language holding that the payment of a fringe benefit to a public official might sometimes count as compensation[1], the Court has already explained that based on its own review of the case, the application of that exception requires circumstances such as subterfuge to give a Commissioner access to benefits not otherwise available to similarly situated officials. *See Caldwell*, *supra* at 955. The PSC has misconstrued the *Caldwell County* case, and provided no basis to support a finding that group health insurance benefits should be considered compensation within the context of KRS 74.020.

However, the PSC notes that the Knott Case served as a great example of the circumstances that could lead to fringe benefits like healthcare being classified as compensation.

[1] *See Caldwell Cnty.*, *supra* at 955. The Court is referencing the quote from the case holding, "It should be understood that we are not holding that the payment of a "fringe benefit" to a public official can never amount to "compensation" under the constitution. If, for example, some scheme were devised to raise the salary of a particular official through the subterfuge of paying certain benefits for him not uniformly available to similarly situated officials, that scheme would not likely pass constitutional muster."

See Def.'s Resp. Br., supra at 7. The Court takes notice that there were significant concerns with the proposed rate hike in the Knott Case, which might have implicated the narrow exception contained in KRS 74.020 counting health care benefits toward the statutory cap on compensation. Further, the Court agrees with the PSC that it is generally mandated by KRS 278.030(1) to ensure "fair, just and reasonable rates…" *Id*. Beyond this, the Court also agrees with the PSC that it must "be able to make all the necessary inquiries required to adequately determine whether the rates proposed by the utility are appropriate. Since items such as employee compensation are included in the underlying calculation, the PSC must have the authority to regulate those costs." *Id*. at 7-8.

For reasons contained further below in this Order, the Court **GRANTS the Plaintiffs' Petition for Declaratory Judgment, and further holds that fringe benefits like health insurance do not, as a matter of law, count toward the statutory cap on salary set forth in KRS 74.020(6)**.

Standard of Review

Under KRS 418.040, where there is an actual controversy in any action in a court of record, the plaintiff may ask for a declaration of rights, and the Court may make a binding judgment. "The party seeking relief must show that an actual, justiciable controversy exists; proceedings for a declaratory judgment must not merely seek advisory answers to abstract questions." *Mammoth Medical, Inc. v. Bunnell*, 265 S.W.3d 205,209 (2008)(citing *Axton v. Goodman*, 205 Ky. 382, 265 S.W. 806 (1924)). "In general the scope of matters to which a declaratory judgment may be rendered is broad", including "any person interested…in a contract…". *Id.* "The Court may refuse to exercise the power to declare rights, duties or other

legal relations in any case where a decision under it would not terminate the uncertainty or controversy which gave rise to the action". *Id.* at 210.

"Justiciability turns on evaluating the appropriateness of issues for decision and the hardship of denying relief." *Commonwealth v. Carrol Cnty. Fiscal Court*, 633 S.W.2d 720, 721 (Ky. App. 1982)(citing *Combs v. Matthews*, 364 S.W.2d 647 (Ky. 1963).) "The controversy must be definite and concrete, touching the legal relations of parties having adverse legal interests." *Public Service Commission of Utah v. Wycoff Co., Inc.*, 344 U.S. 237, 240 (1952). A court will not decide speculative rights or duties that may or may not arise in the future. *Alexander v. Hicks*, 488 S.W.2d 336 (Ky. 1972).

An unripe claim is not justiciable. *Berger Family Real Estate, LLC v. City of Covington*, 464 S.W.3d 160, 166 (Ky. App. 2015). "The basic rationale of the ripeness requirement is to prevent the courts, through the avoidance of premature adjudication, from entangling themselves in abstract disagreements." *Id*. (internal citations omitted) "A court is precluded from deciding questions which may never arise, or which are merely advisory, academic, hypothetical, incidental or remote, or which will not be decisive of a present controversy." *Id*. (internal citations omitted)

Discussion

As noted above, to prevail on a Petition for Declaratory Judgment a proponent must show the existence of an actual, justiciable controversy. *See Bunnell*, *supra* at 209. Here, the Plaintiffs have plead an actual, justiciable controversy. Specifically, the Plaintiffs are (1) at risk of the PSC ordering the OCWD to cease providing the health insurance benefits it has provided continuously over thirty years, (2) the Plaintiff Commissioners could be removed from their positions based on the current PSC interpretation of KRS 74.020, (3) the OSWD is currently

subject to a financial penalty that the PSC could be imposed on OCWD and its commissioners, and (4) all three outcomes could occur. *See Pl.'s Reply Br.*, at 4-5. Consequently, the Court has grounds to issue Declaratory Judgment because the Plaintiffs have plead an actual, justiciable controversy. It is the PSC interpretation of KRS 74.020 that is at issue; the OCWD currently is following a policy at odds with the PSC interpretation, creating a present legal controversy.

Moving to the merits of the dispute, the Court is persuaded that this case is controlled by the *Caldwell County* Court of Appeals case which held that fringe benefits are not to be counted as compensation or salary under the terms of KRS 74.020, except when the public agency acts in a discriminatory or fraudulent manner (such as providing a benefit to a Commissioner that is not available to similarly situated officials). The Court notes that the OCWD and its Commissioners have not been accused of acting in any nefarious way that implicated the very narrow exception which might authorize counting fringe benefits as compensation or salary.

Further, the Plaintiffs have gone out of their way not to challenge the plenary authority of the PSC to make a determination whether "the costs associated with fringe benefits are appropriate for rate recovery." *See Pls.' Reply Br.*, *supra* at 2. *See* also *Pls.' Compl.*, *supra* at 3, ¶ 13. Instead, the Plaintiffs seek the narrow Declaratory Relief that the OCWD's offering of health insurance benefits to its commissioners is not a violation of KRS 74.020. *See Pls.' Reply Br.*, *supra* at 2. Indeed, the Court agrees with the premise that the PSC has a statutory right to set fair, just, and reasonable rates for utilities like OCWD.

Accordingly, the PSC has every right to examine the full compensation and benefits package of any water district, including OCWD, to determine if the expenditure of public funds is "fair, just and reasonable" in the context of a rate case. There are many perfectly legal expenditures of funds that the PSC may disallow in the context of its review of a utilities rate.

The expenditure of funds for group health insurance is one such perfectly legal expenditure. The costs of a participation in group health insurance may be disallowed by the PSC if it is unjustified, extravagant, fraudulent, discriminatory, or not supported by a factual basis. But the PSC cannot categorically disallow such an expenditure for group health insurance benefits for commissioners on the mistaken legal grounds that it violates the compensation caps of KRS 74.020. It appears that in recent cases, the PSC has relied on this mistaken legal conclusion to automatically reject such expenditures. This position of the PSC is erroneous as a matter of law. In light of the importance of recruiting competent citizens to serve on water district boards, and the difficulty of attracting such persons to serve at minimal salaries, the Court believes that including board members in group health insurance and other fringe benefits of county employment may be a very effective strategy, and in many cases may be necessary, to attract and maintain a competent board. While the PSC has every right to examine such expenditures, as it does all utility expenditures borne by the ratepayers, the PSC cannot categorically disallow such expenditures based on its recent misinterpretation of the salary cap law.

Accordingly, the Court must **GRANT the Plaintiffs' Complaint for Declaratory Relief**. Specifically, the Court **declares that the offering of fringe benefits, like health insurance, to Commissioners does not, as a matter of law, count as "salary" or "compensation" under the terms of KRS 74.020**. Consequently, the **Plaintiffs are entitled to Declaratory Relief that KRS 74.020 does not prohibit a water district from offering health insurance or other fringe benefits to its commissioners**.

Conclusion

WHEREFORE, the Plaintiffs' Complaint for Declaratory Relief is hereby **GRANTED**. Fringe benefits like health insurance do not count as "salary" or "compensation" under the terms

of KRS 74.020(6). The Court's ruling is based primarily on the reasoning contained in the *Caldwell County* case, and the Court finds that the nefarious circumstances that would implicate the exception that counts fringe benefits toward statutory caps on compensation do not apply in this case. However, because the Court is persuaded by the arguments of the PSC that it must maintain authority to review the costs of fringe benefits in the context of its KRS 278.030 authority to set fair, just, and reasonable rates, the Court also **declares** the PSC maintains its authority to consider the cost of fringe benefits when evaluating proposed rate changes. However, the PSC may not rely on its erroneous interpretation of *Caldwell County* to include, as a matter of law, the monetary value of fringe benefits in the calculations of "salary" or "compensation" under KRS 74.020. The hypothetical exception discussed in the *Caldwell County* case that would potentially allow for the counting of fringe benefits toward the statutory cap on "salary" or "compensation", in cases involving discrimination or fraud, does not apply to the facts of this case. The PSC may not automatically disallow group health insurance benefits as violations of statutory caps on salary and compensation in KRS 74.020(6).

Accordingly, pursuant to KRS 418.040 and CR 57, **IT IS ORDERED AND ADJUDGED**:

1. The Plaintiffs' Complaint for Declaratory Judgment is **GRANTED**.
2. The Court declares that KRS 74.020 does not prohibit a water district from offering health insurance or other fringe benefits to its commissioners, and that the cost of such group health insurance benefits is not included in applying the salary cap set forth in KRS 74.020.
3. The Court declares that "fringe benefits" are not within the meaning of "salary" for the purposes of KRS 74.020.

SO ORDERED this 15th day of April, 2024.

/s/ HON. PHILLIP J. SHEPHERD
electronically signed
4/15/2024 3:49:17 PM ET

PHILLIP J. SHEPHERD, JUDGE
Franklin Circuit Court, Division I

Distribution:

Monica H. Braun
Gerald Wuetcher
Stoll Keenon Ogden PLLC
300 West Vine Street, Suite 2100
Lexington, KY 40507
Counsel for Plaintiffs

Jurgens van Zyl
Wright Williams
Public Service Commission of Kentucky
Post Office Box 615
211 Sower Boulevard
Frankfort, KY 40602
Jurgens.vanzyl@ky.gov
Wright.williams@ky.gov
Counsel for Defendant

Final PFAS National Primary Drinking Water Regulation

> “Every American deserves to be able to turn on their water tap or faucet and be able to drink clean water.
>
> **- Joe Biden**, President of the United States

Regulatory Levels: Maximum Contaminant Level Goals

- EPA is taking a signature step to protect public health by establishing legally enforceable levels for several PFAS known to occur individually and as mixtures in drinking water
- For PFOA and PFOS, EPA is setting a non-enforceable health-based goal of **zero**. This is called a Maximum Contaminant Level Goal (MCLG).
  - This reflects the latest science showing that there is no level of exposure to these two PFAS without risk of health impacts.
- For PFNA, PFHxS, and HFPO-DA (GenX Chemicals), EPA is setting MCLGs of **10 parts per trillion**.

Regulatory Levels: Maximum Contaminant Levels

- EPA is setting enforceable Maximum Contaminant Levels (MCLs) at **4.0 parts per trillion** for PFOA and PFOS, individually.
  - This standard will reduce exposure from these PFAS in our drinking water to the lowest levels that are feasible for effective implementation.
- For PFNA, PFHxS, and HFPO-DA (GenX Chemicals), EPA is setting MCLs of **10 parts per trillion**.

Regulatory Levels: Hazard Index (see fact sheet for details)

- EPA is also regulating, through a hazard index (HI), mixtures of four PFAS—**PFHxS, PFNA, HFPO-DA,** and **PFBS**.
- Decades of research show some chemicals, including some PFAS, can combine in mixtures and have additive health effects, even if the individual chemicals are each present at lower levels.
- PFAS can often be found together and in varying combinations as mixtures.

Regulatory Levels: Hazard Index

- The Hazard Index is a long-established approach that the EPA regularly uses, for example in the Superfund program, to determine the health concerns associated with exposure to chemical mixtures.
- The Hazard Index is calculated by adding the ratio of the water sample concentration to a Health-Based Water Concentration.

$$HI\ MCL = \left(\frac{[HFPO{-}DA_{water}]}{[10\ ppt]}\right) + \left(\frac{[PFBS_{water}]}{[2000\ ppt]}\right) + \left(\frac{[PFNA_{water}]}{[10\ ppt]}\right) + \left(\frac{[PFHxS_{water}]}{[10\ ppt]}\right) = 1$$

- Details are provided in EPA's fact sheet

Regulatory Levels: Summary

Chemical	Maximum Contaminant Level Goal (MCLG)	Maximum Contaminant Level (MCL)
PFOA	0	4.0 ppt
PFOS	0	4.0 ppt
PFHxS	10 ppt	10 ppt
HFPO-DA (GenX chemicals)	10 ppt	10 ppt
PFNA	10 ppt	10 ppt
Mixture of two or more: PFHxS, PFNA, HFPO-DA, and PFBS	Hazard Index of 1	Hazard Index of 1

*Compliance is determined by running annual averages at the sampling point

Costs and Benefits

- By reducing exposure to PFAS, this final rule will:
  - Save **thousands of lives.**
  - Prevent **tens of thousands of serious illnesses**, including cancers, liver disease, heart attacks, and strokes.
  - Reduce immune impacts and developmental impacts to pregnant people, children and babies.
- The benefits are quantified by considering the costs of illness such as lost wages, medical bills, and the value of every life lost.
- The quantifiable health benefits of this rule are estimated to be **$1.5 billion** annually.
- There are also many other substantial health impacts that will be avoided which EPA does not have data to quantify.

Costs and Benefits

- EPA estimates that between about 6% and 10% of the 66,000 public drinking water systems subject to this rule may have to take action to reduce PFAS to meet these new standards.
- Compliance with this rule is estimated to cost approximately $1.5 billion annually.
- These costs include water system monitoring, communicating with customers, and if necessary, obtaining new or additional sources of water or installing and maintaining treatment technologies to reduce levels of the six PFAS in drinking water.
- EPA considered all available information and analyses for costs and benefits, quantifiable and non-quantifiable, of this rule and determined that the **benefits justify the costs**.

Costs and Benefits (see fact sheet for details)

	How Much?	What From?	The Potential Impact
Costs	$1.5 Billion per year	Monitoring, communicating with customers, and if necessary, obtaining new or additional sources of water or installing and maintaining treatment technologies.	States, Tribes, and territories with primacy will have increased oversight and administrative costs. **66,000 regulated water systems** will have to conduct monitoring and notifications. **4,100 – 6,700 water systems** may have to take action to reduce levels of PFAS.
	Non-quantified*	Costs for some systems to comply with the Hazard Index, HFPO-DA, and PFNA MCLs.	
Benefits	$1.5 Billion per year	The rule results in fewer cancers, lower incidence of heart attacks and strokes, and fewer birth weight-related deaths. Actions taken to implement the rule may also lead to associated health benefits from reductions in other PFAS and unregulated disinfection byproducts. Benefits will prevent over **9,600 deaths and reduce approximately 30,000 serious illnesses.**	**83 – 105 million people** will have improved drinking water as a result of lower levels of PFAS
	Non-quantified*	Increased ability to fight disease, reductions in thyroid disease and impacts to human hormone systems, reductions in liver disease, and reductions in negative reproductive effects such as decreased fertility.	

***Non-quantified benefits and costs are those that EPA could not assign a specific number to as part of its national level quantified analysis, but it doesn't mean their benefits or costs are less important than those with numerical values.**

Implementation

Under the rule requirements, public water systems must:

- Conduct initial and ongoing compliance monitoring for the regulated PFAS
- Implement solutions to reduce regulated PFAS in their drinking water if levels exceed the MCLs
- Inform the public of the levels of regulated PFAS measured in their drinking water and if an MCL is exceeded

Implementation: Timeframes for Water Systems

Within **three years** of rule promulgation (2024 – 2027):

- Initial monitoring must be complete

Starting **three years** following rule promulgation (2027 – 2029):

- Results of initial monitoring must be included in Consumer Confidence Reports (i.e., Annual Water Quality Report)
- Regular monitoring for compliance must begin, and results of compliance monitoring must be included in Consumer Confidence Reports
- Public notification for monitoring and testing violations

Starting **five years** following rule promulgation (starting 2029)

- Comply with all MCLs
- Public notification for MCL violations

Implementation

EPA's final rule protects public health while allowing for maximum flexibility, cost savings, and burden reduction for public water systems. Flexibilities include:

- Reductions in required initial monitoring for most small water systems
- Using previously collected drinking water data to satisfy the rule's initial monitoring requirements (e.g., UCMR)
- Reduced compliance monitoring based on sampling results
- Additional time to comply with the PFAS MCLs, allowing systems time to plan, design, and find the best solutions for their communities

Implementation

- EPA's final rule does not dictate how water systems remove these contaminants. The rule is flexible, allowing systems to determine the best solutions for their community.
- Drinking water utilities can choose from multiple proven treatment options.
- Water treatment technologies exist to remove PFAS chemicals from drinking water, including granular activated carbon, reverse osmosis, and ion exchange systems.
- In some cases, systems can close contaminated wells or obtain new uncontaminated source of drinking water.

What changed from the Proposed Rule?

Examples of changes to the final rule based on comments:

- Compliance deadline for MCLs increased to 5 years instead of 3 years for systems to plan, fund, and construct capital improvements.
- Set individual MCLGs/MCLs for PFHxS, PFNA, and HFPO-DA (GenX chemicals) in addition to the mixture HI MCLG/MCL for PFHxS, PFNA, HFPO-DA, and PFBS.
- Final HI MCL requires presence of two or more PFAS versus one or more.
- Additional flexibility to reduce ongoing monitoring from quarterly to annual or triennial based on results.

PFAS Funding and Technical Assistance

- PFAS contamination can have a disproportionate impact on small, disadvantaged, and rural communities, and there is federal funding available specifically for these water systems.
- The Bipartisan Infrastructure Law (BIL) dedicates $9 billion specifically to invest in communities with drinking water impacted by PFAS and other emerging contaminants. $1B of these funds can be used to help private well owners.
- An additional $12 billion in BIL funding is available for general drinking water improvements.

For more: https://www.epa.gov/water-infrastructure/water-technical-assistance-waterta-information#Adtnl$ResSec

PFAS Funding and Technical Assistance

- EPA collaborates with state, Tribes, territories, community partners, and other key stakeholders to implement Water Technical Assistance (WaterTA) efforts and the end result is more communities with applications for federal funding, quality water infrastructure, and reliable water services.
- EPA's water technical assistance program is ensuring that disadvantaged communities can access federal funding.
- EPA's free WaterTA supports communities to identify water challenges, develop plans, build technical, managerial and financial capacity, and develop application materials to access water infrastructure funding.

For more: https://www.epa.gov/water-infrastructure/water-technical-assistance-programs

Resources

Materials

- Presentation
- General Q&A
- Fact Sheet: Public
- Fact Sheet: Water Filters
- Fact Sheet: What are the Benefits and Costs of the Rule?
- Fact Sheet: Understanding the Hazard Index
- Fact Sheet: Small Systems
- Fact Sheet: PFAS Drinking Water Treatment Technologies
- Fact Sheet PFAS NPDWR Monitoring Requirements
- Detailed Q&As for states and systems

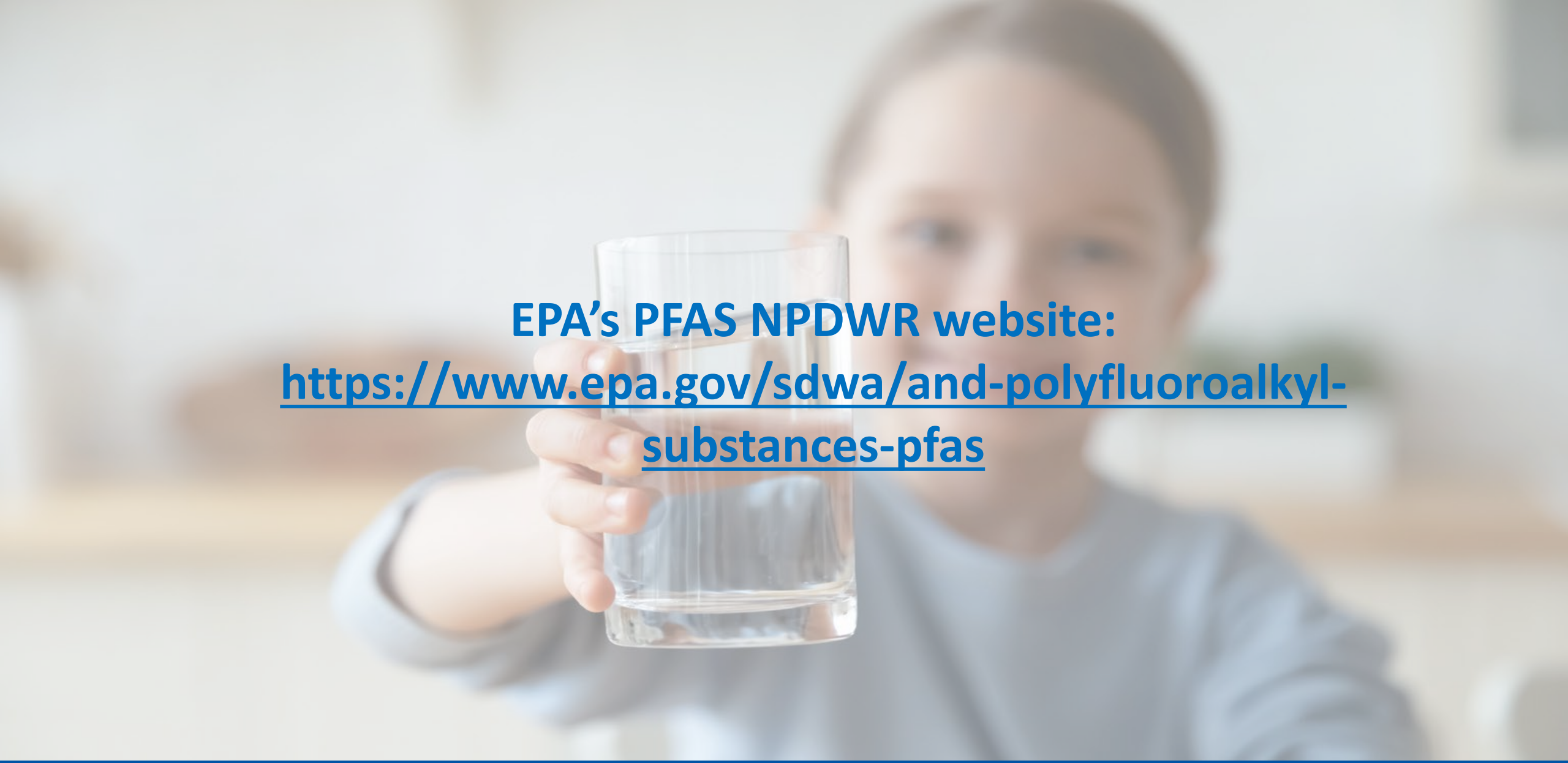
Webinars (Times: TBD)

- General Overview: **April 16**
- Water Sector Professionals Technical Overview: **April 23**
- Small Systems Webinar: **April 30**

Materials & registration available on https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas

EPA's Commitment to Address PFAS Contamination

- The Agency released its PFAS Strategic Roadmap in October 2021 and established the agency's three overarching goals:
  - Restricting PFAS from entering the environment in the first place.
  - Remediating—or cleaning up—PFAS contamination where it is found.
  - Researching PFAS to strategically address public health and environmental risks.
- Since 2021, the agency has taken many actions to strengthen public health protections and address PFAS in the environment.
- The agency's final PFAS drinking water regulation is a cornerstone of this holistic approach.



EPA's PFAS NPDWR website:
https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas

ASSISTANT ADMINISTRATOR FOR ENFORCEMENT AND COMPLIANCE ASSURANCE
WASHINGTON, D.C. 20460

April 19, 2024

MEMORANDUM

SUBJECT: PFAS Enforcement Discretion and Settlement Policy Under CERCLA

FROM: David M. Uhlmann

TO: Regional Administrators and Deputy Regional Administrators
Regional Counsels and Deputy Regional Counsels

Communities across the United States face public health and environmental challenges because of toxic PFAS contamination.[1] PFAS have been manufactured in the United States and around the world since the 1940s for use in a wide range of industrial and consumer products from fire-fighting foam to non-stick cookware and water-resistant fabrics. PFAS are referred to as "forever chemicals" because of their persistence in the environment. Exposure to PFAS has been linked to deadly cancers, impacts to the liver and heart, and immune and developmental damage to infants and children.

On August 17, 2023, EPA announced a new National Enforcement and Compliance Initiative (NECI) to address exposure to PFAS.[2] NECIs are intended to focus on the most serious and widespread environmental problems facing the United States. PFAS is no exception. Due to the toxicity and persistence of PFAS chemicals, and the breadth and scope of PFAS contamination throughout the country, addressing PFAS contamination is a significant priority for EPA.

EPA now has designated two types of PFAS, perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS), as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).[3] The rule designating PFOA and PFOS as hazardous substances will allow EPA to use the full strength of CERCLA to address PFAS contamination. At the same time, the rule does not change the statute's liability framework, which provides liability protections in certain circumstances for parties that are not primarily responsible.

---

[1] PFAS, or per- and polyfluoroalkyl substances, are a large group of manufactured chemicals. For the majority of this document, EPA will use PFAS as a shorthand to refer to perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS), including their salts and structural isomers, consistent with the definition in the Final Designation of PFOA and PFOS as Hazardous Substances. *See infra* note 3.

[2] *See* FY 2024 – 2027 National Enforcement and Compliance Initiatives.

[3] *See* Final Designation of PFOA and PFOS as Hazardous Substances. *See also* Proposed Designation of PFOA and PFOS as Hazardous Substances.

With this memorandum, I am providing direction to all EPA enforcement and compliance staff about how EPA will exercise its enforcement discretion under CERCLA in matters involving PFAS, just as EPA exercises enforcement discretion regarding other hazardous substances. EPA will focus on holding responsible entities who significantly contributed to the release of PFAS into the environment, including parties that manufactured PFAS or used PFAS in the manufacturing process, federal facilities, and other industrial parties.

EPA does not intend to pursue entities where equitable factors do not support seeking response actions or costs under CERCLA, including, but not limited to, community water systems and publicly owned treatment works, municipal separate storm sewer systems, publicly owned/operated municipal solid waste landfills, publicly owned airports and local fire departments, and farms where biosolids are applied to the land. For these same parties, EPA can use CERCLA statutory authorities when appropriate to enter into settlements that provide contribution protection from third party claims for matters addressed in the settlement.

I. Executive Summary

EPA is issuing this PFAS Enforcement Discretion and Settlement Policy Under CERCLA regarding enforcement considerations that will inform EPA's decisions to pursue or not pursue potentially responsible parties (PRPs) for response actions or costs under CERCLA to address the release or threatened release of PFAS. This Policy is intended to clarify when EPA intends to use its CERCLA enforcement authorities or decide not to pursue a particular party. This Policy applies only to the exercise of EPA's enforcement discretion when requiring action to address releases of PFAS under CERCLA; it does not apply to enforcement under other EPA programs or statutes, including other EPA programs that may address PFAS.

The designation of PFOA and PFOS as hazardous substances should not disrupt CERCLA's liability framework; CERCLA will continue to operate as it has for decades. In enforcement matters, the facts, circumstances, and equities of each case inform which parties the Agency pursues. CERCLA's liability limitations and protections safeguard against liability in certain circumstances for parties that are not primarily responsible. EPA's enforcement discretion policies historically have given EPA much-needed flexibility to provide additional protections when circumstances warrant.[4]

Although CERCLA's liability framework is broad, the statutory affirmative defenses and EPA's enforcement discretion provide mechanisms to narrow the scope of liability and focus on the significant contributors to contamination. Some stakeholders have expressed concern that the designation of PFOA and PFOS as hazardous substances will result in parties being pursued for PFAS liability under CERCLA, even if the equities do not support seeking CERCLA response actions or costs. EPA intends to rely upon CERCLA statutory protections and EPA's existing enforcement discretion policies to alleviate those concerns, as well as the factors set forth here.

Consistent with CERCLA's objectives, EPA will focus on holding accountable those parties that have played a significant role in releasing or exacerbating the spread of PFAS into the environment, such as those who have manufactured PFAS or used PFAS in the manufacturing process, and other industrial

[4] *See* Unique Parties and Superfund Liability.

parties. For purposes of this Policy only, these parties are referred to as major PRPs. EPA also intends to pursue federal agencies or federal facilities when they are responsible for PFAS contamination.[5]

EPA remains committed to environmental justice and identifying and protecting overburdened communities that may be disproportionally impacted by adverse health and environmental effects.[6] EPA intends to pursue major PRPs and federal agencies to conduct investigations and cleanup to protect communities from high-risk, high-concentration PFOA and PFOS exposures.

As more fully described in Section IV of this memorandum, and subject to the limitations set forth in Section V, EPA does not intend to pursue otherwise potentially responsible parties where equitable factors do not support seeking response actions or costs under CERCLA, including, but not limited to, the following entities:

(1) Community water systems[7] and publicly owned treatment works (POTWs);[8]
(2) Municipal separate storm sewer systems (MS4s);[9]
(3) Publicly owned/operated municipal solid waste landfills;
(4) Publicly owned airports and local fire departments; and
(5) Farms where biosolids are applied to the land.

EPA may extend enforcement discretion under this Policy to additional parties even if they do not fall within the categories listed above, based on the equitable factors set forth in Section IV.B.

In addition to potential EPA action, EPA understands that entities are concerned about being sued by other PRPs for PFAS cleanup costs under CERCLA. In CERCLA settlements with major PRPs, EPA will seek to require those settling parties to waive their rights to sue parties that satisfy the equitable factors. The major PRPs would then not be able to sue those non-settling parties for matters addressed under the settlement. These settlement protections are consistent with settlement protections regularly applied by EPA in other CERCLA contexts.

Further, consistent with current CERCLA enforcement practice to mitigate these litigation risk concerns, EPA can enter settlements with concerned parties under our statutory authorities when appropriate. Such settlements would help to mitigate litigation risk concerns and associated costs by providing protection from CERCLA contribution claims by other PRPs seeking a portion of PFAS response costs.[10] This exercise of enforcement discretion is discussed in Section IV.C.

To provide context for this policy, Section II provides below a short overview of CERCLA, including a description of the statutory liability framework. Section III includes a summary of the Agency's integrated approach to addressing PFAS. Section IV discusses how EPA intends to exercise its CERCLA

[5] *See* Executive Order 12580, 52 Fed. Reg. 2923 (Jan. 23, 1987).
[6] *See* Strengthening Environmental Justice Through Cleanup Enforcement Actions (July 1, 2021).
[7] A community water system is a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents. *See* 40 C.F.R. § 141.2.
[8] POTW means a treatment works (as defined by CWA section 212) that is owned by a state or municipality (as defined by Clean Water Act (CWA) section 502(4)).
[9] An MS4 is a conveyance or system of conveyances that is: owned by a state, city, town, village, or other public entity that discharges to waters of the U.S.; designed or used to collect or convey stormwater (e.g., storm drains, pipes, ditches); not a combined sewer; and not part of a sewage treatment plant, or publicly owned treatment works (POTW). *See* 40 C.F.R. § 122.26(b)(8).
[10] *See* CERCLA section 113(f)(2), 42 U.S.C. § 9613(f)(2).

enforcement discretion for PFAS. Section V identifies limitations and contingencies that apply to the use of enforcement discretion in this policy.

II. Overview of CERCLA

CERCLA was enacted in 1980 in response to public concern about abandoned hazardous waste sites. CERCLA authorizes the federal government to assess sites, clean up contaminated sites, and respond to releases or threatened releases of hazardous substances, pollutants, and contaminants.

There are over 800 hazardous substances designated under CERCLA. Hazardous substance designation gives rise to a requirement to report releases at or above a certain quantity[11] and enables EPA to order actions by and recover response costs from PRPs. CERCLA's liability framework aims to ensure that, wherever possible, PRPs perform or pay for cleanups instead of relying on the Hazardous Substance Trust Fund (Superfund), consistent with EPA's "polluter pays" principle.

As described in CERCLA section 107(a), the following categories of persons may be liable for the costs or performance of a cleanup of a hazardous substance under CERCLA:

(1) Current owners and operators of a facility where hazardous substances come to be located;
(2) Owners and operators of a facility at the time that hazardous substances were disposed of at the facility;
(3) Generators and parties that arranged for the disposal or transport of the hazardous substances; and
(4) Transporters of hazardous waste that selected the site where the hazardous substances were brought.

To conserve Superfund money for cleanups at sites where there are no financially viable PRPs, EPA has adopted an "enforcement first" policy[12] to compel those responsible for contaminated sites to take the lead in cleanup (the "polluter pays" principle). In keeping with this policy, EPA routinely reaches settlements with PRPs to clean up sites. In addition, EPA can compel PRPs to clean up sites where there may be an imminent and substantial endangerment to public health or welfare or the environment from an actual or threatened release of hazardous substances. When EPA spends Superfund money to finance a response action, EPA may then seek reimbursement from PRPs. Private parties may also conduct cleanups and seek reimbursement of eligible response costs from PRPs.

CERCLA liability is not unlimited. CERCLA includes several statutory protections that may limit liability and discourage litigation (e.g., the provision for settlements with "de minimis" or minor parties, CERCLA section 122(g)). Moreover, EPA has well-established enforcement discretion policies that provide EPA flexibility to offer liability protections to parties when circumstances warrant (e.g., innocent landowners, de micromis parties, owners of residential property at or near Superfund sites,

[11] The designation of PFOA and PFOS, including their salts and structural isomers, as hazardous substances, can trigger the applicability of release reporting requirements under CERCLA sections 103 and 111(g), and accompanying regulations, and section 304 of the Emergency Planning and Community Right-to-Know Act. Facilities must report releases of hazardous substances at or above the reportable quantity (RQ) within a 24-hour period. For PFOA and PFOS, a default RQ of one pound is assigned to these substances pursuant to CERCLA section 102(b). This Policy does not apply to these requirements, and parties that may be eligible for enforcement discretion must comply with this requirement if a reportable release occurs at their facility.

[12] *See* Enforcement First for Remedial Action at Superfund Sites (Sept. 20, 2002).

and contiguous property owners).[13] Existing CERCLA limitations and enforcement policies are sufficient to mitigate concerns about liability that may arise after designation. No additional action should be necessary to ensure that those limitations and policies continue to operate as they have for decades. Nonetheless, EPA is issuing this CERCLA PFAS enforcement discretion policy consistent with existing statutory protections and policies.[14]

EPA's CERCLA enforcement discretion policies help the Agency focus on sites that pose the most risk and PRPs who have contributed significantly to contamination. EPA will continue to implement its "enforcement first" policy, which compels PRPs to conduct and pay for cleanup before resorting to the Superfund, in furtherance of CERCLA's "polluter pays" principle.

III. EPA's Approach to PFAS

On October 18, 2021, EPA released its PFAS Strategic Roadmap,[15] which highlighted the integrated approach the Agency is taking across a range of environmental media and EPA program offices to protect the public and the environment from PFAS contamination. EPA's approach to PFAS is focused on three central directives to address PFAS contamination:

(1) *research* – to invest in research, development, and innovation to increase understanding of PFAS exposures and toxicity, human health, and ecological effects and effective interventions that incorporate the best available science;
(2) *restrict* – to pursue a comprehensive approach to proactively prevent PFAS from entering air, land, and water at levels that can adversely impact human health and the environment; and
(3) *remediate* – to broaden and accelerate the cleanup of PFAS contamination to protect human health and ecological systems.[16]

Historically, PFAS have been found in, or used in making, a wide range of consumer products including carpets, clothing, fabrics for furniture, packaging for food, and cookware. PFAS also have been components of firefighting foams used to extinguish liquid fuel fires at airfields, refineries, military bases and other locations, and in several industrial processes. As a result of their widespread use, environmental releases of PFAS have occurred for decades, leaving many communities and ecosystems exposed to PFAS in soil, sediment, surface water, groundwater, and air. A growing body of scientific evidence shows that exposure at certain levels to specific PFAS is linked to adverse impacts to human health.[17] EPA uses its various enforcement authorities, including under the Safe Drinking Water Act, the Resource Conservation and Recovery Act, the Toxic Substances Control Act, the Clean Air Act, and the Clean Water Act, to identify and address PFAS releases at private and federal facilities and in communities.

[13] For example, for parties who have contributed a miniscule amount of waste to the site (De Micromis Parties), EPA policy is that they should not participate in financing the cleanup. *See* Superfund Cleanup: De Minimis/De Micromis Policies and Models.
[14] *See supra* note 4.
[15] *See* PFAS Strategic Roadmap: EPA's Commitments to Action 2021-2024.
[16] *Id.* at 5.
[17] *Id.* at 7.

In September 2022, based on significant evidence that PFOA and PFOS may present a substantial danger to human health or welfare or the environment,[18] the Agency proposed to designate PFOA and PFOS as hazardous substances under section 102(a) of CERCLA. Findings from laboratory animal toxicological studies and human epidemiology studies suggest that exposure to PFOA and/or PFOS may lead to cancer and reproductive, developmental, cardiovascular, liver, and immunological effects.[19]

On April 17, 2024, EPA signed the final rule[20] to designate PFOA and PFOS as hazardous substances under section 102(a) of CERCLA. This designation allows EPA to use its CERCLA enforcement authorities, as appropriate and where relevant statutory elements are met, which could shift the cost burden of CERCLA response costs from the Superfund to PRPs. As with any other hazardous substance, EPA will determine what, if any, response and enforcement actions may be necessary to protect human health and the environment. Further, EPA and its state, local, and Tribal partners, may carry out a response action to address PFAS contamination, wholly distinct from CERCLA enforcement-driven actions.

IV. CERCLA Enforcement Discretion and Settlement Policy

Although EPA has the authority under CERCLA to require parties to perform response actions and to seek response costs incurred by the United States, the Agency has discretion on how to exercise its authority, which the Agency has utilized since CERCLA was enacted in 1980.

Consistent with EPA's past practice, this Section describes how EPA intends to exercise its CERCLA enforcement discretion for matters involving PFAS. As noted above, EPA intends to focus its enforcement efforts on entities who significantly contributed to the release of PFAS contamination into the environment, including parties that manufactured PFAS or used PFAS in the manufacturing process, federal facilities, and other industrial parties.

Section IV.A identifies entities where equitable factors do not support seeking response actions or costs under CERCLA. Section IV.B sets forth the equitable factors that EPA will consider in deciding whether to exercise enforcement discretion under CERCLA for other PRPs. Section IV.C. sets forth EPA's approach to settling with parties described in this Section.

A. Parties Covered by the PFAS Enforcement Discretion Policy

EPA does not intend to pursue, based on equitable factors, PFAS response actions or costs under CERCLA against the following parties:

1. Community Water Systems and POTWs

Community water systems and POTWs conduct public services by providing safe drinking water and managing and processing public waste. These entities are required to treat PFAS-contaminated sources of drinking water and receive PFAS-contaminated wastewater. They do not manufacture PFAS nor use PFAS as part of an industrial process. Through their operation processes, these parties may discharge

[18] *See* Proposed Designation of PFOA and PFOS as Hazardous Substances.
[19] *See id.* or related news release to proposed designation.
[20] *See supra* note 3.

effluents;[21] dispose or manage sewage sludge, biosolids,[22] and drinking water treatment residuals; and arrange for the disposal of spent treatment media (i.e., activated carbon filters, anion exchange media, or membranes) and/or the discharge of leachate, permeate, or regeneration brines.

2. Municipal Separate Storm Sewer Systems (MS4s)

MS4s do not manufacture PFAS nor use PFAS as part of an industrial process. Owners/operators of regulated MS4s perform a public service and are required to develop, implement, and enforce a stormwater management program (SWMP) to describe how the MS4 will reduce the discharge of pollutants from its sewer system.[23] While the SWMP should detect and eliminate illicit discharges, illegal dumping and connections may result in illicit discharges of non-stormwater wastes into the MS4. MS4s implement programs to prevent or reduce pollutant runoff from municipal operations into the storm sewer system, which helps to control pollutant discharges by minimizing the potential pathways for contaminants carried in runoff.

3. Publicly Owned or Operated Municipal Solid Waste Landfills

Publicly owned or operated municipal solid waste landfills perform a public service by handling municipal solid waste. They do not manufacture PFAS nor use PFAS as part of an industrial process. In addition to receiving waste from communities and other residential entities, these landfills may accept solid waste from POTWs that may be contaminated with PFAS, particularly sewage sludge and solid residues that result from treatment processes and filtration media such as granular activated carbon filters.

4. Publicly Owned Airports and Local Fire Departments

State or municipal airports and local fire departments provide a public service by preparing for and suppressing fire emergencies and protecting public safety. They do not manufacture PFAS nor use PFAS as part of an industrial process. Many airports and fire departments, however, store and use aqueous film forming foam (AFFF),[24] fire-fighting foam that may contain PFAS. Many airports have been required by Federal Aviation Administration regulations to maintain adequate amounts of AFFF to address fire emergencies.[25] State or municipal airports and local fire departments have also used AFFF during fire emergencies and training exercises.

To the extent publicly owned airports and local fire departments are legally required to continue to use AFFF, these parties must follow all applicable regulations governing the use, storage, handling, and disposal of AFFF that contains PFAS.[26] EPA also expects these parties to exercise a high standard of care

[21] CERCLA enumerates 11 categories of federally permitted releases, including releases regulated by CWA section 402 which established a National Pollutant Discharge Elimination System permit program. In this Policy, EPA does not take a position on the applicability of a "federally permitted release" as defined in CERCLA section 101(10).

[22] Sewage sludge is a product of the wastewater treatment process. During wastewater treatment, the liquids are separated from the solids and then may be treated physically and chemically to produce a semisolid, nutrient-rich product. The terms "biosolids" and "treated sewage sludge" are often used interchangeably; however, biosolids typically means sewage sludge treated to meet the requirements in 40 C.F.R. part 503 and intended to be applied to land as a soil amendment. Disposal (incineration and landfilling) requirements in Part 503 refer to sewage sludge.

[23] *See* Stormwater Discharges from Municipal Sources-Developing an MS4 Program.

[24] A Class B fire is a fire in flammable liquids or flammable gases, petroleum greases, tars, oils, oil-based paints, solvents, lacquers, or alcohols. States, Tribes, or municipalities may have regulations for the use and handling of AFFF.

[25] 14 C.F.R. part 139.

[26] Protocols for handling, storage, and accidental release can be found in the Material Safety Data Sheet for AFFF.

to limit the release of PFAS, minimize and contain releases, and forgo, when possible, the use of AFFF in the process of cleaning equipment and training exercises.

5. Farms that Apply Biosolids to Land

POTWs also produce sewage sludge that may be treated to become biosolids. Farms then routinely apply these biosolids to the land, and by doing so, provide for a beneficial application of a product from the wastewater treatment process.[27] Under the Clean Water Act, EPA and the states have regulated standards for the application of sludge as an agricultural fertilizer that ensures strict guidelines and agronomic application rates are followed that support crop growth and protect soil and water quality.[28] EPA recognizes that such land application can result in both economic and resource management benefits, including conservation of landfill space, reduction in methane gas from landfills, reduction of releases from incinerators, and a reduced demand for synthetic fertilizers.[29] Further, these farms do not manufacture PFAS nor use PFAS as part of an industrial process.

B. Factors Considered for Enforcement Discretion for Other Parties

Consistent with EPA's practice of considering fairness and equitable factors, EPA will exercise its enforcement discretion to not pursue additional entities for PFAS response actions or costs under CERCLA, informed by the totality of the following factors:

(1) Whether the entity is a state, local, or Tribal government, or works on behalf of or conducts a service that otherwise would be performed by a state, local, or Tribal government.
(2) Whether the entity performs a public service role in:
    - Providing safe drinking water;
    - Handling of municipal solid waste;
    - Treating or managing stormwater or wastewater;
    - Disposing of, arranging for the disposal of, or reactivating pollution control residuals (e.g., municipal biosolids and activated carbon filters);
    - Ensuring beneficial application of products from the wastewater treatment process as a fertilizer substitute or soil conditioner;[30] or
    - Performing emergency fire suppression services.
(3) Whether the entity manufactured PFAS or used PFAS as part of an industrial process.
(4) Whether, and to what degree, the entity is actively involved in the use, storage, treatment, transport, or disposal of PFAS.

[27] Under CERCLA section 101(22)(D), the definition of "release" explicitly excludes "the normal application of fertilizer." EPA believes this language is best read as requiring a site-specific analysis.
[28] *See* 40 C.F.R. part 503.
[29] EPA acknowledges that biosolids used as soil amendment are subject to an evolving regulatory scheme. CWA sections 405(d) and (e) authorize EPA to promulgate regulations containing guidelines for the use and disposal of sewage sludge, including by establishing numerical limitations where feasible. Under CWA section 405(d)(2)(D), these regulations must be "adequate to protect human health and the environment from any reasonably anticipated adverse effect of each pollutant." *See also* Policy on Municipal Sludge Management, 49 Fed. Reg. 24358 (June 2, 1984).
[30] *See, e.g.*, Standards for the Use or Disposal of Sewage Sludge, 58 Fed. Reg. 9248, 9262 (Feb. 19, 1993).

In helping to ensure equitable outcomes in addressing PFAS contamination, the above factors are instructive in determining whether an entity's CERCLA responsibility should be limited.

C. Settlement Agreements and Contribution Protection

EPA has broad discretion to decide whether to respond to a release or threat of release under CERCLA. Response decisions are made on a case-by-case basis after considering the specific circumstances related to the release at issue. CERCLA section 104(a) provides that whenever there is a release or threat of release of a hazardous substance, or a release of a pollutant or contaminant which may present an imminent and substantial danger to public health or welfare, "the President is authorized to act" and take any response action the President "deems necessary to protect the public health or welfare or the environment." EPA is further directed to employ settlement procedures "[w]henever practicable and in the public interest…to expedite effective remedial actions and minimize litigation."[31]

To further the goals of this policy, EPA can provide some measure of litigation and liability protection through settlement agreements in two primary ways when circumstances warrant.[32]

First, EPA may protect certain non-settling parties when the Agency enters settlement agreements with major PRPs. For example, if EPA settles with a PFAS manufacturer, EPA may secure a waiver of rights providing that the PFAS manufacturer cannot pursue contribution against certain non-settling parties to that settlement. The waiver of rights helps provide some protection to parties that EPA does not intend to pursue from both the costs of litigation and the costs of cleanup. Without such a waiver, settling major PRPs could pursue contribution under CERCLA from those other parties for a portion of the CERCLA cleanup.

Second, EPA may enter into settlement agreements with parties where factors do not support enforcement against them for PFAS response actions under CERCLA, as discussed in Section IV.A and B of this Policy. A party that resolves its liability through a CERCLA settlement with the United States will not be liable for third-party contribution claims related to the matters addressed in the settlement.[33] Non-settling PRPs will not be able to pursue these settling parties for contribution costs under CERCLA related to the settlement, thus minimizing litigation costs and discouraging third-party litigation.

EPA intends to discuss possible settlement approaches with interested parties that are identified by this Policy. In certain situations, parties may qualify for *de minimis* or *de micromis* settlements under the terms of the Agency's 2002 enforcement discretion/settlement policy.[34] On a case-by-case basis,

[31] CERCLA section 122(a), 42 U.S.C. § 9622(a).

[32] *See*, *e.g.*, Interim Revisions to CERCLA Judicial and Administrative Settlement Models to Clarify Contribution Rights and Protection from Claims Following the *Aviall* and *Atlantic Research Corporation* Decisions (Mar. 16, 2009); Defining "Matters Addressed" in CERCLA Settlements (Mar. 14, 1997).

[33] "A person who has resolved its liability to the United States or a state in an administrative or judicially approved settlement shall not be liable for claims for contribution regarding matters addressed in the settlement. Such settlement does not discharge any of the other potentially liable persons unless its terms so provide, but it reduces the potential liability of the others by the amount of the settlement." CERCLA section 113, 42 U.S.C. § 9613.

[34] *See* Revised Settlement Policy and Contribution Waiver Language Regarding Exempt De Micromis and Non-Exempt De Micromis Parties (Nov. 6, 2002); *see also* Model De Minimis Contributor Consent Decree, Model De Minimis Contributor ASAOC, Model De Minimis Landowner Consent Decree and Model De Minimis ASAOC; Superfund Cleanup Subject Listing De Minimis/De Micromis Policies and Models.

EPA may enter into limited "ability to pay" settlements with parties to resolve CERCLA response costs, where payment could result in undue financial hardship for the PRP.[35]

Parties may also be asked to perform actions such as in-kind services, including PFAS monitoring activities and implementing institutional controls. Further, parties identified by this Policy may seek settlement with EPA in order to take actions to address contamination, which would provide protection from potential contribution claims.

V. Limitations and Contingencies and Responsibilities of Other Federal Agencies and Facilities

A. Limitations and Contingencies

Any exercise of CERCLA enforcement discretion pursuant to this Policy is contingent upon a party's full cooperation with EPA, including providing access and information when requested and not interfering with activities that EPA is taking or directing others to undertake to implement a CERCLA response action. This Policy does not exempt parties from reporting PFAS releases under CERCLA.

This Policy in no way affects EPA's ability to pursue any responsible party, including those entities set forth in Section IV, whose actions or inactions significantly contribute to, or exacerbate the spread of significant quantities of PFAS contamination, thereby requiring a CERCLA response action. Where conditions may present an imminent and substantial endangerment to public health, EPA retains its authority to take any necessary action under CERCLA section 106.

This Policy does not apply to enforcement actions taken under any EPA programs or statutes other than CERCLA. As with any other hazardous substance, this Policy also does not affect EPA's ability to determine and address what, if any, response and enforcement action may be necessary to protect human health and the environment.

Further, the Agency, working with state, local, and Tribal partners, may carry out a response action to address PFAS contamination, wholly distinct from CERCLA enforcement-driven actions. In the event the exercise of CERCLA enforcement discretion results in some or all responsible parties at a Superfund site not being pursued to fund or perform PFAS cleanup, characterization, or other response actions, EPA may use all available resources and work with state, local, and Tribal partners to address the contamination.

EPA also recognizes that the science and legal requirements associated with PFAS continue to evolve.[36] As a result, the scope of this policy may change to reflect newly emerging science or regulatory requirements, or other relevant considerations. Entities must continue to follow all applicable laws and regulations.

This Policy is intended to assist EPA personnel in its exercise of CERCLA enforcement discretion in the normal course of business. It is intended solely for the guidance of employees of the Agency. This policy is not a regulation and does not create new legal obligations or limit or expand obligations under any federal, state, Tribal, or local law. It is not intended to and does not create any substantive or

[35] *See* General Policy on Ability to Pay Determinations (Sept. 30, 1997).
[36] *See, e.g.*, Interim Guidance on the Destruction and Disposal of Perfluoroalkyl and Polyfluoroalkyl Substances and Materials Containing Perfluoroalkyl and Polyfluoroalkyl Substances (2024).

procedural rights for any persons. In addition, this guidance does not alter EPA's policy of not providing no action assurances outside the framework of a legal settlement, and EPA will evaluate each request for relief under this policy based on all available information.

B. Federal Agencies

Nothing in this policy affects the scope of CERCLA liability or responsibility of federal agencies, such as the Department of Defense (DoD) and the Department of Energy (DoE), to address PFAS contamination. DoD, DoE, and other federal agencies are responsible for cleaning up releases of hazardous substances, pollutants, and contaminants (including PFAS) from their facilities, and are delegated the President's CERCLA section 104 response authorities for releases on or from facilities under their own jurisdiction, custody, or control.[37] CERCLA section 111(e)(3) prohibits the use of Superfund money for remedial action at a federal facility on the National Priorities List.

VI. Next Steps and Contacts

EPA has established a team to support the implementation of this policy. This team will respond to issues pertaining to this policy and, where appropriate, assist EPA regional staff in formulating and expediting settlement agreements as needed. For questions, please contact Tina Skaar at skaar.christina@epa.gov.

cc: Superfund Emergency Management Division Directors
Superfund Regional Counsel Branch Chiefs
Kenneth Patterson, Director, Office of Site Remediation Enforcement, Office of Enforcement and Compliance Assurance (OECA)
Kathryn Caballero, Director, Federal Facilities Enforcement Office, OECA
Rosemarie Kelley, Director, Office of Civil Enforcement, OECA
Barry Breen, Principal Deputy Assistant Administrator, OLEM
Larry Douchand, Director, Office of Superfund Remediation and Technology Innovation, Office of Land and Emergency Management (OLEM)
Brendan Roache, Acting Director, Office of Emergency Managment, OLEM
Jeffrey Prieto, General Counsel, Office of General Counsel
Charlotte Youngblood, Associate General Counsel, Solid Waste and Emergency Response Law Office, Office of General Counsel
Bruno Piggot, Acting Assistant Administrator, Office of Water
Todd Kim, Assistant Attorney General, Environment and Natural Resources Division (ENRD), Department of Justice
Thomas A. Mariani, Jr., Chief, Environmental Enforcement Section, ENRD, Department of Justice

[37] *See* Executive Order 12580, 52 Fed. Reg. 2923 (Jan. 23, 1987).

CONFRONTING THE PROBLEMS PLAGUING KENTUCKY'S WATER UTILITIES

An Investigative Report by the
Kentucky Public Service Commission
November 2019

MESSAGE FROM THE CHAIRMAN

In this report, we share the results of several Commission-initiated investigations into what has become a recurring trend among rural water utilities across the Commonwealth. Reported water loss that exceeds generally accepted industry and regulatory best practices or standards is indicative of much more serious problems at these utilities—problems that pose a threat to the health and economic wellbeing of our citizens.

Per 807 KAR 5:066, Section 6(3) defining water supply measurement for ratemaking purposes, utilities cannot adjust rates for unaccounted-for water loss that exceeds 15 percent of the total water produced and purchased. Therefore, unaccounted-for water loss over 15 percent on an ongoing basis is cause for concern.[1] The Commission's recent investigations focused on water utilities that have the highest percentage of water loss among all the utilities under the Commission's jurisdiction, some in excess of 45 percent while two reported water loss approaching 70 percent. These shocking figures reveal that customers of the water utilities we investigated are paying for large amounts of treated water that never reaches their homes or businesses.

The Commission has repeatedly found that the utilities with chronic excessive water loss consistently struggle over time because their managers and board members lack the experience and training needed to maintain the operational viability of the water systems. Moreover, while Kentucky is a nationally recognized leader with regard to encouraging and promoting regionalization and consolidation of small water utilities, there is a great deal more to be done. Many small water systems lack a sufficient customer base to support their continued operations. Finally, board members and managers find themselves constrained by political and societal pressure when it comes to raising rates or exploring merger, consolidation or sale, even though taking such actions might be the best long-term solution for the water utility and its customers.

The Public Service Commission strives to foster the provision of safe and reliable service at a reasonable price to the customers of the utilities we regulate. The regulation of rates and service go hand in hand. The Commission must safeguard the financial stability of jurisdictional utilities (through the establishment of fair and just rates) in order to ensure utilities' operational competence to provide safe and reliable service to their customers. If a utility is not operating effectively because it is unwilling to set rates at a level sufficient to support daily operations and replace infrastructure as needed, then the utility cannot provide adequate and safe water service to its customers.

We recognize and appreciate the attention the Kentucky General Assembly has given to issues plaguing troubled water systems, most recently through the formation of the Public Water and Wastewater System Infrastructure Task Force. We hope sharing the results of our investigations can serve to further those efforts. Not only are we working to help right the course, but we also seek to bring attention to problems that may ultimately require action beyond the Commission's authority.

If not addressed now, the problems discussed herein will continue to mount along with the costs of remediation – costs that are already well beyond what the customer bases of these rural water utilities can bear. We must work together to find solutions for the challenges these water utilities face. And the time to act is now.

---

[1] *See* 807 KAR 5:066 Section 6(3) at https://apps.legislature.ky.gov/law/kar/807/005/066.pdf.

Acknowledgements

Chairman Michael J. Schmitt, Vice Chairman Robert J. Cicero and Commissioner Talina R. Mathews want to acknowledge all those without whose hard work and dedication this investigation and report would not have been possible. First, the Commissioners would like to thank the water loss investigation team members:

Brittany H. Koenig, Staff Attorney III
W. Andrew Bowker, Staff Attorney III
John B. Park, Staff Attorney III
Nancy Vinsel, Assistant General Counsel
Ariel Miller, Public Utilities Financial Analyst III
John Rogness, Public Utilities Rate Analyst III
Sam H. Reid, Public Utilities Rate Analyst V
Eddie Beavers, Public Utilities Rate Analyst V
David Foster, Public Utilities Financial Analyst III
Erin Donges, Utility Inspector III
Roy Gray, Utility Inspector II
Ruth Rowles, GIS Contractor
Kabrenda L. Warfield, Special Assistant/Paralegal Consultant

In addition, the Commissioners would like to acknowledge the contributions of the executive management team, including:

Gwen R. Pinson, Executive Director
Karen L. Wilson, Executive Advisor
John S. Lyons, Deputy Executive Director
John E. Pinney, Acting General Counsel
Mary Beth Purvis, Division Director, Division of Financial Analysis

Finally, the investigation and report would not have been possible without the support of other Commission staff, all of whom had an integral part to play before, during and after the investigative hearings:

The Library Editors, Editors and Filings staff who processed, edited and posted data requests, orders and all other relevant documents, despite the high volume and quick turnaround time required in many instances;
The IT specialists who managed the recording/broadcasting of concurrent hearings and helped the Commission share the report on its website;
The Administrative Staff who set up the hearing rooms and ensured that the needs of the Commissioners, staff and hearing participants were met along with providing assistance throughout the completion of the report;
The Consumer Complaint Investigators who took the calls before, during and after the hearings from customers of the struggling water districts, providing vital information about the ongoing proceedings; and
The Front Desk Staff who greeted visitors and assisted with directing all hearing participants to the correct locations as needed.

Executive Summary

A water utility's inability to reduce excessive water loss over time is a symptom of other significant problems plaguing the utility, such as poor financial management and operational practices. In March of 2019, the Public Service Commission launched an investigation (Case No. 2019-00041) of jurisdictional water utilities that recorded water loss of more than 35 percent in their most recent annual reports.[1] This report provides an overview of characteristics common among water utilities facing these challenges along with recommended solutions.

In addition to the 11 utilities named as parties in Case No. 2019-00041[2], the report also discusses two other water utilities, Martin County Water District and Cannonsburg Water District, which are subjects of ongoing investigations by the Commission.

During the course of its investigations, the Commission identified the following common characteristics among struggling water utilities.

Inadequate Oversight and Management

This overarching problem affects every aspect of water utility management. Untrained board members often miss the signs of financial distress that would prompt a rate adjustment to fund necessary capital investments and conduct daily operations and maintenance. The same is true if the general manager lacks training or experience. Common trends include failure to establish metrics to gauge performance, failure to adopt policies and internal controls to ensure business best practices are followed, and failure to maintain complete and accurate records relating to utility operations.

Poor Financial and Accounting Practices

A troubling practice is when water utilities file for rate increases as part of a loan process to fund capital projects and use those rate increases obtained to avoid filing a comprehensive rate adjustment with the Commission. Often, these capital projects are prepared by consulting engineering firms for approval by the water utility boards. The utilities are vulnerable when an engineering firm completes the technical project specifications along with the financial documentation supporting the loan application and then works with the funding agencies to help secure financing. This process lacks the oversight necessary to ensure project proposals address priority needs at reasonable costs.

Detrimental Extraneous Influences

Finally, board members and managers are misguided by local political and community pressure. They are pressured to keep rates at levels that are unsustainable over time. They refuse to even consider merger, consolidation or sale, and often make decisions that ultimately are counter to their duty to preserve the long-term viability of the utilities for their customers.

Recommendations

New or Enhanced Statutory or Regulatory Requirements

---

[1] *Electronic Investigation into Excessive Water Loss by Kentucky's Jurisdictional Water Utilities*, Case No. 2019-00041.

[2] Big Sandy, Cawood, Estill County, Farmdale, Hyden-Leslie, Milburn, Morgan County, Rattlesnake Ridge, Southern Water & Sewer, and West Carroll Water Districts along with North Manchester Water Association.

- **Establish Minimum Qualifications for Water Utility General Managers.** Given that ineffective managerial oversight leads to a host of financial and operational problems, the Commission recommends the establishment of formal, professional requirements for the position of water district/association general manager. Water utility general managers should possess the technical knowledge needed to ensure compliance with federal and state water quality standards, as well as knowledge of business and financial processes and internal controls needed to run the day-to-day operations.
- **Employment of a Staff Engineer.** Each water district or association, individually or jointly in cooperation with other similarly situated districts or associations, should employ a qualified engineer on staff. This requirement could be met if the utility's general manager holds a degree in engineering. A resident engineer could oversee infrastructure maintenance and replacement of the system as a whole while also identifying capital projects (and associated funding sources) and overseeing construction. A resident engineer could be held accountable for ensuring the true needs of the water utility are addressed.
- **Development of a Qualified Infrastructure Improvement Plan**. Each water district and association should be required to develop a comprehensive Qualified Infrastructure Improvement Plan to be filed with and approved by the Commission. Any changes to the Plan also must be filed with and approved by the Commission
- **Qualified Infrastructure Improvement Surcharge or Rider.** The Commission recommends formal codification of its authority to establish a Qualified Infrastructure Improvement Surcharge or Rider, the proceeds of which would be devoted exclusively to infrastructure improvement and replacement.
- **Authority to Effect a Merger or Consolidation.** While Kentucky is ahead of the curve when it comes to regionalization on a national level, there is more work to be done. Barriers to merger or consolidation must be addressed as consolidation among smaller utilities can be an effective tool. Ultimately, authority may be needed to effect a merger, consolidation or other combination of utilities located in the same geographic area.

Augmented Regulatory Oversight

- **Establish Position of Infrastructure Engineer.** The Commission should establish the staff position of Infrastructure Engineer to review, approve and oversee implementation of the Qualified Infrastructure Improvement Plans filed by water districts and associations.
- **Create an Infrastructure Planning Committee.** The Commission, together with the Division of Water and the Kentucky Infrastructure Authority, should establish a joint committee to promote, design and develop infrastructure planning by water districts and associations as well as to review and enforce compliance with their respective Qualified Infrastructure Improvement Plans.
- **Consider Creation of Regional Water Boards.** Regional water boards could oversee the management of regional and local water supply, infrastructure and resources. Such a management structure could reduce duplication of services, achieve economies of scale in purchasing, and permit the employment of a professionally qualified general manager at a salary commensurate with the responsibilities of the office

Improved Oversight and Management of Water Utilities

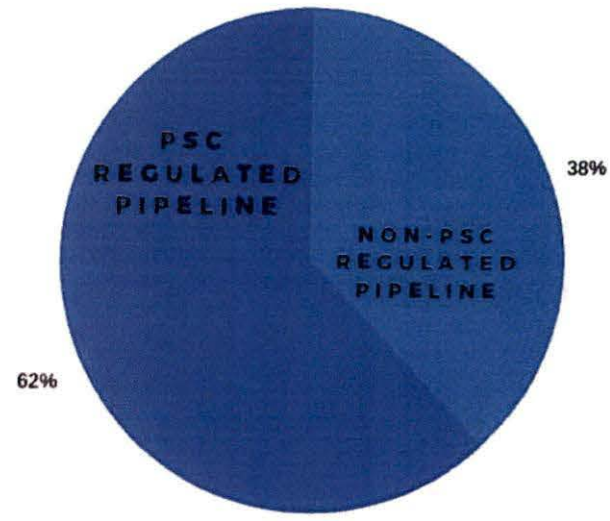
- **Eliminate Partisan Political Pressure.** Water district oversight and management should be separated from the authority of the county judge executive and fiscal court to reduce partisan political influence.

- **Modify Annual Audit Requirements.** All annual audits of water utilities should include a discussion and critical analysis of internal controls, operating procedures and perceived or potential deficiencies in management practices. Water associations also should be required to undergo annual audits.
- **Require Periodic Rate and Operations Review.** Every water district and association should be subjected to a rate and operations review every three (3) years to ensure that revenue is adequate to properly operate the system over the long term. Rate increases recommended by Commission staff should be required to be implemented in full by the utility.

The Commission welcomes discussion on the issues and recommendations set forth in this report. The Commission is committed to working with all relevant stakeholders to improve water quality and service for all Kentuckians.

Background

The Kentucky Public Service Commission (Commission) regulates the rates and services of 137 investor-owned water utilities, water districts and associations. The Kentucky Infrastructure Authority's (KIA) Water Resource Information System (WRIS) includes 426 water utilities in the state. Although Commission jurisdictional utilities represent only 32 percent of the water utilities in the state, the Commission actually regulates 62 percent of the pipelines and 45 percent of the water customers in Kentucky.[2]



All utilities under the Commission's jurisdiction are required to furnish "adequate, efficient and reasonable" service. (KRS 278.030). KRS 278.280 authorizes the Commission, on its own motion, to investigate any practice of a utility that affects or is related to the service of a utility.

On March 12, 2019, the Commission initiated an investigation to review jurisdictional water utilities that reported water loss of more than 35 percent in their most recent annual reports.[3] Water loss is defined as the difference between the quantity of water that a utility produces at its own treatment plant or purchases from another producer and the total amount of water that is sold, used by the utility, used for fire protection, or otherwise accounted for. Leaks from the system, line breaks, theft, unauthorized usage, and metering inaccuracies are common sources for unaccounted-for water loss. Unaccounted-for water loss consistently over 15 percent is considered a warning signal of possible operational and financial problems. Water loss of more than 35percent is excessive and largely indicative of significant operational deficiencies and failing infrastructure.[4]

Per Commission regulations and for ratemaking purposes, a utility's unaccounted-for water loss shall not exceed 15 percent of the total amount of water produced and purchased, excluding water used by a utility in its own operations.[5] In recent years, the Commission has been placing greater emphasis on monitoring utilities that consistently exceed the 15 percent unaccounted-for water loss threshold, strongly encouraging water utilities to take reasonable actions to reduce water loss.[6] Having found that high water loss is indicative

---

[2] *See* Appendix L.

[3] Case No. 2019-00041, *Electronic Investigation into Excessive Water Loss by Kentucky's Jurisdictional Water Utilities* (*Investigation into Excessive Water Loss*) (Ky. PSC Nov. 22, 2019)

[4] All water loss percentages are calculated from the values and figures reported by the utilities that may or may not be accurate.

[5] 807 KAR 5:066, Section 6(3) provides, however, that "upon application by a utility in a rate case filing or by separate filing, or upon motion by the commission, an alternative level of reasonable unaccounted-for water loss may be established by the commission. A utility proposing an alternative level shall have the burden of demonstrating that the alternative level is more reasonable than the level prescribed in this section."

[6] *See generally* Commission Final Orders for Rate Applications from 2017-present for language explaining the greater emphasis on encouraging efforts to reduce water loss and including the approximate amount of money the lost water represented to the utility. *See, e.g.*, Case No. 2017-00176 , *Electronic Application of Estill County Water District No. 1 for Rate Adjustment Pursuant to 807 KAR 5:076*, (Ky. PSC Dec. 20, 2017), Order at 4.

of poor financial and operational well-being, the Commission became increasingly alarmed at the persistent problem of water loss among rural water utilities with sustained unaccounted-for water loss in excess of 35.00 percent, including those utilities that are the subject of the Commission's investigation in Case No. 2019-00041.[7]

The utilities subject to the March 12, 2019 Order responded to multiple rounds of discovery. The Commission conducted formal hearings during the month of July 2019. The Office of Attorney General was the only intervenor in the proceedings. The appendices to this report summarize the formal hearings—during which each utility was asked to provide evidence on issues of water loss, utility operations, and financial health. The Commission's final Order in Case No. 2019-00041 sets out the findings and specific directives each utility must take to improve their systems' operations and financial positions that are discussed in this report (which is incorporated by reference into the final Order). In addition to discussing the investigations of the utilities named in Case No. 2019-00041, this report also reviews the Commission's investigations of water loss (and related operational issues) in cases involving two other water utilities, Martin County Water District (Martin District) and Cannonsburg Water District (Cannonsburg District).[8]

Why Water Loss is a Problem

Water loss and failing water infrastructure are nationwide problems facing water utilities.[9] According to the Alliance for Water Efficiency, utility water loss can be classified into two categories: (1) apparent losses due to customer meter inaccuracies, billing system data errors, and/or unauthorized consumption (theft); and (2) real losses—water that escapes the distribution system from leaks or storage overflows. With the first category — apparent losses—utilities lose revenue, and the water loss distorts the data on customer consumption patterns. The second type of water loss—real loss—increases the water utility's production costs (energy and chemicals needed to treat water) and stresses water system resources because these losses represent water that is extracted and treated (or purchased) but generates zero revenue because it never reaches the end user.[10]

---

[7] The water utilities named in Case No. 2019-00041 were Big Sandy Water District , Cawood Water District, Estill County Water District #1, Farmdale Water District, Hyden-Leslie County Water District, Milburn Water District, Morgan County Water District, Rattlesnake Ridge Water District, Southern Water & Sewer District, and West Carroll Water Districts along with North Manchester Water Association.

[8] Case No. 2018-00017, *Application of Martin County Water District for an Alternative Rate Adjustment (ARF) (Martin County Water District ARF)* (Ky. PSC Nov.15, 2019) , and Case No. 2016-00142, *Electronic Investigation of the Operating Capacity of Martin County Water District Pursuant to KRS 278.280 (Investigation of Martin County Water District)* (Ky. PSC Apr. 11, 2016).

[9] *See, e.g.*, Jose A. Del Real, *The Crisis Lurking in Californians' Taps: How 1,000 Water Systems May Be at Risk*, N.Y. TIMES (July 24, 2019), https://www.nytimes.com/2019/07/24/us/the-crisis-lurking-in-californians-taps-how-1000-water-systems-may-be-at-risk.html; *see, e.g.*, Hiroko Tabuchi, *$300 Billion War Beneath the Street: Fighting to Replace America's Pipes*, N.Y. TIMES (Nov. 10, 2017), https://www.nytimes.com/2017/11/10/climate/water-pipes-plastic-lead.html, "America is facing a crisis over its crumbling water infrastructure, and fixing it will be a monumental and expensive task." Various states have attempted to address the overwhelming number of failing water utilities in different ways. Indiana passed fair market value legislation to facilitate the purchase of distressed utilities. *See* Indiana Utility Regulatory Commission Cause No. 45050, approved Sept. 12, 2018, describing the Commission's intent to encourage Indiana-American Water Company to acquire a distressed utility. New Jersey administrative law cases describe the administrative powers that have been employed to address mismanaged facilities. *See, e.g., Matter of Valley Rd. Sewerage Co.*, 295 N.J. Super. 278, 685 A.2d 11 (App. Div. 1996), *aff'd*, 154 N.J. 224, 712 A.2d 653 (1998).

[10] *See* Alliance for Water Efficiency report, Water Loss Control Programs, https://www.allianceforwaterefficiency.org/resources/topic/water-loss-control-programs.

According to a 2013 EPA report, the United States will need to invest up to $200 billon on water systems over the next 20 years to upgrade transmission and distribution systems. The report estimates that almost 30 percent of this amount will be needed to control water loss.[11] In a 2017 report on Kentucky's infrastructure challenges, the Kentucky Chamber of Commerce estimated that $6.2 billion will be required over the next 20 years to address the state's drinking water infrastructure needs.[12]

Water Districts in Kentucky

Water districts are created by a fiscal court, subject to approval by the Public Service Commission, based on a finding that the geographical area intended to be served by a water district cannot be "feasibly serviced by an existing water supplier." (*See* KRS 74.012). Water districts are administered by a board of commissioners (board) who have the responsibility of overseeing the management of the district. Water district commissioners serve a specified term, per statute, and the number of commissioners on a Board varies depending on service territory and other factors. (*See* KRS 74.020). The boards are corporate bodies with authority to hire a general manager whose duties are delegated by the board and whose salary is determined by the board.

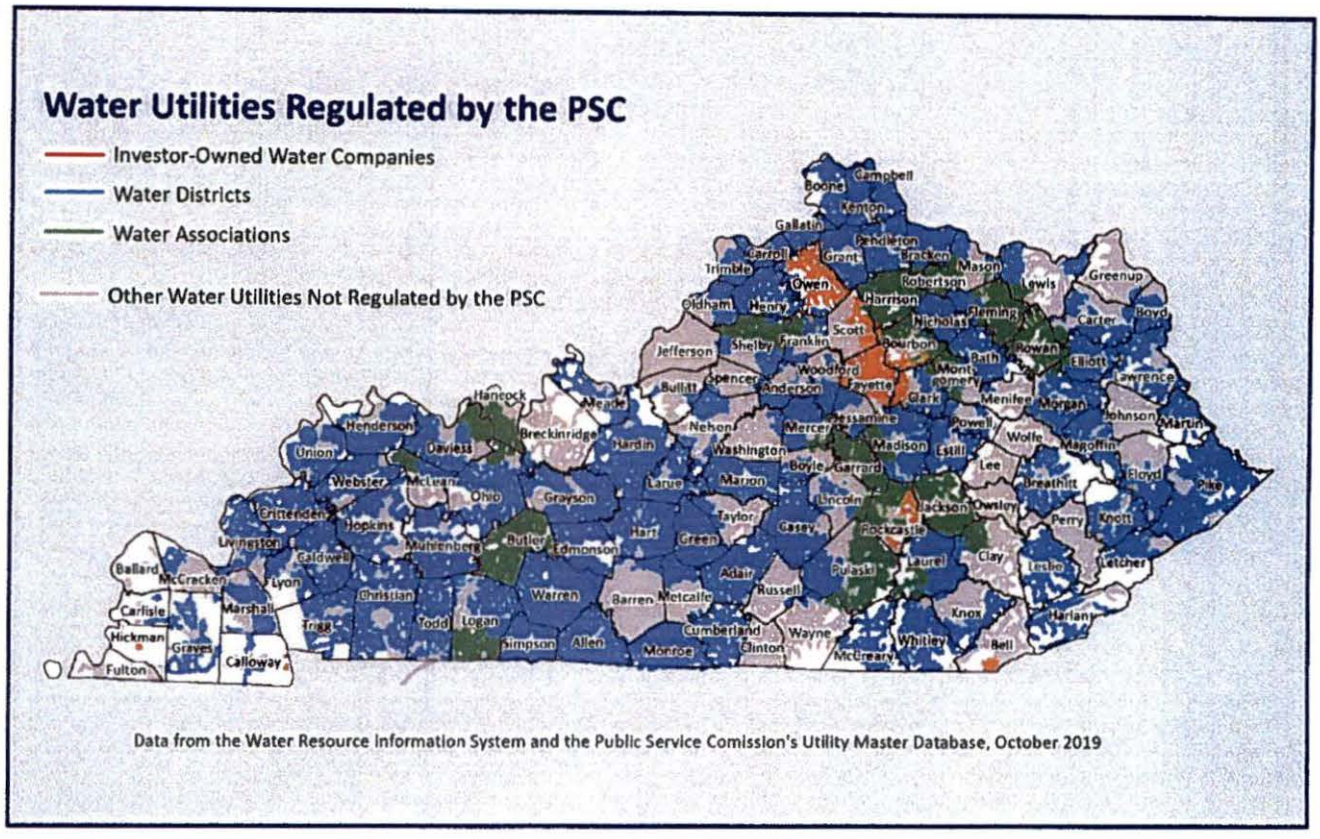
Newly appointed water district commissioners are required to attend training that covers the laws governing management and operation of a water district and other subjects deemed appropriate by the Commission within 12 months of the water district commissioner's appointment. In January 2019, the Commission enhanced the required coursework for newly appointed water district commissioners. The enhanced curriculum emphasizes corporate governance, financial accountability and the importance of internal controls, and the regulatory relationship between water utilities and the Commission.[13]

---

[11] Water Audits and Water Loss Control for Public Water Systems, 2013, U.S. EPA, https://www.epa.gov/sites/production/files/2015-04/documents/epa816f13002.pdf.

[12] In this same report, the Kentucky Chamber also estimated the state's wastewater infrastructure needs over the next 20 years to be $6.24 billion. *See* A Citizens Guide to Kentucky Infrastructure, May 2017, https://www.kychamber.com/sites/default/files/pdfs/A%20Citizens%20Guide%20to%20Kentucky%20Infrastructure%20May%202017_0.pdf.

[13] Case No. 2019-00019, *Revision of Training Required and Authorized By KRS 74.020 for the Commissioners of Water Districts* (Ky. PSC Jan. 14, 2019). Legislation enacted in 1998 amended KRS 074.020 to provide an additional $3,400 in compensation annually to water district commissioners who complete six (6) instructional hours of water district management training. The Public Service Commission was given the responsibility for regulating, as well as encouraging and promoting, such training. In response to the amended statute, the Commission developed training seminars, which typically are sponsored three times per year in different regions across the state. KRS 074.020 was amended again in 2010, with section (8) providing: "At least once annually, the Public Service Commission shall provide or cause to be conducted a program of instruction, consisting of at least twelve (12) hours of instruction, that is intended to train newly appointed commissioners in the laws governing the management and operation of water districts and other subjects that the Public Service Commission deems appropriate." Additionally, the new section requires each newly appointed water district commissioner to attend the 12 hours of training within 12 months of his or her appointment. In Case No. 2019-00019, the Commission enhanced these training requirements by ordering every newly appointed water district commissioner to complete specific courses to satisfy the requirements in KRS 74.020(8). The course topics emphasize administrative requirements, financial accountability, and the relationship of the utilities and the Commission. The Order directed that these courses be offered at every Commission-sponsored seminar.



History of Investigating Excessive Water Loss

As previously mentioned, more and more struggling water utilities were appearing before the Commission with many experiencing problems such as excessive water loss, mismanagement of finances and daily operations, unauthorized accrual of debt, and insufficient revenues. In many cases, these water utilities have customer bases that are ill suited to bear the cost of increased rates that would be sufficient to fund the necessary repairs and improvements to the water utilities' systems.

In addition to the 11 utilities the Commission is investigating pursuant to Case No. 2019-00041, two other water utilities (Martin District[14] and Cannonsburg District[15]) in Kentucky are emblematic of conditions that plague troubled water utilities. The differing responses to water loss issues by Martin District and Cannonsburg District are illustrative of many similar issues that cause some water districts to progress and others to remain tangled in troubled management issues.

[14] *See* Case No. 2016-00142, *Investigation of Martin County Water District*, (Ky. PSC Apr. 11, 2016); *see also* Case No. 2018-00017, *Martin County Water District ARF*, (Ky. PSC Nov.15, 2019).

[15] Case No. 2014-00267, *Cannonsburg Water District's Unaccounted-For Water Loss Reduction Plan, Surcharge and Monitoring (Cannonsburg Water District Surcharge)* (Ky. PSC Aug. 7, 2014).

Martin County Water District

Figure 1, Martin County Water District Reservoir, Courtesy of OhioValleyResource.com

The Commission's involvement with Martin District spans over two decades, beginning with a line loss examination facilitated by the Commission in 1997 following reports of high water loss. Subsequently, an investigation was opened in 2002 following an inspection report which highlighted a pump equipment failure that forced the district to cease operations temporarily.[16] The Commission's investigation revealed Martin District had not used $2.85 million in coal severance funding as intended by the Kentucky General Assembly to make system improvements and expand capacity, but rather had constructed a raw water supply pipeline without obtaining a Certificate of Public Convenience and Necessity.[17]

In 2006, another investigation was opened to examine Martin District's management and operations and identify possible solutions to noted deficiencies.[18] The Commission ordered that a management and operations audit be conducted. The auditing firm found a number of operational deficiencies and recommended 78 changes to remedy them, with a cost-benefit analysis for each recommendation. The recommendations included, *inter alia*, requesting a rate increase because revenue was inadequate to support utility operations, developing a comprehensive water loss reduction plan, implementing a leak detection and repair plan, developing a capital improvement plan, improving procedures to identify theft of service, improving collection of past due accounts, investigating regionalization, and conducting an external audit on an annual basis.[19]

Figure 2, BarbiAnn Maynard, Martin County Courtesy of Lexington Herald Leader.com

Martin District failed to address most of the audit findings and consistently fell short on meeting many critical recommendations. A 2014 inspection of Martin District's system also identified several violations of Commission regulations. Members of Commission Staff met with Martin District in 2014 and 2015 to assess the district's progress on implementing the recommendations from the previous investigations. Finding that insufficient progress had occurred, the Commission opened another investigation into Martin District's persistent operational and managerial shortcomings in 2016. This investigation is ongoing.[20]

---

[16] Case No. 2002-00116, *Investigation of the Operating Capacity of Martin County Water District Pursuant to KRS 278.280,* Opening Order (Ky. PSC Apr. 5, 2002) Appendix at 1.

[17] *Id.* at Order (Ky. PSC Nov. 17, 2003) at 2.

[18] Case No. 2006-00303, *An Investigation into the Management and Operation of Martin County Water District,* (Ky. PSC June 27, 2006).

[19] *Id.* (Ky. PSC Apr. 2, 2008) at Final Order, Appendix A.

[20] Case No. 2016-00142 *Investigation of Martin County Water District* (Ky. PSC Apr. 11, 2016).

Among the challenges it faces, Martin District has experienced unaccounted-for water loss ranging between 60and 72percent between the years 2012 to 2019. The district's fight to keep its water system functioning after years of bad management has received national media attention.[21] Martin District filed for an emergency rate increase only after the water district's equipment failed and it could not afford to make the necessary repairs because its vendors refused to continue extending credit (due to the water district already being in arrears on many of its accounts). Martin District's consultant testified its poor condition was due to "past management and past practices."[22]

In its last rate case, Martin District requested an increase of almost 50 percent that the district believed would enable it to (i) pay its principal obligations on long term debt from water sales revenue rather than from depreciation reserves, (ii) pay for the replacement of defective infrastructure from cash reserves rather than issuing new debt, and (iii) allow it to return to good standing with its creditors by paying down the high balances that had accrued during the many years that Martin District had been charging rates that were insufficient to meet its operational needs.

Figure 3, Martin County Water District, Courtesy of wfpl.org

In March of 2018, the Commission granted Martin District emergency rate relief and established a surcharge to reduce grossly past due outstanding debt to the water district's creditors. The Commission then continued its review of the rate case in order to determine the final rates necessary for Martin District's operations to remain viable.[23]

---

[21] Numerous new outlets have highlighted the water crisis in Martin County, Kentucky, including but not limited to CNN, NPR, WEKU, Courier-Journal, Lexington Herald Leader, Kentucky.com, 89.3 WFPL, The New Republic and The Washington Post.

[22] Case No. 2018-00017, Martin County Water District ARF (Ky. PSC Nov. 5, 2018). When asked how Martin District came to be in as bad a state as it was in January 2018, its from Blue Water Kentucky, engineer Gregory Heiztman, explained that Martin District is as "bad as it is" due to "*past management and past practices.*" (Case No. 2018-00017, January 26, 2018 Hearing Video Transcript (H.V.T.) 2:57:00-2:57:33).

[23] One significant issue for Martin District during the pendency of its rate case was the inability to provide basic financial documents stemming from the absence of proper recordkeeping policies and procedures. These issues were exacerbated by the absence of a general manager and lack of educated, skilled, or trained office personnel able to collect, maintain, and provide the requested information. Martin District still has no audit for 2017 or 2018, despite numerous attempts from the Commission to assist the utility in providing for the payment to the accountant hired to perform the work. When the Commission attempted to determine the reason for the delay, the accountant complained of not having been provided with the requisite documents needed to complete the work while the board members blamed the accounting firm, or the former accountant working with the district. When subpoenaed to testify to resolve the issue close to a year after the Commission stepped in to help, the accounting firm and the utility continued to blame one another for the failure to complete the audits. Martin District continues to work from the 2016 annual report and audit, which prevents the utility from receiving any consideration for USDA Rural Development funding or Kentucky Infrastructure Authority funding.

During the proceedings of the rate case, it became clear that Martin District's current crisis had resulted from decades of mismanagement; ignoring Commission recommendations and directives identified in multiple Commission proceedings which included the 1998 financial audit, 2002 investigative case, and 2007 management audit; and a lack of political will to request and implement rates sufficient to operate and maintain its system in a manner that would support the provision of reasonable and adequate water service.

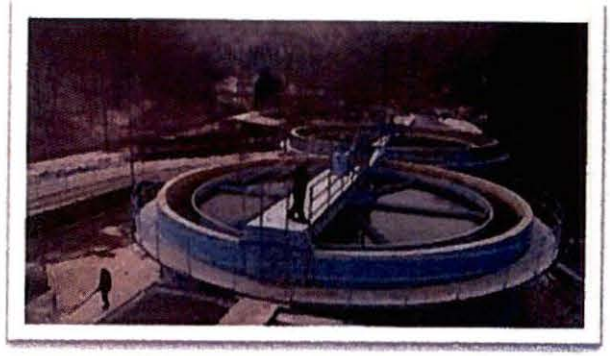


Figure 4, Martin County Water District, Courtesy of WEKU.com

In its November 5, 2018 Order on Martin District's rate application, the Commission rejected the requested rates and substituted its own; maintained the debt service surcharge to pay off unsecured debt estimated at more than one million dollars; noted that poor management was a significant factor contributing to the current crisis; and ordered the district to enter into a management contract with either another utility or a management company.[24] The Commission also established a surcharge to be utilized for retaining a management company as well as for infrastructure repair, replacement, and maintenance to address its excessive unaccounted-for water loss which would tentatively be implemented after it signed an agreement with contract management. The Commission stated that:

> This rate increase has been structured so that Martin District's current commissioners will either comply with the requirements of the rate increase and will proceed with contracted management, or the Commission will be forced to pursue even more extraordinary means through appointment of a receiver who can implement the changes needed to provide safe, clean, and reliable water service.[25]

Nearly two years after Martin District filed its rate case, there were still a number of ongoing deficiencies the Commission highlighted in its Final Order. First and foremost, its 2016 annual audit was incomplete, and the audits for 2017 and 2018 had not yet been started. Without an audit, Martin District was ineligible in some instances, to apply for and receive government loans to make necessary infrastructure investments to replace aging pipes, mains, pumps, and equipment. Second, Martin District was in violation of 807 KAR 5:006, Section 4(2), which requires Martin District to file its annual reports no later than March 31 of each year that includes in-depth financial information about the utility. Third, at least one of Martin District's commissioners were in violation of KRS 74.020(8)(b) that requires water district commissioners to complete water training within 12 months of their initial appointment. In addition to the problems highlighted above, the Commission's Final Order noted three more deficiencies that impacted Martin District's ability to provide safe, adequate and reliable water service. These were identified as high water loss, indifference to water theft, and financial problems that continued despite receiving rate increases in both March 2018 and November 2018.

Because of Martin District's continued deficiencies, the Commission ordered that Martin District execute a Management Contract with Alliance Water Resources, Inc., or forfeit its right to the debt service surcharge

---

[24] Case No. 2018-00017, *Martin County Water District ARF* (Ky. PSC Nov. 5, 2018).

[25] *Id.* at 20.

established in March 2018 and the management/infrastructure surcharge established in the Commission's November 2018 Order.

Cannonsburg Water District

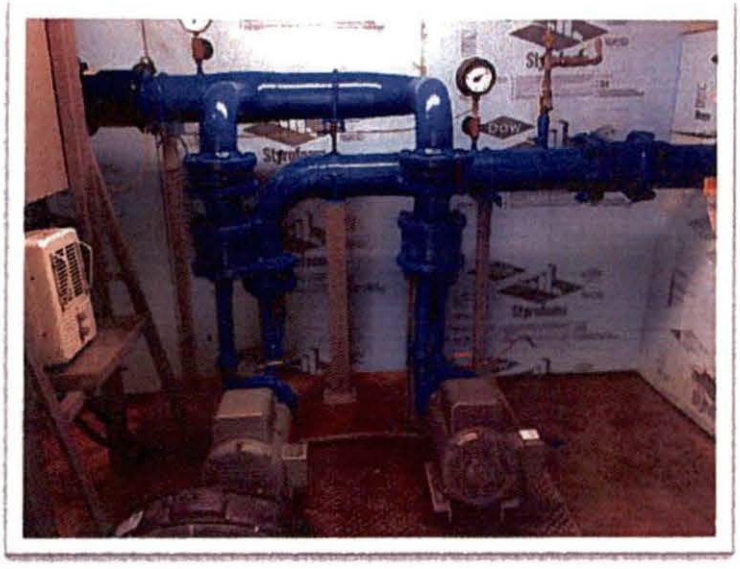


Figure 5, Cannonsburg Water District, Commission Inspections

The Commission also has taken steps to address the excessive unaccounted-for water loss of Cannonsburg District.[26] In 2011, Cannonsburg District applied to the Commission for emergency rate relief and for a dedicated surcharge to reduce unaccounted-for water loss, which at that time was almost 30 percent. The Commission approved the water district's request for a surcharge, conditioning disbursement of the surcharge funds on Commission approval.[27] The Commission also directed the water district to file a water loss plan specifying the inclusion of certain required information. Cannonsburg District filed its initial attempt at a water loss reduction plan in September 2012, but it was not until July 2014 that the water district submitted a plan that conformed to the Commission's Order in the rate case. The Commission established Case No. 2014-00267 to monitor the water district's progress with its water loss reduction plan, continuing the requirements that Cannonsburg District file monthly reports on its efforts to reduce water loss and that the water district obtain Commission approval before dispersing funds from the surcharge account.

From the initiation of Case No. 2014-00267 until 2016, when Cannonsburg District employed a new manager, the water district struggled to meet the Commission's reporting requirements. The Commission had to compel Cannonsburg District to file the required monthly reports on several occasions, and through the periodic reporting, the Commission learned that the master meters that had been installed as part of the water loss plan were not designed for the use intended, failed and had to be replaced.[28]

Under previous management, Cannonsburg District's water loss plan failed to gain traction, and its water loss actually **increased** to as high as 55.00 percent in January 2017. In Cannonsburg District's most recent rate case, however, the new manager testified that the water district's efforts to implement the plan were finally beginning to pay off and that unaccounted-for water loss had decreased to 37.09 percent.[29] As of July 2019, Cannonsburg District reported its unaccounted-for water loss was reported 29.50 percent. The Commission

---

[26] Case No. 2014-00267, *Cannonsburg Water District Surcharge* (Ky. PSC Aug. 7, 2014).

[27] Case No. 2011-00217, *Application of Cannonsburg Water District for (1) Approval of Emergency Rate Relief and (2) Approval of the Increase in Nonrecurring Charges* (Ky. PSC Jun 4, 2012).

[28] Case No. 2014-00267, *Cannonsburg Water District Surcharge* (Ky. PSC Apr. 13, 2015).

[29] Case No. 2018-00376, *Application of Cannonsburg Water District for Rate Adjustment for Small Utilities Pursuant to 807 KAR 5:076* (filed Nov. 13, 2018).

acknowledged the role that the skilled and educated new manager played in Cannonsburg positive turn was invaluable. The new manager began putting basic record keeping policies in place to review water pressure on the system. The new manager initiated a plan to put in a zone metering system to improve the system, specifically designed to address the water loss issue. The manager reported these issues to the board, communicated to the Commission, and worked with an engineering firm to design a project to execute the vision.[30]

Results of the 2019 Investigations: Characteristics Common Among Struggling Water Utilities

Recognizing that excessive water loss is but a symptom of much larger operational and financial problems faced by water utilities, the Commission sought to investigate whether there are common factors among struggling water utilities that contribute to high levels of water loss.[31] Not surprisingly, the investigations revealed that it was not one but a combination of operational, managerial and fiscal deficiencies, which, over time, led to the physical and financial deterioration of the water utility. Similar to how treating a symptom will not cure a patient's disease, addressing one symptom will not necessarily cure the ailments of a distressed water utility. Only a concerted, "big picture" approach to correcting the identified problems over time will afford the water utility the opportunity to regain financial and operational integrity.

At its core, a water utility is a business and must be run as such. Successful operation of a viable business requires a certain amount of training, knowledge and experience.[32]

Implementation of sound fiscal policies and operational procedures ensures the financial health and longevity of any business. If concerns other than the health and welfare of the utility and its customers are permitted to factor into the decision-making process, the long-term viability of the utility as a business will be compromised.[33]

The ideal general manager would be "a degreed individual with a business background, management background or engineering background."

[30] Case No. 2014-00267, *Cannonsburg Water District Surcharge* (Ky. PSC Apr. 13, 2015).

[31] The Commission would like to acknowledge the cooperation of several organizations, including Kentucky Rural Water Association, Kentucky Infrastructure Authority (KIA), USDA Rural Development, Northern Kentucky Water District, and Kentucky American Water, all of which provided information and materials on best business practices and made employees available to meet with Commission Staff. Their assistance helped further the Commission's understanding of the many factors affecting water utilities and the resources available to those utilities.

[32] *See* Case No. 2018-00017, *Martin County Water District ARF*, (August 7, 2018 H.V.T. 5:49:51-5:50:10), wherein Gregory Heitzman testified that the ideal general manager would be "*a degreed individual with a business background, management background or engineering background.*"

[33] The Commission sought input from the Kentucky Rural Water Association on materials available to water systems managers and boards and found that there are several user-friendly guides to which water systems can refer in addition to any in-person training received, including "The Water Board Bible: The handbook of modern water utility management" by Ellen G. Miller and Elmer Ronnebaum; "Getting Results From Your Experts: Engineers, Attorneys & More" by Ellen G. Miller and Elmer Ronnebaum; "Practical Personnel Management for Small Systems" by Ellen G. Miller; "Customers and You: Practical Communications for Small Systems" by Ellen G. Miller; and the "Financial Accounting Guide for Small Water

The water utilities subject to these investigations were presented with the same set of data requests and questions from the Commission to discern whether common problems existed. The common characteristics among the beleaguered utilities fall into three general categories: inadequate oversight and management; poor financial and accounting practices; and detrimental extraneous influences.

Inadequate Oversight and Management

The Board and the General Manager

Oversight by a knowledgeable board and competent day-to-day management are vital to the operational health of a water utility. If board members lack experience in corporate governance or have inadequate knowledge of business best practices, the board will be ill-equipped to monitor and evaluate the performance of the water utility's general manager. Untrained and inexperienced board members often will miss the signs of financial distress, which indicate the need for a rate adjustment to fund necessary capital investments, and conduct daily operations and maintenance of the water utility's system, because they do not know what questions to ask or what type of reports and other information to require from their general manager.[34]

Similarly, general managers who lack the necessary training and experience to run a water utility will usually fail to employ sound business practices that help ensure the viability of the water utility.[35] Well-run utilities establish metrics to gauge performance over time, adopt policies and internal controls to ensure that business best practices are followed, and maintain complete and accurate records relating to their operations.[36] But an untrained general manager simply does not have the insight or experience to implement such procedures.[37] For example regarding a lack of internal controls, when North Manchester Water Association's current

---

Utilities" by Michael D. Peroo, CPA. These are small, manageable guides that contain basic internal controls and record-keeping practices, roles of the board and the manger, and basic business advice.

[34] *See* Appendix M and Appendix S. Because water loss reporting varies wildly and is questionable at times, the Commission opened administrative Case No. 2018-00394, Electronic Investigation into the Measuring, Recording, and Reporting of Water Loss by Kentucky's Jurisdictional Water Utilities (Ky. PSC Nov 22, 2019).

[35] *See* Appendix B, discussion of Cawood District needing to avail itself of the Water Resource Information System (WRIS), which includes mapping of state water systems in its GIS (Geographic Information System). The Area Development Districts (ADDs) are paid by the KIA to interview each water system annually to update any changes in the GIS. Utilities the size of Cawood District have had all of their valves and hydrants mapped with GPS (Global Positioning System), and the water lines have been adjusted to the location of the valves. All of this data is made available to water utilities by the local ADD. The ADD will print paper maps of the system at no cost every year. (https://kia.ky.gov/WRIS/Pages/ADD-GIS-Staff.aspx).

[36] *See* Appendix H, North Manchester Association, discussing how the utility's records were misappropriated by the association's former accountant. As such the association could not produce an annual report or use financial records to complete an application for rate adjustment. Lack of proper oversight and management leaves utilities vulnerable to being taken advantage of by the professionals they employ (North Manchester) and even by their own employees in cases like that of Southern District (*see* Appendix J).

[37] The Commission reached out to Northern Kentucky Water District (NKWD), a non-profit water district like the utilities involved in Case No. 2019-00041, and Kentucky American Water, an investor-owned water company, to review some of their best practices with regard to internal processes, including water loss detection plans, practices and employee manuals. Both utilities employ policies and best business practices in an effort to ensure the most efficient use of ratepayer funds. *See also* resources available from Kentucky Rural Water Service to inform on best business practices.

management took over in late 2017, there were virtually no records of utility operations.[38] In addition, it found that the Board President, who was also the CPA, conducted all the finances, billing, and payroll and kept all of the utility's records off site which is a violation of 807 KAR 5:006, Sec.24. When the CPA was fired, all the utility's records were thrown away or lost. Subsequently, utility management has been able to recover only a portion of those records.[39]

The water utilities were asked to provide information regarding their internal policies and procedures for such items as customer billing, record keeping, meter testing and leak detection and repair.[40] Both North Manchester Water Association and Rattlesnake Ridge Water District acknowledged the lack of and the need for a policies and procedures manual. Hyden-Leslie County Water District has no or insufficient written procedures governing its meter testing and leak detection and repair.[41]

As noted when examining the board members who testified during the Commission's investigations, though well meaning, many of the water utility commissioners lacked basic business acumen and any understanding of the importance of following industry standards and business best practices. While some utility commissioners might have been aware of their utility's high water loss, very few boards had taken action to establish a water loss reduction target or required management to establish procedures for leak detection.

---

[38] *See* North Manchester Association, July 10, 2019 Hearing Transcript 84:9-85:8.

[39] *Id.* at Hearing Transcript 84:9-90:9.

[40] Case No. 2019-00041, *Investigation into Excessive Water Loss,,* The data responses reveal the disorganization of the water utilities and the inability of the water utilities to provide basic financial and operational records was revealed in Rattlesnake Ridge District's Motion for Extension (filed Apr. 10, 2019); Southern Water District' s Response (filed May 2, 2019) (Responses filed late); Southern Water District's Response (filed June 13, 2019) (Responses filed late, including statements such as "Since the PSC conducted the inspection and issued results, would those reports not already be on file with the PSC."); Milburn Water District's Response (filed April 29, 2019). See also, Case No. 2018-00017, *Martin County Water District ARF*, (Ky. PSC Nov. 15, 2019) Martin County Water District had numerous instances where it filed incomplete responses to Staff requests, incorrect financial information, and multiple instances where the Commission had to request the same information multiple times because the utility could not provide basic business records. *See also* Appendix H, North Manchester Association had the unusual circumstance that its records were missing. Appendix B, Cawood District employed an accountant for years and until recently, kept its records off-site. The board hired a different accountant to perform the tasks required of an accountant and the board did not extinguish its contract with the former accountant.

[41] *See* Appendix E, Hyden-Leslie District; Appendix H, North Manchester Association; and Appendix I, Rattlesnake Ridge District.

Some district boards have lacked the will to raise rates to generate the revenue needed to maintain system reliability, citing a concern for the impact of higher rates on low-income customers. Delaying or ignoring the need for regular, gradual rate adjustments, however, results in a deterioration of system integrity and failing infrastructure. Ultimately, customers are shocked with a much higher rate increase to fix deferred problems than they would have if the water utility had maintained the system over time.

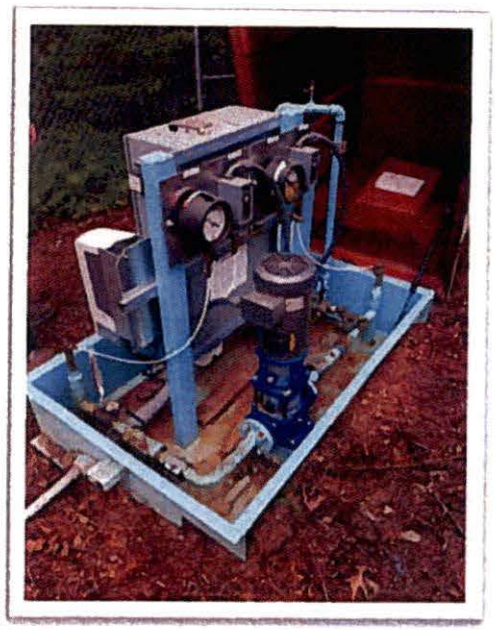


Figure 6, Morgan County District Booster Pump, 2018 Inspection

For example, in Case No. 2016-00068, Morgan County Water District (Morgan District) sought an increase in water rates of 14.97 percent. In its review of the application, Commission Staff determined that the district's operations warranted a rate increase of 26.56 percent, but Morgan District nonetheless chose only to implement the 14.97 percent rate increase sought in its application. The district board's new Chairman testified that in rejecting the higher rate increase, the board was "maybe trying to protect the citizens," many of whom he said were on fixed incomes.[42] That proved shortsighted as the district continued to struggle financially.[43] Less than two years later the district's board Chairman wrote to the Commission requesting permission to implement the 26.56 percent increase recommended by Staff, stating that the lower rate had proven to be insufficient to generate the necessary revenue for the district.[44] Prior to Case No. 2016-00068, the district had never sought a general rate increase other than a purchased water adjustment since its formation in 1992.[45]

Likewise, questioning of water utility general managers uncovered many incidents of poor recordkeeping and an absence of written policies regarding critical daily functions such as the payment of invoices, procurement processes, or customer billing procedures.[46] Failing to address under-billing of customer accounts, for example,

---

[42] *See* Case No. 2019-00041, *Investigation into Excessive Water Loss* Morgan County District July 9, 2019 Hearing Transcript, 27:1-28:1 and Appendix L.

[43] *Id.* at 33:11-34:5.

[44] This request was denied because the rate case had concluded and Morgan District's request did not meet the filing requirements for a new rate case application.

[45] *See* Appendices M-P for a review of the conflicting responses provided during the discovery phase of Case No. 2019-00041, which highlights the disconnect between the critical obstacles facing the water districts and the lack of financial planning to address such obstacles.

[46] Case No. 2019-00131, *Application of Southern Water and Sewer District for an Alternative Rate Adjustment,* (Ky. PSC Nov. 7, 2019) H.V.T 2:12:30-2:26:21; *see generally* Appendices A-K for discussions of recordkeeping problems and lack of policies to produce accurate financial data or accurate water loss data as well as lack of meter testing schedules or policies. While plans to replace meters vary, utility boards need to have good business practices in place to plan financially to avoid issues such as those highlighted by Mountain Water District's application for approval of a loan to purchase meters with a life expectancy of 25 years with a 40-year loan, such that the utility will still be paying for meters after they will have needed to have been replaced. *See* Case No. 2019-00346. *See also* Opinions, *MWD's $3.1M loan must not be something taken lightly*, Appalachian News-Express, (Sept. 21, 2019).

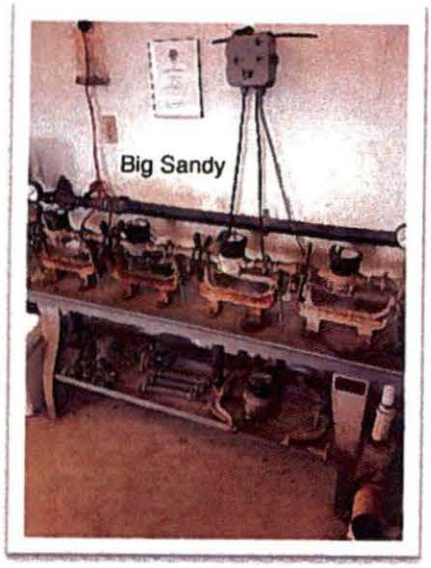


Figure 7, Big Sandy Water District Meter Testing Bench

can impede a utility's ability to provide evidentiary support for a requested rate increase and lead to or perpetuate revenue shortfalls. In addition, many of the small utilities have failed to establish procedures for water loss prevention, leak detection and strategic planning for infrastructure improvements. The Commission found that a large portion of troubled water utilities' meters are not being tested regularly, are outdated, are recording erroneous data, and, in some cases, are completely non-functional.[47] The habitual neglect of daily maintenance and long-term repair and replacement of infrastructure has left some water systems teetering on the verge of collapse. Meter replacement requires financial decisions and the use of basic financial and accounting skills.

Situations such as Mountain Water District requesting approval to sell bonds for a 40-year loan of $3.1 million to purchase replacement meters with a useful life expectancy of only 25 years, are examples of how utility boards do not plan for meter testing and/or replacement or how they will finance such required maintenance. Many times water utility boards make short-term decisions without regard for the future long-term financial obligations of the utility. It is absurd to obligate a utility to pay for meters that will likely not be in use for the better part of 20 years of the loan. This is an example of what is referred to as an 023 loan, where an applicant requests Commission approval of federal funding in 30 days and the Commission cannot reject the application to approve the funding pursuant to KRS 278.023(3).[48]

Figure 8, Mountain Water District, mountainwaterdistrictky.com

Without the guidance of knowledgeable and engaged board members, the leadership of an experienced general manager, and a trained support staff, a troubled water utility has little hope of overcoming the many challenges it must face on a daily basis.

[47] *See* Appendix J, Southern Water District testimony regarding "neglect of testing the meters" (July 16, 2019 Hearing Transcript 17:22). Southern District explained that the amount of excess water loss was the result of years of neglect and that, under previous management, the utility did not spend the appropriate amounts on maintenance and leak detection, nor test meters for accuracy at least every ten years as required by Commission regulation. (July 16, 2019 Hearing Transcript 16:20–22, 17:11–18:1).

[48] *See* Appendix P.

Poor Financial and Accounting Practices

Infrequent Rate Increases

For a myriad of reasons, many of which will be discussed in a later section of this report, the boards and managers of small, rural water utilities will take extraordinary steps to avoid coming to the Commission for a rate increase, opting instead to try and operate on razor-thin margins. A utility that fails to increase revenues to match rising expenses cannot maintain its financial integrity, especially over the long-term. Moreover, when a utility delays increasing rates by covering operational expenses with depreciation reserves or through other funding mechanisms, true financial needs are masked. Generally, the Commission can only review a utility's financial position as part of Commission Staff's examination of the utility's books during a rate case, and when to apply for a rate increase remains within the utility's discretion. At present, there is no statutory or regulatory requirement that specifies rate review frequency or provides for any other triggers that would require when a utility should seek a rate adjustment.[49]

Unsustainable Accounting Practices

Figure 9, Big Sandy, Courtesy of wbur.org

Depreciation is a non-cash expense used in accounting to accurately match revenues to expenses in a given period by allocating the cost of an asset over its useful life.[50] Accumulated depreciation represents the total decline in an assets' value and provides management with an indication of when the utility may need to replace an asset based on the initial projected useful life. If properly utilized, depreciation provides a funding source for eventual cost recovery and replacement of the utility's original investment by permitting the utility to charge customers depreciation expense in their base rates. Rather than maintaining sufficient depreciation reserves and utilizing those funds for future capital improvements, many small water utilities use the depreciation recovery in rates for normal daily operating and maintenance expenses and incur debt or rely on grants to fund the majority of their capital spending. Typically, the amount placed into depreciation reserve accounts is just enough to satisfy loan covenants, which is significantly less than what is required if the funded amounts were calculated based upon the remaining useful lives of the utilities' assets. Unfortunately, evidence of this gross neglect is reflected in crumbling water utility infrastructure and the high water loss statistics discussed in this report.

Adequate funding of depreciation reserves for these high water loss utilities is also hindered by 807 KAR 5:066, Section (6)3, which limits a utility's recovery of expenses attributable to water loss for ratemaking proposes to 15 percent.[51] When a utility is not permitted to recover those costs associated with the excess lost water,

---

[49] *See* Appendix R.

[50] Depreciation is an accounting method of allocating the cost of an asset over its useful life, which accounts for the decline in value and eventual replacement of an asset. The Uniform System of Accounts for Class A/B Water Districts and Associations defines depreciation: "as applied to depreciable utility plant, means the loss in service value not restored by current maintenance, incurred with connection with the consumption or prospective retirement of utility plant in the course of providing service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand, and requirements of public authorities."

[51] *See* footnote 5.

management typically relies on the non-cash depreciation rate expenses recovery to pay for routine operation and maintenance expenses.

Budgeting

Budgeting and monthly financial statements are essential items to the operation and financial health of an organization and should be a priority for water districts and associations.

The majority of the water districts and associations that are the subject of the Commission's investigation rely heavily on their external accountant for the preparation, review and presentation of an annual budget. Only two of these utilities, Big Sandy Water District (Big Sandy District) and Morgan District, rely on internal personnel to offer assistance in the budgetary process. Big Sandy District's Board Chairperson, stated that the district's secretary/office manager was responsible for preparing the annual budget.[52] Additionally, the Chairperson of Morgan District, stated that the board treasurer and general manager and he were involved in the development of the District's annual budget.[53] Board members' lack of input and knowledge of the budgetary process indicates that there is not an awareness of where revenue comes from or where and how the expenditures are made for these water districts and associations.[54]

Financial Statements

In addition to involvement in the budgetary process, board members should review on a monthly basis the financial information of the utility, specifically all revenues and expenditures from the previous month. The review should be a comparison of the budgeted line item amounts and the monthly expenditures and invoices that are incurred by the water districts and associations.

Unfortunately, the water districts and associations involved with this report have not provided adequate evidence that monthly statements or invoices are reviewed monthly by the board. Many of the water districts and associations rely heavily on the external accountants to perform the review and follow-up on the information concerning the monthly financial statements. Farmdale Water District's board treasurer testified at the hearing that the board receives and reviews a monthly financial report of all revenues and expenditures. He further testified that the monthly or quarterly analysis and comparison of actual to budgeted amounts needed more review and that the board should work on that type of review.[55]

Figure 10, Martin County Water District, kentucky.com

Failure of the water districts and associations to understand the budgetary process and the financial review process hampers their ability to properly manage the entire operation and delays the proper review of the operation to determine where areas of concern are and how to address these concerns.

---

[52] Case No. 2019-00041, *Investigation into Excessive Water Loss*, July 17, 2019 Hearing Transcript 29:1–9.

[53] *Id. at* 107:19-25, 108:1-3.

[54] *See* Appendix M.

[55] Case No. 2019-00041, *Investigation into Excessive Water Loss*, July 17, 2019 Hearing Transcript 253:17-25, 254:1-25, 255:1-12.

Failure to understand budgetary process is further supported as the Commission discovered many outdated tariffs, and contracts during its investigation in Case No. 2019-00041, including leak adjustment clauses and contracts unfavorable to the utilities that current management were not aware existed in some instances.[56] Big Sandy District and Rattlesnake Ridge both had contracts on their books that allowed for a situation where a utility might sell water for less than the amount it paid to purchase the water.[57]

For example, the Emergency Supply Agreement between Big Sandy District and the city of Paintsville, dated June 21, 2004, which was not filed with the Commission as required by 807 KAR 5:011 Section 13, but discovered in the course of the investigation. Big Sandy District, because of the lower rate in the contract, will potentially sell water for less than it pays when Paintsville has an emergency event and purchases water from Big Sandy District. High water loss in Big Sandy District's system will create an even greater loss financially for Big Sandy District. The contract provides that in the event that one of the parties experiences an emergency and requires a supply of water the other party will, if capable at the time of the emergency, supply water to the party in need. The rate to be paid by the purchaser set out in the contract is $2.00 per 1,000 gallons, which is less than what Big Sandy District pays any of its suppliers.[58] Big Sandy District's chairman testified that the rate needed to be updated in the contract.[59]

Rattlesnake Ridge has a wholesale contract with the City of Grayson to both sell and purchase water for $4.30 per 1,000 gallons. Per Rattlesnake Ridge's tariff, it will sell water at wholesale to both Big Sandy District and to the City of Vanceburg for $3.82 per 1,000 gallons. Even though Rattlesnake Ridge produced the majority of its water, there are instances where at the wholesale level, it will sell water for less than it purchases water.[60]

Figure 11, Rattlesnake Ridge, Courtesy of Kentucky.com

---

[56] *See* Appendix Q; *see also* Case No. 2019-00041, *Investigation into Excessive Water Loss* , Estill District, July 10, 2019 Hearing Transcript 113:1-144:12.

[57] *See* Appendix I, Case No. 2019-00041, *Investigation into Excessive Water Loss* , Rattlesnake Ridge, July 17, 2019 Hearing Transcript 51:9-16; and Appendix A, Big Sandy.

[58] Case No. 2016-00423, *Purchased Water Adjustment Filing Of Big Sandy Water District*, Exhibit 1 at 1 (Ky. PSC Jan. 4, 2017). Big Sandy District purchases all of its water from five (5) different suppliers at various rates. The city of Kenova, West Virginia's wholesale rate is $2.55 per 1,000 gallons while the city of Louisa, Kentucky's wholesale rate is $3.06 per 1,000 gallons. The city of Ashland, Kentucky charges $2.19 per 1,000 gallons, which is the same amount charged by Cannonsburg Water District for wholesale water. Finally, Rattlesnake Ridge Water District's wholesale rate is $3.82 per 1,000 gallons.

[59] *See* Appendix A, Big Sandy, Case No. 2019-00041, *Investigation into Excessive Water Loss* , July 17, 2019 Hearing Transcript 23:14–25.

[60] *See* Appendix I, Case No. 2019-00041, *Investigation into Excessive Water Loss* , Rattlesnake Ridge, July 17, 2019 Hearing Transcript 51:9-16. Rattlesnake Ridge should evaluate its contracts and tariffs on a regular basis.

Rate Increases Through Other Means

Water utilities frequently file for rate increases as part of a loan process to fund a capital project(s). These capital projects are approved by the water utility board, bundled together into a package, and submitted to various state and federal funding agencies for grants and loans. Typically, an engineering firm completes the technical project specifications along with the financial documentation[61] supporting the loan application and then works with the funding agencies to help secure financing. It is only after funding is conditionally approved that the water utility then submits these projects for Commission review and approval under either KRS 278.023 (023 Applications) or KRS 278.020 in conjunction with KRS 278.300 (020/300 Applications).[62]

In evaluating submitted projects, funding institutions, such as the KIA and the Kentucky Rural Water Finance Corporation (collectively, 020/300 Applications), or U.S. Department of Agriculture Rural Development (USDA RD) (023 Applications), limit their assessment of a water utility's financial health to the utility's ability to repay the loan at issue.[63] Not only are these assessments of the utility's financial condition by the funding agencies less extensive than the typical review Commission Staff would undertake during a rate proceeding, but also, at least in regard to projects that are federally funded (023 Applications), the Commission cannot reject the application and the Commission's scope of review is severely limited by statute.[64]

The Commission is concerned that water utilities are using rate increases obtained through 023 Applications to avoid coming to the Commission for a comprehensive rate case. This practice prevents Commission Staff from reviewing the financial state of the water utility and whether the water utility is accounting for long-term

---

[61] Many small water utilities have developed relationships with a single engineering firm that has lasted for years. This is an understandable consequence of the utilities' size and its inability to afford a full-time engineer whose allegiance is to the utility. The use of engineering firms as "one-stop-shops" for capital project planning, project conception, engineering design, contracting, and construction presents an inherent conflict of interest risk on the part of the engineering firms. The engineering firms' personnel need to work on projects to generate revenue, which could lead them to put the financial wellbeing of the engineering firm ahead of that of their client, the small water utility.

[62] *See* KRS 278.023, Approval of federally –funded construction projects-Commission review of agreement and supporting documents – Surcharge; and KRS 278.020, Certificate of convenience and necessity required for construction provision of utility service or of utility –Exceptions-Approval required for acquisition or transfer of ownership – Public hearing on proposed transmission line – Limitations upon approval of application to transfer control of utility or to abandon or cease provision of services – Hearing—Severability of Provisions.

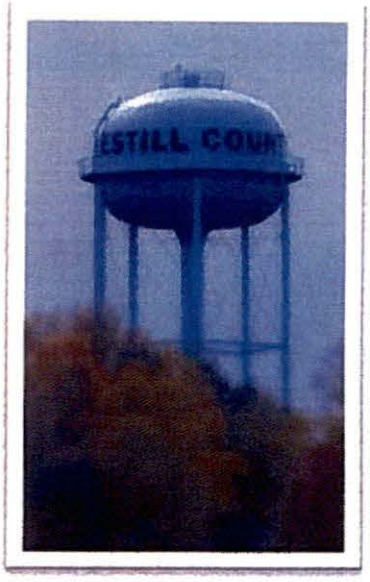
[63] It should be noted that the state and federal lending agencies properly adhere to federally mandated lending guidelines, which tend to focus more on a water utilities' short-term financial viability and the debt coverage ratio during the life of their loan. For example, KRS 278.023 applications require a depreciation reserve for short-lived assets but not for long-term assets, which understates the amount of depreciation reserve the utility should be required to maintain. Simply put, the missions of these lending agencies differ from that of the Commission, which, as a regulatory body charged with oversight of utility rates and service, must undertake a more comprehensive review of a water utilities' financial viability in both the short and long terms.

[64] KRS 278.023(3) requires the Commission to complete its review of 023 applications in 30 days, which limits the Commission's ability to thoroughly review the project(s) and the proposed rates supporting it. While the Commission may recommend changes to the utility and the federal agency, KRS 278.023(3) prohibits the Commission from modifying or rejecting any portion of the agreement. The Commission has greater discretion in analyzing the purpose, need, and rate impact of 020/300 applications, the most common of which are for capital projects but which also can be used for debt refinancing. However, unlike 023 Applications, revised rates in 020/300 Applications do not include a depreciation reserve account. Because there is no requirement for the utility adding assets to its books to make corresponding additions to its reserve accounts, depreciation reserves will be inadequate for the maintenance and replacement of these additional assets.

financial needs. The fact that the critical financial planning documents and operational planning policies identified and requested by Staff during the discovery phase of Case No. 2019-00041 were in many cases created in response to Staff's request illustrates the guidance the Commission can provide in the administrative process of review.[65]

Unauthorized Debt

KRS 278.300 requires jurisdictional utilities to obtain Commission approval prior to issuing any form of indebtedness that has a term exceeding two years.[66] Various Commission investigations have discovered instances in which water utilities have violated statute and procured loans without the required Commission approval. Water utilities enter into such loans for any number of reasons, ranging from the financing of capital projects to the payment of operating expenses or, worse yet, to fund debt payments for other prior existing loans. Investigations have revealed that despite annual water training programs many water utility board members and managers are unaware of the requirements of KRS 278.300. To compound the problem, many water utilities do not perform the necessary financial analysis to determine whether their current rates can support the debt load of the new loan. As a result, the utility finds itself in a deeper downward spiral as revenues are not sufficient to cover operating expenses and debt service. In addition, both the utility and its board members face possible fines for violating KRS 278.300.



Detrimental Extraneous Influences

As previously mentioned, boards and managers of small, rural water utilities will take extraordinary steps to avoid raising their rates. We question why would those responsible for providing safe and reliable water service to their family, friends and neighbors be so reluctant to increase rates when failure to do so potentially jeopardizes the utility's financial stability and capability to delivered good clean potable water. Or why are they so adamantly opposed to even consider alternatives such as consolidation, merger or a possible sale of their water utility, which might offer the best long-term outlook for their customers? Over the course of our investigations and numerous other proceedings involving small, rural utilities, the Commission has learned that the answer to these questions is twofold.

First, water utility board members – who are responsible for hiring water utility general managers – are appointed by local elected officials. Unfortunately the goals of local officials are often diametrically opposed to the needs of the water utility. Elected officials do not want rate increases approved by their water board appointees to become an issue during their next campaign for re-election. Second, our beloved Commonwealth with its 120 counties has a long history of favoring "local control" and of fearing anything that

---

[65] *See* Appendix B, Cawood Water District, July 9, 2019 Hearing Transcript 173:6-173:19, wherein Cawood's General Manager explains that the district did not have a capital improvement plan prior to the general manager creating one in response to Staff's data request served in Case No. 2019-00041, that was then approved by the district's board approved. *See also* Appendices M–P.

[66] KRS 278.300, Issuance or assumption of securities by utilities. *See also* Appendix C.

could lead to relinquishing even a small portion of that control. Consequently, water board commissioners and managers face political, societal and even intrinsic pressures that can lead to poor decision-making. These pressures lead the commissioners to keep their rates artificially low or, in some cases, to implement a rate that is lower than what the Commission has determined necessary for them to adequately operate. These pressures ultimately inhibit their ability to objectively evaluate long-term solutions to the insurmountable challenges facing their water systems.

It is important to note here that, in making these observations, the Commission's intent is not to ignore or diminish the impact of higher water rates on economically distressed customer bases of failing water utilities. The Commission recognizes that these conditions are typically causal of each other and many in these areas are already struggling due to loss of employment opportunities and decreased funding for local government needs and the reduction or elimination of assistance services at these communities. We acknowledge the plight of these citizens as well as the injustice in the fact that they likely face higher water rates to make up for years of mismanagement and poor oversight of their local public utility. However, the fact remains that these failing infrastructure issues must be addressed, and there is simply not enough federal or state funding to complete all the repairs that need to be done. Without financial support from the local customer base, water service and water quality will continue to deteriorate.

Merger is one of the possible solutions to the state-wide deterioration of Kentucky's water systems that are too small to defer costs among their ratepayers. The obstacles to merger include the "local control" argument, but also the smallest water districts have boards of commissioners that are political appointments and carry local prestige and in some cases, benefits.[67]

Figure 12, Milburn Water District, 2018 PSC Inspections

West Carroll Water District (West Carroll District) and Milburn Water District (Milburn District) are two examples of water districts that the optimum solution to address their water loss issues is a merger or consolidation with another entity. Both West Carroll District and Milburn District stated that the primary issues affecting their systems were the age of their water mains, customer density, and topography. West Carroll District does not have any employees and is operated under a contract agreement with Carrollton Utilities. West Carroll District's Commissioners are paid a monthly fee for oversight of the operations of the water district and liability insurance expenses. Aside

[67] Case No. 2019-00041, *Investigation into Excessive Water Loss,* West Carroll District, July 11, 2019 Hearing Transcript 25:11, where West Carroll Chairperson first states she sees no benefit to merger but later acknowledges that she would consider the idea of merger as an option to help the utility. *See also id.* at 144:5-148:3, where West Carroll board advisor, Bill Osborne of Carrollton Utilities, explained that costs for liability insurance could be saved in the event of merger.

from the Commissioner's fees and insurance, the rest of West Carroll's expenses are accounted for per the contract agreement with Carrollton Utilities. West Carroll District's system is connected to Carrollton Utilities, the entity that currently operates West Carroll District's system. West Carroll would benefit from economies of scale by merging/consolidating with Carrolton Utilities.

Milburn District does not have any employees, but instead has two contract employees that are compensated on an agreed upon monthly fee with allowances for when extra work hours are required of them. Milburn District only has 136 customers. They have had estimates totaling $1.5 to $2 million to eliminate and "tie-in" line dead ends.[68] Milburn District simply does not have the customer density to be able to financially afford the repairs needed to their system.

Despite the critical state of some of the water utilities named in Case No. 2019-00041, water districts like Martin District and Southern District argued against merger or regionalization and rehabilitation through the use of a management company because they claim that their rate payers want "local control" over the water in their district. When the chairman of Southern District's board testified at its Case No. 2019-00041 hearing,[69] the chairman admitted he misunderstood what it would mean to sell the district to Kentucky American Water Company. He also admitted that if UMG management company had not been hired at Southern, the district would have collapsed, stating, "In my opinion, the district could not have survived without a private company coming in to take over the management operations.[70]

Unfortunately, in the worst instances of water system failure, the rate payers do not associate the failure with the local managers and boards of commissioners that caused the problem. Those local managers and local boards of commissioners are responsible for permitting the system to fail and making the bad decisions that led to the failure. Despite the administrative authority the Commission is granted by KRS 278, the Commission's authority is not as persuasive as the opinion of the residents of the water district or the opinion or perception of the neighboring counties. The Commission has the expertise to review a water utility's records, practices and operational failure and recommend the utility hire a management company, but the utility is influenced by its ratepayers who perceive a loss of "local control" and the board members are not savvy enough to understand their role to protect the water district would still exist if an management company was in place. The board members have a great deal of local influence, but do not understand the benefit of a management company or do not have the skills to use their role to promote the best for the water utility.

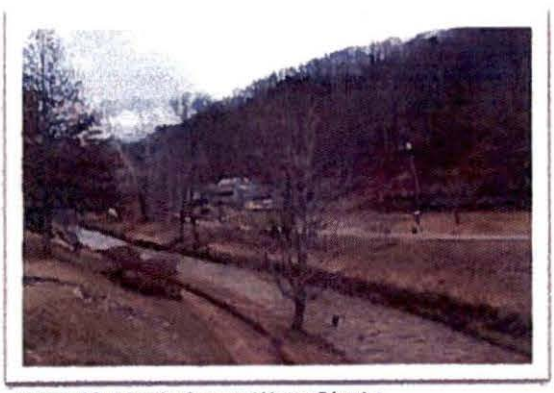


Figure 13, Martin County Water District

Again, the system relies on individuals that are not required to have education or business experience to oversee the manager. Additionally, there is a concern about a rate increase in the case of a management company and as discussed above, rate increases can be political. Many boards of commissioners have been told for years not to increase the rates or they would be replaced because the judge executive at the time made the decision that the residents could not afford a rate increase. Many systems could use a professional

[68] Milburn District, July 18, 2019 Hearing Transcript 42:11-20.

[69] *See* Appendix J and Case No. 2019-00041, Southern District, July 16, 2019 Hearing Transcript 65:18-81:9; 81:6-81:9).

[70] *Id.*

management company to provide efficiencies to put utilities like, for example, Martin District, in a financial position to make the needed improvements to its system and absorb the cost when equipment fails in the normal operation of the system. Currently, each instance of equipment failure threatens the demise of the system.[71]

Recommendations

Certain water systems in Kentucky are not performing well, and the customers of those systems are bearing the consequences, including poor water quality and paying more than they should for substandard water service. The Commission has taken steps to improve the water systems under its jurisdiction (see Appendices A-K) and it will continue to do so as outlined in this report and in its final Order issued in the water loss investigations. However, the Commission is only one of several administrative and regulatory agencies tasked with providing oversight and ensuring funding for safe drinking water throughout the Commonwealth, and each has a role to play in identifying processes and policies that led to the infrastructure challenges our water utilities now face and in finding solutions. Working together strategically, we can help these systems become operationally and financially sound once again and safeguard the health and welfare of Kentucky's citizens. The following recommendations and conclusions are intended for consideration and discussion by the general assembly, all administrative and regulatory agencies with jurisdiction over water utilities, funding entities and other stakeholders.

New or Enhanced Statutory or Regulatory Requirements

Qualifications of Water Utility General Manager. A water utility general manager must ensure compliance with federal and state water quality standards; maintain the system's infrastructure by consistently adjusting rates and successfully applying for grants and low interest loans; and oversee the provision of safe and reliable water service to the utility's customers. To adequately perform these and other duties required by the position, one must have an understanding of the need for internal controls and how to develop, adopt and enforce them; the ability to supervise both office and field personnel; and knowledge of basic accounting and budget preparation principles as well as an understanding of the legal duties attendant to the position. Yet, we have found that many general managers have little, if any, background in business management and that they lack not only the experience but also the education necessary to successfully operate a water utility. The Commission recommends statutory changes that would require water district or water association general managers to have formal educational and professional requirements (to be outlined in statute) for the position and require annual attendance of at least 12 hours at professional seminars, the course materials and instructors of which to be approved in advance by the Commission.

Employment of a Staff Engineer. Each water district or association, individually or jointly in cooperation with other similarly situated districts or associations, should employ a graduate engineer on staff.[72] This requirement could be met if the general manager holds a degree in engineering. Outside engineers identify and design capital projects, apply for grants and other funding, and oversee construction. A resident engineer

---

[71] Case No. 2018-00017, *Martin County Water District ARF* (Ky. PSC Nov. 15, 2019).

[72] The 2007 Management Audit Report of the Martin County Water District conducted by the Barrington-Wellesley Group recommended employment of an engineer individually or jointly with other water districts. (*See* Management and Process Audit of Martin County Water District, Final Report Chapter 3, Recommendation D1 on page III-8, dated March 19, 2007).

could serve that function on a regular basis as well as oversee infrastructure maintenance and replacement. In addition, the resident engineer could help with supervision and management of any contracted engineering services. Water utilities sharing the services of an engineer is an example of how water districts could cooperate to share the services of an engineer to stretch their limited financial resources, as well.

Qualified Infrastructure Improvement Plan. Each water district and association should be required to develop a comprehensive Qualified Infrastructure Improvement Plan that must be filed with and approved by the Commission. Any changes to the Plan also must be filed with and approved by the Commission. Periodically – at least every 3 years – water districts and associations must report to the Commission their adherence to and compliance with the Plan as well as progress made toward infrastructure replacement provided for therein.

Qualified Infrastructure Improvement Surcharge or Rider. In order to provide clarity and remove any uncertainty surrounding requests for same, the Commission recommends formal codification of its authority to establish a Qualified Infrastructure Improvement Surcharge or Rider, the proceeds of which will be devoted exclusively to infrastructure improvement and replacement.

Authority to Effect a Merger or Consolidation. As previously discussed, while Kentucky is ahead of the curve when it comes to regionalization on a national level, there is more work to be done here at home. The Commission recommends consideration of legislation that would grant authority to involuntarily merge distressed water utilities with other, interconnected distribution systems, including municipal water utilities.

Authority to Effect a Rate Case as part of Funding Review Process. In order to maintain utilities financially and operationally, the Commission should have the authority to review the utility's financial and operational needs during its review of funding requests pursuant to KRS 278.020 or KRS 278.023. The current 30 day time period to perform the initial review of the funding request should be extended to 60 days and upon indication that a utility's financial or operational needs require an adjustment in rates, the Commission should have the authority to effect a rate case.

Augmented Regulatory Oversight

Designated Infrastructure Accounts Restricted to Water Loss Reduction. As previously discussed, for ratemaking purposes, 807 KAR 5:066, Section 6(3) does not allow an adjustment in rates for unaccounted-for water in excess of 15 percent, however, the Commission recommends allowing a utility, upon submission of an approved Qualified Infrastructure Improvement Plan, to collect the difference between 15 percent and the percentage of water loss in excess of 15 percent, to be maintained in a separate account that is restricted for Commission approved infrastructure repair intended to reduce water loss. These funds would be in addition to any Qualified Infrastructure Improvement Surcharge or Rider previously identified above.

Infrastructure Engineer. The Commission should be authorized to establish the staff position of Infrastructure Engineer with job duties exclusively devoted to the review, approval and oversight of the implementation of the Qualified Infrastructure Improvement Plans filed by water districts and associations.

Infrastructure Planning Committee. The Commission together with the Division of Water should establish a joint committee to promote, design, and develop infrastructure planning by water districts and associations as well as to review and enforce compliance with their respective Qualified Infrastructure Improvement Plans.

Improved Oversight and Management of Water Utilities

Regional Water Boards. Consideration should be given to the creation of regional water boards to oversee the management of regional and local water supply, infrastructure and resources. Such a management structure would serve to reduce duplication of services, achieve economies of scale in purchasing, and permit the employment of a professionally qualified general manager at a salary commensurate with the responsibilities of the office. Regional Water Board Commissioners would be appointed by the Governor to staggered four-year terms with appointments to be confirmed by the Senate. Such boards would be subject to Commission jurisdiction and the Commission would retain jurisdiction over the construction of facilities, financing and rates.

Eliminate Partisan Political Pressure. Water district oversight and management should be separated from the authority of the county judge executive and fiscal court so as to reduce local partisan political influence. Such interference compromises timely infrastructure maintenance and replacement by impeding necessary and periodic rate increases, leading to the use of funds that should be dedicated to infrastructure needs to cover current operating expenses. Water district commissioners should be appointed by Regional Water Board Commissioners, subject to the qualifications of holding a college degree and to passing an examination developed and administered by the Commission. Appointing water commissioners by the Regional Water Board and enhancing the qualifications for the position should attract better candidates and remove a level of partisan political pressure from the appointing process.

Annual Audit Requirements. All annual audits of water utilities should include a discussion and critical analysis of internal controls, operating procedures and perceived or potential deficiencies in management practices. Water associations also should be required to undergo annual audits. (They are not required to do so under current law). Water districts and associations should be required to bid out auditing services contracts and change auditing firms at least every three years. Consideration should be given to establish a common database of periodic utility filings that can be shared across the state agencies that would reduce the redundant reporting burden and facilitate cooperation with various state regulatory agencies.

Periodic Rate and Operations Review. Every water district and association should be subjected to a rate and operations review every three years to ensure that revenue is adequate to properly operate the system over the long term. Rate increases recommended by Commission Staff should be required to be implemented in full by the utility. The Commission further recommends that its authority to require that the portion of rates applicable to infrastructure replacement be utilized only for that purpose and be specifically codified.

Conclusion

Ready to work as part of a united force to improve water quality and service. The Commission recognizes and appreciates the attention the Kentucky General Assembly has given to issues plaguing troubled water systems. In addition to the investigations of water utilities with excessive water loss, the Commission has been collaborating with the funding agencies to confront some of the problems identified. The Commission also is examining its own regulations, specifically the one that disallows recovery for water loss that exceeds 15 percent (807 KAR 5:066, Section 6(3)). As the infrastructure problems faced by Kentucky's water and wastewater utilities vary in nature and degree, solutions have to be considered in broad terms. The Commission hopes sharing the results of its investigations can serve to further the efforts that all interested parties are making to implement better processes for water utilities.. Soon, the Commission will be issuing a formal order directing the water utilities investigated in Case No. 2019-00041 to take specific action to right the course. The water utilities will be expected to report their progress to the Commission within specified timeframes. Examples of actions the Commission will be requiring include establishing policies and procedures for leak detection, developing written customer billing policies, and completing water audits. The Commission is releasing this report contemporaneous with the issuance of the formal Order in Case No. 2019-00041, to capture all elements of these investigations—complete with findings, conclusions and recommendations. One thing on which we can all agree is that, if not addressed now, these problems will continue to mount along with the costs of remediation—costs that are already well beyond what the customer bases of these rural water utilities can bear. We must work together to find solutions for the challenges these water utilities face. The Commission welcomes your feedback and stands ready to work with any and all relevant stakeholders to improve water quality and service for all Kentuckians.

TAB 5

Kentucky Bar Association
Continuing Legal Education Commission
514 West Main Street
Frankfort, KY 40601 - 1812
Phone: 502-564-3795
Fax: 502-564-3225
http://www.kybar.org

Gerald Edward Wuetcher ID : [redacted]

110 Old Hickory Ln
Versailles Kentucky 40383-1131

Re : CLE Activity Accreditation
Date: April 08, 2024

The application for CLE accreditation for the activity listed below has been approved by the KBA CLE Commission. Kentucky attorneys attending or participating in the activity who have NOT claimed CLE credit must report their attendance either through the Member CLE Portal at www.kybar.org or by submitting a completed form #3.

Please contact Clifford Timberlake at (502) 564-3795 ext. 228 with any questions.

Sponsor:	Stoll Keenon Ogden
Activity:	Northern Kentucky Water Training 2024
Format:	Live - a program at a specific date and time - On site
Location:	Erlanger, Kentucky
Date:	05/08/2024

Activity No.	262380	Sponsor No.	8660
TOTAL CREDITS:	6	ETHICS CREDITS	0

Ethics credits are INCLUDED in the TOTAL number of credits.

TAB 6

Andy Beshear
GOVERNOR

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
300 Sower Boulevard
Frankfort, Kentucky 40601
Phone: (502) 564-2150
Fax: 502-564-4245

Rebecca W. Goodman
SECRETARY

Anthony R. Hatton
COMMISSIONER

April 18, 2024

Stoll Keenon Ogden PLLC
Attn: Gerald Wuetcher
300 W Vine St Ste 2100
Lexington, Kentucky 40507

Agency Interest Number: 175355
RE: Operator Certification Training Approval for Continuing Education Hours

To Whom It May Concern:

Your training request has been received by the Department of Environmental Protection, Certification and Licensing Branch. Course approvals are reviewed and approved based on core content outlined by the cabinet and the Kentucky Board of Certification of Wastewater System Operators and the Kentucky Board of Certification of Drinking Water Treatment and Distribution System Operators. The core content list can be located on our website, http://bit.ly/KY-OCP-trainingproviderinfo.

Your request was reviewed by the Kentucky Board of Certification of Wastewater System Operators and/or the Kentucky Board of Certification of Water Treatment and Distribution System Operators at their most recent board business meeting. This letter serves as notification of the board and/or cabinet determination for continuing education credit.

Course Title	Date	Hours & Type Approved	DCA Event ID#	Comments
Northern Kentucky Water Training 2024	05/08/2024	DW - 6.0 Hours approved	29895	One time Approval

Upon completion of the approved training, the provider shall submit the continuing education hours to the cabinet through our Kentucky Online Gateway website at https://dep.gateway.ky.gov/eForms/Account/Home.aspx. You may also report training hours by submitting the Continuing Education Activity Report form and $50 fee to the cabinet. This form can be located on the program's website at http://bit.ly/KY-OCP-dcaforms. If a continuing education activity report was attached to the training approval request, please be aware that the operators will only receive credit for the number of hours approved by the board(s).

If you have any questions or need additional information, please contact the Division of Enforcement, Certification and Licensing Branch at (502) 782-6189.

Sincerely,

Veronica Roland

Veronica Roland
Certification and Licensing Branch

RECEIPT
Commonwealth of Kentucky
Department of Environmental Protection

Received From: Gerald E Wuetcher
Address: 110 Old Hickory Lane Versailles, KY, 40383-1131
Receipt No.: 301836-0-1
Check Amt: $51.50
Check Number: 139050
Total Paid: $51.50

TAB 7

Re: Request for Approval as a Qualified Training Program

Kearney, Tanya M (DLG) <tanya.kearney@ky.gov>

Mon 4/8/2024 11:33 AM

To:Gerald Wuetcher <Gerald.Wuetcher@skofirm.com>

Mr. Wuetcher,

Hello and good morning. This training event has been approved for 5.75 hours for members of the fiscal court and has been assigned the number: 2024 SKO 01.

Thank you,

Tanya Kearney
County Officials Training Program Coordinator
Department for Local Government
Office of the Governor
100 Airport Rd., 3rd Floor
Frankfort, KY 40601
(502) 564-0674

" Dear children, keep away from anything that might take God's place in your hearts"
1 John 5:21

It is better to walk alone than with a crowd going in the wrong direction.
<<<><<<

From: Gerald Wuetcher <Gerald.Wuetcher@skofirm.com>
Sent: Thursday, April 4, 2024 11:33 AM
To: Kearney, Tanya M (DLG) <tanya.kearney@ky.gov>
Subject: Request for Approval as a Qualified Training Program

---

Ms. Kearney:

Attached is an application for approval of Northern Kentucky Water Training 2024 as a qualified training program of the Local County Officials Training Program. Please contact me if additional information is required or if there are any questions regarding the training program.

Thank you for your attention to this request.

Sincerely,

Gerald Wuetcher

Gerald Wuetcher
Attorney

Gerald.Wuetcher@skofirm.com
Direct: 859.231.3017
Mobile: 859.550.3894
Main: 859.231.3000

Stoll Keenon Ogden PLLC
300 W. Vine St., Suite 2100
Lexington, KY 40507
V-Card

Louisville | Lexington | Indianapolis | Evansville | Frankfort | www.skofirm.com
Stoll Keenon Ogden PLLC is Mansfield Certified.

Training Approval Request Form

Training Approval Requested By: Gerald E. Wuetcher

Title: Attorney **Agency:** Stoll Keenon Ogden PLLC

Phone: (859) 231-3017 **E-mail:** gerald.wuetcher@skofirm.com

REQUESTER: Please complete both pages of this form, **along with** submitting a detailed agenda that lists the start and end times of all training sessions while also indicating any breaks that may be given and submit to: **Tanya.Kearney@ky.gov, 502-564-0674**

Training Providers who have more than 50 in attendance will need to collect all POA forms and drop off or email (preferred) to me.

Training Event Information

Training Title: Northern Kentucky Water Training 2024

Training Provider: Northern Kentucky Water District/Stoll Keenon Ogden PLLC

Contact Name: Gerald Wuetcher **Title:** Attorney

Phone: (859) 231-3017 **E-mail:** gerald.wuetcher@skofirm.com

Fax: (859) 259-3517 **Website:** nkywater.org

Training Intended For: ☐ Fiscal Court ☐ County Clerk ☐ Sheriff ☐ Jailer ☒ All

Registration Fees: ☒ Yes: **Dollar Amount:** $ 50.00 ☐ No

Enrollment Limitations: ☐ Yes: **Maximum Enrollment:** # _____ ☒ No

Proof of Attendance: ☐ Request DLG to provide individual POA forms ☒ Sign-in Sheet ☒ Individual Certificate

Training Dates with Locations: May 8, 2024 - 2835 Crescent Springs Road, Erlanger, Kentucky

FOR DLG USE ONLY

Approved By: _____ **Date:** _____ **Hours:** _____

Denied By: _____ **Date:** _____

Elected County Officials Training Incentive Program Training Approval Request Form
Page Two

Describe the learning objectives & how the content pertains to improving job knowledge and skills.

Upon completion of program, elected officials will have increased knowledge of recently enacted legislation and recent Kentucky Court and Public Service Commission decisions that significantly affect the operation and management of water and wastewater utilities, including water districts and municipal utilities. They will gain a greater appreciation of some common issues that these utilities face and the possible courses of action for addressing these issues.

List Trainers and their Titles/Qualifications (attach short Bio's if necessary):

See attached agenda and biographical materials.

Describe any training materials that will be provided to the trainees:

Each attendee will be provided a copy of each presenter's presentation and presenter's notes. Additional materials, such as copies of recent legislation, statutes and court decisions, will be provided for certain presentations.

Is this training a requirement for County Officials? (If Yes check applicable officials) ☐ **Yes** ☐ **No**

☐ **Fiscal Court** ☐ **County Clerk** ☐ **Sheriff** ☐ **Jailer** ☐ **All**