Drinking Water Board Packet

April 9, 2019

Agenda

State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

DRINKING WATER BOARD MEETING
April 9, 2019 – 1:00 pm
Multi Agency State Office Building – Board Room 1015
195 North 1950 West
Salt Lake City, Utah 84116

Marie Owens' Cell Phone #: (801) 505-1973

1. Call to Order

2. Roll Call – Marie Owens

3. Approval of the Minutes:
   A. February 28, 2019

4. Financial Assistance Committee Report
   A. Status Report – Michael Grange
   B. Project Priority List – Michael Grange
   C. SRF Applications
      i. FEDERAL:
         a) Circleville – Lisa Nelson
         b) Cove Special Service District – Lisa Nelson
         c) Marysvale – Heather Pattee
         d) Tridell-Lapoint (De-authorization) – Lisa Nelson

5. Rulemaking Activities
   A. Current Rulemaking Activities (Board Action Needed)
      i. Authorization to Begin to Amend Water System Rating Criteria – Jennifer Yee
         a. R309-400: Water System Rating Criteria

6. Rural Water Association Report – Dale Pierson

7. Open Board Discussion – Betty Naylor

8. Directors Report
   A. Legislative Updates
   B. ASDWA Updates
   C. Other

9. Other

10. Public Comment Period

11. Next Board Meeting:

Date:	Tuesday, June 11, 2019
Time:	1:00 pm
Place:	Multi Agency State Office Building Board Room 1015 195 North 1950 West Salt Lake City, Utah 84116

12. Adjourn

In compliance with the American Disabilities Act, individuals with special needs (including auxiliary communicative aids and services) should contact Larene Wyss, Office of Human Resources, at: (801) 297-3828, TDD (801) 903-3978, at least five working days prior to the scheduled meeting.

Agenda Item 3(A)

State of Utah
GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Alan Matheson
Executive Director

DIVISION OF DRINKING WATER
Marie E. Owens, P.E.
Director

DRINKING WATER BOARD MEETING
February 28, 2019 – 2:00 pm
Dixie Convention Center – Garden Room
1835 Convention Center Drive
St. George, Utah 84790

DRAFT MINUTES

1. Call to Order

Betty Naylor, Board Chairman called the meeting to order at 2:00 p.m.

2. Roll Call

Board Members present: Betty Naylor, Roger Fridal, Kristi Bell, David Stevens, Jeff Coombs, Eric Franson, Tage Flint and Brett Chynoweth.

Division Staff present: Marie Owens, Hayley Shaffer, Michael Grange, Heather Bobb, Lisa Nelson, Rachael Cassady, Michelle Deras, Ryan Dearing, Patti Fauver, and Nathan Lunstad.

3. Approval of the Minutes:

A. January 15, 2019

- Brett Chynoweth moved to approve the January 15, 2019 minutes as presented. Kristi Bell seconded. The motion was carried unanimously by the Board.

4. Programmatic Financing – Michael Grange

Michael Grange, Technical Assistance Section Manager with the Division of Drinking Water (DDW, the Division) briefly reviewed the handout provided in the Board packets explaining Programmatic Financing. Training for Board members was also provided prior to this meeting, to which Michael referenced the handouts and presentation from the earlier training.

5. Financial Assistance Committee Report

A. Status Report – Michael Grange

Michael reported there is currently a balance of about $3 million in the State SRF fund. Over the course of the next year, the Division is expecting an additional $4.3 million to come into the fund, for a total of approximately $7.4 million for project allocation through the end of January 2020.

Michael then reported currently there is approximately $45.3 million in the Federal SRF fund. Over the course of the next year, the Division is expecting about $20 million to come into the fund for a total of approximately $65 million for project allocation through the end of February 2020. He reported there are no anticipated federal loan closings at this time.

B. Project Priority List – Michael Grange

Michael reported there are two new projects recommended to be added to the Project Priority List this month including: Diamond Valley Acres with 7.2 points, and Granger-Hunter Improvement District with 33.3 points. The Financial Assistance Committee recommends the Board approve the updated Project Priority List as presented, with the addition of these two projects.

Betty Naylor asked if any member of the Board has any conflicts of interest, or potential conflicts of interest needing disclosure. Eric Franson acknowledged a potential conflict of interest with Granger-Hunter Improvement District.

- Jeff Coombs moved to include Eric Franson in the discussion portion of this agenda item, however abstain from voting based on the disclosed potential conflict of interest. Roger Fridal seconded. The motion was carried unanimously by the Board.

- David Stevens moved to approve the updated Project Priority List. Brett Chynoweth seconded. Eric Franson abstained. The motion was carried by the Board.

C. SRF Applications

i. STATE:

a) Kane County Water Conservancy District – Heather Bobb

Representing Kane County Water Conservancy District was Michael Noel, Dirk Clayson, and Joe Phillips.

Heather Bobb informed the Board Kane County Water Conservancy District is requesting $210,000 in financial assistance for a transmission/distribution line to the Duck Creek Townsite parcel. The total cost of the project is $419,095. Kane County is requesting funding to purchase the materials for the project and will be paying for the labor and engineering as an in-kind match of $209,458.

The local MAGI for Kane County is approximately $31,958 (70% of the state MAGI), their after project water bill is 1.24% of the local MAGI. They do qualify for additional subsidy based on the less than 80% of the State MAGI. Due to time constraints, this project was not presented to the Financial Assistance Committee. Therefore, staff recommends the Drinking Water Board authorize a loan of $210,000 at 0.81% Interest/Fee for 20 years.

Those present to represent the system reviewed the need for the funding and projects as presented, however requested a modification to the staff's recommendation to include a portion of the loan have principal forgiveness. The Board discussed and clarified various items with the representatives, and Marie informed the Board this water system is in full compliance with their IPS report.

- Brett Chynoweth moved to authorize a loan of $168,000 at 0.81% interest or fee with 20% principal forgiveness for 20 years to Kane County Water Conservancy District for the project as described. Tage Flint seconded. The motion was carried unanimously by the Board.

ii. FEDERAL:

a) Diamond Valley Acres – Lisa Nelson

Representing Diamond Valley Acres was John Cazier, Ryan Davis, Barbara Johnston, Randee Sanders, and Justin Christensen.

Lisa Nelson informed the Board Diamond Valley Acres Water Company is requesting $235,000 in financial assistance to fund the equipping of an existing well and to connect it to the distribution system.

The local MAGI for DVAWC is $34,007 which is 74% of the State MAGI and the current average water bill is $53.14 per month, which is 1.88% of the local MAGI. Their current rates appear to be sufficient to cover the proposed debt service. Staff's recommendation is a reduction in interest rate, based on the system's MAGI. The Financial Assistance Committee recommends the Drinking Water Board authorize a loan of $235,000 at 2.5% Interest/Fee for 20 years to the Diamond Valley Acres Water Company.

Those present to represent the system reviewed the need for the funding and projects as presented. The Board discussed and clarified various items with the representatives, and Marie informed the Board this water system currently has 9 points on their IPS report.

- Jeff Coombs moved to authorize a loan of $235,000 at 2.5% interest or fee for 20 years to Diamond Valley Acres Water Company. Kristi Bell seconded. The motion was carried unanimously by the Board.

b) Granger Hunter Improvement District – Lisa Nelson

Representing Granger-Hunter Improvement District was Clint Jensen and Jason Helm.

Lisa informed the Board Granger-Hunter Improvement District (GHID) is requesting $20,000,000 in financial assistance to fund numerous system improvements from their

Capital Improvements Plan that will occur over the course of several years. These improvements include new wells, new storage tanks and repair of existing storage tanks, and installation of water line. This application will also be the first Programmatic Financing request made before the Board.

The local MAGI for GHID is $35,701 which is 78% of the State MAGI therefore Granger Hunter is eligible for subsidy. The current average water bill is $45.60 per month, which is 1.53% of the local MAGI, so rates are already sufficient to cover the proposed debt service. GHID is also contributing $5,950,000 towards this project. Due to limited principal forgiveness funds in the Federal program, Staff recommends a reduced interest rate for the Granger Hunter project. This will be both as subsidy and as incentive to participate in the Federal Program's "Programmatic Financing" option. The Financial Assistance Committee recommends the Drinking Water Board authorize a loan of $20,000,000 at 1.25% Interest/Fee for 20 years.

- Tage Flint moved to authorize a programmatic financing loan of $20,000,000 at 1.25% interest or fee for 20 years. Roger Fridal seconded. Eric Franson abstained. The motion was carried by the Board.

c) M & J Trailer Home Community – Heather Bobb

Representing M & J Trailer Home Community was Jesse Boone.

Heather informed the Board M & J Trailer Home Community is a private water system in Box Elder County that is owned by Jenamac LLC. The project consists of a new well, 2,200 feet of distribution line, 25,000 gallon tank and arsenic treatment. They scored 50.2 points on the project priority list. The cost of the project is estimated at $1,200,000. After purchasing the trailer park, Jenamac LLC learned of all the problems with the water system and wants to come in to compliance and become an approved system again.

Heather explained M & J Trailer Home Community has a significant number of deficiencies on their IPSreport, is a "not approved" water system and has a "no-use" order. There is a DRAFT version of a Compliance Agreement Enforcement Order (CA/EO) with the Division to correct the deficiencies and become an approved water system. A large portion of these deficiencies will be corrected with this project as they are basically replacing the entire system.

They have explored several options to correct the system, including regionalizing with another system. The closest system is Ukon Water, which requires each connection to purchase one share of company stock. This would require each individual connection to purchase a share and increase the cost of the project significantly and availability of shares is unknown. Fielding Town has also been contacted; they informed staff they receive their water from Ukon Water.

M & J has also approached Bear River Water Conservancy District, who expressed support of this project, with a suggestion of drilling a test well to determine quantity and quality of water.

Based on the engineering pre-design report, the most feasible and cost effective option is for M & J to replace the entire system.

Heather reported that as this is a small community, they did an independent income survey to obtain their local MAGI which is approximately $18,292 (41% of the state MAGI), their after project water bill, with 0% interest would need to be $352.31 which is 23.11% of the local MAGI. Therefore they do qualify as a hardship community to receive principal forgiveness. Based on the above information, the Financial Assistance Committee recommends the Drinking Water Board not authorize a funding package.

Jesse Boone reviewed the need for the funding and projects in order to restore potable water to the residents living in the trailer homes on the property. The Board discussed and clarified various items with Jesse, and determined based on the per connection cost, is not a responsible use of the funding program.

- Roger Fridal moved to not authorize a funding package to M & J Trailer Home Community. Betty Naylor seconded. The motion was carried unanimously by the Board.

The Board revisited this request later in the meeting during the "Open Board Discussion" agenda item and discussed the possible authorization of a full loan. Based on discussion of the lack of collateral and cost per connection, the initial vote of not authorizing funding to the water system remained. The Board would like staff to continue discussing other potential options this system may want to explore including private funding. Marie informed the Board staff will continue to work with Jesse in order to reach a solution for the residents on the property and finalize the CA/EO.

6. Rulemaking Activities

A. Current Rulemaking Activities (Board Action Needed)

i. None

B. Future Rulemaking Activities (Informational)

i. R309-300: Certification Rules for Water Supply Operators – Michael Grange

a) Impact to Water Systems

Michael reviewed the impact to water systems once the R309-300 Rule change is implemented including a revision to the continuing education unit requirements and water system classifications. Patti Fauver, Program Manager with DDW was invited up to discuss this item in more depth, and ways in which the Division is looking to improve the current system to have better prepared and trained water system operators to protect public health.

b) Coordination with Stakeholders

Michael informed the Board the draft revised rule was prepared by a stakeholder group consisting of Division staff, selected water system operators, and selected technical assistance providers. He explained this diverse group of subject matter experts has over 100 years of collective experience in the drinking water industry, most of it in water system or water treatment facility operation. The draft revised rule was further vetted through an internal review

process within the Division of Drinking Water and with our District Engineers. The Division also plans to conduct an informal public review.

ii. R309-400: Water System Rating Criteria – Rachael Cassady

a) Proposed Draft Rule Language

Rachael Cassady, Rules Section Manager with DDW reviewed the proposed draft rule language of the water system rating criteria, noting the proposed draft rule has been reduced to a total of 3 pages down from 38 pages in the existing rule. She informed the Board the major changes to the rule include the elimination of credit points to mask other possible deficiencies, a more simplified and concise point system, and a rating system that will be more in line with EPA's ETT point system. She explained this will more efficiently alert staff if a water system is in trouble with EPA.

b) Existing Draft Rule Language

Copies of the existing rule were provided to Board members for review and comparison of the revised draft rule.

c) IPS Implementation and Table of IPS Points (Proposed Draft)

Rachael then reviewed the proposed IPS point value tables. Marie explained if these tables were to be amended, they would only need to be brought before the Board for approval and not put through the official rulemaking process. Rachael explained this rule will be brought to the Board at the April meeting to officially begin to amend the rule, with an anticipated adoption date of June 2019. From there, water systems will have approximately six months to fix deficiencies on their current IPS report before the rule is implemented on January 1, 2020.

d) Impact and Outreach

Rachael informed the Board of the outreach that has been ongoing including webinars, mailings, and consultations during the RWAU conference to educate water systems on the proposed changes, and solicit requests for feedback on the draft rule before the official comment period opens after the April Board meeting.

There was discussion among Board members on the number of water systems that will potentially go "Not Approved" once this rule goes into effect if they have not resolved their deficiencies, equaling approximately 27%. Rachael acknowledged this would be the case and restated the importance of educating water systems on the change and providing a grace period to resolve their issues before the rule is officially implemented.

Betty expressed her appreciation to the staff on their efforts to provide outreach and education on the proposed rule changes.

iii. R309-105: Administration: General Responsibilities of Public Water Systems

a) Customer Complaints – Marie Owens

Marie informed the Board this agenda item was for review and consideration to be brought back to a future meeting for a more in depth discussion.

She reviewed the Draft language related to the addition of "Water-Related Customer Complaints" in the rule and explained the reasons for the change. Marie continued expressing the frustration the Division receives from residents reporting they have provided a complaint or

water related concern to their water provider with no follow-up or response. The proposed additional language to the rule would provide guidelines to a water system on their responsibilities to investigate and provide feedback to the complaining resident and/or connected water system if they are receiving water from another public water system.

Board members shared concerns of the possible overreach the addition of this rule may imply and this may be interpreted as putting more rules in place for the majority of water systems that are providing the right feedback to their residents, as well as other possible unintended consequences. Other members had concerns of how this would be tracked and how the Division would ensure compliance.

In order to review this item further, Jeff Coombs, Eric Franson, and Tage Flint volunteered to be on a Board sub-committee to vet prior to a Board vote.

b) Emergency Response – Ryan Dearing

Ryan Dearing, Environmental Scientist and Emergency Response Contact for the Division reviewed the handout provided in the Board packets relating to changes to emergencies. The proposed change to this rule would clarify for a water system what an emergency is, when to report to the Division and their additional stakeholders, and the suggestion of all water systems having a contingency plan in place in the event of an emergency.

Ryan continued stating this rule has not be revised since 1992, and there are a variety of new threats water systems should be planning for including cyber-security, terrorism, etc.

A draft of the proposed language will be brought before the Board for review and approval at a future date.

7. Rural Water Association Report – Dale Pierson

Dale Pierson with Rural Water Association of Utah (RWAU) thanked the Drinking Water Board for attending the RWAU conference and holding a Board meeting onsite. He informed the Board the conference had approximately 1,900 registered attendees this year.

The annual RWAU meeting was held earlier this day and Dave Gardner was elected as the new section chair. Dale reminded members the conference banquet and awards ceremony would be held this same evening at 6pm, and two of the Drinking Water Board members would be receiving an award, Roger Fridal and Eric Franson.

Dale then informed the Board of the winners of the Best Tasting Water:

1st Place = Silver Lake
2nd Place = Monroe
3rd Place = Morgan

Betty thanked Dale and his staff for their work and for hosting the Board meeting at the annual conference.

8. Open Board Discussion – Betty Naylor

See the last paragraph of agenda item 5(C)(ii)(c).

9. Director's Report

A. Enforcement Report

Marie reviewed the report of water systems with a current status of "Not Approved" for various reasons as well as those systems under formal and informal enforcement. She reminded the Board Division staff has been actively working to assist water systems in order to be moved to approved and removed from this list. They are also diligently working with systems to solve the deficiency issues and ultimately prevent them from being added to this list. The Board will routinely be provided copies of this report to review the status of these systems.

B. Other

Marie informed the Board the reauthorization of the State Safe Drinking Water Act has passed through the legislature and will be sent to the Governor for his signature. This will ensure funding for the next five years.

Tage also thanked Marie on her efforts to get the Extraterritorial Jurisdiction Bill passed.

10. Other

There were no other items for discussion.

11. Public Comment Period

There were no public comments at this time.

12. Next Board Meeting:

Date: Tuesday, April 9, 2019
Time: 1:00 pm
Place: Multi Agency State Office Building
Board Room 1015
195 North 1950 West
Salt Lake City, Utah 84116

13. Adjourn

- Brett Chynoweth moved to adjourn the meeting. David Stevens seconded. The motion was carried unanimously by the Board.

The meeting adjourned at 4:50 p.m.

Agenda Item 4(A)

DIVISION OF DRINKING WATER

STATE LOAN FUNDS

AS OF February 28, 2019

	SUMMARY		
	Total State Fund:	$16,089,647	
	Total State Hardship Fund:	$2,089,793	
	Subtotal:	$18,179,440	
LESS AUTHORIZED	Less:		
	Authorized Loans & Closed loans in construction:	$14,227,000	*(see Page 2 for details)*
	Authorized Hardship:	$924,869	
	Subtotal:	$15,151,869	
	Total available after Authorized deducted	**$3,027,571**	
PROPOSED	**Proposed Loan Project(s):**	**-$40,000**	*(see Page 2 for details)*
	Proposed Hardship Project(s):	**$0**	
	Subtotal:	**-$40,000**	
AS OF:			
February 28, 2019	**TOTAL REMAINING STATE LOAN FUNDS:**	**$1,902,647**	
	TOTAL REMAINING STATE HARDSHIP FUNDS:	**$1,164,924**	

Total Balance of ALL Funds: **$3,067,571**

Projected Receipts Next Twelve Months:		
and Sales Tax Revenue		
Annual Maximum Sales Tax Projection	**$3,587,500**	
Less State Match for 2018 Federal Grant	$0	
Less State Match for 2019 Federal Grant	($2,221,400)	
	$0	
Less Appropriation to DDW/Board	($1,001,950)	
SUBTOTAL Sales Tax Revenue including adjustments:		$364,150
Payment:		
Interest on Investments (Both Loan and Hardship Accounts)		$480,000
Principal payments		$2,961,654
Interest payments		$734,967
Total Projections:		$4,540,770

Total Estimated State SRF Funds Available through 2-28-2020	**$7,608,341**

DIVISION OF DRINKING WATER
STATE LOAN FUNDS
PROJECTS AUTHORIZED BUT NOT YET CLOSED
AS OF February 28, 2019

Community	Loan #	Cost Estimate	Date Authorized	Date Closed/Anticipated	Authorized Funding Loan	Grant	Total
Ephraim 1% int, 20 yrs	3S251	1,422,905	Mar-18		1,145,000	127,150	1,272,150
Laketown 1.5% int @ 30 yrs	3S248	1,863,636	May-18		1,110,000	0	1,110,000
Mtn Regional-Community Wtr 2% 20 yr	3S254	2,600,000	Jul-18		2,600,000	0	2,600,000
Aurora City 0.75% int 30 yrs	3S258	4,228,000	Aug-18		3,804,000	424,000	4,228,000
Eastland SSD	3S1697	70,469	Jan-19			70,469	70,469
Moroni 2.34%, 20 yr	3S1705	110,000	Jan-19	Jul-19	110,000		110,000
Kane Co WCD .81% int 20 yrs	3S1712	210,000	Feb-19		168,000	42,000	210,000
Subtotal Loans and Grants Authorized					8,937,000	663,619	9,600,619
PLANNING LOANS / GRANTS IN PROCESS							
							0
Circleville	3S260P	40,000	Aug-18	system req to deauth	40,000		40,000
Enoch City	3S256P	27,500	Jul-18	Jul-18		27,500	27,500
Paragonah	3S257P	10,000	Jul-18	Aug-18		10,000	10,000
Mexican Hat	3S1703P	25,000	Nov-18	Dec-18		18,750	18,750
						0	0
					40,000	37,500	77,500
CLOSED LOANS (partially disbursed)							
Daggett Co - Dutch John 0% int 30 yrs	3S216	1,020,000	Jan-15	Feb-16	0	100,000	100,000
Henrieville	3S241	345,000	Aug-16	Nov-16	0	105,000	105,000
Mutton Hollow Imp Dist 2% int 30 yr	3S253	2,060,000	Jul-18	Sep-18	800,000		800,000
Grantsville 1.5% int, 20 yrs	3S249	3,500,000	Mar-18	Dec-18	2,500,000		2,500,000
Pleasant Grove 2% int, 20 yrs	3S255	2,300,000	May-18	Jan-19	1,950,000		1,950,000
							0
							0
Subtotal Planning Loans/Grants Auth					5,250,000	205,000	5,455,000
Total authorized or closed but not yet funded					$14,227,000	$924,869	$15,151,869
PROPOSED PROJECTS for APRIL 2019							
							0
Circleville	3S260P	(40,000)	Aug-18	deauthorization	(40,000)		(40,000)
							0
							0
							0
Total Proposed Projects					(40,000)	0	(40,000)

DIVISION OF DRINKING WATER
STATE LOAN FUNDS
AS OF February 28, 2019

	5235 Loan Funds	5240 Interest (use for Grants)	Total
Cash:	$16,089,647	$2,089,793	$18,179,440
Less:			
Loans & Grants authorized but not yet closed (schedule attached)	(8,977,000)	(701,119)	(9,678,119)
Loans & Grants closed but not fully disbursed (schedule attached)	(5,250,000)	(205,000)	(5,455,000)
Proposed loans & grants	40,000	0	40,000
Administrative quarterly charge for entire year	(1,001,950)		(1,001,950)
Appropriation to DDW	0		0
FY 2018 Federal SRF 20% match	0		0
FY 2019 Federal SRF 20% match	(2,221,400)		(2,221,400)
	(1,320,703)	**1,183,674**	**(137,029)**
Projected repayments during the next twelve months			
Thru 02-28-2020			
Principal	2,961,654		2,961,654
Interest		734,967	734,967
Projected annual investment earnings on invested cash balance		480,000	480,000
Sales Tax allocation thru Feb-28-2020	3,587,500		3,587,500
Total	**$5,228,450**	**$2,398,641**	**$7,627,091**
* All interest is added to the Hardship Fee account.			

DIVISION OF DRINKING WATER
FEDERAL SRF
AS OF February 28, 2019

FIRST ROUND FUND	
1997 thru 2018 SRF Grants	
Net Federal SRF Grants:	$171,144,401
Total State Matches:	$39,050,300
Closed Loans:	-$206,881,301
Total Grant Dollars:	**$3,313,400**

FEDERAL SECOND ROUND FUND	
Principal Repayments	
Principal (P):	$60,232,948
Interest (I):	$17,242,196
Total P & I:	**$77,475,144**

Earnings on Invested Cash Balance	
Total:	**$1,215,659**

Hardship Fund	
Total:	**$1,664,984**

SUMMARY	
Total Federal State Revolving Fund:	$82,004,203
Total Federal Hardship Fund:	$1,664,984
Subtotal:	$83,669,187

LESS AUTHORIZED & PARTIALLY DISBURSED			
Less:			
	Authorized & Partially Disbursed Closed Loans:	$36,550,836	*(see Page 2 for details)*
	Authorized Federal Hardship:	$313,674	
	Subtotal:	$36,864,510	

PROPOSED			
	Proposed Federal Project(s):	**$4,026,500**	*(see Page 2 for details)*
	Proposed Federal Hardship Project(s):	**$0**	
	Subtotal:	**$4,026,500**	

AS OF:	**February 28, 2019**		
		TOTAL REMAINING LOAN FUNDS:	**$41,426,867**
		TOTAL REMAINING HARDSHIP FUNDS:	**$1,351,310**

Total Balance of ALL Funds after deducting proposed actions: $42,778,177

Projected Receipts thru February 29, 2020		
2019 Fed SRF Grant	$8,200,000	
2019 State Match	$2,221,400	
Interest on Investments	$1,698,000	
Principal Payments	$6,687,203	**Receive 60% in January**
Interest	$1,455,217	
Hardship & Technical Assistance fees	$255,192	
RWAU DS Contract 1 year	-$135,200	
Total:	$20,381,812	

Total Estimated Federal SRF Funds Available through: 02/29/2020 **$63,159,989**

DIVISION OF DRINKING WATER
FEDERAL STATE REVOVING FUND
PROJECTS AUTHORIZED BUT NOT YET CLOSED
AS OF February 28, 2019

COMMUNITY	Project			Authorized Date	Closing Date Scheduled or Estimated	Authorized From Loan Funds (1st or 2nd Round)			Hardship Fund
	Total Project	Terms	Loan #			Loan	Forgiveness	Total	
Cove SSD	1,085,000	0% int, 30 yrs	3F285	Mar-17	Apr-19	600,000	485,000	1,085,000	
Swiss Alpine Water Company	947,000	3.53% hgf, 25 YRS	3F300	Mar-18	Jul-19	807,000		807,000	
Twin Creeks SSD (Phase II)	3,976,000	1.87% hgf, 30 yrs	3F1716	Nov-17	Dec-19	3,395,000	300,000	3,695,000	
West Corinne Water Co	553,000	2.5% hgf, 20 yrs	3F305	Aug-18		500,000		500,000	
CU WCD - Duchesne Valley WTP	3,706,000	1.5% hgf, 30 yrs	3F307	Aug-18		3,100,000		3,100,000	
Lincoln Culinary Water Assn	2,516,000	60/40 1.25% hgf, 30 yrs	3F1696	Jan-19		1,510,000	1,006,000	2,516,000	
Virgin Town	1,200,000	50% PF 0% int, 20 yrs	3F1702	Jan-19		400,000	400,000	800,000	
Canyon Meadows Mutual Wtr	1,925,000	90/10 1.0% hgf, 30 yrs	3F1700	Jan-19		1,540,000	385,000	1,925,000	
Tridell LaPoint WID	2,075,000	75/25 1.75% hgf, 30 yrs	3F1701	Jan-19		777,000	260,500	1,037,500	
Diamond Valley Acres	235,000	2.50% HGA 20 yrs	3F1706	Feb-19		235,000		235,000	
Granger Hunter ID	20,000,000	1.25% HGA 20 yrs	3F1708	Feb-19		20,000,000		20,000,000	
					TOTAL CONSTRUCTION AUTHORIZED:	**$ 32,864,000**	**$ 2,836,500**	**$ 35,700,500**	**$ -**
COMMITTED ADVANCES / AGREEMENTS or PARTIALLY DISBURSED CLOSED 2ND ROUND AGREEMENTS:									
					Date Closed				
								0	0
Rural Water Assn of Utah	676,000	5 yr contract for Development Specialist	Ongoing	Jan-18	Jun-18			0	78,000
Forest Glen Plat A HOA	1,438,986	0% int, 30 yrs	3F222	Feb-14	Dec-14	68,000	29,986	97,986	
Springdale	7,840,000	.5% int/hgf, 30 yrs	3F264	May-16	Oct-17	571,500	54,850	626,350	
Moab	90,000	100% pf	3F292P	Aug-17	Feb-18		90,000	90,000	
Johnson Water Imp Dist	90,000	100% pf	3F299P	Mar-18	May-18		36,000	36,000	
Marble Hills Water Co	40,400	1.85% int, 20 yrs	3F296	Nov-17	Mar-18			0	5,284.06
Monticello	39,000	Eng study 10 yr 0% int	3F281P	Nov-16	May-18			0	39,000
Summit Special Service District	36,600	100% pf	3F303P	Jun-18	Jul-18			0	23,140
Green River City	40,000	100% pf	3F304P	Jul-18	Jul-18			0	40,000
Minersville	23,250	100% pf	3F310P	Jul-18	Sep-18			0	23,250
Old Meadows	25,000	100% pf	3F312P	Sep-18				0	25,000
Sigurd	40,000	100% pf	3F1695P	Nov-18				0	40,000
Hildale City	40,000	100% pf	3F1704P	Nov-18				0	40,000
					TOTAL PLANNING AUTHORIZED:	**$639,500**	**$210,836**	**$850,336**	**$313,674**
				TOTAL CONSTRUCTION & PLANNING:				**$36,550,836**	**$313,674**
								AVAILABLE PROJECT FUNDS:	**$45,453,367**
								AVAILABLE HARDSHIP FUNDS:	**$1,351,310**
PROPOSED PROJECTS FOR APRIL 2019:									
								0	
Marysvale	3,665,000	0% 30 yrs	3F1709	Apr-19		2,932,000	733,000	3,665,000	
Cove Special Service District	399,000	incr project costs, 0% @ 30 yrs	3F285	Apr-19		216,000	183,000	399,000	
Circleville	1,000,000	2.5% 30 yrs	3F1710	Apr-19		1,000,000		1,000,000	
Tridell-Lapoint	(2,075,000)	Deauthorization	3F1701	Jan-19		(777,000)	(260,500)	(1,037,500)	
					TOTAL PROPOSED PROJECTS FOR THIS MEETING:	**$3,371,000**	**$655,500**	**$4,026,500**	**$0**
*RWAU hardship grant is being disbursed monthly									
			TOTAL FUNDS AFTER PROPOSED PROJECTS ARE FUNDED:						**$41,426,867**
			TOTAL FUNDS AFTER PROPOSED HS PROJECTS ARE FUNDED:						**$1,351,310**
NOTES OF LOAN CLOSINGS SINCE LAST BOARD MEETING:									
Total Recent Loan Closings						**$0**	**$0**	**$0**	**$0**

DIVISION OF DRINKING WATER
FEDERAL SRF LOAN FUNDS
AS OF February 28, 2019

	Loan Funds 1st Round	Loan Payments 2nd Round Principal	Loan Payments 2nd Round Interest	Loan Payments Hardship Fund	TOTAL
Federal Capitalization Grants and State 20% match thru 2015	$210,194,701				
Earnings on Invested 1st Round Funds			1,215,659		
Repayments (including interest earnings on 2nd round receipts)		60,232,948	17,242,196	1,664,984	290,550,488
Less:					
Closed loans and grants	-206,881,301				-206,881,301
SUBTOTAL of Funds Available	**$3,313,400**	**$60,232,948**	**$18,457,855**	**$1,664,984**	**$83,669,187**
Loans & Grants authorized but not yet closed or fully disbursed	-32,920,500	-3,419,500	-210,836	-313,674	-36,864,510
SUBTOTAL of Funds Available less Authorized	**-$29,607,100**	**$56,813,448**	**$18,247,019**	**$1,351,310**	**$46,804,677**
Future Estimates:					
Proposed Loans/Grants for current board package	-4,026,500			0	-4,026,500
SUBTOTAL of Funds Available less Proposed Loans & Grants	**-$33,633,600**	**$56,813,448**	**$18,247,019**	**$1,351,310**	**$42,778,177**
PROJECTIONS THRU February-2020					
	0				
2017 SRF Capitalization Grant (Loan Portion)	8,200,000				
2017 SRF Capitalization State Match	2,221,400				
Projected repayments & revenue during the next twelve months		6,687,203	1,455,217	119,992	8,262,412
Projected annual investment earnings on invested cash balance		1,320,000	348,000	30,000	1,698,000
TOTAL	**-$23,212,200**	**$64,820,651**	**$20,050,236**	**$1,501,302**	**$63,159,989**

Agenda Item 4(B)

Project Priority List
Presented to the Drinking Water Board
April 9, 2019

DRINKING WATER BOARD
PACKET FOR PROJECT PRIORITY LIST

There are three new projects being added to the project priority list

Circleville is being added to the Project Priority List with 23.9points. Their project consists of a chlorination building, meters, SCADA and water lines.

Marysvale is being added to the Project Priority List with 20.3 points. Their project consists of well improvement, chlorination building booster pumps and distribution lines.

Pinion Forest SSD is being added to the Project Priority List with 16.1 points. Their project consists of a new well, well house, tank and distribution line

FINANCIAL ASSISTANCE COMMITEE RECOMMENDATION:

The Drinking Water Board approve the updated Project Priority List.

March 11, 2019

Utah Federal SRF Program

Project Priority List

Total Unmet Needs: **$236,903,022** **Total Needs, incl. Recent funding** **$301,307,695** **Authorized** **$298,136,991**

	date	type	%Green	Priority Points	System Name	County	Pop.	ProjectTitle	Project Total	Request DWB	Funds Authorized
N				50.2	M & J Trailer Home	Box Elder	17	Well, Tank, Dist ines, treatment	$1,209,456.00	1849840	
N				23.9	Circleville	Piute	570	Chlorination bldg, meters, SCADA, water lines	$3,358,586.00	$3,358,856.00	
N				20.3	Marysvale Town	Piute	420	Well improvement, chlorination bldg, booster pump, dist line	$3,665,000.00	$3,665,000.00	
N				20.1	Junction Town	Piute	187	Dist lines, meters, tank hydrants and well building	$2,449,091	$2,409,091	
N				16.1	Pinion Forest SSd	Duchesne	640	Well, well house, tank, dist line	$1,415,000	$1,400,000	
A				33.3	Granger-Hunter ID	Salt Lake	121,083	Reservoir storage, dist lines, booster station, well trmnt	$25,950,000.00	$20,000,000.00	$20,000,000
A				31.6	Virgin Town	washington	596	New tank and distribution lines	$1,200,000	$800,000	$800,000
A				30.7	Canyon Meadows	Wasatch	100	Trans line, Dist line, Tank, treatment plant	$1,724,068	$1,724,068	$1,925,000
A				**27**	Bridge Hollow	Summit	45	New Well	$225,000	$225,000	$225,000
A				**26.3**	Hanksville	Wayne	210	Water Line Replacement	$601,548	$601,548	$601,548
A				**25.3**	San Juan Spanish Valley SSD	San Juan	491	New System: tank, well, distribution	$5,125,758	$2,575,758	$2,550,000
A				**24.8**	Torrey Town	Wayne	500	New water line and replacement	$2,230,000	$1,852,000	$1,852,000
A				24.3	West Corrine	Box Elder	1,275	Spring redevelopment and transmission line replacement	$533,075	$479,767	$500,000
A				**24.1**	Community Water Company	Summit	505	Water line replacement, treatment plant upgrades	$3,343,000	$3,343,000	$3,662,000
A				**19.5**	Twin Creeks SSD	Wasatch	2,500	Treatment Plant, Storage Tank, Water Lines	$5,672,650	$5,400,000	$5,338,000
A				**18.8**	Swiss Alpine	Wasatch	300	New Well and transmission line	$955,152	$815,152	$807,000
A				**18.3**	Greenwich	Piute	67	Chlorination building	$131,300	$131,300	$131,000
A				**17.3**	North Valley Ranches	Washington	25	New Well and transmission line	$450,000	$450,000	$450,000
A				**16.6**	Lincoln Culinary	Tooele	489	Well development, trans line, dist line, supply line	$2,516,000	$2,516,000	$2,516,000
A				**12.5**	Cove SSD	Sevier	100	New well, storage tank and water lines	$1,611,000	$1,085,000	$1,085,000
A				**9.7**	Juab Co	Juab	???	Regionalization pipeline	$24,000,000	$21,000,000	$21,210,000
A				7.2	Diamond Valley Acres	Washington	1370	Well equipping and conn to system	$235,000	$235,000	$235,000
A				**N/A**	Big Plains Water and Sewer SSD	Washington	720	Regionalization- purchase Canaan Springs Water Co.	$517,125	$517,125	$517,125

N = **New Application**
A = **Authorized**
P = **Potential Project- no application**

E= **Energy Efficiency**
W= **Water Efficiency**
G= **Green Infrastructure**

I= **Environmentally Innovative**

GREEN PROJECTS

March 11, 2019

Utah Federal SRF Program

Project Priority List

											Authorized
					Total Unmet Needs:		**$236,903,022**		**Total Needs, incl. Recent funding**	**$301,307,695**	**$298,136,991**
	date	type	%Green	**Priority Points**	System Name	County	Pop.	ProjectTitle	Project Total	Request DWB	Funds Authorized
					EMERGENCY FUNDING						
					POTENTIAL PROJECTS						
P				**125.2**	Soldier Summit SSD-2nd home sub	Utah	33	Water line upgrade	$530,303	$530,303	
P				**36.4**	Santa Clara (on hold)	Washington	8,000	Water line upgrades	$6,419,202	$6,354,202	
P				**35.0**	CUWCD-Utah Valley	Utah		Treatment plant upgrades	$39,369,500	$36,950,000	
P				**51.8**	Storm Haven	Wasatch	148	New Well and transmission line	$2,041,414		
N				**29**	Woodland Mutual	Summit	186	Spring redevelopment, new tank, water lines, pump station	$3,257,320	$3,257,320	
P				**20.0**	Pinon Forest	Duchesne	n/a	New system- residents haul water	$21,247,000		
P				**17.9**	Wendover	Tooele	1,600	Water line upgrades	$833,000		
P				**17.5**	Draper City	Salt Lake	15,000	Storage and distribution upgrades	$35,789,000		
P				**17.1**	East Zion SSD	Kane	49	Water line	$128,876	$128,876	
P				**16.4**	Eastland SSD	San Juan	60	New well for back up purposes	$500,000		
P				**16.4**	Neola	Duchesne	840	Waterline upgrades, storage, source improvements	$3,607,592	$3,607,592	
P				**15.3**	Newton Town	Cache	799	Spring rehabilitation, water line upgrades	$1,581,500		
P				**15.3**	South Rim Water	Tooele	264	Well equipment and house, new tank	$600,000		
P				**15.2**	Midvalley Estates Water Company	Iron	700	Source, storage, distribution	$500,000		
P				**15.1**	Syracuse	Davis	25,200	Water line upgrades	$1,589,756	$1,589,756	
P				**14.7**	Central Waterworks Co.	Sevier	450	Storage and distribution upgrades	$1,400,000		
P				**14.0**	Herriman	Salt Lake	18,431	Booster Pump, water line	$2,050,000		
P				**13.7**	Cornish Town	Cache	300	Connect to Lewiston, rehab well	$1,226,263		
P				**13.7**	Morgan City	Morgan	3,250	Water line upgrades	$692,026		
P				**13.5**	Riverdale	Weber	8,200	New well and tank, water line upgrades	$2,050,000		
P				**13.3**	Richfield City	Sevier	7,111	System repairs	$2,722,000		
P				**13.0**	Uintah City	Weber	1,300	Treatment	$1,063,000		
P				**12.8**	Centerfield	Sanpete	1,200	New tank, upgrade water lines	$3,600,000		
P				**12.6**	Enterprise	Washington	1,500	New tank, upgrade water lines	$1,917,100		
P				**12.6**	Price River	Carbon	7,659	New tank, water lines, treatment	$2,750,000		
P				**11.6**	Manila Culinary Water Co.	Utah	2,450	Treatment and water line upgrades	$700,000		
P				**11.6**	Jordan Valley WCD	Salt Lake	82,500	Flouride facility, well equipping	$3,694,000	$2,000,000	
P				**11.4**	Pineview West Water Company	Weber	115	Telemetry system	$25,000		
P				**11.4**	North Ogden City	Weber	15,000	Water line upgrades	$746,000	$746,000	

March 11, 2019

Utah Federal SRF Program

Project Priority List

Total Unmet Needs: **$236,903,022** **Total Needs, incl. Recent funding** **$301,307,695** **Authorized** **$298,136,991**

	date	type	%Green	Priority Points	System Name	County	Pop.	ProjectTitle	Project Total	Request DWB	Funds Authorized
P				11.3	Farmington	Davis	15,000	New well, new tank, water line replacement	$2,830,000		
P				10.7	Ogden City	Weber	77,000	Source rehabilitation, treatment plant upgrades	$26,500,000		
P				10.7	High Valley Water Company	Summit	850	Water line upgrades	$1,000,000		
P				10.3	City of Monticello	San Juan	2,000	Storage and distribution upgrades	$1,200,000		
P				9.8	Gorgoza	Summit	4,200	Waterline upgrades	$1,000,000		
P				9.7	Moutain Regional SSD	Summit	6,700	Transmission line	$600,000		
P				9.7	Benson Culinary Water District	Cache	743	New tank, water line replacement	$500,000		
P				9.3	Mapleton City	Utah	7,300	Replace distribution lines	$15,339,560		
P				9.2	Greendale Water Co.	Daggett	500	Treatment system	$800,000		
P				9.1	Center Creek	Wasatch	200	Pump house and pump	$80,000		
P				8.4	Nibley City	Cache	4,300	New tank	$1,270,355		
P				8.3	Hurricane	Washington	8,000	Water line replacement and new tank	$5,047,899		
P				7.6	Harmony Farms Water User Assoc.	Washington	300	Water line Replacement	$3,000		
P				6.8	Hooper Water Improvement District	Weber	16,520	Storage, water lines, treatment	$2,887,000		
P				6.7	Centerville City	Davis	16,000	Replacement well, water line upgrades	$2,965,000		
P				6.1	Marble Hill Water Company	Box Elder	250	New storage tank	$225,000		
P				4.5	Peterson Pipeline Association	Morgan	450	Source, storage, distribution	$1,700,000		
P				4.5	Perry City	Box Elder	4,603	Source, storage, distribution	$4,782,220		
P				3.9	Wolf Creek Country Club	Weber	2,000	Water line	$180,000		
P				3.4	Highland City	Utah	15,066	New well houses	$650,000		

Agenda Item 4(C)(i)(a)

Circleville Town
Presented to the Drinking Water Board
April 9, 2019

DRINKING WATER BOARD
BOARD PACKET FOR CONSTRUCTION ASSISTANCE

APPLICANT'S REQUEST:

Circleville Town is requesting $1,000,000 in financial assistance to fund the construction of a new chlorination building, installation of approximately 40,000-feet of water line, installation of new metering equipment and SCADA.

STAFF COMMENTS:

The local MAGI for Circleville Town is $31,316 which is 68% of the State MAGI and the monthly water bill for the recommended funding is $31.74per month, which is 1.22% of the local MAGI. Circleville Town's MAGI is < 80% of the State MAGI and therefore they qualify as a disadvantaged community. Staff's funding recommendation is for a reduced interest rate and an extended term.

Option #	Description	Repayable Loan Amount	Interest Rate	Term	Principal Forgiveness	Monthly Water Rate	% Local MAGI
1	Full Loan	$ 1,000,000	3.92%	30 yrs	0	$34.77	1.33%
2	Full Loan	$ 1,000,000	2.50%	20 yrs	0	$32.45	1.42%
3	Full Loan	$ 1,000,000	2.50%	30 yrs	0	$31.74	1.22%

FINANCIAL ASSISTANCE COMMITTEE RECOMMENDATION:

The Drinking Water Board authorize a loan of $1,000,000 at 2.50% hardship grant assessment fee for 30 years.

APPLICANT'S LOCATION:

Circleville Town is located in Piute County approximately 55 miles east of Beaver, Utah.

MAP OF APPLICANT'S LOCATION:

PROJECT DESCRIPTION:

Circleville Town is seeking to build a new chlorination building, install new metering, install 10,800-feet of 12-inch C900 water line, 2,600-feet of 10-inch C900 water line, and install new SCADA system. In addition, some of the existing 2-inch water lines will be replaced with 10-inch water line to help improve dependability and pressure.

POPULATION GROWTH:

	Year	Population	Connections
Current:	2019	570	327
Projected:	2040	880	503
Annual growth rate		2.07%	2.05%

COST ESTIMATE:

Legal/Bonding/Admin		$ 32,000
Engineering – Environmental	17%	$ 44,000
Engineering – Design		$ 56,000
Engineering – CMS		$ 72,000
Construction		$ 692,000
Contingency (~ 15%)		$ 104,000
Total		**$ 1,000,000**

COST ALLOCATION:

Circleville Town is not bringing a local contribution to this project

Funding Source	Cost Sharing	Percent of Project
DWB	$ 1,000,000	100%
Local Contribution	$ 0	0%
	$ 1,000,000	100%

IMPLEMENTATION SCHEDULE:

FA Committee Conference Call:	March 6, 2019
DWB Funding Authorization:	April 9, 2019
Complete Design:	August 2019
Plan Approval:	September 2019
Advertise for Bids:	September 2019
Loan Closing	October 2019
Begin Construction:	November 2019
Complete Construction:	November 2020

IPS SUMMARY:

Code	Description	Physical Facilities	Quality & Monitoring	Significant Deficiency Violations
M001	Current Emergency Response Program	-10		
D004	Air or Vacuum Release Valves Not Properly Screened	10		
M004	Cross Connection Control – No Annual Public Education or Awareness	10		
M007	Cross Connection Control – Lacks On-Going Enforcement Plan	10		
SP04	System Not Current on All DWSP Updates	10		
SS01	Spring Lacks a Permanent Flow Measuring Device	5		
SS03	Spring Collection Area Lacks a Diversion Channel	5		
SS07	Deep Rooted Vegetation in Spring Collection Area	10		
SS21	Drain Line Does Not Have Adequate Air Gap not Covered in IPS	0		
SSL2	Vent Not Present	0		
V003	Storage Facility Cover Not Sloped for Drainage	10		
	Total = 9	**60**	**0**	**0**

CONTACT INFORMATION:

APPLICANT:	Circleville Town 210 South Center PO Box 69 Circleville, Utah 84723 435-690-0538
PRESIDING OFFICIAL	Koby Willis, Mayor PO Box 69 Circleville, Utah 84723 435-690-0538
CONSULTING ENGINEER:	Jeff Albrecht, P.E. Savage Albrecht Engineering 1925 South Industrial Park Road Richfield, Utah 84701 435-896-8635 jeff@savagealbrechtengineering.com
RECORDER:	Makeisia Westwood 435-690-0538
BOND ATTORNEY:	Richard Chamberlain Chamberlain and Associated 225 N 100 E Richfield, Utah 84701 435-896-4461 nobismike@gmail.com

DRINKING WATER BOARD FINANCIAL ASSISTANCE EVALUATION

SYSTEM NAME: Circleville
FUNDING SOURCE: Federal SRF
COUNTY: Piute
PROJECT DESCRIPTION: Install Spring Chlorination Building, meters, waterline, SCADA

100 % Loan & 0 % P.F.

ESTIMATED POPULATION:	570	NO. OF CONNECTIONS:	327 *	SYSTEM RATING:	APPROVED
CURRENT AVG WATER BILL:	$27.13 *			PROJECT TOTAL:	$1,000,000
CURRENT % OF AGI:	1.04%	FINANCIAL PTS:	32	LOAN AMOUNT:	$1,000,000
ESTIMATED MEDIAN AGI:	$31,316			PRINC. FORGIVE.:	$0
STATE AGI:	$45,895			TOTAL REQUEST:	$1,000,000
SYSTEM % OF STATE AGI:	68%				

	$1,000,000 FULL LOAN 2.50%	$1,000,000 FULL LOAN 3.92%		AFTER REPAYMENT PENALTY & POINTS 2.50%
SYSTEM				
ASSUMED LENGTH OF DEBT, YRS:	20	20		30
ASSUMED NET EFFECTIVE INT. RATE:	2.50%	3.92%		2.50%
REQUIRED DEBT SERVICE:	$64,147.13	$73,061.45		$47,777.64
*PARTIAL COVERAGE (15%):	$9,622.07	$10,959.22		$7,166.65
*ADD. COVERAGE AND RESERVE (10%):	$6,414.71	$7,306.14		$4,777.76
ANNUAL NEW DEBT PER CONNECTION:	$245.21	$279.29		$182.64
O & M + FUNDED DEPRECIATION:	$35,790.00	$35,790.00		$35,790.00
OTHER DEBT + COVERAGE:	$29,051.25	$29,051.25		$29,051.25
REPLACEMENT RESERVE ACCOUNT:	$0.00	$0.00		$0.00
ANNUAL EXPENSES PER CONNECTION:	$198.29	$198.29		$198.29
TOTAL SYSTEM EXPENSES	$145,025.16	$156,168.06		$124,563.30
TAX REVENUE:	$0.00	$0.00		$0.00
RESIDENCE				
MONTHLY NEEDED WATER BILL:	$36.96	$39.80		$31.74
% OF ADJUSTED GROSS INCOME:	1.42%	1.53%		1.22%

* Equivalent Residential Connections

Agenda Item 4(C)(i)(b)

Cove Special Service District
Presented to the Drinking Water Board
April 9, 2019

DRINKING WATER BOARD
BOARD PACKET FOR CONSTRUCTION ASSISTANCE
REVISED AUTHORIZATION

APPLICANT'S REQUEST:

Cove Special Service District (CMSSD) is requesting a revised amount of $1,484,000 in financial assistance for well exploration/development, upgrade/repair to an existing well, construction of a new 300,000 gallon tank and the installation of 1000-ft of 6-inch PVC transmission water lines and 16,000 feet if 8-inch PVC distribution water lines.

STAFF COMMENTS:

On March 2, 2017, the Drinking Water Board authorized funding for this project, however, bids were recently opened and came in higher than estimated. There were three bidders and the bids were all within 1.25% of each other. Some of the reasons for the increased costs are related to the delays associated with purchase of the land where the tank will be sited, a change in the well location, addition of a mainline booster pump station to the design scope, and the current construction environment.

CMSSD has value engineered some of the project scope but a $399,000 funding shortfall still remains. In addition, the top two bidders have indicated they will not be able to honor their bids for longer than 60 days.

The local MAGI for Cove SSD is $29,622 which is 69% of the State MAGI $45,895 and therefore they do qualify as a disadvantaged community. In addition, the proposed funding package would result in an average water bill of $46.46 per month, which would be 1.82% of the local MAGI. Staff's recommendation is based on a proportional increase of loan and grant from the original authorization.

Option #	Description	Repayable Loan Amount	Interest Rate	Term	Principal Forgiveness	Monthly Water Rate	% Local MAGI
1	**55/45**	**$ 816,000**	**0.0%**	**30 yrs**	**$ 668,000**	**$46.46**	**1.82%**
Original DWB Auth	55/45	$ 600,000	0.0%	30 yrs	$ 485,000	$45.72	1.79%

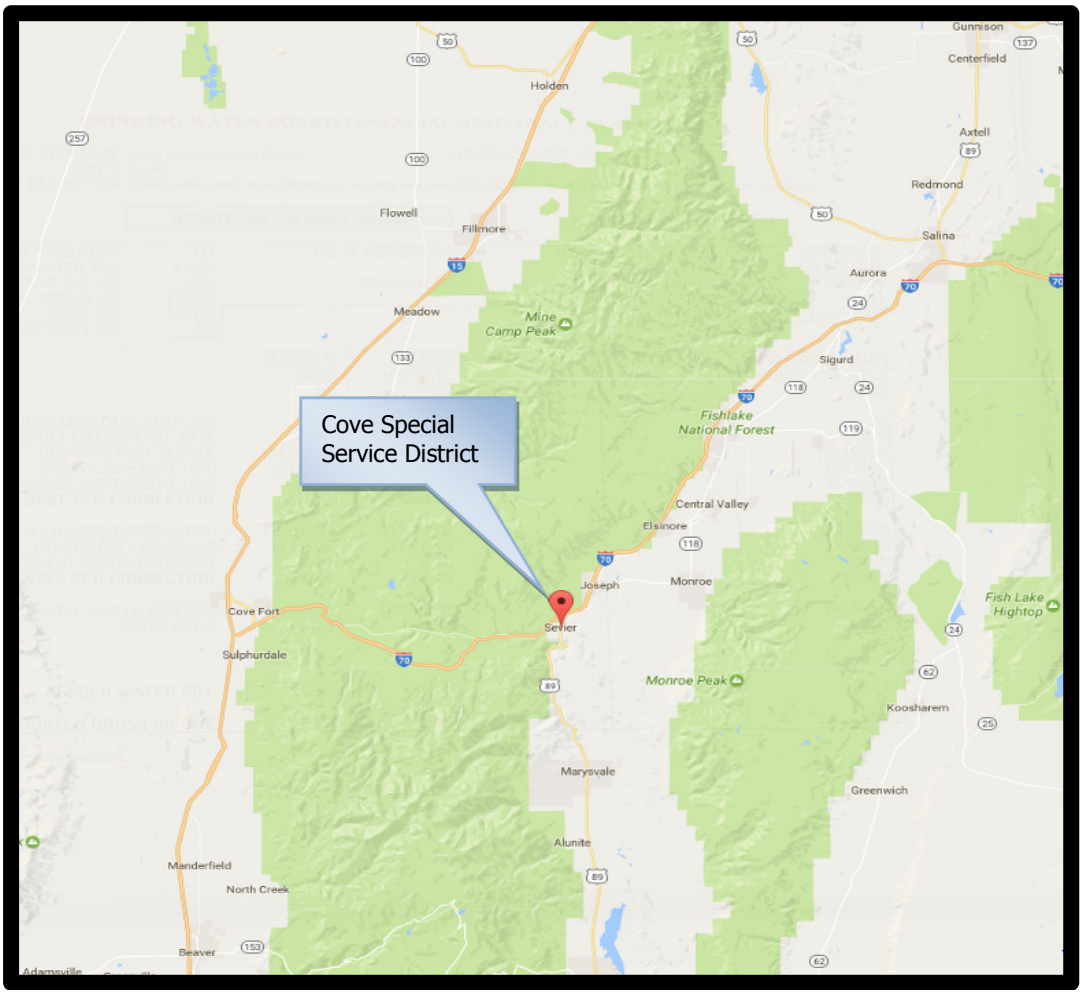
FINANCIAL ASSISTANCE COMMITTEE RECOMMENDATION:

The Drinking Water Board modify the prior funding authorization to a loan of $1,484,000 at 0% interest/fee for 30 years with $668,000 in Principal Forgiveness. The repayable amount will be $816,000.

APPLICANT'S LOCATION:

Cove Special Service District is located near the town of Joseph in Sevier County approximately 175 miles south of Salt Lake City.

MAP OF APPLICANT'S LOCATION:



PROJECT DESCRIPTION:

The primary purpose of this project is to develop an additional well, repair/upgrade the existing well, and to replace some of the existing undersized waterlines. Currently a single well services the system and is not able to provide sufficient water during the summer months nor is there enough storage capacity to meet the Division of Drinking Water's requirements. A new 300,000 gallon concrete storage tank will be constructed toward the north end of the system that will help balance the system and improve flows on the northern end. Some of the existing 6-inch waterlines will be replaced with 8-inch lines and there will be new 8-inch waterlines in the system to improve flow.

POPULATION GROWTH:

	Year	Cove SSD Population	Cove SSD Connections
Current:	2017	114	57
Projected:	2040	153	75
Growth Rate		1.28%	1.19%

REVISED IMPLEMENTATION SCHEDULE:

Apply to DWB for Funds:	January 2017
Apply to CIB for Funds	March 2017
DWB Funding Authorization:	March 2017
Plan Approval	June 2017
Advertise for Bids:	June 2017
Bid Opening	June 2017
DWB Revised Funding Authorization	April 2019
Loan Closing	May 2019
Begin Construction	May 2019
Complete Construction	November 2019
Receive Operating Permit:	November 2019

COST ESTIMATE:

	As originally authorized	After bid opening	Difference
Legal/Bonding	$ 21,000	$ 15,000	$ -6,000
Engineering - Design	$ 96,000	$ 165,000	$ 69,000
Engineering - CMS	$ 72,000	$ 70,000	$ -2,000
Construction	$ 1,241,000	$ 1,644,099	$ 403,099
Contingency	$ 181,000	$ 95,901	$ -85,099
Property Purchase	$ 0	$ 20,000	$ 20,000
Total	**$ 1,611,000**	**$ 2,010,000**	**$ 399,000**

COST ALLOCATION:

The cost allocation proposed for the project is shown below.

Funding Source	Cost Sharing	Percent of Project
DWB	$ 1,484,000	74%
CIB	$ 510,000	25%
Local Contribution	$ 16,000	1%
	$ 2,010,000	100%

IPS SUMMARY:

Code	Description	Physical Facilities	Quality & Monitoring	Significant Deficiency Violations
M001	Current Emergency Response Program	-10		
	Total = 9	**-10**	**0**	**0**

APPLICANT:	Cove Special Service District 1105 South Sevier Highway Joseph, UT 84739 435-979-4538
PRESIDING OFFICIAL & CONTACT PERSON:	Randell Obray, President 1105 South Sevier Highway Joseph, UT 84739 435-979-4538 rgobraycovessd@gmail.com
TREASURER/RECORDER:	Laura Obray 1105 South Sevier Highway Joseph, UT 84739 435-979-4538
CONSULTING ENGINEER:	Kelly Crane Ensign Engineering and Land Surveying 225 North 100 East Richfield, UT 84701 435-869-2983 kcrane@ensignutah.com

DRINKING WATER BOARD FINANCIAL ASSISTANCE EVALUATION

SYSTEM NAME: Cove Special Service District FUNDING SOURCE: Federal SRF
COUNTY: Sevier
PROJECT DESCRIPTION: Well development, recapitalization of existing well, new 300,000 gal tank, and transmission and distribution waterlines

55 % Loan & 45 % P.F.

ESTIMATED POPULATION:	114	NO. OF CONNECTIONS:	87 *	SYSTEM RATING:	APPROVED
CURRENT AVG WATER BILL:	$17.00 *			PROJECT TOTAL:	$2,010,000
CURRENT % OF AGI:	0.67%	FINANCIAL PTS:	40	LOAN AMOUNT:	$816,000
ESTIMATED MEDIAN AGI:	$30,606			PRINC. FORGIVE.:	$668,000
STATE AGI:	$43,196			TOTAL REQUEST:	$1,484,000
SYSTEM % OF STATE AGI:	71%				

	@ ZERO % RATE 0%	@ RBBI MKT RATE 3.83%		AFTER REPAYMENT PENALTY & POINTS 0.00%
SYSTEM				
ASSUMED LENGTH OF DEBT, YRS:	30	30		30
ASSUMED NET EFFECTIVE INT. RATE:	0.00%	3.83%		0.00%
REQUIRED DEBT SERVICE:	$27,200	$46,220		$27,200
*PARTIAL COVERAGE (15%):	$4,080	$6,933		$4,080
*ADD. COVERAGE AND RESERVE (10%):	$2,720	$4,622		$2,720
ANNUAL NEW DEBT PER CONNECTION:	$391	$664		$391
O & M + FUNDED DEPRECIATION:	$13,000	$13,000		$13,000
OTHER DEBT + COVERAGE:	$1,500	$1,500		$1,500
REPLACEMENT RESERVE ACCOUNT:	$0	$0		$0
ANNUAL EXPENSES PER CONNECTION:	$166.67	$166.67		$166.67
TOTAL SYSTEM EXPENSES	$48,500	$72,275		$48,500
TAX REVENUE:	$0.00	$0.00		$0.00
RESIDENCE				
MONTHLY NEEDED WATER BILL:	$46.46	$69.23		$46.46
% OF ADJUSTED GROSS INCOME:	1.82%	2.71%		1.82%

* Equivalent Residential Connections

Agenda Item 4(C)(i)(c)

Marysvale Town
Presented to the Drinking Water Board
April 9, 2019

DRINKING WATER BOARD
BOARD PACKET FOR CONSTRUCTION LOAN

APPLICANT'S REQUEST:

Marysvale Town is requesting financial assistance in the amount of $3,665,000. Their project includes improvements and upgrades to their existing well, a new line to the well, a chlorination building, booster pumps for the upper zones, distribution line, service laterals and misc appurtenances.

STAFF COMMENTS:

The local MAGI for Marysvale Town is approximately $31,145 (70% of the state MAGI), their after project water bill at a full loan would be $89.94 which is 3.47% of the local MAGI. Therefor they do qualify for additional subsidy.

Option #	Description	Repayable Loan Amount	Interest Rate	Term	Grant or Principal Forgiveness	Monthly Water Rate	% Local MAGI
1	Full Loan	$3,665,000	2.73%	20 yrs	0	$89.94	3.47 %
2	Full Loan	$3,665,000	0.00%	20 yrs	0	$72.16	2.78%
3	Full Loan	$3,665,000	0.00%	30 yrs	0	$53.11	2.05%
4	20% PF	$2,932,000	0.00%	20 yrs	$733,000	$60.73	2.34%
5	20% PF	$2,932,000	0.00%	30 yrs	$733,000	$45.49	1.75%
6	30% PF	$2,566,000	0.00%	20 yrs	$1,099,000	$55.03	2.12%

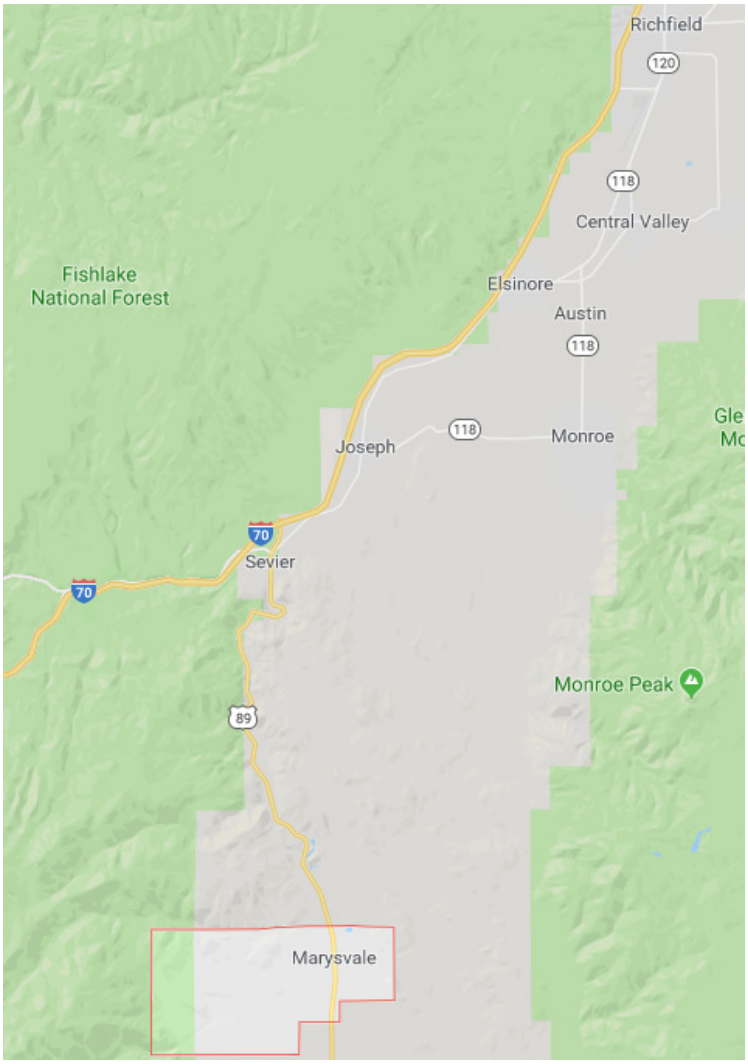
FINANCIAL ASSISTANCE COMMITTEE RECOMMENDATION:

The Financial Assistance Committee recommend the Drinking Water Board authorize a loan of $3,665,000 at 0% interest for 30 years with $733,000 in principal forgiveness.

APPLICANT'S LOCATION:

Marysvale Town is located in Piute County approximately 29 miles South of Richfield.

MAP OF APPLICANT'S LOCATION:



PROJECT DESCRIPTION:

Their project includes improvements and upgrades to their existing well, a new line to the well, a chlorination building, booster pumps for the upper zones, distribution line, service laterals and misc appurtenances.

POPULATION GROWTH:

Projected populations and number of connections are shown in the table below:

Year	Population	Connections
2020	429	361
2025	499	398
2030	548	439
2035	579	485
2040	639	520

IMPLEMENTATION SCHEDULE:

DWB Funding Authorization:	Apr 2019
Complete Design:	Aug 2019
Plan Approval:	Sep 2019
Advertise for Bids:	Sep 2019
Begin Construction:	Oct 2019
Complete Construction:	Nov 2020

COST ESTIMATE:

Legal – Bonding, Admin	$12,000
Environmental clearances	$70,000
Engineering- Plan, Design, CMS	$390,000
Construction – source	$647,900
Construction – lines	$1,002,000
Construction – treatment facility	$200,000
Hydrants, surface restoration, mobilization	$923,000
Contingency	$420,100
Total Project Cost	**$3,665,000**

COST ALLOCATION:

The cost allocation proposed for the project is shown below:

Funding Source	Cost Sharing	Percent of Project
DWB Loan	$2,932,000	80%
DWB Principal Forgiveness	$733,000	20%
Total	$3,665,000	100%

IPS SUMMARY:

Code	Description	Physical Facilities	Quality & Monitoring	Significant Deficiency Violations
M001	Current Emergency Response Program	-10		
M003	Cross Connection Control – Lacks local authority	10		
M004	Cross Connection Control – No Annual Public Education or Awareness	10		
M006	Cross Connection Control – Lacks written records	10		
M007	Cross Connection Control – Lacks on-going enforcement plan	10		
S015	Well lacks means to measure drawdown	1		
S020	Well house station not protected from flooding	5		
SL01	No means to release trapped air from source pump	5		
SP04	System not current on DWSP updates	10		
SS07	Deep rooted vegetation in spring collection area	10		
SS10	Spring box lacks gasket on lid	5		
SS14	Spring box drain/overflow lacks proper freefall	5		
TD01	CL2 – No automatic CL cylinder switch cover	2		
TD08	CL2- Building improper heat light or ventilation	2		
TD09	CL2-Improper location for ventilating fan suction	5		
TD13	CL2 Feed vent improperly vented or screened	2		
TD22	CL2 Insufficient back up equipment	10		
V005	Storage facility vent not turned down	2		
V009	Storage facility access lacks proper gasket	3		
V011	Storage facility overflow pipe lacks freefall	5		
V016	Storage facility drain line lacks freefall	5		
	Total = 107	**107**	**0**	**0**

CONTACT INFORMATION:

APPLICANT:	Marysvale Town PO Box 160 Marysvale, Utah 84750 435-326-4597
PRESIDING OFFICIAL & CONTACT PERSON:	Janet Fautin Mayor PO Box 160 Marysvale, Utah 84750 435-326-4597
CONSULTING ENGINEER:	Jeff Albrecht Savage Albrecht Engineering 1925 S Industrial Park Rd Richfield, Utah 84701 435-896-8635 jeff@saeutah.com
RECORDER:	Wendy Steed 435-326-4597
BOND COUNSEL:	Richard Chamberlain Chamberlain and Associates 225 N 100 E Richfield, Utah 84701 435-896-4461

DRINKING WATER BOARD FINANCIAL ASSISTANCE EVALUATION

SYSTEM NAME: Marysvale Town
COUNTY: Piute
PROJECT DESCRIPTION: Chlorination bldg, well imp. Booster pump

FUNDING SOURCE: Federal SRF

80 % Loan & 20 % P.F.

ESTIMATED POPULATION:	420	NO. OF CONNECTIONS:	334 *	SYSTEM RATING:	APPROVED
CURRENT AVG WATER BILL:	$18.96 *			PROJECT TOTAL:	$3,665,000
CURRENT % OF AGI:	0.73%	FINANCIAL PTS:	30	LOAN AMOUNT:	$2,932,000
ESTIMATED MEDIAN AGI:	$31,145			PRINC. FORGIVE.:	$733,000
STATE AGI:	$44,268			TOTAL REQUEST:	$3,665,000
SYSTEM % OF STATE AGI:	70%				

	@ ZERO % RATE	@ RBBI MKT RATE		AFTER REPAYMENT PENALTY & POINTS
	0%	3.92%		0.00%
SYSTEM				
ASSUMED LENGTH OF DEBT, YRS:	30	30		30
ASSUMED NET EFFECTIVE INT. RATE:	0.00%	3.92%		0.00%
REQUIRED DEBT SERVICE:	$97,733.33	$167,914.73		$97,733.33
*PARTIAL COVERAGE (15%):	$14,660.00	$25,187.21		$14,660.00
*ADD. COVERAGE AND RESERVE (10%):	$9,773.33	$16,791.47		$9,773.33
ANNUAL NEW DEBT PER CONNECTION:	$365.77	$628.42		$365.77
O & M + FUNDED DEPRECIATION:	$35,172.00	$35,172.00		$35,172.00
OTHER DEBT + COVERAGE:	$25,000.00	$25,000.00		$25,000.00
REPLACEMENT RESERVE ACCOUNT:	$0.00	$0.00		$0.00
ANNUAL EXPENSES PER CONNECTION:	$180.16	$180.16		$180.16
TOTAL SYSTEM EXPENSES	$182,338.67	$270,065.41		$182,338.67
TAX REVENUE:	$0.00	$0.00		$0.00
RESIDENCE				
MONTHLY NEEDED WATER BILL:	$45.49	$67.38		$45.49
% OF ADJUSTED GROSS INCOME:	1.75%	2.60%		1.75%

* Equivalent Residential Connections

Agenda Item 4(C)(i)(d)

Tridell Lapoint Water Improvement District
Presented to the Drinking Water Board
April 9, 2019

DRINKING WATER BOARD
BOARD PACKET FOR CONSTRUCTION LOAN
AUTHORIZATION

STAFF COMMENTS:

The Drinking Water Board authorized a loan of $1,037,500 at 1.75% hardship grant assessment fee for 30 years with $260,500 in Principal Forgiveness to Tridell Lapoint WID on January 15, 2019.

Staff has received correspondence from Tridell Lapoint WID indicating that they no longer require the funding package and have declined.

STAFF RECOMMENDATION:

The Drinking Water Board de-authorize the loan of $1,037,500 at 1.75% hardship grant assessment fee for 30 years with $260,500 in Principal Forgiveness.

Agenda Item 5(A)(i)(a)

R309-400 Water System Rating Criteria (Improvement Priority System)
Presented to the Drinking Water Board
April 9, 2019

Proposed Substantive Changes for R309-400

PROPOSAL:

We propose to make the following changes to R309-400, *Water System Rating Criteria (Improvement Priority System)*:

1) Repeal the existing rule and reenact the new rule in its place.

2) Remove the individual violations and deficiencies from the rule to be a separate Improvement Priority System (IPS) implementation policy. This policy will require a separate approval from the Drinking Water Board for substantive revisions.

HISTORY/CONTEXT:

The IPS rule was first finalized in 1996 as a tool for water systems to track compliance with violations and physical deficiencies. It helps systems understand the severity of any issues and maintain compliance. Since its inception in 1996, the IPS rule has had only minor changes. The purpose of this proposed rule revision is to emphasize the importance of significant deficiencies, align better with federal regulations, and ensure that risk to public health is the driving force behind the rule.

DIVISION STAFF/DIRECTOR RECOMMENDATION:

Division staff recommends that the Board authorize it to begin rulemaking to amend R309-400 and to file the proposed rule repeal and reenactment with the Office of Administrative Rules for publication in the Utah State Bulletin.

IMPLEMENTATION SCHEDULE:

The Division anticipates making the repeal and reenactment effective June 15, 2019 with an implementation start date of January 1, 2020. The schedule for starting the rulemaking process is as follows:

1. Drinking Water Board Authorizes Rulemaking to Amend Rule – April 9, 2019
2. File Proposed Rule Amendment with Office of Administrative Rules – April 15, 2019
3. Begin 30-Day Comment Period (Utah State Bulletin Publication) – May 1, 2019
4. End 30-Day Comment Period – May 31, 2019
5. Return to Drinking Water Board – June 11, 2019

COST ESTIMATE:

The new R309-400 rule does not add any new requirements to the existing rules in R309. It only enforces them. The proposed amendment to R309-400 is not expected to result in costs or savings to the state budget, local governments, or small businesses.

R309-400 Water System Rating Criteria (Improvement Priority System)
Presented to the Drinking Water Board
April 9, 2019

DRINKING WATER BOARD PACKET
Proposed Rule Language

R309-400. Improvement Priority System and Public Water System Ratings.

R309-400-1. Purpose.

The purpose of this rule is to establish the Improvement Priority System used by the division to assign compliance ratings to public water systems and to prioritize enforcement action based on points assessed for noncompliance with drinking water rules.

R309-400-2. Authority.

This rule is promulgated by the Drinking Water Board as authorized by Title 19, Environmental Quality Code, Chapter 4, Safe Drinking Water Act, Subsection 104, of the Utah Code and in accordance with 63G, Chapter 3 of the same, known as the Administrative Rulemaking Act.

R309-400-3. Definitions.

"Improvement Priority System (IPS)" is a point system used by the division to evaluate a public water system's performance and compliance with the drinking water rules in Title 309, *Environmental Quality, Drinking Water.*

"Public Water System Rating" is assigned to a public water system by the director to characterize the water system's compliance with drinking water rules and overall operation and performance.

R309-400-4. Improvement Priority System – Assessment of Points.

1. The division shall:

    a. maintain and make public an IPS implementation policy that includes:

        i. a table specifying the number of points associated with each instance of noncompliance with a drinking water rule requirement and noncompliance with a directive or order issued by the director, and

        ii. the point thresholds for assigning an Approved or Not Approved rating to each type of public water system; and

    b. obtain approval from the Drinking Water Board for substantive revisions to the policy.

2. The director may assess points to a public water system and take enforcement action in accordance with the implementation policy and the table of points based on:

    a. noncompliance with Title R309 of the Utah Administrative Code;

    b. noncompliance with a directive or order issued by the director; or

    c. operational practices or performance that may result in a threat to public health.

R309-400-5. Public Water System Ratings.

1. The director may assign a rating to a public water system of:

    a. Approved based on the total number of points assessed for noncompliance;

    b. Not Approved based on:

        i. the total number of points assessed for noncompliance, or

        ii. an immediate public health threat; or

    c. Corrective Action based on a current, written agreement with the division to resolve underlying noncompliance according to a compliance schedule.

2. A public water system shall maintain an Approved rating.

3. A public water system with a Not Approved rating shall:

    a. take immediate action to resolve the noncompliance that resulted in the Not Approved rating; or

    b. enter into a written agreement with the division to resolve the noncompliance that resulted in the Not Approved rating according to a compliance schedule.

R309-400-6. Administrative Appeals.

1. The assessment of points does not constitute a permit order per R305-7-102(1)(l) and may not be appealed pursuant to R305-7.

2. The assignment of a rating to a public water system constitutes an initial order per R309-7-102(1)(g) and may be appealed by submitting, filing, and serving a written Request for Agency Action pursuant to R305-7-303 within 30 days of the date of the order issued by the director.

KEY: drinking water, environmental protection, penalties
Date of Enactment or Last Substantive Amendment: [~~November 22, 2016~~]
Notice of Continuation: March 22, 2010
Authorizing, and Implemented or Interpreted Law: 19-4-104

R309-400 Water System Rating Criteria (Improvement Priority System)
Presented to the Drinking Water Board
April 9, 2019

DRINKING WATER BOARD PACKET
Draft IPS Implementation Policy
(To be approved at a later date)

IPS Implementation Policy

I. Introduction

The Improvement Priority System (IPS) is used by the Division of Drinking Water to evaluate a public water system's compliance with Title R309 of the Utah Administrative Code and to prioritize noncompliance for enforcement action. Under IPS, the Division assesses points for noncompliance and assigns ratings to public water systems.

Implementation of IPS is based on three documents:

1. Utah Administrative Code R309-400, I*mprovement Priority System and Public Water System Ratings* − the IPS rule establishes the IPS program, the Division's and the Director's authority, and a public water system's responsibility. Changes to the rule must go through the official rulemaking process.

2. The *IPS Implementation Policy* – the IPS policy, which is this document, establishes the points associated with noncompliance and the point thresholds for assigning public water system ratings. Changes to the implementation policy need to be reviewed and approved by the Drinking Water Board.

3. The *IPS Implementation Standard Operating Procedure (SOP)* – the IPS SOP outlines the Division's internal procedures for implementing the IPS program in detail. The SOP may be modified as needed by the Division.

II. Assessment of Points

1. The Division will assess points based on noncompliance with Title R309 of the Utah Administrative Code, noncompliance with a directive or order issued by the director, or operational practices or performance that may result in a threat to public health.

2. In general, the **Points** assessed for each category of health threat are as follows:

    a) Low health risk – 5 points
    b) Minor potential to cause harm – 15 points
    c) Moderate potential to cause harm; harm becomes worse if not addressed – 25 points
    d) Significant potential to cause harm – 50 points
    e) Monitoring violations – 100 points
    f) Imminent health threat (automatic not-approved status) – 200 Points

3. **Appendix 1** of this document contains tables specifying the number of points associated with each instance of noncompliance with a drinking water rule requirement and noncompliance with a directive or order issued by the director.

4. The Division will remove points when a water system submits written documentation of correction of a deficiency with supporting evidence or when the noncompliance is resolved. In some cases, a site inspection by DDW may be required.

III. Public Water System Rating Thresholds

1. The Division will rate a public water system based on the point thresholds shown below or based on a written agreement with the director.

2. The point thresholds for rating a public water system as Approved or Not Approved are different for each type of water system and are given below:
    - Community Water System – 150 points
    - Non-transient Non-community Water System – 120 points
    - Transient Non-community Water System – 100 points

3. Per R309-400, the Division will assign Ratings to water systems as follows:
    - **Approved** – the total number of points is below the point threshold
    - **Not Approved** – the total number of points is equal to or greater than the point threshold or the Director finds a threat to public health
    - **Corrective Action** – a water system has entered into a written agreement with the Director to resolve its deficiencies according to a compliance schedule

IV. Changes to the IPS Implementation Policy

1. The Division may make changes to the IPS Implementation Policy when dictated by the need to revise its enforcement priority system.
2. All changes to the policy, except for non-substantive changes, will be reviewed and approved by the Drinking Water Board.

R309-400 Water System Rating Criteria (Improvement Priority System)
Presented to the Drinking Water Board
April 9, 2019

DRINKING WATER BOARD PACKET
Draft IPS Deficiency Tables
(To be approved at a later date)

Deficiency Code	(CURRENT) Database Description	(CURRENT) Deficiency Type	(CURRENT) IPS	*DRAFT Database Description*	(PROPOSED) Deficiency Type	(PROPOSED) IPS Points	Rule Reference
General							
G004	INSUFFICIENT SYSTEM OWNERSHIP INFORMATION	MIN	10	Designated Legal Ownership	Sig	25	R309-100-4(3)
R000	LACKS LEAD/COPPER SAMPLE SITE PLAN	MIN	10	Monitoring/sample site plan (ie arsenic, blending, LCR, DBP, etc)	Min	5	R309-210
				Systems must submit annual water use data to DWRi and verify water use data accuracy (points acrew each year of violation)	Min	15	
A025	ADMINISTRATIVE ISSUES - SEE NOTES FOR SPECIFIC DETAILS	MIN	25	Administrative Issues - see R309-400 for details	Min	15	R309-400-11
A050	ADMINISTRATIVE ISSUES - SEE NOTES FOR SPECIFIC DETAILS	SIG	50	Administrative Issues - see R309-400 for details	Sig	25	R309-400-11
A075	ADMINISTRATIVE ISSUES - SEE NOTES FOR SPECIFIC DETAILS	SIG	75	Administrative Issues - see R309-400 for details	Sig	50	R309-400-11
A100	ADMINISTRATIVE ISSUES - SEE NOTES FOR SPECIFIC DETAILS	SIG	100	Administrative Issues - see R309-400 for details	Sig	100	R309-400-11
A150	ADMINISTRATIVE ISSUES - SEE NOTES FOR SPECIFIC DETAILS	SIG	200	Administrative Issues - see R309-400 for details	Sig	200	R309-400-11
A226	PWS DID NOT FOLLOW TYPICAL PLAN APPROVAL PROCESS FOR THIS FACILITY. AFTER THE FACT OP ISSUED. THIS CODE REMAINS UNTIL THE FACILITY IS REPLACED OR BROUGHT UP TO DATE.	REC	0	PWS did not follow typical plan approval process for this facility. After the fact operating permit issued.	Rec	0	R309-500-6
Cross Connection Control, Operator Certification, Emergency Response							
M020	UNPROTECTED CROSS CONN PRESENT IN DIST SYSTEM	SIG	50	Cross connections absent in the water system	Sig	50	R309-105-12(1)
M003	CCC-LACKS LOCAL AUTHORITY	MIN	10	Water System has a cross connection control program that includes a legally adopted and functional authority statement	Min	15	R309-105-12(2)
M004	CCC-NO ANNUAL PUBLIC EDUCATION OR AWARENESS	MIN	10	Water System has a cross connection control program that includes annual public education or awareness material	Min	15	R309-105-12(2)
M005	CCC-LACKS OPERATOR TRAINING	MIN	10	Water System has a cross connection control program that includes an operator with adequate training in the area of cross connection control or backflow prevention	Min	15	R309-105-12(2)

Deficiency Code	(CURRENT) Database Description	(CURRENT) Deficiency Type	(CURRENT) IPS	*DRAFT Database Description*	(PROPOSED) Deficiency Type	(PROPOSED) IPS Points	Rule Reference
M006	CCC-LACKS WRITTEN RECORDS OF CCC ACTIVITIES	MIN	10	Water System has a cross connection control program that include written records of cross connection control activities, such as, backflow assembly inventory and assembly testing	Min	15	R309-105-12(2)
M007	CCC-LACKS ON-GOING ENFORCEMENT IMPLEMENTATION	MIN	10	Water System has a cross connection control program that includes documentation of on-going enforcement activities	Min	15	R309-105-12(2)
M008	DIST SYS HAS INDIVIDUAL SERVICE CONNECTED TO BOOSTER PUMPS	SIG	50	Distribution System has individual service connections connected to booster pumps.	Sig	50	R309-550-11(3)
M001	CURRENT EMERGENCY RESPONSE PROGRAM	REC	-10				
M001	CURRENT EMERGENCY RESPONSE PROGRAM	REC	-10				
C001	NO CERTIFIED OPERATOR WHEN REQUIRED FOR SYSTEM	SIG	30	Operator certified at the level required for the system and avaialbe within one hour travel time	Sig	50	R309-105-11
C002	OPERATOR NOT AVAILABLE WITHIN 1 HOUR TRAVEL TIME	MIN	20				
C004	OPERATOR CERTIFIED AT A HIGHER LEVEL THAN REQUIRED	REC	-20				
M002	CURRENT FINANCIAL CAPACITY PLAN IN PLACE	REC	-10				
Plan Review							
G001	WATER SYSTEM FACILITY LACKS PLAN APPROVAL	SIG	50	Water System has received Plan Approval and/or Operating Permit for all active drinking water facilities as defined in R309-500-5(1)	Sig	50	R309-100-5(1&2), R309-105-6(1)(a), R309-500-6, R309-500-9, R309-550-9(3)
S001	SOURCE LACKS PLAN APPROVAL	SIG	200	All Active Water Sources (Springs and Wells) have received Plan Approval and/or Operating Permit	Sig	200	R309-515-6(1)(5) & R309-515-7(7)
M025	INTERCONNECTION LACKS DDW APPROVAL	SIG	200	If the system purchases water, the interconnection has been approved by the Division	Sig	50	R309-550-9(3)
Minimum Sizing Requirements							
V030	SYSTEM LACKS 10% OF REQUIRED STORAGE CAPACITY	MIN	10	Storage tank size meets the minimum storage volumes per R309-510; > 80% (not considering fire flow demand)	Min	15	R309-510-8
V031	SYSTEM LACKS 20% OF REQUIRED STORAGE CAPACITY	SIG	20				

Deficiency Code	(CURRENT) Database Description	(CURRENT) Deficiency Type	(CURRENT) IPS	*DRAFT Database Description*	(PROPOSED) Deficiency Type	(PROPOSED) IPS Points	Rule Reference
V032	SYSTEM LACKS 30% OF REQUIRED STORAGE CAPACITY	SIG	30	Storage tank size meets the minimum storage volumes per R309-510; < or = 80% (not considering fire flow demand)	Sig	50	R309-510-8
V033	SYSTEM LACKS 40% OF REQUIRED STORAGE CAPACITY	SIG	40				
VF30	SYSTEM LACKS 10% OF REQUIRED STORAGE FOR FIRE SUPPRESSION	MIN	10	Storage tank size meets the minimum storage volumes per R309-510 considering fire flow demand	Min	15	R309-510-8
VF31	SYSTEM LACKS 20% OF REQUIRED STORAGE FOR FIRE SUPPRESSION	MIN	20				
VF32	SYSTEM LACKS 30% OF REQUIRED STORAGE FOR FIRE SUPPRESSION	MIN	30				
VF33	SYSTEM LACKS 40% OF REQUIRED STORAGE FOR FIRE SUPPRESSION	MIN	40				
VF34	SYSTEM LACKS >40% OF REQUIRED STORAGE FOR FIRE SUPPRESSION	MIN	50				
S090	SYSTEM LACKS 10% OF REQUIRED SOURCE CAPACITY	MIN	10	Source Capacity meets the minimum source flows per R309-510; > 80%	Min	15	R309-510-7
S091	SYSTEM LACKS 20% OF REQUIRED SOURCE CAPACITY	SIG	20				
S092	SYSTEM LACKS 30% OF REQUIRED SOURCE CAPACITY	SIG	30	Source Capacity meets the minimum source flows per R309-510; < or = 80%	Sig	50	
S093	SYSTEM LACKS 40% OF REQUIRED SOURCE CAPACITY	SIG	40				
S094	SYSTEM LACKS >40% OF REQUIRED SOURCE CAPACITY	SIG	50				
Source Development							
TGR7	SYSTEM LACKS AT LEASR 2 SOURCES FOR 100 CONNECTIONS	NON	0	Community water system serving more than 100 connections has a minimum of two sources, except where served by a surface water treatment plant.	Sig	50	R309-515-4(3)
S033	NO BACKUP POWER FOR COM SYSTEM WO FREE FLOWING SOURCE	SIG	25	Community water system (without naturally flowing water sources) have at least one redundant power supply	Sig	25	R309-515-6(2)(a)
S003	ELEVATION OF WELL CASING INADEQUATE	SIG	20	Well or pitless well and adapter casing terminates at least 18 inches above the final ground surface and at least 12 inches above the pump house floor.	Sig	25	R309-515-6(6)(b)(vi) & R309-515-6(12)(c)(ii)

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S013	WELL LACKS PROPER SANITARY SEAL	SIG	50	Well is sealed with grout to a depth of at least 100 feet below the ground surface. If well is equipped with a pitless adapter or unit, the well seal is installed to a minimum depth of 110 feet to take in to account the top 10 feet of compromised seal interval.	Sig	50	R309-515-6(6)(i)
S095				Well is capped per R655-4-14-1 until permanent equipment is installed	Sig	50	R309-515-6(8)(a)
S005	PITLESS ADPTR NOT WATER TIGHT LACKS PROPER SEALING	SIG	50	The pitless well and adaptor is protected against vandalism or sabotage and appears to be watertight including the cap, cover, and other attachments	Sig	50	R309-515-6(12)(c)
S006	WELL CASING VENT NOT PROPERLY SCREENED	SIG	2	If well casing is vented, the vent and/or air release/air vacuum valve exhaust/relief piping terminates in a down-turned position with a #14 mesh corrosion resistant screen and terminating at least 6 inches above the well floor	Sig	25	R309-515-6(12)(d)(v)
S007	WELL CASING VENT IS NOT DOWN-TURNED	MIN	2				
S008	WELL CASING VENT DOES NOT HAVE AN PROPER AIR GAP	MIN	2				
S028	A/V RELEASE VALVE IS NOT DOWN-TURNED	MIN	2				
S029	A/V RELEASE VALVE LACKS PROPER SCREEN	SIG	2				
S030	A/V RELEASE VALVE LACKS PROPER AIRGAP	MIN	2				
SL01	NO MEANS TO RELEASE TRAPPED AIR FROM SOURCE PUMP	MIN	5	Pumping directly to distribution: There is an air release valve or pump to waste line prior to being pumped to distribution	Min	5	R309-515-6(12)(d)(v)
S009	PUMP TO WASTE LINE LACKS PROPER AIR GAP	SIG	20	If there is a pump to waste line, it discharges with a minimum of 12 inches of clearance to the flood rim with a #4 mesh corrosion resistant screen at the discharge end	Sig	25	R309-515-6(12)(d)(ix)
S010	PUMP TO WASTE LINE LACKS #4 MESH NON-CORROD SCREEN	SIG	5	If there is a pump to waste line, the discharge end is downturned	Min	5	R309-515-6(12)(d)(ix)
S011		SIG	2				
S015	WELL LACKS A MEANS TO MEASURE DRAWDOWN	MIN	2	There are provisions to permit periodic measurement of water levels in a completed well and these provisions are installed to prevent entrance of foreign materials	Min	5	R309-515-6(12)(d)(e) & R309-515-6(12)(c)(vi)
S002	WELL HOUSE NOT SECURE	SIG	20				
S020	WELL HOUSE STATION NOT PROTECTED FROM FLOODING	MIN	5	Well head or well house is protected from flooding	Min	5	R309-515-6(13)(a-d)
S021	UNPROTECTED CROSS CONN PRESENT IN WELL HOUSE	SIG	20	Cross connections absent in the water system	Sig	50	R309-105-12(1)
S022	LACK OF DRAIN TO DAYLIGHT FLOOR DRAIN	MIN	5	Well house has a drain to daylight floor drain.	Min	5	R309-515-6(13)(b)

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TGR5	TOXIC / HAZARDOUS MATERIALS STORED IN PUMPING STATION	NON	0				
S023	NO SMOOTH NOSED SAMPLING TAP ON DISCHARGE PIPING	MIN	1	Well discharge piping is equipped with a smooth nosed sampling tap as the first thing installed after the well head	Min	5	R309-515-6(12)(d)(iv)
S024	NO CHECK VALVE ON DISCHARGE PIPING	MIN	1	Well discharge piping is equipped with a check valve after the sampling tap but before the shut off valve	Min	5	R309-515-6(12)(d)(iv)
S025	NO PRESSURE GAUGE ON DISCHARGE PIPING	MIN	1	Well discharge piping is equipped with a pressure gauge after the sampling tap but before the shut off valve	Min	5	R309-515-6(12)(d)(iv)
S026	NO FLOW MEASURING DEVICE ON DISCHARGE PIPING	MIN	1	Well discharge piping is equipped with a means to measure flow after the sampling tap but before the shut off valve.	Min	5	R309-515-6(12)(d)(iv)
S027	NO SHUT OFF VALVE ON DISCHARGE PIPING	MIN	1	Well discharge piping is equipped with a shut off valve installed the furthest from the well head	Min	5	R309-515-6(12)(d)(iv)
S031	IMPROPER LUBRICATION OIL	SIG	25	Pump lubricants are ANSI/NSF 60 certified	Sig	25	R309-105-10(7)
S150	SOURCE DETERMINED AS UDI	SIG	150	Source determined to be UDI	Sig	200	R309-515-5
S097	SURFACE WATER/UDI SOURCE LACKS SURFACE WATER TREATMENT			For surface water or UDI source, surface water treatment of spring water is provided.	Sig	200	R309-515-5(1) & 7(1)
SS19	LACK OF ACCEPTABLE LINER	MIN	10	Spring liner intact	Sig	50	R309-515-7(7)(a) & (b)(vi)
SS22	LACK OF IMPERVIOUS SOIL COVER	MIN	10	Either a minimum of 10 feet of impervious soil cover or 2 feet of impervious soil cover over a liner, placed at least 15 feet laterally in all directions from spring collection devices	Sig	50	R309-515-7(7)(a) & (b)(vi)
L014	NO SPRING COLLECITON BOX PRESENT	REC	0	At least one collection box provided for each collection area	Min	5	R309-515-7(7)(c)
SS20	UNSEALED OPENINGS IN SPRING COLLECTION BOX	SIG	50	All penetrations and openings sealed to prevent inflow of contaminants	Sig	50	R309-545-14 (1)
SS13	SPRING BOX IS NOT SECURE	SIG	20	Access openings for junction and collection boxes secured with a shoebox type lid with at least a 2- inch overhang, gasket, and lock	Sig	25	R309-515-7(7)(d)
SS09	SPRING BOX LACKS SHOE BOX LID	MIN	5				
SS10	SPRING BOX LACKS A GASKET ON LID	SIG	5				
SS12	SPRING BOX LACKS RAISED ACCESS ENTRY	MIN	5	Access openings for junction and collection boxes with a raised access at least 4 inches above the top of a raised box or 18 inches above earthen cover	Min	15	R309-515-7(7)(d)
SS11	SPRING BOX LACKS AN ADEQUATE AIR VENT	MIN	5	Spring box has air vent	Min	5	R309-515-7(7)(d)
SSL2	VENT NOT PRESENT BUT RECOMMENDED	REC	0				

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SS16	SPRING COLLECTION BOX VENT NOT DOWN-TURNED	MIN	2	Vents for junction and collection boxes are downturned, screened with a #14 mesh screen and sealed	Sig	25	R309-515-7(7)(d)
SS17	SPRING COLLECTION BOX VENT NOT PROPERLY SCREENED	SIG	2				
SS18	SPRING COLLECTION BOX VENT NOT AIR GAPPED	MIN	2	Vents for junction and collection boxes have at least 24 inches of clearance above earthen cover	Min	15	R309-515-7(7)(d)
SS23	LACKS OVERFLOW ON JUNCTION/COLLECTION BOXES			Overflow present on junction and collection boxes	Sig	50	R309-515-7(7)(d)
SS14	SPRING BOX DRAIN/OVERFLOW LACKS PROPER FREE FALL	SIG	5	Overflow and drain for junction and collection boxes discharge with at least 12 inches of clearance	Sig	25	R309-515-7(7)(d)
SS21	DRAIN LINE DOES NOT HAVE ADEQUATE AIR GAP NOT COVERED IN IPS	REC	0				
SS04	SPRING BOX LACKS PROPER OVERFLOW/DRAIN LACKS PROPER SCREEN	SIG	5	Overflow and drain for junction and collection boxes screened with a #4 mesh screen	Sig	25	R309-515-7(7)(d)
SS02	SPRING COLLECTION AREA NOT FENCED	Min	10	Stock tight fencing at least 50 feet from collection devices on land equal to or higher in elevation and 15 feet on land lower in elevation from collection devices	Sig	25	R309-515-7(7)(e)
SS03	SPRING COLLECTION AREA LACKS A DIVERSION CHANNEL	MIN	5	Berm or channel immediately inside fenced collection area to divert all surface water runoff	Min	15	R309-515-7(7)(g)
SS01	SPRING LACKS A PERMANENT FLOW MEASURING DEVICE	MIN	5	Permanent flow-measuring device, properly housed and protected	Min	5	R309-515-7(7)(h)
SS06	MAJOR PONDING ON SPRING COLLECTION AREA	SIG	20	Spring developed to minimize ponding	Sig	50	R309-515-7(7)(i)
SS07	DEEP ROOTED VEGETATION IN SPRING COLLECTION AREA	MIN	10	Deep-rooted vegetation removed within fenced spring collection area	Sig	25	R309-515-7(7)(f)
SS08	ROOTS IN COLLECTION PIPES	MIN	10				
SS24				Herbicides, pesticides and algicides may not be applied to spring collection area without DDW approval and ANSI/NSF 60 certification	Sig	50	R309-515-8 (3) & (1)(b)

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Disinfection							
TD41	CLEANING MATERIALS DO NOT MEET ANSI/NSF 60 STANDARDS	SIG	25	All chemicals added to drinking water, including chlorine, chloramines, and chemicals used to generate hypochlorite solutions and chlorine dioxide, as well as chemicals used to clean components that will contact drinking water are NSF Standard 60 certified	Sig	25	R309-520-6(2), R309-520-8(3)(j), R309-520-9(4)(h)
TD90	CHLORINE CHEMICAL DOES NOT MEET ANSI/NSF 60 STANDARD	SIG	25				
TD47	QUENCHING CHEMICALS DO NOT MEET ANSI/NSF 60 STANDARDS	SIG	25				
TD78	INSUFFICENT SAMPLING FOR CHLORINE RESIDUAL TESTING	MIN	2	Chlorine residual test equipment available capable of measuring residuals to the nearest 0.1 mg/l in the range below 0.5 mg/l, to the nearest 0.3 mg/l between 0.5 mg/l and 1.0 mg/l and to the nearest 0.5 mg/l above 1.0 mg/l	Sig	50	R309-520-7(1)(j)
TD75	CL2 SYSTEM LACKS SPARE PARTS FOR HYPOCHLORINATOR	MIN	2	Required Disinfection: There is a means to continuously disinfect including having spare parts and redundancy available (for maintenance and emergency)	Sig	25	R309-520-7(1)(k) & R309-520-6(1)
TD22	CL2 INSUFFICIENT BACK UP EQUIPMENT	MIN	10				
TD42	UNABLE TO ISOLATE UV DININFECTION SYSTEM FOR MANTENANCE	MIN	2				R309-520-8(3)(g)
TD43	NO BACKUP POWER SOURCE	MIN	2				R309-520-8(3)(l)
TD44	NO REDUNDANT PRIMARY DISINFECTION MECHANISM	MIN	5				R309-520-8(3)(m)
TD25	CL2 DISINFECTION PROCESS NOT CONTINUOUS	SIG	2	Required Disinfection: Water system properly continuously disinfects without "batch" disinfection	Sig	50	R309-520-6(1)
TD08	CL2 BUILDING IMPROPER HEAT LIGHT OR VENTILATION	MIN	2	Chlorination building is heated, lighted, and vented to assure proper operation and safety	Min	15	R309-520-7(1)(l)
TD69	CHLORINATOR BUILDING LACKS ADEQUATE VENTILATION	REC	0				
TD91				Chlorination system has a means to measure the flow rate of treated water as a basis for dosing	Min	15	R309-520-7(1)(i)
TD01	CL2 - NO AUTOMATIC CL CYLINDER SWITCH OVER	MIN	2	Gas Chlorinators: Automatic switch over of gas chlorine cylinders is provided to assure continuous disinfection	Min	5	R309-520-7(2)(a) & R309-520-6(1)
TD09	CL2 IMPROPER LOCATION FOR VENTILATING FAN SUCTION	MIN	5	Gas Chlorinators: Exhaust fan(s) take suction inside the chlorine room near the floor, as far as practical from the door and air inlet, and discharge air outside of the building through wall lourvers near the ceiling, away from air inlets	Sig	25	R309-520-7(2)(d)(iii) & R309-520-7(2)(d)(iv)
TD10	CL2 AIR INLETS NOT LOCATED NEAR CEILING W/LOUVERS	MIN	2				

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TD12	CL2 SWITCHED FOR FAN / LIGHTS NOT OUTSIDE CL2 ROOM	MIN	2	Gas Chlorinators: Have separate switches for the chlorine room fans and lights, located near the entrance to the room and protected from vandalism	Min	15	R309-520-7(2)(d)(v)
TD13	CL2 FEED VENT IMPROPERLY VENTED OR SCREENED	MIN	2	Gas Chlorinators: Area vent line discharges outside, above grade, at a point least susceptible to vandalism, and has the end covered with a #14 mesh non-corrodible screen	Sig	25	R309-520-7(2)(e)
TD17	CL2 CYLINDERS EXPOSED TO DIRECT SUN OR EXCESS HEAT	MIN	2	Gas Chlorinators: Cylinders are not stored in direct sunlight or exposed to excessive heat	Min	15	R309-520-7(2)(f)(ii)
TD92				Gas Chlorinators: The chlorinatin equipment and storage is secure	Sig	25	R309-520-7(2)(f)
TD15	CHLORINE CYLINDERS IMPROPERLY RESTRAINED	MIN	2	Gas Chlorinators: Chlorine cylinders are restrained in position to prevent upset	Min	15	R309-520-7(2)(h)
TD16	CL2 CYLINDERS NOT STORED SEPARATE FROM AMMONIA	SIG	2	Gas Chlorinators: Chlorine cylinders are stored separate from ammonia	Sig	50	
TD02	LACKS EQUIPMENT TO MEASURE CHLORINE FEED RATE	MIN	2	Gas Chlorinators: Corrosion resistant scales are provided and placed in a location remote from moisture. Scales are accurate to indicate loss of weight to the nearest one pound for 150 pound cylinders and nearest 10 pounds for one ton cylinders	Min	15	309-520-7(2)(i)
TD21	CL2 UNPROTECTED CROSS CONN PRESENT IN FEED LINE	MIN	5	Gas Chlorinators: no cross connections present in feed lines	Sig	25	R309-520-7(1)(h)
TD23	CL2 NO ALARMS ON CONT LEAK DETECT EQUIP	MIN	5	Gas Chlorinators: Alarms present on continuous leak detection equipment	Sig	50	
TD06	CL2NO ACCESS TO SELF CONTAINED BREATHING APPARATUS	MIN	5	Gas Chlorinators: Required respiratory equipment available - One ton cylinders NIOSH respiratory protection equipment required - 150 pound cylinders respiratory requipment required (NIOSH respiratory equipment recommended)	Sig	25	R309-520-7(2)(k)
TD14	CL2 LACKS A MEANS OF LEAK DETECTION 150 LB	MIN	2	Gas Chlorinators: 150 pound cylinder, leak detection, 56% ammonia solution available	Min	15	R309-520-7(2)(l)(i)
TD04	CL2 LACKS A 150 LB CHLORINE CYLINDER REPAIR KIT	REC	0				
TD05	CL2 LACKS A 1 TON CHLORINE CYLINDER REPAIR KIT	SIG	15	Gas Chlorinators: One ton cylinder has leak repair kit available (Chlorine Institute approved, Type B)	Sig	25	R309-520-7(2)(l)(ii)
TD19	CL2 LACKS A MEANS OF LEAK DETECTION 1 TON	MIN	15	Gas Chlorinators: One ton cylinders have continuous chlorine leak detection equipment with audible alarm and warning light to ensure operator safety	Sig	25	R309-520-7(2)(l)(iii & Iv)
TD93				Gas Chlorinators: One ton cylinder operation areas are equipped with a gas scrubber	Sig	25	R309-520-7(2)(b)

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TD66	FACILITY DOES NOT PROVIDE SOME METHOD OF EMERGENCY EYEWASH	REC	0	Hypochlorite System: Emergency eyewash and safety showers are provided for solutions containing concentrations of 5% or great available chlorine by volume and are handled in containers greater than 55 gallons; unless at a remote location where alternative emergency eyewash is provided	Sig	25	R309-520-7(3)(a)(i)
TD67	HYPOCHLORITE NOT PROTECTED FROM EXCESSIVE HEAT OR DIRECT SUN LIGHT	REC	0	Hypochlorite System: Storage and injection areas are protected from excessive heat or direct sunlight	Min	5	R309-520-7(3)(a)(ii)
TD68	NO RECORDS KEPT TO MINIMIZE USE OF DECAYED HYPOCHLORITE SOLUTION	REC	0	Hypochlorite System: Records are kept of on site delivery to avoid the injection of significantly decayed hypochlorite solutions	Min	5	R309-520-7(3)(b)
TD24				Hypochlorite System: Has a liquid level indicator	Min	5	R309-525-11(6)(a)(iv)(A)
TD29				Hypochlorite System: Has adequate spill containment	Min	5	R309-525-11(6)(a)(iv)(B)
TD54				Hypochlorite System: Tanks are be properly labeled to designate the chemical contained	Min	5	R309-525-11(8)(c)(vii)
TD70	MAKE UP WATER NOT DRINKING WATER QUALITY	REC	0	Hypochlorite On-Site Generation System: Make-up water used in on-site generation is of drinking water quality	Sig	50	R309-520-7(3)(c)(iii)
TD71	HYDROGEN GAS FROM ELECTOLYTIC CELL NOT PROPERLY VENTED	REC	0	Hypochlorite On-Site Generation System: hydrogen gas generated in the electrolytic cell is vented upward to the outside of the building in a dedicated, unobstructed line	Sig	50	R309-520-7(3)(c)(iv)
TD72	HYPOCHLORINE TABLETS NOT STORED IN COOL, DRY, VENTED AREA	REC	0	Hypochlorite Tablet System: Tablets are stored in a cool, dry, well-ventilated area and are not near combustible materials or acids	Min	5	R309-520-7(3)(d)(iii)
TD73	HYPOCHLORITE TABLETS STORED WITH COMBUSTIBLE MAT. OR ACIDS	REC	0				
TD26	CL2 CONTACT TIME IS INSUFFICIENT	SIG	35	Chlorination contact time is sufficent	Sig	50	R309-520-6(4)
TD39	LACKS ADEQUATE OPERATING PROCEDURES FOR UV	MIN	2	UV Process: Incident plan is developed to address lamp breakage and release of mercury, response to alarms, power supply interruptions, activation of standby equipment, failure of system, etc.	Min	15	R309-520-8(4)(b)
TD40	UV INTENSITY SENSOR NOT CORRECTLY CALIBRATED	MIN	2				
TD46	INADEQUATE OZONE RESIDUAL ANALYZERS	MIN	2	Ozone System: Ozone gas analyzer, flow meter, and temperature measurements are provided on the gaseous ozone feed line going to the injection point	Min	15	R309-520-9(7)(c)

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TD48	OZONE OFF-GAS BLOWERS NOT PROPERLY FUNCTIONING	MIN	2	Ozone System: An off-gas treatment system is provided and working properly, including the blowers to draw off-gas from the contactor into the destruction units.	Min	15	R309-520-9(5)(a & b)
TD49	OZONE OFF-GAS DISTRUCTION UNITS NOT PROVIDED / PROPERLY FUNCTIONING PROPERLY	MIN	2				
TD50	OZONE OFF-GAS DESTRUCTION NOT LESS THAN 0.1 PPM	MIN	2	Ozone System: The maximum ozone gas discharge from the destruction unit is 0.1 ppm by volume	Sig	25	R309-520-9(5)(d)
TD31	EMERGENCY EYEWASH AND SHOWER NOT AVAILABLE	MIN	2	Chlorine Dioxide System: Emergency shower and eyewash are present and located outside but close to the operation area	Sig	25	R309-520-10(3)(b)(viii)
TD32	NO EMERGENCY SHUT OFF FOR CHLORINE DIOXIDE GENERATOR	MIN	2	Chlorine Dioxide System: Emergency shutoff control is present and located outside the operations area	Sig	25	R309-520-10(3)(b)(ix)
TD34	NO CHLORINE DIOXIDE SENSOR ALARM AVAILABLE	MIN	2	Chlorine Dioxide System: There is an ambient air chlorine dioxide sensor alarm or warning light detectable inside and outside of the operations area	Sig	25	R309-520-10(3)(b)(v)
TD35	NO WASH DOWN WATER AVAILABLE	MIN	2	Chlorine Dioxide System: Wash-down water is available within the operations area	Sig	25	R309-520-10(3)(b)(xvi)
TD28	COMBUSTIBLE OR REACTIVE MATERIALS IMPROPERLY STORED	MIN	2	Chlorine Dioxide System: Combustible or reactive materials (acids, reduced metals, or organic material) are not stored or handled in the operations area	Sig	25	R309-520-10(5)(a)
TD30	PERSONAL PROTECTIVE EQUIPMENT NOT AVAILABLE	MIN	5	Chlorine Dioxide System: Personal protective equipment and first aid kits are stored near but outside the operations area	Min	5	R309-520-10(5)(c)
TD33	CHLORINE AND CHLORINE DIOXIDE TANKS IMPROPERLY VENTED	MIN	2	Chlorine tanks vented properly	Min	5	R309-525-11(8)(B)(VI)
TD36	OPERATING AREA TEMPRATURES NOT BETWEEN 60 AND 100 DEGREES F	MIN	2	Chlorine Dioxide System: Operations area is maintained between 60 and 100 degrees F	Min	5	R309-520-10(5)(d)
TD37	O/M MANUAL DOES NOT INCLUDE SAFETY AND EMERGENCY RESPONSE PROCEDURES	MIN	2	Chlorine Dioxide System: Operating and Maintenance manual includes a safety and emergency response procedures which employees have ongoing training on	Min	5	R309-520-10(5)(f)
TD38	NO SAFETY AND EMERGENCY TRAINING	REC	0				

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Surface Water Treatment and Miscellaneous Treatment Methods							
TG32	INADEQUATE PROCESS CONTROL TESTING	MIN	30	General Treatment: General Information (objective, seasonal, capacity, overall process flow, recycling waste stream)?	Non	0	R309-525
TC19	ACTIVATED CARBON - UNTRAINED OPERATORS ON PROCESS	REC	0				
TD99	TREATMENT PLANT IS NOT SECURE	SIG	20				
TD58				General Treatment: For primary treatment, the plant has standby power available to permit operation of essential functions during power outages.	Sig	25	R309-525-7(5), R309-525-11(7)(b)(iii)
TD59				General Treatment: The plant has backup equipment or necessary spare part for critical items, including for feeders	Sig	25	R309-525-7(6), R309-525-11(7)(b)(i)
TC15	ACTIVATED CARBON - FEED LINES NOT LABELED OR CODED	MIN	2	General Treatment: Water treatment plant piping is color coded for identification with direction of flow indicated on the pipes.	Min	5	R309-525-8
TD79	NO MEANS OF MEASURING WATER TREATED WITH CHLORINE	MIN	10	General Treatment: There is a means to measure volume of water treated	Min	5	R309-525-11(7)(d)(iv)
TD62				General Treatment: Sampling taps are provided so that water samples can be obtained from appropriate locations in each unit operation of treatment	Min	15	R309-525-18
TD74				General Treatment - Conventional and Direct Filtration Safety: At least one pair of rubber gloves, a dust respirator or a type certified by NIOSH for toxic dusts, an apron or other protective clothing and goggles or face mask are provided for each operator. A deluge shower and/or eye washing device is installed where strong acids and alkalis are used or stored	Sig	25	R309-525-11(10)(b)
TD76	INADEQUATE RESIDUAL MAINTAINED IN DIST SYSTEM	MIN	0	Adequate residual maintained in the distribution system	Sig	25	R309-520-7(1)(c)(iii)
TG31	NO FINISHED WATER SAMPLE TAP	MIN	2	Finished water tap provided	Min	5	
TG35	XCONN BETWEEN RAW SW AND FINISHED VIA CL2 SYSTEM	SIG	50	No cross connection between raw surface water and finished chlorination system	Sig	50	R309-520-7(1)(h)
TG53	NO BACKFLOW PROTECTION ON SERVICE LINE TO TANKS	SIG	10	General Treatment - Cross Connection: Controls are in place to prevent backflow or back-siphonage of chemical solutions to finished water systems	Sig	50	R309-525-11(2)(c), R309-525-11(9)(b)(ii)

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TX07	NO BACKFLOW PROTECTION ON MAKE-UP WATER INLET	MIN	2	Treatment - Chemical Storage: Solution tank overflows have a freefalling discharge and are located where noticeable.	Sig	50	R309-525-11(8)(b)(v)
TX08	OVERFLW PIPE NOT TURNED DOWN/SCREENED W/AIR GAP	SIG	10				
TG64	NO CROSS-CONNECTION CONTROL ON IN-PLANT WATER SUPPLY	SIG	10	General Treatment - Cross Connection: Cross connection control is provided so that there is no direct connections between any sewer and a drain or overflow from a feeder, solution chamber or tank by providing that all pipes terMinate at least 6-inches or two pipe diameters, whichever is greater, above the overflow rim of the receiving basin	Sig	50	R309-525-11(9)(b)(iii)
TG06	SOLUTION TANK LACKS BACKFLOW PROTECTION	SIG	10				
TD52	CL2 UNPROTECTED CROSS CONN PRESENT IN FEED LINE	SIG	10	General Treatment - Cross Connection: The treated water supply is prevented from contaMination by make-up water of lesser quality	Sig	200	R309-520-7(1)(h), R309-525-11(9)(a)(iii)
TD88				General Treatment - Cross Connection: Pre and Post-Chlorination systems are independent to prevent possible siphoning of partially treated water into the clear well. The water supply to each system is have a separate shut-off valve with no master shut off valve.	Sig	50	R309-525-11(9)(b)(iv)
TD94				Treatment-Presedimentation: Presedimenation basin are equipped for sludge removal	Min	15	R309-525-10(1)
INFO		NON	0	General Treatment- Pre Treatment: What type of pretreatment is used?	Non	0	
TC05	ACTIVATED CARBON - PAC IS NOT ADD AS EARLY AS POSS	REC	0	General Treatment- Activated Carbon: General information; manual/automatically controlled, where is it added in the process, storage area clean and dry?	Non	0	R309-525-15(4)(d)
TC07	ACTIVATED CARBON - PAC IS NOT ADDED BEFORE OXIDANT	REC	0				
TC08	ACTIVATED CARBON - PAC ADD IS NOT AT MULTIPLE PTS	REC	0				
TC10	ACTIVATED CARBON - PAC NOT STORED SEPARTE	REC	0				
TC17	ACTIVATED CARBON - CHEM STORAGE NOT CLEAN AND DRY	REC	0				
L017		NON	0	Treatment-Chemical Addition: General Information; what chemicals are used?	Non	0	R309-525-11
TG63	IMPROPER DRY CHEMICAL FEEDER	MIN	20	Treatment- Chemical Addition: General Inforamtion; how is dosing determined, implemented, quanities of chemicals used determined, and feeders verified for accuracy?	Non	0	R309-525-11(6)(b)(iii), R309-525-11(7)(d)(iv)
TX09	NO MEANS TO METER DILUTION OF BRINE	MIN	2				
TG21	CHEMICAL FEEDERS IMPROPERLY CALIBRATED	MIN	2				

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T080	NOT USING ANSI/NSF 60 APPROVED MATERIALS	SIG	25	Treatment- Chemical Addition: All Chemicals, additives, and adhesives are ANSI/NSF 60 certified	Sig	25	R309-525-11(5), R309-525-25(1), R309-535-11(5)(d)
TG27	CHEMICALS DO NOT COMPLY WITH ANSI/NSF STANDARD	SIG	25				
TX05	BRINE SALT NO APPROVED BY ANSI/NSF	SIG	25				
TQ10	SEQ - POLY SEQUEST CHEMICALS DOES NOT MEET ANSI/NSF STAND	SIG	25				
TG05				Treatment - Chemical Addition: Chemical name, purity and concentration and Safety Data Sheets are available for all chemicals used at the plant	Min	5	R309-525-11(5)(a), R309-525-11(6)(b)(i)
TG19	INCOMPATIBLE CHEMICALS NOT STORED SEPARATELY	MIN	2	Treatment - Chemical Addition: Chemicals that are incompatible are not fed, stored or handled together	Sig	25	R309-525-11(7)(a)(iv)
TG09				Treatment - Chemical Storage: Solution tanks (including day tanks) have a liquid level indicator or are scale mounted to meaningfully relate the total amount of chemical fed (or used) during a day.	Min	5	R309-525-11(6)(a)(iv)(A), R309-525-11(8)(b)(ii), R309-525-11(8)(c)(iv)
TG10				Treatment - Chemical Storage: Solution tanks are equipped with an inverted "J" air vent	Min	5	R309-525-11(6)(a)(iv)(C)
TG59	INADEQUATE SPILL CONTAINMENT PROVISIONS	MIN	2	Treatment - Chemical Storage: Solution tanks have an overflow and a receiving basin or drain capable of receiving accidental spills or overflows	Min	5	R309-525-11(6)(a)(iv)(B). R309-525-11(8)(b)(viii)
TG13				Treatment - Chemical Storage: Acid is kept in closed acid-resistant shipping containers or storage units.	Min	5	R309-525-11(6)(a)(v)
TG17				Treatment - Chemical Storage: Dust Control and ventilation is adequate	Min	5	R309-525-11(6)(c)
TG60	ACID TANK VENTS NO SCREEN OR OUTSIDE BLDG	MIN	2	Treatment - Chemical Storage: Acid storage tanks are vented (independently) to the outside atmosphere, separate from vents in common with day tanks.	Min	5	R309-525-11(8)(b)(vi)
TG03	TANKS AND REFILL LINES LACK PROPER LABELING	MIN	2	Treatment - Chemical Storage: Storage tanks are properly labeled to deSignate the chemical contained.	Min	5	R309-525-11(8)(c)(vii)
TG18				Treatment - Chemical Storage: Each solution tank is provided with a valved drain to protect against backflow.	Sig	50	R309-525-11(8)(b)(ix)
TD64	CL2 NO COVER ON STORAGE TANK	MIN	2	Treatment - Chemical Storage: Chemical solutions tank are kept covered including openings.	Min	5	R309-525-11(8)(b)(iii)
				Treatment - Flash Mixing: General Information; type of mixing used (mechanical, in-line, jet), mixing time (should be less than 30 sec), and location in plant?	Non		R309-525-12(1)
INFO	PRIMARY COAGULANT NOT USED AT ALL TIMES	NON	0	Treatment - Coagulation: Describe plant coagulation process, what chemicals are used?	Non	0	R309-525-12
INFO	NO PLAN TO DETERMinE COAGULANT DOSAGE	NON	0				

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T014	NO SOP FOR ADJUSTING FLOCCULATOR SPEED	REC	0	Treatment - Flocculation: General Information; what are the detention times, type of agitators, is there visible floc?	Non	0	R309-525-12(2)
T043	FILTER SEPTUM NOT PERIODICALLY INSPECTED	NON	0	Treatment - Filters: General Information; type, objective(s), media(s), media depth, run times, rate of filtration controls, turbidity goal, turbidity limit?	Non	0	R309-525-15
T044	FILTER SEPTUM NOT REGULARLY CLEANED	NON	0				
T021	INTRUMENTATION AND CONTROLS NOT OPERABLE	MIN	2				
T004				Treatment - Conventional/Direct Filtration General Filters: There are handrails or walls around filter areas adjacent to normal walkways.	Sig	25	R309-525-15(6)(n)
T074	NO FILTER TO WASTE LINE ON EACH FILTER	MIN	20	Treatment - Conventional/Direct Filtration General Filters: There is a filtration to waste line for each filter	Sig	25	R309-525-15(6)(p)
TT01	FAILURE TO HAVE WORKING TURBIDIMETER WHEN CONTINUOUS MONITORING IS REQUIRED	SIG	100	Treatment - There is a working turbidimeter when continuous monitoring is required	Sig	50	R309-525-25(4)
T001	NO PROVISIONS FOR PRESSED BYPASS	MIN	0	Treatment - provisions for pressed bypass	Sig	25	R309-525-10(3)
T002	PRIMARY COAGULANT NOT USED AT ALL TIMES	MIN	0	Treatment - Primary coagulant used at all times	Sig	200	R309-525-11(1)(a)
T003	NO PLAN TO DETERMINE COAGULANT DOSAGE	MIN	0	Treatment - System uses plan to determine coagulant dosage	Sig	25	
T005	FILTER NOT PROVIDED WITH ALARM FOR TURBIDITY EXCEEDANCE			Treatment - Surface Water General Filters: The filter is provided with an alarm should turbidity exceed it's NTU limit so that filter shutdown is initiated.	Sig	25	R309-525-15(4)(b)(vi), R309-525-15(4)(c)(vii)
T006	NO SAMPLE TAP OR MEANS TO OBTAIN SAMPLES FROM INFLUENT OR EFFLUENT			Treatment - General Filters: Sampling taps or means to obtain samples from influent and effluent are provided	Min	5	R309-525-15(10)(a)(i)
T007	PRESSURE GUAGES FOR HEAD LOSS NOT PROVIDED			Treatment - General Filters: Pressure gauges are provided to indicate head loss through filter system to establish pressure differential between upstream and downstream side of each filter	Min	15	R309-525-15(10)(a)(ii), R309-535-8(2)(b)(ii), R309-535-11(1)(c)(ii)(A)
T008	NO METER INDICATING RATE OF FLOW FOR FILTERS			Treatment - General Filters: A meter indicating rate-of-flow for the filters is provided.	Min	5	R309-525-15(10)(a)(iii), R309-535-11(1)(c)(ii)(B)
L062		NON	0	Treatment - General Filter Backwash: General Information, describe the process. What triggers backwash (head, time, etc.), backwash process time, with or without air?	Non	0	R309-525-16(6)
T076	INSUFFICIENT STORAGE TANK VOLUME	MIN	20	Treatment - Conventional/Direct Filter General Filter Backwash - The backwash tank is capable of backwashing at least two filters consecutively	Min	15	R309-525-15(7)(a)(iv)

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T075	BACKWASH TANK DOES NOT PROVIDE FINISHED DRINKING WATER	SIG	20	Treatment - General Filter Backwash - Only finished water is used in the backwash process	Sig	50	R309-525-15(7)(a)(ix)
T077	BACKWASH TANK DOES NOT PERFORM IN CONJUNCTION WITH FILTER TO WASTE SYSTEM	REC	0				
T009	AT LEAST 3 FILTER UNITS NOT PROVIDED			Treatment - Slow Sand Filters: At least three (3) filter units are provided	Min	15	R309-530-6(5)(a)
				Treatment - Membrane Filters: Describe Membrane process, what initiates Clean in Place (CIP), what chemicals are used, where is it discharged to	Non	0	R309-530-8
TD57	VENTILATION NOT SEPARATE FROM REST OF TREATMENT PLANT	REC	0	Treatment - Gas Chlorinator: Housed in a separate chlorine room, for chlorine cylinders and feed equipment. All openings between the chlorine room and the remainder of the plant/faciltiy are sealed	Sig	25	R309-520-7(2)(g)
TD18	CL2 ROOM NOT SEALED FROM REST OF FACILITY	MIN	2				
TD95	EXIT DOORS DO NOT SWING OUTWARD WITH PANIC BARS	MIN	2	Treatment - Gas Chlorinator: Outward-opening doors are present and are equipped with panic bars to allow rapid exit	Sig	25	R309-520-7(2)(g)(iii)
TD96	INADEQUATE FLOOR DRAINAGE	MIN	5	Treatment - Gas Chlorinator: Where floor drains are present, the drain line discharges outside the building and is not connected to other internal or external drain systems	Sig	25	R309-520-7(2)(g)(iv)
TD56	CLORINE ROOM LACKS SHATTER RESISTANT INSPECTION WINDOW(S)	REC	0	Treatment - Gas Chlorinator: Has shatter resistant inspection window(s) in an interior wall located so an operator may read the weighing scales without enter the chlorine room	Sig	25	R309-520-7(2)(g)(i)
TD07	CL2 GAS FED/STORAGE NOT SEPARATE FROM OTHER AREAS	MIN	2	Treatment - Gas Chlorinator: Chlorine feed lines do not carry pressurized chlorine gas beyond the chlorine room. Only vacuum lines are routed to other areas of the building and these lines are adequately sealed	Sig	25	R309-520-7(2)(g)(v)
				Treatment - Finished Water Storage: General Information. How is CT calculated and does it account for in-plant water, storage size.	Non	0	R309-525-16
T018	CLEAR WELL DOES NOT HAVE AN OVERFLOW AND VENT			Treatment - Clear Well: The clear well has an overflow and vent and complies with the requirements of R309-545	Sig	25	R309-525-16(1)(b)(iii), R309-545
T019	CONVENTIONAL TREATMENT LABORATORY NO T LOCATED ON SITE TO PROVIDE O&M			Treatment - Conventional Treatment Laboratory: A laboratory is located on site to provide proper operations & maintenance of the plant	Sig	25	R309-525-17(1)
T027	PLANT DOESN'T PROVIDE FINISHED DW IN LAVATORY AND TOILET FACILITIES			Treatment - Conventional Laboratory: The plant provides finished drinking water, lavatory and toilet facilities	Min	15	R309-525-17(3)
TG20	DAILY RECORDS DO NOT REFLECT DOSAGES & TOTALS	SIG	2				

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TG34	SW PLANT DOES NOT HAVE CONT RESIDUAL MONITOR	MIN	20				
INFO	ACTIVATED CARBON - SYSTEM STARTS ON DIRTY FILTERS	REC	0				
TC18	ACTIVATED CARBON - PLANT EQUIP VENTING INADEQUATE	REC	0				
INFO	CL2 CONTACT TIME IS INSUFFICIENT	NON	0				
TF07				All chemicals used for fluoridation comply with ANSI/NSF Standard 60	Sig	25	R309-535-5(2)(a)(i)
TF06	FL CHEMICALS ARE NOT STORED SEPARATELY	MIN	2	Fluoride chemicals are stored in covered or sealed containers, inside a building, and away from direct sunlight and a source of heat.	Min	15	R309-535-5(2)(b)(i)
TF01	FL CONC ARE NOT CALCULATED DAILY	MIN	2	Fluoride concentrations calcuated daily	Sig	25	R309-535
TF02	FL CONC ARE NOT TESTED AS PER LOCAL RULES	REC	0	Fluoride concentrations are tested per local rules	Sig	25	R309-535
TF03	FL NO FAIL-SAFE DEVICE TO PREVENT OVERFEED	MIN	2	Fluoride has fail-safe device to prevent overfeed	Sig	50	R309-535
TF28	IMPROPER STORAGE OF CHEMICALS	MIN	10	Fluoride chemicals are properly stored away from incompatible chemicals	Sig	25	R309-535-5(2)(b)(ii)
TF36	CHEMICALS NOT STORED ON PALLETS	MIN	2	Bags or other containers for dry materials are stored on pallets and kept closed to keep out moisture and are disposed of in a manner which minimizes operators' exposure to fluoride dusts	Min	15	R309-535-5(2)(b)(iii)
TF41	INADEQUATE DISPOSAL OF BAGS, DRUMS OR BARRELS	MIN	10				
TF18	FL IMPROPER OVERFLOW FROM DAY TANK	MIN	2	Fluoride has proper overflow from day tank	Min	15	R309-535
TF26	INADEQUATE SPILL CONTAINMENT PROVISIONS	MIN	2	There is acid resistant secondary containment provided and it is sized to contain maximum volume of solution handled	Sig	25	R309-535-5(2)(c)
TF14	FL NO SCALE PRESENT TO CALC QUANTITY USED	MIN	2	There is a means to measure the quantity of chemical used	Min	15	R309-535-5(2)(d)
TF10	FL DILUTION LINE UNPROTECTED FROM BACKFLOW	SIG	10				
TF22	FLUORIDE PUMP NOT AUTOMATICLY STARTED WITH WELL OR SERVICE PUMP	MIN	30	The fluoride feed pump is only turned on when the well or service pump is on [i.e. the fluoride feed pump is not plugged into a continuously active ("hot") electrical outlet]	Sig	50	R309-535-5(2)(e)
TF16				The fluoride injection line enters at the point in the lower one-third of the water line, and the end of the injection line is in the lower half of the water line	Min	5	R309-535-5(2)(g)(i)

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TF08	FL MAKE UP WATER NOT TREATED FOR HARDNESS	MIN	2	The fluoride injection point point is located downstsream of lime softening, ion exchange, or other processes that affect the fluoride level	Min	5	R309-535-5(2)(g)(iii)
TF23				The Fluoridation equipment is house in a secure building	Sig	25	R309-535-5(2)(h)(i)
TF24	CHEMICAL STORAGE ROOM LACKS VENT TO OUTSIDE	MIN	2	The fluoridation equipment is housed in a building that is lighted, heated, and ventilated (vented to outside atmosphere away from air intakes) to assure proper operation	Min	5	R309-535-5(2)(j)(i)& (iii)
TF25				There are separate switches for fans and lights in the fluoride operating area located outside or near the entrance of the fluoride operating area and protected from vandalism	Min	5	R309-535-5(2)(j)(iv)
TF27	INADEQUATE CROSS-CONNECTION PROTECTION	SIG	10	Cross Connection: Cross connection control is provided by air gap or an approved properly operating backflow prevention assembly	Sig	50	R309-535-5(2)(k)
TF42	NO ADEQUATE FLOOR DRAIN	MIN	2				
TF29	VENTS DO NOT DISCHARGE OUTSIDE ABOVE GRADE	MIN	2	Fluorosilicic Acid: Solution bulk tank is vented to the outside, above grade, away from air intakes, where least susceptible to contamination; with a non-corrodible fine mesh #14 (or finer) screen placed over the vent discharge	Sig	25	R309-535-5(3)(b)(ii)& (iv)
TF21	TEST EQUIPMENT NOT VERIFIED OR CALIBRATED	MIN	2	Test equipment is varifeid and calibrated	Min	15	R309-525-25(4)
TF31	STORAGE AND DAY TANKS DO NOT HAVE SEPARATE VENTS	MIN	2	Fluorosilicic Acid: If there is a risk of the bulk tank overflowing to the day tank; the bulk tank and day tank have separate vents	Sig	25	R309-535-5(3)(b)(iii)
TF30				Fluorosilicic Acid facility constructed after January 1, 2017: There is a separate room provided for a fluoride operating area with a view window between the control room and the fluorosilicic acid operating area	Sig	25	R309-535-5(3)(c)
TF15	FL NO DELUGE SHOWERS OR EYEWASH AVAILABLE	MIN	10	Fluorosilicic Acid: Emergency eyewash stations and showers are provided (recommended the eye station be located where it can be used during an emergency, away from the fluoride leak)	Sig	25	R309-535-5(3)(d)
TF38		REC	0	Fluorosilicic Acid: There is a neutralizing chemical available on site to handle small-quantity accidental acid spills	Min	15	R309-535-5(3)(e)
TF13	FL INSUFFICIENT OR IMPROPER SAFETY EQUIPMENT	MIN	10	Fluorosilicic Acid: Appropriate protective equipment is provided for Operators (full-face shield and splash-proof safety goggles, long gauntlet acid-resistant rubber or neoprene gloves with cuffs, acid-resistant rubber or neoprene aprons, and rubber boots)	Sig	25	R309-535-5(3)(f)
TF32	NO MEANS TO STOP TRANSFER PUMP	REC	0				
TF33	NO EMERGENCY SHUT OFF	REC	0				

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TF34	NO PROVISIONS FOR FAILURE OF ACID BULK TANK	REC	0				
TF35	NO SEISMIC RESTRAIT FOR ACID BULK STORAGE TANK	REC	0				
TF19	SATURATORS NOT UP-FLOW TYPE	MIN	2				
TF43	NO FLOW MEASURING DEVICE ON INLET OR OUTLET OF SATURATOR	MIN	2	Fluoride Saturator: A water meter is installed on the make-up water line to determine the amount of fluoride solution being fed	Min	5	R309-535-5(4)(a)
TF44	NO SAMPLE TAP AVAILABLE FOR FL TESTING	MIN	2	Fluoride: sample tape available for testing	Sig	25	R309-535
TF12	FL NO FLOW METER ON LINE TO SATURATOR	MIN	2	Fluoride Saturator: The minimum depth of undissolved fluoride chemical, to maintain a saturated solution, is marked on the outside of the saturator tank	Min	5	R309-535-5(4)(b)
TF37	DISSOLUTION WATER NOT PROPERLY TREATED FOR HARDNESS	MIN	2	Fluoride Saturator make-up water hardness greater than 75 mg/L: The make up water is softened and a sediment filter (20 mesh) is installed in the make-up water line between the softener and the water meter.	Min	15	R309-535-5(4)(e)
TF45				Fluoride Saturator: Emergency eyewash is provided	Sig	25	R309-535-5(4)(g)
TF46				Fluoride Saturator: Personal protective equipment is available (NIOSH approved particulate respirator, chemical dust-resistant safety goggles, acid-resistant gloves, acid-resistant rubber or neoprene aprons, and rubber boots)	Sig	25	R309-535-5(4)(h)
TF47				Fluoride Dry Feed Installations: A solution tank with a mechanical mixer is installed for volumetric and gravimetric dry feeders	Min	15	R309-535-5(5)(a&b)
TF39	NO EXHAUST FAN AND DUST FILTER FOR TRANSFER OF DRY CHEMICALS	MIN	10	Fluoride Dry Feed Installations: If a hopper is provided it is equipped with a dust filter and exhaust fan that places the hopper under negative pressure	Sig	25	R309-535-5(5)(c)(ii)
TF47	NO SOLUTION TANK WITH MECHANICAL MIXER INSTALLED	MIN	15	Fluoride Dry Feed Installations: Solution tank with mechanical mixer installed	Min	15	R309-535-5(5)(a&b)
TF40	IMPROPER DISCHARGE OF AIR FROM FLUORIDE HANDLING EQUIPMENT	MIN	10	Fluoride Dry Feed Installations: Air exhaust from the fluoride handling equipment is discharged through a dust filter to the atmosphere outside of the building	Min	15	R309-535-5(5)(c)(ii)
TF48				Fluoride Dry Feed Installations: Emergency eyewash is provided	Sig	25	R309-535-5(5)(d)
TF49				Fluoride Dry Feed Installations: Personal protective equipment is available (NIOSH approved particulate respirator, chemical dust-resistant safety goggles, acid-resistant gloves, acid-resistant rubber or neoprene aprons, and rubber boots)	Sig	25	R309-535-5(5)(e)

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TI05	INHIBITOR ADD - PHOSPHATE TESTS NOT DONE	NON	0	Treatment - Iron (solubility) Sequestration by Polyphosphates: General Information, describe the process	Non	0	R309-535-11(5)
TQ06	SEQ - TOTAL PHOSPHATE APPLIED EXCEEDS 10 MG/L	MIN	2				
TQ08	SEQ - IMPROPER PHOSPHATE TEST EQUIPMENT	MIN	2				
				Treatment - Deionization (Non-Filter): General information, describe the process?	Non	0	R309-535-8
				Treatment - Lime-Soda Softening: General information, describe the process?	Non	0	R309-535-11(2)
TI05	INHIBITOR ADD - PHOSPHATE TESTS NOT DONE	REC	0				
Pump Stations							
PS13	PS SHOWS EVIDENCE OF OR NOT PROTECTED FROM FLOODING	SIG	5	Building designed with interior floor a minimum of 6" above outside finished grade	Min	5	R309-540-5 (2)(a)(iii)
PS01				Grading plan directs surface drainage away from pump station	Min	5	R309-540-5 (1)(a)(iv)
PS33	PUMP HOUSE NOT SECURE	SIG	5	Pump station designed to prevent vandalism and entry by animals and unauthorized persons	Min	15	R309-540-5 (1)(a)(v)
PS05	PS - NO SHUT OFF VALVE ON DISCHARGE PIPING	MIN	1	Pump station designed with shut off valve on discharge piping.	Min	5	R309-540
PS14	PS NOT PROPERLY HEATED LIGHTED OR VENTILATED	MIN	5	Pump station properly heated, lighted and ventilated.	Min	5	R309-540
PS06	PS - LACK OF DRAIN TO DAYLIGHT FLOOR DRAIN	MIN	1	Pump station designed with drain to daylight floor drain.	Min	5	R309-540
PS02	PS - NO CHECK VALVE ON DISCHARGE PIPING	MIN	1	Pump station designed with check valve on discharge piping.	Min	15	R309-540
				Building floor designed with slope to a drain separate from wet wells holding drinking water	Sig	25	R309-540-5 (2)(a)(v)
PS18	PUMP STATION LACKS REDUNDANT PUMP UNIT	SIG	20	If the pump station is used to pressurize the distribution system, it is designed with a minimum of two pumping units demand	Sig	25	R309-540-5 (4)(b)
PS19	PUMP STATION LACKS CAPACITY TO MEET DEMAND	SIG	20				
PS03	PS - NO PRESSURE GAUGE ON DISCHARGE PIPING	MIN	1	Standard pressure gauge for the discharge line on each pump	Min	5	R309-540-5 (6)(c)(i)(ii)
PS07				Electrical controls designed to be protected from flooding	Sig	25	R309-540-5 (6)(e)
PT14	HYDROPNEUMATIC TANK LACKS PROVISIONS FOR FLOOD PROTECTION	MIN	10	Hydropnuematic systems: Below-ground diaphragm/air tank chamber designed with adequate drainage and flood protection	Min	5	R309-540-6 (2)
PT08				Hydropnuematic systems designed with a pressure gauge on pressure tank inlet line	Min	15	R309-540-6 (3)

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PT13	HYDROPNEUMATIC TANK AND CONTROLS NOT SECURE	SIG	20	Hydropnuematic tank and controls are secure.	Sig	25	R309-540
PS31	IMPROPER LUBRICATION OIL	MIN	25	Pump station uses proper lubrication oil.	Sig	25	R309-540
PS15	UNPROTECTED CROSS CONN PRESENT IN PUMP STATION	SIG	20	Cross connections absent in pump station	Sig	50	R309-105-12(1)
PS12	A/V RELEASE VALVE LACKS A DOWN-TURNED DISCHARGE	MIN	2	Pump Station air release valve discharge line down turned, covered with a #14 mesh screen and terminates at least 6 inches above the pump station floor	Sig	25	R309-515-6(12)(d)(v)
PS10	A/V RELEASE VALVE LACKS A PROPER SCREEN	SIG	2				
PS11	A/V RELEASE VALVE LACKS A PROPER AIRGAP	MIN	2				
PS32	ELECTRICAL ROTATING EQUIP LACKS PROTECTIVE GUARDS	MIN	2				
PS17	PS - PIPING OR APPURTENANCES LEAKING	REC	0				
				Drinking Water Storage Tanks			
V018				Tank material provides stability, durability, and protects water quality	Sig	25	R309-545-6 (1)
V025				Tank located a Minimum of 50 lateral feet from sewers and contaMination sources	Sig	50	R309-545-7 (3)
V001	STORAGE FACILITY SITE NOT GRADED - PROPER DRAINAGE	MIN	5	Ground within 50 foot radius of tank graded to prevent standing water (ground-level & buried tanks)	Min	5	R309-545-7 (4)
V026				Tank capable of being isolated from distribution system	Min	5	R309-545-7 (5)
V020	STORAGE FACILITY SHOWS MILD DETERIORATION	REC	0	Tank roof has watertight roof and sidewalls that lacks evidence of mild deterioration or spalling which could penetrate through the tank if not addressed	Min	15	R309-545-9 (1)
V021	STORAGE FACILITY SHOWS MODERATE DETERIORATION	MIN	20				
V022	STORAGE FACILITY SHOWS EVIDENCE OF LEAKAGE	SIG	30	Tank roof has watertight roof and sidewalls that lacks evidence of siginificant deterioration that penetrates through the tank evidenced by leaking	Sig	50	R309-545-9 (1)
V023	STORAGE FACILITY IS LEAKING AT TIME OF INSPECTION	SIG	40				
V024	STORAGE FACILITY SHOWS EVIDENCE OF WATER INTRUSION	SIG	50				
V002	UNCOVERED FINISHED WATER STORAGE	SIG	150	All pipes and openings are properly welded, gasketed and sealed	Sig	50	R309-545-9 (2)(a)&(b)
V017	STORAGE FACILITY HAS UNSEALED ROOF PENETRATIONS	SIG	50				
V027				Minimum double wall separation provided between water and wastewater compartments	Sig	50	R309-545-9 (3)

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V003	STORAGE FACILITY COVER NOT SLOPED FOR DRAINAGE	REC	0	Tank roof drainage designed to prevent water ponding	Min	5	R309-545-9 (4)
V028				Tank designed with level control devices to maintain water levels	Min	5	R309-545-17
V036				Tank drain shall not discharge to a sanitary sewer	Sig	50	R309-545-10 (1)(c)
V016	DRAIN LINE DOES NOT HAVE ADEQUATE AIR GAP	MIN	5	If a drain line exists, the end of the drain line has a minimum of 12 inches of clearance	Sig	25	R309-545-10 (1)(d)
V037				Internal catwalks (if provided) designed with solid floors and raised edges	Sig	50	R309-545-10 (2)
VL01	STORAGE STRUCTURE MISSING A PROPER OVERFLOW	SIG	15	Tank overflow is present	Sig	50	R309-545-13
V011	STORAGE FACILITY OVERFLOW PIPE LACKS FREEFALL	MIN	5	Tank overflow discharges with a minimum of 12 inches of clearance	Min	15	R309-545-13
V038				Tank overflow designed to direct discharge away from tank and to prevent erosion	Min	15	R309-545-13
V012	STORAGE FACILITY OVERFLOW PIPE IMPROPER SCREEN	SIG	5	Overflow screened with non-corrodible #4 mesh screen	Sig	25	R309-545-13 (3)
V013	STORAGE FACILITY OVERFLOW CONNECTED TO SEWER	MIN	5	Overflow pipes not connected to, or discharge into, any sanitary sewer system	Sig	50	R309-545-13 (5)
VL03	STORAGE STRUCTURE MISSING A PROPER ACCESS HATCH	MIN	9	Tank designed with reasonable convenient access for cleaning and maintenance	Min	15	R309-545-14
VL04		MIN	9	Tank designed with at least one roof access opening above the overflow level	Min	15	R309-545-14 (1)
V008	STORAGE ACCESS NOT A Min. OF 4 IN ABOVE SURFACE	MIN	3	Access openings framed a minimum of 4 inches above the roof surface or 18 inches above earthen cover	Min	15	R309-545-14 (1)
V039				Access frame sealed to prevent inflow of contaminants with no openings, cracks or penetrations on the horizontal surface of the lid	Sig	50	R309-545-14 (1) & (2)
V010	STORAGE FACILITY LACKS PROPER SHOEBOX ACCESS	MIN	3	Access openings secured with a shoebox type lid with at least a 2-inch overhang, gasket and lock	Sig	25	R309-545-14 (2)& (3)
V009	STORAGE FACILITY ACCESS LACKS PROPER GASKET	SIG	3				
V029	STORAGE FACILITY IS NOT SECURE	SIG	20				
VL02	STORAGE STRUCTURE MISSING A PROPER AIR VENT	SIG	6	Tank designed with vent	Sig	25	R309-545-15
VL05		SIG	6	Vent capacity exceeds water inflow and water outflow	Sig	25	R309-545-15

Deficiency Code	(CURRENT) Database Description	(CURRENT) Deficiency Type	(CURRENT) IPS	*DRAFT Database Description*	(PROPOSED) Deficiency Type	(PROPOSED) IPS Points	Rule Reference
V007	STORAGE FACILITY VENT NOT PROPERLY SCREENED	SIG	2	Vents are downturned a minimum of 2 feet below any opening, screened with a #14 mesh screen and sealed	Sig	25	R309-545-15 (1)
V005	STORAGE FACILITY VENT NOT TURNED DOWN	MIN	2				
V006	STORAGE FACILITY VENT NOT 24-36 IN. ABOVE SURFACE	MIN	2	Vents have a minimum of 24 inches of clearance above earthen cover	Min	15	R309-545-15 (2)
V040				Vent located and sized to prevent blockage during winter	Sig	25	R309-545-15 (3)
V035	AIR VENT LACKS LARGER PTROTECTIVE SCREEN	REC	0	Vent 6-inches or greater in diameter designed with additional heavy gage screen to protect #14 mesh screen	Min	15	R309-545-15 (5)
V004	STORAGE FACILITY INADEQUATE LADDERS OR RAILINGS	MIN	2	Ladder greater than 20 feet long designed with appropriate safety features (cage, harness, platform, etc.)	Sig	25	R309-545-18 (2)
V041				Elevated tank designed with railings/handholds to access the tank	Sig	25	R309-545-18 (3)
V014	STORAGE FACILITY INTERIOR COATINGS DONT MEET ANSI/NSF 61	SIG	30	Specs require material for underwater recoating/repairing of tank interior to be certified to meet ANSI/NSF 60 & 61 standards	Sig	25	R309-545-21 (2)
Transmission and Distribution Pipelines							
D019	INADEQUATE DISTRIBUTION CAPACITY FOR FIREFLOW	MIN	5	All water mains (installed after 1995) that provide fire flow have a diameter of at least 8 inches	Min	5	R309-550-5(4) & (5)
D009				Design consideration for water mains near contamination areas	Sig	50	R309-550-5(11)
INFO		NON	0	Asbestos-Cement Pipe Absent	Non	0	R30-550-6(2)(a)
D014	DIST PIPING NOT FREE OF LEAD PIPES/FITTING			Distribution piping is free of lead pipes/fittings	Min	15	R30-550-6(2)(b)
D001	SYSTEM USES UNAPPROVED PIPE, FITTINGS OR MATERIAL	SIG	30	NSF/ANSI 61 Certification for drinking water components	Sig	25	R309-550-6(1) & R309-550-6(3)
D002	WATER LINES LACK REQUIRED SEPARATION FROM SEWER	SIG	30	Water line lacks required separation from sewer.	Sig	20	R309-550
D004	AIR OR VACUUM RELEASE VALVES NOT PROPERLY SCREENED	SIG	10	End of air relief vent pipe is down turned, covered with a #14 mesh screen, provided with a shut-off valve to permit servicing and extends to at least 12 inches above grade where possible or at least one foot above water main pipe if the chamber has means for drainage such as drain to daylight, gravel-filled adsorption pit or a sump pump.	Sig	25	R309-550-6(6)(a, b & e)
D006	A/V RELEASE VALVE PIPING NOT EXTEND ABOVE GRADE	SIG	10				
D007	AIR OR VACUUM RELEASE VALVES SUBJECT TO FLOODING	SIG	30				
D008	AIR OR VACUUM RELEASE VALVES FLOODED AT INSPECTION	SIG	50				
D009	DIST SYS NOT DESIGNED FOR WATER MAINS NEAR CONTAMINATION AREAS	SIG	50	Distribution system is not designed for water mains near contamination areas	Sig	50	R309-550-5(11)

Deficiency Code	(CURRENT) Database Description	(CURRENT) Deficiency Type	(CURRENT) IPS	*DRAFT Database Description*	(PROPOSED) Deficiency Type	(PROPOSED) IPS Points	Rule Reference
D013	DIST BLOW OFFS CONNECTED TO SEWER OR W/NO AIR GAPS	SIG	20	Cross Connection: Blow offs, air relief valves, and/or fire hydrant drains are not directly connected to a sewer and have adequate clearance if exit below flood level in a ditches or streams?	Sig	50	R309-550-6(5)(a) & R309-550-5(7)(b)
D011	DIST LINE CROSS A SW BODY W/ INADEQUATE PROTECTION	SIG	50	If a section of pipeline crosses under any surface water body great than 15 feet in width it has been specially constructed with restrained joints; isolation valves at each side on both ends of the water crossing; and a means of taking samples on the upstream and downstream sides of the water crossing	Sig	50	R309-550-8(8)(b)
D012	REC - FIRE HYDRANT USE POLICY INADEQUATE	REC	0				
D018	DOES NOT USE AWWA DISINFECTION STANDARDS	SIG	10	Water Line Maintenance: All water mains or appurtences were disinfected in accordance with AWWA C651-05 or a method approved by the Director	Sig	25	R309-550-8(10)
D003	SYSTEM FAILS TO PROVIDE 20 PSI TO ALL CONNECTIONS	SIG	50	Minimum of 20 psi, for systems constructed after January 1, 2007, 20 psi during fire flow and fire demand experienced uring peak day demand, 30 psi during peak instantaneous demand, and 40 psi during peak day demand	Sig	50	R309-105-9 & R306-550 5
D010	INADEQUATE PRESSURE PROVIDED TO SYSTEM POST 2006	SIG	50				
D016				Cross Connection: There are no water line physical connections with a possible contamination source, including pressurized, sewer. Niether stream condensate nor cooling water from engine jackets or other heat exchange devises are connected to the drinking water supply	Sig	50	R309-550-9(1 & 3)
M011	WATER HAULING NOT ALLOWD IF OTHER OPTION AVAILABLE	SIG	150	If the system hauls water, the system received DDW approval to haul water (community water systems are prohibited from permanent water hauling)	Sig	200	R309-550-10(2)
M012	REC - WATER HAULING GUIDELINES MUST BE UTILIZED	SIG	50				
INFO		NON	0	Cross Connection: There are no individual service connected booster pumps	Sig	50	R309-550-11(3)
Source Protection							
SP01	NO DESIGNATED CONTACT FOR SOURCE PROTECTION	MIN	5				
SP02	PER NOT UPGRADED TO FULL DWSP PLAN	SIG	30	PER for active sources upgraded to full DWSP plan within one year of plan approval	Sig	25	R309-600-13(6) & R309-605-9(3)
SP04	SYSTEM NOT CURRENT ON ALL DWSP UPDATES	MIN	10	All active sources have approved updates to DWSP plan	Minor	5	R309-600-7(2)(e) & R309-605-7(c)(v)
SP06	NO PER FOR NEW ACTIVE SOURCE	SIG	150	All new sources have an approved PER	Sig	50	R309-600-13 & R309-605-9

Deficiency Code	(CURRENT) Database Description	(CURRENT) Deficiency Type	(CURRENT) IPS	*DRAFT Database Description*	(PROPOSED) Deficiency Type	(PROPOSED) IPS Points	Rule Reference
SP07	SYSTEM HAS DISAPPROVED PLAN, UPDATE OR PER	SIG	20	All active sources have an approved DWSP plan	Sig	25	R309-600-7(2) & R309-605-7(1)(c)
SP08	OLD SOURCE LACKS A DWSP PLAN	SIG	30				
SP09	NO DWSP REVISION SUBMITTED AFTER REDEV OF SOURC	MIN	20	Revised DWSP plan submitted for redeveloped sources	Minor	15	R309-600-7(2)(f) & R309-605-7(1)(c)(vi)
SP03				DWSP plan implemented according to management strategies outlined in the plan	Sig	25	R309-600-7(2)(d) & R309-605-7(1)(c)(iv)

R309-400 Water System Rating Criteria (Improvement Priority System)
Presented to the Drinking Water Board
April 9, 2019

DRINKING WATER BOARD PACKET
Draft IPS Violation Table
(To be approved at a later date)

Vio Code	Violation	Rule-Analyte	(CUURENT) IPS	Proposed Rules Deficiencies	Deficiency/ Violation Type	(PROPOSED) IPS Points	Rule Reference
01	MCL, SINGLE SAMPLE	0100 TURBIDITY	10	Turbidity MCL Exceedance	Acute	50	R309-205-8/215-9
01	MCL, SINGLE SAMPLE	ALL OTHER ANALYTES	50	MCL Exceedance	Acute	50	R309-205/215
01	MCL, SINGLE SAMPLE	1038 NITRATE-NITRITE	60	Nitrate-Nitrite MCL Exceedance	Acute	100	R309-205-5(4)
01	MCL, SINGLE SAMPLE	1040 NITRATE	60	Nitrate MCL Exceedance	Acute	100	R309-205-5(4)
01	MCL, SINGLE SAMPLE	1041 NITRITE	50	Nitrite MCL Exceedance	Acute	50	R309-205-5(5)
01	MCL, SINGLE SAMPLE	3008 GIARDIA LAMBLIA	50	Log removal/inactivation of Giardia Lamblia not achieved	Acute	50	R309-215-7/505-6(2)(a)&(b)
02	MCL, AVERAGE	ALL OTHER ANALYTES	10	Running Annual Average MCL Exceedance	Acute	50	R309-205/215
02	MCL, AVERAGE	1040 NITRATE or 1038 NITRATE-NITRITE	35	Nitrate Running Annual Average MCL Exceedance	Acute	100	R309-205-5(4)
03	MONITORING, ROUTINE MAJOR	ALL OTHER ANALYTES	35	Chem Monitoring Violation	Monitoring	25	R309-205/215
03	MONITORING, ROUTINE MAJOR	1040 NITRATE or 1038 NITRATE-NITRITE	50	Nitrate Monitoring Violation	Monitoring	50	R309-205-5(4)
10	OPERATIONS REPORT	0200 SWTR	100	Monthly SWTR Report	Reporting	50	R309-215-8
11	MRDL (CHLORINE/CHLORAMINE)	0400 DBP STAGE 1	10	Residuals exceed 4 mg running annual average	Chronic	50	R309-215-12
19	MONITOR GWR ASSESSMENT, MAJOR	3014 TCR	5	Failure to submit GWR Assessment Source Sample	Monitoring	5	R309-215-16
1A	MCL, E. COLI, POS E COLI	3014 RTCR	50	Confirmed Positive E. coli Sample	Acute	50	R309-211-9
1A	MCL, E. COLI, POS E COLI	8000 RTCR	50	Confirmed Positive E. coli Sample	Acute	50	R309-211-9
27	MONITORING, ROUTINE (DBP), MAJOR	0999 CHLORINE	10	Failure to collect distribution system residuals	Reporting	15	R309-215-12
27	MONITORING, ROUTINE (DBP), MAJOR	2456 TOTAL HALOACETIC ACIDS (HAA5)	20	Monitoring & reporting Stage 1 DBP	Monitoring	15	R309-215-12
29	FAILURE TO PRODUCE FILTER ASSESSMENT	0300 IESWTR/LT1	35	Failure to perform filter assessment	Monitoring	25	R309-525-15
2A	LEVEL 1 ASSESS, MULTIPLE TC POS	8000 RTCR	40	Failure to complete a Level One Assessment for Multiple TC Pos	Chronic	50	R309-211-9
2A	LEVEL 1 ASSESS, TC POS RT NO RPT	8000 RTCR	40	Failure to complete a Level One Assessment for TC Pos with no repeats	Chronic	50	R309-211-9
2D	STARTUP PROCEDURES TT	8000 RTCR	50	Failure to complete a Seasonal Start Up Form	Reporting	50	R309-211-9
34	MONITOR GWR TRIGGERED/ADDITIONAL, MAJOR	0700 GROUNDWATER RULE	40	Failure to take Triggered Source sample after monthly Routine TC+ sample	Monitoring	25	R309-215-16
36	MONITORING, RTN/RPT MAJOR (SWTR-FILTER)	0999 CHLORINE	10	FTM and Report distribution residuals for SW PWS	Reporting	15	R309-215-8
3A	MONITORING, ROUTINE, MAJOR	3014 RTCR	35	Failure to complete all the required monthly RTCR sampling	Monitoring	25	R309-211-9
3A	MONITORING, ROUTINE, MINOR	3014 RTCR	10	Failure to complete some of the required monthly RTCR sampling	Monitoring	15	R309-211-9
41	MONTHLY COMB. FILTER EFFLUENT (SWTR	0100 TURBIDITY	25	Failure to meet NTU standards	Acute	100	R309-215-9
41	MONTHLY COMB. FILTER EFFLUENT (SWTR	0200 SWTR	25	Failure to maintain entry point residual	Acute	100	R309-215-8
41	RES DISINFECT CONCENTRATION (SWTR)	0999 CHLORINE	25	Failure to maintain at least a trace level of CL at furthest ends of dist	Acute	100	R309-215-8
42	FAILURE TO FILTER (SWTR)	0200 SWTR	50	Failure to provide treatment	Chronic	100	R309-215-8
43	SINGLE COMB FLTR EFFLUENT (IESWTR/LT1)	0300 IESWTR	50	Exceeds Turb 1 NTU	Acute	100	R309-215-8
44	MONTHLY COMB FLTR EFFLUENT (IESWTR/LT1)	0300 IESWTR	50	Exceeds Turb 0.3 NTU	Acute	100	R309-215-8
45	FAILURE ADDRESS DEFICIENCY (GWR)	0700 GROUNDWATER RULE	35	Significant Deficiency Failure to Fix Violation GW PWS	Chronic	50	R209-215-16(3)(a)(iii)

Vio Code	Violation	Rule-Analyte	(CUURENT) IPS	Proposed Rules Deficiencies	Deficiency/ Violation Type	(PROPOSED) IPS Points	Rule Reference
45	FAILURE ADDRESS DEFICIENCY (EPA SURVEY)	0800 LT2ESWTR	0	Significant Deficiency Failure to Fix Violation SW PWS	Chronic	50	R209-215-16(3)(a)(iii)
46	INADEQUATE DBP PRECURSOR REMOVAL	2920 DBP Stage 1	20	Precursor removal	Chronic	50	R309-215-12
4B	REPORT SAMPLE RESULT/FAIL MONITOR	8000 RTCR	1	Failure to submit RTCR monthly sample results on time	Reporting	5	R309-211-9
51	INITIAL TAP SAMPLING (LCR)	5000 LEAD & COPPER RULE	20	Failure to sample on 6 month monitoringfor Lead and Copper	Monitoring	25	R309-210-6
52	FOLLOW-UP OR ROUTINE TAP M/R (LCR)	5000 LEAD & COPPER RULE	20	Failure to sample for Lead and Copper	Monitoring	25	R309-210-6
57	OCCT/SOWT RECOMMENDATION/STUDY (LCR)	5000 LEAD & COPPER RULE	35	Failure to submit Corrosion Control Recommendation/Study	Chronic	50	R309-210-6
5A	SAMPLE SITING PLAN ERRORS	8000 RTCR	0	Failure to submit RTCR Sample Site Plan	Reporting	5	R309-211-9
65	PUBLIC EDUCATION (LCR)	5000 LEAD & COPPER RULE	10	Failure to submit LCR MCL public notice	Chronic	50	R309-210-6
71	CCR REPORT	7000 CONSUMER CONFIDENCE RULE	10	Failure to submit CCR	Reporting	15	R309-225-4
72	CCR ADEQUACY/AVAILABILITY/CONTENT	7000 CONSUMER CONFIDENCE RULE	10	Failure to submit proof of CCR delivery notification	Reporting	15	R309-225-4
75	PUBLIC NOTICE RULE LINKED TO VIOLATION	ALL ANALYTES	5	Failure to submit Tier 3 PN	Reporting	5	R309-220
75	PUBLIC NOTICE RULE LINKED TO VIOLATION	ALL ANALYTES	2	Failure to submit Tier 2 PN	Reporting	5	R309-220
75	PUBLIC NOTICE RULE LINKED TO VIOLATION	ALL ANALYTES	10	Failure to submit Tier 1 PN	Reporting	15	R309-220
76		7500 PUBLIC NOTICE		Other Non-NPDWR Potential Health Risks	Reporting	50	R309-220
03	LT24 MAJOR	3014 ECOLI	25	FTM and Report all LT2 required samples for a month	Monitoring	25	R309-215-15
03	LT24 MINOR	3014 ECOLI	5	FTM and Report some LT2 required samples for a month	Monitoring	5	R309-215-15
4A		8000 RTCR		Failure to Timely Submit Level 1 Assessment Forms	Reporting	15	R309-211-11
4C		8000 RTCR		Failure to Timely Submit Seasonal Start-up Certification Form for Properly Conducted Start-up Procedures	Reporting	15	R309-211-11
4D		8000 RTCR		Failure to notify DDW of E*coli* positive	Reporting	25	R309-211-11

R309-400 Water System Rating Criteria (Improvement Priority System)
Presented to the Drinking Water Board
April 9, 2019

DRINKING WATER BOARD PACKET
Existing Rule Language
(To be replaced by the proposed rule)

R309-400. Water System Rating Criteria.

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R309-400. Water System Rating Criteria.

R309-400-1. Authority.

Under authority of Utah Code Annotated, Section 19-4-104, the Drinking Water Board adopts this rule in order to evaluate a public water system's standard of operation and service delivered in compliance with R309-100 through R309-705 hereinafter referred to as Rules.

R309-400-2. Extent of Coverage.

This rule shall apply to all public water systems as defined in R309-100.

R309-400-3. Definitions.

Definitions for certain terms used in this rule are given in R309-110 but may be further clarified herein.

Corrective Action Plan - an agreement between the Division of Drinking Water and a public drinking water system establishing conditions and timelines for addressing significant deficiencies or E. coli contamination of a drinking water source.

Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water.

Treatment Technique Violation - failure to correct significant deficiencies, address E. coil positive source contamination or adhere to specific terms of a Corrective Action Plan.

R309-400-4. Water System Ratings.

(1) The Director shall assign a rating to each public water system in order to provide a concise indication of its condition and performance. This rating shall be assigned based on the evaluation of the operation and performance of the water system in accordance with the requirements of the Rules. Points shall be assessed to water systems for each violation of these requirements (R309-100 through R309-705) as the requirements apply to each individual water system. The number of points that shall be assessed is outlined in the following sections of this rule. The number of points represents the threat to the quality of the water and thereby public health.

(2) Points are assessed in the following categories: Quality, Monitoring and Public Notification; Physical Deficiencies; Operator Certification; Cross Connection Control; Drinking Water Source Protection; Administrative Issues; and, Reporting and Record

Maintenance.

(3) Based upon the accumulation of points, the public water system shall be assigned one of the following ratings:

(a) Approved - In order to qualify for an Approved rating, the public water system must maintain a point total less than the following:

(i) Community water system - 150 points;

(ii) Non-Transient Non-Community water system - 120 points; and

(iii) Non-Community water system - 100 points.

(b) Not Approved - In order for a public water system to receive a Not Approved rating the accumulation of points for the water system must exceed the totals listed above.

(c) Corrective Action - In order to qualify for a Corrective Action rating the public water system must submit the following:

(i) A written agreement to the Director stating a willingness to comply with the requirements set forth in the Rules; and,

(ii) A compliance schedule and time table agreed upon by the Director outlining the necessary construction or changes to correct any physical deficiencies or monitoring failures; and,

(iii) Proof of the financial ability of the water system or that the financial arrangements are in place to correct the water system deficiencies.

(iv) The Corrective Action rating shall continue until the total project is completed or until a suitable construction inspection or sanitary survey is conducted to determine the effectiveness of the improvements or the accumulation of points drops below the threshold for a not approved rating whichever is later.

(4) The water system point accumulation shall be adjusted on a quarterly basis or as current information is available to the Director. The appropriate water system rating shall then be adjusted to reflect the current point total.

(5) The Director may at any time rate a water system Not Approved, if an immediate threat to public health exists. This rating shall remain in place until such time as the threat is alleviated and the cause is corrected.

(6) Any water system may appeal its assigned rating or assessed points as provided in

R305-7.

R309-400-5. Quality, Monitoring and Public Notification Violations.

(1) Total Coliform Rule:

All points assessed to public water systems via this subsection are based on violations of the quality standards in R309-200-5(6); or the monitoring requirements in R309-210-5; and the associated public notification requirements in R309-220. The bacteriological points assessed shall be updated on a monthly basis with the total number of points reflecting the most recent twelve month period or the most recent 4 quarters for those water systems that collect bacteriological samples quarterly, unless otherwise noted.

(a) For each major bacteriological routine monitoring violation, 35 points shall be assessed. For each failure to perform the associated public notification 5 points shall be assessed.

(b) For each minor bacteriological routine monitoring violation, 10 points shall be assessed. For each failure to perform the associated public notification 2 points shall be assessed.

(c) For each major bacteriological repeat monitoring violation, 40 points shall be assessed. For each failure to perform the associated public notification 5 points shall be assessed.

(d) For each minor bacteriological repeat monitoring violation, 10 points shall be assessed. For each failure to perform the associated public notification 2 points shall be assessed.

(e) For each additional monitoring violation (R309-210-5(2)(e)), 10 points shall be assessed. For each failure to perform the associated public notification 2 points shall be assessed.

(f) For each non-acute bacteriological MCL violation (R309-200-5(6)(a)), 40 points shall be assessed. For each failure to perform the associated public notification 10 points shall be assessed.

(g) For each acute bacteriological MCL violation (R309-200-5(6)(b)), 50 points shall be assessed. For each failure to perform the associated public notification 10 points shall be assessed.

(2) Ground Water Rule:

All points assessed to public water systems via this subsection are based on violations of the standards in R309-215-16. Points assessed for any significant deficiency shall be deleted as the deficiencies are corrected and are reported to the Director. The bacteriological points assessed shall be updated on a monthly basis with the total number of points reflecting the most recent 12-month period or the most recent four quarters for those water systems that collect bacteriological samples quarterly, unless otherwise noted.

(a) For failure to collect triggered source samples in violation of R309-215-16(2)(a)(i)(A) and (a)(i)(B), 40 points shall be assessed. For each failure to perform the associated public notification, 2 points shall be assessed.

(b) For failure to collect assessment source samples in violation of R309-215-16(2)(b)(i), 5 points shall be assessed. For each failure to perform the associated public notification, 2 points shall be assessed.

(c) For failure to correct a significant deficiency in violation of R309-215-16(4)(a)(i) and (ii), R309-215-16(4)(c) or R309-215-16(4)(d), 35 points shall be assessed. For each failure to perform the associated public notification, 2 points shall be assessed.

(d) For an Escherichia coli. in violation of R309-215-16(4)(b)(i) and (ii), 40 points shall be assessed. For each failure to perform the associated public notification, 2 points shall be assessed.

(3) Chemical:

All points assessed to public water systems via this subsection are based on violations of the quality standards in R309-200-5; or the monitoring requirements in R309-205, 210 and 215; and the associated public notification requirements in R309-220. The chemical assessments shall be updated on a quarterly basis with the total number of points reflecting the most recent compliance period unless otherwise specified. Points for any chemical MCL violation shall remain on record until the quality issue is resolved. Points for any monitoring violation shall be deleted as the required chemical samples are taken and the analytical results are reported to the Director.

(a) Inorganic and Metal Contaminants:

(i) For each major chemical monitoring violation for inorganic and metal contaminants, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.

(ii) For each minor chemical monitoring violation for inorganic and metal contaminants, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(iii) For each MCL exceedance for inorganic and metal contaminants, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(b) Sulfate (for non-community water systems only):

(i) For each major chemical monitoring violation for sulfate, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.

(ii) For each minor chemical monitoring violation for sulfate, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(iii) For each MCL exceedance for sulfate, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(c) Radiologic Contaminants:

(i) For each major chemical monitoring violation for radiological contaminants, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.

(ii) For each minor chemical monitoring violation for radiological contaminants, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(iii) For each MCL exceedance for radiological contaminants, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(d) Asbestos Contaminants:

(i) For each major chemical monitoring violation for source water or distribution system asbestos, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.

(ii) For each minor chemical monitoring violation for source water or distribution system asbestos, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(iii) For each MCL exceedance for source water or distribution system asbestos, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(e) Nitrate:

(i) For each routine chemical monitoring violation for nitrate, 50 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(ii) For each MCL exceedance of nitrate, 60 points shall be assessed. For each failure to perform the associated public notification, 10 points shall be assessed.

(f) Nitrite:

(i) For each routine chemical monitoring violation for nitrite, 35 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(ii) For each MCL exceedance of nitrite, 50 points shall be assessed. For each failure to perform the associated public notification, 10 points shall be assessed.

(g) Volatile Organic Chemicals:

(i) For each major chemical monitoring violation for volatile organic chemical contaminants, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.

(ii) For each minor chemical monitoring violation for volatile organic chemical contaminants, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(iii) For each MCL exceedance for volatile organic chemical contaminants, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(h) Pesticides/PCBs/SOCs

(i) For each major chemical monitoring violation for pesticide/PCB/SOC contaminants, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.

(ii) For each minor chemical monitoring violation for pesticide/PCB/SOC contaminants, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(iii) For each MCL exceedance for pesticide/PCB/SOC contaminants, 30 points shall be assessed. For each failure to perform the associated public

notification, 5 points shall be assessed.

(i) Disinfection Byproducts:

(i) Total Trihalomethanes:

(A) For each routine chemical monitoring violation for total trihalomethanes, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each MCL exceedance for total trihalomethanes, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(ii) Haloacetic Acids (HAA5):

(A) For each routine chemical monitoring violation for HAA5, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each MCL exceedance for HAA5, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(iii) Bromate:

(A) For each routine chemical monitoring violation for bromate, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each MCL exceedance for bromate, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(iv) Chlorite:

(A) For each routine chemical monitoring violation for chlorite, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each MCL exceedance for chlorite, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(j) Disinfectant Residuals:

(i) Chlorine:

(A) For each routine chemical monitoring violation for chlorine, 10 points shall be assessed. R309-210-8(3)(a). For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each MCL exceedance for chlorine, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(C) For a disinfected system that does not maintain a trace residual at all points of the distribution system, 2 points shall be assessed. R309-105-10(1) and R309-200-5(7).

(D) For a disinfected system that lacks an adequate number of disinfection residual sample sites, 2 points shall be assessed. R309-210-8(3)(a)(i)(z15).

(ii) Chloramines:

(A) For each routine chemical monitoring violation for chloramines, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each MCL exceedance for chloramines, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(iii) Chlorine Dioxide:

(A) For each routine monitoring violation for chlorine dioxide, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each non-acute chlorine dioxide MCL violation, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(C) For each acute chlorine dioxide MCL violation, 50 points shall be assessed. For each failure to perform the associated public notification, 10 points shall be assessed.

(iv) Ground Water Rule, where a water system has received a 4-Log exemption from triggered source water monitoring:

(A) For a ground water treatment facility serving greater than 3300

population lacking equipment to measure chlorine residuals continuously entering the distribution system, 20 points shall be assessed. R309-215-10(1).

(B) For a ground water system serving greater than 3300 people failing to continuously monitor the residual disinfectant concentrations, 10 points shall be assessed. R309-215-16(3)(b)(iii)(A)(I).

(C) For a ground water system serving less than 3300 people failing to collect a daily grab sample during peak demand to monitor the residual disinfectant concentrations, 10 points shall be assessed. R309-215-16(3)(b)(iii)(A)(II).

(D) For a ground water system that during the past year, the disinfection process was not operated uninterrupted while water was being produced, points will be assessed based on monthly and quarterly treatment reports. R309-200-5(7).

(E) For a ground water system that is required to provide continuous disinfection but fails to do so, 10 points shall be assessed for each month the failure continues. R309-520-6(1).

(k) Lead and Copper:

(i) For each major chemical monitoring violation for lead and copper contaminants, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.

(ii) For each minor chemical monitoring violation for lead and copper contaminants, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(iii) A system that fails to install, by the designated deadline, optimal corrosion control if the lead or copper action level has been exceeded shall be assessed 35 points. For each failure to perform the associated public notification, 10 point shall be assessed.

(iv) A system that fails to install source water treatment if the source waters exceed the lead or copper action level shall be assessed 35 points. For each failure to perform the associated public notification, 10 points shall be assessed.

(v) A system that fails to complete public notification/education if the lead/copper action levels have been exceeded shall be assessed 10 points for each calendar quarter that the system fails to provide public

notification/education.

(vi) A system that still exceeds the lead action level and is not on schedule for lead line replacement shall be assessed 5 points annually. For each failure to perform the associated public notification, 2 point shall be assessed.

(vii) A system that fails to notify its customers of their lead and copper sample results, 5 points shall be assessed.

(viii) A system that fails to send the lead and copper certification notice to the Division, 5 points shall be assessed.

(l) Groundwater Turbidity:

(i) For each monitoring violation for turbidity, 35 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(ii) For each confirmed MCL exceedance of turbidity, 50 points shall be assessed. For each failure to perform the associated public notification, 10 points shall be assessed.

(m) Surface Water Treatment:

(i) For water systems having sources, which are classified as under direct influence from surface water and which fail to abandon, retrofit or provide conventional complete treatment or its equivalent within 18 months of notification shall be assessed 150 points. For the associated failure to perform public notification 10 points shall be assessed. The points shall be assessed as the failure occurs and shall remain on record until adequate treatment is provided or the source is physically disconnected.

(ii) Quality and Monitoring: The surface water treatment assessments shall be updated on a monthly basis with the total number of points reflecting the most recent 12-month period.

(A) Turbidity:

(I) For each turbidity exceedance that requires tier 1 notification under R309-220-5(1)(e) or (f), 50 points shall be assessed. For the associated failure to perform public notification, 10 points shall be assessed.

(II) For each turbidity exceedance that requires tier 2 notification under R309-220-5(1)(e) or (f), 35 points shall be

assessed. For the associated failure to perform public notification, 10 points shall be assessed.

(III) For each month where the percentage of turbidity interpretations meeting the treatment plant limit is less than 95 percent, 25 points shall be assessed. For the associated failure to perform public notification, 10 points shall be assessed.

(IV) For any period of time that exceeds 4 hours where the system fails to continuously measure (or perform grab samples) the combined filter effluent turbidity, 50 points shall be assessed. For the associated failure to perform public notification, 10 points shall be assessed.

(V) For a water system whose failure to repair continuous turbidity monitoring equipment within 5 working days, 50 points shall be assessed.

(B) Disinfection:

(I) For each instance where the disinfectant level in water entering the distribution system is less than 0.2 milligrams per liter for more than 4 hours, 25 points shall be assessed. For the associated failure to perform public notification, 5 points shall be assessed.

(II) For each instance where there is insufficient disinfectant contact time, 35 points shall be assessed. For the associated failure to perform public notification, 5 points shall be assessed.

(iii) Treatment Process Control:

(A) For each instance a treatment facility exceeds the assigned filter rates, 30 points shall be assessed.

(B) For each month a water system fails to verify calibration of the plant turbidimeters, 5 points shall be assessed.

(C) For each month a water system fails to submit a water treatment plant report, 50 points shall be assessed.

R309-400-6. Physical Facilities.

All points assessed to public water systems via this subsection are based upon violation of R309-500 through R309-705 unless otherwise noted. These points shall be assessed and updated upon notification of the Director and shall remain until the violation or deficiency no longer exists.

(1) New Source Approval:

(a) Use of an unapproved source shall be assessed 200 points.

(2) Surface Water Diversion Structures and Impoundments:

(a) For each surface water intake structure that does not allow for withdrawal of water from more than one level if quality significantly varies with depth, 2 points shall be assessed. R309-515-5(5)(a).

(b) Where diversion facilities are not capable of keeping large quantities of fish or debris from entering the intake, 2 points shall be assessed. R309-515-5(5)(e).

(c) Where impoundment reservoirs have not had brush and trees removed to the high water level, 2 points shall be assessed. R309-515-5(6)(a).

(d) Where reservoir watershed management has not provided adequate precautions to limit nutrient loading, 10 points shall be assessed. R309-515-5(6)(d).

(3) Well Sources

(a) For each well that is not equipped with a sanitary seal, or has any unsealed opening into the well casing, 50 points shall be assessed. R309-515-6(6)(i).

(b) For each well that does not utilize food grade mineral oil for pump lubrication, 25 points shall be assessed. R309-515-8(2).

(c) For each well casing that does not terminate at least 12 inches above the well house floor, 18 inches above the final ground surface, or shows evidence of being subject to flooding, 20 points shall be assessed. R309-515-6(6)(b)(vi) and R309-515-6(13)(a) and (d).

(d) For each well fitted with a pitless adaptor that does not maintain a water tight seal throughout, 50 points shall be assessed. R309-515-6(12)(c)(x).

(e) For each wellhead that is not properly secured to protect the quality of the well water, 20 points shall be assessed. R309-515-6(13)(f).

(f) For each well that is equipped with a pump to waste line that does not discharge

with a minimum of 12-inch clearance to the flood rim, 20 points shall be assessed. R309-515-6(12)(d)(ix).

(g) For each well that is equipped with a pump to waste line without a downturned discharge end covered with a No. 4 mesh screen, 5 points shall be assessed. R309-515-6(12)(d)(ix).

(h) For each well that is equipped with a pump to waste line that discharges to a receptacle without local authorization, 2 points shall be assessed.

(i) For each well that does not have a means to permit periodic measurement of water levels, 2 points shall be assessed. R309-515-6(12)(e)(i) and (ii).

(j) For each well casing vent that is not covered with a No. 14 or finer mesh screen, 2 points shall be assessed. R309-515-6(12)(d)(iii) and R309-550-6(6)(b).

(k) For each well casing vent that is not downturned, 2 points shall be assessed. R309-515-6(12)(d)(iii) and R309-550-6(6)(b). Also Division of Water Rights Rule R655-4-11.7.11.

(l) For each well casing vent that does not have adequate clearance to prevent the contaminants from entering the well, 2 points shall be assessed. R309-515-6(12)(d)(iii) and R309-550-6(6)(b).

(m) For each well (excluding the naturally flowing wells) that has discharge piping that is not equipped with 1) a smooth nosed sampling tap 2) check valve 3) pressure gauge 4) means of measuring flow, and 5) shut-off valve, 1 point shall be assessed for each component not present. R309-515-6(12)(d)(iv).

(n) For each well that pumps directly into a distribution system and does not have a means to release trapped air from the discharge piping (for example, release air through an air release vacuum relief valve, through a pump to waste line or pumps directly to a tank), 5 points shall be assessed. R309-515-6(12)(d)(v).

(o) For each well house that is not at least 6 inches above the final ground level, is not sloped to drain, or shows evidence of being subject to flooding, 5 points shall be assessed. R309-515-6(13)(b).

(p) For each well that has a cross connection present in the discharge piping, 20 points shall be assessed. R309-105-12(1) and R309-515-6(12)(d)(iii).

(q) For each well with an air vacuum relief valve on the well discharge piping that is not screened, 2 points shall be assessed. R309-515-6(12)(d)(v).

(r) For each well with an air vacuum relief valve on the well discharge piping that is not downturned, 2 points shall be assessed. R309-515-6(12)(d)(v).

(s) For each well with an air vacuum relief valve on the well discharging piping that does not have a 6-inch clearance to prevent contaminants from entering the piping, 2 points shall be assessed. R309-515-6(12)(d)(v).

(t) For each well that has rotating and electrical equipment that is not provided with protective guards, 2 points shall be assessed.

(4) Spring Sources:

(a) For each spring source that allows surface water to stand or pond upon the spring collection area (within 50 feet from collection devices), 10 or 20 points shall be assessed. The number of points shall be based upon the size and extent of the ponding; the possible source (rainfall or incomplete collection); or the presence of moss or other indicators of long term presence of standing water. R309-515-7 (7)(i).

(b) For each spring area that does not have a minimum of ten feet of relative impervious soil or an acceptable alternate design with liner, or the spring collection area shows evidence of damaged liner or impervious soil cover, 10 points shall be assessed. R309-515-7(7)(a) and (b).

(c) For each spring area that has deep-rooted vegetation within the fenced collection area, 10 points shall be assessed. R309-515-7(7)(f).

(d) For each spring area that has deep rooted vegetation interfering with the spring collection, 10 points shall be assessed. R309-515-7(7)(f).

(e) For each spring with a spring collection/junction box that does not have a proper shoebox lid, 5 points shall be assessed. R309-515-7(7)(d) and R309-545-14(2).

(f) For each spring with a spring collection/junction box that does not have a proper gasket on the lid, 5 points shall be assessed. R309-515-7(7)(d) and R309-545-14(2).

(g) For each spring with a spring collection/junction box that lacks an adequate air vent, 5 points shall be assessed. R309-515-7(7)(d) and R309-545-15.

(h) For each spring with a spring collection/junction box with a vent that is not screened with No. 14 mesh screen, 2 points shall be assessed. R309-515-7(7)(d) and R309-545-15.

(i) For each spring with a spring collection/junction box with a vent that is not down-turned or inverted, 2 points shall be assessed. R309-515-7(7)(d) and R309-545-15(1).

(j) For each spring with a spring collection/junction box with a vent that does not have sufficient clearance to prevent ice blockage, or is not at least 24 inches above the earthen cover, 2 points shall be assessed. R309-515-7(7)(d) and R309-545-15(2).

(k) For each spring with a spring collection/junction box that lacks a raised access entry, at least 4 inches above the spring box or 18 inches above the earthen cover, 5 points shall be assessed. R309-515-7(7)(d) and R309-545-14(1).

(l) For each spring with a spring collection/junction box that is not secured against unauthorized access, 20 points shall be assessed. R309-515-7(7)(d) and R309-545-14(3).

(m) For each spring collection area without a proper fence, 10 points shall be assessed. R309-515-7(7)(e).

(n) For each spring collection area that does not have a diversion channel, or berm capable of diverting surface water away from the collection area, 5 points shall be assessed. R309-515-7(7)(g).

(o) For each spring system that does not have a permanent flow measuring device, 5 points shall be assessed. R309-515-7(7)(h).

(p) For each spring area with an overflowor a combined overflow/drain discharge that is not screened with a No. 4 mesh screen, 5 points shall be assessed. R309-515-7(7)(d) and R309-545-13.

(q) For each spring collection/junction box overflow that does not have a freefall of 12 to 24 inches between the bottom of the discharge pipe and the surrounding ground, 5 points shall be assessed. R309-515-7(7)(d) and R309-545-13.

(r) For each spring collection/junction box that has any unsealed opening(s) resulting in public health risk, 50 points shall be assessed. R309-515-7(7)(d) and R309-545-9(1).

(5) Pump Stations.

(a) For a pumping facility that does not have a standard pressure gauge on the discharge line, 1 point shall be assessed. R309-540-5(6)(c)(i).

(b) For a pumping facility building without adequate drainage or showing evidence of flooding, 5 points shall be assessed. R309-540-5(2)(a)(v) and (vi).

(c) For a pumping facility where the discharge line from the air release valve is not screened with number 14 non-corrodible mesh screen, 2 points shall be assessed.

R309-540-5(6)(b)(ii) and R309-550-6(6)(b).

(d) For an air release valve located within a building, if the discharge line terminates less than six inches above the floor, 2 points shall be assessed. R309-515-6(12)(d)(v) and R309-540-5(6)(b)(ii).

(e) For an air release valve located in a chamber, if the air release valve discharge piping terminates less than 12 inches above grade, or less than one foot above the top of the pipe where the chamber is not subject to flooding, 10 points shall be assessed. R309-540-5(6)(b)(ii) and R309-550-6(6)(b).

(f) For a pumping facility where the discharge line from the air release valve is not down-turned, 2 points shall be assessed. R309-540-5(6)(b)(ii) and R309-550-6(6)(b).

(g) For a pumping facility where there is inadequate heating, lighting or ventilation, 5 points shall be assessed. R309-540-5(2)(e), (f) and (g).

(h) For a pumping facility where there are cross connections present, 20 points shall be assessed. R309-105-12(1).

(i) For an inline booster pumping facility designed to provide pressure directly to the distribution system, which does not have at least two pumping units such that with any one pump out of service the remaining pump or pumps are capable of meeting the peak day demand of the specific portion of the system served, 20 points shall be assessed. R309-540-5(4)(b).

(j) For a pumping facility which does not have protective guards on rotating and electrical equipment, 2 points shall be assessed. R309-525-21.

(k) For a pumping facility which is not secured against unauthorized access shall be assessed, 5 points. R309-540-5(1)(a)(v).

(6) Hydropneumatic pressure tanks.

(a) For diaphragm or air tanks located below ground without adequate provisions for drainage, maintenance and flood protection, 10 points shall be assessed. R309-540-6(2).

(b) For a pressure tank with a pump cycle that cycles more frequently than once every 4 minutes, 5 points shall be assessed. R309-540-6(5).

(7) Storage:

(a) A water system with uncovered finished water storage shall immediately be assessed a rating of not approved, 200 points shall be assessed. R309-545-9(1) and (2).

(b) For each storage tank roof showing evidence of water ponding with deterioration, 10 points shall be assessed. R309.545-9(4).

(c) For each storage tank that does not have an access to the interior for cleaning and maintenance, 9 points shall be assessed. R309-545-14.

(d) For each storage tank access that does not have a shoebox type lid with a minimum of a 2-inch overlap, 3 points shall be assessed. R309-545-14(2).

(e) For each storage tank access that lacks a proper gasket between the lid and frame, 3 points shall be assessed. R309-545-14(2).

(f) For each storage tank access that lacks a minimum rise of 4 inches above the tank roof or a minimum of 18 inches above an earthen cover, 3 points shall be assessed. R309-545-14(1).

(g) For each storage tank that is not vented, 6 points shall be assessed. R309-545-15.

(h) For each finished water storage tank vent that is not downturned or covered from rain and dust, 2 points shall be assessed. R309-545-15(1).

(i) For each storage tank vent that does not terminate a minimum of 24 inches above the surface of the storage tank roof if the tank is a buried structure, 2 points shall be assessed. R309-545-15(2).

(j) For each storage tank vent that is not screened with number 14 non-corrodible mesh screen, 2 points shall be assessed. R309-545-15(4).

(k) For each storage tank that lacks an overflow, 15 points shall be assessed. R309-545-13.

(l) For each storage tank overflow that does not terminated 12 to 24 inches above the ground, 5 points shall be assessed.R309-545-13.

(m) For each storage tank overflow that is not screened with number 4 non-corrodible mesh screen, 5 points shall be assessed. R309-545-13(3).

(n) For each storage tank overflow that is connected to a sewer system without an adequate air gap, 5 points shall be assessed. R309-545-13(5).

(o) For each storage tank with a drain that does not discharge through a physical

airgap of at least 2 pipe diameters, 5 points shall be assessed. R309-545-10(1).

(p) For each storage tank with inadequate or improper means of site drainage or showing evidence of standing surface water within 50 feet of the tank, 5 points shall be assessed. R309-545-7(4).

(q) For each storage tank with any unsealed roof or wall penetrations, 50 points shall be assessed. R309-545-9(2).

(r) For each storage tank where the roof and sidewalls show signs of deterioration, 10 to 50 points shall be assessed based upon the size and number of cracks, the loss of structural integrity, and the access of contamination to the drinking water. R309-545-9(1).

(s) For each storage tank without a safe access (such as ladders for tanks in excess of 20 feet, ladder guards, or railings) or safely located entrance hatches, 2 points shall be assessed. R309-545-19(1), (2) and (3).

(t) For each storage tank with internal coatings not in compliance with ANSI/NSF standard 61, 30 points shall be assessed. R309-545-11.

(u) For a storage facility that is not secured against unauthorized access, 20 points shall be assessed. R309-545-14(3).

(8) Distribution System:

(a) A water system that fails to provide the minimum water pressures as required in R309-105-9 at all times and at all locations within the distribution system, 50 points shall be assessed. R309-105-9 and R309-550-5(1).

(b) A water system using pipe and materials not meeting the ANSI/NSF 61 standard shall be assessed 30 points. R309-550-6.

(c) A water system with pipelines installed without adequate separation distance from the sanitary sewer lines shall be assessed 30 points. R309-550-7.

(d) A new water system constructed after January 1, 2007 or an existing water system modification without adequate pressure as defined in R309-105-9(2) shall be assessed 50 points.

(e) A water system which has a distribution line that crosses under a surface water body without adequate protection as outlined in R309-550-8(8)(b) shall be assessed 50 points.

(f) A water system which has distribution system flushing devices, blow-offs or air

relief valves, which are directly connected to a sewer or do not have a proper air gap, shall be assessed 20 points. R309-550-6 and R309-550-9.

(g) For a water system that does not properly follow the AWWA disinfection standards 10 points shall be assessed. R309-550-8(10).

(h) For a water system that is required by the local fire authority to provide fire protection or has fire hydrants connected with water mains less than 8 inches in diameter, 5 points shall be assessed. These points will only be assessed for water mains installed after 1995. R309-550-5(4) and (5).

(i) For each air relief valve vent piping, which is not screened with a No. 14 mesh and downturned, 10 points shall be assessed. R309-550-6(6)(b).

(j) For an air release valve located in a chamber, if the air release valve discharge piping terminates less than 12 inches above grade or less than one foot above the top of the pipe where the chamber is not subject to flooding, 10 points shall be assessed. R309-550-6(6)(b).

(k) For each air relief valve located in a chamber without a drain or adequate sump, or showing evidence of being subject to flooding, 30 points shall be assessed. R309-550-7.

(l) For each air vacuum release valve chamber that is flooded at the time of inspection, 50 points shall be assessed.

(m) For an unprotected cross-connection in the distribution system as required in R309-550-9, 50 points shall be assessed.

(9) Quantity requirements

(a) A water system without sufficient source capacity to meet peak day and average yearly flow requirements, from 10 to 50 points shall be assessed. The number of points shall be based upon the severity of the shortage, including the number of times and duration of water outages or low pressure. R309-510-7.

(b) A water system without sufficient storage capacity to meet average day demand, plus the required fire suppression volume if applicable, 10 to 50 points shall be assessed. The number of points shall be based upon the severity of the shortage including the number of times and duration of water outages. R309-510-8.

R309-400-7. Treatment Processes.

(1) General Treatment.

(a) For a treatment facility without anti-siphon control to assure that liquid chemical solutions cannot be siphoned through solution feeders into the process units, 2 points shall be assessed. R309-525-11(9)(b)(ii) and (c).

(b) For a treatment facility with a process tank that is not properly labeled to designate the chemical contained, 2 points shall be assessed. R309-525-11(8)(c)(vii).

(c) For a treatment facility with chemicals not stored in covered or unopened shipping containers, unless the chemical is transferred into a covered storage unit, 2 points shall be assessed. R309-525-11(6)(a)(iii).

(d) For a treatment facility with no cross connection control provided to assure that no direct connections exist between any sewer and the drain or overflow from the feeder, solution chamber, or tank by providing that all pipes terminate at least six inches or two pipe diameters, whichever is greater, above the overflow rim of a receiving sump, conduit, or waste receptacle, 10 points shall be assessed. R309-525-11(9)(b)(iii).

(e) For a treatment facility with no spare parts available for all feeders to replace parts that are subject to wear and damage, 2 points shall be assessed. R309-525-11(7)(b)(v).

(f) For a treatment facility where incompatible chemicals are fed, stored or handled together, 2 points shall be assessed. R309-525-11(7)(a)(iv).

(g) For a treatment facility where daily operating records do not reflect chemical dosages and total quantities used, 2 points shall be assessed. R309-105-14(3).

(h) For a water system that fails to maintain and properly calibrate all instrumentation needed to verify the treatment process, 2 points shall be assessed. R309-525-25(4).

(i) For a treatment facility without the means to accurately measure the quantities of chemicals used, 20 points shall be assessed. R309-525-11(7)(a)(i) and R309-525-11(6)(b)(iii).

(j) A water system that does not keep acids and caustics in closed corrosion-resistant shipping containers or storage units, 2 points shall be assessed. R309-525-11(11)(a)(i).

(k) For a treatment facility that does not have the vent hose from the feeder to discharge to the outside atmosphere above grade or have the end covered with #14 non-corrodible mesh screen, 2 points shall be assessed. R309-520-7(2)(f).

(l) For a treatment facility that uses any chemical that is added to water being treated for use in a public water system for human consumption that does not comply with ANSI/NSF Standard 60, 25 points shall be assessed. R309-525-11(5).

(m) For a treatment facility that does not have a finished water sampling tap(s), 2 points shall be assessed. R309-525-18.

(n) For a treatment facility that is not performing adequate process control testing consistent with the specific treatment process, 30 points shall be assessed. R309-525-19.

(o) For a surface water treatment facility that does not have continuous residual disinfection equipment to measure the residual in mg/L entering the distribution system, 20 points shall be assessed. R309-215-10(1).

(p) For a treatment facility without provisions for disposing of empty bags, drums or barrels by an acceptable procedure that will minimize operator exposure to dusts, 2 points shall be assessed. R309-525-11(6)(b) and (c).

(q) For a treatment facility that does not provide cross connection control on the make-up waterlines discharging to solution tanks, 10 points shall be assessed. R309-525-11(9)(b)(i).

(r) For a treatment facility with solution tank overflow pipes that do not have a free fall discharge or are not located where noticeable, 2 points shall be assessed. R309-525-11(8)(b)(v).

(s) For a treatment facility without adequate spill containment provisions, 2 points shall be assessed. R309-525-11(6)(a)(iv)(B).

(t) For a treatment facility with acid storage tanks that are not vented to the outside atmosphere with separate screened vents, 2 points shall be assessed. R309-525-11(8)(b)(vi).

(u) For a treatment facility without provisions for the proper disposal of water treatment plant waste (such as sanitary, laboratory, sludge, and filter backwash water), 5 points shall be assessed. R309-525-23.

(v) For a treatment facility where cross connection control is not provided on the feed lines to the solution tanks, 10 points shall be assessed. R309-525-11(9)(b) and (c).

(w) For a treatment facility that does not have a means to measure water flow rate, 10 points shall be assessed.

(x) For a surface water treatment facility where the piping is not labeled and color coded to identify the direction of flow and the contained liquid, 2 points shall be assessed. R309-525-8.

(y) Treatment facilities not secured against unauthorized access, 20 points shall be assessed.

(z) For a treatment facility using expired chemical reagents for process control, 5 points shall be assessed.

(aa) For a treatment facility with no access to lab or test kits for process testing, 2 points shall be assessed. R309-525-17(1).

(bb) For a treatment facility lacking cross connection control for the in-plant water supply, 10 points shall be assessed. R309-525-11(9)(b)

(2) Disinfection.

(a) General.

(i) For a chlorination facility which is not heated, lighted or ventilated as necessary to assure proper operation or the equipment and serviceability, 2 points shall be assessed. R309-520-7(1)(l).

(ii) For a disinfection facility without cross connection control on the solution feeders into the process units as required in R309-525-11(9)(c), 10 points shall assessed. R309-525-11(9)(b)(ii).

(iii) For a chlorination facility where there is no standby disinfection equipment of sufficient capacity available to replace the largest unit, 10 points shall be assessed. R309-520-7(1)(k).

(iv) For a disinfection facility where the correct reagent is not used for testing free disinfectant residual, 2 points shall be assessed.

(v) For a treatment facility where the pre- and post-chlorination processes are not independent of each other, to prevent possible siphoning of partially treated water into the clear well, 50 points shall be assessed. R309-525-11(9)(b)(iv).

(vi) For a disinfection facility where chemical solution tanks are not kept covered, 2 points shall be assessed. R309-525-11(8)(b)(iii).

(vii) For a disinfection facility without disinfectant residual test equipment, 2 points shall be assessed. R309-520-7(1)(j).

(viii) For a disinfection facility where there is no means to measure the volume of water treated, 2 points shall be assessed. R309-520-7(1)(i).

(b) Gas chlorination.

(i) For a gas chlorination facility without an automatic switch over of chlorine cylinders to assure continuous disinfection, 2 points shall be assessed. R309-520-7(2)(a).

(ii) For a gas chlorination facility without scales for weighing cylinders, 2 points shall be assessed. R309-520-7(2)(k).

(iii) For a gas chlorination facility without a leak repair kit, 15 points shall be assessed. R309-520-7(2)(p).

(iv) For a gas chlorination facility without respiratory equipment available and stored at a convenient location, 5 points shall be assessed. R309-520-7(2)(o).

(v) For a gas chlorination facility housed in a water treatment plant building where the chlorine gas feed and storage area is not enclosed and separated from other operating areas, 2 points shall be assessed. R309-520-7(2)(h).

(vi) For a gas chlorination facility where the chlorination equipment rooms are not vented such that the ventilating fan(s) take suction near the floor, as far as practical from the door and air inlet, with the point of discharge so located as not to contaminate air inlets of any rooms or structures, 5 points shall be assessed. R309-520-7(2)(e)(ii).

(vii) For a gas chlorination facility where the chlorination equipment rooms are not vented such that air inlets are through louvers near the ceiling, 2 points shall be assessed. R309-520-7(2)(e)(iii).

(viii) For a gas chlorination facility where the chlorination equipment rooms are not vented such that separate switches for the fans and lights are outside of the chlorine room, at the entrance to the chlorination equipment room and protected from vandalism, 2 points shall be assessed. R309-520-7(2)(e)(v).

(ix) For a gas chlorination facility where the vent hose from the feeder to discharge to the outside atmosphere is not above grade or does not have the end covered with #14 non-corrodible mesh screen, 2 points shall be assessed. R309-520-7(2)(f).

(x) For a gas chlorination facility without a bottle of ammonium hydroxide (56%) available for leak detection, 2 points shall be assessed. R309-520-

7(2)(p).

(xi) For a gas chlorination facility where full and empty cylinders of chlorine gas are not restrained in position to prevent upset, 2 points shall be assessed. R309-520-7(2)(i)(ii).

(xii) For a gas chlorination facility with full and empty cylinders of chlorine gas stored in areas in direct sunlight or exposed to excessive heat, 2 points shall be assessed. R309-520-7(2)(i)(iii).

(xiii) For a gas chlorination facility in a water treatment plant building where the chlorine room is constructed in a manner that any openings between the chlorine room and the remainder of the plant are not sealed, 2 points shall be assessed. R309-520-7(2)(h)(ii).

(xiv) For a gas chlorination facility housed in a water treatment plant building that lacks outward-opening doors with panic bars, 2 points shall be assessed. R309-520-7(2)(h)(iii).

(xv) For a gas chlorination facility housed in a water treatment plant building with floor drains that do not discharge to the outside of the building and are not connected to other internal or external drain systems, 5 points shall be assessed. R309-520-7(2)(h)(iv).

(xvi) For a gas chlorination facility without a means of chlorine leak detection, such as a bottle of ammonia hydroxide solution or chlorine leak detection equipment, 15 points shall be assessed. R309-520-7(2)(p).

(c) Chlorine dioxide.

(i) For a chlorine dioxide disinfection facility where provisions are not made for proper storage of sodium chlorite to eliminate any danger of explosion 2 points shall be assessed. R309-520-10(3)(b) and R309-525-11(11)(b)(i).

(ii) For a chlorine dioxide disinfection facility where sodium chlorite is not stored by itself in a separate room and away from organic materials that would react violently with sodium chlorite, 2 points shall be assessed. R309-520-10(5)(a) and R309-525-11(11) (b)(i)(A).

(iii) For a chlorine dioxide disinfection facility where sodium chlorite storage structures are not constructed of noncombustible materials, 2 points shall be assessed. R309-520-10(3)(b)(iv) and R309-525-11(11)(b)(i)(B).

(iv) For a chlorine dioxide disinfection facility where a sodium chlorite storage structure is not located in an area where a fire may occur, water

should be available to keep the sodium chlorite area sufficiently cool to prevent decomposition from heat and resultant potential explosive conditions. 2 points shall be assessed if this is not the case. R309-520-10(4)(d) and R309-525-11(11)(b)(i)(C).

(v) For a chlorine dioxide disinfection facility that stores combustible or reactive materials in the operating area, 2 points shall be assessed. R309-520-10(5)(a).

(vi) For a chlorine dioxide disinfection facility that does not store personal protective equipment nearby, 5 points shall be assessed. R309-520-10(5)(c)

(vii) For a chlorine dioxide disinfection facility that does not have an emergency eyewash and shower immediately outside the operating area, 2 points shall be assessed. R309-520-10(3)(b)(viii)

(viii) For a chlorine dioxide disinfection facility that lacks an emergency shutoff for flows to the chlorine dioxide generator, 2 points shall be assessed. R309-520-10(3)(b)(ix)

(ix) For a chlorine dioxide disinfection facility that lacks a distinguishable alarm triggered by an ambient air chlorine dioxide sensor, 2 points shall be assessed. R309-520-10(3)(b)(v)

(x) For a chlorine dioxide disinfection facility that lacks wash down water available in the operating area, 2 points shall be assessed. R309-520-10(3)(b)(xvi)

(xi) For a chlorine dioxide disinfection facility that does not maintain the temperature of the chlorine dioxide operating area between 60 and 100°F, 2 points shall be assessed. R309-520-10(5)(d)

(xii) For a chlorine dioxide disinfection facility that lacks an Operation and Maintenance Manual including safety and emergency response procedures, 2 points shall be assessed. R309-520-10(5)(f)

(d) Ultraviolet (UV)

(i) For a UV disinfection facility that lacks an operating procedure in place to handle UV lamp breakage, power supply interruption, response to alarms, 2 points shall be assessed. R309-520-8(4)(b)

(ii) For a UV disinfection facility that does not calibrate and operate UV intensity sensors per manufacturer's instruction, 2 points shall be assessed R309-520-8(4)

(iii) For a UV disinfection facility that does not use ANSI/NSF Standard 60 chemicals in the cleaning of the UV, 25 points shall be assessed. R309-520-8(3)(j)

(iv) For a UV disinfection facility that can't isolate the UV disinfection system or each UV reactor for maintenance, 2 points shall be assessed. R309-520-8(3)(g)

(v) For a UV disinfection facility that lacks a backup power source for the UV disinfection system, 2 points shall be assessed. R309-520-8(3)(l)

(vi) For a UV disinfection facility that lacks a redundant primary disinfection mechanism, 5 points shall be assessed. R309-520-8(3)(m)

(e) Ozone

(i) For an ozone disinfection facility without a minimum of two ozone aqueous residual analyzers, 2 points shall be assessed. R309-520-9(7)(c)

(ii) For an ozone disinfection facility using chemicals that do not meet ANSI/NSF Standard 60 quench the residual ozone, 25 points shall be assessed. R309-520-9(4)(h)

(iii) For an ozone disinfection facility lacking properly functioning ozone off-gas blowers from the contactor, 2 points shall be assessed. R309-520-9(5)(b)

(iv) For an ozone disinfection facility that lacks a system for treating the final off-gas from each ozone contactor, 2 points shall be assessed. R309-520-9(5)(a)

(v) For an ozone disinfection facility discharging an ozone concentration in the gas discharge exceeding 0.1 ppm by volume, 2 points shall be assessed. R309-520-9(5)(d)

(3) Fluoridation.

(a) General

(i) For a fluoridation facility that does not calculate fluoride concentrations, including chemical dosages and total water quantities daily, 2 points shall be assessed. R309-105-14(3).

(ii) For a fluoridation facility without a fail-safe device incorporated in the fluoride feed control system to prevent overfeeding fluoride, 30 points shall

be assessed. R309-535-5(3).

(iii) For a fluoridation facility that uses fluoride chemicals that do not conform to the applicable AWWA standards or with ANSI/NSF Standard 60, 25 points shall be assessed. R309-535-5.

(iv) For a fluoridation facility without scales, loss-of-weight recorders or liquid level indicators, as appropriate, 2 points shall be assessed. R309-535-5(2)(a).

(v) For a fluoridation facility without proper personal protective equipment as required in R309-525-11(10) for operators handling fluoride compounds, 10 points shall be assessed. R309-535-5(4).

(vi) For a fluoridation facility lacking a sampling location for measuring the final fluoride level, 2 points shall be assessed. R309-525-18.

(vii) For a fluoridation facility that does not have a means to measure the flow of water to be treated, 2 points shall be assessed. R309-535-5(2)(g).

(viii) For a fluoridation facility without fluoride testing equipment not properly verified or calibrated, 2 points shall be assessed. R309-525-25(4).

(ix) For a fluoride facility adding fluoride compound before lime-soda softening, 2 points shall be assessed. R309-535-5(2)(c).

(x) For a Fluoridation facility lacking cross connection control so that no direct connections exist between any sewer and a drain or overflow from the feeder, solution chamber or tank, 10 points shall be assessed. R309-525-11(9)(b)(iii).

(xi) For a fluoridation facility storing incompatible chemicals in the fluoride storage or injection areas, 10 points shall be assessed. R309-525-11(7)(a)(iv).

(xii) For a fluoridation facility lacking a floor drain to facilitate the washdown of floors, 2 points shall be assessed. R309-535-5(5)(b)

(b) Acid

(i) For a fluoridation facility without deluge showers and eye wash devices, 10 points shall be assessed. R309-535-5(4).

(ii) For a fluoridation facility lacking adequate spill containment provisions, 2 points shall be assessed R309-525-11(6)(a)(iv)(B).

(iii) For a fluoridation facility lacking a vent in the fluorosilicic acid storage units that vents to the atmosphere, 2 points shall be assessed. R309-525-11(8)(b)(vi).

(c) Dry

(i) For a fluoridation facility where the make-up water used for sodium fluoride dissolution is not treated to reduce hardness to less than 75 mg/l as calcium carbonate, 2 points shall be assessed. R309-535-5(2)(i).

(ii) For a fluoridation facility without a spring opposed diaphragm type anti-siphon device for all fluoride feed lines and dilution water lines, 10 points shall be assessed. R309-535-5(2)(f).

(iii) For a fluoridation facility with saturators that do not have a flow meter on the inlet or outlet line, 2 points shall be assessed. R309-535-5(2)(l).

(iv) For a fluoridation facility without an adequate level of fluoride crystals in the saturator, 2 points shall be assessed. R309-525-11(8)(b)(i).

(v) For a fluoridation facility without a NIOSH/MSHA certified dust respirator approved for fluoride dust removal as required in R309-525-11(10) for operators handling dry fluoride compounds, 10 points shall be assessed. R309-535-5(4).

(vi) For a fluoridation facility where an overflow from the day tank will not drain by gravity back into the bulk storage tank or a containment system, 10 points shall be assessed. R309-525-11(8)(c)(v).

(vii) For a fluoridation facility using the sodium fluoride dry chemical where the saturators are not of the up-flow type, 2 points shall be assessed. R309-535-5(2)(l).

(viii) For a fluoride facility where fluoride chemicals stored in uncovered or opened shipping containers and are stored inside a building on pallets, 2 points shall be assessed. R309-535-5(1).

(ix) For a fluoride feed pump that is not tied directly to the well pump or service pump, 30 points shall be assessed. R309-535-5(2)(k).

(x) For a fluoridation facility lacking a vent in the dry chemical storage areas that vents to the atmosphere outside the building, 2 points shall be assessed. R309-535-5(5)(a).

(xi) For a fluoridation facility using sodium fluoride dry chemical and lacking a hopper equipped with an exhaust fan and dust filter and under a

negative pressure during transfer of dry fluoride compounds, 10 points shall be assessed. R309-535-5(5)(a).

(xii) For a fluoridation facility that does not vent air from fluoride handling equipment through a dust filter to the outside atmosphere of the building for dust control during transfer of dry fluoride compounds, 10 points shall be assessed. R309-535-5(5)(a).

(xiii) For a fluoridation facility using sodium fluoride dry chemical and lacking a means of disposing of empty bags, drums or barrels handled in a manner that minimizes operators' exposure to fluoride dusts shall be assessed, 10 points. R309-535-5(5)(b).

(4) Filtration Treatment.

(a) For a filtration facility that does not have equipment for each individual filter to continuously monitor the effluent turbidity, 30 points shall be assessed.

(b) For a surface water filtration facility that does not have at least two filter units, each capable of meeting the plant design capacity, 20 points shall be assessed. R309-525-15(3).

(c) For a conventional surface water filtration facility that does not have the ability to filter to waste (to allow a filter to ripen before introduction finished water into the clearwell), 20 points shall be assessed.

(d) For a filtration facility where instrumentation and controls are inoperable, 2 points shall be assessed.

(e) For a filtration facility where a backwash tank is not provided with finished drinking water, 20 points shall be assessed. R309-525-15(7)(a)(ix).

(f) For a conventional surface water filtration facility where the backwash waste water is not settled prior to being recycled to the head of the treatment plant, 2 points shall be assessed. R309-525-15(7)(a).

(g) For a membrane filtration facility where automatic membrane integrity tests are not performed at least daily, 2 points shall be assessed. R309-530-8(3)(b).

(h) For a membrane filtration facility not using ANSI/NSF 60 approved chemicals, 25 points shall be assessed. R309-525-11(5)(b).

(i) For a membrane filtration facility lacking cross-connection control protection for the treatment process, 10 points shall be assessed.

(5) Ion Exchange

(a) For an ion exchange facility without a depth of the exchange resin at least 3 feet, 2 points shall be assessed. R309-535-8(1)(b)(iii).

(b) For an ion exchange facility using a salt for the brine solution not having an ANSI/NSF 60 certification, 25 points shall be assessed. R309-525-11(5)(b).

(c) For an ion exchange facility make-up water inlet that lacks protection from back-siphonage, 2 points shall be assessed

(d) For an ion exchange facility where the overflow discharge piping is not protected with a corrosion resistant screen or is not terminated with a downturned bend with adequate clearance to prevent cross connection, 10 points shall be assessed. R309-525-11(9)(b).

(e) For an ion exchange facility that lacks a brine measuring tank or means of metering provided to obtain proper dilution, 2 points shall be assessed. R309-525-11(8)(b)(i).

(6) Sequestration

(a) For a polyphosphate sequestration facility that uses chemicals not meeting ANSI/NSF 60 certification, 25 points shall be assessed. R309-535-11(5)(d).

(b) For a sequestration facility using phosphate chemicals where total phosphate applied exceed 10 milligrams per liter as PO4, 2 points shall be assessed. R309-535-11(5)(b).

(c) For a sequestration facility that lacks sample taps located on each raw water source, each treatment unit influent and each treatment unit effluent, 2 points shall be assessed. R309-535-11(5)(d).

(d) For a sequestration facility that lacks the testing equipment for accurately measuring the phosphate dosage, 2 points shall be assessed. R309-535-11(5).

R309-400-8. Operator Certification.

(1) A water system that is required to have a certified operator and does not, 30 points shall be assessed.

(2) A water system where the operator is not certified at the appropriate level, 10 points shall be assessed.

(3) A grade 3 or 4 water system that does not have all direct responsible charge operators (as specified in R309-300-5(5)) certified at the level of the system, 5 to 15 points shall be assessed. The number of points shall be based on the percentage of time that the water system is operated by operators not certified at the required level.

(4) A water system where the certified operator does not live within a one hour response time, 20 points shall be assessed.

(5) A water system may be credited up to a maximum of 20 points, which shall remain on record for as long as the conditions apply. The following items are eligible for credit:

(a) A water system that is not required to have a certified operator and does shall be credited 10 points.

(b) A water system that has operators that are certified at a higher level than required shall be credited 10 points.

(c) A water system that has operators certified in other areas that are not required by that water system, such as treatment shall be credited 10 points.

R309-400-9. Cross Connection Control Program.

(1) A water system, which does not have any of the below listed components of a cross connection control program in place, 50 points shall be assessed.

(2) A water system, which only has some of the components of a cross connection control program in place, shall be assessed the following number of points:

(a) A water system which does not have local authority to enforce a cross connection control program (e.g., ordinance, bylaw or policy), 10 points shall be assessed.

(b) A water system that does not provided public education or awareness material or presentations on an annual basis, 10 points shall be assessed.

(c) A water system that does not have an operator with training in the area of cross connection control or backflow prevention, 10 points shall be assessed.

(d) A water system with no written records of cross connection control activities, such as, backflow assembly inventory and test history, 10 points shall be assessed.

(e) A water system that does not have on-going enforcement activities (hazard assessments and enforcement actions), 10 points shall be assessed.

R309-400-10. Drinking Water Source Protection.

Drinking water source protection (for ground water and surface water sources): Points shall be assessed for each source after a system fails to complete source protection requirements according to schedules or deadlines specified in R309-600 and R309-605, unless extensions have been requested from and granted by the Director. The points shall remain until such time as the violation or deficiency is corrected or resolved.

(1) For a water system that has not appointed a designated person for source protection and notified the Division, 5 points shall be assessed.

(2) For a water system that has not upgraded a Preliminary Evaluation Report to a Drinking Water Source Protection plan, 30 points shall be assessed.

(3) For a water system that has not submitted an updated Drinking Water Source Protection plan, 10 points shall be assessed.

(4) For a water system with any new (see R309-110) sources for which a Preliminary Evaluation Report has not been submitted, 150 points shall be assessed. These points shall be included with the points for an unapproved source, not added to them.

(5) For a water system that has any existing (see R309-110) sources that have come into use for which a source protection plan has not been submitted, 30 points shall be assessed.

(6) For a water system that has reconstructed or redeveloped a water source and has not submitted a revised source protection plan, 20 points shall be assessed.

(7) For a water system that has a disapproved plan, update or Preliminary Evaluation Report, 20 points shall be assessed.

R309-400-11. Administrative Issues.

Points in this area shall be assessed at the time that the failure occurs or upon notification of the Director, and shall remain until the issue is resolved unless otherwise specified.

(1) Administrative Data -

(a) A water system, that has not designated a person or organizational official responsible for the system including a current address and phone number,10 points shall be assessed.

(b) A water system project constructed without proper plan approval, 50 to 200 points shall be assessed based on an evaluation of the project which shall include the

structural or engineering integrity of the project; whether the plans and specifications were prepared and stamped by a licensed professional engineer; the adequacy of the materials used and the impact on the operation of the water system (good or bad).

(2) A water system with a current written Emergency Response Program

shall be credited 10 points that shall remain on record as long as the Program remains current.

(3) A water system with a written Financial Management Plan

including an appropriate rate structure, infra-structure replacement fund, and master plan shall be credited 10 points that shall remain on record as long as the Plan is current.

(4) Sampling Site Plans:

(a) A water system, which does not have an adequate bacteriological sampling site plan, 5 points shall be assessed.

(b) A water system, which does not have a lead/copper sampling site plan, 10 points shall be assessed.

(5) Customer Complaint:

(a) 25 to 100 points may be assessed for valid and documented customer complaints. The customer complaints include but are not limited to the following:

(i) Turbidity;

(ii) Pressure;

(iii) Taste and Odor;

(iv) Sickness (water suspected); and

(v) Waterborne Disease Outbreak (R309-104-9).

(vi) Periods of Water Outage

(b) The number of points shall be based upon the extent and documentation of the problem and the potential impact to public health. The documentation shall consist

of an investigation by Department of Environmental Quality, Department of Health or Local Health Department personnel and may include an epidemiological study linking the drinking water to reported outbreaks of illness where appropriate.

(c) In the case of a documented waterborne disease outbreak, the water system shall automatically be rated Not Approved for at least the duration of the threat to the quality of the drinking water and as long as it takes the water system to correct any deficiency that caused the outbreak.

(d) Points shall only be assessed once per issue and shall not be additive based on the number of calls per issue. These points shall be assessed and updated upon verification of the complaint by the Director and shall remain on record until the issue or deficiency no longer exists. Points may have already been assessed in other areas as appropriate.

(6) (a) The Director may issue directives

to a water system that include, but are not limited to the following:

(i) Administrative Orders;

(ii) Rule defined action;

(iii) Rule defined compliance schedule;

(iv) Variance/Exemption requirements;

(v) Bilateral Compliance Agreement;

(vi) Notice of Violation and Compliance Order; and

(vii) Compliance Action/Enforcement Order.

(b) If the water system does not comply with the directive, the Director may assess 25 to 200 points to the water system. Points shall be assessed based upon the severity of the non-compliance, the threat to public health and the underlying basis for the original directive.

(7) Data Falsification –

The Director may assess a water system points for data falsification. The water system may be assessed 25 to 200 points for each occurrence based upon:

(a) the severity of the falsification;

(b) the threat to public health;

(c) the intent of the water system personnel; and,

(d) the type of falsification.

(i) Reports only good data

(ii) Doctored results from the laboratory

(iii) Non-valid sample

Data reported to the Director includes but is not limited to Water Treatment Plant Reports, Disinfection Reports, bacteriological and chemical analyses, and Annual Reports. This assessment of points shall be in addition to any other penalty provided by law.

(8) Water Hauling:

(a) For a community water system that is hauling water as a permanent method of culinary water distribution, 150 points shall be assessed. R309-550-10(1).

(b) For a non-community system that is hauling water as a permanent method of culinary water distribution without approval from the director, 150 points shall be assessed. R309-550-10(2).

(c) For a water system, which has been granted an exception to haul water, if any part of the water hauling guidelines is not followed, 50 points shall be assessed. R309-550-10.

R309-400-12. Reporting and Record Maintenance Issues.

Points may be assessed for failure to provide required reports to the Director by the reporting deadline. The points shall be assigned as the failure occurs and shall remain on record for a period of one year.

(1) Monthly Reports:

(a) For each failure to report the monthly water treatment plant report, 100 points shall be assessed.

(2) Quarterly Reports:

(a) For each failure to report the quarterly disinfection report, 50 points shall be assessed.

(3) Annual and Other Reports:

(a) A public water system that fails to submit water use data required by a state agency or fails to verify the accuracy of the data by including a certification by a certified operator or a professional engineer performing the duties of a certified operator shall be assessed 50 points.

(b) Community water systems that fail to send a certification to the Division stating how the consumer confidence report was distributed to its customers as required in R309-225-7(3), 10 points shall be assessed.

(c) Community water systems that fail to mail a copy of the consumer confidence report to the Division as required in R309-225-7(3), 10 points shall be assessed.

(d) A public water system that fails to submit operational reports or other reports required by the Division shall be assessed 20 points.

KEY: drinking water, environmental protection, water system rating, penalties
Date of Enactment or Last Substantive Amendment: November 22, 2016
Notice of Continuation: March 22, 2010
Authorizing, and Implemented or Interpreted Law: 19-4-104

Agenda Item 6

Rural Water Association Report
Presented to the Drinking Water Board
April 9, 2019

DRINKING WATER BOARD PACKET
Rural Water Association Report

Table of Contents

Rural Water Association of Utah

Drinking Water Board Report, Activities Overview

Employee/Position: Terry Smith - Management Technician
Report Date Range: 2/6/2019 - 3/22/2019

February

Onsite:

- 6th; Toquerville water rates/budget analysis meeting, 6th
- 9th; Church Wells - Attended board meeting to advise on rates, policies - commercial/residential rates
- 15th; Proctor test - Washington WCD
- 25th - March 1st; Annual conference - St. George

Offsite:

- Created budgeting/rates analysis spreadsheet for Manila Town at the request of Mayor Coombs
- Assisted Janet Ross with creation of an O&M plan - Eastland SSD
- Worked with Roy Fox, Skyline SSD, on possible funding options, water system upgrade path, engineering, etc.
- Created budget/rates analysis for Eden Water Company at the request of Mayor Ron Lackey

March

Onsite:

- While at conference I met with the Mayor and Public Works Director to discuss budgeting and rates. I demonstrated the spreadsheet I had put together for them, and told them the additional data that needed to be added - mostly budget amounts verification
- 4th; Met with Toquerville Clerk and Public Works Director to go over budget/rate spreadsheet modifications and to evaluate if the modifications were sufficient to meet their needs.
- 5th, Proctor Op-Cert test for Mid-Valley Estates.
- 6th, Proctor Op-Cert test for Intermountain Power Plant (Delta).
- 14th, Proctor Op-Cert test for Washington City.
- 19th, Met onsite with Goshen City's new operator to go over O&M specific to their system. Meeting with the mayor that evening, I demonstrated the rate calculation spreadsheet I have built for them. We discussed funding options, grant eligibility, budgeting.

Offsite:

- Created draft budget/rate analysis spreadsheet for Goshen City (Mayor Staheli)

Rural Water Association of Utah

Drinking Water Board Report - Activities Overview

Employee/Position: BRIAN PATTEE, Compliance Circuit Rider
Report Date Range: February 1 2019—March 22 2019

February 1st thru February 28th

Onsite:

- Camp Williams – Security forum , Homeland Security VA,s (Vulnerability assessments)
- Best Friends - IPS review & Cross Connection Program, New Water Operator.

Offsite or Direct Contact w/ Operator:

- American Pacific - New source, request for contact Info .
- Peoa Pipeline – Contact for assistance on IPS violations , Schedule Meeting
- Spanish Fork, Pleasant View, Smithfield City, Monroe, Draper City, – CCC program assistance request
- Price City, PRWID, - Operator Certification request.
- Escalante- IPS Assistance Request
- Wendover, Delta,- W/WW one day training request
- Lila Canyon Mine – IPS Questions

DDW- Cross Connection Control Certification Exam work group, Meetings and Program Review.
Coalition Training Calendar Administration
Groundwater/source protection workshop planning

March 1st thru March 22th

Onsite:

- Cottonwood Coves – Compliance IPS violations assistance
- Richmond City – Lead & copper Sampling issues

Offsite: or direct Contact with Operator:

- Daniel Town- source fencing issue
- Moab Under canvas – IPS Violation Assistance
- Cedarview Montwell – Board conference call to explain CL2 residual and DBPs, Bac T sample site plan review.
- Eastland – IPS violation assistance, well head air vac issue.
- Ruby's Inn – sampling requirements Issue
- Logan City, Virgin Town ,Draper City, – CCC program assistance

DDW- Cross Connection Control Certification Exam work group, Meetings and Program Review.

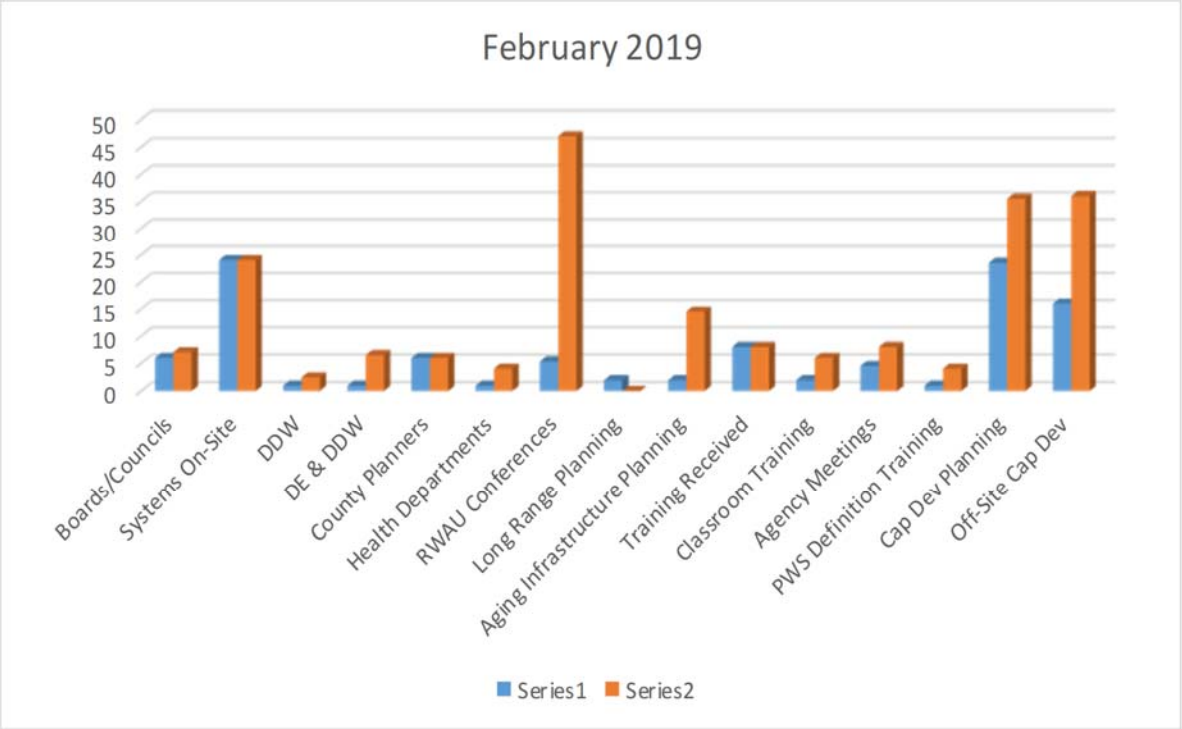
RURAL WATER ASSOCIATION OF UTAH
76 Red Pine Drive • Alpine, UT 84004 • Phone: 801-756-5123 • Fax: 801-756-5036

Drinking Water Board Report

Development Contract

June 2018 – May 2023

RWAU Employee: Curtis Ludvigson



Work Performed	Goal	Actual
Boards/Councils	6	7
Systems On-Site	24	24
DDW	1	2.5
DE & DDW	1	6.5
County Planners	6	6
Health Departments	1	4
RWAU Conferences	5.33	47
Long Range Planning	2	0
Aging Infrastructure Planning	2	14.5
Training Received	8	8
Classroom Training	2	6
Agency Meetings	4.5	8
PWS Definition Training	1	4
Cap Dev Planning	23.5	35.5
Off-Site Cap Dev	16	36
Total	**103.33**	**209**

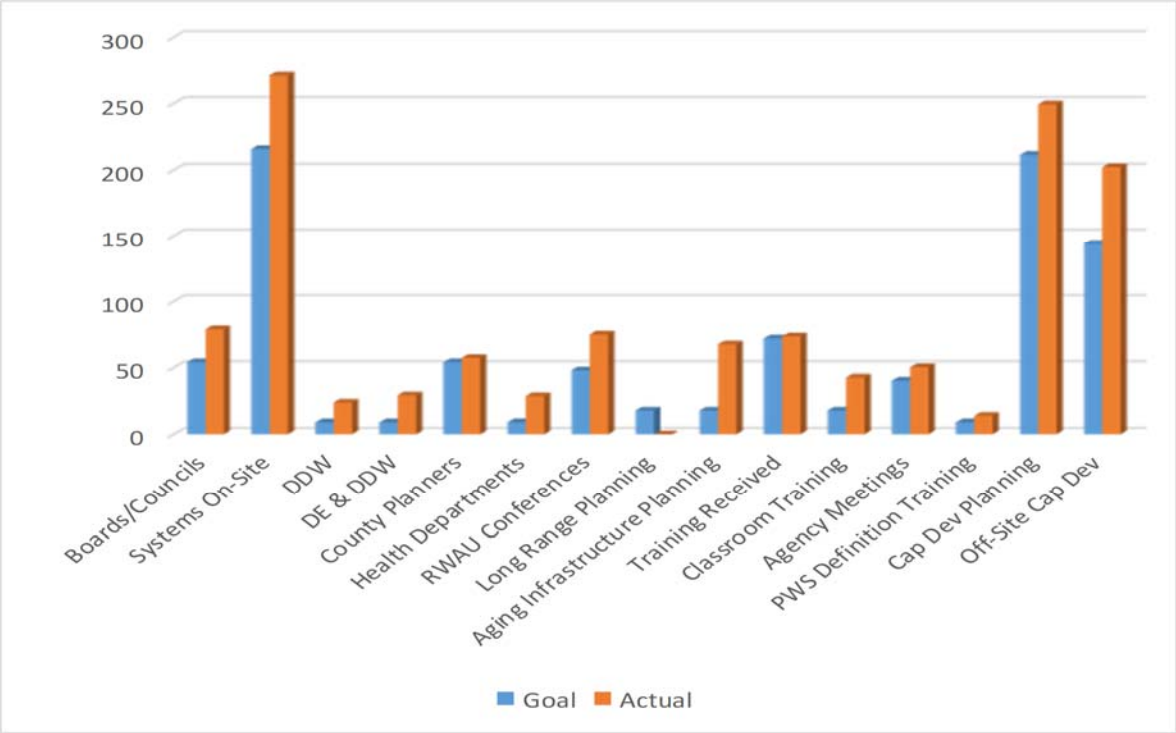
RURAL WATER ASSOCIATION OF UTAH
76 Red Pine Drive • Alpine, UT 84004 • Phone: 801-756-5123 • Fax: 801-756-5036

Drinking Water Board Report

Development Contract

June 2018 – May 2023

RWAU Employee: Curtis Ludvigson



Work Performed	Goal	Actual
Boards/Councils	54	79
Systems On-Site	216	271.25
DDW	9	24
DE & DDW	9	29.5
County Planners	54	57.25
Health Departments	9	29
RWAU Conferences	47.97	75
Long Range Planning	18	0
Aging Infrastructure Planning	18	67.5
Training Received	72	73.5
Classroom Training	18	43
Agency Meetings	40.5	50.25
PWS Definition Training	9	14
Cap Dev Planning	211.5	249.25
Off-Site Cap Dev	144	202.25
Total	**929.97**	**1264.75**

RURAL WATER ASSOCIATION OF UTAH
76 Red Pine Drive • Alpine, UT 84004 • Phone: 801-756-5123 • Fax: 801-756-5036

On-Site Assistance & Work Performed

Kanab	Engineering Selection, Funding Applications
Tropic	Household Income Survey
Panguitch	Training on Funding Agencies
Antimony	Aging Infrastructure Training
Bicknell	Project Applications, Master Planning
Loa	Budget and Rates Review
Escalante	RFP, Budget Review
Axtell SSD	Research on new meters
Fayette	Elected Officials Responsibility Training
Fairview	Growth Issues Discussions, Master Planning
Sterling	Water Rights Training and Assistance
Mayfield	Follow up on Spring Redevelopment planning and progress
Goshen	Rates Review, Master Planning, Aging Infrastructure Training
Genola	Engineering Selection Process
Tabiona	Engineering Selection Process, Master Planning
Jensen WID	Funding Agency Training
Cornish	Aging Infrastructure Training
Elwood	Budget Review
Snowville	Aging Infrastructure Training
Bear River WCD	Discussion of various projects and needs

Agency & Other Meetings

Entity	Hours
Division of Water Resources	2.0
Division of Water Rights	1.0
Community Impact Board	1.0
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Current News

Current News
Presented to the Drinking Water Board
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DRINKING WATER BOARD PACKET
Current News

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EPA releases plan to limit chemicals chief Andrew Wheeler calls 'very important threat,' but critics want more action now

By: Stephanie Ebbs, abc NEWS; February 14, 2019; abcnews.go.com
https://abcnews.go.com/Politics/epa-chief-andrew-wheeler-calls-toxic-chemicals-drinking/story?id=61004327

The Environmental Protection Agency on Thursday announced a nationwide effort to learn more about and better control toxic chemicals in Americans' drinking water across the country.
EPA announced a national action plan to regulate and clean up a class of chemicals used in everyday products like nonstick pans and carpets, as well as firefighting foam.

The types of chemicals are so common the Centers for Disease Control says all Americans have some level in their blood but residents in some communities are being exposed to much higher levels that EPA says are hazardous for their health. High levels of the chemicals have been found in dozens of communities and drinking water systems serving up to 16 million Americans, though the number is likely to grow as EPA begins a new round of tests.

CDC reports and other research have connected exposure to the chemicals to liver damage, high blood pressure, decreased fertility, testicular and kidney cancers, and immune system disorders.

In an administration that has prioritized rolling back regulations, and after outcry about reports the agency would not regulate how much of the chemicals are allowed in drinking water, acting Administrator Andrew Wheeler says they consider the chemicals a "very important threat" and are moving forward to set a limit for how much is allowed in drinking water.

"What we're doing with this new management plan for PFOS, PFOA. We're protecting Americans drinking water which is very important. We need to make sure that every American regardless of zip code has safe reliable drinking water," he told ABC News Live in an exclusive interview on Wednesday.

But in the announcement Thursday, EPA officials said the next step to regulate the chemicals in drinking water will still take months and that doesn't include setting how high the limit should be.

Advocacy groups and communities dealing with these chemicals say they've already been waiting for help and EPA's plan doesn't move fast enough. Advocacy groups have called for an immediate limit in drinking water and exposed to the chemicals" target="_blank">bans on the chemicals or new versions seeking approval to stop more people from being exposed.

The mayor of Hoosick Falls, New York, which has been dealing with chemical contamination from a plastics factory, tweeted he wants EPA to declare the chemicals hazardous now and do more to take them off the market, saying only announcing next steps isn't enough.

"As Mayor of PFOA contaminated Hoosick Falls, NY, as someone who had over 20x the national average of PFOA in my blood, and as a parent whose children average a higher PFOA blood count than me, I have a lot to say about this," Mayor Rob Allen tweeted Thursday.

"If, like many of us fear, today's announcement will only be the official "beginning of the process" of labeling PFOS and PFOA as hazardous chemicals and of defining groundwater guidelines that require action, then this huge endeavor will come off as a joke."

EPA says it hopes to take the next step to set a limit for how much of the chemicals are allowed in drinking water by the end of the year, but that they have to follow a formal process under the Safe Drinking Water Act.

Democrats on the Senate committee with oversight of EPA said the plan being touted by EPA does not do enough to protect people, citing an exchange in his confirmation hearing when Wheeler said he could not promise the agency would set a drinking water standard. Senate Majority Leader Chuck Schumer has threatened to hold up his nomination to become full administrator over the issue.

Some critics cite former EPA administrator Scott Pruitt's comments last May when he called the issue a "national emergency" and slated the plan to be released in Fall 2018, but it was delayed by the interagency review process and the government shutdown.

"It has taken the EPA nearly a year just to kick the can even further down the road. While EPA acts with the utmost urgency to repeal regulations, the agency ambles with complacency when it comes to taking real steps to protect the water we drink and the air we breathe," Sen. Tom Carper, the ranking member of the committee, said in a statement.

"I urge Mr. Wheeler to reverse course and treat this public health threat with the urgency it deserves. And I ask my colleagues in the Senate to take note of Mr. Wheeler's lack of urgency in addressing this threat as they consider his nomination to be EPA's permanent administrator."

The two specific chemicals targeted in the plan, PFOS and PFOA, are known as "forever chemicals" because once they're introduced into the environment they're very hard to remove. Research has connected exposure to the chemicals to health problems like immune system disorders, thyroid issues, reproductive problems, and some kinds of cancer.

High levels of the chemicals have been found in drinking water for more than 16 million Americans, and more communities have found it in the environment near airfields or former industrial facilities.

EPA's action plan lays out several steps the agency will take on the chemicals, including moving on the next step to regulate them under the Safe Drinking Water Act, releasing guidance for when they need to be cleaned up in other sources like groundwater, and declaring them "hazardous" under the Superfund law – which governs clean up at contaminated sites – prompting more cleanup requirements.

The agency says that drinking water systems around the country will be tested for the chemicals at lower levels than an earlier round of testing in 2012, meaning more communities could find out the chemicals are in their water. The plan will also include more research on the health effects of other chemicals in the same category and more communication with communities about the risks of exposure.

In the absence of a national drinking water standard, several states have moved to pass their own laws to regulate the chemicals. State officials have asked EPA to provide more federal guidance to prevent confusion and make more resources available for drinking water systems to test for and remove the chemicals.

Some advocates have also called for the EPA to do even more to prevent the chemicals from being released into the environment, either by banning them in products or declining to approve new chemicals in the same category.

But Wheeler said EPA is working quickly and called the new plan "groundbreaking" because it's the first time EPA has ever taken a multifaceted approach to combat chemicals in the environment.

"We haven't slowed down, we've actually speeded up the process. We're continuing research for example, we want to make sure we have the best clean up technologies - that we understand better the health impacts on people and that we can move forward," he told ABC.

"But, we have been cleaning up. We've been helping and assisting the states around the country... dozens of sites around the country, we're making sure that those are cleaned up and we're moving forward with additional authorities under all of our statutes. Again, and this is the first multimedia approach in the agency's 49-year history we've ever taken for a chemical like this."

Update: “Do not drink” water order now in place for certain areas of Sandy City

By: Trevor Warner, abc 4; February 15, 2019; abc4.com
https://www.abc4.com/news/local-news/deq-reports-sandy-drinking-water-has-elevated-levels-of-lead-copper/1786141376

SANDY, Utah (ABC4 News) - UPDATE: Sandy City provided an update Saturday on the fluoride, lead and copper incident from Friday afternoon.

The city, for safety reasons, is advising people in the affected area from 10600 South to 11400 South and 700 East to 2000 East to not drink the water or use it for cooking.

The city wants this precaution in place until it receives confirmation lab results that the lead and copper concentrations are at a safe level.

Sandy City is working on arrangements for bottled water to be available for people in the impacted area in the event the city has to extend the "do not drink" order beyond Saturday. Residents can pick up the water at Fire Station 34, which is located at 10765 South 700 East.

Sandy City has a call center up and running. If you have any questions or concerns call (801) 352-4421.

ORIGINAL STORY: Utah Department of Environmental Quality announced high levels of lead, copper, and fluoride were detected in Sandy City's drinking water.

Officials said the issue is limited to Sandy City water users and is not valley wide. The city is reaching out to the estimated 450 affected residents to inform them about precautions they should take.

Sandy City officials said a fluoride pump malfunctioned at one of Sandy City’s wells near the intersection of 1700 East and Dimple Dell Lane due to last week's storm and subsequent power outage.

They said higher levels of fluoride entered the water system impacting about 50 homes. Once the city’s Public Utilities Department crews discovered the failed equipment on Thursday, February 7 they immediately closed valves to isolate the area. Crews flushed the drinking water line, notified the State of Utah and the Health Department, and went door-to-door to notify and instruct customers to flush their water systems.

By that afternoon, the city’s water systems were back to normal fluoride levels.

Since last week, the city has been monitoring the situation and discovered other homes outside the initial designated affected area may have also been impacted.

Additionally, lab test results from last Thursday’s sample came back Friday indicating high levels of copper and lead. Utah law requires immediate notification regarding the elevated levels of lead and copper in drinking water.

Out of an abundance of caution, Sandy City is asking citizens to flush their water system if they haven't done so already. A full flush includes running all hot water taps for 30 minutes, followed by 30 minutes of running all cold water taps.

Sandy said it is confident your water is safe to drink if you have flushed your system according to the guidelines provided above.

Sandy residents vent anger over city's water ordeal

By: Marjorie Cortez, Deseret News; February 18, 2019; deseretnews.com
https://www.deseretnews.com/article/900056380/volunteers-collect-water-samples-from-sandy-homes-after-release-of-undiluted-fluoride.html

SANDY — Sandy leaders found themselves on the spot all night at a town hall meeting aimed at talking about the recent contaminated water situation, but it quickly turned into a barrage of questions and accusations from angry residents demanding answers.

"You can't reverse health damage with this," one resident yelled from the audience at Sandy Mayor Kurt Bradburn.

"You're right, I cannot go back in time," an apologetic Bradburn replied while trying to explain what the city is doing moving forward.

"My No. 1 goal is making it right for you," the mayor said.

The town hall began with Sandy Public Works Director Tom Ward explaining his version of the timeline of events that began with a large storm on Feb. 5. Ward struggled to get through the timeline, however, as many residents yelled out questions or disputed what he was saying.

"No, that's baloney," one man yelled, accompanied by a chorus of "no's" from the audience when Ward said the city went door-to-door notifying residents of possible contaminated water.

"We know that some of the things we thought we understood were wrong," Ward said while also conceding, "We realize there's better ways to communicate."

After Ward took nearly 40 minutes to explain the city's timeline, Bradburn told the audience that he shared their frustrations. He said he was "not in the know," and the way the situation was initially explained to him had not been accurate.

He agreed with residents upset with the city for allegedly putting flyers on doors, calling it "not acceptable."

"I failed you in several aspects. I should have been more on top of that sooner," the mayor said.

Bradburn also acknowledged that he had not tested the city's reverse 911 system prior to Friday, and quickly learned it was inadequate.

Because of the number of questions and comments being yelled out, the city quickly moved to the formal open comment section, during which Ward was the focus of many residents' anger. "I'm very disappointed you kept your boss, our mayor, in the dark until Friday," one man said, who also called Ward's response during his presentation "inadequate."

That man, who said he is a chemist, also called out Ward for not doing field pH tests on the water. "I'm a chemist. This is simple stuff," he said.

Another person asked Ward what his qualifications were for being in charge of the city's drinking water.

"I feel like I'm being lied to," a woman said of the city's explanation of informing residents. "You violated my trust."

The woman finished by telling Bradburn she trusted and voted for him.

"It's a mistake I won't do again."

The mayor also announced Monday there would be an independent investigation into why the pump that regulates fluoride into the water system failed, and how the city responded.

As the evening progressed, many residents called for, and applauded suggestions calling for a new vote on the ballot to eliminate fluoride altogether from the city's water supply.

Monday began in Sandy with dozens of volunteers streaming into City Hall to undergo training to collect water samples in neighborhoods affected by possible lead or copper contamination resulting from inadvertent release of undiluted fluoride on Feb. 6.

On Sunday, city officials announced it was safe to resume drinking and using the water.
The in-home tests, conducted at city expense, were to provide added assurance that water in individual homes was safe to use and consume, said Bradburn.

"This is a big effort to try to reach 2,800 homes as soon as we possibly can. We couldn’t do it without all these volunteers," he said.

Volunteers were each asked to attempt to sample water from 20 homes. Only homes that had properly flushed their water by running hot and cold taps for 30 minutes could be tested.

Nathaniel and Crystal Ash, who live in the affected area, were among volunteers to turned out on Presidents Day to collect water samples. Nathaniel Ash said he hopes the additional testing "will give city residents an extra level of comfort that the water's safe."

Crystal Ash said the ordeal was "a little scary, at first."

"Hopefully, they got the water taken care of or they say they do. But just to have that little extra comfort having the water tested," she said.

The Ashes said they will continue to drink bottled water until they receive test results from their home.

Understanding the fear and frustration in the community, the couple said they hoped that homeowners would view them as people just trying to help.

"I think we could encounter some anger. We're frustrated, too," he said.

The city officials issued an advisory Saturday for people in the affected area not to drink water or use it for cooking. That reversed a city-issued advisory less than 24 hours earlier that said the water was OK to drink as long as systems have been adequately flushed.

John and Marie Fowler, who learned of the fluoride release days after returning to Utah from Italy on Feb. 11, said they are frustrated the city didn't do more to inform residents of the problem.

They believe they were spared the brunt of it but they are concerned about their neighbors, particularly those who became ill. They are also worried about lingering effects such as damage to their pipes or what it will mean in terms of their home values.

"Some of the residents are very angry over this and anger is the only way I can describe it. They're very angry," John Fowler said.

A neighbor who collected their mail while they were in Europe picked up the handbill the city had left at their house and delivered it along with their mail. Marie Fowler said she thought it was junk mail and discarded it.

It wasn't until they received a second flyer at their home that they understood there was a problem.

The city of Sandy was cited by the Utah Division of Drinking Water for failing to notify the public adequately about potential contamination, along with a citation for exceeding safe fluoride levels.

Bradburn said the city attempted to notify as many people as possible through all of its channels.

"But our main notification system, which is our reverse 911 system, we realized most people had not opted in with their cellphones into that service and were not getting the message," he said.

Bradburn said Sandy residents "should feel secure now. Three regulatory agencies — Environmental Protection Agency, state drinking water and Sandy utilities — have all reviewed these 193 samples and we only had one individual home that had a slightly elevated level of lead, which could be an isolated event."

The city is continuing to work with that homeowner and the city has a claims process they can access from the city's website. The website also explains how people can sign up for reverse 911 notifications.

The affected area included some 2,200 households from 700 East to 2140 East between 10600 and 11400 South.

According to the city, there were no schools affected above 1700 East. The affected schools were Alta High School, Sunrise Elementary and Altara Elementary. Pipes at the affected schools were drained over the weekend.

"On Tuesday morning, when students and teachers return after the Presidents Day recess, bottled water will be available for students, teachers and staff. Meals that do not require water from the faucet for either preparation or cleanup will be made and served in the cafeteria," according to the city website, which quotes a Canyons School District notification to parents.

The school district is also conducting independent tests, the website states.

While there have been repeated assurances about the water's safety from city officials, residents say they are concerned about consuming the water until they receive the results of samples taken from their individual homes.

Marie Fowler said she has reservations about washing her dishes or clothes.

David O'Bryant, whose home is about four houses from the fluoride pumping station, said he understood the initial spill occurred on Feb. 6 "but we didn't hear about it until a week later on the 13th."

While his family was not sickened, others in the immediate area, including a mom and 3-month-old baby, were sickened. He knows one family that reported that they all became ill, including their dog.

"That's really disturbing. It's really sad," he said.

O'Bryant said he flushed his pipes again on Sunday. The discharge left a coating of sediment in the sinks of his family's home, causing him to worry whether the coating on the interior of their pipes has been damaged or if their water softener or water heaters have been affected.

He collected before and after samples and city officials said they would collect samples at his home on Monday.

Nate Roe, whose infant boy and wife were sickened by the water, said Monday that they were advised by physicians to have their other children tested as well.

Roe said he, too, had a bad headache after consuming the water, which he said "tasted like a metal pipe." The family's illnesses preceded notification from the city.

O'Bryant said the events are worrisome, particularly how it may affect his children. On Monday, when he went to brush his teeth, he nearly turned on the tap until he was reminded by the water bottle on the counter.

"There are water bottles all over my house," he said.

Sandy city Public Utilities director steps away from job during investigation into water contamination

By: Paighten Harkens, The Salt Lake Tribune; February 20, 2019; sltrib.com
https://www.sltrib.com/news/2019/02/21/sandy-city-public/

Sandy's Public Utilities director will be on paid administrative leave as independent investigators look into the city's response to a fluoride pump malfunction that contaminated parts of the municipality's water supply.

Tom Ward announced his decision to step away from the job during a nearly two-minute-long news conference on Wednesday. Mayor Kurt Bradburn stood beside Ward and said he supported the decision.

"It's important that we allow this fact-gathering process to play out, and the best way to do that is through an independent investigation. Tom will be put on paid administrative leave until we get a better understanding of exactly what happened," Bradburn said.

Ward said he supports the investigation and was stepping away because media distraction was affecting his ability to do his job.

The Utah Department of Environmental Quality has cited the cityfor the high fluoride levels, which entered parts of the water system Feb. 6 after a power outage-related malfunction. While the city thought it had brought fluoride levels back to normal on Feb. 7 and had notified the affected residents, they discovered more than a week later that the issue was more widespread than they once thought.

In addition to being dangerous, the high levels of acidic fluoride corroded pipes in some homes, causing them to discharge the heavy metals lead and copper into the tap water. The DEQ is determining if Sandy appropriately notified the public of elevated levels of lead and copper in the water system.

Sandy's city council voted unanimously Tuesday to form an independent committee to look into the city's communications with residents about the tainted water and give recommendations for how to address future issues.

Eight people file claims against Sandy after water contamination problem

By: Michael Locklear, KUTV; February 20, 2019; kutv.com
https://kutv.com/news/local/eight-people-file-claims-against-sandy-after-water-contamination-problem

SANDY, Utah (KUTV) — People are asking the city to pay for damages caused by the contaminated water in Sandy.

Eight people have already filed claims, according to Evelyn Everton, deputy mayor. She said they were for "mostly medical issues. Some of them have been plumbing." The initial fluoride problem caused pipe corrosion that added copper and lead to the drinking water supply. The numbers have fluctuated, but Everton said the current estimate is 2,800 homes were affected.

2News asked if the city would pay all reasonable claims.

"Obviously we have to do our due diligence for each one and have to look through them," Everton said. "It is a little bit of a process to verify those, but I think for the most part, we're going to be very accommodating and willing to work with residents." She added insurance should cover the damages. No dollar amounts were available.

People can fill out the claim form on the city's website.

Lawsuits are possible, although none have been filed yet.

Personal injury attorney Chris Thresher said because a government agency is involved, people must first give the city 60 days to respond to a claim. They then have one year to file a lawsuit in district court if they're unhappy with the result, a much shorter window than the four-year statute of limitations that generally applies to negligence cases.

Thresher said beyond medical bills and any lost wages, some people may be eligible for general damages, commonly known as pain and suffering.

"If a doctor is able to say to a reasonable degree of medical certainty that this water issue is what caused them injury, then they have a claim," he said.
"If someone is really hurt because of this, that could be a significant claim," Thresher added.

A plumber or another expert could confirm the extent of any damage to pipes, he said.

For ‘peace of mind,’ the health department is offering free lead testing for Sandy residents after water contamination

By: Courtney Tanner, Salt Lake Tribune; February 22, 2019; sltrib.com
https://www.sltrib.com/news/2019/02/23/peace-mind-health/

The Salt Lake County Health Department will offer free lead testing for Sandy residents who believe they may have been affected by the city’s recent water contamination.

The blood tests, which will be administered by Intermountain Healthcare, start at 8 a.m. Saturday and run until noon. They are open for anyone living between 700 East to 2140 East and 10600 South to 11400 South.

That area was affected by high fluoride levels — as well as copper and lead — which leaked into parts of the water system after a power outage caused a malfunction at one of the city’s pumps on Feb. 6.

Sandy officials had thought the fluoride levels were back to normal the next day and had alerted residents. But, more than a week later, they discovered the issue was more widespread. The high levels of fluoride, which can be dangerous to drink, also corroded pipes in some houses, adding lead and copper into tap water.

The health department said it is offering the lead tests to residents as “peace of mind.” The duration of exposure to the heavy metal was brief and “therefore unlikely to have long-term health impacts,” it added in a news release Friday. Still, anyone interested can call 385-468-4636 for an appointment and for a list of the locations.

The slots will be filled on a first-come, first-served basis. But the department will take down contact information for those who are not able to be seen Saturday to schedule later tests, which include a finger prick and take about three minutes.

The Utah Department of Environmental Quality has cited Sandy for the excess fluoride and is also determining if the city appropriately notified the public for the elevated levels of lead and copper. Sandy staff had initially said residents would be fine if they flushed their systems. It then advised certain areas to not drink or use any water for cooking until it was later deemed safe.

About 150 residents questioned city leaders during a public meeting Monday about why they didn’t learn about the issue sooner. “That’s beyond negligent,” said one man.

Elevated levels of copper found in drinking water of some homes in Richmond

By: Mike Anderson, KSL; March 4, 2019; ksl.com
https://www.ksl.com/article/46504252/elevated-levels-of-copper-found-in-drinking-water-of-some-richmond-homes

RICHMOND — Elevated levels of copper were reported in the drinking water of three homes in Richmond, pushing city leaders to work with the state to come up with ways to bring it back down to safer levels.

“We tested 20 different locations. And we do them random throughout the town, all different locations,” Mayor Jeff Young said. “Last year, we were notified by the state that a few of the tests that we sent in were a little bit high on copper.”

While the copper seepage came in just above acceptable levels, Young said the city is working with an engineering firm and the Division of Water Quality to come up with a way to reduce the corrosion in the pipes.

Young said the city water supply otherwise tested clean. He said the copper contamination appears to be coming from older copper pipes in the homes.

“Right now we know it’s in limited locations. We’re doing additional testing to find out just how many,” Young said.

Young says homeowners living in areas where the test results came in at actionable levels were notified within 30 days of the testing. The rest of the city received notices along with a recent city newsletter. The contamination through corrosion of copper pipes can potentially happen in any home that has the copper pipes.

“There are cases where copper becomes enough of an issue where they need to replace the lines,” Young said. “A lot of homes that are remodeled are changed out so they don’t have those.”

Young is hopeful that it won’t get to that point in Richmond. For now, the city is asking homeowners who have the older copper pipes to use only cold water for drinking and preparing food, and to let the tap run for 10 to 15 seconds before using the water.

The state Division of Water Quality has a list of certified water testing laboratories for homeowners who are concerned about their drinking water.

No public health risk after crude oil spills into San Juan River in southeast Utah, officials say

By: Jacob Klopfenstein, KSL; March 5, 2019; ksl.com
https://www.ksl.com/article/46505078/no-public-health-risk-after-crude-oil-spills-into-san-juan-river-in-southeast-utah-officials-say

MONTEZUMA CREEK, San Juan County — Officials say there is no risk to public health after a spill released five to six barrels of crude oil into the San Juan River on Friday.

The spill occurred at an Elk Petroleum site at Bucket Canyon, about a mile west of Montezuma Creek on Bureau of Land Management land, according to Kevin Okleberry with the Utah Division of Water Quality.

A broken valve at the wellhead gathering facility caused a mixture of water and crude oil to leak into a dry wash nearby, Okleberry said. The mixture then traveled about 3 miles to the San Juan River, and about 28 barrels, or 1,176 gallons, got into the river, he said.

Between five and six barrels, or about 250 gallons, of crude oil was in the mixture that got into the river, according to Okleberry.

As of Tuesday, the environmental damage at the site has been contained, and there is no risk to public health, he said.

“It could have been a lot worse,” Okleberry said. “Part of the reason it traveled so far is apparently there was ice and snowmelt in the draw and that allowed what would have been a relatively small spill to go farther down the draw into the river.”

A rainstorm also made some of the mixture run down the draw, according to Okleberry.

The Division of Water Quality is working with Elk Petroleum to monitor the cleanup, he added. The company is expected to release a follow-up report that will include details about the cause of the spill, which has yet to be determined, Okleberry said.

The Environmental Protection Agency determined that the company acted appropriately in aggressively attacking and containing the spill, according to Okleberry.

As of Tuesday, the EPA has determined that federal resources are no longer necessary at the spill site, and the agency is no longer at the scene, Okleberry said. Division of Water Quality employees will be testing the water in the river over the next week to make sure there is no contamination left over, he added.

Sandy officials kept quiet about water contamination to avoid panic, email reveals

By: Michael Locklear, KUTV; March 6, 2019; kutv.com
https://kutv.com/news/local/sandy-officials-kept-quiet-about-water-contamination-to-avoid-panic-email-reveals

SANDY, Utah (KUTV) — City officials met and decided to hold off on notifying news organizations about the water contamination problem that sickened residents, according to newly-released emails obtained by 2News through a public records request.

Several emails show Evelyn Everton, deputy mayor, drafted a press release by about noon on Wednesday, Feb. 13. Some affected residents had been notified by then, but the information wasn't sent to journalists until two days later, Friday evening, after the problem had worsened.

A note sent Feb. 13 by Public Utilities Director Tom Ward, which appears to have been compiled by another staffer, said the decision was made to avoid a panic.

"Members of City administration, Communications, Fire and Legal met today with Public Utilities to review additional outreach," the email read. "We are focusing efforts on communicating directly with citizens We discussed today the possibility of a broad media announcement, and decided to cancel that effort in order to avoid triggering panic beyond the impacted area."

A retired nurse and longtime Sandy resident, Jody Sybrowsky, emailed Ward — also on Feb. 13 — saying she "feel(s) that this issue has been hidden from the public."

Sybrowsky said in an interview Wednesday that she got sick as a result of drinking tap water the weekend before her email to Ward.

"I guzzled that liter of water while I was working out and then guzzled another liter afterwards," she said. "Immediately, I felt bloated and about half an hour later, had pretty severe gastric distress, and that lasted about three days."

"He (Ward) called me right away after he got the email personally and apologized," Sybrowsky said, "and told me that it was taken care of, that there was no further problem."

However, the scale and scope of the problem would only widen. Lab results received Friday, Feb. 15, showed high levels of lead and copper in the drinking water as a result of the initial fluoride contamination. The number of homes at risk jumped from a few dozen at first to about 2,800.

It was then that the city sent the press release, more than 48 hours after drafting it.

The mayor's office declined an interview request. Deputy mayor Everton said in a statement: "A press release wasn't sent out because each of the residents in Zone 1 and Zone 2 were notified

directly. Once the affected area was expanded to Zone 3 and it was more difficult to notify each resident directly the press release was sent out."

Sybrowsky said she is in Zone 1 and was not notified. Someone left a flyer on her neighbor's front door, which is how she learned of the problem.

The Utah Department of Environmental Quality's Division of Drinking Water is investigating whether the city properly notified residents as required.

Ward is on paid leave while the city investigates the response.

"I can understand not wanting to cause a panic," she said, "but I also know that it will cause panic if you don't tell people because they will find out. Neighbors talk to neighbors."

Sybrowsky hopes the city can reset and better plan for the future.

"I think they've learned from this," she said. "I hope they've learned from this. They need to have some protocols in place so that when an emergency happens, they know exactly what to do."

Sandy hit with three drinking water violations

By: Amy Joi O'Donoghue, Deseret News; March 7, 2019; deseretnews.com
https://www.deseretnews.com/article/900059274/sandy-hit-with-three-drinking-water-violations-fluoride.html

SANDY — Sandy officials did not report to Utah regulators fluoride levels in drinking water nearly 40 times the federal limit for 16 days and did not provide them with a written report on the contamination or proof the malfunctioning equipment is permanently shut down.

Details of those alleged violations are part of an administrative order issued to Sandy city officials on March 4 by the Utah Division of Drinking Water and obtained by the Deseret News in a government records request.

Sandy is required to file a written response by March 9 and has 30 days to appeal.

Late Thursday, the city issued a statement in response.

"We have been working closely with the Division of Environmental Quality from the beginning and we were prepared for their administrative order. Mayor (Kurt) Bradburn welcomes all levels of scrutiny in regards to this incident. This administrative order's findings are just one of the many independent investigations being conducted that will help us understand what occurred and improvements that need to be made. We will methodically work through the regulations outlined in the order to meet the requirements of our state and federal partners."

Thousands of emails obtained in a records request also reveal a state environmental scientist warned Sandy Public Works Director Tom Ward on Feb. 8 that elevated levels of copper and lead could be a concern due to an inadvertent release of fluoride concentrate, but the city waited a week to make a public announcement.

Ward has since been placed on administrative leave.

The administrative order, a legal document that is now on file with the U.S. Environmental Protection Agency, cites Sandy in violation of the maximum contaminant level of 4 miligrams per liter.

A Sandy water sample taken on Feb. 7 but not provided to the state until Feb. 23 showed a fluoride level of 151.5 miligrams per liter.

The administrative order also includes a public notice violation because the city's efforts did not comply with requirements state drinking water director Marie Owens gave to Sandy on Feb. 8.

"These violations are serious and constitute a considerable risk to public health," Owens wrote in a letter accompanying the order to Bradburn.

A power outage caused by a Feb. 5 snowstorm led to a malfunction of a fluoride injector at the Paradise Valley Fluoridation Facility. The concentrate was dispensed to an area of the city absent any well water and by the next day, Sandy began receiving multiple taste and odor complaints, "including notification that an infant had been medically treated," according to the order.

Documents show 15 gallons of 25 percent fluoride solution entered the city's distribution system starting Feb. 5, and because of continued snow on Feb. 6, employees were allowed to leave early and did not perform a routine, daily maintenance check of the fluoride facility.

By Feb. 8, the state environmental scientist provided Ward with an academic case study of a "hyperfluoridation event" that showed peak fluoride levels at 51 parts per million, causing substantially high levels of copper in a municipal water supply due to acidification of the water, according to one of the emails.

During a subsequent conference call that day, according to the order, Sandy employees said sampling data indicated the impacted area was confined to 50 homes.

"The director expressed concerns over the determination of the perimeter of impact and potential ongoing metals contamination due to corrosion," according to the order.

Owens then provided the city with a template for specific written public notification with mandatory language and directed officials to expand the impacted area by three times beyond the scope of the initial area.

On Feb. 8, Ward emailed a copy of the notification order to Owens, but after the business day concluded. The copy did not include the mandatory language of a "do not ingest" warning. Owens said she thought it was a cover letter and did not find out until much later that it was the actual notice that was distributed to residents.

On Feb. 9, the state scientist once again warned Ward about the possibility of elevated levels of copper, according to an email obtained in the records request.

“Mike said there was a report of a kid peeing in a toilet and the water turning blue. As in the attached report, my thought is that it is from copper that was stripped from the interior plumbing. This is why ongoing metals testing is important. The affected homes could have elevated levels of lead and copper," the state employee wrote in an email.

The order issued to Sandy details that contaminant levels in the drinking water from Feb. 7 were:
• Copper ranging from 3,040 to 28,800 micrograms per liter, compared to an action level threshold of 1,300 micrograms per liter.

• Lead levels ranging from 18 to 394 micrograms per liter, compared to standard of 15 micrograms per liter.

• Arsenic levels ranging from 16.8 micrograms per liter to 34 micrograms per liter, compared to a federal threshold of 10 micrograms per liter.

Sandy was assessed 50 points per each of the violations issued by the state, triggering the administrative order.

Under the directive, Sandy must collect 60 water samples every quarter, including 30 samples systemwide and 30 samples from impacted zones, and conduct a corrosion control study within 90 days.

Within 20 days, the city must provide an illness report with data collected from the county health department and the Utah Poison Control Center.

Although Sandy officials initially thought the contamination was confined to a 50-home area, sampling by Feb. 23 had expanded the area to include 1,509 home and schools.

Owens identified five homes that need further mitigation and monitoring.

Utah and Fluoride spills – it’s not just a Sandy thing

By: Amy Joi O’Donoghue, Deseret News; March 8, 2019; deseretnews.com
https://www.deseretnews.com/article/900059511/utah-and-fluoride-spills-not-just-a-sandy-thing.html

SANDY — The Salt Lake Valley Health Department and Intermountain Healthcare wrapped up two weeks of free blood tests on Friday for Sandy residents who may have ingested water contaminated with lead, copper and excess fluoride.

In the meantime, the city was ordered this week by the Utah Division of Drinking Water to complete an illness report in the aftermath of a contamination event with impacts still not fully understood.

On Friday, Sandy Deputy Mayor Evelyn Everton said the city put out a request for proposals for an investigation into the handling of communications and emergency response after the release of hydrofluorosilicic acid from a malfunctioning pump on Feb. 5.

The city also retained an attorney to investigate management of the release.

This isn't the first time in Utah that an accidental release of the concentrated material has caused problems in the communities where voters approved the introduction of fluoride into community drinking water systems.

Hydroflurosilicic acid is a concentrate that in its undiluted form is classified as a hazardous, poisonous material that, while it contains fluoride, also contains arsenic, lead, copper, manganese, iron and aluminum. It is a byproduct from phosphate mining operations.

In 2007, an estimated 1,500 gallons of hydrofluorosilicic acid was released in a tank rupture at a treatment plant in Salt Lake County, prompting monitoring of Parleys Creek from Sugarhouse Park to Mountain Dell Reservoir, according to state documents.

Five years later, a worker at a North Salt Lake water treatment plant was hospitalized when he was exposed to fumes during a delivery of the material. He was not wearing any personal protection equipment. Officials at the time believed a hose may have malfunctioned.

In North Salt Lake two years later, a feeder pump malfunctioned, discharging 140 gallons of the acid onto the floor of a drinking water well house. The material then made its way to the curb and gutter into the storm drain. Incident reports say fumes corroded the lock on the facility, making it inoperable.

The Centers for Disease Control named community water fluoridation as one of the 10 great public health achievements of the 20th century, but the practice is not without its controversy or its critics, for a number of reasons.

Just two of Utah's 29 counties opted for fluoridation in narrow votes about 20 years ago, and while the majority of the nation's water systems are fluoridated, some communities are revisiting the issue or opting out altogether.

Although the CDC touts that for every dollar invested in community fluoridation $38 in dental treatment costs are saved, a 2015 study debunked that assertion because of the costs associated with remediating the over fluoridation of children — something called fluorisis.

The study by the International Journal of Environmental and Occupational Health concluded the cost savings were based on a "flawed analysis" that also ignored the costs of environmental impacts, equipment replacement, overfeed incidents like Sandy's, introducing fluoride into the system and occupational exposure.

It also cited the "poor track record" for cost estimates by community water fluoridation advocates, pointing in particular to Utah costs far higher than initially proposed.

Salt Lake County officials have not indicated any desire to revisit the fluoride issue, although at least one Davis County commissioner is making site inspections at distribution points.

Utah cited Sandy with three drinking water violations and ordered an intensified testing schedule for contaminants like lead and copper.

Sandy faces enhanced state scrutiny following water contamination

By: Kyle Harvey, KUTV; March 8, 2019; kutv.com
https://kutv.com/news/local/sandy-faces-enhanced-state-scrutiny-following-water-contamination

SANDY, Utah (KUTV) — Water officials in Sandy will face increased scrutiny from state regulators because of their less than perfect response to the recent water contamination, according to a letter from the state this week obtained by 2News.

Absent an appeal, which the city could file at any time in the next 30 days, the water department will have to conduct much more intensive sampling for the foreseeable future.

The state Division of Drinking Water issued an administrative order Monday which contained bullet points outlining where the state believes the city erred during the crisis.

The first violation pertains to the water quality itself. The second violation pertains to the way in which the city informed its residents of the problem. The third strike against Sandy alleges officials failed to forward lab test results up the chain of command on the proper time table.

The violations translate into points on their record which affects the regulatory burden.

"It's like a golf score," said DEQ spokesperson Jared Mendenhall. "You want as few points as possible. And this is just, this is a way we kind of rank where we're at in enforcement with water systems."

Mendenall reports there are about 1,000 water systems in Utah and only a few have racked up a similar number of points as Sandy. None of them serve anywhere near the number of users that Sandy does.

City officials declined repeated requests for interviews Friday, noting they are still planning their response.

Deputy Mayor Evelyn Everton sent the following written statement.

"We have been working closely with the Division of Environmental Quality from the beginning and we were prepared for their administrative order. Mayor Kurt Bradburn welcomes all levels of scrutiny in regards to this incident. This administrative order's findings are just one of the many independent investigations being conducted that will help us understand what occurred and improvements that need to be made. We will methodically work through the regulations outlined in the order to meet the requirements of our state and federal partners."

2News reached out to each member of the city council and heard back from Kris Nicholl, who said the council has no control over the city's response to the administrative order.

She said she's not satisfied with the level of transparency she's seen throughout the process and will be advocating for the council to hire their own investigator to research what happened during the crisis.

From flooding to sick kids and pets, small legal claims show Sandy water crisis had a big impact on residents

By: Taylor Stevens, Salt Lake Tribune; March 11, 2019; sltrib.com
https://www.sltrib.com/news/politics/2019/03/11/flooding-sick-kids-pets/

In the wake of Sandy's water contamination crisis, residents fear long-term damage to their children's health, their pets and their homes — and a number are asking the city to pay for their missed wages, medical bills and replacement water filters.

The more than 20 small-damage claims filed with the city after a fluoride pump malfunctioned and flooded parts of the local water system last month were obtained by The Salt Lake Tribune through an open-records request. Together, they add up to more than $3,000, demonstrating the wide-reaching impacts the water incident had on residents in ways big and small.

"The claims kind of fall into different categories," Chase Parker, the city's risk management officer, told the City Council at its meeting last week. "There's claims that have been filed because they missed work due to illness associated with their consumption of this water. There's claims where they've submitted medical bills or veterinarian bills in response to this issue. Other times people have wanted us to replace water filters in their refrigerator."

While experts say fluoride is beneficial in small doses, unsafe levels can cause a number of health issues. Several complainants said they had to take time off work — some for as long as a week — after either they or their children experienced gastrointestinal problems and stomach pains.

"Loss of sleep, inability to concentrate or do physical activity for periods of time because of persistent cough and throat drainage," one person described their symptoms in the complaint. "I am also a recovering cancer patient and hope this does not affect my 1 year diagnosis."

The complainant, who originally appears to have filed a request for $25,000 in damages, looks to have later withdrawn the claim after his or her cough improved.

The city redacted the names of residents filing the claims.

Another complainant — who took a week off work to care for his or her two young children, a 5-year-old and a 6-month-old, after they became sick from the water — is seeking $510 for bodily injury and property damage.

"We had what we thought was a stomach bug and headache for 1 week and didn't know why," the person wrote. "Not knowing the situation and not being aware of it until this weekend is very discouraging. What long-term effects is this going to have on our bodies? I'm just worried and frustrated that I had to miss work for something preventable."

Many Sandy residents have expressed frustration that they were allowed to drink possibly tainted water for a week before they heard about problems with the city's water supply, which began because of a power outage at one of the city's wells on Feb. 6. The city deemed the water safe to drink on Feb. 17.

Anyone who believes they have an injury caused by Sandy can file a claim through an online form on the city's website within one year from the date the incident occurred. The city then has 60 days to approve or deny the claim, after which point a complainant could pursue a case in district court if the case was denied.

"We get claims all the time," said Sandy City Recorder Wendy Downs. "When snowplows hit mailboxes or the mailboxes get knocked over, or when any city property is hit, or if one of our vehicles had hit another vehicle. So we get claims all throughout the year. It's kind of a little bit of everything."

Sandy receives an average of 50 claims a year and pays out an average $278,617 annually, Parker told the council during a presentation to the City Council on Tuesday. A total 1,015 claims have been filed against Sandy since 1999, and the city has paid out $5,572,342 since that time. The claims, Parker said, are rarely adversarial.

"We've had a very cooperative relationship with these people," he said, speaking to claims generally. "They've been harmed and just want to be made whole and think for some reason that the city is at fault. And oftentimes they're right. So we try to process these claims quickly and promptly."

In this case, the city is asking claimants to provide receipts or other documentation, like medical or veterinary bills, to support their claims for damages.

While many of the complaints center around health damages to themselves or their children, several others focus on pets and other animals. One complainant said his or her young labrador started "having multiple seizures" after drinking the water; another sought $115 for the cost of a blood test to determine whether the fluoride had impacted a competitive show horse, which is insured for $25,000. "His health is of utmost importance," the person wrote.

Still others requested money for property damage. One complainant flushed his or her home water system in conjunction with Sandy's instructions, allegedly leading the heater to refill overnight and resulting in an increase in pressure that activated the pressure release valve and pushed water into the basement.

"The water dump flooded our laundry room, a bedroom and hallway soaking the drywall and carpeting," the complaint stated. The person is seeking $300 from the city for a fan purchased for drying the carpets, water lost in the flushing and dumping process and the labor and time spent to deal with the incident.

While some people said they had receipts for extremely specific expenses — like a home fluoride kit, replacement water filters or bottled water — others said they had no way of quantifying the damage and frustration they had gone through.

“How do you put a dollar amount on a health factor that is unknown?” asked one complainant, who was concerned about the potential impacts of the contaminated water on his or her pipes and kids’ health. “I don’t think we have been given the full truth and therefore don’t know the full damage done.”

The Sandy City Council has voted to create a technical committee that will investigate the city administration’s response to the fluoride pump malfunction. The Utah Department of Environmental Quality has cited the city for the high fluoride levels and is determining if Sandy appropriately reported elevated levels of lead and copper.

Additionally, Sandy has announced its Public Utilities director will be on paid administrative leave as independent investigators look into the city’s response to the fluoride pump malfunction. City Council Chairwoman Kris Nicholl acknowledged that the claims aren’t representative of all the people who have been impacted by the water crisis.

And while the impacts have decreased, she said “there are still concerned people about long-term effects, whether it be health [or] long-term effects on their home and that’s normal, and I feel for them and I want to get those questions answered for them.”

“There’s no wiping our hands of it,” she continued. “We do have to monitor [the water quality] and monitor all the time and keep in contact with these people.”

How safe is the fluoridated water in Davis County?

By: Brittany Johnson, abc4; March 13, 2019; abc4.com
https://www.abc4.com/news/local-news/how-safe-is-the-fluoridated-water-in-davis-county-/1847562985

LAYTON, Utah (ABC4 News) - A few Davis County residents have inquired about the safety of their water supply after a fluoride contamination crisis in nearby Salt Lake County.

Davis and Salt Lake are the only counties in Utah that add fluoride to their water supply.

It caused a scare in Sandy last month when citizens complained of sickness due to the elevated levels of fluoride in the city's water.

ABC4 News went to Layton, the largest city in Davis County, to see what measures are being taken to ensure only the approved amount fluoride makes it to residents.

Brittany Johnson toured one of the city's five well houses.

Wes Adams, Water Supervisor for Layton City, says each well house is checked three times a day and monitored around the clock.

"Fluoride is an acid," said Adams.

He says that's why it's very important that the facility is not only monitored manually but electronically as well.

"We drink the water as well. They need to know it's safe," said Steve Garside, Public Information Officer for Layton City. "At minimum, the water is tested once a week."

Layton's water is tested in what's called a split sample.

"We have the ability here to do an immediate test to make sure we're in compliance. We send a second part of that same test down to the county health department and they run those tests as well. If there's a difference there that's concerning they will notify us," explained Garside.

In November 2000, voters countywide approved adding one part per million of fluoride to the drinking water systems to prevent tooth decay in children.

The fluoride was then added to Layton's water supply in 2003.

Garside says since added, the city hasn't had any problems with improper levels.

With the extra precautions, monitoring systems, and intrusion alarms, Garside hopes Layton won't have any contamination problems like the one in Sandy.

"We're confident it's not going to happen here," he said.

Layton City posts its Annual Water Quality Report on its website.

Sandy residents still dealing with contaminated water

By: Ladd Egan, deseretnews; March 14, 2019; deseretnews.com
https://www.deseretnews.com/article/900060516/sandy-residents-still-dealing-with-contaminated-water.html

SANDY — The drinking water crisis is not over for some homeowners.

More than a month after toxic levels of fluoride entered pipes following a pump malfunction, Kathe Bolan still can't drink or cook with the water in her home. She lives in one of six houses that are still showing elevated levels of lead and copper.

Officials say a power outage on overnight on Feb. 5-6 caused an injector to malfunction, releasing concentrated fluoride into a section of town potentially impacting 2,200 homes, some schools and other facilities. The Utah Division of Drinking Water says the malfunction caused copper and lead to leach from pipes and fixtures.

Bolan said she knew immediately that something wasn't right with the water.

“It makes you cramp. It was a cramping feeling,” she said Thursday.

Residents have criticized the city for how it responded to the problem. A news release was first issued Feb. 15, with updates on possible elevated levels of lead and copper the next day.

But even after the fluoride was flushed from the system the problems continued.

“They did say that the water was good to drink, and that’s when I put the water down for my dogs and they threw up immediately,” she said.

Week after week, test results from Bolan's home have come back in the red, showing unsafe levels of lead and copper. Sandy officials are now advising Bolan and other homeowners whose water is contaminated to replace their faucets. It is also advising those living in the homes to let the water run for a minute before washing their hands and not use the water to brush their teeth.

Bolan has been advised to replace three faucets to start with and then do more testing.

Marie Owens, division director of the Utah Division of Drinking Water, said ongoing testing will reveal if homes have permanent damage.

“We have found a few homes that need some follow-up," she said. “It’s going to take some time.”

And if replacing the faucets doesn’t get rid of the unsafe levels of copper and lead?

“It could be either the service line coming into the home or the plumbing with the whole home,” Owens said.

Evelyn Everton, Sandy’s deputy mayor, said Thursday that of the six homes with red test results, two are now in the clear. Testing is still out for another house where the faucets were replaced. The city says it will reimburse the homeowners for the faucets.

Bolan says she feels left in the dark, wondering when she can go back to drinking the water and who will pay if appliances, water heaters and pipes need to be replaced.

“If I were to put my house on the market today, who would want to buy my house?” she asked.

"I don’t see any accountability. I don’t see anyone calling me,” Bolan said. “They know my home is still in the red. If I know it, they know it. It’s like we’re forgotten. I feel like I’ve been forgotten.”

‘There’s something wrong with the water’: Sandy 911 calls detail contamination concerns

By: Ladd Egan, KSL; March 17, 2019; ksl.com
https://www.ksl.com/article/46512739/theres-something-wrong-with-the-water-sandy-911-calls-detail-contamination-concerns

SANDY — Recordings of two 911 calls to Sandy City's dispatch center reveal concern and confusion from residents about what we now know was acute levels of fluoride in their water.

“I went to take a drink of it and I had to spew it out. There’s something wrong with the water,” one man told the operator in the early morning hours of Feb. 7. “It almost tasted like too much chemicals or sewage. I don’t know what it was.”

(The water) almost tasted like too much chemicals or sewage. I don’t know what it was.
–911 caller

The caller said the day before his wife had mentioned that the water tasted “funny.”

“It’s just awful,” he said.

He went on to explain that he and his wife had very upset stomachs after drinking the water from their kitchen tap.

“I drank a bunch of it,” he said at the end of the call. “I don’t know if it’s bad water. I hope I’m OK.”

After asking a series of questions, the dispatcher offers to send the fire department and call the water department.

“It’s extremely metallic and extremely painful” is how another caller described the water to a different dispatcher on the afternoon of Feb. 6.

Both callers live in the same neighborhood where Sandy City says a power outage caused a fluoride pump to malfunction on Feb. 5, allowing undiluted fluoride to enter the water supply.

“It’s the water. I can’t reach anybody at Sandy City,” the Feb. 6 caller said, telling the dispatcher he suspected something had malfunctioned because of the storm.

“Nobody at the city is answering,” he said. “Everybody goes home at 3:30.”

Emails between Sandy City employees show the city was warned that the water supply could be contaminated with lead and copper a full week before they told residents.

Documents from the Utah Department of Environmental Quality say that on Feb. 6 the pump house in the neighborhood was not checked because of the inclement weather.

“Most of the Sandy City operations staff had been sent home due to the snow storm,” reads a Feb. 11 communication to Sandy’s public utility director. “Which resulted in the Paradise Well and its fluoridation facility not being checked according to Sandy City’s routine daily inspection practice.”

City crews discovered the fluoride malfunction on Feb. 7. Residents received an official notification on Feb. 8.

It wasn’t until a week later, on Feb. 15, that lab results showed acute high levels of copper and lead in the water supply, prompting the city to issue a “no drink order” for more than 2,000 homes.

The undiluted fluoride corroded pipes and fixtures, which allowed the metals to leach into the water, according to Utah’s Division of Drinking Water. The division sent a notice to the city saying damage to pipes, hot water tanks, filters and water softeners could be permanent.

As of Feb. 17, the city has said all water is safe to drink.

No sign of elevated lead in the blood of Sandy residents after the big water contamination

By: Sean P. Means, Salt Lake Tribune; March 19, 2019; sltrib.com
https://www.sltrib.com/news/2019/03/19/no-sign-elevated-lead/

Tests taken after Sandy's recent water contamination found no sign of elevated lead levels in residents' blood, the Salt Lake County Health Department reports.

Intermountain Healthcare administered 704 blood tests between Feb. 23 and March 8 to residents of the three zones in Sandy where fluoride, copper and lead leaked into the water system. Of those tested, only one — an adult over 65 – was found with a lead level of 5.1 micrograms per deciliter of blood, above the level where the Centers for Disease Control and Prevention recommends launching public health actions.

One out of 704 is lower than what the county health department would statistically expect for a population that size, based on the expected prevalence of elevated blood lead levels across the county.

Health officials said they expect the Sandy water contamination — which began Feb. 6 when a power outage caused a malfunction in one of the city's pumps — is unlikely to cause long-term health damage to residents in the area. This is what health officials predicted before the tests were administered.

"We are grateful that these results confirm for those screened that any potential exposure to elevated levels of lead in this incident was indeed brief enough to not cause elevated blood lead levels," Gary Edwards, executive director of the Salt Lake County Health Department, said in a statement.

Lead is common enough in the environment that health officials recommend all pregnant women and children under 6 years old, in Sandy or not, get a blood lead test from their health care provider.

The most common source of lead is old paint in homes built before 1978. Lead also can be found in such common products as jewelry, tableware, charms, ammunition, fishing sinkers, stained glass, miniblinds, roofing and artificial turf. It can also be found in toys made in countries without strict safety guidelines.

The Utah Department of Environmental Quality cited Sandy for the excess fluoride.

Clean drinking water a bigger global threat than climate change, EPA's Wheeler says

By: Kathryn Watson, Major Garrett, CBS News; March 20, 2019; cbsnews.com
https://www.cbsnews.com/news/epa-administrator-andrew-wheeler-exclusive-interview/

Environmental Protection Agency Administrator Andrew Wheeler says that unsafe drinking water -- not climate change -- poses the greatest and most immediate global threat to the environment.

In his first network interview since his confirmation last month, Wheeler told CBS News chief Washington correspondent Major Garrett that while the administration is addressing climate change, thousands are dying everyday from unclean drinking water. Wheeler is announcing the EPA's global clean water push in a speech at the Wilson Center in Washington, D.C., Wednesday morning.

"We have 1,000 children die everyday worldwide because they don't have safe drinking water," Wheeler told Garrett. "That's a crisis that I think we can solve. We know what goes into solving a crisis like that. It takes resources, it takes infrastructure and and the United States is working on that. But I really would like to see maybe the United Nations, the World Bank focus more on those problems today to try to save those children. Those thousand children each day, they have names, we know who they are."

The U.S., Wheeler said, has a number of clean water financing programs that provide grants and loans. He wants those to be models for international organizations like the United Nations to provide money to third-world countries.

The World Health Organization estimates that at least 2 billion people globally use a drinking water source contaminated with feces. It's unclear what, if any, new funding the Trump administration might be providing for the clean water push.

Wheeler also insists his EPA is working to combat climate change, a phenomenon to which he says man "certainly contributes." He said the Trump administration will roll out two major regulations later this year in an effort to reduce CO2 emissions in the U.S. Those measures would replace rules limiting carbon emissions from power plants and clean car standards.

Climate change, Wheeler said, "is an important change we have to be addressing and we are addressing." But he added that "most of the threats from climate change are 50 to 75 years out," while unsafe drinking water is killing people right now.

Wheeler noted that the U.S. has already cut CO2 emissions, which are thought to be the primary driver of climate change, by "14 percent since 2005." He argued that the U.S. is "doing much better than most westernized countries on reducing their CO2 emissions, but what we need to do is make sure that the whole world is focused on the people who are dying today, the thousand children that die everyday from lack of drinking water. That is something where we have the

technology, we know what it will take to save those children. And internationally, we need to step up and do something there."

Much of those CO2 emission reductions, however, took place during the Obama administration. And the U.S. Energy Information Administration projects U.S. energy-related CO2 emissions are expected to rise slightly for 2018, and remain flat in 2019.

Wheeler, a former lobbyist for the coal industry and other energy concerns, worked at the EPA in the 1990s before moving on to jobs in the U.S. Senate and the private sector. Wheeler replaced former EPA Administrator Scott Pruitt as acting administrator last year, after Pruitt resigned amid a slew of ethics investigations. When he was still EPA administrator, Pruitt told Garrett his job involved not just protecting the environment, but partnering with industry.

Asked if he views the EPA's mission as protecting both the environment and business, Wheeler didn't mention business.

"Well, the mission of our agency is to protect public health and the environment and that's what we do and we do that every day. You know, it's public health and the environment and that is our mission," Wheeler told Garrett.

Wheeler says that's why he thinks the Green New Deal, the proposal championed by progressive Democrats like Rep. Alexandria Ocasio-Cortez, is an "aspirational" but unrealistic idea. He claims the proposal could actually jeopardize clean drinking water.

"In fact, on the drinking water side, the Green New Deal does not value — at least nowhere in the documents does it value — having reliable electric grid," Wheeler said. "A reliable electric grid is absolutely necessary to provide drinking water. You have to have the electricity. When we go, as a first responder, when we go into a community that's been hit with a hurricane, or some other natural disaster, the first thing we do is try to make sure the electric grid is back up and running in order to provide the drinking water for those communities."

As the recent crisis in Flint, Michigan, painfully brought to light, clean drinking water isn't only a global issue. CBS News has reported that lead in America's water system is a national problem, with warning signs surfacing in cities including Newark, Chicago, Detroit, Baltimore and Milwaukee.

Wheeler said the EPA is looking at what it can do to require regular testing for water in schools and daycares later this year.

"First of all, I want to make sure the American public understands 92 percent of the water everyday meets all the EPA requirements for safe drinking water," Wheeler said.

"We have the safest drinking water in the world. We are working to update a number of regulations, one of which is our lead and copper rule, which takes a look at the pipes. The lead pipes that we have around the country. As part of that, we're looking at what we can do to require regular testing for schools and daycares, so that would be part of that regulation when it comes out later this year."

Wheeler also said that the water in Flint now meets EPA standards.

"Part of the problem with Flint was there was a breakdown in once they got the data, once the city of Flint, the state of Michigan, the Obama EPA – they sat on it," Wheeler said. "We're not doing that. As soon as we get information that there's a problem, we're stepping in, we're helping the local community get that water system cleaned up."