



P.O. BOX 840490 320 E. NEWEL AVE. HILDALE, UTAH 84784 PHONE: 435-874-1160 FAX: 435-874-2603

NOTICE

*The Utility Board will meet on Tuesday, March 26th, 2019, at 6:00 p.m. M.D.T.
At 320 East Newel Avenue, Hildale, Utah 84784.*

AGENDA:

1. Call to Order
2. Prayer & Pledge of Allegiance
3. Approval of Minutes from February 26, 2019, Meeting
4. Public Comment
5. Consideration of Utility Waiver Requests
6. Manager Report
7. Financial Report
8. Consideration of Approval to Pay Bills
9. Service Award for Employee
10. Consideration and Possible Action on Large Purchases
11. Discussion on Water Remediation
12. Adjournment

Agenda items and any variables thereto are set for consideration, discussion, approval or other action. The Utility Board may, by motion, recess into executive session which is not open to the public, to receive legal advice from the their attorney(s) on any agenda item, or regarding sensitive personnel issues, or concerning negotiations for the purchase, sale or lease of real property. Board Members may attend by telephone. The Agenda may be subject to change up to 24 hours prior to the meeting. Individuals needing special accommodations should notify the City Recorder at 435-874-2323 at least three days prior to the meeting.

Utility Departments of Hildale/Colorado City

Utility Board Meeting Minutes
320 East Newel Ave, Hildale Utah
Tuesday, February 26, 2019 6:00 P.M.

Present: Utility Board

Board Members:	Present	Absent	Excused
Haven Barlow	X		
Sterling Jessop, Jr.	X		
Ralph Johnson	X		
Arvin Black	X		
Jason Black	X		
Nathan Burnham	X		
JVar Dutson	X		
Stacy Seay	X		
Michael Cawley	X		

Staff Present:

Weston Barlow, Vincen Barlow, Harrison Johnson, Mariah La Corti, Vance Barlow, Mayor Joseph Allred, Mayor Donia Jessop

Public Present:

Lawrence Barlow, Glynn Jones, Tonja Holm, Milton Holm (this list may be incomplete)

#1 Call to Order

Meeting called to order at 6:00 pm. Roll was taken, quorum present.

Arvin made the Board aware of John Barlow's deployment to Cuba. He wanted to let him know that his service is appreciated, and his safe return is looked forward to.

#2. Prayer & Pledge of Allegiance

Michael offered a prayer, the crowd joined in the pledge of allegiance.

#3. Approval of Minutes from Previous Meeting

A few corrections were noted.

JVar Dutson moved to ratify the minutes of the January 29, 2019 Meeting.

Nathan Burnham seconded. Roll call vote:

Board Members:	Yes	No	Abstain
Haven Barlow	X		
Sterling Jessop, Jr.	X		
Ralph Johnson	X		
Arvin Black	X		
Jason Black	X		
Nathan Burnham	X		
JVar Dutson	X		
Stacy Seay	X		
Michael Cawley	X		

Motion carried.

#4. Public Comment

Glynn Jones addressed the Board about his support of the Water Surge Remediation Program. He encouraged the Board to approve this program, pointing out that almost every other city in the nation has something similar.

#5. Consideration of Utility Waiver Requests

Harrison Johnson presented. The request is something that is asked a lot. A customer is asking that the base rates between the time that they initially requested service and the first time there was actual usage (3 months) be refunded. Harrison pointed out that, per the water service regulations, the customers are required to pay base rates because of the immediate availability of services. He recommended a denial of this request, as the customers services were connected in line with their request. Tonja Holm addressed the Board about the reason for the request.

Stacy explained a similar experience that she is currently going through. Jason pointed out that according to the way sewer is calculated, the customer is actually benefiting from having base rates, but no usage during these months. Ralph explained that everybody that has requested to have their water turned on has to pay the base rates for such.

Jason Black moved to deny the waiver request.

Nathan Burnham seconded. Roll call vote:

Board Members:	Yes	No	Abstain
Haven Barlow	X		
Sterling Jessop, Jr.	X		
Ralph Johnson	X		
Arvin Black	X		
Jason Black	X		
Nathan Burnham	X		
JVar Dutson		X	
Stacy Seay	X		
Michael Cawley	X		

Motion carried.

Harrison was directed to work with the customer on a payment arrangement and look into a policy addressing this issue in the future.

#6. Manager Report

Harrison presented. There has been a net increase in customer accounts for several months. The Rural Water Association has an annual conference hosted in St. George he, Weston and the operators are attending. Harrison is trying to be proactive with regulatory agencies, and has meetings scheduled with several of them.

JVar asked that we make sure we are going overboard on making sure the public is aware of any water quality issues. Harrison agreed, and he is collecting research to distribute any information in a knowledgeable manner. There was brief discussion about the radium contamination in the well water and spring water expansion idea.

Because of the potential of requests for installation rising in low pressure areas, and the State law associated with this, the Department is actively working on a solution to provide adequate water pressure in these areas. Disclosure has been given to the public that there are areas of the city we simply cannot provide water to at this time because the infrastructure does not allow for it.

#7. Financial Report

Vincen Barlow presented. Revenues with comparison to budget and an invoice register were provided.

#8. Consideration of Approval to Pay Bills

JVar Dutson moved to pay the bills as they become due and the funds become available.

Ralph Johnson seconded. Roll call vote:

Board Members:	Yes	No	Abstain
Haven Barlow	X		
Sterling Jessop, Jr.	X		
Ralph Johnson	X		
Arvin Black	X		
Jason Black	X		
Nathan Burnham	X		
JVar Dutson	X		
Stacy Seay	X		
Michael Cawley	X		

Motion carried.

#9. Consideration and Possible Action on Water Surge Remediation Program

Harrison presented. The program is recommending the water service regulations be amended to reflect an allowance for a water surge billing adjustment once every 36 months.

Glynn Jones was invited to address the Board once more. He spoke about the benefit of this program for the customers. He made a few recommendations to the policy regarding the requirement of being in good standing, and the billing cycle. Harrison agreed to look into applying these suggestions. The sewer rate recalculation verbiage was briefly discussed.

Mayor Jessop reiterated the need for this program to help individuals. Mayor Allred used his experience with the Utility Department to express his concern about the City bearing this burden when the customer may have a leak due to using inferior materials or being poorly constructed. He would not vote for the program. Harrison answered this by pointing out that all leaks can be inspected and verified by the Water Superintendent. He feels the customer service and benefits would outweigh the financial burden.

There was discussion on the 36-month timeline. Haven felt that this amount of time addresses Mayor Allred's workmanship concerns.

Jason Black moved to recommend that the city councils adopt the resolution to the water service regulations following approval from the Department of Justice.

Stacy Seay seconded. Roll call vote:

Board Members:	Yes	No	Abstain
Haven Barlow	X		
Sterling Jessop, Jr.	X		
Ralph Johnson		X	
Arvin Black	X		
Jason Black	X		
Nathan Burnham	X		
JVar Dutson	X		
Stacy Seay	X		
Michael Cawley	X		

Motion carried.

Ralph felt he was not given enough time to research this.

#10. Consideration and Possible Action on Non-Discrimination of Public Services Policy

The personnel policy manuals of both cities discuss non-discrimination of fellow employees but does not address non-discrimination of customers. It would be beneficial to have this added to the employee manuals, so employees are aware of the repercussions of such actions.

Christian pointed out that he has reviewed the policy and feels it is very thorough.

JVar Dutson moved to approve the Non-Discrimination of Public Services Policy.

Nathan Burnham seconded. Roll call vote:

Board Members:	Yes	No	Abstain
Haven Barlow	X		
Sterling Jessop, Jr.	X		
Ralph Johnson	X		
Arvin Black	X		
Jason Black	X		
Nathan Burnham	X		
JVar Dutson	X		
Stacy Seay	X		
Michael Cawley	X		

Motion carried.

#11. Adjournment

JVar would like commercial water sales at Maxwell Park to be added to the agenda, and asked Board Members to think about their stance on this issue.

Jason also made a note about the lack of timeliness in receiving the packet. The meetings would go smoother and Board members would be more informed if information was received sooner. Centennial Park Water District will meet Saturday and Michael will communicate their plan for going forward.

With no other business, meeting adjourned at 7:32 pm.

Minutes were approved at the meeting on _____.

Vincen Barlow, Hildale City Recorder

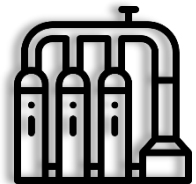
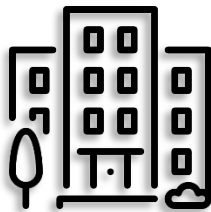
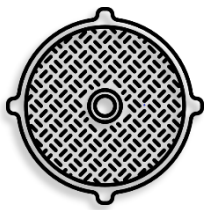
Vance Barlow, Colorado City Town Clerk

Summary of Board Actions:

Approval of Minutes of 1-29-19 Meeting

Recommendation to City Councils Regarding Adopting Water Surge Remediation Program

Adoption of Non-Discrimination of Public Services Policy.



Hildale-Colorado City Utility Department

Director's Report

March 26, 2019

February Statistics

Number of accounts billed in February 2019:

Water base rate	869
Sewer	819
Gas base rate	670
WSG Penalties	707

of shut off notices printed March 19, 2019 194

of final billed accounts with final bill date in February is **11**

of new connect accounts in February is **16**

Dominion Energy Natural Gas System Purchase

Having consulted with administration on the previous negotiations with Dominion Energy, it was determined that there may be some value to approaching Dominion for more specific details of an offer. I approached Dominion Energy in February to ask to provide a specific offer. Additionally, the goal of bringing Natural Gas to Colorado City is an objective of these negotiations no matter the outcome.

Redwood Extension

The Utility technicians have completed the Redwood extension project near El Capitan Highschool. We will be providing propane service to customers on those streets. Additionally, we are reaching out to the UEP to discuss property line issues.

Retirement Planning

The cities are currently researching retirement plans for employees, and have had presentations by the Arizona Retirement System, and a number of private retirement providers. Both the cost to city and the need for flexibility in today's hiring environment it is unlikely that either Arizona's or Utah's state retirement programs will be tenable. We have a presentation on March 27th from the Utah Retirement System to determine if there is any way to work that in.

Landfill Reconciliation

The Department has observed significant discrepancies between customer billings and landfill services rendered. Often customers are reimbursed, in one case thousands of dollars, for incorrect billings. We've approached the Landfill and have a plan to reconcile the accounts, and to bring the billing policy of the Landfill into compliance with City codes and ordinances. We are also in the process working with Public Works to align customer service policies in order to unify procedures among city employees.



Apple Valley Natural Gas Proposal

Hildale-Colorado City Utility Department
320 East Newel Avenue, Hildale UT 84784

February 11, 2019

To the Town of Apple Valley,

Our community is undergoing incredible changes that are expected to continue for many years. One of those changes is our community's willingness to be good neighbors, and to start to collaborate on solutions that will help us all. A large part of that is offering services and resources that we have to one another when it clearly benefits both communities. One of the unused resources has been the natural gas pipeline Hildale City installed that runs from Hurricane to Short Creek. The pipeline currently provides natural gas service to many of Hildale's residents.

Underground piped natural gas is cleaner, safer, and more cost effective and more energy efficient than regular tanked propane. Natural gas also provides more consistent service to residential and commercial customers. Our transit pipeline maintains a standard operating pressure of 375 PSI and has the capacity to fully supply the municipality of Apple Valley. The Hildale-Colorado City Utility Department (HCCUD) would like to formally propose that Apple Valley develop distribution gas lines and receive commodity delivery, payment processing, and system maintenance services from HCCUD.

I believe that natural gas service will increase the value of your homes, and enhance the quality of life in your community, as it has ours. I see a bright future of many more collaborative opportunities for our communities, so let this be our first step!

Harrison Johnson
Director, Hildale-Colorado City Utility Department

Proposed Structure

The Town of Apple Valley should establish a gas department through a vote of its council members and establish a superintendent role for the new department. Apple Valley and the city of Hildale will sign an Intergovernmental Agreement (IGA) which will provide the basis on which Natural Gas is supplied to Apple Valley. The IGA will stipulate the following:

- Rate Authority
- Construction and Expansion of the Distribution System
- Maintenance and Operation of the Distribution System
- Billing and Collections

Rate Authority

The Rate Authority will be vested in the IGA, however all rates should apply across the Natural Gas System (both Hildale and Apple Valley). The Town of Apple Valley will have the unilateral authority to add applicable and legal fees to Apple Valley Natural Gas Customers.

We would like to offer both billing and collections services, the costs of which, would be included in the standard rate for all users of HCCUD Natural Gas services.

Construction and Expansion of the Distribution System

The Distribution System should be solely owned and constructed by Apple Valley through a development agreement that uses funding from a revenue bond. That bond payment should be added as a fee to the gas service to Apple Valley customers until the bond is paid in full.

Expansion of the Natural Gas Distribution System should come under standard agreement with a private developer. The private developer is then responsible for funding and recuperation of spent funds through whatever mechanism they deem fit. As a policy, expansions should not be paid by current customers, however, it may be advisable to collect a marginal fee from revenue to fund municipal use expansions.

Maintenance and Operation of the Distribution System

The maintenance and operation of the distribution system will, by IGA, be the responsibility of the HCCUD staff. The cost of maintenance and operation will be covered by the billed fees to each customer in Apple Valley at the same rate levied for Hildale and Colorado City customers.

Material Improvements to the Distribution System

HCCUD will work with Apple Valley to set a capital improvement fund rate that will only be applicable to Apple Valley citizens, and the funds will be wholly owned and managed by the Town of Apple Valley. All material capital improvements to the distribution system shall be approved by the Gas Department of Apple Valley.

Material Improvements will be defined as any improvement or replacement of materials that will become permanent fixtures to Distribution System of Apple Valley.

Example Cost Estimates

The following cost estimates are example and should not be used to formulate a budget or to apply for financing.

Town Proper

Apple Valley Way Road North: 1708 feet

North Apple Blossom Lane: 2782 feet

North Rome Way: 5248 feet

North Rome Avenue: 1893 feet

Juniper Circle: 541 feet

North Mount Zion Drive: 2650 feet

North Zion Circle: 659 feet

North Golden Delicious Drive: 1299 feet

North Cartland Drive: 2614 feet

West 2000 North: 807 feet

South Cartland Drive: 3850 feet

Smithsonian Way: 3574 feet

North Purple Sage Road: 2236 feet

West Foot Hill Drive: 4343 feet

West Little Pinion Way: 784 feet

South Cartland Drive: 355 feet

Total: 35,343 feet

Price	Quantity	Description	Total
\$ 1.53	35,343	2" Poly Main	\$ 54,074.79
\$ 0.43	15251	3/4" Poly From Main	\$ 6,557.93
\$ 1.95	200	3/4" poly coupling	\$ 390.00
\$ 42.45	150	Risers	\$ 6,367.50
\$ 55.00	1	Pressure Testing	\$ 55.00
\$ 30.00	95	Excess Flow Valve	\$ 2,850.00
\$ 9.75	200	Tapping Tee	\$ 1,950.00
\$ 50.00	0	2nd Stage Regulator	\$ -
\$ 13.46	120	Union	\$ 1,615.20
\$ 13.50	0	3/4" valve	\$ -
\$ 20.00	6	Meter Bar	\$ 120.00
\$ 3.30	115	3/4" 90s	\$ 379.50
\$ 3.50	115	3/4" BIP nipple	\$ 402.50
\$ 1.13	115	3/4" BIP	\$ 129.95
\$ 75.00	65	Meter Regulator	\$ 4,875.00
\$ 4.50	35,343	Trenching	\$ 159,043.50
\$ 1.00	35,343	pipe bedding	\$ 35,343.00
\$ 0.38	35,343	Tracer Wire	\$ 13,430.34
\$ 0.35	30,000	Caution Tape	\$ 10,500.00
\$ 2.00	35,343	surface restoration	\$ 70,686.00
\$ 5.55	1000	Boring	\$ 5,550.00
\$ 17.62	6	Meter Valve	\$ 105.72
\$ 45.00	560	Install, truck & tools	\$ 25,200.00
\$ 30.00	12	Service head adapter	\$ 360.00
\$ 3.50	900	Seal tight	\$ 3,150.00
\$ 150.00	6	Meter Fee	\$ 900.00
\$ 12,000.00	1	Engineering	\$ 12,000.00
		total	<u>\$ 416,035.93</u>

Westside

East Apple Valley Drive: 2358 feet

North Apple Valley Drive: 2757 feet

South Apple Valley Drive: 3545 feet

Total: 8,660 Feet

Price	Quantity	Description	Total
\$ 1.53	8,660	2" Poly Main	\$ 13,249.80
\$ 0.43	4000	3/4" Poly From Main	\$ 1,720.00
\$ 1.95	25	3/4" poly coupling	\$ 48.75
\$ 42.45	25	Risers	\$ 1,061.25
\$ 55.00	1	Pressure Testing	\$ 55.00
\$ 30.00	15	Excess Flow Valve	\$ 450.00
\$ 9.75	25	Tapping Tee	\$ 243.75
\$ 50.00	2	2nd Stage Regulator	\$ 100.00
\$ 13.46	35	Union	\$ 471.10
\$ 13.50	20	3/4" valve	\$ 270.00
\$ 20.00	6	Meter Bar	\$ 120.00
\$ 3.30	20	3/4" 90s	\$ 66.00
\$ 3.50	20	3/4" BIP nipple	\$ 70.00
\$ 1.13	20	3/4" BIP	\$ 22.60
\$ 75.00	20	Meter Regulator	\$ 1,500.00
\$ 4.50	8,660	Trenching	\$ 38,970.00
\$ 1.00	8,660	pipe bedding	\$ 8,660.00
\$ 0.38	8,660	Tracer Wire	\$ 3,290.80
\$ 0.35	4,000	Caution Tape	\$ 1,400.00
\$ 2.00	8,660	surface restoration	\$ 17,320.00
\$ 5.55	400	Boring	\$ 2,220.00
\$ 17.62	6	Meter Valve	\$ 105.72
\$ 45.00	100	Install, truck & tools	\$ 4,500.00
\$ 30.00	20	Service head adapter	\$ 600.00
\$ 3.50	200	Seal tight	\$ 700.00
\$ 150.00	6	Meter Fee	\$ 900.00
\$ 2,000.00	1	Engineering	\$ 2,000.00
		total	<u>\$ 100,114.77</u>

Project Process Suggestions

Determining the will and acceptance of Apple Valley citizens is the entire responsibility of the its elected body. There are two paths that should be explored based on your decision process. The first is to have a project developed for the entire town all at once, which would likely require only a town council vote. The other path would be to phase the project to only extend to streets that are initially willing to hook on to the system. The phase project approach will require a significant amount of administrative involvement which could require approaching all landowners individually.

Entire System Approach

With developing the entire system under one single phase project there will likely be some cost savings measures, as well as, a more streamlined approach that may reduce administrative and political cost over the long run. However, in all fields there is a much higher upfront cost in the aforementioned areas.

Phased Project Approach

The Phased Project Approach will be more flexible in obtaining financing, but the total cost of the project may be higher once the system has developed. The administrative and political process will likely be extended and require continuous attention as different areas of the town install gas service.

Finance Suggestions

The HCCUD would like to suggest a few methods to secure financing for Apple Valley's natural gas expansion. Use of a revenue bond is likely the best option as opposed to a general obligation bond, or governmental loan. Intergovernmental loans between departments should be the first option as financing terms would likely be the most beneficial for Apple Valley. Additionally, interests' rates set by an intergovernmental loan can help provide revenue to other departments.

Initial Installation Fee

Apple Valley could explore the option of financing the installation of the system with a one-time, upfront fee. The size of the initial fee will likely be determined on how much of the principal the town is willing to pay. Obviously, the benefits of the fee itself will be to reduce interest payments over time. An initial upfront fee of around \$3,000 from each customer may be able to completely fund the system.

Monthly Debt Service Fee

Another option would be to charge each customer a monthly fee to their gas bill which would constitute your debt service for whatever financial instrument the town of Apple Valley wishes to use.

HCCUD Recommendation

Depending on the financial wherewithal of Apple Valley, as well as, the sentiments of its citizens, HCCUD recommends a combination of a large Initial Installation Fee and a large Monthly Debt Service Fee in order to reduce any loan or bond period. Reducing the overall principal by at least half or more and resolve the any loan period to be shorter than 10 years.

Time Line

March 2019

Administration of Apple Valley, with the assistance of HCCUD staff, should develop and present a plan to the Apple Valley Town Council.

April 2019

If the council approves the plan, Apple Valley should contract with an engineer to develop construction plans, and project costs.

May 2019

The Apple Valley Town Council will be presented with the total project costs and approve a method of financing. They should also vote to establish an Apple Valley Gas Department at this time and approve an IGA with Hildale City establishing the HCCUD's official role.

June 2019

With financing in place, Apple Valley obtain a project contractor to begin construction.

July through September 2019

Construction and completion of the Distribution System of Apple Valley. HCCUD will begin to onboard customers into our collections process and help educate Apple Valley on billing process and procedures.

October 2019

The Distribution System should be activated, and gas operations will commence.

CITY OF HILDALE
REVENUES WITH COMPARISON TO BUDGET
FOR THE 8 MONTHS ENDING FEBRUARY 28, 2019

2017 JUDGMENT RESOLUTION FUND

		<u>PERIOD ACTUAL</u>	<u>YTD ACTUAL</u>	<u>BUDGET</u>	<u>UNEXPENDED</u>	<u>PCNT</u>
	<u>REVENUES</u>					
63-38-101	TRANSFER FROM GENERAL FUND	3,155.93	22,609.26	88,900.00	66,290.74	25.4
63-38-102	TRANSFER FROM WATER FUND	1,051.97	7,536.44	20,100.00	12,563.56	37.5
63-38-103	TRANSFER FROM WASTEWATER	1,051.97	7,536.44	20,100.00	12,563.56	37.5
63-38-105	TRANSFER FROM GAS FUND	1,051.97	7,536.44	20,100.00	12,563.56	37.5
		<u>6,311.84</u>	<u>45,218.58</u>	<u>149,200.00</u>	<u>103,981.42</u>	<u>30.3</u>
	TOTAL REVENUES					
		<u>6,311.84</u>	<u>45,218.58</u>	<u>149,200.00</u>	<u>103,981.42</u>	<u>30.3</u>
	TOTAL FUND REVENUE					
		<u>6,311.84</u>	<u>45,218.58</u>	<u>149,200.00</u>	<u>103,981.42</u>	<u>30.3</u>

CITY OF HILDALE
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 8 MONTHS ENDING FEBRUARY 28, 2019

2017 JUDGMENT RESOLUTION FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>EXPENDITURES</u>					
63-41-310 PROFESSIONAL & TECHNICAL	6,311.84	37,061.01	129,200.00	92,138.99	28.7
63-41-315 LEGAL - GENERAL	.00	294.23	20,000.00	19,705.77	1.5
TOTAL EXPENDITURES	6,311.84	37,355.24	149,200.00	111,844.76	25.0
TOTAL FUND EXPENDITURES	6,311.84	37,355.24	149,200.00	111,844.76	25.0
NET REVENUE OVER EXPENDITURES	.00	7,863.34	.00	(7,863.34)	.0

CITY OF HILDALE
REVENUES WITH COMPARISON TO BUDGET
FOR THE 8 MONTHS ENDING FEBRUARY 28, 2019

LITIGATION DEFENSE FUND

		<u>PERIOD ACTUAL</u>	<u>YTD ACTUAL</u>	<u>BUDGET</u>	<u>UNEXPENDED</u>	<u>PCNT</u>
	<u>REVENUES</u>					
64-38-101	TRANSFER FROM GENERAL FUND	1,578.63	11,842.37	19,500.00	7,657.63	60.7
64-38-102	TRANSFER FROM WATER FUND	1,578.62	11,842.38	22,700.00	10,857.62	52.2
64-38-103	TRANSFER FROM WASTEWATER	1,578.62	10,285.71	22,700.00	12,414.29	45.3
64-38-105	TRANSFER FROM GAS FUND	1,578.62	11,842.38	22,700.00	10,857.62	52.2
		<u>6,314.49</u>	<u>45,812.84</u>	<u>87,600.00</u>	<u>41,787.16</u>	<u>52.3</u>
	TOTAL REVENUES					
		<u>6,314.49</u>	<u>45,812.84</u>	<u>87,600.00</u>	<u>41,787.16</u>	<u>52.3</u>
	TOTAL FUND REVENUE					
		<u>6,314.49</u>	<u>45,812.84</u>	<u>87,600.00</u>	<u>41,787.16</u>	<u>52.3</u>

CITY OF HILDALE
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 8 MONTHS ENDING FEBRUARY 28, 2019

LITIGATION DEFENSE FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>EXPENDITURES</u>					
64-41-230 TRAVEL	.00	.00	2,700.00	2,700.00	.0
64-41-250 EQUIPMENT SUPPLIES & MAINT	47.82	47.82	.00	(47.82)	.0
64-41-310 PROFESSIONAL & TECHNICAL	.00	60.00	.00	(60.00)	.0
64-41-316 LEGAL - LITIGATION DEFENSE	.00	3,435.00	84,900.00	81,465.00	4.1
64-41-911 JUDGMENTS AND LOSSES	6,266.67	50,133.36	.00	(50,133.36)	.0
TOTAL EXPENDITURES	6,314.49	53,676.18	87,600.00	33,923.82	61.3
TOTAL FUND EXPENDITURES	6,314.49	53,676.18	87,600.00	33,923.82	61.3
NET REVENUE OVER EXPENDITURES	.00	(7,863.34)	.00	7,863.34	.0

CITY OF HILDALE
REVENUES WITH COMPARISON TO BUDGET
FOR THE 8 MONTHS ENDING FEBRUARY 28, 2019

JOINT ADMINISTRATION FUND

		<u>PERIOD ACTUAL</u>	<u>YTD ACTUAL</u>	<u>BUDGET</u>	<u>UNEXPENDED</u>	<u>PCNT</u>
	<u>REVENUES</u>					
65-38-102	TRANSFER FROM WATER FUND	15,318.39	152,053.94	214,600.00	62,546.06	70.9
65-38-103	TRANSFER FROM WASTEWATER	14,224.22	141,192.93	278,900.00	137,707.07	50.6
65-38-105	TRANSFER FROM GAS FUND	5,470.85	54,304.97	107,400.00	53,095.03	50.6
	TOTAL REVENUES	<u>35,013.46</u>	<u>347,551.84</u>	<u>600,900.00</u>	<u>253,348.16</u>	<u>57.8</u>
	TOTAL FUND REVENUE	<u>35,013.46</u>	<u>347,551.84</u>	<u>600,900.00</u>	<u>253,348.16</u>	<u>57.8</u>

CITY OF HILDALE
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 8 MONTHS ENDING FEBRUARY 28, 2019

JOINT ADMINISTRATION FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>EXPENDITURES</u>					
65-41-110 SALARIES-PERMANENT EMPLOYEES	16,734.34	149,507.93	298,400.00	148,892.07	50.1
65-41-130 PAYROLL TAXES	2,026.13	17,858.58	25,200.00	7,341.42	70.9
65-41-140 BENEFITS-OTHER	2,939.97	19,438.31	41,400.00	21,961.69	47.0
65-41-150 STIPENDS - UTILITY BOARD	900.00	7,400.00	11,700.00	4,300.00	63.3
65-41-230 TRAVEL	488.52	488.52	.00	(488.52)	.0
65-41-235 FOOD & REFRESHMENT	109.28	1,179.62	4,700.00	3,520.38	25.1
65-41-240 OFFICE EXPENSE & SUPPLIES	.00	21.00	.00	(21.00)	.0
65-41-250 EQUIPMENT SUPPLIES & MAINT	1,457.39	14,002.45	26,500.00	12,497.55	52.8
65-41-257 FUEL	.00	6,561.15	30,900.00	24,338.85	21.2
65-41-271 MAINT & SUPPLY - OFFICE	16.00	1,796.07	2,000.00	203.93	89.8
65-41-280 UTILITIES	2,667.48	8,229.71	5,700.00	(2,529.71)	144.4
65-41-285 POWER	513.96	4,134.01	6,900.00	2,765.99	59.9
65-41-287 TELEPHONE	.00	35.65	.00	(35.65)	.0
65-41-310 PROFESSIONAL & TECHNICAL	71.34	368.47	5,300.00	4,931.53	7.0
65-41-330 EDUCATION	100.00	1,083.00	2,100.00	1,017.00	51.6
65-41-510 INSURANCE	6,939.05	48,573.35	98,800.00	50,226.65	49.2
65-41-741 EQUIPMENT - OFFICE	.00	.00	3,200.00	3,200.00	.0
65-41-850 DEBT SERVICE - VEHICLE & EQUIP	.00	15,747.04	11,000.00	(4,747.04)	143.2
65-41-900 AUTOMATIC PAYMENT INCENTIVE	.00	2,075.00	.00	(2,075.00)	.0
65-41-901 SURVEY INCENTIVE PROGRAM	50.00	1,875.00	.00	(1,875.00)	.0
65-41-960 TRANSFERS TO RESERVE FUNDS	.00	.00	27,000.00	27,000.00	.0
TOTAL EXPENDITURES	35,013.46	300,374.86	600,800.00	300,425.14	50.0
TOTAL FUND EXPENDITURES	35,013.46	300,374.86	600,800.00	300,425.14	50.0
NET REVENUE OVER EXPENDITURES	.00	47,176.98	100.00	(47,076.98)	47177.

CITY OF HILDALE
REVENUES WITH COMPARISON TO BUDGET
FOR THE 8 MONTHS ENDING FEBRUARY 28, 2019

WATER FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>OPERATING REVENUES</u>					
81-37-111 WATER SALES - METERED	18,494.70	226,440.99	288,800.00	62,359.01	78.4
81-37-121 WATER SALES - FLAT RATE	30,681.18	247,445.01	362,400.00	114,954.99	68.3
81-37-331 CONNECTION CHARGES	1,400.00	14,190.00	20,400.00	6,210.00	69.6
81-37-332 CONSTRUCTION	3,434.35	6,289.85	62,400.00	56,110.15	10.1
81-37-411 INTEREST	1,022.53	7,079.45	3,600.00	(3,479.45)	196.7
81-37-412 PENALTIES	10,828.64	72,054.32	60,000.00	(12,054.32)	120.1
81-37-451 IMPACT FEE - UT	.00	.00	34,700.00	34,700.00	.0
81-37-452 IMPACT FEE - AZ	.00	.00	34,700.00	34,700.00	.0
TOTAL OPERATING REVENUES	65,861.40	573,499.62	867,000.00	293,500.38	66.2
<u>NON-OPERATING REVENUE</u>					
81-38-102 TRANSFERS FROM R&R RESERVE	.00	.00	46,000.00	46,000.00	.0
81-38-440 SUNDRY NON-OPERATING REVENUE	.00	7,500.00	5,000.00	(2,500.00)	150.0
81-38-999 CONTINGENCY	.00	.00	200,000.00	200,000.00	.0
TOTAL NON-OPERATING REVENUE	.00	7,500.00	251,000.00	243,500.00	3.0
TOTAL FUND REVENUE	65,861.40	580,999.62	1,118,000.00	537,000.38	52.0

CITY OF HILDALE
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 8 MONTHS ENDING FEBRUARY 28, 2019

WATER FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>OPERATING EXPENDITURES</u>					
81-41-210 BOOKS, SUBSCR, & MEMBERSHIPS	.00	100.00	1,500.00	1,400.00	6.7
81-41-230 TRAVEL	.00	755.46	4,600.00	3,844.54	16.4
81-41-235 FOOD & REFRESHMENT	.00	41.06	600.00	558.94	6.8
81-41-250 EQUIPMENT SUPPLIES & MAINT	.00	1,808.10	1,000.00	(808.10)	180.8
81-41-257 FUEL	.00	.00	200.00	200.00	.0
81-41-260 TOOLS & EQUIPMENT-NON CAPITAL	.00	5,077.32	3,000.00	(2,077.32)	169.2
81-41-273 MAINT & SUPPLY - SYSTEM	2,135.32	15,270.36	38,000.00	22,729.64	40.2
81-41-285 POWER	4,727.34	33,777.11	66,200.00	32,422.89	51.0
81-41-311 ENGINEER	.00	1,719.25	2,000.00	280.75	86.0
81-41-314 LABORATORY & TESTING	407.00	7,079.00	4,500.00	(2,579.00)	157.3
81-41-315 LEGAL - GENERAL	.00	.00	1,300.00	1,300.00	.0
81-41-330 EDUCATION	870.00	1,951.00	3,500.00	1,549.00	55.7
81-41-340 SYSTEM CONSTRUCTION SERVICES	.00	103.82	2,000.00	1,896.18	5.2
81-41-341 CONST-CUSTOMER'S INSTALLATION	74.77	1,917.95	59,000.00	57,082.05	3.3
81-41-431 COMMODITY SUPPLY	.00	69,192.60	165,900.00	96,707.40	41.7
81-41-432 SPECIAL DEPT SUPPLIES	.00	11,231.68	18,500.00	7,268.32	60.7
81-41-580 RENT OR LEASE	.00	1,156.44	.00	(1,156.44)	.0
TOTAL OPERATING EXPENDITURES	8,214.43	151,181.15	371,800.00	220,618.85	40.7
<u>NON-OPERATING EXPENDITURES</u>					
81-42-560 BAD DEBT EXPENSE	.00	.00	2,000.00	2,000.00	.0
81-42-730 IMPROVEMENTS OTHER THAN BLDGS	.00	25,281.02	2,200.00	(23,081.02)	1149.1
81-42-742 EQUIPMENT - FIELD	.00	.00	2,500.00	2,500.00	.0
81-42-780 RESERVE PURCHASES	.00	.00	46,000.00	46,000.00	.0
81-42-815 PRINC. & INT W. RIGHTS LOAN	3,444.16	27,553.28	41,300.00	13,746.72	66.7
81-42-911 TRANSFERS TO JOINT ADMIN FUND	15,318.39	152,053.94	214,600.00	62,546.06	70.9
81-42-912 TRANSFERS TO LITIGATION	1,578.62	11,842.38	29,200.00	17,357.62	40.6
81-42-913 TRANSFERS TO GF ADMIN	10,416.67	83,333.36	125,000.00	41,666.64	66.7
81-42-914 TRANSFERS TO 2017 JMT RES FUND	1,051.97	7,536.44	13,600.00	6,063.56	55.4
81-42-960 TRANSFERS TO RESERVE FUNDS	.00	.00	69,800.00	69,800.00	.0
81-42-999 CONTINGENCY	.00	.00	200,000.00	200,000.00	.0
TOTAL NON-OPERATING EXPENDITURES	31,809.81	307,600.42	746,200.00	438,599.58	41.2
TOTAL FUND EXPENDITURES	40,024.24	458,781.57	1,118,000.00	659,218.43	41.0
NET REVENUE OVER EXPENDITURES	25,837.16	122,218.05	.00	(122,218.05)	.0

CITY OF HILDALE
REVENUES WITH COMPARISON TO BUDGET
FOR THE 8 MONTHS ENDING FEBRUARY 28, 2019

WASTEWATER FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>OPERATING REVENUES</u>					
82-37-311 SERVICE CHARGES	58,973.38	471,125.27	710,700.00	239,574.73	66.3
82-37-312 SERVICE CHARGES - CPMCWID	12,731.58	99,792.54	145,000.00	45,207.46	68.8
82-37-331 CONNECTION CHARGES	.00	.00	300.00	300.00	.0
82-37-332 SERVICING CUSTOMER INSTALL	.00	1,195.00	20,000.00	18,805.00	6.0
82-37-411 INTEREST	1,528.17	9,838.45	4,000.00	(5,838.45)	246.0
82-37-412 INTEREST EARNINGS (LOAN)	68.63	549.04	.00	(549.04)	.0
82-37-451 IMPACT FEE	.00	9,000.00	5,000.00	(4,000.00)	180.0
82-37-452 IMPACT FEE - CPMCWID	.00	14,550.00	5,000.00	(9,550.00)	291.0
TOTAL OPERATING REVENUES	73,301.76	606,050.30	890,000.00	283,949.70	68.1
<u>NON-OPERATING REVENUES</u>					
82-38-102 TRANSFERS FROM R&R RESERVE	.00	.00	55,000.00	55,000.00	.0
82-38-440 SUNDRY NON-OPERATING REVENUE	.00	.00	23,000.00	23,000.00	.0
82-38-999 CONTINGENCY	.00	.00	200,000.00	200,000.00	.0
TOTAL NON-OPERATING REVENUES	.00	.00	278,000.00	278,000.00	.0
TOTAL FUND REVENUE	73,301.76	606,050.30	1,168,000.00	561,949.70	51.9

CITY OF HILDALE
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 8 MONTHS ENDING FEBRUARY 28, 2019

WASTEWATER FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>OPERATING EXPENDITURES</u>					
82-41-210 BOOKS, SUBSCR, & MEMBERSHIPS	.00	.00	500.00	500.00	.0
82-41-230 TRAVEL	.00	.00	4,600.00	4,600.00	.0
82-41-235 FOOD & REFRESHMENT	.00	22.29	700.00	677.71	3.2
82-41-250 EQUIPMENT SUPPLIES & MAINT	.00	1,905.00	8,000.00	6,095.00	23.8
82-41-257 FUEL	.00	548.19	3,000.00	2,451.81	18.3
82-41-260 TOOLS & EQUIPMENT-NON CAPITAL	.00	3,186.01	5,400.00	2,213.99	59.0
82-41-273 MAINTENANCE & SUPPLY - SYSTEM	459.01	3,133.47	53,000.00	49,866.53	5.9
82-41-285 POWER	991.82	15,409.56	36,000.00	20,590.44	42.8
82-41-311 ENGINEER	.00	.00	500.00	500.00	.0
82-41-314 LABORATORY & TESTING	.00	.00	1,000.00	1,000.00	.0
82-41-315 LEGAL - GENERAL	.00	.00	1,000.00	1,000.00	.0
82-41-330 EDUCATION	.00	146.00	5,000.00	4,854.00	2.9
82-41-340 SYSTEM CONSTRUCTION SERVICES	.00	.00	5,000.00	5,000.00	.0
82-41-341 CONST-CUSTOMER'S INSTALLATION	.00	325.00	10,000.00	9,675.00	3.3
TOTAL OPERATING EXPENDITURES	1,450.83	24,675.52	133,700.00	109,024.48	18.5
<u>NON-OPERATING EXPENSES</u>					
82-42-560 BAD DEBT EXPENSE	.00	.00	1,500.00	1,500.00	.0
82-42-710 LAND	.00	.00	25,500.00	25,500.00	.0
82-42-720 BUILDINGS	.00	.00	5,000.00	5,000.00	.0
82-42-742 EQUIPMENT - FIELD	.00	.00	5,400.00	5,400.00	.0
82-42-780 RESERVE PURCHASES	.00	.00	55,000.00	55,000.00	.0
82-42-812 PRINCIPAL ON BONDS - RDA B	2,954.82	2,954.82	33,500.00	30,545.18	8.8
82-42-813 PRINCIPAL ON BONDS - RDA - C	558.81	558.81	6,400.00	5,841.19	8.7
82-42-816 PRINCIPAL ON BONDS - DWQ	.00	80,000.00	80,000.00	.00	100.0
82-42-822 INTEREST ON BONDS - RDA - B	5,609.18	45,180.22	69,300.00	24,119.78	65.2
82-42-823 INTEREST ON BONDS - RDA - C	1,061.19	8,547.52	13,100.00	4,552.48	65.3
82-42-911 TRANSFERS TO JOINT ADMIN FUND	14,224.22	141,192.93	278,900.00	137,707.07	50.6
82-42-912 TRANSFERS TO LITIGATION	1,578.62	10,285.71	22,700.00	12,414.29	45.3
82-42-913 TRANSFERS TO GF ADMIN	10,416.66	83,333.28	125,000.00	41,666.72	66.7
82-42-914 TRANSFERS TO 2017 JMT RES FUND	1,051.97	7,536.44	20,100.00	12,563.56	37.5
82-42-960 TRANSFERS TO RESERVE FUNDS	.00	.00	92,900.00	92,900.00	.0
82-42-999 CONTINGENCY	.00	.00	200,000.00	200,000.00	.0
TOTAL NON-OPERATING EXPENSES	37,455.47	379,589.73	1,034,300.00	654,710.27	36.7
TOTAL FUND EXPENDITURES	38,906.30	404,265.25	1,168,000.00	763,734.75	34.6
NET REVENUE OVER EXPENDITURES	34,395.46	201,785.05	.00	(201,785.05)	.0

CITY OF HILDALE
REVENUES WITH COMPARISON TO BUDGET
FOR THE 8 MONTHS ENDING FEBRUARY 28, 2019

GAS FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>OPERATING REVENUES</u>					
84-37-111 GAS SALES - METERED NAT GAS	50,426.83	170,237.33	148,000.00	(22,237.33)	115.0
84-37-112 GAS SALES - METERED PROPANE	88,358.81	332,130.13	488,700.00	156,569.87	68.0
84-37-113 GAS SALES - CYLINDER	650.83	8,427.74	10,600.00	2,172.26	79.5
84-37-114 GAS SALES - CYLINDER EXCHANGE	205.28	1,538.98	3,700.00	2,161.02	41.6
84-37-121 NATURAL GAS SALES - FLAT RATE	2,350.28	18,512.97	24,000.00	5,487.03	77.1
84-37-122 PROPANE GAS - FLAT RATE	3,271.13	25,386.28	44,000.00	18,613.72	57.7
84-37-160 CONSTRUCTION REVENUE	257.46	10,825.46	125,000.00	114,174.54	8.7
84-37-331 CONNECTION CHARGES	330.00	3,780.00	3,000.00	(780.00)	126.0
84-37-351 SUNDRY OPERATING REVENUE	3,444.16	27,553.28	47,000.00	19,446.72	58.6
84-37-411 INTEREST	1,133.75	8,146.13	3,500.00	(4,646.13)	232.8
84-37-412 PENALTIES	4,365.26	21,673.56	21,000.00	(673.56)	103.2
TOTAL OPERATING REVENUES	154,793.79	628,211.86	918,500.00	290,288.14	68.4
<u>NON-OPERATING REVENUES</u>					
84-38-102 TRANSFERS FROM R&R RESERVE	.00	.00	172,300.00	172,300.00	.0
84-38-901 APPROP - UTILITY FUND BALANCE	.00	.00	22,000.00	22,000.00	.0
84-38-999 CONTINGENCY	.00	.00	200,000.00	200,000.00	.0
TOTAL NON-OPERATING REVENUES	.00	.00	394,300.00	394,300.00	.0
TOTAL FUND REVENUE	154,793.79	628,211.86	1,312,800.00	684,588.14	47.9

CITY OF HILDALE
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 8 MONTHS ENDING FEBRUARY 28, 2019

GAS FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
<u>OPERATING EXPENDITURES</u>					
84-41-140 BENEFITS-OTHER	.00	65.00	3,000.00	2,935.00	2.2
84-41-210 BOOKS, SUBSCR, & MEMBERSHIPS	.00	175.00	2,000.00	1,825.00	8.8
84-41-230 TRAVEL	.00	.00	4,000.00	4,000.00	.0
84-41-235 FOOD & REFRESHMENT	.00	30.85	600.00	569.15	5.1
84-41-250 EQUIPMENT SUPPLIES & MAINT	.00	3,152.19	2,000.00	(1,152.19)	157.6
84-41-257 FUEL	.00	728.07	1,000.00	271.93	72.8
84-41-260 TOOLS & EQUIPMENT-NON CAPITAL	.00	2,526.62	2,000.00	(526.62)	126.3
84-41-273 MAINT & SUPPLY SYSTEM	497.26	6,411.12	11,700.00	5,288.88	54.8
84-41-285 POWER	151.91	844.81	1,000.00	155.19	84.5
84-41-330 EDUCATION	1,995.00	6,962.71	7,200.00	237.29	96.7
84-41-341 CONST-CUSTOMER'S INSTALLATION	.00	4,586.52	100,000.00	95,413.48	4.6
84-41-431 NATURAL GAS COMMODITY SUPPLY	24,980.94	51,253.29	49,700.00	(1,553.29)	103.1
84-41-432 PROPANE GAS COMMODITY SUPPLY	25,492.92	198,435.49	318,100.00	119,664.51	62.4
84-41-434 NAT GAS COMMODITY TRANSPORT	8,336.95	18,863.26	18,100.00	(763.26)	104.2
84-41-580 RENT OR LEASE	100.00	3,712.66	4,200.00	487.34	88.4
84-41-610 MISC. SUPPLIES	.00	.00	5,000.00	5,000.00	.0
TOTAL OPERATING EXPENDITURES	61,554.98	297,747.59	529,600.00	231,852.41	56.2
<u>NON-OPERATING EXPENDITURES</u>					
84-42-560 BAD DEBT EXPENSE	.00	.00	600.00	600.00	.0
84-42-750 SP PROJECTS CAPITAL	.00	.00	37,000.00	37,000.00	.0
84-42-780 RESERVE PURCHASES	.00	18,750.00	172,300.00	153,550.00	10.9
84-42-911 TRANSFERS TO JOINT ADMIN FUND	5,470.85	54,304.97	107,300.00	52,995.03	50.6
84-42-912 TRANSFERS TO LITIGATION	1,578.62	11,842.38	29,200.00	17,357.62	40.6
84-42-913 TRANSFERS TO GF ADMIN	10,416.67	83,333.36	125,000.00	41,666.64	66.7
84-42-914 TRANSFERS TO 2017 JMT RES FUND	1,051.97	7,536.44	13,600.00	6,063.56	55.4
84-42-960 TRANSFERS TO RESERVE FUNDS	.00	.00	98,200.00	98,200.00	.0
84-42-999 CONTINGENCY	.00	.00	200,000.00	200,000.00	.0
TOTAL NON-OPERATING EXPENDITURES	18,518.11	175,767.15	783,200.00	607,432.85	22.4
TOTAL FUND EXPENDITURES	80,073.09	473,514.74	1,312,800.00	839,285.26	36.1
NET REVENUE OVER EXPENDITURES	74,720.70	154,697.12	.00	(154,697.12)	.0

Invoice	Description	Invoice Date	Due Date	Total Cost	Period	GL Activity	GL Account
CHEMTECH-FORD LABORATORIES, INC. (1481)							
19A1332	Water Tests	02/07/2019	03/09/2019	32.00	02/19	0	81-41-314
19A1331	Raduim tests	02/21/2019	03/23/2019	375.00	02/19	0	81-41-314
Total CHEMTECH-FORD LABORATORIES, INC. (1481):				407.00			
Customer Deposit (5518)							
3.16501.2 (2)	3.16501.2 Credit for Gas in Tank	01/29/2019	02/04/2019	320.35	02/19	0	84-37-112
3.14101.5	3.14101.5 CUSTOMER DEPOSIT REFUND	02/05/2019	02/28/2019	68.92	02/19	0	81-21350
3.16602.1	3.16602.1 CUSTOMER DEPOSIT REFUND	02/05/2019	02/28/2019	52.98	02/19	0	81-21350
3.84260.1	3.84260.1 CUSTOMER DEPOSIT REFUND	02/05/2019	03/05/2019	173.34	02/19	0	81-21350
6.04501.5	6.04501.5 CUSTOMER DEPOSIT REFUND	02/05/2019	03/05/2019	96.63	02/19	0	81-21350
6.18200.4	6.18200.4 CUSTOMER DEPOSIT REFUND	11/30/2018	02/10/2019	41.04	02/19	0	81-21350
3.16602.1	3.16602.1 CUSTOMER DEPOSIT REFUND	02/05/2019	02/28/2019	52.98-	02/19	0	81-21350
3.16602.1 (2)	3.16602.1 CUSTOMER DEPOSIT REFUND	02/06/2019	02/28/2019	52.98	02/19	0	81-21350
6.45990.1	6.45990.1 Customer Deposit Refund	02/06/2019	02/28/2019	611.29	02/19	0	81-21350
3.16602.1 (2)	3.16602.1 CUSTOMER DEPOSIT REFUND	02/06/2019	02/28/2019	52.98-	02/19	0	81-21350
3.16602.1 (3)	3.16602.1 CUSTOMER DEPOSIT REFUND	02/06/2019	02/28/2019	52.98	01/19	0	81-21350
3.13901.6	3.13901.6 CUSTOMER DEPOSIT REFUND	02/13/2019	03/13/2019	75.53	02/19	0	81-21350
3.27301.7	3.27301.7 CUTOMER DEPOSIT REFUND	02/20/2019	03/20/2019	34.35	02/19	0	81-21350
3.46110.5	3.46110.5 CUTOMER DEPOSIT REFUND	02/13/2019	03/13/2019	65.15	02/19	0	81-21350
Total Customer Deposit (5518):				1,539.58			
DJB GAS SERVICES, INC. (4750)							
01122635	Welder Tank Rental	01/31/2019	03/02/2019	25.03	02/19	0	82-41-273
Total DJB GAS SERVICES, INC. (4750):				25.03			
DOMINION ENERGY (5607)							
5948550000	Natural Gas Transportation	01/30/2019	02/20/2019	8,336.95	02/19	0	84-41-434
Total DOMINION ENERGY (5607):				8,336.95			
GARKANE ENERGY (5057)							
1709902 021	Power Pant Well Power	02/14/2019	03/06/2019	3,783.61	02/19	0	81-41-285
1717500 021	Lift Station Power	02/14/2019	03/06/2019	719.59	02/19	0	82-41-285
1734500 021	East Water Tank Power	02/21/2019	03/13/2019	64.55	02/19	0	81-41-285
1763000 021	Recirc Pump Station Power	02/14/2019	03/06/2019	185.61	02/19	0	82-41-285
1763900 021	Wastewater Headworks	02/14/2019	03/06/2019	86.62	02/19	0	82-41-285
1775500 021	Water Plant Power	02/21/2019	03/13/2019	769.10	02/19	0	81-41-285
1782300 021	Lab Shop Power	02/14/2019	03/06/2019	513.96	02/19	0	65-41-285
1782500 021	Well #22	02/21/2019	03/13/2019	40.34	02/19	0	81-41-285
1787300 021	Propane Yard Power	02/14/2019	03/06/2019	141.05	02/19	0	84-41-285
1793900 021	Million Gallon Tank Power	02/14/2019	03/06/2019	32.56	02/19	0	81-41-285
1945500 021	Academy Ave Well Power	02/21/2019	03/13/2019	37.18	02/19	0	81-41-285
Total GARKANE ENERGY (5057):				6,374.17			
GOLD LINE AUTO PARTS (5631)							
38552	Coolant for lift station generator	01/02/2019	02/28/2019	111.13	02/19	0	82-41-273
38553	RTV Silicone	01/02/2019	02/28/2019	28.77	02/19	0	65-41-250
38564	Fuses	01/03/2019	02/28/2019	3.03	02/19	0	65-41-250
38575	Coolant hose for lift station generator	01/03/2019	02/19/2019	80.93	02/19	0	82-41-273
38598	Parts Return - Coolant Hose	01/07/2019	02/28/2019	15.99-	02/19	0	82-41-273
38607	Oil for lift station generator	01/08/2019	02/28/2019	37.34	02/19	0	82-41-273
38624	Air Valve	01/10/2019	02/28/2019	4.45	02/19	0	84-41-273
38672	Air fittings for propane yard	01/15/2019	02/28/2019	43.68	02/19	0	84-41-273

Invoice	Description	Invoice Date	Due Date	Total Cost	Period	GL Activity	GL Account
38713	Strap Hook	01/22/2019	02/28/2019	34.27	02/19	0	81-41-273
Total GOLD LINE AUTO PARTS (5631):				327.61			
HILDALE CITY (2160)							
NAT 0119	ENERGY & USE TAX GAS	02/11/2019	02/26/2019	2,854.55	01/19	0	84-21376
Total HILDALE CITY (2160):				2,854.55			
HILDALE CITY UTILITIES (2170)							
3.18000.1 01	Lab Shop Utilities	02/07/2019	02/22/2019	2,385.93	01/19	0	65-41-280
3.84110.1 01	Water service to well yard	02/07/2019	02/22/2019	54.00	01/19	0	65-41-280
6.42870.1 01	Propane Yard Lease	02/07/2019	02/22/2019	100.00	01/19	0	84-41-580
Total HILDALE CITY UTILITIES (2170):				2,539.93			
HOME DEPOT (2220)							
5022120	Drywall repair at lab shop office	02/07/2019	03/01/2019	16.00	02/19	0	65-41-271
Total HOME DEPOT (2220):				16.00			
HYDRO SPECIALTIES CO. (5201)							
21502	Replacement meter for power plant well	02/13/2019	03/13/2019	2,055.05	02/19	0	81-41-273
Total HYDRO SPECIALTIES CO. (5201):				2,055.05			
Johnson, Harrison (5663)							
190213	Per Diem - Meetings with UTOPIA OREM ETC.	02/13/2019	02/28/2019	342.00	02/19	0	65-41-230
Total Johnson, Harrison (5663):				342.00			
NGL SUPPLY CO. LTD (5605)							
NGL264203	Propane Commodity	02/06/2019	03/06/2019	12,577.50	02/19	0	84-41-432
NGL261315	Propane Commodity	01/16/2019	01/26/2019	14,386.03	01/19	0	84-41-432
NGL262685	Propane Commodity	01/28/2019	02/07/2019	14,898.75	01/19	0	84-41-432
Total NGL SUPPLY CO. LTD (5605):				41,862.28			
PINNACLE GAS PRODUCTS (5471)							
103563	LP Gas Hose, Ball Valves, Chamfer Tools	01/11/2019	02/10/2019	562.32	01/19	0	84-41-260
103563	Parts for customers gas connection	01/11/2019	02/10/2019	632.24	01/19	0	84-41-341
104792	Meter Regulator	02/21/2019	03/23/2019	169.68	01/19	0	84-41-341
Total PINNACLE GAS PRODUCTS (5471):				1,364.24			
PREFERRED PARTS (4694)							
36753	Antifreeze for lift station generator	01/07/2019	02/28/2019	85.62	02/19	0	82-41-273
37113	Battery for lift station generator	01/17/2019	02/28/2019	111.81	02/19	0	82-41-273
38382	Air fittings for lab shop	02/20/2019	03/20/2019	29.58	01/19	0	65-41-271
Total PREFERRED PARTS (4694):				227.01			
RURAL WATER ASSOCIATION OF UT (3391)							
3086	RWAU Annual Dues	01/01/2019	03/02/2019	870.00	02/19	0	81-41-330
Total RURAL WATER ASSOCIATION OF UT (3391):				870.00			

Invoice	Description	Invoice Date	Due Date	Total Cost	Period	GL Activity	GL Account
SCHOLZEN PRODUCTS COMPANY, INC. (3450)							
6359346-00	2" Tapping Saddle	02/06/2019	03/08/2019	74.77	02/19	0	81-41-341
3021350-00	Chlorine Cylinder Rental	02/21/2019	03/23/2019	19.20	01/19	0	81-41-432
Total SCHOLZEN PRODUCTS COMPANY, INC. (3450):				93.97			
STANLEY ACCESS TECHNOLOGIES (5406)							
0905416818	T & H for Gearbox & bearing for front door	10/19/2018	11/18/2018	125.38	02/19	0	65-41-250
Total STANLEY ACCESS TECHNOLOGIES (5406):				125.38			
SUMMIT ENERGY, LLC (4605)							
01191HILD	Natural Gas Commodity-01/19	02/11/2019	03/13/2019	24,980.94	02/19	0	84-41-431
Total SUMMIT ENERGY, LLC (4605):				24,980.94			
TOWN OF COLORADO CITY (3930)							
8160	Auto Insurance Premium Portion	02/01/2019	02/16/2019	6,939.05	02/19	0	65-41-510
8163	Utility Field Staff Payroll	02/01/2019	02/16/2019	16,398.34	02/19	0	65-41-110
8163	Utility Field Staff Payroll Taxes	02/01/2019	02/16/2019	1,957.28	02/19	0	65-41-130
8163	Utility Field Staff Payroll Benefits	02/01/2019	02/16/2019	2,939.97	02/19	0	65-41-140
8164	DOJ Court Judgement Cost Sharing - Roger Carter	02/01/2019	02/16/2019	2,314.71	02/19	0	63-41-310
8165	DOJ Court Judgement Cost Sharing - Jim Keith	02/01/2019	02/16/2019	3,997.13	02/19	0	63-41-310
PROST0119	Total Propane Tax	01/31/2019	02/15/2019	5,801.67	01/19	0	84-21371
WAT0119	Total Water Tax	01/31/2019	02/15/2019	1,070.53	01/19	0	81-21371
Total TOWN OF COLORADO CITY (3930):				41,418.68			
UTAH STATE DIVISION OF FINANCE (4561)							
LOAN 00011	ANNUAL PRINCIPLE ON DWQ BOND	01/30/2019	03/01/2019	80,000.00	01/19	0	82-42-816
Total UTAH STATE DIVISION OF FINANCE (4561):				80,000.00			
UTAH STATE TAX COMMISSION (4221)							
STC 0119	Taxes Collected for Hildale	02/14/2019	03/16/2019	2,061.30	02/19	0	84-21375
Total UTAH STATE TAX COMMISSION (4221):				2,061.30			
WHEELER MACHINERY CO. (4441)							
PS00076829	Gear oil for skidder	02/11/2019	03/13/2019	38.02	01/19	0	65-41-250
Total WHEELER MACHINERY CO. (4441):				38.02			
ZION'S BANK (4470)							
190107 (1)U	Remote for Propane Truck	01/07/2018	02/26/2019	449.13	02/19	0	84-41-273
190108 (1)W	Security System	01/08/2019	02/26/2019	494.95	02/19	0	65-41-250
190124 (2)W	Snacks for Field Staff	01/24/2019	02/26/2019	109.28	02/19	0	65-41-235
190201 (1)HJ	Facebook Ads	02/01/2019	02/26/2019	25.00	02/19	0	65-41-310
190205 (2)HJ	Facebook Ads	02/05/2019	02/26/2019	25.00	02/19	0	65-41-310
190128 (1)ID	Domain for Utility Department	01/28/2019	02/26/2019	21.34	02/19	0	65-41-310
Total ZION'S BANK (4470):				1,124.70			
Grand Totals:				218,984.39			

Report GL Period Summary

Vendor number hash:	0
Vendor number hash - split:	0
Total number of invoices:	0
Total number of transactions:	0



MLSG MOUNTAINLAND SUPPLY
525 N. 3050 E. #1
St George, UT 84790
435-627-9510
Fax 435-627-9501



Quotation

EXPIRATION DATE	QUOTE NUMBER
03/15/2019	S102981255
REMIT TO: MOUNTAINLAND SUPPLY COMPANY PO Box 127 OREM, UT 84059-0127	PAGE NO.
	1 of 2

QUOTE TO:

SHIP TO:

CITY OF HILDALE
320 EAST NEWEL AVENUE
P O BOX 840490
HILDALE, UT 84784

MAINTENANCE
HILDALE, UT 84784

CUSTOMER NUMBER	CUSTOMER PO NUMBER	JOB NAME / RELEASE NUMBER	SALESPERSON		
9545			LYF ERICKSON		
WRITER		SHIP VIA	TERMS	SHIP DATE	FREIGHT ALLOWED
EVAN CHRISTENSEN				03/08/2019	No
ORDER QTY	DESCRIPTION			UNIT PRICE	EXT PRICE
100ea	R275TCDR-20LT GROEBNER METER 20 LT, 1/2'&2' TST DIRECT READ, TEMP COMP, 5# CASE SPECIAL ORDER RETURN POLICY APPLIES			109.988/ea	10998.80
100ea	R275 TARIFF SURCHARGE SPECIAL ORDER RETURN POLICY APPLIES			4.878/ea	487.80
	Subtotal -----				11486.60
	.				
	.				
	**** IN STOCK****				
	.				
	.				
50ea	SS-20LT-3/4-I SWIVEL NPT,BMI,INSULATED,STRAIGHT SPECIAL ORDER RETURN POLICY APPLIES			4.000/ea	200.00
50ea	SS-20LT-3/4 SWIVEL NPT,BMI,NON-INSULATED,STRAIGHT SPECIAL ORDER RETURN POLICY APPLIES			1.805/ea	90.25
100ea	N-20LT 20LT METER NUT,BMI SPECIAL ORDER RETURN POLICY APPLIES			0.927/ea	92.70
100ea	W-20LT WASHER,20LT SPECIAL ORDER RETURN POLICY APPLIES			0.171/ea	17.10
	Subtotal -----				400.05
** Continued on Next Page *				Bid Total	



MLSG MOUNTAINLAND SUPPLY
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Quotation

EXPIRATION DATE	QUOTE NUMBER
03/15/2019	S102981255
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CUSTOMER NUMBER	CUSTOMER PO NUMBER	JOB NAME / RELEASE NUMBER	SALESPERSON		
9545			LYF ERICKSON		
WRITER		SHIP VIA	TERMS	SHIP DATE	FREIGHT ALLOWED
EVAN CHRISTENSEN				03/08/2019	No
ORDER QTY	DESCRIPTION			UNIT PRICE	EXT PRICE
100ea	. . ****LEAD TIME: 2 WEEKS**** . . 143-80-2HP REGULATOR,3/4" FPT,6# BLK SPRG,1/4"ORF,IRV,#105 SPECIAL ORDER RETURN POLICY APPLIES . . ****LEAD TIME: 4-6 WEEKS****			106.171/ea	10617.10
Bid Total does not include tax or freight. All prices herein supercede all prior quotes and are subject to change without prior notice. No guarantee is made as to the accuracy of the quantities listed.				Bid Total	22503.75

Due to the impact of tariffs on pricing of imported goods, this
pricing will be valid for 7 days.

Vincen Barlow

From: Harrison Johnson
Sent: Monday, March 25, 2019 3:17 PM
To: Vincen Barlow; Recorder
Subject: FW: Large purchase

From: Weston Barlow
Sent: Friday, March 22, 2019 3:36 PM
To: Harrison Johnson <Harrisonj@hildalecity.com>
Cc: Recorder <recorder@hildalecity.com>
Subject: Large purchase

Harrison,

I'd like to purchase 4 rolls of 2" fiber conduit. The best price we have is \$3300 per roll making the total cost at \$13,200. I plan on running out to the sewer plant on Uzona Ave. This would get our SCADA communication back that has been down for some time, since our radio burned out. I think fiber would be a much more reliable connection for SCADA and cameras. Although this doesn't complete the project it is a step. I plan on the sewer department funding the cost.

Weston



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

March 15, 2019

Harrison Johnson
Hildale – Colorado City
P.O. Box 840490
Hildale, Utah 84784

Dear Mr. Johnson:

Subject: Notice of Violation for Radium-228, Public Notice Requirement, Water System
#UTAH27006

This letter is an official notification that the Division of Drinking Water (the Division) has determined that Hildale – Colorado City Water System's Power Plant Well (identified as WS012 in our inventory database) has a running annual average of radium-228 at 9.4 pCi/L, over the Maximum Contaminant Level (MCL) of 5 pCi/L. This is a violation of the radium-228 standard found in our Rules, R309-200-5(4).

In conversations with your staff we understand that around 60% of your water supply comes from the Power Plant Well (WS012), and about 15% of the water systems capacity is supplied by the springs at the Sampling Station- 01,02 (SS048). We understand that your efforts to comply with the MCL for radium-228 may include further developing the spring sources.

With the Power Plant Well containing radium-228 levels above the MCL, you must immediately:

1. Notify your water users per the attached public notice protocol within 30 days of receiving this letter, and repeat the notice every three months for as long as the violation exists. A copy of the public notice must be submitted to the Division by April 15, 2019.
2. Enact one of the following mitigation measures:
 - a. Identify operational strategies that can minimize radium-228 exposure.
 - b. Identify possible alternative sources for drinking water.
 - c. Immediately implement an operational plan to minimize radium-228 exposure of the drinking water.

In addition you will be required to immediately take actions to pursue a permanent solution to

Harrison Johnson
Page 2
March 15, 2019

reduce the radium-228 levels in the source to meet the MCL. You are required to submit a radium-228 MCL compliance plan to the Division for review by June 15, 2019. This compliance plan must contain specific information such as proposal, milestones, and schedule to meet the radium-228 MCL of 5 pCi/L by January 1, 2020.

Please be aware that any permanent treatment option must comply with the Division's plan review process including submittal of design, engineering plans and specification, and obtaining plan approval (prior to construction) and an operating permit (prior to placing into service). Please contact Paul Wright, District Engineer in St. George office for the Southwest District, at (435) 986-2590 or pwright@utah.gov, or Nathan Lunstad, Permitting Section Manager in this office, at (385) 239-5974 or nlunstad@utah.gov if you have any question regarding the plan review requirements.

Please notify the Division in writing, by June 15, 2019, what your intentions are regarding this source. If an acceptable course of action is not agreed upon June 15, 2019, the Power Plant Well (WS012) will be classified as an unapproved source of drinking water, and Hildale – Colorado City will be assessed 150 points for using an unapproved source. The result of the 150 IPS points is that the Hildale – Colorado City water system will be classified as a not approved system.

If you have questions or need further assistance, please call Rachael Cassady, at (801) 536-4467.

Sincerely,



Marie E. Owens, P.E., Director
Division of Drinking Water

efn

Enclosures

cc: Robert Beers, Southwest Utah Public Health Department, rbeers@swuhealth.org
Paul Wright, DEQ Southwest District Engineer, pwright@utah.gov
Nathan Lunstad, Division of Drinking Water, nlunstad@utah.gov
Rachael Cassady, Division of Drinking Water, rcassady@utah.gov
Emily Frary, Division of Drinking Water, emilyfrary@utah.gov

Instructions for Chemical or Radiological MCLs Notice-Tier 2

Template on Reverse

Since exceeding chemical or radiological maximum contaminant levels (MCLs) is a Tier 2 violation, you must provide public notice to persons served as soon as practical but within 30 days after you learn of the violation (R309-220-6(2)). You must issue a repeat notice every three months for as long as the violation persists. The Division of Drinking Water may have more stringent requirements for MCL violations; e.g., it may require you to provide water from an alternate source. Check with your agency to make sure you meet all requirements. **Use the *Fluoride MCL – Tier 2 template for fluoride MCL violations*.**

Community systems must use one of the following methods (R309-220-6(3)):

- X Hand or direct delivery
- X Mail, as a separate notice or included with the bill

Non-community systems must use one of the following methods (R309-220-6(3)):

- X Posting in conspicuous locations
- X Hand delivery
- X Mail

In addition, both community and non-community systems must use *another* method reasonably calculated to reach others if they would not be reached by the first method (R309-220-6(3)). Such methods could include newspapers, e-mail, or delivery to community organizations. If you mail, post, or hand deliver, print your notice on letterhead, if available.

The notice on the reverse is appropriate for hand delivery or mail. However, you may wish to modify it before using it for posting. If you do, you must still include all the required elements and you may not modify the mandatory health effects language (R309-220-8(4)).

Corrective Action

In your notice, describe corrective actions you are taking. Do not use overly technical terminology when describing treatment methods. Listed below are some steps commonly taken by water systems with chemical or radiological violations. Use one or more of the following actions, if appropriate, or develop your own:

- X We are working with [local/state agency] to evaluate the water supply and researching options to correct the problem. These options may include treating the water to remove [contaminant] or connecting to [system]'s water supply.
- X We have stopped using the contaminated well. We have increased pumping from other wells, and we are investigating drilling a new well.
- X We will increase the frequency at which we test the water for [contaminant].
- X We have since taken samples at this location and had them tested. They show that we meet the standards.

Repeat Notices

If this is an ongoing violation and/or you fluctuate above and below the MCL, you should give the history behind the violation, including the source of contamination, if known. List the date of the initial detection, as well as how levels have changed over time. If levels are changing as a result of treatment, you can indicate this.

After Issuing the Notice

Make sure to send the Division of Drinking Water (PO Box 144830, SLC, UT 84114-4830) a copy of each type of notice and a certification that you have met all public notification requirements within ten days after issuing the notice (R309-105-16(3)).

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

[System] Has Levels of [Contaminant] Above Drinking Water Standards

Our water system recently violated a drinking water standard. Although this is not an emergency, as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation.

We routinely monitor for the presence of drinking water contaminants. Testing results we received on [date] show that our system exceeds the standard, or maximum contaminant level (MCL), for [contaminant]. The standard for [contaminant] is [MCL]. The average level of [contaminant] over the last year was [level]. or [Contaminant] was found at [level].

What should I do?

- **You do not need to use an alternative (e.g., bottled) water supply.** However, if you have specific health concerns, consult your doctor.

What does this mean?

This is not an immediate risk. If it had been, you would have been notified immediately. However, [Insert relevant health effects language from Appendix B.]

What happened? What is being done?

[Describe corrective action.] We anticipate resolving the problem within [estimated time frame].

For more information, please contact [name of contact] at [phone number] or [mailing address].

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by [system].

Water System ID#: _____. Date distributed:



Dear Water Customer,

As many of you know, the Hildale-Colorado Water System has been monitoring an increase in Radium contamination in our deep wells for two years. As of March 2019, our water system now has a running annual average of Radium 228 of 9.4 pCi/L which exceeds the allowable Maximum Contaminant Level (MCL) of 5 pCi/L. Therefore, our system has been issued a notice of violation by the Utah Division of Drinking Water.

This is NOT a public health emergency and is not an immediate risk, your culinary water is still approved for drinking, cooking and sanitation. You do NOT need to use an alternative water supply. The effects of Radium contamination are only seen after continued exposure over a long period of time at levels that far exceed what has been tested in our water system. The U.S. Environmental Protection Agency estimates that long-term consumption of water containing five pCi/l radium will cause 44 added cancer deaths for every million people exposed. The risk doubles to 88 per million at 10 pCi/l, triples to 132 at 15 pCi/l. How does this level of risk compare to other risks in life? It is approximately the same as the risk of dying from lightning strikes, or tornadoes and hurricanes. The Maximum Contaminant Level has been set as precautionary measure to ensure water systems work towards correcting any issue long before there is any threat to the public's health.

Over the past year, while the water system was under increased monitoring, the city councils working through the City Councils have been working on a solution to improve the overall water quality. As a result, we are close to determining the proper long-term solution to this issue and will begin implementation as quickly as possible.

We are working closely with the Utah Department of Environmental Quality and the Division of Drinking Water to ensure we are taking the appropriate corrective measures to this issue. The Utility Department is looking at long-term corrective actions may include new filtration systems for current ground water sources and/or new water source development. As fellow citizens who live and drink the same water that we serve you, we take this issue very seriously.

Over the next couple of months as we move into the planning process we will want to have feedback from our citizens. Our first public hearing to answer questions and provide information will be (insert time and place).

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.



Radium in Drinking Water

What Is Radium?

Radium (Ra) is a naturally occurring radioactive element that is present in varying amounts in rocks and soil within the earth's crust. Small amounts of radium also can be found in groundwater supplies. Radium can be present in several forms, called isotopes. The most common isotopes in Illinois groundwater are Ra-226 and Ra-228. The main type of radiation emitted by radium is the alpha particle.

Is Radium In My Water?

Surface water is usually low in radium but groundwater can contain high levels of radium depending on local geology. Deep bedrock aquifers used for drinking water sometimes contain levels of Ra-226 and Ra-228 that exceed health-based regulatory standards. In Illinois, high radium levels occur primarily in the northern third of the state due to the presence of radium in the granite bedrock that surrounds aquifers from which water supplies are drawn.

Most of the private wells in Illinois draw their well water from aquifers that are much shallower than those used by public water supplies. Most shallow aquifers do not contain higher levels of radium. However, radium has been found in some private and public wells. Radium cannot be seen, tasted, or smelled in your drinking water. Unless your private water supply has been tested for radium, you should not assume your water is radium-free. All public water supplies are tested regularly for radium.

Is Radium In Water Harmful To My Health?

Radium in water may pose a hazard to human health when the water is used for drinking or cooking. Only a small portion of ingested radium is absorbed from the digestive tract and distributed throughout the body. The rest is passed unchanged from the body. Some absorbed radium is excreted in urine. Absorbed radium behaves similarly to calcium and is deposited in the tissues of the body, especially bone. Any radiation received externally through showering, washing, or other uses is not a hazard since alpha particles do not travel through your skin.

Internally deposited radium emits alpha particles that may then damage surrounding tissue. Studies of workers exposed to high levels of radium and other sources of alpha radiation for extended periods show that high levels of radium may cause depression of the immune system, anemia, cataracts, and fractured teeth. Exposure to high levels of radium also has shown an increased incidence of bone, liver and breast cancer.

Is There A Safe Level Of Radium In Drinking Water?

Based upon our current knowledge, it is assumed that any radiation exposure carries some degree of risk. However, the U.S. Environmental Protection Agency (USEPA) has established a maximum contaminant level (MCL) for radium in public water supplies of 5 picoCuries per liter (pCi/L). The MCL for radium has been set well below levels for which health effects have been observed and is therefore assumed to be protective of public health. Public water supplies whose radium levels exceed 5 pCi/L are required to notify the public that the water exceeded the MCL. They also must evaluate ways to reduce the radium levels in the water. Individuals may test their private wells and use the MCL of 5 pCi/L as a guideline.

Is There A Test To Determine If I Have Been Exposed To Radium?

If you think that you have been exposed to radium in your drinking water, you should consult your doctor. Urine tests can determine if you have been exposed to radium. Another test measures the amount of radon (a breakdown product of radium) in exhaled air. However, these tests cannot tell how much radium you have been exposed to or if adverse health effects will occur.

Can Radium Be Removed From Water?

A number of treatment methods are available to remove radium from water. Ion exchange, lime softening, and reverse osmosis are the most common and can remove up to 90 percent of radium present. Ion exchange (i.e. water softeners) can often remove 90 percent of radium present along with water hardness. For some people, an undesired effect of ion exchange is the addition of sodium to the treated water. Those on low sodium (salt) diets should consider this before installing a softener. Reverse osmosis does not add sodium to the water.

Where Can I Get More Information?

Illinois Department of Public Health
Division of Environmental Health
525 West Jefferson Street
Springfield, Illinois 62761
217-782-5830

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Frequently asked questions about radium in drinking water

Some Wisconsin community water supplies have naturally-occurring radium in quantities that exceed the safe drinking water standard.

This page will answer common questions about how and where radium occurs in water supplies; what are its health effects; options communities and private well owners have to remedy this problem; and radium regulations.

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Where is radium found?

The highest radium levels in water are found in water drawn from two rock formations; the deep sandstone of the state's eastern quarter and the crystalline granite rock of north central Wisconsin.

Immediate health risks from drinking water containing low radioactivity levels are small, but consuming this water for a lifetime increases the health risks. Another natural radioactive element, uranium, has been detected in a few Wisconsin wells. Currently there is no drinking water standard for uranium.

Currently, approximately 50 of Wisconsin's 1,300 community water systems exceed the drinking water standard for radium. The Wisconsin Department of Natural Resources (DNR) is providing guidance to help water system officials take corrective action to safeguard the environment as well as human health. Efforts are underway to identify the best methods of reducing radium in drinking water and disposing the wastes from treatment processes.

Where is radium a problem?

All rock contains some radium, usually in small amounts. Groundwater, which moves slowly through the pores or cracks in underground layers of rock, dissolves minerals as it travels. Where the rock contains significant amounts of radium, and the groundwater moves at a slow enough rate, the water can pick up higher amounts of radium.

In Wisconsin, most of the community water supplies which exceed the radium standard draw water from a deep sandstone aquifer and are located in a narrow band which stretches from

Green Bay to the Illinois state line. In addition, a few high radium levels have been found in groundwater from sandstone formations in west central Wisconsin and in granite formations in north central Wisconsin. In all cases, the radium was there long before the first well was drilled.

How is radium in drinking water monitored?

By law, all community water systems must be monitored for radioactivity. The testing process for water samples begins with a screening for "gross alpha particle activity" which measures the total amount of one type of radioactivity given off by the water. If gross alpha activity is found, further testing for radium is conducted. Radioactivity levels are measured in "picocuries" per liter of water (abbreviated "pCi/l").

What is the drinking water standard for radium?

The state and federal drinking water standard has been established at five pCi/l for the combined total of two forms of radium, Radium-226 and Radium-228. The standard applies to levels in the water distribution system, as determined quarterly and averaged over a one-year period.

What are the health risks from radium?

Radium is known to cause bone cancer when consumed in high doses.

The National Academy of Sciences has concluded that a long-term exposure to elevated levels of radium in drinking water does indeed pose a "higher risk of bone cancer for the people exposed." The U.S. Environmental Protection Agency estimates that long-term consumption of water containing five pCi/l radium will cause 44 added cancer deaths for every million people exposed. The risk doubles to 88 per million at 10 pCi/l, triples to 132 at 15 pCi/l, etc.

How does this level of risk compare to other risks in life? It is approximately the same as the risk of dying from lightning strikes, or tornadoes and hurricanes. Fortunately, the risk from radium is manageable because radium can be removed from drinking water.

In the 1920s, radium paint was used to make watch dials luminescent. The workers who painted the watch dials would touch the paintbrush tips to their tongues, and inadvertently swallow high doses of radium. In the decades since, this group of occupationally exposed workers (approximately 4,000) has developed an extremely high rate of death from bone cancer. This effect of radium has also been documented in laboratory animals.

The doses ingested by the radium watch-dial painters and laboratory animals were many times greater than the radium levels in any of Wisconsin's water systems, and as expected, the associated risk from radium levels commonly found in drinking water is proportionately far lower.

How can community systems correct a radium problem?

Each community which exceeds the drinking water standard for radium must determine the best remedy for its situation. Quality, dependability, difficulty in maintaining and operating equipment, and cost of alternatives are important considerations. Corrective methods include obtaining a new water source, blending water from more than one source, or removing radium by treatment. The first two are usually preferable to treatment since they are less expensive and create no additional waste disposal problems.

Where possible, a source of treated surface water or groundwater with lower radium content, drawn from a different geologic formation, can replace or be mixed with an existing source. Systems unable to use these options will have to remove radium by treatment.

The most inexpensive treatment method is likely to be synthetic zeolite ion exchange such as used in home water softeners. This water softening process, is expected to remove about 90% of the radium. It produces a pleasing water supply that reduces scaling in pipes. However, it increases an average daily sodium intake by 200 to 400 mg compared to an estimated average daily intake of 2,000 to 7,000 mg. Increased sodium levels from the ion exchange process are a concern to some people, particularly those on low salt diets, but in most cases the increase will amount to no more than approximately 10% of the average dietary intake of sodium. Numerous treatment plants may be necessary for community systems with multiple wells. Other possible treatment methods include lime-soda ash softening and reverse osmosis. Comparatively high start-up and operating costs may make these options impractical for most affected Wisconsin systems.

Any of the options mentioned above will cost money. Although there may be federal funds available to cover part of the costs, some or all of the costs must be borne by local consumers through higher water bills.

Does treating for radium create other problems?

All treatment processes produce wastewater and solid waste (sludge) containing radium in varied concentrations. These treatment by-products must be disposed properly.

Radium waste disposal issues are relatively new to Wisconsin, and the problems they raise are complex and difficult. State officials, however, are working to establish environmentally safe waste disposal criteria.

What about private wells?

Generally, private wells are not drilled into the deeper geologic formations containing higher concentrations of radium. Nevertheless, radium has been found in a small number of private and non-community public wells.

A geological and geographical cross-section of Wisconsin's private wells has now been tested for radium. Concerned owners whose wells have not been tested can contact their regional DNR office, which may be able to estimate groundwater radioactivity levels from previous well samplings. DNR staff will need well construction and location details to make this determination. Water samples can be analyzed for signs of radioactivity by private laboratories or the State Laboratory of Hygiene.

Private well owners wishing to reduce radium levels by reconstructing or replacing wells (the preferred methods) should seek DNR guidance on construction details. A good alternate groundwater supply is the most important factor with these options. In some cases, forming a community system or connecting to an existing system may be feasible.

What funds are available for replacing a private well that has radium?

Since radium occurs naturally, replacement or treatment costs are not covered under the new well compensation program.

How is radium treated in private wells?

Of the treatment methods described earlier, ion exchange using zeolite softening is effective for home use. Radium, however, could get past a softener which is improperly maintained. Owners need to check softeners regularly to assure that they are operating properly. These home units also build up wastes that need to be properly disposed, and will increase sodium levels in water.

Small "reverse osmosis" units and distillation units may be effective in radium removal in home systems, but the units have limited capacity and severely restrict water flow. The devices can only be used to treat water from a single faucet rather than the entire water supply. Additionally, other water quality problems such as high iron or manganese may interfere with these treatment methods.

The Department of Industry, Labor and Human Relations must approve in-home treatment units for radium removal. The DNR must approve the treatment process and each installation. Before purchasing or installing a treatment system, contact your local DNR region office.

Why spend money reducing levels of something that occurs naturally - like radium?

There is little question that radium does cause biological damage, and most experts agree that if not reduced, the levels of radium we have found could shorten the lives of some Wisconsin residents.

It has been estimated that as much as 80% of all human cancer is due to environmental sources (including diet and such activities as cigarette smoking). In many cases, the specific causes cannot be identified due to the complex patterns of exposure and our inability to measure them.

In the case of radium in drinking water, however, the exposure levels are known, our best science has identified a specific risk, and methods exist to deal with the problem.

The State of Wisconsin is committed to working with each affected community to permanently reduce radium levels delivered to consumers, in the shortest reasonable time.

Radium Health Information (Courtesy of the Wisconsin State Laboratory of Hygiene)

Radium behaves similarly to calcium when ingested. Because approximately 90 percent of radium in the body is deposited in the bones, the primary health risk of radium is bone cancer (Hahn 1984). It has been estimated by the Environmental Protection Agency (EPA) that 44 excess cancer deaths per million people will occur from the continuous ingestion of water at 5 pCi/L over a lifetime (Hahn 1984). Although it is not clear from the reference, most risk assessments are conservative so this risk is probably an upper limit risk or at least it over estimates the mean risk (Bro et al. 1987). Nevertheless, most authorities believe that any dose poses some risk (Hahn 1984). Children are more susceptible to the effects of radiation than are adults because their bodies are growing and radiation has its most profound effects on cells that are actively dividing (Haschke et al. 1987).

Bro, K., Sonzogni, W., and Hanson, M. 1987. Relative Cancer Risks of Chemical Contaminants in the Great Lakes. *Environmental Management*. Vol. 11, No. 4, pp. 495-505.

Hahn, N., 1984. Radium in Wisconsin Groundwater and Removal Methods for Community Water Systems. Wisconsin Department of Natural Resources. pp. 1-125. 316, No. 7, pp. 409-410.

Haschke, F., Pietschnig, B., Karg, V., Vanura, H., and Schuster, E. 1987. Radioactivity in Austrian Milk After the Chernobyl Accident. *New England Journal of Medicine*. Vol. 316, No. 7, pp. 409-410.

Links to Additional Information

<http://dnr.wi.gov/topic/drinkingwater/documents/forms/radium.pdf>

<http://www.epa.gov/radiation/radionuclides/radium.html>



Request for Proposal for Engineering Services to Prepare a Feasibility Study

Hildale City is requesting statement of interest and qualifications for providing engineering services for preparation for a feasibility study regarding radium treatment options for our municipal water system.

Hildale-Colorado City Water System Background

Hildale-Colorado City Water System (the System) is sourced from three sources of varying sizes and quality of effluent. The first source is the Alluvial Aquifer with a depth of 40 to 60 feet, which provides water high in iron and manganese. The second source is the Shinarump Aquifer with a depth from 280 feet to 420 feet and provides roughly 60% of the System's capacity and is contaminated with radium 228 and 226. The third and final source is the Navajo Sandstone Aquifer accessed through gravity fed horizontal wells in canyon walls to the north of the system, and there is no known contamination nor any treatment need. See attached Water Master Plan for more detailed information on sources of water.

The Power Plant Well, a Shinarump Aquifer well, had begun to test high for Radium in 2014 and was placed under increased monitoring. As of its most recent test with 11 pCi/L of combined radium levels. Over the next few years, the well was intermittently used for the System. In 2016 another Shinarump Aquifer well, the Academy Avenue well was constructed and as of 2018 was denied its operating license by the Arizona Department of Environmental Quality due to high Radium levels. In testing the Academy Ave well in relation to the Power Plant well we discovered the wells are hydrologically due to output rate changes when both are in operation. Additionally, the radium levels in the water have only increased with greater usage and flushing of the wells. The community to the south of the System has been experiencing radium contamination in their groundwater for a longer period of time. See the attached diagram of uranium deposits to the south of our system.

Scope of Work

The purpose of the feasibility study is to research and evaluate different methods of removing radium contamination from the Hildale-Colorado City Water System. The Scope of Services presented herein describes the objectives of the feasibility study that will need to met in order to inform the Cities Administration on solutions.

- I. **Efficacy of Available Treatment Options.** The study must review the know treatment options that will bring the levels of radium contamination below the Maximum Contaminant Level (MCL). Each treatment option shall have an analysis which evaluates how the System would be affected if the radium from the source were to increase (i.e. if the treatment option would be effective at any amount of radium or if additional treatment would be required)
- II. **Initial Capital Costs of Treatment Options.** The study should detail the initial projected capital costs of the installation of each treatment option.
- III. **Ongoing Operation and Maintenance (O&M) and Associated Costs.** The study should detail any projected ongoing O&M required to maintain the specific treatment



- apparatus and any associated costs. Any information on public or operator health impacts or concerns with any treatment waste should also be included.
- IV. **Assessment of Radionuclide Conditions that Affect the System.** The study should have information on the cause of the radium contamination, and its effects on the System. Additionally, the study should contain any known tertiary effects of radionuclide presence in the ground water i.e. higher radon levels that affect air quality.
 - V. **Regulatory Assessment.** The study should also explore the regulatory authorities and processes required by each option and assess the ability to satisfy any of the requirements.
 - VI. **Financial Assessment of Proposed Treatment Options.** The study should outline the financial wherewithal of the Cities, available financing and grants to determine which treatment options are the most feasible. Emphasis should be placed on balancing the long-term health of community's water that leverages the Cities' financial situation.
 - VII. **Graphic Analysis and Treatment Recommendation.** The study should include graphic analysis of all options that compare the treatment methods along the above criteria. Additionally, this section should have a professional assessment and recommendation of which treatment option would be the most advisable.

Proposal Requirements

Proposals shall include but are not limited to the following requirements. Provide eight (8) copies of the consultant's proposal. The proposal shall include the following:

- A. **Organization Overview.** The section should include the organization's history, and its current structure and size.
- B. **Approach and Scope of Work.** This section should include your organization's approach to the Scope of Work by identifying your process to complete each section.
 - a. This section should also include the organization's process for gathering information in the field and how they establish communication channels with the client.
- C. **Water Treatment Capabilities and Past Experience.** This section should detail institutional knowledge and capabilities of the organization's water treatment projects as well as a summary of relevant water treatment projects completed in the past.
- D. **Professional References.** This section should have the names and contact information of professional references and include a brief description of work completed for each one.
- E. **Proposed Schedule.** Include an estimated time to complete the feasibility study.
- F. **Fee Structure.** This section should include the proposed cost of full development of the feasibility study.
- G. **Bid Statement.** The proposal shall include a statement on whether or not your organization plans to bid as the primary contractor to install any of the treatment methods. If your organization plans to bid as the primary contractor, you must include a statement on how your organization will segregate objectives and ensure that the feasibility study's integrity is maintained.



Evaluation Criteria

- A. Professional Presentation:____/5
- B. Proposed Schedule:____/5
- C. Professional References:____/10
- D. Fee Structure:____10
- E. Defined and Competent Approach and Scope of Work:____/30
- F. Water Treatment Capabilities and Past Experience:____/40

Attachments

- A. Water Master Plan 2016
- B. Grand Canyon Trust Map
- C. Radium Test Samples

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