

- Q1. Refer to Northern Kentucky District's response to Commission Staff's Fourth Request for Information (Staff's Fourth Request), Item 2, which included Northern Kentucky District's firm contracts for chemicals. The contracts referenced the vendors had winning bids but did not provide the product pricing. Provide a detailed pricing schedule for each contract.
- A1. Northern Kentucky District utilizes a reverse auction process to procure all chemicals except sodium hypochlorite. Northern Kentucky District and Sanitation District No. 1 have bid sodium hypochlorite jointly since 2014 in an attempt to benefit from economies of scale since both organizations use the same chemical at the same strength. In 2018, there were two reverse auctions held on April 19th. The chemicals were split into two auctions due to the volume of chemicals being procured. Please see attached the Final Bid Submission Reports for April 19, 2018 at 11:00AM and April 19, 2018 at 2:00PM. Please also see attached the bid summary for sodium hypochlorite.



Final Bid Submission Report

Water Treatment Chemicals 2018, First Bid

Started: 4/19/2018 11:00 AM

Ended: 4/19/2018 12:04 PM

Water Treatment Chemicals 2018, First Bid

Caustic Soda - 50 Percent Solution, Bulk - 4,000 Gallon Truck - per Specifications, Delivered - Price per GALLON

Rank	Company	Value	Date/Time
1	Brenntag	\$2.264	4/19/2018 12:01:09 PM
2	Univar USA Inc	\$2.275	4/19/2018 11:58:59 AM

Copper Sulfate - 50 LB Bags - per Specifications, Delivered - Price per POUND

Rank	Company	Value	Date/Time
1	Chemrite	\$1.845	4/19/2018 11:34:49 AM
2	Thatcher Chemical of Florida, Inc.	\$1.849	4/19/2018 11:31:43 AM
3	Univar USA Inc	\$1.900	4/19/2018 11:20:44 AM
4	Water Solutions Unlimited	\$2.010	4/19/2018 11:11:14 AM

Hydrofluorosilicic Acid - Minimum 23 Percent Solution, Bulk - 4,000 Gallon Truck - per Specifications, Delivered - Price per GALLON

Rank	Company	Value	Date/Time
1	Pencoco, Inc.	\$1.395	4/19/2018 11:43:09 AM
2	Univar USA Inc	\$1.405	4/19/2018 11:39:12 AM
3	Mosaic Global Sales, LLC	\$1.770	4/19/2018 11:02:01 AM
4	DuBois Chemicals, formerly BHS Marketing	\$2.340	4/19/2018 11:27:37 AM
5	Brenntag	\$2.990	4/19/2018 11:34:30 AM

Liquid Ferric Sulfate - 4,000 Gallon Truck - per Specifications, Delivered - Price per DRY TON

Rank	Company	Value	Date/Time
1	Kemira Water Solutions	\$343.00	4/19/2018 11:23:55 AM
2	Chemtrade Chemicals US LLC	\$344.00	4/19/2018 11:23:51 AM
3	Thatcher Chemical of Florida, Inc.	\$394.00	4/19/2018 11:11:35 AM
4	Pencoco, Inc.	\$447.00	4/17/2018 10:46:01 AM

Potassium Permanganate - per Specifications, Delivered - Price per POUND

Rank	Company	Value	Date/Time
1	Carus Corporation	\$1.450	4/19/2018 11:52:12 AM
2	Chemrite	\$1.454	4/19/2018 11:51:54 AM
3	Water Solutions Unlimited	\$1.835	4/19/2018 11:09:56 AM
4	American International Chemical	\$1.850	4/19/2018 11:01:47 AM
5	Brenntag	\$3.495	4/19/2018 11:34:39 AM



Final Bid Submission Report

Water Treatment Chemicals 2018, Second Bid

Started: 4/19/2018 2:00 PM

Ended: 4/19/2018 3:18 PM

Water Treatment Chemicals 2018, Second Bid

Powdered Activated Carbon - Bulk - per Specifications, Delivered - Price per POUND

Rank	Company	Value	Date/Time
1	Donau Carbon, formerly Standard Purification	\$0.477	4/19/2018 3:15:51 PM
2	Jacobi Carbons, Inc	\$0.479	4/19/2018 2:58:11 PM
3	Cabot Purification	\$0.480	4/19/2018 2:57:34 PM
4	Thatcher Chemical of Florida, Inc.	\$0.524	4/19/2018 2:15:35 PM
5	Oxbow Activated Carbon	\$0.551	4/19/2018 2:04:57 PM
6	Chemrite	\$0.590	4/19/2018 2:33:15 PM
7	Brenntag	\$1.000	4/19/2018 2:02:24 PM

Powdered Activated Carbon - Bulk, 900 LB Bags - per Specifications, Delivered - Price per POUND

Rank	Company	Value	Date/Time
1	Jacobi Carbons, Inc	\$0.650	4/19/2018 2:14:07 PM
2	Chemrite	\$0.720	4/19/2018 2:35:54 PM
3	Cabot Purification	\$0.846	4/19/2018 2:14:45 PM
4	Thatcher Chemical of Florida, Inc.	\$0.910	4/19/2018 2:17:31 PM
5	Brenntag	\$0.940	4/19/2018 2:02:46 PM

Powdered Activated Carbon - 40 to 50 LB Bags - per Specifications, Delivered - Price per POUND

Rank	Company	Value	Date/Time
1	Jacobi Carbons, Inc	\$0.650	4/19/2018 2:14:32 PM
2	Chemrite	\$0.720	4/19/2018 2:30:01 PM
3	Thatcher Chemical of Florida, Inc.	\$0.769	4/19/2018 2:22:02 PM
4	Brenntag	\$0.900	4/19/2018 2:03:49 PM
5	Water Solutions Unlimited	\$1.500	4/19/2018 2:03:19 PM

Polyaluminum Chloride - Taylor Mill Treatment Plant - 4,000 Gallon Tanker Truck - per Specifications, Delivered - Price per POUND

Rank	Company	Value	Date/Time
1	Aluminum Chemical Specialties	\$0.238	4/19/2018 2:37:18 PM
2	USALCO	\$0.240	4/19/2018 2:03:19 PM
3	Kemira Water Solutions	\$0.310	4/19/2018 2:07:21 PM
4	Chemtrade Chemicals US LLC	\$0.350	4/19/2018 2:08:46 PM
5	Gulbrandsen Technologies, Inc.	\$0.400	4/18/2018 3:25:47 PM

Polyaluminum Chloride - Memorial Parkway and or Fort Thomas Treatment Plants - 4,000 Gallon Tanker Truck - per Specifications, Delivered - Price per POUND

Rank	Company	Value	Date/Time
1	USALCO	\$0.170	4/18/2018 10:01:26 AM
2	Gulbrandsen Technologies, Inc.	\$0.208	4/19/2018 2:13:02 PM
3	Kemira Water Solutions	\$0.219	4/19/2018 2:12:04 PM
4	Aluminum Chemical Specialties	\$0.224	4/19/2018 2:04:48 PM

5 Chemtrade Chemicals US LLC \$0.300 4/19/2018 2:08:02 PM

Corrosion Inhibitor - Bulk - 4,000 Gallon Tanker Truck - per Specifications, Delivered - Price per POUND

Rank	Company	Value	Date/Time
1	Shannon Chemical Corporation	\$0.346	4/19/2018 3:12:17 PM
2	Carus Corporation	\$0.347	4/19/2018 3:11:55 PM
3	Chemrite	\$0.360	4/19/2018 2:22:12 PM
4	Water Solutions Unlimited	\$0.361	4/19/2018 2:20:16 PM
5	SAL Chemical	\$0.495	4/19/2018 2:02:43 PM
6	Brenntag	\$0.900	4/19/2018 2:03:32 PM

Acrylamide Polymer - Cationic - per Specifications, Delivered - Price per POUND

Rank	Company	Value	Date/Time
1	Polydyne Inc.	\$2.050	4/19/2018 2:20:20 PM
2	Thatcher Chemical of Florida, Inc.	\$2.258	4/19/2018 2:29:01 PM
3	SAL Chemical	\$2.720	4/19/2018 2:09:06 PM

Acrylamide Polymer - Anionic - per Specifications, Delivered - Price per POUND

Rank	Company	Value	Date/Time
1	Polydyne Inc.	\$1.595	4/19/2018 2:52:01 PM
2	SAL Chemical	\$1.600	4/19/2018 2:51:42 PM

Sodium Hypochlorite (#5735249)
Bid Opening: June 21, 2018 @ 2:00 PM EDT

				Chemicals Inc		Univar USA Inc		PVS Nolwood	
Line Item	Item Description	UofM	Quantity	Unit Price	Extension	Unit Price	Extension	Unit Price	Extension
Section A - Sanitation District No. 1 ONLY									
A1	Dry Creek Waste Water Treatment Plant - 2999 Amsterdam Rd, Villa Hills, KY 41017	GAL	640000	\$0.6790	\$434,560.00	\$0.7670	\$490,880.00	\$0.8400	\$537,600.00
A2	River Shore Pump Station - 7735 River Rd, Hebron, KY 41048	GAL	1000	\$2.5200	\$2,520.00	\$2.2020	\$2,202.00	\$2.2300	\$2,230.00
A3	Taylor's Port Pump Station - 1528 Tanner Rd (KY 2846), Hebron, KY 41048	GAL	5000	\$1.5200	\$7,600.00	\$1.6190	\$8,095.00	\$1.8500	\$9,250.00
					\$444,680.00		\$501,177.00		\$549,080.00
Section B - Northern Kentucky Water District ONLY									
B1	Fort Thomas Treatment Plant - 700 Alexandria Pike, Ft Thomas, KY 41075	GAL	200000	\$0.6790	\$135,800.00	\$0.7670	\$153,400.00	\$0.8400	\$168,000.00
B2	Memorial Parkway Treatment Plant - 2055 Memorial Pkwy, Ft Thomas, KY 41075	GAL	51000	\$0.6790	\$34,629.00	\$0.7670	\$39,117.00	\$0.8400	\$42,840.00
B3	Taylor Mill Treatment Plant - 608 Grand Ave, Taylor Mill, KY 41015	GAL	36000	\$0.8622	\$31,039.20	\$1.1410	\$41,076.00	\$1.2000	\$43,200.00
					\$201,468.20		\$233,593.00		\$254,040.00
Section C - SD1 and NKWD COMBINED									
C1	Full Transport Loads - 4000 to 4500 Gallons	GAL	891000	\$0.6790	\$604,989.00	\$0.7670	\$683,397.00	\$0.8400	\$748,440.00
C2	Less Than Full Transport Loads - equal to 2000 Gallons	GAL	36000	\$0.8622	\$31,039.20	\$1.1410	\$41,076.00	\$1.2000	\$43,200.00
C3	Less Than Full Transport Loads - less than 2000 Gallons	GAL	6000	\$1.6800	\$10,080.00	\$2.2020	\$13,212.00	\$2.2300	\$13,380.00
					\$646,108.20		\$737,685.00		\$805,020.00

- Q2. In its application, Northern Kentucky District proposed a \$149,888.00 adjustment to the chemical expense using a three-year average of chemical expense based on actual chemical expenses between July 1, 2015, and June 30, 2018, rather than using the chemical expenses incurred in the test year of July 1, 2017, through June 30, 2018.
- a. Explain in specific detail the basis for the upwards adjustment in chemical expenses given that customer water consumption is declining.
 - b. Explain in specific detail what the difference is and why there is a difference between the test-year chemical expense and the three-year average chemical expense.
 - c. Explain why Northern Kentucky based the three-year average on two six-month periods and two full-year periods instead of three calendar years.
 - d. Confirm that the calendar year chemical expense for 2015 was \$2,844,729, \$2,308,355 for 2016, and \$2,361,133 for 2017.
 - e. Confirm that the test-year chemical expense was \$2,212,149.
- A2a. The basis for the adjustment in chemical expenses is to allow for and attempt to diminish the impact of the volatility in chemical expense. Note that consumption is not the only factor to consider with respect to chemical expense. While fluoride and corrosion inhibitor dosages change proportionally with the volume of water treated, this cannot be said of the bulk of the chemicals used in treatment of Northern Kentucky District's surface water sources. The temperature and quality of the river water being treated is highly variable and can fluctuate greatly from day to day and year to year. The condition of the river water influences chemical dosages, particularly when dealing with periodic events such as algae blooms and chemical spills. When turbidity is higher and the temperature is colder in the river water, it requires more pre-treatment chemicals to clarify the water. When the water temperature and organics in the river are higher, more carbon is used for disinfection byproduct control and more chlorine is needed to disinfect the water. Chemicals used for pH control will also fluctuate based on changing water quality conditions and treatment requirements. Another consideration is that the District may vary the operation of its three treatment plants depending on plant shutdowns for maintenance, construction, and availability of licensed operators. This means that the volume of water treated by the carbon in the Granular Activated Carbon (GAC) contactors can change, and this, along with changing organic loading in the raw water, will affect the timing of the carbon reactivation. The actual life of the carbon in a GAC contactor is not pre-determined using a set schedule and cannot be accurately predicted based on anticipated volume of water to be treated. As a result, chemical costs have been averaged in an effort to allow for the unpredictability of the treatment needs of the water.
- A2b. The test-year chemical expense is the chemical expense amount recognized during the test-period only (7/1/2017 – 6/30/2018). The three-year average chemical

expense is the chemical expense amount recognized during the last three years spanning the test year period (7/1/2015 – 6/30/2018). There is a difference between the test-year chemical expense and the three-year average chemical expense to allow for the unpredictability in the treatment needs of the water as described in A2a.

- A2c. The initial calculation was an attempt by the District to avoid confusion. The intent of Northern Kentucky District was not to calculate chemical expense on two six-month periods and two full-year periods, but to remain consistent with the 6/30 test period, and therefore calculated the average chemical expense using the same test period time frame for three periods: 7/1/15 – 6/30/16, 7/1/16 – 6/30/17, and 7/1/17 – 6/30/18.
- A2d. Confirmed; the calendar year chemical expense for 2015 was \$2,844,729, \$2,308,355 for 2016, and \$2,361,135 for \$2017.
- A2e. Confirmed; the test-year chemical expense from 7/1/2017 – 6/30/2018 was \$2,212,149.

- Q3. Refer to the response to Staff's Fourth Request, Item 3, which compares the percentage of salary increases in 2017 and 2018 to the operations and maintenance (O&M) budget.
- a. Provide a comparison of annual salary and wage increases to the total budget, the O&M budget, and the budget for labor costs for each of the years 2013-2017.
 - b. Provide a comparison of annual salary and wages percentage and dollar increases to Northern Kentucky's total labor cost budgets for each of the years 2013-2017. The salary and wages should not include benefits or taxes.
 - c. Provide the salary and wage percentage increases for each of the years 2013-2017, and the current salary and wage percentage increase approved by the Board. Provide the total amount per year and broken out by labor class, i.e., hourly/salary exempt and hourly/salary non-exempt.
 - d. Provide the information requested in the above requests in paper format and Excel spreadsheet format with all formulas intact and unprotected, and all columns and rows accessible.
- A3a. Based upon conversations with PSC staff on March 4, 2019, the following information has been provided: NKWD_PSCDR5_3ab_Wage_and_Salary_Increase_Percent_of_Budget
- A3b. Based upon conversations with PSC staff on March 4, 2019, the following information has been provided: NKWD_PSCDR5_3ab_Wage_and_Salary_Increase_Percent_of_Budget
- A3c. Based upon conversations with PSC staff on March 4, 2017 and March 7, 2019, the following information has been provided:
NKWD_PSCDR5_3c_Wage_and_Salary_Increase_Percentages.

Please note that employees listed in the "Rankings Not Reported to Board" column are employees hired July 1, and after, and are not eligible for an increase until they have reached 6 months of employment. Once 6 months of employment has been reached, the employee is eligible to receive ½ of the average performance ranking amount for that year. Also, please note that the President/CEO is evaluated annually by the Board of Commissioners collectively, and therefore is included in the "Rankings Not Reported to Board" column since District staff does not report his performance ranking back to them. The salary increase for the President/CEO is included in the budgeted annual salary and wage increase amount as reflected in the NKWD_PSCDR5_3ab_Wage_and_Salary_Increase_Percent_of_Budget document included in response to Q3a and Q3b. The salary increase provided to the President/CEO is consistent with the salary and wage increases provided to all other employees for the periods reported.

The data requested in this data request, DR5-3c, requests information from years 2013 – 2017, and current year. Northern Kentucky District provided information for both 2018 and 2019 in response to the current year data request, and as such, six years of data has been presented. During the compilation of this information, it was discovered that the 2013

electronic files maintained by former staff had been overwritten by 2014 data. As a result, the information requested in DR5-3c is not readily available in the format requested. Northern Kentucky District estimates that it would take staff approximately 28-37 hours, or cost Northern Kentucky District approximately \$1,200 - \$1,700, to pull the source data from each personnel file to obtain the performance ranking given to each employee on staff during 2013 in order to re-create the 2013 electronic files that would make it possible to compile the information requested for presentation to the PSC in response to DR5-3c. Northern Kentucky District will work to pull the requested information from personnel files, and re-create the 2013 electronic files so that the data can then be compiled in the format requested by the PSC to be submitted on Friday, March 15, 2019 unless Northern Kentucky District is instructed otherwise.

A3d. Please see above referenced files.

**Northern Kentucky Water District
Comparison of Annual Salary and Wage Increases to Budget
Budget Years 2013-2017**

NKWD_PSCDR5_3ab_03-08-19
Rate Case 2018-00291
Response/Attachment to Q3ab
Witness: Rehtin

Budget Year	Budgeted Annual Salary and Wage Increase	Total Revenue Budget ¹	% of Revenue Budget	Total O&M Budget ²	% of O&M Budget	Total Labor Cost Budget ³	% of Labor Cost Budget	Total Salary and Wage Budget ⁴	% of Salary & Wage Budget
2013	158,756	51,159,618	0.31%	25,831,321	0.61%	13,228,054	1.20%	8,181,093	1.94%
2014	200,000	52,625,911	0.38%	26,689,942	0.75%	13,424,163	1.49%	8,097,836	2.47%
2015	219,150	52,271,763	0.42%	27,161,761	0.81%	13,459,490	1.63%	8,153,817	2.69%
2016	246,787	53,780,511	0.46%	27,904,899	0.88%	13,926,541	1.77%	8,422,994	2.93%
2017	281,874	55,149,418	0.51%	28,241,195	1.00%	14,209,611	1.98%	8,342,010	3.38%

¹ Total Revenue Budget includes debt payments, O&M expenses, and transfer to Operating Capital.

² Total O&M Budget includes salary and wages, benefits, taxes, purchased power, chemicals, GAC, materials & supplies, contractual services, rent, transportation, insurance, advertising, bad debt expense, miscellaneous, and PSC assessment and rate case expense.

³ Total Labor Cost Budget includes salary and wages, benefits, and taxes.

⁴ Total Salary and Wage Budget does not include benefits or taxes.

**Northern Kentucky Water District
Salary and Wage Percentage Increases
Budget Years 2013-Current**

NKWD_PSCDR5_3C_03-08-19
Rate Case 2018-00291
Response/Attachment to Q3c
Witness: Clemons/Rechtin

Wage Increases Given

Budget Year	Needs Improvement	Meets Standard	Commendable	Exemplary
2013	See Note A	See Note A	See Note A	See Note A
2014	0.00%	2.00%	2.25%	2.60%
2015	0.00%	2.00%	2.30%	2.65%
2016	0.00%	2.75%	3.00%	3.25%
2017	0.00%	2.50%	3.00%	3.50%
2018	0.00%	2.50%	3.00%	3.50%
2019	0.00%	3.00%	3.50%	4.00%

Key:
A = Data not readily available in format requested.

Number of Employees - Total

Budget Year	Needs Improvement	% of Total	Meets Standard	% of Total	Commendable	% of Total	Exemplary	% of Total	Rankings Not Reported to Board	% of Total	Total	% of Employees that Received an Increase - Total
2013	See Note A	See Note A	See Note A	See Note A	See Note A	See Note A	See Note A	See Note A	See Note A	See Note A	See Note A	See Note A
2014	1	1%	11	8%	81	60%	37	27%	5	4%	135	99%
2015	0	0%	31	21%	76	51%	37	25%	6	4%	150	100%
2016	2	1%	30	21%	65	45%	44	30%	5	3%	146	99%
2017	0	0%	19	14%	64	46%	51	36%	6	4%	140	100%
2018	0	0%	34	23%	67	46%	31	21%	14	10%	146	100%
2019	0	0%	45	31%	56	38%	43	29%	2	1%	146	100%

Number of Employees - Salary/Exempt

Budget Year	Needs Improvement	% of Exempt Total	Meets Standard	% of Exempt Total	Commendable	% of Exempt Total	Exemplary	% of Exempt Total	Rankings Not Reported to Board	% of Exempt Total	Total - Salary/Exempt	% of Employees that Received an Increase - Salary/Exempt	% of Total Increases - Salary/Exempt
2013	See Note A	See Note A	See Note A	See Note A	See Note A	See Note A	See Note A	See Note A	See Note A	See Note A	See Note A	See Note A	See Note A
2014	0	0%	2	7%	14	50%	10	36%	2	7%	28	100%	21%
2015	0	0%	1	4%	12	44%	12	44%	2	7%	27	100%	18%
2016	1	4%	0	0%	7	29%	14	58%	2	8%	24	96%	16%
2017	0	0%	0	0%	12	44%	12	44%	3	11%	27	100%	19%
2018	0	0%	3	12%	10	40%	11	44%	1	4%	25	100%	17%
2019	0	0%	3	11%	8	29%	16	57%	1	4%	28	100%	19%

Number of Employees - Hourly/Non-Exempt

Budget Year	Needs Improvement	% of Non-Exempt Total	Meets Standard	% of Non-Exempt Total	Commendable	% of Non-Exempt Total	Exemplary	% of Non-Exempt Total	Rankings Not Reported to Board	% of Non-Exempt Total	Total - Hourly/Non-Exempt	% of Employees that Received an Increase - Hourly/Non-Exempt	% of Total Increases - Hourly/Non-Exempt
2013	See Note A	See Note A	See Note A	See Note A	See Note A	See Note A	See Note A	See Note A	See Note A	See Note A	See Note A	See Note A	See Note A
2014	1	1%	9	8%	67	63%	27	25%	3	3%	107	99%	79%
2015	0	0%	30	24%	64	52%	25	20%	4	3%	123	100%	82%
2016	1	1%	30	25%	58	48%	30	25%	3	2%	122	99%	84%
2017	0	0%	19	17%	52	46%	39	35%	3	3%	113	100%	81%
2018	0	0%	31	26%	57	47%	20	17%	13	11%	121	100%	83%
2019	0	0%	42	36%	48	41%	27	23%	1	1%	118	100%	81%

AFFIDAVIT

COMMONWEALTH OF KENTUCKY

COUNTY OF KENTON

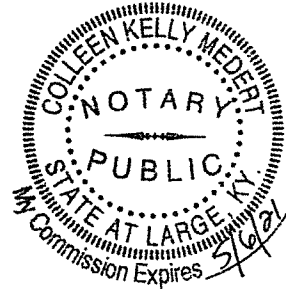
Affiant, Amy Kramer, after being first sworn, deposes and says that she is the Vice President of Engineering, Production & Distribution, that she is authorized to submit this response on behalf of Northern Kentucky Water District, and that the information contained in the response is true and correct to the best of her knowledge and belief except as to those matters that are based on information provided to her and as to those she believes to be true and correct.

Amy Kramer
Amy Kramer

This instrument was produced, signed and declared by Amy Kramer to be her act and deed the 8TH day of MARCH, 2019.

Colleen Kelly Medert
Notary Public
Registration Number 577360

My Commission expires: May 6, 2021



AFFIDAVIT

COMMONWEALTH OF KENTUCKY

COUNTY OF KENTON

Affiant, Lindsey Rechten, after being first sworn, deposes and says that she is the Vice President - Finance and Support Services, that she is authorized to submit this response on behalf of Northern Kentucky Water District, and that the information contained in the response is true and correct to the best of her knowledge and belief except as to those matters that are based on information provided to her and as to those she believes to be true and correct.


Lindsey Rechten

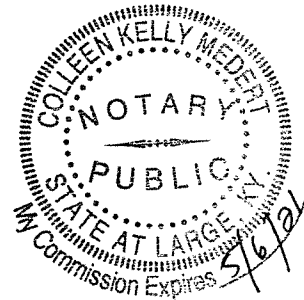
This instrument was produced, signed and declared by Lindsey Rechten to be her act and deed the 8th day of MARCH, 2019.



Notary Public

Registration Number 577360

My Commission expires: May 6, 2021



AFFIDAVIT

COMMONWEALTH OF KENTUCKY

COUNTY OF KENTON

Affiant, Kim Clemons, after being first sworn, deposes and says that she is the Human Resources Manager, that she is authorized to submit this response on behalf of Northern Kentucky Water District, and that the information contained in the response is true and correct to the best of her knowledge and belief except as to those matters that are based on information provided to her and as to those she believes to be true and correct.

Kim Clemons
Kim Clemons

This instrument was produced, signed and declared by Kim Clemons to be her act and deed the 8TH day of MARCH, 2019.

Colleen Kelly Medert
Notary Public
Registration Number 577360

My Commission expires: May 6/2021

