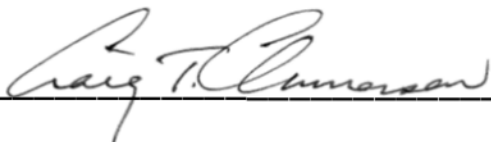




Jackson Housing Commission (MI038)

**Snapshot Review
Jackson, Michigan**

September 14, 2021



**Craig T. Clemmensen
Director, Departmental Enforcement Center**

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I. Executive Summary

HUD's Office of Public and Indian Housing (PIH), Detroit Field Office (DFO), made a referral to the Departmental Enforcement Center (DEC) on October 20, 2020, to recalculate the operating subsidy awarded to the Jackson Housing Commission (JHC), for the Reed Manor site (AMP 2) for the funding years 2018, 2019, and 2020 pursuant to the Operating Fund program described in 42 USC §1437g and administered under HUD regulations at 24 CFR §990. The snapshot review was conducted remotely from January 19, 2021, to July 14, 2021.

In our review, we found that the JHC had not accurately reported consumption levels and actual costs for electricity, natural gas, and water for funding periods 2018 through 2020 in accordance with 24 CFR §§990.170, 990.175, and 990.180 on their form HUD-52722, Calculation of Utility Expense Level (52722) and form HUD-52723, Calculation of Operating Subsidy (52723).

In a previous report, published on August 11, 2020, DEC examined Utility Expense Level (UEL) for funding periods 2016 and 2017. DFO requested DEC to reexamine their report, specifically the water consumption UEL due to high water consumption reported. Considering the new water consumption information obtained in this review, our calculation of overpaid subsidy for funding periods 2016 and 2017 is greater than originally indicated. We now conclude that the failure in reporting water consumption levels correctly for 2017 through 2019 and the erroneous transfer of information during 2020 from the 52722 to the 52723, resulted in net overpaid operating subsidy of \$5,543,157 for funding periods 2016 through 2020. During the 2017 funding period, the JHC failed to use the correct unit-of-measure when reporting its actual water consumption. This error carried over as rolling base consumption in funding periods 2018 and 2019. During the 2020 funding period, the JHC incorrectly transferred the previous year's UEL from the 52722 to the 52723. We recommend that the DFO require the JHC to reimburse \$5,543,157 to HUD from AMP 2's unrestricted cash or reserve accounts. If AMP 2 is unable to repay the excess subsidy from unrestricted cash or reserve accounts, we recommend that repayment be made from non-federal funds or offset from future subsidy. We also recommend that the JHC fix future errors of pre-populated data in real time by immediately contacting the DFO and then overlay any consumption or cost corrections in their next subsidy request, so that errors are not carried over to future funding periods. Guidance can be found in Notice PIH-2021-04 and Financial Management Division's (FMD's) PHA User Guide to the UEL Excel Tool (February 21, 2018, Version 1.2).

II. Objective

The objective of our review was to determine whether the JHC accurately calculated the UEL component of operating expenses on 52722s for AMP 2 for funding periods 2018 through 2020 in

accordance with 24 CFR §§990.170, 990.175, and 990.180. Since the UEL is one of several components in a housing authority's calculation of annual operating subsidy, we also determined whether the JHC accurately calculated the related operating subsidy request in accordance with 24 CFR §990.200(a) on the 52723s for AMP 2 for funding periods 2018 through 2020. Based on FMD's request, our analysis included a re-review of water consumption and costs for funding periods 2016 and 2017.

III. Scope

Our review primarily covered the funding periods from 2018 through 2020 for AMP 2 and was limited to the verification of utility consumption data, actual expense data, and recalculation of the UEL and the operating subsidy request. We reviewed billing statements for natural gas, electric, and water utility companies and recalculated the UEL and operating subsidy for funding periods 2016 through 2020. For water, we re-reviewed consumption and cost data for 2016 and 2017. Finally, we reviewed the form 52722s and 52723s from 2016 to 2020 as submitted by the JHC and reconciled calculations to source documents. We conducted interviews with the following individuals:

- Ira Thompson, Financial Analyst, DFO
- Joseph Davis, Portfolio Management Specialist, DFO
- Rachel Arnold, Financial Analyst, FMD
- Laurie Ingram, Executive Director, JHC
- Lakeshia Baker, Accounts Payable Specialist, JHC
- Christine Wise, Fee Accountant, JHC
- Mike Osborn, Director of Public Works, City of Jackson
- Susan Wixson, Public Utilities Clerk, City of Jackson

IV. Background

The JHC is located at 301 Steward Avenue, Jackson, Michigan and has served the surrounding community since 1946. The JHC operates 540 low-rent units across three sites: Chalet Terrace (126 scattered units), Reed Manor (292 units in nine buildings in one complex), and Shahan Blackstone North (122 scattered units).¹ The Board consists of five members serving staggered, 5-year terms. Board members are appointed by the mayor, with the approval of the City Council.

In late 2020, the DFO requested that we review JHC's UEL in funding periods 2018 through 2020. During the entrance conference, FMD requested that we re-review the water consumption portion from a previously published DEC report to see why consumption spiked in 2017 compared to previous years and to investigate the possibility that the JHC used an incorrect unit-of-measure when reporting on the form HUD-52722, Calculation of Utilities Expense Level (52722).

¹ The number of units is based on the JHC's website at <https://www.jacksonhousing-mi.org/public-housing>

V. Results of Review

We conclude that the JHC did not accurately report on the 52722s actual consumption levels, rolling base consumption levels, and actual utility costs for funding periods 2016 through 2020 in accordance with 24 CFR §§990.170, 990.175, and 990.180.

For funding period 2017, the JHC failed to use the correct unit-of-measure when reporting its water rolling base consumption as it had been doing in the past. This caused water consumption to be reported as if it had more than doubled, which resulted in an overpayment of subsidy of over \$1 million for 2017. Because consumption is carried over as part of the rolling base for two additional years, an overpayment of subsidy of over \$1 million occurred in 2018 and 2019. In a second unrelated error, the JHC incorrectly carried over the previous year's UEL from the 52722 to the 52723 resulting in an additional overpayment of subsidy of over \$1 million for 2020.

A. Water Consumption and Sewer

During our review, the JHC determined that its previous financial director routinely moved the decimal two places to the left when reporting water consumption on the 52722. This was done because the municipal water billing department reported consumption in Cubic Feet (CF) but reported actual costs in Hundreds of Cubic Feet (CCF). The JHC's adjustment was made so that consumption and annual cost would be reported using the same unit of measurement. After contacting the water billing department to confirm that water consumption and costs were stated in two different units of measure on the billing statement and that the JHC's past practice was correct to move the decimal two places to the left, we also moved the decimal in our analysis two places to the left to align with the JHC's methodology and to make sure the unit of measurement for both consumption and cost were the same.

For 2016, the JHC reported actual consumption as 9,405 CCF and three-previous years rolling base consumption of 6,191 CCF, 15,026 CCF, and 11,782 CCF for 2015, 2014, and 2013, respectively. Our recalculation of consumption based on source data from billing statements showed the 2016 current year consumption to be 12,742 CCF and rolling base consumption to be 14,214 CCF, 10,643 CCF, and 11,845 CCF for 2015, 2014, and 2013, respectively. We determined that actual costs for funding period 2016 were \$53,671, instead of \$64,076 reported by the JHC. See Appendix A.

For 2017, the JHC reported actual consumption as 13,772 CCF and three-previous years rolling base consumption of 1,348,957 CCF, 6,191 CCF, and 15,026 CCF for 2016, 2015, and 2014, respectively. The JHC reported cost as \$57,551. In 2017, the JHC failed to move the decimal to the

left two places in the 2016 rolling base consumption as it had been doing in the past. This caused a spike in reported water consumption. Our recalculation of consumption, based on source data from billing statements, showed the 2017 current year consumption to be 13,880 CCF and rolling base consumption to be 12,742 CCF, 14,214 CCF, and 10,643 CCF for 2016, 2015, and 2014, respectively. We agreed with the JHC's determination of actual costs for funding period 2017 to be \$57,551. See Appendix B.

In 2018, the JHC reported actual consumption as 14,980 CCF and three-previous years rolling base consumption of 13,772 CCF, 1,348,957 CCF, and 6,191 CCF, for 2017, 2016, and 2015, respectively. The JHC reported cost as \$65,647. In 2018, the JHC failed to move the decimal to the left two places in the 2016 rolling base consumption as it had been doing in the past. This caused water consumption to once again be reported as if it had spiked. Our recalculation of consumption, based on source data from billing statements, showed the 2018 current year consumption to be 14,480 CCF and rolling base consumption to be 13,880 CCF, 12,742 CCF, and 14,214 CCF for 2017, 2016, and 2015, respectively. We agreed with the JHC's determination of actual costs for funding period 2018 to be \$65,647. See Appendix C.

In 2019, the JHC reported actual consumption as 17,690 CCF and three-previous years rolling base consumption of 14,908 CCF, 13,772 CCF, and 1,348,957 CCF for 2018, 2017, and 2016, respectively. In 2019, the JHC failed to move the decimal to the left two places in the 2016 rolling base consumption as it had been doing in the past. This caused water consumption to once again be reported as if it had spiked. Our recalculation of consumption, based on source data from billing statements, showed the 2019 current year consumption to be 17,760 CCF and rolling base consumption to be 14,480 CCF, 13,880 CCF, and 12,742 CCF for 2018, 2017, and 2016, respectively. We determined that actual costs for funding period 2019 were \$85,282 rather than \$85,797 reported by the JHC. See Appendix D.

In 2020, the JHC reported actual consumption as 14,818 CCF and three-previous years rolling base consumption of 17,690 CCF, 14,908 CCF, and 13,772 CCF, for 2019, 2018, and 2017, respectively. The JHC reported cost as \$77,610. Our recalculation of consumption, based on source data from billing statements, showed the 2020 current year consumption to be 14,848 CCF and rolling base consumption to be 17,760 CCF, 14,480 CCF, and 13,880 CCF for 2019, 2018, and 2017, respectively. We agreed with the JHC's determination of actual costs for funding period 2020 to be \$77,610. See Appendix E. We found that the JHC carried over the incorrect UEL of \$628.34 from the 52722 to the 52723 for the 2020 funding period. The correct UEL was \$102.88. This error caused water consumption to be reported in funding period 2020 as if it had more than doubled. JHC informed us that an error was made by their previous financial director/fee accountant but failed to retain support documentation that explained the nature of the error. The previous financial

director/fee accountant left a comment on the 52722 form but the comment did not provide sufficient detail of the error. A comment is not the proper way to fix an error in actual or rolling base consumption. Per the guidance listed above, the proper way to fix an error is to overlay the incorrect consumption numbers with the correct consumption numbers so that the error does not keep carrying over into future funding periods. JHC saw its subsidy increase by \$1 million dollars each funding period but failed to understand the error and failed to properly seek direction as to how to fix it.

B. Electricity Consumption

In 2018, the 52722 provided by the JHC reported current year consumption as 1,483,060 kilowatt hours (kWh), with the previous three-year rolling base numbers of 1,383,040 kWh, 1,405,680 kWh, and 2,468,032 kWh, for the years 2017, 2016, and 2015, respectively. The JHC reported utility costs of \$184,576. Our recalculation of the consumption numbers, based on data from billing statements and utilizing the 2018, 52722 instructions, showed the 2018 current year consumption number as 1,475,400 kWh, and rolling base consumption numbers as 1,383,040 kWh, 1,394,040 kWh, and 1,466,240 kWh for 2017, 2016, and 2015, respectively. We determined that actual electricity costs for funding period 2018 were \$214,567, rather than \$184,576 as reported by the JHC. See Appendix C.

For 2019, the 52722 provided by the JHC reported current year consumption as 1,524,823 kWh, with the previous three-year rolling base numbers of 1,483,060 kWh, 1,383,040 kWh, and 1,405,680 kWh, for the years 2018, 2017, and 2016, respectively. The JHC reported utility costs of \$195,859. Our recalculation of the consumption numbers, based on data from billing statements and utilizing the 2019, 52722 instructions, showed the 2019 current year consumption number was 1,581,200 kWh, and rolling base consumption numbers were 1,475,400 kWh, 1,383,040 kWh, and 1,394,040 kWh for 2018, 2017, and 2016, respectively. We determined that actual electricity costs for funding period 2019 were \$204,815, rather than \$195,859 as reported by the JHC. See Appendix D.

For 2020, the 52722 provided by the JHC reported current year consumption as 156,740 kWh, with the previous three-year rolling base numbers of 1,524,823 kWh, 1,483,060 kWh, and 1,383,040 kWh, for the years 2019, 2018, and 2017, respectively. Our review of the data provided by the JHC showed that the 156,740 kWh consumption number reported on the 52722 was incorrect and the correct number was 1,564,740 kWh. The JHC reported utility costs of \$196,047. The recalculation of the consumption numbers, based on data from billing statements and utilizing the 2020 52722 instructions, showed the 2020 current year consumption number as 1,563,710 kWh, and rolling base consumption numbers as 1,581,823 kWh, 1,475,400 kWh, and 1,383,040 kWh for 2019, 2018, and

2017, respectively. We determined that actual electricity costs for funding period 2020 were \$212,578, rather than \$196,047 as reported by the JHC. See Appendix E.

C. Natural Gas Consumption

In 2018, the JHC reported actual consumption as 6,895 thousand cubic feet (Mcf) with the previous three-year rolling base numbers of 6,760 Mcf, 75,226 Mcf, and 8,534 Mcf for the years 2017, 2016, and 2015, respectively. For the calculation period covering July 2016 through January 2017, the JHC utilized the consumption numbers of only 1 of 2 natural gas meters for AMP 2. We recalculated the 2018 natural gas consumption as 7,073 Mcf. We determined that the actual natural gas cost for funding period 2018 was \$58,350, rather than \$55,584 as reported by the JHC. See Appendix C.

For 2019, the JHC reported 7,616 Mcf with the previous three-year rolling base numbers of 6,895 Mcf, 6,760 Mcf and 75,226 Mcf for the years 2018, 2017, and 2016, respectively. The JHC erroneously stated that natural gas consumption for November 2017 and December 2017 was 564 and 873 Mcf, respectively. However, after analyzing the billing statements, the actual November and December 2017 natural gas consumption was 360 and 839 Mcf, respectively. The JHC overstated November 2017 natural gas consumption by 204 Mcf and December 2017 consumption by 34 Mcf. Through email correspondence dated February 24, 2021, the JHC Accounts Payable Director, who is responsible for calculating the monthly utility consumption usage, agreed with the billing statements and attributed the two 2019 erroneous entries to human error. We recalculated the 2019 natural gas consumption as 7,379 Mcf. We also determined that the actual natural gas cost for funding period 2019 was \$57,269, rather than \$57,503 as reported by the JHC. See Appendix D.

For 2020, the JHC reported 7,940 Mcf with the previous three-year rolling base numbers of 7,616 Mcf, 6,895 Mcf, and 6,760 Mcf for the years 2019, 2018, and 2017, respectively. In May 2019, the JHC calculated 555 Mcf, but our recalculated consumption number was 557 Mcf. Although there is a difference of 2 Mcf, this discrepancy did not impact the overall calculation of the aggregate consumption total entered onto the 52722. We recalculated the 2020 natural gas consumption as 7,942 Mcf. We further determined that the actual natural gas cost for funding period 2020 was \$64,973, rather than \$65,216 as reported by the JHC. See Appendix E.

D. Recalculation of Operating Subsidy

Since the UEL calculated on line 26 of the 52722s is carried over to Section 3, Part A, line 05 of the 52723s, any error in UEL will impact the requested operating subsidy. We determined that because the JHC did not accurately report actual utility consumption data, three-year rolling base

consumption data, and actual utility costs on the 52722s, the per-unit UEL carried over to the 52723s resulted in the overpayment of operating subsidy totaling \$5,543,157 for funding periods 2016 through 2020. Appendices A through E show our recalculation of AMP 2's 52722 and 52723 forms. The table below provides a summary.

Funding Period	Original PUM UEL 52722 Line 26	Corrected PUM UEL 52722 Line 26	Original Subsidy Amount Per LOCCS	Corrected Subsidy Amount per 52723 Line 3-D-03	Difference
2016	\$77.28	\$118.85	\$683,653	\$902,966	\$(219,313)
2017	\$481.48	\$96.48	\$2,010,163	\$803,340	\$1,206,823
2018	\$576.08	\$99.56	\$2,364,161	\$814,539	\$1,549,622
2019	\$628.34	\$96.44	\$2,514,834	\$707,218	\$1,807,616
2020	\$628.34	\$102.88	\$1,979,907	\$781,498	\$1,198,409
Total					\$5,543,157

The JHC's March 31, 2019 balance sheet reported an unrestricted cash balance of \$1,942,921 for AMP 2. AMPs 1 and 3 report respective unrestricted cash balances of \$349,793 and \$97,572. AMPs 1, 2, and 3 report respective unrestricted reserve balances of \$539,504, \$2,262,462, and \$115,570 as of March 31, 2019. Based on these balances, we conclude that the excess subsidy paid to AMP 2 is partially held in AMP 2 accounts. We did not perform a detailed analysis or in-depth review of how excess subsidy payments were used as it was beyond the scope of our review.

In June 2021, we presented the details of our Total Subsidy Overpayment calculation to the DFO, FMD, and the JHC. Each was offered a walk-through and a review period to verify our calculations for accuracy. None of these entities presented any corrections or concerns.

VI. Recommendations

1. PIH should require that JHC maintain effective internal controls by creating and maintaining written policies and procedures describing the process to fix consumption reporting errors in real time and the process to convert water usage to the correct unit-of-measure when completing the 52722 form so that institutional knowledge is retained and successor financial directors or fee accountants can access and accurately complete future requests for operating subsidy. See 24 C.F.R § 990.310 and 2 C.F.R 200.303.

2. PIH should recapture operating subsidy overpayment of \$5,543,157 from AMP 2's unrestricted accounts. If operating cash or reserves are not sufficient to make the full repayment, the overpaid subsidy should be recaptured from non-federal funds or offset from future AMP 2 subsidy per 24 C.F.R § 990.200(c) and 2 C.F.R. § 200.345.
3. PIH should remind the JHC to correct future errors in real time by immediately contacting the DFO, submitting a revised form 52722 and then overlaying any consumption or cost corrections in their next subsidy request, so that errors are not carried over to future funding periods.
4. PIH should implement procedures to prevent future overpayment of operating subsidy by reviewing a reasonable sampling of the 52722s UEL amounts as compared to consumption source documentation for eligible housing authorities. Furthermore, PIH should review the placed 52722s UEL amounts on the corresponding line of the 52723 to verify that operating fund subsidy requests are correct.

VII. Appendix A: Funding Period 2016 Recalculated Forms HUD 52722 and 52723

2016	Corrected HUD Form 52722				
Line	Consumption level	Electricity	Gas	Water/Sewer	Total
01	Current Actual Consumption	1,394,040	8,009	12,742	
01a	Unit of Consumption	kWh	MCF	CCF	
02	Rolling Base Year 1 actual	1,466,240	8,065	14,214	
03	Rolling Base Year 2 actual	1,430,920	6,986	10,643	
04	Rolling Base Year 3 actual	1,461,080	6,363	11,845	
05	Total Consumption during 3- year Rolling Base period	4,358,240	21,414	36,702	
06	Average rolling base consumption	1,452,747	7,138	12,234	
08	Rolling Base Consumption	1,452,747	7,138	12,234	
09	Base Consumption	1,394,040	7,138	12,234	
10	Actual consumption > rolling base	0	871	508	
11	Actual consumption < rolling base	58,707	0	0	
12	75% 25% Split	0	218	127	
13	75% 25% Split	44,030	0	0	
15	Payable consumption	1,438,070	7,356	12,361	
16	Actual utility costs	\$ 298,365	\$ 65,059	\$ 53,671	
17	Actual average utility rate	\$ 0.2140	\$ 8.1232	\$ 4.2122	
18	Base utilities expense level	\$ 307,747	\$ 59,754	\$ 52,067	\$ 419,568
20	Base utilities expense level minus surcharges				\$ 419,568
21	Utilities inflation/deflation factor per HUD				0.996
22	Utilities expense level adjusted for inflation/deflation				\$ 417,890
24	Utilities expense level				\$ 417,890
25	Eligible unit months				3,516
26	Utilities expense level (PUM)				\$ 118.85
	Corrected HUD Form 52723				
		A	B	C	
2-01	Occupied dwelling units - by public housing eligible family under lease	3,444	3,444	3,444	
2-06	Vacant Unit Months - Special use units	12	12		
2-09	Units vacant due to casualty losses	0	0		
2-11	Units vacant and not categorized above	60			
2-13	All ofther ACC units not categoriezed above	12			
2-14	Limited Vacancies		60		
2-15	Total Unit Months	3,528	3,516	3,444	
2-16	Unite eligible for funding for resident participation activities			287	
3-A-01	PUM project expense level (PEL) per HUD	\$ 298.34			
3-A-02	Inflation factor per HUD	1.01100			
3-A-03	PUM inflated PEL	\$ 301.62			
3-A-04	PEL	1,060,496			
3-A-05	PUM Utilities expense level (UEL)	\$ 118.85			
3-A-06	UEL	\$ 417,877			
3-A-09	Payment in lieu of taxes (PILOT)	\$ 24,985			
3-A-10	Cost of independent audit	\$ 2,000			
3-A-11	Funding for resident participation activities	\$ 7,175			
3-A-12	Asset management fee	\$ 14,112			
3-A-13	Information technology fee	\$ 7,056			
3-A-16	Total Add-Ons	\$ 55,328			
3-A-17	Total Formula Expenses	\$1,533,701			
3-B-01	PUM formula income per HUD	\$ 179.39			
3-B-03	PUM adjusted formula income	\$ 179.39			
3-B-04	Total Formula Income	\$ 630,735			
3-D-01	Formula calculation	\$ 902,966			
3-D-02	Cost of independent audit	\$ 2,000			
3-D-03	Formula amount	\$ 902,966			

VIII. Appendix B: Funding Period 2017 Recalculated Forms HUD 52722 and 52723

2017 Corrected HUD Form 52722					
Line	Consumption level	Electricity	Gas	Water/Sewer	Total
01	Current Actual Consumption	1,383,040	6,760	13,880	
01a	Unit of Consumption	kWh	MCF	CCF	
02	Rolling Base Year 1 actual	1,394,040	8,009	12,742	
03	Rolling Base Year 2 actual	1,466,240	8,065	14,214	
04	Rolling Base Year 3 actual	1,430,920	6,986	10,643	
05	Total Consumption during 3- year Rolling Base period	4,291,200	23,060	37,599	
06	Average rolling base consumption	1,430,400	7,687	12,533	
08	Rolling Base Consumption	1,430,400	7,687	12,533	
09	Base Consumption	1,383,040	6,760	12,533	
10	Actual consumption > rolling base	0	0	1,347	
11	Actual consumption < rolling base	47,360	927	0	
12	75% 25% Split	0	0	337	
13	75% 25% Split	35,520	695	0	
15	Payable consumption	1,418,560	7,455	12,870	
16	Actual utility costs	\$ 255,873	\$ 44,469	\$ 57,551	
17	Actual average utility rate	\$ 0.1850	\$ 6.5783	\$ 4.1462	
18	Base utilities expense level	\$ 262,434	\$ 49,041	\$ 53,362	\$ 364,837
20	Base utilities expense level minus surcharges				\$ 364,837
21	Utilities inflation/deflation factor per HUD				0.92980
22	Utilities expense level adjusted for inflation/deflation				\$ 339,225
24	Utilities expense level				\$ 339,225
25	Eligible unit months				3,516
26	Utilities expense level (PUM)				\$ 96.48
Corrected HUD Form 52723					
		A	B	C	
2-01	Occupied dwelling units - by public housing eligible family under lease	3,447	3,447	3,447	
2-06	Vacant Unit Months - Special use units	12	12		
2-09	Units vacant due to casualty losses	0	0		
2-11	Units vacant and not categorized above	57			
2-13	All ofther ACC units not categoriezed above	12			
2-14	Limited Vacancies		57		
2-15	Total Unit Months	3,528	3,516	3,447	
2-16	Unite eligible for funding for resident participation activities			287	
3-A-01	PUM project expense level (PEL) per HUD	\$ 301.62			
3-A-02	Inflation factor per HUD	1.01500			
3-A-03	PUM inflated PEL	\$ 306.14			
3-A-04	PEL	1,076,388			
3-A-05	PUM Utilities expense level (UEL)	\$ 96.48			
3-A-06	UEL	\$ 339,224			
3-A-09	Payment in lieu of taxes (PILOT)	\$ 29,785			
3-A-10	Cost of independent audit	\$ 2,000			
3-A-11	Funding for resident participation activities	\$ 7,175			
3-A-12	Asset management fee	\$ 14,112			
3-A-13	Information technology fee	\$ 7,056			
3-A-16	Total Add-Ons	\$ 60,128			
3-A-17	Total Formula Expenses	\$1,475,740			
3-B-01	PUM formula income per HUD	\$ 191.24			
3-B-03	PUM adjusted formula income	\$ 191.24			
3-B-04	Total Formula Income	\$ 672,400			
3-D-01	Formula calculation	\$ 803,340			
3-D-02	Cost of independent audit	\$ 2,000			
3-D-03	Formula amount	\$ 803,340			

IX. Appendix C: Funding Period 2018 Recalculated Forms HUD 52722 and 52723

2018	Corrected HUD Form 52722				
Line	Consumption level	Electricity	Gas	Water/Sewer	Total
01	Current Actual Consumption	1,475,400	7,073	14,480	
01a	Unit of Consumption	kWh	MCF	CCF	
02	Rolling Base Year 1 actual	1,383,040	6,760	13,880	
03	Rolling Base Year 2 actual	1,394,040	8,009	12,742	
04	Rolling Base Year 3 actual	1,466,240	8,065	14,214	
05	Total Consumption during 3- year Rolling Base period	4,243,320	22,834	40,836	
06	Average rolling base consumption	1,414,440	7,611	13,612	
08	Rolling Base Consumption	1,414,440	7,611	13,612	
09	Base Consumption	1,414,440	7,073	13,612	
10	Actual consumption > rolling base	60,960	0	868	
11	Actual consumption < rolling base	0	538	0	
12	75% 25% Split	15,240	0	217	
13	75% 25% Split	0	404	0	
15	Payable consumption	1,429,680	7,477	13,829	
16	Actual utility costs	\$ 214,567	\$ 58,350	\$ 65,647	
17	Actual average utility rate	\$ 0.1454	\$ 8.2497	\$ 4.5336	
18	Base utilities expense level	\$ 207,875	\$ 61,683	\$ 62,695	\$ 332,253
20	Base utilities expense level minus surcharges				\$ 332,253
21	Utilities inflation/deflation factor per HUD				1.05360
22	Utilities expense level adjusted for inflation/deflation				\$ 350,062
24	Utilities expense level				\$ 350,062
25	Eligible unit months				3,516
26	Utilities expense level (PUM)				\$ 99.56
Corrected HUD Form 52723		A	B	C	
2-01	Occupied dwelling units - by public housing eligible family under lease	3,452	3,452	3,452	
2-06	Vacant Unit Months - Special use units	12	12		
2-09	Units vacant due to casualty losses	0	0		
2-11	Units vacant and not categorized above	52			
2-13	All ofther ACC units not categoriezed above	12			
2-14	Limited Vacancies		52		
2-15	Total Unit Months	3,528	3,516	3,452	
2-16	Unite eligible for funding for resident participation activities			288	
3-A-01	PUM project expense level (PEL) per HUD	\$ 306.14			
3-A-02	Inflation factor per HUD	1.02000			
3-A-03	PUM inflated PEL	\$ 312.26			
3-A-04	PEL	1,097,906			
3-A-05	PUM Utilities expense level (UEL)	\$ 99.56			
3-A-06	UEL	\$ 350,053			
3-A-09	Payment in lieu of taxes (PILOT)	\$ 31,466			
3-A-10	Cost of independent audit	\$ 2,000			
3-A-11	Funding for resident participation activities	\$ 7,200			
3-A-12	Asset management fee	\$ 14,112			
3-A-13	Information technology fee	\$ 7,056			
3-A-16	Total Add-Ons	\$ 61,834			
3-A-17	Total Formula Expenses	\$1,509,793			
3-B-01	PUM formula income per HUD	\$ 197.74			
3-B-03	PUM adjusted formula income	\$ 197.74			
3-B-04	Total Formula Income	\$ 695,254			
3-D-01	Formula calculation	\$ 814,539			
3-D-02	Cost of independent audit	\$ 2,000			
3-D-03	Formula amount	\$ 814,539			

X. Appendix D: Funding Period 2019 Recalculated Forms HUD 52722 and 52723

2019	Corrected HUD Form 52722				
Line	Consumption level	Electricity	Gas	Water/Sewer	Total
01	Current Actual Consumption	1,581,200	7,379	17,760	
01a	Unit of Consumption	kWh	MCF	CCF	
02	Rolling Base Year 1 actual	1,475,400	7,073	14,480	
03	Rolling Base Year 2 actual	1,383,040	6,760	13,880	
04	Rolling Base Year 3 actual	1,394,040	8,009	12,742	
05	Total Consumption during 3- year Rolling Base period	4,252,480	21,842	41,103	
06	Average rolling base consumption	1,417,493	7,281	13,701	
08	Rolling Base Consumption	1,417,493	7,281	13,701	
09	Base Consumption	1,417,493	7,281	13,701	
10	Actual consumption > rolling base	163,707	98	4,059	
11	Actual consumption < rolling base	0	0	0	
12	75% 25% Split	40,927	25	1,015	
13	75% 25% Split	0	0	0	
15	Payable consumption	1,458,420	7,306	14,716	
16	Actual utility costs	\$ 204,815	\$ 57,269	\$ 85,282	
17	Actual average utility rate	\$ 0.1295	\$ 7.7611	\$ 4.8019	
18	Base utilities expense level	\$ 188,865	\$ 56,703	\$ 70,665	\$ 316,233
20	Base utilities expense level minus surcharges				\$ 316,233
21	Utilities inflation/deflation factor per HUD				1.06800
22	Utilities expense level adjusted for inflation/deflation				\$ 337,737
24	Utilities expense level				\$ 337,737
25	Eligible unit months				3,502
26	Utilities expense level (PUM)				\$ 96.44
	Corrected HUD Form 52723				
		A	B	C	
2-01	Occupied dwelling units - by public housing eligible family under lease	3,384	3,384	3,384	
2-06	Vacant Unit Months - Special use units	12	12		
2-09	Units vacant due to casualty losses	0	0		
2-11	Units vacant and not categorized above	120			
2-13	All ofther ACC units not categorized above	12			
2-14	Limited Vacancies		106		
2-15	Total Unit Months	3,528	3,502	3,384	
2-16	Unite eligible for funding for resident participation activities			282	
3-A-01	PUM project expense level (PEL) per HUD	\$ 312.26			
3-A-02	Inflation factor per HUD	1.01600			
3-A-03	PUM inflated PEL	\$ 317.26			
3-A-04	PEL	1,111,045			
3-A-05	PUM Utilities expense level (UEL)	\$ 96.44			
3-A-06	UEL	\$ 337,733			
3-A-09	Payment in lieu of taxes (PILOT)	\$ 42,647			
3-A-10	Cost of independent audit	\$ 2,000			
3-A-11	Funding for resident participation activities	\$ 7,050			
3-A-12	Asset management fee	\$ 14,112			
3-A-13	Information technology fee	\$ 7,056			
3-A-16	Total Add-Ons	\$ 72,865			
3-A-17	Total Formula Expenses	\$1,521,643			
3-B-01	PUM formula income per HUD	\$ 232.56			
3-B-03	PUM adjusted formula income	\$ 232.56			
3-B-04	Total Formula Income	\$ 814,425			
3-D-01	Formula calculation	\$ 707,218			
3-D-02	Cost of independent audit	\$ 2,000			
3-D-03	Formula amount	\$ 707,218			

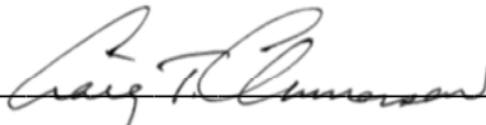
XI. Appendix E: Funding Period 2020 Recalculated Forms HUD 52722 and 52723

2020	Corrected HUD Form 52722				
Line	Consumption level	Electricity	Gas	Water/Sewer	Total
01	Current Actual Consumption	1,563,710	7,942	14,848	
01a	Unit of Consumption	kWh	MCF	CCF	
02	Rolling Base Year 1 actual	1,581,200	7,379	17,760	
03	Rolling Base Year 2 actual	1,475,400	7,073	14,480	
04	Rolling Base Year 3 actual	1,383,040	6,760	13,880	
05	Total Consumption during 3- year Rolling Base period	4,439,640	21,212	46,121	
06	Average rolling base consumption	1,479,880	7,071	15,374	
08	Rolling Base Consumption	1,479,880	7,071	15,374	
09	Base Consumption	1,479,880	7,071	14,848	
10	Actual consumption > rolling base	83,830	871	0	
11	Actual consumption < rolling base	0	0	526	
12	75% 25% Split	20,958	218	0	
13	75% 25% Split	0	0	395	
15	Payable consumption	1,500,838	7,289	15,243	
16	Actual utility costs	\$ 212,578	\$ 64,973	\$ 77,610	
17	Actual average utility rate	\$ 0.1359	\$ 8.1809	\$ 5.2270	
18	Base utilities expense level	\$ 203,964	\$ 59,631	\$ 79,675	\$ 343,270
20	Base utilities expense level minus surcharges				\$ 343,270
21	Utilities inflation/deflation factor per HUD				1.03250
22	Utilities expense level adjusted for inflation/deflation				\$ 354,426
24	Utilities expense level				\$ 354,426
25	Eligible unit months				3,445
26	Utilities expense level (PUM)				\$ 102.88
	Corrected HUD Form 52723	A	B	C	
2-01	Occupied dwelling units - by public housing eligible family under lease	3,327	3,327	3,327	
2-06	Vacant Unit Months - Special use units	12	12		
2-09	Units vacant due to casualty losses	0	0		
2-11	Units vacant and not categorized above	177			
2-13	All ofther ACC units not categoriezed above	12			
2-14	Limited Vacancies		106		
2-15	Total Unit Months	3,528	3,445	3,327	
2-16	Unite eligible for funding for resident participation activities			277	
3-A-01	PUM project expense level (PEL) per HUD	\$ 317.26			
3-A-02	Inflation factor per HUD	1.02000			
3-A-03	PUM inflated PEL	\$ 323.61			
3-A-04	PEL	1,114,836			
3-A-05	PUM Utilities expense level (UEL)	\$ 102.88			
3-A-06	UEL	\$ 354,422			
3-A-09	Payment in lieu of taxes (PILOT)	\$ 36,766			
3-A-10	Cost of independent audit	\$ 2,835			
3-A-11	Funding for resident participation activities	\$ 6,925			
3-A-12	Asset management fee	\$ 14,112			
3-A-13	Information technology fee	\$ 7,056			
3-A-16	Total Add-Ons	\$ 67,694			
3-A-17	Total Formula Expenses	\$1,536,952			
3-B-01	PUM formula income per HUD	\$ 219.29			
3-B-03	PUM adjusted formula income	\$ 219.29			
3-B-04	Total Formula Income	\$ 755,454			
3-D-01	Formula calculation	\$ 781,498			
3-D-02	Cost of independent audit	\$ 2,835			
3-D-03	Formula amount	\$ 781,498			



**Hamtramck Housing Commission
Snapshot Review**

Hamtramck, Michigan

A handwritten signature in black ink, appearing to read "Craig T. Clemmensen".

Craig T. Clemmensen, Director
Departmental Enforcement Center

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I. Executive Summary

The Office of Public and Indian Housing (“PIH”) referred the Hamtramck Housing Commission (the “HHC”) to the Departmental Enforcement Center (“DEC”), because of concerns with the HHC’s management and reporting of water consumption data from its Energy Performance Contract (“EPC”) with Siemens, Inc. (“Siemens”), and the use of this data in its subsidy funding applications to PIH’s Detroit Field Office (“DFO”).¹ The DFO is concerned that the Low Rent Public Housing (“LRPH”) operating subsidy was overpaid to the HHC.

We found that Siemens was an unreliable source of data for the HHC. Siemens erroneously used a unit of measure for water consumption that caused it to report incorrect water consumption amounts in its annual Measurement and Verification Report (“M&V Report”) and other communications to the HHC. Siemens also incorrectly reported guaranteed savings on the EPC and reported unauthorized increases in baseline consumption amounts in its annual reports to the HHC. We recommend that the HHC require Siemens to update its annual M&V Report to report water consumption amounts in the correct unit of measure, report guaranteed savings correctly, and report baseline consumption amounts that have been approved by HUD in its annual reports.

We also found that the HHC reported incorrect data on Form HUD 52722 - Operating Fund Calculation of Utility Expense Levels (“Form 52722”) because it relied on the Siemens’ M&V Reports to populate the Form 52722. Specifically, we found that the HHC over-reported actual water consumption for funding periods 2014 through 2020 on its annual submissions of Form 52722 by 3,485 thousand cubic feet (“MCF”), resulting in the under-calculation of the reported Base Utility Expense Level (“UEL”) by \$1,031,092.² As the UEL was under-reported because of the error, we concluded that the HHC was not overpaid LRPB operating subsidy. We recommend that the HHC identify the water consumption amounts and costs that are used to complete Form 52722 independently from the data provided by Siemens.

We found that HHC has the capacity to manage and provide quality control of its LRPB subsidy submissions, Forms 52722 and 52723, in accordance with federal regulations and statutes. It was in deference to Siemens and the M&V Reports produced under the EPC contract, not the lack of capacity, that the HHC used incorrect utility consumption data in its submissions for LRPB operating subsidy.

II. Objective

The objective of this review was to determine the HHC’s capacity to manage and provide quality control of the submission to request LRPB subsidy in accordance with federal regulations and statutes. Additionally, we were to determine whether HHC staff properly reported the annual consumption amount, cost, utility rate, and UEL for water, as reported by the HHC on Form 52722.

III. Scope

Our remote review started on October 23, 2019, and concluded on November 1, 2020. The review covered the funding years 2014 through 2020. We reviewed Form 52722 for the

¹ The term water includes both water and sewerage.

² In Roman numerals “M” in MCF and MGal means 1,000 and “C” in CCF means 100.

period and water bills provided by the HHC and the Hamtramck Water Department (“HWD”) from July 2012 through June 2019. We also reviewed the EPC and M&V Reports for the corresponding funding years. We conducted remote interviews with staff of the HHC, HWD, Siemens, DFO, and PIH's Financial Management Division.

IV. Background

Hamtramck Housing Commission. The HHC, located in Hamtramck, Michigan, is one of the oldest public housing agencies in the State of Michigan. Built in 1936 by the Civilian Conservation Corps, all the HHC’s original buildings are still in use. The HHC is an LRPH-only housing authority and operates an LRPH program consisting of 450 units in two Asset Management Projects (“AMPs”) as described below:

The HHC’s AMPs

Property	Name	Description
AMP1	Colonel Hamtramck Homes	300 family units and administration office in 36 buildings
AMP2	Hamtramck Senior Plaza	150 elderly and disabled units in an 8-story building and a maintenance building

The HHC is governed by a five-member Board of Commissioners appointed by the Mayor of Hamtramck. The HHC has a staff of fifteen employees, which includes the Executive Director, the Manager of Support Services, two Project Managers, seven Maintenance Technicians, an administrative assistant, and a tenant affairs specialist. Additionally, the HHC has retained a consultant from ADR Consultants to assist with operational affairs. ADR Consultants help with project development, compliance, cost reduction, and program management.

The HHC was rated as a high performer in the Public Housing Assessment System (“PHAS”) for the fiscal year ended December 31, 2018, with a score of 96 and had an occupancy rate of 98.2%. The audited financial statements for the fiscal years ending December 31, 2017 and 2018 did not note any findings.

Energy Performance Contract. In 2008, the HHC selected Siemens Industry, Inc. (an affiliate of Siemens) as its energy consultant, to perform an energy audit to identify possible energy conservation measures (“ECM”) to be carried out under an EPC.³ Using the energy audit, the HHC solicited bids from a small pool of contractors. Siemens was one of two responding bidders and the HHC selected Siemens as its contractor.

To encourage a Public Housing Authority (“PHA”) to make energy upgrades, EPCs provide financial incentives that can result in increased subsidy. On November 2, 2010, the DFO issued a letter approving the proposed terms of the EPC and authorizing the financial incentives that the HHC is entitled to receive under the EPC (the “Approval”). Housing authorities use a

³ Guidance for EPC contracting is found in PIH Notices 2008-22 and 2009-16, *Guidance on EPCs*, dated April 25, 2008, and June 12, 2009, respectively, and subsequently updated in Notice PIH 2011-36, *Guidance on EPCs*, issued on July 8, 2011 (collectively, PIH Guidance).

rolling three-year period as the basis to calculate future utility consumption when requesting their annual subsidy.⁴ Under the Approval, the rolling base consumption for each AMP is frozen during the 15-year contract term beginning with 2012, the year that the HHC accepted the completed ECM.⁵ In the Approval, the DFO froze the HHC's measured consumption during the period from July 2005 to June 2008. This three-year average is the HHC's Frozen Rolling Base ("FRB"). The Approval also included an adjustment to AMP1's original FRB.

On or around January 1, 2011, the HHC and Siemens executed an EPC to upgrade various components of the AMPs' building systems at a cost of \$2,470,268. The table below shows the original baseline along with the FRB set forth in the Approval and the EPC. Both the Approval and the EPC use 1,000 gallons ("MGal") as the unit of measure for water consumption.

FRB BASELINES

AMP	Original Baseline 2005-2008	FRB 2010 Approval	FRB 2011 EPC
AMP1	16,585 MGal	29,173 MGal	29,821 MGal
AMP2	20,187 MGal	20,187 MGal	20,187 MGal

The EPC includes the rationale for adjusting the AMP1 baseline upwards by roughly 56% from 16,585 to 29,821 MGal. To adjust the baseline, Siemens used historical data from six similar multifamily properties. According to Siemens, this data was used because the water meters at AMP1 were unreliable.

Under the EPC, Siemens guaranteed total annual consumption savings of 23,287 MGal and annual cost savings of \$117,608. Because of the uncertainty of future utility costs, EPC contractors cannot promise actual future cost savings. Therefore, EPC parties typically agree to a stipulated cost per unit of consumption with an escalation factor. The contractual cost savings under an EPC are not the same as dollar-for-dollar savings to a housing authority, rather a way to quantify potential savings at the outset of a long-term contract, while managing the risk of future cost fluctuations. If these guaranteed cost savings are not met, Siemens is financially liable for the differences as set forth in the EPC. Contractual cost savings are not relevant to funding.

Annually, Siemens consolidates and analyzes the data in a M&V Report.⁶ The first M&V Report for the period from July 1, 2012 to June 30, 2013, was released on July 1, 2014. According to the Approval, the HHC must submit the annual M&V Report to the DFO by April 30 of the following year. Exhibit 1 summarizes water consumption data from the seven M&V Reports for AMP1 and AMP2.

Siemens collected monthly consumption and cost data from the HWD online billing system and reported this data in its M&V Reports. The water bills in the HWD's online billing system did not indicate a unit of measure. Siemens used MGal, because that was the unit of measure reported in the original EPC. Per a representative from Siemens, via an email dated

⁴ The computation of utility subsidies is governed by 24 CFR 990.170, 990.175, and 990.180.

⁵ The frozen rolling base incentive is governed by 24 CFR 990.185

⁶ The EPC requires the HHC to provide the utility bills to Siemens monthly. The HHC stated that this was the initial practice, but eventually the HHC directed Siemens to the HWD's online system.

September 4, 2020, “[t]he monthly consumption amounts were taken directly from the third-party billing and mislabeled as Mgal by our Specialist, again because the third-party billing did not provide units and all the other documentation we had regarding units referenced either gallons or Mgal (gal *1000), so they had no reason to think the bills were in different units.” As a result, Siemens converted the usage data using the MGal to MCF conversion factor (See Exhibit 2) and gave the data to the HHC to complete Form 52722. When we compared what the HHC reported as consumption costs, provided by Siemens, to the consumptions costs we calculated for each funding year, we found large cost differences for both AMPs in funding years 2014 and 2015, the years HWD adjusted the consumption costs for the billing cycle. For AMP2, the costs of consumption that we totaled for each funding year from 2016 to 2020 were within a margin of error that would deem the differences immaterial. For AMP1, the differences in costs from 2016 to 2020 were more significant (See Exhibit 5 - Tables A and C). When we asked Siemens how the costs were tabulated, Siemens stated that “*actual costs were reported for informational purposes based on the available billing data. Monetary rates, used to determine realized savings for the M&V, were based on Utility Rate Structures and Escalation Rates*” (see Exhibit 4). Based on written and oral communication with the HWD, we recreated Form 52722 to reflect both the actual usage amounts and the correct amount billed (See Exhibit 5 – Table C).

We found errors in the M&V Reports. The executive summaries in the reports for program years 1, 2, 3, and 4 show guaranteed savings different than those established in the EPC. Siemens finally corrected the error in Year 5. We also found that Siemens used different baselines for AMP1. The reports for Years 1, 2, and 3 used the baseline from the Approval (29,173 MGal), while Years 4 and 5 used the slightly higher baseline from the EPC (29,821 MGal), without explanation. The HHC did not submit a baseline adjustment request for Years 4 and 5. For Years 6 and 7, Siemens adjusted the baseline to 40,596 MGal, because of the installation of new meters in 2017.⁷ An adjustment to the baseline requires approval from HUD.⁸ The HHC submitted a baseline adjustment request to the DFO for Years 6 and 7 per Siemens’ request, but HUD declined to consider it, because of ongoing subsidy reviews and thus, the HHC demanded that Siemens remove it from its M&V reports without success.

The HHC is not satisfied with Siemens' performance and has taken legal action to address unresolved issues. There was an initial mediation in early 2020, but it has not been finalized. Our interviews with Siemens were delayed while they obtained clearance from legal counsel to talk to us. We were not able to interview Siemens’ staff working directly on the EPC, but only spoke with senior managers who were not aware of the specifics of the HHC EPC and could not clarify our questions on usage data, compilation of bills, and baseline adjustments.

HWD Billing Information. Our review of correspondence between Siemens and the HHC indicated that collecting accurate consumption amounts was an issue since the inception of the EPC, because the meters lacked auto-read functionality and because some of the HWC bills were estimated. According to the HHC, for its first M&V Report, a Siemens employee went to AMP1 to collect actual readings from the meters. The estimated bills were “trued up” by site

⁷ Raising the baseline makes it easier for Siemens to meet its EPC obligations for consumption and cost savings.

⁸ The Approval requires the HHC to obtain HUD approval when a proposed adjustment has an impact greater than 10% of the original savings. The EPC states that Siemens can adjust the calculated savings for variations in consumption, because of factors such as weather, malfunctioning equipment, recalibration, or replacement of meters.

visits by HWD staff within two years. The HWD's online billing system is accessible to the public, but the HHC provided hard copy bills to our office. The unit of measure was reported on the hard copy bills, however the hard copy bills provided to us did not cover the entire review period. Because of this, we used the bills from the online system for our analysis.

In 2017 and 2018, the HWD installed three new meters with auto-read capability. Since the installation of the new meters for AMP1, 80% of the bills for the administration building and 66% of the bills for the residential buildings use the auto-read feature. For AMP2, 100% of the bills for the maintenance building use the auto-read feature. The AMP2 residential building has not been equipped with an auto-read meter (see Exhibit 3).

During our review of the HWD bills, we found three instances of large fluctuations in consumption as well as other minor discrepancies between the paper bills and the online bills. When asked to clarify these discrepancies, the HWD explained that two of the three instances offset each other within a period of six months, but these offsets spanned two different funding years. The third instance was a credit to the HHC for which the HWD could not provide a justification.

V. Results of the Review

The HHC's Oversight of the EPC. We could not find HUD regulations or statutes pertaining to compliance between an EPC contractor and a housing authority. We found that the HHC's staff did not clearly understand its responsibilities relative to completing Form 52722. There is confusion regarding whether Siemens is obligated to provide the data to populate Form 52722. Instead of using the consumption and cost data from the water bills, the HHC believes Siemens is required to provide this data to complete Form 52722, including providing converted consumption numbers. The EPC neither requires this conversion, nor Siemens to assist the HHC in its funding applications, however the parties have established this collaboration since the beginning of the EPC. We found that the HHC is otherwise knowledgeable about the water consumption measures pertaining to the EPC and its applications and can manage its EPC. Written and oral communication with the HHC supports this conclusion. In 2017, the HHC hired a consultant to assist with the HHC's operations, including overseeing the EPC and verifying consumption data from Siemens and the HWD. The consultant has improved the HHC's capability to manage the EPC.

Form HUD 52722. The consumption and cost data used in Form 52722 are the sum of the 12 monthly water bills for each year. Both the HHC and Siemens receive billing information (consumption amounts and costs) via the HWD's physical bills and its online billing system. Siemens takes the billing information from the HWD bills and reports this data to the HHC via its M&V reports and email communications. The HHC then completes its annual Form 52722 with the consumption and cost data provided by Siemens.

The HWD reports water consumption in units of 100 cubic feet ("CCF").⁹ However, Siemens incorrectly reported water consumption as **MGal** in its M&V reports (See Exhibit 1).

⁹ Our review of the City of Hamtramck's ordinances from 2009 and 2020 show the use of CCF as the unit of measure for water.

Siemens then converted the consumption amount to MCF, the unit of measured required for Form 52722, using the MGal to MCF conversion formula (See Exhibit 2).

The data in Form 52722 are used to calculate an UEL by applying the FRB incentive. The resulting UEL from the completed Form 52722 is converted into per unit-month amounts and is then incorporated into the annual Form 52723, which is used by HUD to set the LRPB subsidy amount for the subsequent funding year.

Tables A, B, and C in Exhibit 5 represent a summary of the HHC Forms 52722 for funding years 2014 through 2020 prepared by the various organizations involved. Form 52722 has pre-defined formulas that calculate the average utility rate and the UEL using the pre-populated FRB amount from the PIH tool. In these tables, each row under the funding year header corresponds with a line item on the Form 52722. The average utility rate (Line 17) is determined by dividing the utility cost (Line 16) by the consumption amount (Line 1). The UEL (Line 18) is determined by multiplying the FRB (Line 15) by the average utility rate (Line 17).

Table A displays a summary of the Form 52722 that the HHC submitted to the DFO using the data provided by the Siemens M&V Reports. The consumption and the cost amounts were manually entered by the HHC using the consumption amounts that Siemens had erroneously recorded in MGal instead of CCF before converting them to MCF. As a result, water consumption was over-reported by approximately 33%.

Upon a review of the HHC's subsidy application, PIH found discrepancies in the HHC's Form 52722 submission for 2018. Using the consumption amounts reported on the HWD bills, PIH recalculated the HHC's Form 52722 for 2018 and found that the UELs were less than what the HHC had reported for both AMPs. For example, in funding year 2018 for AMP1 (highlighted in yellow), Table A reports consumption at 655 MCF, average utility rate at \$69.29 per unit, and the UEL at \$270,249. In contrast, Table B reports consumption at 4,899 MCF, average utility rate at \$13.30 per unit, and UEL at \$51,881. However, PIH had erroneously entered the amount of water consumption on this form in CCF using the consumption amounts reported on the HWC bills when Form 52722 requires the consumption amount to be entered in MCF. As a result, the water consumption listed was over-reported tenfold in the Form 52722 prepared by PIH for 2018.

The numbers for each of the funding years in Table B formed PIH's concern that the HHC was overpaid LRPB operating subsidy based on the relationship between the UEL and LRPB subsidy. First, there is an inverse relationship between the consumption amount and both the average utility rate and the UEL. The lower the consumption, the greater the average utility rate and the UEL. Second, there is a direct relationship between the UEL and the LRPB operating subsidy. The greater the UEL, the greater the LRPB operating subsidy. The referral to our office was based on PIH erroneously concluding that the HHC may have over-reported UEL, by under-reporting consumption not only for 2018, but also for the years, both prior and after 2018, further resulting in the overpayment of LRPB subsidy to the HHC.

When we examined the Forms 52722 prepared by the HHC and by PIH, we found that both the HHC and PIH prepared forms had under-reported the UEL by over reporting water consumption, but by different degrees. Table C shows the average utility rates and UELs when

the HHC's water consumption was properly converted from the units of consumption reported on the HWC bills to the units of consumption required on the Form 52722. The result was average utility rates and UELs that are greater than those the HHC submitted in each funding year for AMP1. For AMP2, average utility rates and UELs are less than what the HHC reported in funding years 2014 through 2016 and greater than reported in years 2017 through 2020.

For example, Table C reports consumption at 490 MCF, average utility rate at \$133 per unit, and the UEL at \$518,708 for AMP 1 in 2018. The correct consumption amount is 165 MCF lower than the consumption amount reported in the Form 52722 submitted by the HHC. The correct UEL is \$248,459 more than the UEL listed in the Form 52722 by the HHC. Comparing the UEL totals in Tables A and C over the review period, AMP1's UEL in Table C was greater than the UEL in Table A by \$794,295 and AMP2's UEL was greater by \$236,798, for a total difference of \$1,031,092.

Since an increase in UEL results in an increase in LRPH operating subsidy, we conclude that HUD did not overpay LRPH operating subsidy because of the errors in the HHC's Form 52722 submissions. Instead, the errors in reporting water consumption may have resulted in the underpayment of subsidy to the HHC. Any additional payments due to the HHC would be determined by recalculating Form 52723, which is outside of the scope of our review.

VI. Recommendations

- The HHC should use the annual consumption amounts and costs from the HWD bills and ensure that the consumption amounts are recorded in the same unit of measure as the pre-populated FRB amounts (i.e., MCF) that are used to complete Form 52722.
- The DFO should increase its oversight of the data entered in the HHC's Form 52722 submissions to ensure their accuracy and that of the resultant subsidy payments.
- HHC should require Siemens to update its annual M&V Reports to correctly report water consumption, to correctly report guaranteed savings amounts, and to only use the baseline consumption amounts that have been approved by HUD.

VII. Exhibits

1 - M&V and HWD water usage reporting

YEAR	AMP 1 HWD (CCF)	AMP 1 M&V (MGal)	AMP 2 HWD (CCF)	AMP 2 M&V (MGal)
FY 2014	22,230	9,480	4,604	2,762
FY 2015	9,327	9,827	5,878	6,259
FY 2016	9,901	9,900	2,076	2,084
FY 2017	5,096	5,114	2,080	2,048
FY 2018	4,899	4,900	2,178	2,161
FY 2019	17,015	16,376	2,122	2,128
FY 2020	14,339	13,904	2,132	2,135

2 – Conversion Table (Based on 7.48 gallons of water in a cubic foot of water)

Quantity	MGal	CCF	MCF
1 MGal (1000 Gal)	N/A	1.337 CCF	0.1337 MCF
1 CCF (100 Cubic Feet)	0.748 MGal	N/A	0.1000 MCF
1 MCF (1000 Cubic Feet)	7.480 MGal	10.00 CCF	N/A

3 – Water Meters

AMP Number	Operating Fund Project Number	Project Name	Description	Meter Size	Account Number
AMP1	MI 004 0000 01	Col. Hamtramck Homes -Administration Bldg.	Commer - 1 office building	6"	1101124
AMP1	MI 004 0000 01	Col. Hamtramck Homes - Homes	Dequindre - 36 low rise buildings containing 300 units	6"	1101126
AMP2	MI 004 0000 02	Col. Hamtramck Senior Plaza - Senior Bldg.	Holbrook -1 high rise containing 150 units	3"	0108045
AMP2	MI 004 0000 02	Col. Hamtramck Senior Plaza - Maintenance Bldg.	Holbrook - 1 maintenance building	1.5"	0108047

4 – Utility Rate Structures and Escalation Rates

Table 6.1.3 Water / Sewer	
Tariff Number or Designation:	Colonel Hamtramck
Utility Name:	City of Hamtramck
Rate Structure:	6.57 \$ per MGal
Rate Escalation:	3.50 % per Annual Period
Tariff Number or Designation:	Senior Plaza
Utility Name:	City of Hamtramck
Rate Structure:	4.08 \$ per MGal
Rate Escalation:	3.50 % per Annual Period

5 – Table A – HHC’s Form 52722 data created with Siemen’s erroneous usage data

Colonel Hamtramck-AMP 1

FUNDING YEAR	HHC 2014	HHC 2015	HHC 2016	HHC 2017	HHC 2018	HHC 2019	HHC 2020	Totals
Actual consumption (MCF) Line 1	1,267	3,633	1,323	681	655	2,381	1,859	11,799
Rolling base (frozen) (MCF) Line 15	3,987	3,900	3,900	3,900	3,900	3,900	3,900	
Actual cost of consumption (\$) Line 16	\$137,808	\$347,260	\$108,957	\$37,171	\$45,388	\$201,118	\$143,707	\$1,021,409
Actual average utility rate (\$) Line 17	\$108.77	\$95.58	\$82.36	\$54.58	\$69.29	\$84.47	\$77.30	
Base utility expense level (\$) Line 18	\$433,655	\$372,781	\$321,188	\$212,874	\$270,249	\$329,425	\$301,483	\$2,241,655

Senior Plaza-AMP 2

FUNDING YEAR	HHC 2014	HHC 2015	HHC 2016	HHC 2017	HHC 2018	HHC 2019	HHC 2020	Totals
Actual consumption (MCF) Line 1	369	366	207	275	289	284	285	2075
Rolling base (frozen) (MCF) Line 15	2,699	2,699	2,699	2,699	2,699	2,699	2,699	
Actual cost of consumption (\$) Line 16	\$42,255	\$44,690	\$24,225	\$25,510	\$28,193	\$27,651	\$27,353	\$219,877
Actual average utility rate (\$) Line 17	\$114.51	\$122.10	\$117.03	\$92.76	\$97.55	\$97.36	\$95.98	
Base utility expense level (\$) Line 18	\$309,068	\$329,558	\$315,861	\$250,369	\$263,297	\$262,782	\$259,038	\$1,989,973

5 -Table B – Form 52722 Data for the HHC created by the DEC using HWC’s usage data with the same unit of measurement used by PIH in its analysis of the 2018 data

Colonel Hamtramck-AMP 1

FUNDING YEAR	2014	2015	2016	2017	2018	2019	2020	Totals
Actual consumption (MCF) Line 1	22,230	9,327	9,901	5,096	4,899	17,015	14,339	82,807
Rolling base (frozen) (MCF) Line 15	3,900	3,900	3,900	3,900	3,900	3,900	3,900	
Actual cost of consumption (\$) Line 16	\$201,169	\$96,659	\$110,585	\$61,474	\$65,171	\$199,111	\$146,449	\$880,618
Actual average utility rate (\$) Line 17	\$9.05	\$10.36	\$11.17	\$12.06	\$13.30	\$11.70	\$10.21	
Base utility expense level (\$) Line 18	\$35,293	\$40,417	\$43,559	\$47,046	\$51,881	\$45,638	\$39,832	\$303,666

Senior Plaza-AMP 2

FUNDING YEAR	2014	2015	2016	2017	2018	2019	2020	Totals
Actual consumption (MCF) Line 1	4,604	5,878	2,076	2,080	2,178	2,122	2,132	21,070
Rolling base (frozen) (MCF) Line 15	2,699	2,699	2,699	2,699	2,699	2,699	2,699	
Actual cost of consumption (\$) Line 16	\$45,020	\$59,183	\$24,232	\$25,900	\$28,509	\$26,592	\$27,538	\$236,974
Actual average utility rate (\$) Line 17	\$9.78	\$10.07	\$11.67	\$12.45	\$13.09	\$12.53	\$12.92	
Base utility expense level (\$) Line 18	\$26,392	\$27,175	\$31,504	\$33,608	\$35,329	\$33,823	\$34,862	\$68,685

5 – Table C - Form 52722 Data for the HHC created by the DEC using HWC’s usage data

Colonel Hamtramck-AMP 1

FUNDING YEAR	2014	2015	2016	2017	2018	2019	2020	Totals
Actual consumption (MCF) Line 1	2,223	933	990	510	490	1,702	1,434	8,282
Rolling base (frozen) (MCF) Line 15	3,900	3,900	3,900	3,900	3,900	3,900	3,900	
Actual cost of consumption (\$) Line 16	\$201,169	\$96,659	\$110,585	\$61,474	\$65,171	\$199,111	\$146,449	\$880,618
Actual average utility rate (\$) Line 17	\$90.49	\$103.60	\$111.70	\$120.54	\$133.00	\$116.99	\$102.13	
Base utility expense level (\$) Line 18	\$352,928	\$404,041	\$435,638	\$470,095	\$518,708	\$456,247	\$398,292	\$3,035,949

Senior Plaza-AMP 2

FUNDING YEAR	2014	2015	2016	2017	2018	2019	2020	Totals
Actual consumption (MCF) Line 1	460	588	208	208	218	212	213	2107
Rolling base (frozen) (MCF) Line 15	2,699	2,699	2,699	2,699	2,699	2,699	2,699	
Actual cost of consumption (\$) Line 16	\$45,020	\$59,183	\$24,232	\$25,900	\$28,509	\$26,592	\$27,538	\$236,974
Actual average utility rate (\$) Line 17	\$97.87	\$100.65	\$116.50	\$124.52	\$130.78	\$125.43	\$129.29	
Base utility expense level (\$) Line 18	\$264,150	\$271,658	\$314,434	\$336,077	\$352,962	\$338,546	\$348,944	\$2,226,771



Minnesota Housing Finance Agency

Snapshot Review

St. Paul, Minnesota

7/26/2021

X Mark G. Borum

Mark G. Borum

DEC, Deputy Director

Signed by: MARK BORUM

for

Craig T. Clemmensen, Director

Departmental Enforcement Center

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I. Executive Summary

HUD's Office of Multifamily Housing (MFH) made a referral to the Departmental Enforcement Center (DEC) to perform a review of the Minnesota Housing Finance Agency ("the MHFA") to assess the MHFA's compliance with the provisions of HUD's risk-share (RS) regulations at 24 CFR 266, *Housing Finance Agency Risk Share Program for Insured, Affordable Multifamily Project Loans* ("RS Regulations"). The objectives of the review were to evaluate the MHFA's compliance with its approved underwriting and applicable RS program guidelines, and to evaluate the MHFA's financial condition. The scope of our review included active loans initially endorsed from August 23, 2013, through February 20, 2020, and the MHFA's audited financial statements (AFS) for the fiscal years ending June 30, 2018, 2019, and 2020. The review was conducted remotely from December 7, 2020, through March 3, 2021.

Out of 243 loans in the Minnesota Housing Low- and Moderate-Income Rental Procedural Guide (LMIRPG) portfolio, 102 are RS Level I and two are Level II loans. We randomly selected ten Level I RS loans and reviewed each loan file and supporting documentation, including closing dockets, as well as loan servicing and asset management documentation to determine program compliance.

Our review found that for ten out of ten loan files, the owners provided to the MHFA documentation that was incomplete and, as a result, the files provided from the MHFA for this review were incomplete. We recommend that the MHFA implement procedures to ensure that all future documentation provided by the owners is complete.

The HUD Community Planning and Development (CPD) Region V Environmental Officer ("HUD EO") has not conducted in-depth environmental monitoring of the MHFA as a Responsible Entity (RE), as required by HUD Handbook 4590.01 REV-1, *Housing Finance Agency Risk-Sharing Pilot Program* ("Handbook") at Section 7-6(B). We recommend that MFH request that the HUD EO conduct the required in-depth environmental monitoring.

As required by the Handbook and by the RS agreements (RSA) between the MHFA and HUD ("HUD RSA") and between the MHFA and the Federal Financing Bank ("FFB RSA"), the MHFA failed to submit physical condition documentation to HUD. Specifically, the MHFA failed to submit its inspection report of one project along with, either: a) a certification that the project was in compliance with the physical conditions requirements; or b) a plan of physical deficiency corrective actions with target completion dates. We recommend that the MHFA submit this documentation timely going forward and that MFH monitor the MHFA for such timely submissions.

To evaluate the financial condition of the MHFA, we performed a trend analysis of the AFS for fiscal years 2018, 2019, and 2020. We also reviewed the MHFA's financial performance since Standard and Poor's Global Ratings Direct ("S&P") increased the long-term issuer credit rating to AAA/Stable on July 15, 2020, from AA+/Stable on August 13, 2019. The June 30, 2020, AFS reported an increase of mortgage-backed securities (MBS) forbearances resulting from the COVID-19 pandemic. According to the S&P report, the MHFA has announced a forbearance program for its multifamily loans, overcollateralized the agency's rental

housing bond resolution, and increased liquidity to mitigate any near-term decline in mortgage payments resulting from forbearance or delinquencies related to the pandemic. We conclude that the MHFA is taking adequate measures to prevent a future downward rating adjustment below the required A rating.

II. Objectives

The objectives of our review were to evaluate the MHFA's compliance with its approved underwriting guidelines and program requirements found in the RS Regulations, HUD RSA, FFB RSA, the Handbook and MFH's monitoring checklists ("Checklists"); and to assess the financial condition of the MHFA.

III. Scope

The scope of our review included analyses of active loans initially endorsed from August 23, 2013, through February 20, 2020, and the MHFA's AFS for the fiscal years ending June 30, 2018, 2019, and 2020.

We reviewed the MHFA's underwriting guidelines, asset management, and loan servicing policies and procedures from loan origination, through construction, final endorsement, asset management, and loan servicing.

We performed telephone interviews from November 30, 2020, through December 4, 2020. We conducted interviews with Kevin Carpenter, the MHFA's Chief Financial Officer, Jessica Deegan, Director of Federal Programs, James Lehnof, Assistant Commissioner for Multifamily, and staff from underwriting, servicing, asset management, and those with financial reporting duties. The following Level I loans were reviewed:

- Sunset Ridge Apartments ("The Ridge") - FHA# 092-98106
- Rochester Square Apartments ("The Square on 31st") - FHA# 092-98111
- Pine Ridge Apartments - FHA# 092-98136
- Hamline Station - FHA# 092-98124
- Meadows Townhomes - FHA# 092-98142
- Grand Terrace Apartments - FHA# 092-98144
- Valley View Apartments - FHA# 092-98154
- Dublin Crossing - FHA# 092-98147
- Northcrest Townhomes - FHA# 092-98177
- Cedarview Commons - FHA# 092-98160

The findings and recommendations included in this report that are not expressly related to RS program requirements are made to promote MFH's best practices for HFAs as delineated in the Checklists.

IV. Background

“Section 542 of the Housing and Community Development Act of 1992 directs the Secretary of HUD to carry out programs that will demonstrate the effectiveness of providing new forms of federal credit enhancement of multifamily loans.”¹ Section 542(c) provides credit enhancement for mortgages of multifamily housing projects through a system of RS agreements with housing finance agencies (HFA). Participating qualified state and local HFAs may originate and underwrite affordable housing loans including new construction, substantial rehabilitation, refinancing, and housing for the elderly. The program provides full FHA mortgage insurance to enhance bonds to investment grade. HFAs may elect to share from 10 to 90 percent of the risk on any RS loan with HUD. In the event of a claim pursuant to the terms of the RSAs, the HFA reimburses HUD for its portion of the loss. The MHFA entered into the HUD RSA on May 3, 1994, and executed the separate FFB RSA on November 16, 2015. The MHFA is a HUD-approved Level I participant (assumes at least 50% of the risk) and Level II participant (assumes less than 50% of the risk).

The MHFA is located in St. Paul, Minnesota. It is a public corporation and an instrumentality and agency of the State of Minnesota. The MHFA is governed by an appointed six-member Board of Directors (the “Board”). The Board appoints a Commissioner.

The MHFA makes loans for the acquisition, construction, and rehabilitation of housing available to low- and moderate-income persons and families. The MHFA finances mortgages through bond sales and selling loans directly in the capital market. The MHFA receives annual credit ratings from Moody’s Investor Services and S&P.

V. Results of Review

A. General Operations

We reviewed the MHFA’s closing and endorsement documentation in accordance with the RSAs, Chapters 6 and 7 of the Handbook and the Checklists.

The MHFA provided evidence that closing dockets were submitted to HUD within 90 days of closing for each loan in the sample as provided in the Checklists.

The MHFA runs annual watchlist reports with sufficient categories to warn of pending defaults. An analysis score of 255+ is considered troubled. As of June 30, 2020, the MHFA had four loans that were troubled, but none of these loans were part of our sample.

Per 24 CFR § 266.100(a)(5), the MHFA is required to have at least five years’ experience in underwriting. Based on interviews conducted with MHFA staff and review of staff profiles, and the fact that the MHFA has been active in the RS program since 1994, we determined that the MHFA has the requisite experience.

¹ Section 542 of the Housing and Community Development Act of 1992 (12 U.S.C. 1707 1715z-22).

Section 7-3(C)(2) of the Handbook states that the HFA must provide annual certifications that there was no basic change in organization, business activities, or financial status and that the HFA complied with all eligibility requirements during the past year. The 2018, 2019, and 2020 annual certifications were included with the first quarter watchlist.

B. Underwriting Loan Review and Origination

Per 24 CFR § 58.77(d)(1), and Section 7-6(B)(3) of the Handbook, the HUD EO intends to conduct in-depth monitoring of the RE every three years unless MFH requests more frequent monitoring. The MHFA is the designated RE. According to the MHFA and MFH staff, no environmental monitoring of the RE has ever taken place and no review has been requested or scheduled with the HUD EO.

In accordance with 24 CFR § 58.4, each HFA RE performs environmental reviews of projects and submits certifications to HUD.² The project files revealed that environmental reviews had been conducted by the MHFA; as evidenced by documentation related to environmental, socioeconomic, community facilities and services, natural features, and other factor assessment checklists. Two project files, those for Hamline Station and Rochester Square, also included response action plans relative to environmental findings. The files documented that all issues were resolved, and notification was provided to HUD. There were no public comments in the review files.

We reviewed the MHFA's Minnesota Housing Multifamily Underwriting Standards (MHMUS) from 2013 to 2020 and found that the initial deposit requirements are not specified in the MHFA's MHMUS or LMIRPG as provided for in the Checklists. The MHFA stated that it is aware of this deficiency and is currently updating the 2021 MHMUS and LMIRPG to address initial deposit requirements for real estate and insurance escrow deposits. The MHFA provided no documentation of required escrow deposits at closing. We were unable to determine if the escrow accounts were fully funded at closing.

C. Asset Management and Servicing

We found that the documentation provided by the owners to the MHFA for ten out of ten loan files was incomplete. See Exhibit B for a complete list of asset management file deficiencies. Other deficiencies include:

1. Semi-Annual Report- Per 24 CFR § 266.115, the MHFA is required to submit the semi-annual report on its portfolio to HUD. The MHFA's fiscal year end is June 30 and the MHFA has opted to submit semi-annual reports as of March 31 and October 31. According to the MFHA's staff, the MFHA did not comply with internal procedures that require submission to HUD of semi-annual reports for October 31, 2018, 2019, or 2020. Also, the March 31, 2018, 2019, and 2020

² Per 24 CFR § 58.2(a)(7)(ii)(A), the RE for an HFA is the state, unit of general local government, Indian tribe, or Alaska native village whose jurisdiction contains the project site.

semi-annual reports did not include the original principal amounts of the mortgages, status of mortgages, and default ratios.³

2. Physical Inspections- Per CFR §266.510(a), and as required by Article III(U) of the HUD RSA, and Article II(S) of the FFB RSA, the MHFA is required to conduct annual physical inspections. Cedarview Commons and Grand Terrace were endorsed on November 5, 2018 and July 6, 2018, respectively. During 2019, the MHFA did not conduct physical inspections for either of these projects. Since March 2020, physical inspections have been postponed until further notice, because of the pandemic. The MHFA is currently developing a remote inspection strategy that has yet to be approved.

3. Documentation relative to Physical Inspection Deficiencies and Reports to HUD- During an annual physical inspection of Dublin Crossing, conducted by the MHFA in August 2019, physical deficiencies were identified, and a work order was prepared to correct these deficiencies. Per Section 7-6(C)(3)(C)(1) of the Handbook, the MHFA must submit copies of all physical inspection reports to HUD and provide either: a) a certification that the project was in compliance with the physical conditions requirements; or b) a plan of physical deficiency corrective actions with target completion dates. We found no evidence in the file that HUD had been provided with inspection reports or that the deficiencies had been corrected.

4. Owner AFS- According to the MHFA’s policy, owners must submit AFS to the MHFA within 60 days after the end of the fiscal year. We found that, over the last three years, nine out of ten projects had at least one instance of a late submission to the MHFA. According to the MHFA, because of the pandemic, all projects in the portfolio were provided leniency to file the 2019 AFS.

Dates AFS Received by the MHFA				
<i>Project Names</i>	<i>FYE</i>	<i>2017</i>	<i>2018</i>	<i>2019*</i>
Sunset Ridge Apartments	12/31	6/2/2018 (94 days late)	3/5/2019 (5 days late)	3/2/2020
Rochester Square Apartments	12/31	3/26/2018 (26 days late)	4/3/2019 (34 days late)	5/20/2020
Pine Ridge Apartments	12/31	3/30/2018 (30 days late)	4/17/2019 (48 days late)	8/4/2020
Hamline Station	12/31	6/4/2018 (96 days late)	5/15/2019 (76 days late)	7/23/2020
The Meadows	12/31	Not Available (N/A)	4/5/2019 (36 days late)	3/31/2020
Grand Terrace	12/31	N/A	3/26/2019 (26 days late)	4/1/2020
Valley View	12/31	N/A	N/A	8/20/2020

* The MHFA allowed late filing of the AFS.

³ Section 7-3(C)(1) of the Handbook requires that the semi-annual report include the original mortgage amount and outstanding principal balance for all projects underwritten, the status of all projects (current, in default, workout, foreclosure, etc.), and, if applicable, the date(s) bankruptcy was filed and the date(s) the HFA requested dismissal.

5. Submission of AFS to HUD- Per CFR §266.510(b), and per paragraphs Article III(V) of the HUD RSA and Article II(T) of the FFB RSA, the MHFA is required to analyze each owner's AFS within 30 days of the date of the audit. Through email exchanges with both MFH and the MHFA, we found that neither the MHFA nor HUD log the timely or late submission of AFS to HUD. Therefore, we cannot determine whether any of the audits in our loan sample were submitted to HUD within 30 days of the date of the audit.

D. Financial Condition

To evaluate the overall financial condition of the MHFA, we performed a trend analysis of financial ratios derived from the MHFA's AFS for the fiscal years ending June 30, 2018, 2019, and 2020, and compared them to the conclusions drawn by the July 15, 2020, S&P credit review. From the audit year ending June 30, 2019, to June 30, 2020, S&P raised the MHFA's rating from AA+ to AAA. The S&P report states that the MHFA's upgraded rating is partially the result of the MFHA's "rental bond resolution's significant overcollateralization of assets to liabilities...[and] very strong performance of the rental housing mortgage loan portfolio with extremely good delinquency statistics and the agency's strong oversight; and cash flow demonstrating the program's ability to fully pay bondholders with revenues, without the support of available funds from the General Obligation pledge." The analysis identified one unlikely scenario, stating "if the agency's rental housing resolution asset-to-liability ratio were to significantly deteriorate to the extent that a dependence on general reserves appeared to be a possibility" the MHFA rating could be lowered from the AAA rating.

On October 26, 2020, S&P published a nationwide review of 23 HFAs which evaluated trends from 2010 to 2019. The report's forecast found that the MHFA's 2019 AA+ rating was consistent with 19 other HFAs (87%), which received AA-, AA, or AA+ ratings. Only one HFA received an AAA performance rating. The increase to an AAA credit rating in 2020 elevates the MHFA to one of the top-rated HFA's in the country.

Because the MHFA does not differentiate between current and long-term assets and liabilities, we were unable to perform a ratio analysis using the agreed-upon DEC/MFH HFA Financial Checklist ("Financial Checklist"). The MHFA's Chief Financial Officer explained that the nature of the MFHA's business requires constant changes in loans receivable and outstanding debt that would normally be classified as long-term assets and liabilities. When Borrowers exercise their right to prepay their mortgages, assets that are normally classified as long-term are written down. Similarly, the retirement of bonds used to finance these mortgages requires the reduction of debt normally classified as long-term. The random timing of such transactions blurs the distinction between short-term and long-term assets and liabilities. The MHFA's auditor stated in the Notes to the 2020 AFS "[s]ince the business of the Agency is essentially that of a financial institution having a business cycle greater than one year, the statement of net position is not presented in a classified format."

Instead, to achieve similar ratios to those required in the Financial Checklist, we evaluated the MHFA based on our independent ratio analysis from 2018 through 2020. We found positive trending ratios such as interest spread, net interest margins, asset to loan ratios, and return on assets. The MHFA maintains strong key financial indicators, including the loans

to assets ratio of 88%, net interest margin of .90%, and continually rising assets of \$4.88 billion as of June 30, 2020, which is a 28% increase since 2018. As a result of the pandemic, the MHFA reported an increase in MBS delinquencies from 2.5% in 2019 to 9.1% in 2020. Per the 2020 AFS, because of the pandemic, borrowers with mortgage loans as part of the MBS portfolio were permitted 360 days of payment forbearance under the CARES Act. The MBS loan payments are guaranteed by the Government National Mortgage Association, Fannie Mae, or Freddie Mac and are not considered delinquent.

The MHFA increased investments to MBS by \$1,032,905 from June 30, 2018, to June 30, 2020, an increase of 48%, while total liabilities only increased by \$837,527, an increase of 28%. As a result of increased assets, the MHFA's equity grew 28%, from \$3,859,078 to \$4,926,666. The MHFA has mitigated future risks by increasing assets against liabilities through overcollateralization, implementing a forbearance program in response to the pandemic, and increasing MBS while maintaining stable bond liabilities and delinquency rates. We conclude that the MHFA's financial condition is strong and will not drop below the required A rating.

VI. Recommendations

Best Practices:

1. The MHFA should update the MHMUS to include escrow amounts for real estate taxes, property and liability insurance expenses, and include required deposits in the loan agreement.
2. The MHFA should create an internal system to track the timely submission of project AFS to the MHFA.
3. The MHFA should create an internal system to track the timely submission of its own AFS to HUD.

Regulatory:

1. MFH should work with CPD to ensure timely environmental monitoring of the MHFA in accordance with 24 CFR § 58.77(d)(1), and Section 7-6(B)(3) of the Handbook.
2. Per 24 CFR § 266.115(d)(2), the MHFA should ensure that internal procedures are followed, and semi-annual reports are prepared and submitted to HUD for October 31 for each year. The MHFA should also review the requirements for semi-annual report submissions to ensure correct reporting and provide training to staff on these requirements.
3. Per CFR §266.510(a), and as required by the HUD RSA Article III(U), the MHFA should conduct the overdue annual physical inspections for Cedarview Commons and Grand Terrace as soon as practically feasible.
4. Per the Handbook, HUD RSA and FFB RSA, the MHFA should provide to HUD each physical inspection report either: a) a certification that the project was in compliance with the physical conditions requirements; or b) a plan of physical deficiency corrective actions with target completion dates.

5. In accordance with MHFA's internal policies, the MFHA should notify prior year untimely AFS filers of required deadlines and take appropriate actions to ensure compliance.

Exhibit A: Development/Underwriting Loan File Deficiencies

Project Name	Deficiencies
1. Cedarview Commons 2. Dublin Crossing 3. Hamline Station 4. Meadows Townhomes 5. Pine Ridge 6. Northcrest Townhomes 7. Sunset Ridge Apartments 8. Rochester Square Apartments 9. Valley View Apartments 10. Grand Terrace	1. The MHFA provided no documentation of required escrow deposits at closing. The initial deposit requirements are not specified in the MHMUS and LMIRPG Guideline Book

EXHIBIT B: Asset Management File Deficiencies

Project Name	Deficiencies
1. Cedarview Commons 2. Hamline Station 3. Meadows Townhomes 4. Pine Ridge 5. Northcrest Townhomes 6. Sunset Ridge Apartments 7. Rochester Square Apartments 8. Valley View Apartments 9. Grand Terrace	1. No evidence open audit findings were sent to HUD w/ correction plan and target date within 6 months. 2. No evidence the audits were timely submitted to HUD
10. Dublin Crossing	1. October 24, 2019 MHFA conducted a property inspection and noted multiple physical deficiencies. There is no evidence that HUD was provided with inspection reports, or a) certifications that the project was in compliance with the physical conditions requirements; or b) plans of physical deficiency corrective actions with target completion dates. 2. No evidence open audit findings were sent to HUD w/ correction plan and target date within 6 months. 3. No evidence the audits were timely submitted to HUD