October 30, 2025

Mr. Dwayne Alexander
Virgin Islands Housing Authority (VIHA)
9900 Oswald Harris Court
St. Thomas, USVI 00802-3100

RE: 2025 Utility Allowance Study for all VIHA St. Thomas Developments
Virgin Islands Housing Authority (VIHA)
Rate adjustment calculation based on *24 CFR 982.517(c)*

Dear Mr. Alexander:

In accordance with our agreement, Creative Housing Solutions, Inc. (CHS) prepared a utility allowance study for the following nine (9) VIHA Developments on St. Thomas:

1. Oswald E. Harris Court
2. Estate Bovoni Apartments
3. Paul M. Pearson Garden
4. H.H. Bergs Homes
5. Addition to H.H. Bergs Homes
6. Lucinda A. Millin Home
7. Michael J. Kirwan Terrace
8. The Knolls at Contant
9. Sugar Estates

This study was used to create a Utility Allowance (UA) based on the existing units as observed during previous inspections. Note: if the units are refurbished or differ from that observed during the walkthrough, the UA values will be affected and the UAs will need to be recalculated to reflect the actual improvements made to the property. Otherwise, the UAs described in this report will be invalid.

The Utility Allowance study was conducted in accordance with HUD's Engineering Method protocol and guidance from the latest *HUD 24 CFR 982.517*. Although this analysis is scientific in its approach, actual utility costs experienced by the residents will vary from the UA values determined by this study. This is due to numerous variables such as: tenant usage patterns, condition and maintenance of particular dwelling units and climatological conditions. Although CHS was diligent in creating highly accurate UA values, CHS does not warranty or guarantee that actual utility costs will directly correspond to actual tenant utility costs.

Utility allowances were calculated for electricity and water usage throughout. The results are displayed for each development in the following "Utility Allowance Schedule" [Form HUD-52667 (04/2023)] documents and have been summarized in the appendix in the CHS Tabulated Results tables. Weighted averages were then calculated for each bedroom size based on the total number of each unit type at every development. These averages were then summarized in the island specific "Utility Allowance Schedule" [Form HUD-52667 (04/2023)]. Monthly appliance stipends were calculated for Refrigerators and Stoves. The allowances were calculated using average cost data gathered from an island specific supplier, Home Depot, and were divided by the average life span of the specific appliance. Refrigerators at a 10-year life span and stoves at a 7-year life span. Supporting data contains information concerning utility costs and design load data for each of the selected units. Utility Rate data is supplied in the Appendix.

Utility rates from the Virgin Islands Water and Power Authority (Electric and Water) and Antilles Gas were collected for this particular report. These rates were summarized in the "*VIHA Utility Rate Structure*" attached. The latest WAPA Electric RS rates were published 03/01/2022. The latest WAPA Water rates were published 08/01/2023. Antilles Gas rates are current as of 10/30/2025. The WAPA Electric RS rates have been stable due to Governor Albert Bryan Jr.'s government subsidy. This is summarized by Suzanne Carlson in an article from the Virgin Islands Daily News (04/09/2025).

Estimate Methodology:

Building/ unit construction data was obtained from one or all of the following sources.

1. Fixtures and devices present in VIHA Public Housing units during the walkthrough (09/09/2019 - 09/12/2019).
2. Product / equipment information gathered from the internet.

After the building/unit construction data was obtained, HUD Handbook 7418.1 was used to develop typical usage values based on tenant paid public housing utilities.

The resulting utility cost allowances were prepared in accordance with 24 CFR Part 965, Subpart E, Establishment of Utility Allowances by PHAs. The *Engineering Method* was used. The specific steps taken to develop these estimates are as follows.

1. The housing types were selected based on construction types, floor plans, sizes, and other factors that may impact the calculated utility allowance values.
2. Based on building / unit data obtained from documents: gross areas, number of windows, doors and existing and proposed conditions were determined.
3. Electrical usage for each typical unit was calculated.
4. Water costs were calculated. It should be noted that currently VIHA pays for water costs. VIHA will need to determine whether to exclude these costs in the UA or continue to provide these utilities.

Assumptions: The following assumptions have been made:

1. No major physical changes have been made to the VIHA Public Housing units that were inspected during the walkthrough (09/09/2019 - 09/12/2019).
2. Owner/Developer/Property Management will pay for all refuse removal.
3. Units will be serviced by the US Virgin Islands Water and Power Authority (WAPA) and will be charged electric usage based on the RS-Residential Multi-Family Rate.
4. Owner/Developer/Property Management does not intend to install electric load meters, which would measure electric usage on a peak demand.
5. Utility costs for public spaces, public exterior lighting, common laundry room and other non-tenant spaces were not calculated, since they have no affect on tenant-paid utilities.
6. No public housing units are currently equipped for air conditioning; therefore no rates were calculated for this load.

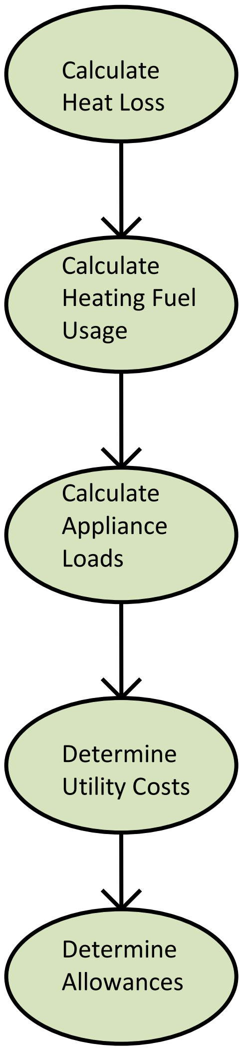
Selection of Units for Sampling:

The units were selected by CHS. The selection criterion was as follows.

1. Units from all developments were selected for analysis.
2. Each bedroom type was analyzed from each specific development.

After calculating the specific utility allowance for each of the selected units, the results were summarized. Specific component data was gleaned from the prototypical unit data to develop the individual utility component data illustrated in the "Utility Allowance Schedules" [Form HUD-52667 (04/2023)].

Process:



The heating loss was calculated using standard ASHRAE protocol. Basically, the exterior building envelope was analyzed to determine the amount of heat loss through the walls, doors, windows, ceilings, floor, and by infiltration. The heat gain realized by occupants, lighting, cooking etc. was subtracted from the heat loss and the resulting amount was the design heat loss in Btu/hr.

Based on the calculated heat loss the total annual heating fuel usage was determined using the degree-day calculation method. This resulted in the total estimated Kilowatt-Hour (kWh) required per year to provide adequate heat in the units.

In addition to the heating fuel usage, the electrical usage was calculated for appliances such as; cooking ranges, refrigerators, lighting, clothing dryer and washer (townhouses only), television and miscellaneous small appliances.

The utility costs for the particular location was obtained from the local utility provider and the rates applicable at the time of the calculation were used to determine the allowances. Because utility rates will change over time, the allowances should be reviewed annually to determine if the amounts are representative of actual utility costs.

After the above calculations were made, the utility allowances were determined by multiplying the utility rates by the predicted annual heating and appliance demand. This resulted in the estimated annual utility cost, which was divided by 12 months to result in the monthly utility allowance amounts. These utility allowance amounts represent electric consumption and natural gas consumption (for the townhouses only), but do not include water utility and refuse removal costs.

The above methodology is consistent with established protocols and procedures. Additional detail can be obtained from the accompanying calculation tables. If any further information is required, please contact Creative Housing Solutions, Inc.

Final Results:

As you will see from reading 24 CFR Part 965, E. this report shall be available for inspection by the residents affected by these allowances. Specifically, the allowances should be included in, or referenced in the lease agreement. Much of the CFR language pertains to existing tenants and leases (i.e. resident comment period etc.). Please review these requirements.

Note that HUD does not need to review or approve these allowances, but the calculations should be available for inspection by HUD during the course of audits or reviews.

Because the allowances are based on theoretical data and averages, the allowances should be reviewed in 12 months by comparing the actual usage (consumption). If significant deviations from the indicated allowances are observed, then re-evaluation of the allowance amounts may be necessary.

Please call if you have any questions regarding these allowances or the calculation method.

Sincerely,

Donald L. Dudrow, Jr., RA, NCARB, AIA, CEM
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