Draft of Testimony of James W. "Bill Forman, Jr., P.E.

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NCUC Docket No. W-1297; Sub 14

Proposed Testimony of James W. (Bill) Forman, Jr., P.E.

Response to proposed testimony of Tim Ragan:

Page 2, Response to Ragan's research regarding total capacity:

Mr. Ragan's lack of understanding of actual versus permitted treatment capacity is evident. The actual treatment capacity is the hydraulic and biological capacity of the plant to treat wastewater to state water quality and effluent standards. Under DHHS/DPH rules, the permitted capacity is that capacity set aside or allocated to serve residences or commercial users, and is based on the flows mandated in 15A NCAC 18A..1949, Sewage Flow Rates. As in many areas, but especially for bedrooms and other facilities located on Harkers Island, the .1949 rates are not anywhere close to an accurate representation of actual flows through the HISCO WWTP facilities. Actual flows are much less than the .1949 flows (paper flows), but the HISCO permits allow only those flows defined and approved by DHHS/DPH per the .1949 rules. During the early years of the utility, this regulatory constraint did not exist as the Westbay facility was regulated by DWR within NCDENR, the predecessor to DEQ. HISCO hands are tied by these overly stringent permitted capacity rules as interpreted by Berkowitz and DHHS.

Unlike with DWR/DEQ rules, the DHHS/DPH 18A rules do not contain provisions that allow a permitted WWTP to collect data and submit for permitted flow reductions based on that data. This is most unfortunate not only for HISCO, but other WWTPs regulated by the DHHS/DHP rules. As an experienced professional engineer, it is my professional opinion that the HISCO system likely has between 10,000 GPD and 20,000 GPD of additional actual treatment capacity, with the potential to document even more additional actual capacity.

Before the dissolution of BLE as the original developer of the proposed James Creek Subdivision, a permit was approved by DHHS/DPH which included Harkers Village capacity, together with West Bay and a proposed new WWTP to be located within James Creek. Pipes lines were designed, permitted and installed to connect the James Creek and West Bay Plants and allow maximum flexibility in managing flows between the two subdivisions. The total on-paper permitted flow that would be available would have been sufficient to serve James Creek, West Bay and the then newly proposed National Park Service Facilities. When HISCO lost control of James Creek due to the unilateral actions of BNC, the 38,100 gpd associated with the proposed James Creek WWTP had to be removed from the total of HISCO's permitted capacity. The permit was no longer valid as then written, and HISCO correctly applied to the State to correct the loss of permitted capacity unilaterally forced on it by the actions of BNC. However, even so, the actual flows to the Harkers Village plant were much below the allocated/permitted flows. HISCO projected that an upgrade to that plant would occur well before actual flows approached the permitted or "paper" flow limits.

Page 4 Re: MRT-1 Building plant and turning it over to HISCO. In theory, this is a viable plan but it is my opinion that MRT-1 would be shooting itself in the foot. First of all, the land is available at the HISCO Harkers Village WWTP site for onsite disposal in excess of 80,000 GPD. MRT-1 would also lose several marketable lots that would have been occupied by the WWTP and disposal area if built on the James Creek site. Moreover, in my professional experience and opinion, a developer constructed and operated WWTP, turned over to the HOA, is rarely a successful situation.

The objection by MRT-1 that anything they finance for HISCO would benefit other users on the island is, with all due respect, bogus. Because of the discrepancy between .1949 allowed flows and actual WWTP flow, the excess capacity that exists between .1949 and actual flows **will always exist –** unless and until these rules are amended, as they should be. One must remember that if the National Park Service had not paid for building the force main the runs nearly the length of the island, HISCO would never have been able to realize the customer connections is has now nor expand the system to include West Bay, Oak Hammock and points between. DHHS/DPH will require that a WWTP be constructed

with a capacity determined by rule .0949. That capacity will never be utilized and at some point a portion of that allocation will be made available for the remainder of the island. There is some evidence that the existing DHHS/DPH rules will be amended to allow for documented, data driven flow reductions, but those rules are not yet finalized.

In addition to the above, Carteret County ordinances will require MRT-1 to utilize the HISCO system unless the NCUC takes James Creek out of the HISCO franchised territories. In my professional opinion, doing so would be a mistake.

The cost estimates that I prepared in July of 2019 remain valid, with appropriate adjustments for any changes in materials and labor costs since then. It remains my professional opinion that a WWTP designed, permitted, constructed and operated along the lines of that proposal is the most cost effective solution for providing sewer to James Creek. It is my further professional opinion that the existing HISCO system, while not without its challenges, remains viable. Further, none of the costs described in my July 2019 letter report represent costs associated with repairing he existing system – the costs in my July 2019 letter report are all new system costs properly allocated and attributable to providing sewage treatment and disposal capacity for James Creek lots.

I have worked with Mike Laws for many years now. Based on this extensive interaction regarding the various regulatory and engineering issues facing HISCO, it is my opinion that Mr. Laws has operated the HISCO system competently, honestly and to the best of his abilities, for the benefit of all HISCO customers. It is my expectation that Mr. Laws would continue to do so in providing cost effective sewer service for the current or any future owners/developers of the James Creek subdivision.

s/James W. Forman, Jr., P.E.