CHESAPEAKE BAY STATES DATA SHARING PROGRAM
FOR ADVANCED SMALL ON-SITE WASTEWATER SYSTEMS

DRAFT INITIAL DATA COLLECTION

The following table provides the minimum data collection requirements for initial data submitted to Chesapeake Bay States for their advanced onsite system approval program, for systems having rated treatment capacities of 400 gal/d to 1500 gal/d. This protocol is for nitrogen reducing treatment units that do not include soil treatment as part of the process. The information is adapted from NSF Standard 245, with minor changes: the effluent reporting will require submissions of raw data and averaged data (NSF 245 requires reporting of data averages only) and cold weather data is required. Any data collection information not summarized below shall follow NSF 245.

Data collected in compliance with this data collection protocol submitted to states will be accepted for review under their own approval program. For some states, the following may be required to meet "provisional" approval before a field verification phase. Data submitted must be developed by a recognized third party. Some states may accept to review data that does not comply with all of the data collection requirements stated below. Acceptance of data that does not comply with these protocols is at the discretion of each individual state.

Preparations for testing and evaluation	System shall be operated in accordance with the manufacturer's instructions. Routine service and maintenance is not allowed during the testing and evaluation period.		
Influent Wastewater Characteristics	TKN	35 - 70 mg/L as N	
	TSS	100 - 350 mg/L	
	BOD_5	100 - 300 mg/L	
	Alkalinity	> 175 mg/L as CaCO3	
	Temperature	10 to 30 degrees C	
	pH	6.5 – 9.0 SU	
Hydraulic Loading	Systems shall be evaluated for a minimum of 26 weeks (maximum of 34 weeks).		
Design Loading	System shall be dosed 7 d/wk with a wastewater volume equivalent to the daily hydraulic capacity of the system.		
	6:00 am – 9:00 am	35%	
	11:00 am – 2:00 pm	25%	
	5:00 pm – 8:00 pm	40%	
Stress Loading	Stress loading sequences shall begin in week 17 of the testing and will be completed in this order: wash-day stress, working-parent stress, power/equipment failure stress, and vacation stress.		
Dosing Volumes	30-d average volume is in 100% ± 10% of the system's rated hydraulic capacity.		
Sampling Frequency	Minimum of 55 influent and effluent data sets collected during non-stress dosing period		
	16 weeks	Design Loading	3 samples/week
	7.5 weeks	Stress Loading	2 samples/stress recovery week
	2.5 weeks	Design Loading	3 samples/week
Cold Weather Sample	A minimum of 12 of the total 55 data sets must be collected during cold weather (December 15-March 15), where the unit is in a location where the average daily ambient air temperature is at or below 50 degrees Fahrenheit.		

Collection Methods	All sample collection shall be in accordance with *Standard Methods*, unless otherwise specified. Influent samples shall be flow-proportional, 24-h composites obtained during periods of system dosing. Effluent samples shall be flow-proportional, 24-h composites obtained during periods of discharge. Grab samples shall be collected for pH, temperature, and dissolved oxygen.	
Final Report	Final report shall be prepared in accordance with NSF 245 except for the following changes:	
	Total Nitrogen	Raw data and average shall be reported
	TSS	Raw data and average shall be reported
	$CBOD_5$	Raw data and average shall be reported
	pH	Raw data and average shall be reported