



MARYLAND DEPARTMENT OF THE ENVIRONMENT

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Memorandum

TO: Local Approving Authorities, Directors of Environmental Health
Regional Consultants

FROM: Joshua Flatley, BAT/ BRF Technical Lead 

DATE: August 19, 2015

SUBJECT: Sampling requirements for 1,500+ GPD BAT

Upon approval as a 1,500+ GPD individually engineered Best Available Technology (BAT), systems have to undergo a field verification component. In accordance with the May 7, 2014 MDE memorandum, "Review of 1,500 GPD BATs" all individually engineered systems will have sampling ports included immediately downstream of the system and documentation of system's ability to meet target treatment level must be provided. Target treatment levels will be established prior to system approval. Sampling protocols and requirements must be reviewed and approved by the approving authority and/or MDE before the unit may be installed.

Each individually engineered BAT needs to be sampled quarterly for (at minimum) one year and then semi-annually for a following year. One quarterly and one semi-annual sample occurrence must be within December 15 – March 15. Grab samples are acceptable for all sampling occurrences. Samples must be analyzed by a certified third party laboratory and the results be sent into the MDE BRF/BAT Technical Review Committee and the approving authority by the laboratory representative.

The samples collected must be analyzed in the lab for total nitrogen and its components of TKN, nitrate, nitrite, biological oxygen demand (BOD), total suspended solids (TSS) and alkalinity. If the facility being served by the individually engineered BAT has food service or catering capabilities, fats, oils and grease content sampling will also be required. Onsite measurements of dissolved oxygen (DO), waste water temperature (C°) and pH should be taken. All sampling methods and preservation techniques should be consistent with "Standard Methods for the Examination of Water and Wastewater," 22nd Edition, 2012, A.P.H.A. or any EPA approved method. Further stipulations may be required by the approving authority and/or MDE due to site conditions and/or facility type. A list of individually engineered BAT systems and their designs that are meeting target treatment levels will be maintained at MDE for use on future upgrades.

This is not a discharge permit requirement and the property owner will not be required to meet target treatment levels. This is for analytical review for future use of the technology and design in future applications.

