

Center for Environmental Systems Stevens Institute of Technology Castle Point on Hudson Hoboken, NJ 07030-0000

## VERIFICATION

To: Suntree Technologies Inc. 798 Clearlake Road Suite 2 Cocoa, FL 32926

## Re: <u>Identification of Technology</u> Nutrient Separating Baffle Box (NSBB)

## <u>Identification of Claims</u> Technical Performance Claim – **Suspended Solids Removal**

NSBB testing followed the recently issued NJDEP protocol titled New Jersey Department of Environmental Protection Laboratory Protocol to Assess Total Suspended Solids Removal by a Hydrodynamic Sedimentation Manufactured Treatment Device (January 25, 2013) with one significant exception. The NSBB suspended sediment removal efficiency evaluation experiments were conducted using 100 µm size sediment with a relatively narrow particle size distribution (PSD) of 60 to 126 µm. The 100 µm centered PSD contrasts with the broader PSD (2 to 1,000 µm) specified in the new NJDEP protocol and in the previous NJDEP protocols. Suntree selected the 100 µm particle size for those stakeholders seeking MTD performance data based on sediment with a 100 µm particle size. The same 100 µm sediment PSD was also used for evaluation of sediment resuspension. Other than (a) the use of a narrow PSD test sediment centered on 100 µm particles for both removal efficiency and resuspension evaluations, and (b) the scaling method for the maximum water treatment flow rate sizing chart, NSBB testing was conducted in general accordance with the methods cited in the January 25, 2013 NJDEP laboratory testing protocol. A Maximum Treatment Flow Rate (MTFR) of 1.30 cfs (33.7 gpm/ft<sup>2</sup>) was derived for 80% SSC removal by the NSBB 3-6-72, based on the NJDEP weighted removal efficiency procedure.

This will confirm that NJCAT has concluded the evaluation of the above captioned claim for the above captioned technology, pursuant to your application and our mutually agreed plan of evaluation. NJCAT is pleased to provide a copy of the final report, "NJCAT Technology Verification – Nutrient Separating Baffle Box: Evaluation with 100 $\mu$ m Particles", detailing the procedures that evaluated the claim.



Suntree Technologies Inc. (Suntree) agrees that the notation "NJCAT Verified" and the Verification Mark will only be used in connection with the above-captioned claim and the above-captioned technology. Breach by Suntree of these conditions of use may result in the withdrawal of this verification and the right to use the notation "NJCAT Verified" and the Verification Mark. Suntree agrees to provide NJCAT, upon request, with sample copies of any literature in which the notation "NJCAT Verified" or the Verification Mark are used. Any third party who submits a written inquiry to NJCAT concerning this Verification, may be provided with a copy of this Verification Agreement, the final report, and any subsequent correspondence and/or revocation of Suntree's rights hereunder, upon terms and conditions established by NJCAT.

In consideration for participation in the NJCAT Technology Verification Program, the undersign hereby releases and holds harmless NJCAT, its officers, directors, employees, members and subcontractors from any and all damages, claims and liabilities arising out of participation by Suntree in the NJCAT Technology Verification Program.

Please confirm your acceptance of this Verification Agreement by executing the enclosed copy of this verification Agreement and returning the same to NJCAT.

New Jersey Corporation for Advanced Technology

Behand Magee

By: Richard S. Magee Technical Director

Date: 7/05/13

Suntree Technologies Inc.

Accepted: Thomas H. Happel President

Date: 7/10/2013