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To whom it may concern,

American Polywater Corporation's Polywater® Solar Panel Wash SPW™ has been tested with SolarWorld photovoltaic solar modules under the accelerated test procedure outlined below.

### **Test Duration:**

May 1 to May 14, 2015

### Test Set-Up

Two new SolarWorld panels were provided to American Polywater and installed at a 45-degree angle on a south facing well at their factory location in Stillwater, MN.

To simulate precipitation and soiling the modules were sprayed for 15 minutes daily at 3 am with standard ground water. The ground water conductivity was measured at 95  $\mu$ S and a water hardness of 67 parts per million (ppm).

# **Test Methodology**

- Monday: Between 8 and 10 am each panel was rinsed with a 25:1 solution of Solar Panel Wash SPW and water. The panels were then scrubbed with a soft nylon bristle brush and then rinsed with the same 25:1 solution of Solar Panel Wash SPW and allowed to air dry without any additional rinse.
- 2. Tuesday Friday: Between 8 and 10 am each day the panels were rinsed with the 25:1 solution of SPW and allowed to air dry.
- 3. Saturday Sunday: The panels were not cleaned over the weekends but were sprayed for 15 minutes at 3 am each day.
- 4. This process was run for a total of two weeks from May 1 to May 14

### Results

The modules were returned to SolarWorld Americas and retested; their post-test performance was compared to their original manufactured performance. Polywater® Solar Panel Wash SPW™ did not have any appreciable effect on the module performance, antireflective glass coating or frame anodized coating.



## Conclusion

When used as directed by American Polywater their Solar Panel Wash SPW™ is not an exclusion to the standard SolarWorld warranty. Care must be taken when cleaning solar panels. When cleaning solar modules with water or Solar Panel Wash SPW™ a soft bristle brush must be used and the modules should only be cleaned when they are cool; failure to do so may damage the module. Furthermore SolarWorld's performance and limited product warranty are never void but we do retain the right to deny claims based on the exclusions within the guarantee and limited product warranty document at the time of purchase.

Sincerely,

Eric Olson

Product Manager – Modules SolarWorld Americas, Inc.

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