

# Draft WaterSense<sup>®</sup> Certification Scheme Public Meeting Summary June 20, 2007

Navy League Conference Center 2300 Wilson Blvd Arlington, Virginia 22201 1:00 pm - 4:00 pm

#### Attendees

Rick Hall, K-Rain Manufacturing Tom Runge, The Toro Company Bob Carter, Zurn Plumbing Products Gordon Gillerman, NIST Reinaldo Figueiredo, ANSI Ross Quan, ANSI Claire Kammer, Underwriters Laboratories Mary Shimkin, the Track Group Phil Smith, American Association of Laboratory Accreditation Sheila Frace, EPA Stephanie Tanner, EPA Ben Hamm, EPA Roy Sieber, ERG Kim Wagoner, ERG

## Introduction

Sheila Frace, Director of Municipal Support Division at EPA's Office of Water, provided the welcome and introductions. These meetings are an important part of the decision making process as EPA moves forward. The draft certification scheme is now out for public comment and this is the opportunity for EPA to have an open dialog and to clarify any questions regarding the certification scheme as it is proposed. Initial reactions also help EPA understand better the written comments as they come in. The draft WaterSense certification scheme is open for public comment until July 24, 2007 and EPA looks forward to receiving comments as the program moves forward.

## **Overview of the WaterSense Program**

Stephanie Tanner, WaterSense products lead for EPA, provided an overview of the WaterSense Program. A copy of her overview presentation is available on the WaterSense Web site.

## Product Certification and Labeling Background

Last year, EPA issued a draft specification for high-efficiency residential toilets, which required testing by a qualified testing laboratory named in the specification. Many plumbing manufacturers submitted comments stating that EPA was unfairly limiting their business relationships by designating a specific laboratory to do the testing. Manufacturers felt that they had existing relationships with a variety of laboratories and that as a Government Agency, EPA



should not be dictating who tests their products. Opening the process up to include a variety of testing laboratories, however, lead to another set of issues. EPA, as the manager of the integrity of the WaterSense label needed to be able to ensure the facilities are capable of conducting the testing, that testing is done consistently, that all manufacturers get equal service, and that the label means the same thing no matter which organization provides the testing. To address these issues, EPA began working with the National Institute of Standards and Technology (NIST) to evaluate the conformity assessment options. NIST helped EPA understand the processes for products in the U.S. This process ensures the quality of products and/or that products meet health and safety standards as appropriate. EPA looked at three conformity assessment options:

- Self-declaration where the manufacturer declares to EPA that their products meet the criteria contained in the specification
- EPA acts as the certifier
- Third-party independent certification

Problems were quickly identified with the option of self-certification. Self-certification did not meet the level of stringency that utilities felt the program needed in terms of ensuring that products meet the specification criteria. In addition, some manufacturers wanted additional verification. These manufacturers preferred this confirmation to come from an independent third-party. The second option, in which EPA would act as the certifier, was also raised concerns. This type of process would place more burdens on the manufacturers and would provide an unmanageable workload for the WaterSense program. In addition, the process for certification could be slow and cumbersome.

Weighing these options, EPA chose to establish a conformity assessment program based on the already existing process in the U.S., relying on independent third-party certification. This process allows EPA to focus its resources on marketing the label and developing specifications for a wider variety of products. In addition, as a Government Agency, EPA is in compliance with the National Technology Transfer and Advancement Act (NTTAA), which requires Agencies to work within systems already developed and implemented by the private sector. EPA also found that this process would provide more rigorous standards for certification, which is good from a marketing perspective and that this process would provide better policing and ongoing surveillance of the WaterSense label in the marketplace. The process also provides manufacturers with faster approval times, because the process is much more efficient. In some cases, certification decisions can be made within a matter of a few weeks. Finally, EPA decided to develop conformity assessment based on third-party certification to provide better consistency in the testing of products.

EPA has implemented this independent third-party product certification process for the first set of WaterSense labeled products (high-efficiency toilets), and the process is working. In January 2007 WaterSense issued its final specification for high-efficiency toilets. The list of licensed product certification bodies was posted in February 2007. In early April 2007, the first highefficiency toilets received certification. To date there are approximately 33 certified toilets and WaterSense expects to see labeled toilets on retail shelves some time in July 2007. EPA has not received any complaints from manufacturers regarding the certification process.

Currently, products are certified under an interim process. The interim process was developed and implemented because establishing an accreditation program for product certification bodies



requires a long-term commitment. EPA wanted to make sure that while the final process was being developed, the program was up and running and that products were getting the label.

Generally (under both the interim and final processes), EPA requires all products to be certified by an independent third-party product certification body. The manufacturers apply directly to the product certification body for the label. The product certification body provides the testing and authorization to use the label, and conducts follow-up surveillance. The only interaction EPA has with the manufacturer during this process is the signing of a partnership agreement and notification when a product receives certification. EPA maintains a combined list of certified products on its website.

EPA established an interim set of requirements for certification, which are contained in the WaterSense program guidelines. Under the interim process, EPA requires product certification bodies to be currently ANSI accredited to certify plumbing products. The product certification bodies that meet the criteria contained in the WaterSense program guidelines apply directly to EPA for approval and must sign a licensing agreement in order to authorize manufacturers to use the WaterSense label.

Ultimately, EPA would like the product certification bodies to be accredited to the requirements in the WaterSense certification scheme by one of the accreditation bodies in the U.S. Product certification bodies would also be accredited for every WaterSense specification for which they certify products. Once the product certification bodies are accredited to a new specification, they would sign a new licensing agreement with EPA, which would allow them to authorize the use of the WaterSense label.

Establishing an accreditation process specifically for WaterSense provides EPA with several benefits. EPA can be ensured that the product certification bodies have the capability to perform certifications for WaterSense and that there is a uniform minimum set of certification requirements. This is different from the interim process, which allows product certification bodies to operate in accordance with whatever requirements they have in effect under their current accreditation program. This process employed during the interim may be more or less stringent than EPA would prefer, so by establishing an accreditation program specifically for WaterSense, EPA has assurance of some minimum level of uniformity in the certification process. This process also ensures that EPA is not limiting in any way whom manufacturers can use to certify their products. The field is also open to all product certification bodies that can qualify by meeting the requirements contained in the WaterSense certification scheme.

At this point, the focus of the public meeting turned to the minimum requirements contained in the draft WaterSense certification scheme.

## Draft WaterSense Certification Scheme

Kim Wagoner, of ERG, provided an overview of the draft WaterSense certification scheme. There are four parties involved in the WaterSense certification process; EPA, the manufacturer, the product certification body, and the accreditation body. EPA develops certification requirements, oversees the certification process, develops specifications, and is ultimately responsible for marketing the WaterSense brand to consumers. Manufacturers produce products that conform to WaterSense specifications. Product certification bodies certify that



products conform to WaterSense specifications and authorize manufacturers to use of the WaterSense label in conjunction with certified products. Accreditation bodies accredit, or ensure that the product certification bodies are capable and competent to certify products for WaterSense.

The product certification process is an established process in the U.S. and is governed by international standards. There are standards, published by the International Organization for Standardization (ISO), for assessing the capability and competence of product certification bodies, accreditation bodies, and testing laboratories. All of these international guides are incorporated by reference into the draft WaterSense certification scheme. This structure is incorporated to create a level playing field across all product certification bodies that will be conducting product certifications for WaterSense and to help facilitate trade both nationally and internationally.

## <u>Scope</u>

The draft WaterSense certification scheme specifies the minimum requirements for operating third-party product certifications. It is based on ISO/IEC Guide 65, *General requirements for bodies operating product certification systems*. ISO/IEC Guide 65 is very general. The WaterSense certification scheme elaborates on those general requirements, incorporating specific program aspects that provide WaterSense with the necessary level of confidence in products that are certified. The product certification process is also guided by the WaterSense specifications, which specify the testing requirements, and the program guidelines which provide general program requirements. These three pieces work in concert to guide the product certification process.

## The Product Certification Body

The product certification body certifies products for WaterSense. In order to certify products for WaterSense, the product certification body must be 1) accredited for the general requirements of ISO/IEC Guide 65, 2) accredited specifically for the WaterSense certification scheme, and 3) accredited specifically for each WaterSense specification relevant to the products that the product certification body wishes to certify. It is important to associate the level of accreditation with each specification, because this provides WaterSense with confidence in the capabilities of the product certification bodies that certify products in each and every product category.

The draft WaterSense certification scheme speaks largely to the criteria EPA has established to asses the capability and competence of the product certification bodies. EPA has also established three specific criteria to assess the capability and competence of the accreditation bodies that accredit product certification bodies.

- Operates in accordance with ISO/IEC 17011, General requirements for accreditation bodies accrediting conformity assessment bodies;
- Offers accreditation services to ISO/IEC Guide 65; and
- Is an International Laboratory Accreditation Cooperation or International Accreditation Forum signatory.

This last requirement ensures that the accreditation body is part of a larger international accreditation organization and that it has been peer evaluated for its accreditation services.



*Question:* Tom Runge, of the Toro Company, asked that as new specifications are developed, are product certification bodies required to become accredited to them.

*Response:* Product certification bodies may choose which products or product categories they want to certify for WaterSense. When new specifications are published, and it is a product category of interest, the product certification body can apply to the accreditation organization for an extension of their scope of accreditation. The product certification body would then be evaluated for the ability to certify that product category in accordance with the relevant WaterSense specification.

*Question:* Reinaldo Figueiredo, of ANSI, asked if EPA would use the same certification scheme for all product categories.

*Response:* Stephanie Tanner answered that this WaterSense certification scheme would apply to all WaterSense products. If EPA becomes aware of an industry sector that is not at this point in its market development, EPA may decide to look at some other process to accommodate the industry. EPA does, however, hope to use this basic philosophy for all WaterSense labeled products.

#### Product Certification

The first step in the product certification process is the application. Manufacturers interested in applying the WaterSense label to their products apply directly to a licensed product certification body of their choice. The product certification body provides the application and follows up with the manufacturer regarding the application process. EPA is not involved in this process.

Once the application has been accepted, the manufacturer may be subject to an initial product inspection. This inspection is an audit of the manufacturer's production process and quality management system and is a verification that the manufacturer has in place a process that is capable of mass producing products that will continually meet the WaterSense specification. The initial production inspection, however, is not a required aspect of the evaluation because in some instances, the product certification body may have an ongoing relationship with the manufacturer and may have previously conducted this type of inspection for the purpose of another type of certification. In these instances, when the product certification body has already established confidence in the manufacturer's production process, EPA does not require an additional inspection because it does not want to unduly increase the amount of time or money involved in the certification process.

The next step in the certification process is to have the product tested for conformance to the WaterSense specification. The product certification body collects a sample from the manufacturer that is representative of the model that is to be certified. The sample must be made using components identical to those used in production, made using the components and subassemblies identical to production, and made from production tools and assembled using methods established for production run.

The product testing is conducted in accordance with the WaterSense specification by a test facility that is compliant with ISO/IEC 17025, *General requirements for the competence of* 



*calibration and testing laboratories.* It is up to the product certification body to determine how to conduct this initial product testing. The draft WaterSense certification scheme allows for inhouse testing, where the product certification body does the testing in its own facilities. The product certification body can also subcontract the testing to another testing laboratory as long as that laboratory complies with ISO/IEC 17025. The final option is for the product certification body to conduct on-site testing, where the manufacturer has the ability to conduct the testing at its own facility, but the testing is overseen by the product certification body. EPA is not allowing any testing where the manufacturer does the testing unsupervised. The product certification body must either conduct or oversee the testing.

The evaluation of a product and the certification decision are based on a review of the manufacturer's documentation, verification that the manufacturer has a quality management system in place, and that the production process is established such that all products can continue to meet the WaterSense specification. The product certification body must also verify that the manufacturer has signed a Partnership Agreement with EPA.

#### <u>Licensing</u>

EPA licenses the product certification bodies to authorize manufacturers of certified products to use the WaterSense label. The signed licensing agreement provides the conditions for authorizing the use of the label and is specific to each WaterSense specification. This provides a mechanism for EPA to ensure that the product certification body is accredited for the specifications for which they are conducting certifications. In turn, the licensed product certification bodies are required to provide EPA with general data on certified products, an annual report regarding the number of products tested, certified, failed, suspended, reinstated, and withdrawn, and any common label misuse issues. EPA is also provided with permission to accompany the accreditation body on any routine audits of the product certification body's certification operations as they relate to WaterSense.

Because the product certification bodies are licensed to authorize the use of the WaterSense label on EPA's behalf, the product certification bodies must also have in place a mechanism for licensing manufacturers to use the WaterSense label. For this licensing process, the product certification body must verify that the manufacturer has in place a signed Partnership Agreement with EPA, must provide the certification decision to the manufacturer along with authorization to use the WaterSense label in conjunction with certified products, and must ensure that the manufacturers continue to abide by the WaterSense label guidelines.

*Question:* Tom Runge sought clarification regarding how the product certification body ensures that the manufacturers are abiding by the WaterSense label guidelines. He questioned whether this is something that is covered under the initial (interim) certification process and who is responsible for it during this period.

*Response:* The product certification bodies will provide this support under the interim process and as part of the final WaterSense certification scheme. The product certification body that issued the certification is responsible for providing surveillance of the label use in the marketplace and ensuring that the manufacturer is properly using the label. To facilitate label policing, the product certification body is identified by name underneath the WaterSense label.



## The WaterSense Label

The WaterSense label has a unique identifier for each product certification body. This identification helps the product certification body identify and police the WaterSense label in the market place. The product certification bodies are provided with a copy of the WaterSense label guidelines and as part of the licensing agreement will survey products in the marketplace to ensure that the label is being used properly. The product certification bodies are also responsible for following up and responding to any label misuse claims that come to their attention. Once the manufacturer has been authorized to use the WaterSense label, the manufacturer can use the label on products or product packaging. In addition, the manufacturer, retailer, distributor, or wholesaler can use the WaterSense label in promotional materials as long as it is in direct correlation with the certified product.

The product certification body is responsible for policing, identifying and responding to any misleading, incorrect, or unauthorized use of the WaterSense label. The product certification body has discretion to determine when the use of the WaterSense label is to be suspended or withdrawn and must notify EPA when such corrective action is taken. There may be some instances where the label is placed on products by a manufacturer that does not have a certified product. In these instances, EPA is responsible for any corrective action against the infringing manufacturer.

*Question:* Reinaldo Figueiredo asked if EPA intended to also use a certification number to identify the product certification body. The ANSI accreditation process, for example, provides the product certification body with a number that corresponds to their accreditation.

*Response:* To clarify, the WaterSense label will simply identify the product certification body's name.

*Question:* Tom Runge sought clarification for how this process would help the product certification body police the label and if the name was going to be the product certification body's name.

*Response:* The only artwork that the product certification body is permitted to authorize manufacturers to use contains their specific name (i.e., "Certified by ABC Product Certification Body" appears underneath the label). If the WaterSense label appears on a product and it does not have a product certification body identified, that indicates that label is a counterfeit. This helps EPA police the label in the instance where a product was never certified by a product certification body and it helps the product certification bodies police the label on the products that they certified. Label policing is a part of the product certification body's responsibilities. They have effective processes and procedures in place for policing their mark in the marketplace.

*Question:* Tom Runge then asked if any organization could become accredited, particularly if they are not as well known as some of the major product certification bodies currently in the market.

*Response:* Any product certification body that meets the requirements in the WaterSense certification scheme can become accredited to certify products for WaterSense.



*Question:* Tom then stated that the label may carry additional weight with the manufacturers and consumers in certain product areas based on which organization provided the certification. Most product certification bodies specialize in certain product areas.

Response: EPA anticipates that the market will dictate the choice of product certification bodies. For instance, some product certification bodies specialize in toilets, but once EPA develops the final specification for faucets, the product certification bodies conducting the certifications may shift. Some product certification bodies are also more interested in irrigation products than others. Not all product certification bodies will want to certify all of the WaterSense products, but any organization that meets the objective requirements contained in the WaterSense certification scheme can become accredited. Manufacturers then have the choice as to who certifies their products. Gordon Gillerman, of NIST, then interiected that the messaging to the consumer is going to be about WaterSense label, not about who certified the product. This is the typical infrastructure that underpins the labeling process and the ability to differentiate the products that do not meet the high-efficiency specifications. The manufacturer's decision regarding the product certification body will be based on what is efficient and effective based on their current relationships with various product certification bodies. Tom was still concerned that the there will be some draw for the consumer towards products certified by more recognized product certification bodies. He did, however, recognize that the market would effectively dictate this process.

## Surveillance

The product certification body is responsible for the ongoing surveillance of products to ensure that they continue to meet the WaterSense specification. The WaterSense certification scheme outlines the minimum surveillance requirements. The product certification body will annually audit the manufacturer's production process and quality management system. Even if the product certification body opted not to conduct an initial audit, this audit will happen at a minimum of one year after the initial certification was provided. The purpose of this audit is to ensure that the manufacturer's operations remain capable of producing products that conform to the WaterSense specification.

Every fifth year each model of each certified product must be retested. For example, if a manufacturer has three certified faucets and four certified toilets, all seven products would be retested for conformance to the WaterSense specification every five years.

*Question:* Rick Hall, of K Rain, asked if the products would be required to meet the original specification under which it was tested. The concern was that there could be more efficient technology in existence within the five year period before the product is required to be retested.

*Response:* Products will be retested to the original specification, as long as that specification is still in effect. EPA reserves the right to revise WaterSense specifications should technological and/or market changes affect its usefulness to consumers, industry, or the environment. In such instances, the products would have to be retested to meet the new specification and products conforming to the old specification would no longer be eligible for the WaterSense label. This process, however, does not happen without ample notice and input from manufacturers, product certification bodies, and accreditation bodies.



In addition to the retesting requirements, every year the product certification body will also conduct post-market surveillance. The product certification body goes to the warehouse or retail store where products are being sold and randomly selects one unit of one model of each certified product for retesting. For example, if a manufacturer had models A,B, and C certified faucets and models X,Y, and Z certified toilets, the product certification body may select one model A faucet and one model Z toilet for testing. This is the minimum level of post-market surveillance, however, the certification bodies may choose to operate under more stringent requirements if they feel it is necessary to ensure the ongoing product conformance to the WaterSense specification.

*Question:* Tom Runge asked if the manufacturer would be responsible for compensating the product certification body if they chose to go above and beyond the WaterSense certification scheme requirements (e.g., conducted five audits in a year verses the required one).

*Response:* The manufacturer is responsible for following the procedures established by the product certification body that they have chosen to certify their products, even if these procedures are more stringent than the minimum WaterSense certification requirements. If the manufacturer feels unduly burdened by the product certification body's requirements, the manufacturer can choose to take its business to another product certification body.

*Question:* Rick Hall asked if a manufacturer already had a product listed by a certain product certification body and it would already meet the minimum EPA criteria, could the manufacturer begin labeling the product without any additional testing, provided the product certification body reviewed the existing testing report to ensure that it meets the minimum requirements.

*Response:* Gordon Gillerman responded that the specification (giving WaterSense highefficiency toilets as an example) would already have to be in place in order for a product to be available for labeling immediately. In other words, products cannot be grandfathered in, but must be tested for compliance to the WaterSense specification once the specification is finalized. Under the given scenario, even though the product was certified for conformance to some other requirements such as health and safety standards, the product may not necessarily have been tested for its water efficiency aspect in accordance with the WaterSense specification. The product is only eligible for the WaterSense label after it has been certified to meet the specific criteria contained in the WaterSense specification.

*Question:* Claire Kammer, of Underwriters Laboratories, asked when the accreditation process would begin.

*Response:* As soon as EPA finalizes the WaterSense certification scheme, it will begin working with the accreditation bodies and the product certification bodies on the accreditation process. The process will take approximately one year to fully implement.

*Question:* Tom Runge asked to revisit the five year retesting requirement verses the annual audit. He sought clarification for why the five year retesting was necessary if the products were to be retested every year.



*Response:* To clarify, the initial test for a specific product is good for a period of five years. At which point the product must be retested for continued conformance to the WaterSense specification. The purpose of the annual retesting is simply as a spot-check of the products that are available in the market place, as a measure of ensuring that what is being sold meets the requirements of the WaterSense specification. The latter annual retest is really a post-market surveillance. It doesn't cover every model of every product. For example, a manufacturer has three model faucets (A,B,C) and three model toilets (X,Y,Z). Every year the product certification body will go to the warehouse or retail outlet, sample one model A faucet and one model Z toilet for retesting to ensure that the products being sold meet the WaterSense specifications. However, on the fifth anniversary of the original testing, each certified product must be retested. The five year retesting would be conducted in the same fashion as the initial testing for the product.

*Question:* Rick Hall was concerned about the requirement to remove the WaterSense label from products within six months once a product was found to be noncompliant. If a particular product certification body chooses to conduct multiple inspections every year and holds the manufacturer responsible for those inspections above and beyond the minimum WaterSense certification requirements and the manufacturer decides to change providers and get their products certified by a different product certification body, he questioned whether the six months for removing the WaterSense label would apply under this scenario.

*Response:* In such a situation, the manufacturer should call the WaterSense program and EPA would discuss a solution. The WaterSense program guidelines state that EPA will try and resolve these types of issues amicably with all parties. If the manufacturer is having problems with product certification body A because they feel the requirements are too onerous and wants to switch to product certification body B, EPA would provide the manufacturer with the necessary time to work through that process. As long as the manufacturer is demonstrating that the product is moving through the certification process, EPA will accommodate the needs. In addition, the manufacturer could stay with product certification body A until the certification from product certification body B came through, at which time the manufacturer could make a quick transition with little interruption in the product certification body B. Claire Kammer also interjected that the licensing agreement between the product certification body and the manufacturer would have to be negotiated to cover this scenario, even if EPA decided to allow the manufacturer additional time to make the transition.

Kim Wagoner then asked if there were specific comments regarding the timeframe for the recertification or post-market surveillance. Tom Runge responded that this was something that would come out in the future, depending on the costs associated with it. The post-market surveillance is important because too often the manufacturer may submit a product for the initial testing that is not necessarily representative of what is coming off the production line.

## Next Steps

The comment period for the draft WaterSense certification scheme is open through July 24, 2007. EPA would appreciate all comments to be forwarded to <u>watersense\_certification@erg.com</u>. Once EPA has received all comments, the comments will be compiled and published on the WaterSense website. EPA will then evaluate the comments



and make the necessary changes to the WaterSense certification scheme. EPA anticipates that it will issue the final WaterSense certification scheme later this Fall. Once the final WaterSense certification scheme is published, EPA will initiate the accreditation process. This process is anticipated to be completed by the Fall of 2008. At that point in time, the manufacturers would apply to a product certification body that has been accredited to the WaterSense certification scheme.