

The Journey to Sustainability

By Stuart Mann

New standards provide sustainability certification for carbon products

As concern for the environment moves ever closer to the forefront of public and media attention, the water treatment industry has been subjected to criticism. Reverse osmosis (RO) systems and softeners have been accused of wasting water and contributing to salinity problems, and producers of bottled water vie with filter manufacturers over which option is greener. In addition, companies are increasingly concerned about making environmental claims out of fear that they will be accused of “green-washing,” the practice of making unfounded, misleading or unsubstantiated environmental claims.

In order to meet growing demands on manufacturers, consumers, retailers, regulators and environmental groups, the Water Quality Assn. (WQA) membership and board directed the proactive development of a voluntary certification program for sustainable water contact products.

Two New Standards

A product is defined as sustainable if it meets the needs of the present without compromising the needs of future generations. These needs are further delineated as encompassing responsibility for the “three Ps” of sustainability: people (the safety and welfare of production workers and consumers), planet (the continuing health of our ecosystems) and profit (the economic realities that the product must fulfill a need, perform as advertised and be offered for a competitive price—all of which lead to success in the marketplace).

Consumers need a way to determine whether products are truly sustainable. This is the goal of the new Product Sustainability Certification standards, beginning

with the first two standards: WQA S802 – Product Sustainability for Activated Carbon, and WQA S803 – Product Sustainability for Activated Carbon Water Filtration Systems. The former applies to raw activated carbon, while the latter applies to any point-of-use or point-of-entry filter system that contains activated carbon. It excludes systems that combine additional technologies or incorporate a waste stream, such as RO, ultraviolet (UV), softeners or mixed-bed/multistage filtration.

These standards were developed by the WQA Environmental Labeling Task Force and WQA Sustainable Activated Carbon Workgroup, both of which comprised key industry representatives and outside stakeholders from academic, consulting and regulatory organizations. A collaborative process was utilized to create broad consensus for the adoption of these standards. Task forces currently are being assembled to write the next standards in the series to cover additional water contact product categories, such as RO and UV.

A Worthwhile Investment

Clearly, certification to a sustainability standard meets an emerging need in the marketplace. But what are the costs of implementing the programs and policies that the standards require? The answer may surprise you.

Sustainability is more of a journey than a destination, and embarking on this journey requires some initial investment of resources. Most sustainability initiatives, however, produce a positive return on investment over time. This is because in practice, sustainability is largely about reducing waste and improving efficiency.

Sustainability efforts usually result in some or all of the following long-term cost savings: raw materials, energy and water consumption, manufacturing/productivity, occupational health and safety, waste disposal, hazards management, regulatory compliance, public relations and reduced risk (business, liability and regulatory). In addition to the

marketing advantages that certification confers, to the extent that it provides the impetus to accomplish positive changes to the manufacturers’ business practices, the cost generally proves to be a worthwhile investment.

Certification Process

The sustainability standards involve a combination of the environmental aspects and sustainability attributes of products. Environmental aspects consist of impacts to the environment: air/water/solid waste emissions, resource depletion, etc. Sustainability attributes are the characteristics of a product (throughout its entire life-cycle) that impact its sustainability performance across the environmental aspects.

The WQA Environmental Labeling Task Force commissioned life-cycle analyses of activated carbon and activated carbon filtration systems that identified a matrix of the sustainability attributes versus the environmental aspects for these products, producing a heat map that ranks the significance of the impacts. This heat map was used to inform the selection and weighting of various criteria that address these impacts and concerns within a “points-based” framework, whereby manufacturers choose from a menu of criteria designed to maximize the positive effects across the sustainability attributes, while at the same time minimizing any undue burdens on the competitiveness of the company. Products that accumulate enough points to pass a defined threshold qualify for certification.

Because the standards address more than one attribute, they are characterized as multi-attribute standards designed for use within a Type I Environmental Labeling Scheme (per ISO 14024). As such, a formal life-cycle analysis is not required to demonstrate conformance (although a “life-cycle approach” is incorporated into many of the requirements).

These standards will be reviewed again within three years and regularly thereafter to ensure that they stay current with the industry, account



for new sustainability trends and spur continuous progress on the path toward sustainability.

In order to account for all of the elements of the three Ps, there are several prerequisites embedded in these standards. They all contain a requirement for conformance to the adjunct WQA S801 – Sustainable Management. This standard includes basic human rights and fair labor prerequisites, referencing the Social Accountability Intl. SA8000 Standard.

The final prerequisite within all of the product standards is certification to the appropriate drinking water treatment unit/drinking water additives safety/performance standard, such as NSF/ANSI 42, 53 or 61 or WQA S-200. Because the safety/performance prerequisite certification already covers product testing and toxicology requirements, no such requirements are included within the sustainability standards.

The process begins with a simple application, after which the manufacturer also completes appraisal scoresheets, which enumerate the points eligible/awarded for each criterion, and references any required supporting documentation. This is the opportunity for the manufacturer to self-declare those criteria/points for which qualification is claimed.

WQA then evaluates the scoresheets in conjunction with the submitted supporting documentation and determines which points will be formally awarded and whether overall passing scores have been attained. For those products/facilities that attain the required minimum total scores, a facility assessment plan will be created to assign items for verification and/or follow up, in order to assure that policies on paper are actually implemented in practice, baseline monitoring of performance is accurate and objectives/targets are met.

For those manufacturers that fail to attain enough points to be awarded certification, WQA will identify further supporting documentation that can be submitted in order to qualify for additional points. In addition, WQA can help direct applicants to numerous resources that have been developed by third parties to assist companies that wish to comply with this type of sustainability program.

Meanwhile, the following are the basic steps that a company should take to get started on the path to a more sustainable future:

1. Implement a corporate-level sustainability policy.
2. Establish a baseline inventory of

current environmental impacts.

3. Implement programs, objectives and targets to effectively manage performance.
4. Monitor performance over time.
5. Implement corrective actions to improve achievement of key objectives and targets.

WQA is excited about this first-of-its-kind effort to implement product sustainability standards in the water contact products industry, and looks forward to working with its customers to issue these certifications and propel progress further along on its journey. *wqp*

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