

WQA/ASPE/ANSI S-802 (2017): Sustainable Media Products for Water Treatment

Second Public Review Draft

May 22, 2017

1 Scope

1.1 Included Product Types

1.1.1 The scope of this standard is limited to the following treatment media product types (or blends thereof) commonly utilized in water treatment:

- A. Activated carbon
- B. Ion exchange resin
 - 1. Cation resins (polybenzyl sulfonates)
 - 2. Anion resins (polybenzyl aminates)
 - 3. Acrylic-based ion exchange resin

1.1.2 ~~The term 'drinking water' is generally used within this standard to refer to water~~The media covered within the scope of this standard are most commonly utilized for the treatment of water meant for human consumption (such as for drinking, or cooking food preparation), or to be used as ingredient in food. However, ~~the use of the term in this~~the scope of this standard also context encompasses media for use in water treatment applications which have water quality needs similar to drinking or potable water (e.g. recreational/bathing water ~~or and~~ industrial process applications), ~~and the scope of this standard covers treatment media used in all such applications.~~

1.1.3 The above product types are covered by this standard for any of the following end-use applications:

- A. Point of Use (POU) systems/products
- B. Point of Entry (POE) systems
- C. Commercial/Industrial Systems
- D. Municipal supply

4 Core Attributes, Criteria and Metrics [100]

4.1 Scope

4.2 Production [90]

4.2.1 Healthy and Safe Working Conditions [20]

4.2.2 Emissions and Consumption

4.2.2.1 General

For all criteria under §4.2.2 below, where consumption or emissions reductions/improvements are specified, full credit for the criteria shall be awarded if the facility has already achieved a baseline level of zero or de-minimus for that particular consumption or emission.

4.2.2.2 Energy Efficiency / Renewable Energy Use [15]

- 4.2.2.2.1 A product shall receive five (5) points if the manufacturer conducts an annual energy audit of all the manufacturing facilities under the scope of this standard. Documentation shall include the quantity and source of energy consumed.
- 4.2.2.2.2 A product shall receive three (3) points if the manufacturer develops and implements a program to reduce total energy use in all the manufacturing facilities under the scope of this standard.
- 4.2.2.2.3 A product shall receive two (2) points if the manufacturer sets and documents specific targets within a defined timeframe for the reduction of total energy consumption in all its manufacturing facilities under the scope of this standard.
- 4.2.2.2.4 A product shall receive three (3) points if the manufacturer demonstrates a reduction in the overall trend for total energy consumption, achieved across the previous five years, at all the manufacturing facilities under the scope of this standard.
- 4.2.2.2.5 A product shall receive two (2) points if the manufacturer demonstrates that it uses a minimum of 5% renewable energy at the manufacturing facilities under the scope of this standard in order to reduce the use of fossil-based energy sources.

4.2.2.3 Reduction of Greenhouse Gas (GHG) Emissions [15]

- 4.2.2.3.1 A product shall receive five(5) points if the manufacturer has a program to regularly inventory direct [scope 1] and indirect [scope 2] GHG emissions from its production facilities in accordance with the WRI/WBCSD GHG Protocol: Corporate Accounting and Reporting standard or an equivalent recognized standard. If the latter equivalent recognized standard option is chosen, the company shall disclose their choice of standard for verification purposes.
 - 4.2.2.3.1.1 **Guidance Note:** A GHG inventory may include collection of information on GHG emissions for either the facilities associated with media production or a full corporate GHG Report that includes the facilities associated with media production and broader corporate activities. Examples of recommended GHG measurement reporting programs for scope 1 and 2 GHG emissions include:
 - a. *WRI/WBCSD GHG Protocol: Corporate Accounting and Reporting Standard*
 - b. *ISO 14064 – Part 1*
 - c. *The Climate Registry (TCR) General Reporting Protocol*

- 4.2.2.3.2 A product shall receive four (4) points if the manufacturer has developed and implemented a GHG emissions reduction program at the manufacturing facilities under the scope of this standard.
- 4.2.2.3.3 The product shall receive (2) points if the manufacturer sets and documents specific targets within a defined timeframe for the reduction of total GHG emissions in all its manufacturing facilities under the scope of this standard.
- 4.2.2.3.4 A product shall receive four (4) points if the manufacturer can demonstrate a reduction in the overall trend for GHG emissions, achieved across the previous five years, in the production facilities directly related to the product on a per unit product or facility-wide production basis. The following are actions the manufacturer may undertake to reduce its GHG emissions, ordered from most to least preferred:
 - a. Avoid GHG-intensive activities;
 - b. Reduce energy consumption via energy efficiency;
 - c. Replace high-carbon energy sources with low or zero-carbon alternatives; and
 - d. Offset emissions that cannot be otherwise eliminated with carbon credits.
- 4.2.2.3.5 If the reduction was achieved partially or entirely from the use of carbon credits, the manufacturer shall provide justification for why credits were used and demonstrate that purchased credits are certified and registered by at least one of the following programs:

Carbon Credit Program	e. Web Address
The Gold Standard	http://www.cdmgoldstandard.org/
Clean Development Mechanism	http://cdm.unfccc.int/
Joint Implementation	http://ji.unfccc.int/index.html
Verified Carbon Standard	http://www.v-c-s.org
The Climate Registry	http://www.theclimateregistry.org/
Climate, Community and Biodiversity Alliance (CCBA)	http://www.climate-standards.org/
American Carbon Registry	http://americancarbonregistry.org/

4.2.2.4 Reduction of Air Emissions (excluding Greenhouse Gas Emissions) [10]

- 4.2.2.4.1 A product shall receive four (4) points if the manufacturer can demonstrate that it has conducted an inventory of its non-greenhouse gas air emissions for the production facilities directly related to the product. The inventory shall include documented data on all fugitive and point source regulated air emissions, as well as any known persistent, bio-accumulative, or toxic (PBT) air emissions not covered by local regulations.
- 4.2.2.4.2 A product shall receive three (3) points if the manufacturer has developed and implemented a program to reduce air pollution¹ during media production.
- 4.2.2.4.3 A product shall receive one (1) point if the manufacturer has set and documented specific targets within a defined timeframe for the reduction of regulated air emissions and any known PBT air emissions not covered by local regulations from its production facilities.

¹ This criterion excludes greenhouse gas pollutants, which are covered under Section 4.2.2.3, **Reduction of Greenhouse Gas (GHG) Emissions**.

4.2.2.4.4 A product shall receive two (2) points if the manufacturer can demonstrate a reduction in the overall trend for air emissions, achieved across the previous five years, at the manufacturing facilities under the scope of this standard

4.2.2.5 Reduction of Water Consumption in Production [10]

4.2.2.5.1 A product shall receive four (3) points if the manufacturer can demonstrate that it has conducted an inventory of its water consumption for the manufacturing facilities under the scope of this standard.

4.2.2.5.2 A product shall receive three (2) points if the manufacturer has developed and implemented a program to reduce water consumption during production.

4.2.2.5.3 A product shall receive one (1) point if the manufacturer has set and documented specific targets, within a defined timeframe, for the reduction of water consumption.

4.2.2.5.4 A product shall receive two (2) points if the manufacturer can demonstrate a reduction in the overall trend for water consumption, achieved across the previous five years, at the manufacturing facilities under the scope of this standard.

4.2.2.5.5 A product shall receive two (2) points if at least 10% of its water consumption is reclaimed from graywater or other non-potable sources

4.2.2.6 Reduction of Contaminants in Water Discharge [10]

4.2.2.6.1 A product shall receive four (4) points if the manufacturer can demonstrate that it has conducted an inventory of its water discharge contaminants for the manufacturing facilities under the scope of this standard.

4.2.2.6.2 A product shall receive three (3) points if the manufacturer has developed and implemented a program to reduce water discharge contaminants during production.

4.2.2.6.3 A product shall receive one (1) point if the manufacturer has set and documented specific targets, within a defined timeframe, for the reduction of water discharge contaminants

4.2.2.6.4 A product shall receive two (2) points if the manufacturer can demonstrate a reduction in the overall trend for water discharge contaminants, achieved across the previous five years, at the manufacturing facilities under the scope of this standard

4.2.2.7 Reduction of Solid Waste [10]

4.2.2.7.1 The product shall receive the following points if the manufacturer demonstrates that it has conducted an annual inventory of the following for the manufacturing facilities under the scope of this standard:

4.2.2.7.1.1 Two (2) points for reporting the total solid waste by weight and/or volume; and

4.2.2.7.1.2 One (1) point for reporting the solid waste by disposal method (e.g. landfill disposal, incineration, recycling, energy recovery processes, biological reprocessing, etc.).

4.2.2.7.1.3 One (1) point for reporting the solid waste according to classification as hazardous vs. non-hazardous

4.2.2.7.2 A product shall receive three (3) points if the manufacturer has developed and implemented a program to reduce solid waste during production.

4.2.2.7.3 A product shall receive one (1) point if the manufacturer has set and documented specific targets, within a defined timeframe, for the reduction of solid waste during production

- 4.2.2.7.4 A product shall receive two (2) points if the manufacturer can demonstrate a reduction in the overall trend for solid waste, achieved across the previous five years, at the manufacturing facilities under the scope of this standard