

Acknowledgement:

This Fact Sheet is one of a series developed by an Interagency Committee with representatives from Saskatchewan Health, Regional Health Authorities, Saskatchewan Watershed Authority, Saskatchewan Agriculture, Agriculture and Agri-Food Canada – PFRA and Saskatchewan Environment.

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Certification of Water Treatment Devices

(For Private Water and Health Regulated Public Water Supplies)

What Is Certification?

Certification is an approval process that products undergo indicating they have met the design, material and performance requirements specified by national standards. Certification includes extensive product testing and unannounced audits of production facilities.

Certification is performed by non-governmental agencies through tests that verify that the products meet recognized standards. Once certified, the seal or mark of approval of the certifying body is placed on the water treatment device.

The primary non-governmental agencies that have established standards for water treatment devices are the National Sanitation Foundation (NSF) and the American National Standards Institute (ANSI). The main agencies responsible for testing and certifying water treatment devices include National Sanitation Foundation (NSF International), Water Quality Association (WQA), Underwriters Laboratories (UL), and Canadian Standards Association (CSA).

What Does Certification Mean?

Certification by an entity other than the manufacturer indicates a product is safe, effective and can perform to the specific standard when used for its designed purpose. Certification only validates the safety and effectiveness of a product when it is used for the purpose for which it is designed by the manufacturer. It is recommended that when purchasing a water treatment device it is certified for the specific purpose for which it will be used. It is noted that not all certification indicates compliance to a standard related to treatment effectiveness.

What Are The NSF/ANSI Standards For Water Treatment Devices?

The following is a list of the NSF/ANSI standards used for the evaluation of drinking water treatment units, drinking water systems and drinking water additives. Devices certified to a specific standard may not be capable at removing all contaminants listed within the standard. Individuals should ensure that the proposed device is effective at removing the contaminant of concern.

- **NSF/ANSI Standard 42:** Drinking Water Treatment Units - Aesthetic Effects: This standard covers point-of-use (POU) and point-of-entry (POE) systems designed to reduce specific aesthetic or non-health-related contaminants (chlorine, taste and odor, and particulates) that may be present in public or private drinking water.
- **NSF/ANSI Standard 53:** Drinking Water Treatment Units - Health Effects: Standard 53 addresses point-of-use (POU) and point-of-entry (POE) systems designed to reduce specific health-related contaminants, such as *Cryptosporidium*, *Giardia*, lead, volatile organic chemicals (VOCs), MTBE (methyl tertiary-butyl ether), that may be present in public or private drinking water.
- **NSF/ANSI Standard 58:** Reverse Osmosis Drinking Water Treatment Systems: This standard was developed for point-of-use (POU) reverse osmosis (RO) treatment systems. These systems typically consist of a pre-filter, RO membrane, and post-filter. Standard 58 includes contaminant reduction claims commonly treated using RO, including fluoride, hexavalent and trivalent chromium, total dissolved solids, nitrates, etc. that may be present in public or private drinking water.

- **NSF/ANSI Standard 44:** Cation Exchange Water Softeners: This standard covers residential cation exchange water softeners designed to reduce hardness from public or private water supplies. Additionally, this standard can verify the system's ability to reduce radium and barium.
- **NSF/ANSI Standard 55:** Ultraviolet Microbiological Water Treatment Systems: This standard establishes requirements for point-of-use (POU) and point-of-entry (POE) ultraviolet systems and includes two optional classifications. Class A systems (40,000 µw-sec/cm²) are designed to disinfect and/or remove microorganisms from contaminated water, including bacteria and viruses, to a safe level. Class B systems (16,000 µw-sec/cm²) are designed for supplemental bactericidal treatment of public drinking water or other drinking water, which has been deemed acceptable by a local health agency.
- **NSF/ANSI Standard 62:** Drinking Water Distillation Systems: Standard 62 covers distillation systems designed to reduce specific contaminants, including total arsenic, chromium, mercury, nitrate/nitrite, and microorganisms from public and private water supplies.
- **NSF/ANSI Standard 177:** Shower Filtration Systems - Aesthetic Effects: This standard covers point-of-use (POU) shower filtration systems, designed to reduce free available chlorine that may be present in potable water (public or private).
- **NSF Protocol P231:** Microbiological Water Purifiers: Protocol P231 addresses systems that use chemical, mechanical, and/or physical technologies to filter and treat waters of unknown microbiological quality, but that are presumed to be potable.

More information about NSF/ANSI standards, including the development process and updates under consideration by the applicable joint committee, can be found at their website at http://www.nsf.org/business/standards_and_publications/.

How Can I Find Out If My Water Treatment Equipment Is Certified To The National Sanitation Foundation Standards?

Water treatment devices that have been certified usually carry a logo or seal of the third party entity that carried out the certification. For example, water treatment devices certified by NSF will usually have a logo stating "Independently Certified, NSF." Likewise, water treatment devices certified by WQA will have the WQA Gold Seal. Certification of a water treatment device may also be specified in the operating manual or manufacturer's data sheet. A list of certified water treatment devices or systems is available on NSF's drinking water treatment units online product database at <http://www.nsf.org/Certified/dwtu/> or WQA's Product Listings at <http://wqa.org/>.

Need More Information?

Health Regulated Public Water Supply

For more information on this fact sheet and/or other water quality issues relating to health regulated public water supplies contact your local health region public health inspector.

Private Water Supply

For more information on human health impacts, contact your local health region office. For information on impacts on agricultural operations contact Saskatchewan Ministry of Agriculture through your Regional Office or the Agricultural Knowledge Centre at 1-866-457-2377 or on the internet (<http://www.agriculture.gov.sk.ca/AKC>).

<p>Government of Saskatchewan Water Information website www.SaskH2O.ca</p>	<p>Water Inquiry Line Questions about water? Call 1-866-SASK H2O (1-866-727-5420) to be referred to proper agency.</p>
<p>Saskatchewan Ministry of Health http://www.health.gov.sk.ca/environmental-health Regional Health Offices Saskatoon: Saskatoon (306) 655-4605 Sunrise: Yorkton (306) 786-0600 Kelsey Trail: Melfort (306) 752-6310 Five Hills: Moose Jaw (306) 691-1500 Sun Country: Weyburn (306) 842-8618</p>	<p>Saskatchewan Watershed Authority, Head Office, Moose Jaw (306) 694-3900 Website: www.swa.ca <i>Regional Offices:</i> http://www.swa.ca/AboutUs/Contact.asp?type=Offices</p> <p>Sask Water Corporation Head Office, Moose Jaw Customer Service 1-888-230-1111 Website: http://www.saskwater.com</p>

<p>Heartland: Rosetown (306) 882-6413 Prairie North: North Battleford (306) 446-6400 Prince Albert Parkland: Prince Albert (306) 765-6600 Cypress: Swift Current (306) 778-5280 Regina Qu'Appelle: Regina (306) 766-7755 Mamawetan Churchill River: La Ronge (306) 425-8512 Keewatin Yatthe: Buffalo Narrows (306) 235-5811</p>	<p>Prairie Farm Rehabilitation Administration (PFRA) - Agriculture and Agri-Food Canada Website http://www.agr.gc.ca/pfra/water/intro_e.htm Regional Offices: http://www.agr.gc.ca/pfra/sask_e.htm</p>
<p>Saskatchewan Ministry of Health Saskatchewan Disease Control Laboratory, Regina General Inquiry 1-866-450-0000 Phone: (306) 798-2125 // Fax (306) 798-0071 Website: http://www.health.gov.sk.ca/lab</p>	<p>Saskatchewan Ministry of Agriculture General Inquiry 1-866-457-2377 Agricultural Operations Regina (306) 787-4680 Irrigation Development Outlook (306) 867-5500 Website: www.agriculture.gov.sk.ca</p>
<p>Health Canada First Nation and Inuit Health Branch, Regina (306) 780-5434 Website: http://www.hc-sc.gc.ca</p>	<p>Saskatchewan Ministry of Environment Toll-Free 1-800-567-4224 Spill Emergency Toll-Free 1-800-667-7525 Website: http://www.environment.gov.sk.ca</p>