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## **SECTION II. PROGRAM SPECIFIC POLICIES FOR PLUMBING SYSTEM COMPONENTS FOR ~~MANUFACTURED HOMES AND~~ RECREATIONAL VEHICLES AND MECHANICAL PLUMBING PRODUCTS**

*Rationale – Manufactured Homes are no longer part of Standard NSF/ANSI 24.*

### **INTRODUCTION**

The Mechanical Plumbing Products Certification Program is intended to cover the certification of any mechanical plumbing component used in the treatment and distribution of drinking water.

The registered NSF Certification Mark on a mechanical plumbing component confirms that NSF has assessed and certified its conformity with the relevant Standard(s) or NSF Protocols. As part of the certification process, the production facility is audited. The purpose of this audit is to assure that all the requirements of the Standard are met, quality assurance and quality control procedures are followed, products are sampled and retested on schedule, and labeling and product literature are true and accurate.

While the standards and protocols outline the requirements for the products being certified, policies are necessary to outline the operational requirements for achieving and maintaining certification.

As part of the authorization to use the Certification Mark, the mechanical plumbing component manufacturing facility agrees to abide by the policies specified herein. Section I specifies the General policies applicable to every product Certified by NSF as meeting the appropriate NSF standard/criteria, another national consensus standard, or government regulation or specification. The General policies include (among other requirements) provisions relating to audits, testing, records, complaints, corrective action/enforcement, and appeals.

In addition to the General policies applicable to all products Certified by NSF, there are policies specific to the Certification of mechanical plumbing components. These are included in Section II and relate to issues such as product marking, listing formats, product testing, and formulation review processes.

The General and Program Specific policies must be considered in their entirety and shall be applied within the context of the specific standard, protocol, government regulation, or other specifications referenced in the Contract for Certification Services between the Company and NSF. For clarity and ease of reference, these policies are presented as individually numbered items with appropriate headings. General policies have a prefix of “GP,” and Program policies have a prefix “PP.” A descriptive title and the page on which each policy appears is listed in the Table of Contents.

### **DEFINITIONS**

Family Group - Products which are similar in materials, design and construction and are Certified based on testing of a representative model.

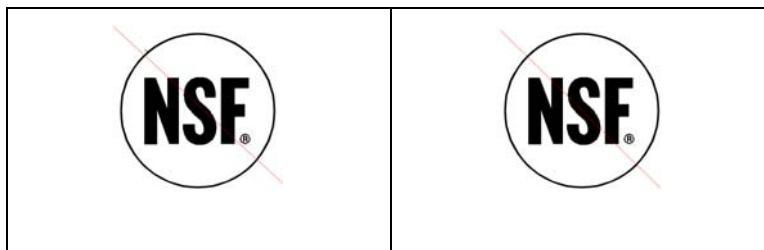
Referenced Standard - A specification defining the explicit set of requirements applicable to a material, product, or system, and used as the basis for product certification by NSF.

Samples - The sum of the individual specimens or the quantities of materials, compounds, or ingredients used for testing by NSF.

## MARKING


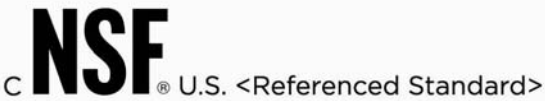
### **PP - 1. NSF Certification Marks**

Products Certified by NSF shall bear the NSF Mark (Mark) directly on the product, with the referenced standard printed directly below the Mark. Products Certified by NSF to Canadian Standards shall bear the cNSF Mark, and Products Certified by NSF to Canadian and U. S. standards shall bear the cNSFus Mark directly on the product. The referenced standard or Special Engineered (SE) specification shall be printed directly below the cNSF or cNSFus Mark. A Product Certified to standards across more than one NSF program shall follow the specific marking requirements of each program's policies.



For Products Certified to the Mechanical Plumbing Program  
Products For Marking Display

U. S.		
Canadian		

Canadian & U. S.		
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Products that have been Certified to an SE Specification shall bear the symbol “SE” immediately below or following the Mark.



or



Products that have been Certified to Uniform Plumbing Code shall bear the symbol “U. P. Code” immediately below or following the Mark.



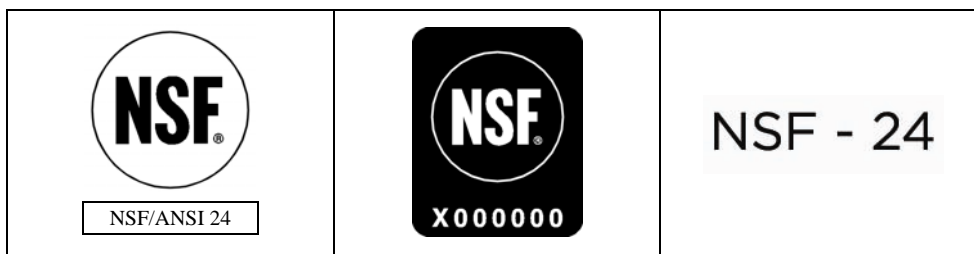
or



Products that have been Certified by NSF to EPA WaterSense<sup>SM</sup> specifications shall bear the WaterSense<sup>SM</sup> Mark. The Mark shall be displayed in two colors (Pantone 641 Blue/Pantone 364 Green) or black and white. All components shall be legible.



For Plumbing System Components for Recreational Vehicles



The Mark shall be permanent and legible. If a Company is known to have removed the Mark for any reason, NSF may make public notice.

NOTE: This Mark option shall be a laminated "foil" Mark with an identifying number purchased from NSF.

- The purchased Marks are laminated, blue "foil" labels, 13/16" x 1" (20.6 mm x 25.4 mm), and bear a serial number comprised of a letter and six numeric digits.
- If a Company requests customized foil labels bearing the appropriate Mark and serial number, the labels shall be purchased from NSF.

***Rationale – To add NSF Marking requirements for products Certified to Canadian Standards, U.S. and Canadian Standards, Uniform Plumbing Code and WaterSense Program.***

**PP - 2. Products Marked with Additional Referenced Standards**

Plumbing Products marked with more than one referenced standard shall be Certified by NSF to all referenced standards, or the Mark shall be printed directly above those referenced standards for which the Product has been NSF Certified. The marking shall not be misleading to anyone concerning the end-uses or applicable standards used in the Certification by NSF.

**PP – 3. Reference Standard Marking**

Products Certified by NSF to referenced standards shall be marked in accordance with any specific marking requirements of the referenced standards as well as the marking requirements of NSF.

***Rationale – To clarify that products must meet both NSF and referenced standard marking requirements.***

**PP – 34. Alternate Marking Methods**

Alternate marking methods due to production method, size, configuration, or space limitations shall be reviewed and authorized by NSF prior to use. For shipment of accessories necessary for use with Certified Products or materials, shipping containers with alternate methods of marking shall be reviewed and authorized by NSF prior to use.

If an alternate marking method is accepted by NSF, a letter of authorization shall be forwarded by NSF to the Company and the following footnote shall appear in the Official Listing: **“This Product is Certified whether or not it bears the Mark.” “All Listed Products from this facility are NSF Certified, whether or not they bear the NSF Mark.”**

***Rationale 1 – Update wording of footnote.***

**PP - 45. Designation of Certified Products**

A Company may use the same trade designation and/or model designation on Certified and Non-Certified products, provided:

- The Certified products bear the NSF Mark;
- The Company has obtained prior written authorization from NSF; and
- The NSF Listing and any product literature bearing the NSF Mark contain the statement, “Only products bearing the NSF Mark are Certified.”

**PP – 6. Marking Requirements for NSF Certified Products**

All Certified Products shall be traceable to an NSF authorized location and a Registered Documentation Report, if applicable. In addition to the NSF Mark, the following information shall appear on the Product, Product packaging, bill of lading for bulk shipments, or other documentation shipped with the Product for the Product to be considered NSF Certified, unless the Company has obtained prior written authorization from NSF to use an alternate method of Product traceability:

- Company name or identification;
- Production location (city/state, province/country, or other facility identification);
- Trade name or designation as shown in the Official Listing; and
- Lot number (if applicable).

The Marking shall not be misleading to the user concerning the Product end uses Certified by NSF.

Certified materials and compounds are exempt from the requirement to bear the Mark on the container. The following information shall be provided with each shipment of Certified materials and compounds:

- Manufacturer;
- Material type;
- Trade designation; and
- Lot number or production code.

*Rationale 1 – Policy added to provide Product traceability.*

*Rationale 2 – Add exemption for material and compound listings.*

**GENERAL REQUIREMENTS**

**PP - 7. Authorization to Transfer to a New or Unlisted Production Facility**

A Company requesting a production facility location change shall document the change, in writing, to NSF and shall also document how it can assure that there are no changes to the Certified Products as a result of the production facility move. NSF may conduct an audit to verify that there are no changes to the formulation prior to Listing the new facility, including supplier ingredients and sources, components, and design and manufacture of the Certified Products. NSF may conduct Product testing prior to authorizing the facility location change, due to changes in product formulation, material suppliers, or production process. Certified Products may also be collected during the audit for monitoring testing. Unsatisfactory test results shall result in immediate de-Listing of the new manufacturing facility for the non-complying Products.

*Rationale – Added to provide a policy regarding authorizing a transfer to a new or unlisted facility.*

**PP - 8. Authorization of Transfer of Production to another Mechanical Plumbing Listed Production Facility**

A company requesting a transfer of Production of a Certified product to another NSF/ANSI 24 or referenced performance standard Listed production facility shall document the change, in writing, to NSF and shall also document how it can assure that there are no changes to the Certified Products as a result of the production facility move. NSF shall verify there are no changes to the formulation or manufacturing of the Certified Products during the next monitoring audit of the Listed facility. Certified Products may be collected during the audit for monitoring testing. Unsatisfactory test results may result in immediate de-Listing of the new manufacturing facility for the non-complying Products.

*Rationale - To provide a policy regarding authorization of transfer of production to another Mechanical Plumbing Listed production facility.*

## OFFICIAL LISTING

**PP - 59. General Format**

The Listing format shall include at least the following information:

- Company name and address,
- Production facility (city/state, province/country, or production facility identification acceptable to NSF),
- Item or unit description,
- Trade or model designation,
- The size (where applicable),
- The configuration (where applicable),
- Referenced performance standard(s), and
- End use (required only for Standard 24 Listed products).

For Certified Special Engineered Products, the Listing shall indicate “SE” as part of the Product description, in addition to the information required for Certified Products.

*Rationale – To add clarification that sizes, configurations, and “SE” descriptions may be added to the Listing.*

## AUDITS

**PP - 610. Requirements for Initial Audits**

An initial audit shall be completed prior to or within 60 days of all non-potable water mechanical plumbing listings. For potable water mechanical plumbing Products, an initial audit of the Company’s production facility shall be required before Certification may be granted. Any non-compliance not resolved within 30 days may result in withdrawal of NSF Certification. A minimum of one unannounced audit shall be conducted at each Certified

~~production facility of the Company each calendar year. NSF reserves the right to conduct additional audits to monitor for compliance with all NSF requirements.~~

***Rationale: The change allows an option for inspections to be completed shortly after initial listing similarly to those in other NSF certification programs. With certain products, it is more practical to conduct an inspection after the testing and product evaluation is completed so auditors can have more complete documentation by which to verify product conformance.***

**PP - 11. Scope of Audits**

Audits may include, but are not limited to, the following items related to the NSF Certification:

- Review of formulation and/or manufacturing processes of all Certified Products;
- Production walk through;
- Review raw material suppliers, component suppliers, and ingredient suppliers;
- Review quality control (QC) programs and records;
- Observation of QC testing;
- Review analytical procedures and methods;
- Sampling of Certified Products for NSF testing;
- Review of retained samples procedures; and
- Verification that production is within the requirements of NSF/ANSI 24 or referenced performance standard

***Rationale – The addition of this policy adds items that may be included in an NSF audit for plumbing system components for recreational vehicles and mechanical plumbing products. This gives a Company a summary of some items to expect during an NSF audit.***

**PP - 12. Monitoring Audits**

A minimum of one unannounced audit shall be conducted at each Certified production facility of the Company each calendar year. NSF reserves the right to conduct additional audits to monitor for compliance with all NSF requirements.

Additional audits may be required for noncompliance resulting from unsatisfactory test results or other noncompliance of Certified Products, misuse of the Mark, investigation of complaints, Product recall, or other reasons stipulated in the contract or policies.

***Rationale – Monitoring audits are required for continued Certification to verify production, materials, suppliers, etc. remain in compliance with the Registered Documentation Report. The addition of this policy simply documents this requirement.***

**PRODUCT INFORMATION**

**PP - 13. Testing Prototype Models**

Prototype models may be submitted for testing to initially qualify a Product for Certification to NSF/ANSI 24 or referenced performance standard.

For a non-Listed production facility, a special follow-up audit, at the manufacturer's expense may be required prior to Listing to demonstrate that the design, materials, suppliers, and manufacturing processes used in the manufacture of production model are identical to those used in the production of the prototype. If the production models are found to be identical to the prototype, no additional testing or evaluation shall be required to Certify the Product. If deviations are found, additional testing may be required.

For similar Products at a Listed production facility, the Company shall provide a written certification statement to NSF that the production and prototype samples are identical. Conformance with the certification statement shall be confirmed during subsequent annual audits. If deviations are found, additional testing may be required.

*Rationale – When beginning production of a new model, Companies often manufacture prototypes before continuing production with an entire line of product. This new policy allows prototypes to be submitted for testing. This policy is similar to PP-16 of NSF 61 Policies.*

**PP - 14. Confidential Product Information**

The Company shall submit complete product information, including design, installation instructions (where applicable), sources of supply, trade designations, and part numbers of all components of a Product submitted for evaluation and Certification. NSF shall review product information and if acceptable, a copy shall be registered and returned to the Company. The original registered copy shall be maintained at each production facility and be made available by the Company to NSF for use during the audits. Only those specific components on the Registered Documentation Report are authorized for use. All modifications to the registered product information (i.e. alternate sources of components) shall be submitted to NSF for review and acceptance prior to implementation of the change by the Company.

*Rationale – This policy is added to include the requirements for a Registered Documentation Report in the Policies.*

**TESTING AND EVALUATION**

**PP - 15. Sampling Frequency**

Initial qualification samples may be collected by NSF or submitted by the Company at NSF's request. Thereafter, NSF shall collect samples of Certified Products from each manufacturing facility at the NSF established frequency to monitor for compliance with NSF requirements unless otherwise specified in writing by NSF.

*Rationale – To include collection of qualification samples.*

**PP - 16. Testing for Continued Certification**

For testing at intervals not to exceed five years, NSF shall witness or evaluate monitoring samples based on a quality control process accepted by NSF. ~~For continued Certification, annual testing shall be required at NSF if a quality control plan acceptable to NSF is not being utilized at the facility.~~



*Rationale – Std. 24 and multiple performance standards do not have QC requirements; annual testing cannot be required.*

**PP - 817. Product Testing - Monitoring Test Failure**

Retest samples may not receive full testing under the applicable requirements of the referenced standard(s) when the parameters that initially failed are determined by NSF to be non-critical to performance of the Product. The retest sample shall be the same size, style, and configuration as the original Product sample that failed. In the event that the same size, style, and configuration of the Product is not available, a different size/configuration may be tested to maintain the Certification, except that the size/configuration that initially failed shall be dropped from Certification until satisfactory retesting of that size/configuration is completed. In addition, the company shall within 30 days:

- Investigate and report to NSF the cause of the failure;
- Take corrective action necessary to prevent recurrence;
- Document the corrective action to NSF in writing; and
- Initiate any recall as may be required.

**PP - 918. Qualification Test Failure**

Samples for retest of a qualification test failure may be submitted to NSF by the Company. In addition, prior to re-testing, the Company shall:

- Investigate and report to NSF the cause of the failure,
- Take corrective action necessary to prevent recurrence, and
- Document the corrective action to NSF in writing.

**PP - 109. Collection of Samples for Retesting After Unsatisfactory Monitoring Test Results**

Samples for retesting of a monitoring failure shall be collected by a representative of NSF at the point of production within 30 days of the reported failure. The Company shall bear all costs for expenses and staff time associated with collecting retest samples.

**PP - 112. General Requirements for Adding Products to the Listing of a Family Group**

Additional Products may be added to an existing family group based on similarity without testing by NSF; however, the Company shall submit a report to NSF of the testing conducted by the Company to demonstrate conformance of the additional Products, and also include calibration requirements.

The performance testing conducted by the Company and provided to NSF shall be sufficient to demonstrate the product's compliance with the referenced standard.

**PP - 121. Certification of Identical Models at Different Production Facilities**

A production facility may have a Product Certified without additional testing, provided all materials, design, manufacturing methods, and the Product are identical to those of a Product tested and currently Certified at another production facility of the same Company.

**SAMPLES**

**PP - 132. General Requirements for Sample Submittal**

Samples collected by NSF shall be shipped to NSF promptly following collection. If samples are not received within 30 days from collection, a special audit may be conducted to re-

collect samples. The Company shall bear all costs for expenses and staff time associated with the visit. It is acknowledged that samples collected outside the USA may experience delays in customs and transit. It is the manufacturer's responsibility to provide written notice to NSF if receipt of the sample will exceed 30 days from collection.

**PP - 14. Qualification Sample Submittal**

- Samples submitted for the qualification of a Product from a non-Certified production facility
- shall be collected during the initial audit of the production facility by NSF, or submitted with
- a sample disclosure form by the Company at the discretion of NSF. Samples submitted for
- qualification of a Product from a currently Listed production facility may be submitted with a
- sample disclosure form by the Company at the discretion of NSF.

**PP - 1523. Chain of Custody**

NSF's chain-of-custody procedures terminate upon shipment of the samples by NSF. NSF assumes no liability for any future use of the samples returned to the Company. The Company shall bear the cost of handling and shipping of returned samples.

**CONFIDENTIAL INFORMATION REQUIRED FOR CERTIFICATION**

**PP - 1624. Product Design, Engineering, and Materials Information**

The Company shall provide Product design and engineering information, including but not limited to Product prints and parts and materials lists, to adequately document the Product for evaluation and Certification. This information shall include but not be limited to:

- Complete parts/material/suppliers list/trade designation/levels of ingredients;
- Photographs/drawings of family representative each product;
- Design and engineering drawings; and
- Installation, operation, and maintenance instructions.

This information shall be reviewed by NSF, and if accepted, a copy shall be maintained at each production facility in the Registered Documentation Report and made available by the company to NSF for use during audits.

*Rationale 1 – Drawings of each product are required. This is for bracketing and if the family representative is dropped at some time, the remainder models will have drawings so that a new family representative may be chosen.*

*Rationale 2 – Addition of the document title.*

**QUALITY ASSURANCE**

**PP - 1725. Quality Control Records**

If quality control records are required, they shall be maintained by the Company for the preceding five-year period or period required by the referenced performance standard, whichever is greater. Upon request, the Company shall provide NSF representatives access to these records while on site.

Facilities which have Registered Documentation Reports shall submit QC records as required in the facility's Documentation Report..

*Rationale 1 – Some referenced performance standards require Q.C. records to be maintained for longer than 5yrs and the policy must account for these variations.*

*Rationale 2 – If QC records are required, NSF must review them and determine that they meet the reference performance standard.*

**PP - 26. Quality Control Requirements**

Specific quality control requirements of referenced standards shall be outlined in the Registered Documentation Report.

*Rationale – To provide a reference for where to find QC requirements. The reference standards have so many different QC requirements it would be difficult for a PP to encompass them all, or it would have to be so general, it wouldn't be worth it.*

**PP - 1827. Calibration of In-Facility Equipment**

All equipment used for quality control testing, other than dimensioning, shall be calibrated at the equipment supplier's required frequency, but at least once annually. The calibration shall be traceable to National Institute for Standards and Technology (N.I.S.T.), where applicable. Dimensioning equipment shall be verified upon use that calibration has been performed within one year. Records of calibration for the preceding five years shall be maintained at the production facility for review by NSF representatives. The calibration systems and records shall comply with the applicable requirements of ISO/IEC Guide 25.

## ENFORCEMENT

**PP - 1928. Inaccurate, Incomplete, or False Quality Control Testing or Records**

In-facility quality control testing is essential for demonstrating that Certified Products comply with all NSF requirements. Inaccurate, incomplete, or false quality control testing or records compromise the integrity of the Mark on a Product and constitute a serious breach of the contract with NSF. For these reasons:

- A recurrence of a specific item of noncompliance for inaccurate or incomplete quality control testing or records within a period of two years, may result in NSF requiring an administrative hearing, and
- A third occurrence of a specific item of noncompliance for inaccurate or incomplete quality control testing or records within a period of three years may result in withdrawal of Certification for all Products for a production facility.

Other appropriate actions may be taken by NSF including, but not limited to, requiring a Product recall and/or issuing a public notice.

*Rationale – Added this statement to reiterate why NSF acts on inaccurate, incomplete, or false QC testing or records.*

**PP - 209. Disposal of Non-complying Products**

Non-complying product bearing the Mark shall be destroyed under the direct observation of NSF, or be made non-usable and held until verified and released by NSF in writing to be destroyed.

**SPECIAL POLICIES**

**PP - 2130. Certification of Special Engineered Products**

Upon request, NSF may offer Certification for Products that are:

- Not covered by a referenced standard, or
- Covered by a proposed standard, or
- Covered by a proposed revision to an existing referenced standard by development of a special engineered (SE) specification. An SE Product may maintain Certification as long as it remains in compliance with the SE specification.

NSF shall register a Special Engineered (SE) specification and provide an original registered specification to the Company for each production facility. The SE specification shall be assigned a unique SE number. The Company shall maintain the signed original registration at each production facility and make it available to NSF for use during the required audits.

Upon request, NSF may provide a copy of the SE specification for a Product to any person.

**PP - 2231. Policy Requirements - Dual Certifications**

For Companies which have a Product Certified under two or more NSF Certification Programs, all policies and requirements of each Program shall be followed.

**PP - 232. Witness Testing Performance Testing - Mechanical Plumbing Products**

A manufacturer shall have the option of performing testing to support NSF Certification under a witness testing agreement with NSF. The witness testing shall be performed at a facility owned and operated by the manufacturer under contract with NSF. In addition, the following requirements shall apply:

- 1.) The manufacturer's laboratory system shall comply with the requirements of ISO Guide 25 17025, EN45001, and the Standard(s) to which a product is designed.
- 2.) NSF shall send a witness to observe the initial set up of products and at least one other day of the testing sequence for the specific test (if applicable).
- 3.) NSF shall perform parallel testing at the NSF laboratory on 50% of the samples tested at the manufacturer's laboratory during the first series of testing.
- 4.) If the manufacturer decides to pursue subsequent witness testing sequences, NSF shall perform parallel testing on a minimum of 10% of the product groups tested at the manufacturer's facility. ~~Parallel testing shall not be required at NSF if the NSF witness observes the entire test sequence at the manufacturer's facility.~~
- 5.) ~~Parallel testing can be discontinued starting with a third sequence of witness testing, if the laboratory has continued to meet all requirements, including that the manufacturer's laboratory's pass/fail results shall agree with the pass/fail results determined by the NSF laboratory.~~ Parallel testing shall not be required at NSF if the NSF witness observes the entire test sequence at the manufacturer's facility.
- 6.) Parallel testing shall be conducted a minimum of once per year.

*Rationale 1 – Clarify title*

*Rationale 2 - The manufacturer does not need to be ISO 17025 accredited for witness testing; however, they shall demonstrate the capabilities.*

*Rationale 3 – Make this sentence its own point to emphasize parallel testing is not always required for witness testing.*

*Rationale 4 – Continued parallel testing is required to monitor witness testing.*

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***THE HOPE OF MANKIND rests in the  
ability of man to define and seek out  
the environment which will permit him  
to live with fellow creatures of the  
earth, in health, in peace, and in  
mutual respect.***