NSF CHEMICAL INHIBITOR APPROVAL SCHEME (CIAS) PROCEDURE

1. Thank you for your recent enquiry, the information below explains the Scheme's procedures and requirements. The application form CIAS 2 must be completed and returned to the scheme administrator to progress the CIAS approval DYemm@nsf.org

1.1 Applicants agree to abide by the terms and conditions of the scheme and associated audit procedures by submitting an application form CIAS 2. Details of the terms and conditions and the audit procedures are available from the CIAS section of the NSF website (www.nsf.org).

2. The NSF Chemical Inhibitor Approval Scheme (CIAS) assesses the performance of chemical inhibitors for use in domestic hot water central heating systems to restrict the formation of:

- limescale
- reduce metallic corrosion
- ensure compatibility with non-metallic components typically found within central heating systems.

2.1 The Scheme's requirements are as follows:

- Initially, and after every 5 years, the chemical inhibitor shall meet the requirements of the 'NSF Industry Standard for the performance of Chemical Inhibitors for use in Domestic Hot Water Central Heating Systems'
- Initially, and annually thereafter it will be verified that the manufacturer/factor/bottler has an ISO 9001 quality system in place. Where this is not available NSF shall conduct its own quality audit.
- Twice within the 5 year approval period, formulation assessment audits will be undertaken at the place of manufacture **and** the bottling plant if this is not undertaken at the place of manufacture.
- Once within the 5 year approval period, a limited performance audit will be undertaken.

3. GENERAL INFORMATION

3.1 The applicant can be either a manufacturer or a factor. Whichever party pays the test fee of a successful application shall own the licence. Where the same product is sold by a number of factoring agents, each individual agent shall possess a licence with their own unique product reference.

3.2 The manufacturer and / or factor and bottler, **must** have in place an ISO 9001 NSF recognised quality system. Where this is not available NSF shall conduct its own quality audit.

3.3 Instructions for use must be supplied with the inhibitor and shall include specific information relating to filling central heating systems and recommended inhibitor concentration levels including the capacity of the system in litres that can be treated.

3.4 The inhibitor's container must identify the license holder's name and product name.

3.5 The Scheme must be supplied with the chemical formulation of the corrosion inhibitor and include details of the inhibitor's pH, odour, colour, form and specific gravity. The formulation/recipe can be held by the licence holder and must be made available to the auditor at the time of the formulation audit. If a separate bottler is involved, the formulation/recipe must also be available when undertaking that audit. If the formula/recipe is held by the licence holder then an initial NSF formulation audit must be undertaken at the time of the initial approval to verify the formula/recipe.

3.6 The Technical Assessment Panel (TAP) comprises independent experts who, if necessary, confirm the test and audit requirements and review the test and audit reports and any additional requirements of the Scheme in accordance with NSF policies.

3.7 The laboratory undertaking the testing must be registered by NSF and shall comply with the NSF Guidance Document BGD01.

4. SUBMISSION OF APPLICATION

4.1 An applicant wishing to submit a chemical inhibitor for NSF approval must complete an Application Form CIAS 2, and return this to the Scheme Administrator at:
NSF Wales Ltd, 30 Fern Close, Pen-y-Fan Industrial Estate, Oakdale, Gwent, NP11 3EH.
Alternatively email: DYemm@nsf.org or ptaylor@nsf.org

4.2 A copy of the applicant's ISO 9001 quality assurance certificate, with accompanying scope of certification must be supplied. Where this is not available, or it is found not to be applicable to the product in question, then NSF shall conduct its own quality audit.

4.3 Only inhibitors in full commercial production will be considered for certification by the Scheme. Scale up production trial inhibitors can be tested and presented to the TAP for their consideration but will not receive full approval. Test samples must be taken from a scale up production batch or full production batch.

4.4 All information submitted will be held in strictest confidence.

5. TEST REQUIREMENTS

5.1 Chemical inhibitors will be tested in accordance with the 'NSF Standard specification Industry Standard for the Performance of Chemical Inhibitors for use in Domestic Hot Water Central Heating Systems', Sections 1, 2 and 3.

5.2 Sample selection for testing. Three test samples (minimum 200ml per sample) shall be **independently selected** at random from a normal production batch (minimum 30). A NSF representative, representative of the independent test laboratory, TAP committee member, or an independent third party (as agreed by NSF), shall select the products for test. Test samples selected shall be kept under the possession and control of the person making the selection and packaged and sealed in their presence and forwarded to NSF. A letter documenting the person(s) making the selection and verifying the chain of custody of the samples must be forwarded to NSF for inclusion within the test file. (See the NSF website for the sample selection template). NSF will forward two samples to the nominated test house for testing.

5.3 NSF will retain one sample for comparison with future production batches as required. Care should be taken when transporting potentially hazardous chemicals. The test samples will become and remain the property of the Scheme and will not be returned.

5.4 Testing must only be carried out by laboratories which have been inspected & approved by NSF. A list of registered NSF laboratories is available from the CIAS section of the NSF website www.nsf.org.

5.5 Communication with the designated test laboratory and the payment of the laboratory's testing fee are the responsibility of the applicant, who shall arrange for the Scheme to be provided with a copy of the test report.

5.6 Any applicant who submits a chemical inhibitor to the Scheme, which is advertised as having CIAS approval without possessing a current certificate, must understand that a new unique product identity will be required before certification will be granted. Similarly, CIAS approval cannot be claimed until the certificate has been issued. The Schemes use of the NSF logos (NSF Guidance Document - BGD 03) is available on the NSF website www.nsf.org.

6. SCHEMES PROCEDURES

6.1 Each type of inhibitor must be accompanied by a separate Application Form, (Form CIAS 2).

6.2 When a completed application form (CIAS 2) has been received the Scheme will allocate a NSF sample number. If necessary, the TAP will review the information supplied and agree on the testing schedule and verify the applicant's quality system. This information will be forwarded to the client and the designated test house along with an invoice to cover the cost of administration.

6.3 Arrangements and costs associated with the delivery and testing of products are the responsibility of the applicant.

6.4 See clause 5.2 for the requirements associated with selecting samples for test.

6.5 Applications will be cancelled which have been on the Scheme's files for more than twelve months.

6.6 When the tests have been completed the test laboratory will forward the test results and a report to NSF. The NSF Technical Assessment Panel (TAP) will then decide as to whether the chemical inhibitor passes or fails to meet the requirements of the Industry standard. Any approval certificate will be based upon the submission date to the TAP Committee. The NSF Manager will notify the applicant of the Scheme's decision and if appropriate request further information or, if successful, an approval letter and certificate will be issued along with the Scheme's invoice for approval; an additional invoice for professional fees will be attached for additional work above that normally expected for an application, or as and when necessary.

6.7 If the product satisfies all the Scheme's requirements, a licence for NSF CIAS approval will be granted and a description of the inhibitor will be entered on the NSF website. Each approved inhibitor will be allocated a unique approval number indicating the year and month of approval.

6.8 Approval will relate solely to the inhibitor(s) referred to in the NSF approval letter. Statements by applicants in sales literature must refer only to the specifically approved product(s) as designated by the manufacturer's unique identifier.

6.9 Annually NSF will verify that the license holder continues to have a recognised quality system in place, or NSF will conduct a quality audit.

6.10 For primary approved chemical inhibitors, **twice** within the 5 year approval, NSF will undertake a **formulation assessment audit** at the place of manufacture to ensure that the formulation and method of manufacture has not changed.

6.11 For primary approved chemical inhibitors, **once** within the 5 year approval, NSF will undertake a **performance audit test** (1) to ensure that the chemical inhibitor continues to satisfy the performance requirements of the NSF performance standard.

6.12 The Scheme reserves the right to close applications that have not progressed since the initial application by more than 12 months. The administration fee will still be applicable.

6.13 Approval may be withdrawn for any of the following reasons: -

- Expiration of licence
- Failure of formulation audit
- Failure of performance audit
- Failure to maintain an ISO 9001 certification, or an approved quality system
- License holder's request
- Failure to pay invoices

6.14 In the event that certification is suspended or withdrawn, the licence holder shall discontinue reference to the product being certified in promotional and advertising literature.

7.0 ACCESS FOR QUALITY AUDITS

7.1 NSF shall be granted access to all facilities and production locations of the Company, except where precluded from doing so by restrictions included in agreements between the Company and NSF or by government regulations, and where NSF has been notified in advance and is satisfied as to the validity of these restrictions. Refused or delayed access may result in withdrawal of Certification.

8.0 COOPERATION WITH NSF

8.1 Audit and sampling of Products by NSF is for the benefit of the Company as well as in the public interest. While engaged in the performance of these duties, NSF shall be given every assistance necessary, and shall have the right to examine all records, equipment, areas, personnel and Company's subcontractors; and investigation of complaints; bearing upon the duties and responsibilities of NSF or the Company with respect to compliance with NSF requirements. No NSF representative shall be required, nor authorized to make any agreements, waive any rights or privileges, or enter into any compromises as a condition of audit.

8.2 While in a Company's facility, NSF representatives shall comply with all applicable health and safety rules and be accompanied by authorized Company personnel. The Company shall notify NSF in advance of any health and safety equipment necessary for access to the Company's facility, or shall provide the necessary health and safety equipment for the NSF auditor's use during the audit, along with instructions for proper use.

8.3 NSF auditors may discontinue an audit at a site where their health and safety may be at risk, if they are subject to sexual harassment or discrimination, or the conduct of the Company staff hampers the completion of a valid audit. The Company may, at any time for any reason, require that an auditor of NSF leave the facilities of the Company. An auditor shall immediately notify executive management of the Company and NSF if an audit is to be discontinued. If an audit is terminated its status is "attempted."

9.0 COMPANY RECORDS OF COMPLAINTS ABOUT ITS CERTIFIED PRODUCTS

9.1 The Company shall retain a record of complaints and remedial actions taken by the Company since the last on-site audit performed by NSF, and shall make the record available to NSF upon request.

9.2 All complaints received by the Company, the subject of which is under the Company's control, and referring to Certified Products or services covered by the scope of the Certification provided by NSF, are included in this policy. At a minimum, the record shall include:

- The nature of the complaint
- Identification of the product and or services pertinent to the complaint
- Confirmation that remedial action(s) have been taken
- The status (open or closed) of the complaint, as known to the Company

9.3 All records and other information provided to NSF shall remain the property of the Company and be handled by NSF as confidential information.

9.4 If the complaint record required is not retained by the Company at the facility location being audited, NSF shall be advised by the Company in writing of the location of the record. The Company shall provide the record to NSF upon request by whatever means selected by NSF.

10. MODIFICATION TO APPROVED INHIBITOR

10.1 A modification to a listed inhibitors formulation must be made using Application Form CIAS 2. Technical data and supporting test data, where appropriate, should be submitted with the application form.

10.2 A change of the manufacture or the bottling plant must be notified to NSF.

10.3 A change to the method of mixing or a change of supplier of an ingredient(s) must be notified to NSF.

10.4 Test requirements for modified inhibitors will be identified by the TAP and the appropriate test laboratory shall be notified.

11. FEES

11.1 The following fees apply: -

- An administration fee invoiced upon receipt of an application
- A certification fee invoiced upon final approval
- A initial listing fee
- Professional fees for additional work above that expected for a CIAS application(*)
- An annual NSF CIAS membership fee
- An annual listing fee per product
- Amendments to approvals or certification issues(*)
- Professional fees for audit administration

12. APPEALS

12.1 Complaints and appeals regarding NSF should be addressed to the NSF Director in the first instance. These are reviewed with the TAP committee as necessary.

12.2 In the event of there being irreconcilable differences between the applicant and the TAP regarding appeals, these will be forwarded to the Chairman of the NSF Advisory Committee for review.