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| NSF International Certification Scheme                | Doc. No. <b>BGD 02</b> |
|   | ISSUE NO : 5           |
| Title: Guidance on interlaboratory comparison testing | DATE : 01-MAY-2017     |

## **Introduction**

NSF requires that the laboratories that it uses to undertake testing operate in accordance with ISO 17025. Section 5.9 of this standard (Assuring the quality of test and calibration results) requires that laboratories actively participate in processes that verify the validity of their test methods, with one way being to participate in interlaboratory comparison (round-robin) programmes.

NSF will expect all laboratories to successfully complete a 'round-robin' exercise prior to becoming a listed laboratory with NSF. This will be initiated by NSF, with the laboratory undertaking a test programme proposed by the Technical Assessment Panel (TAP),

Laboratories will also be expected to enter into 'round-robin' exercises as deemed necessary at any time. Examples when this could occur include a revision to a product standard, questioning the validity of results or improving quality control measures.

New laboratories will normally enter into 'round-robin' exercises with NSF laboratory at Oakdale. However, NSF can stipulate an alternative test facility as necessary.

Note : 'Round-robin' testing shall be undertaken in such a manner that where a manufacturer's testing facilities is involved, both the test facility and possibly the product being used for the comparison tests are not subject to any conflicts of interest or breach of confidentiality.

All costs associated with this activity shall be at the laboratory's expense.

NSF may require laboratories to enter into 'round-robin' exercises at any time. Although it is appreciated that this would need to fit in with other commercial work, it is important that laboratories embrace these exercises and complete them in a timely manner.

Note : Refer to the NSF Guidance Document BGD 01 'Guidance for laboratories seeking registration with NSF' for supporting information).

## **TMV Scheme**

### New laboratories

When new laboratories initially seek registration with NSF a 'round-robin' exercise will need to be completed with the NSF laboratory at Oakdale.

For laboratories testing products for the TMV3 Scheme, three full set of tests shall be completed on one valve for the designations applied for.

NSF shall forward a suitable product to the new laboratory for tests. Once the necessary test programme has been completed (excluding durability) the product and test results are forwarded to NSF. The product will then be forwarded to the NSF laboratory at Oakdale for a repeat of the test programme and these test results also forwarded to NSF.

NSF will collate the test results from both laboratories and present them to the TAP to review.

Note : Should the need arise it may be necessary to call upon the services of another laboratory to enter into the exercise if the results from the initial two laboratories prove to be inconclusive).



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#### Existing NSF registered laboratories

Every 5 years the TAP will notify NSF that the next product received from the laboratory should be subject to a 'round-robin' exercise.

NSF will forward the product to the NSF laboratory at Oakdale, with clear instructions of the tests to be undertaken at the appropriate designations. The test laboratory submitting the results will, at this time, be notified that the recently submitted valve and test result will be subject to a 'round-robin' exercise.

(Note : Testing should incorporate the audit tests and be performed on the designation having the highest mixed temperature and repeated on the designation having the lowest flowrate for both high and low pressure applications (e.g. T46 and S at HP and LP).

The test results will be forwarded to the TAP for review. The members of the TAP reserve the right to require additional testing by both the 'lead' laboratory and the registered laboratory. If further testing is required then other NSF registered laboratories could be asked to participate.

#### **CIAS Scheme**

##### New laboratories

When new laboratories initially seek registration with NSF a 'round-robin' exercise will need to be completed with an independent laboratory of their choice.

Full testing against the requirements of the NSF CIAS standard will need to be completed. ('Standard specification for the Performance of Chemical Inhibitors for Use in Domestic Hot Water Central Heating Systems).

NSF shall forward a suitable product to the new laboratory and independent laboratory for tests. Once the necessary test programme has been completed the test results from both laboratories are forwarded to NSF.

NSF will collate the test results from both laboratories and present them to the TAP to review.

(Note : Should the need arise it may be necessary to call upon the services of another laboratory to enter into the exercise if the results from the initial two laboratories prove to be inconclusive).

##### Existing NSF registered laboratories

All registered laboratories will be asked to enter into a 'round-robin' exercise on a 5 yearly basis.

NSF will forward a sample to all the laboratories with clear instructions of the tests to be undertaken.

The test results will be forwarded to the TAP for review. The members of the TAP reserve the right to require additional testing as deemed necessary.

#### **Other NSF Schemes**

##### New laboratories

When new laboratories initially seek registration with NSF a 'round-robin' exercise will need to be completed with the NSF laboratory at Oakdale or an alternative laboratory as deemed appropriate by NSF.

The TAP will decide what test programme constitutes the 'round-robin' exercise.



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#### Existing NSF registered laboratories

The TAP will decide what test programme constitutes the 'round-robin' exercise.

#### Conclusions

The conclusions derived by NSF following 'round-robin' exercises shall be conveyed to those parties that entered into the exercise, with any remedial action need to be undertaken as deemed necessary.

#### Appeals

Appeals about decisions made in the first instance should be addressed to the TAP. In the event of irreconcilable differences between and applicant and the TAP, any appeal will be forwarded to the Chairman of the Industry forum and the Chairman of the NSF Advisory Committee for their consideration.

| Revision History |             |         |                           |         |                |
|------------------|-------------|---------|---------------------------|---------|----------------|
| AESOP Issue #    | NSF Issue # | Page #s | Description of Change     | Author  | Effective Date |
| --               | 4           | 1       | Reference to WRc removed. | P Davis | 25.01.17       |
| --               | 5           | 1-3     | Company name change       | A Jones | 01.05.17       |