Australian Government
National Measurement Institute
Bradfield Road, West Lindfield NSW 2070

Notification of Change
Certificate of Approval No 8/77A
Change No 1

Issued by the Chief Metrologist under Regulation 60
of the
National Measurement Regulations 1999

The following changes are made to the approval documentation for the

HME Model HMEFV18000H Milk Tank

submitted by Hendl & Murray Engineering
Tawa Street
Melville Hamilton
NEW ZEALAND.

A. In Certificate of Approval No 8/77A dated 4 February 2005;

1. The Condition of Approval referring to the review of the approval should be amended to read:

   "This approval becomes subject to review on 1 March **2015**, and then every 5 years thereafter."

2. The FILING ADVICE should be amended by adding the following:

   "Notification of Change No 1 dated 14 January 2011"

B. In Technical Schedule No 8/77A dated 4 February 2005, the 1st paragraph of the TEST PROCEDURE should be amended to read, in part:

   "… any relevant tests specified in **the Uniform Test Procedures**."

Signed by a person authorised by the Chief Metrologist to exercise his powers under Regulation 60 of the *National Measurement Regulations 1999*.

Australian Government

National Measurement Institute

12 Lyonpark Road, North Ryde NSW 2113

Certificate of Approval

No 8/77A

Issued by the Chief Metrologist under Regulation 60
of the
National Measurement Regulations 1999

This is to certify that an approval for use for trade has been granted in respect of the

HME Model HMEFV18000H Milk Tank

submitted by Hendl & Murray Engineering
Tawa Street
Melville Hamilton
NEW ZEALAND.

NOTE: This Certificate relates to the suitability of the pattern of the instrument for use for trade only in respect of its metrological characteristics. This Certificate does not constitute or imply any guarantee of compliance by the manufacturer or any other person with any requirements regarding safety.

This Certificate is issued upon completion of a review of approval No 8/77.

CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 March 2010, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked with approval number 'NMI 8/77A' and only by persons authorised by the submittor.

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It is the submittor's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the National Measurement Institute (NMI) and with the relevant Certificate of Approval and Technical Schedule. Failure to comply with this Condition may attract penalties under Section 19B of the National Measurement Act and may result in cancellation or withdrawal of the approval, in accordance with document NMI P 106.

The National Measurement Institute reserves the right to examine any instrument or component of an instrument purporting to comply with this approval.

DESCRIPTIVE ADVICE

Pattern: approved 15 November 2004

- An HME model HMEFV18000H horizontal cylindrical refrigerated milk tank of 18 000 L capacity.

Technical Schedule No 8/77A describes the pattern.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 8/77A dated 4 February 2005
Technical Schedule No 8/77A dated 4 February 2005 (incl. Test Procedure)
Figures 1 and 2 dated 4 February 2005

Signed by a person authorised by the Chief Metrologist to exercise his powers under Regulation 60 of the National Measurement Regulations 1999.

TECHNICAL SCHEDULE No 8/77A

Pattern: HME Model HMEFV18000H Milk Tank

Submittor: Hendl & Murray Engineering
Tawa Street
Melville Hamilton NEW ZEALAND

1. Description of Pattern

An HME model HMEFV18000H horizontal cylindrical refrigerated milk tank of 18 000 L capacity, and incorporating a sight-gauge for the measurement of the volume.

1.1 Milk Tank

(i) The tank (Figures 1 and 2) is a horizontal stainless steel cylinder sheathed in an outer casing of stainless steel; the cavity between is filled with insulating material. The bottom of the tank slopes towards the outlet orifice which is located near the sight-gauge side of the tank. An outlet pipe is permanently fixed to the outlet orifice and has a continuous slope such that the entire contents of the tank drain freely to the outlet valve.

(ii) A sight-gauge mounted in a vertical position is located in the vicinity of the outlet valve and comprises a transparent polycarbonate sight-tube fitted in a rigid stainless steel support channel fixed to the side of the tank adjacent to a stainless steel scale, with the edge of the scale placed against the front centre of the sight-tube. The scale has provision for a lead seal to be attached to the scale mounting assembly.

The scale is graduated in 50 L increments.

A valve located at the bottom of the sight-gauge allows milk to enter the sight-tube and be isolated from the tank contents and allows the sight-tube to be drained without draining the contents of the tank.

(iii) Levelling is effected by means of 6 adjustable legs with reference to the datum level marks permanently marked on the tank at the widest horizontal cross-section. The volume represented by the datum level marks is marked on the sight-gauge scale. Each corner leg has provision for fixing the leg to the floor, and provision for sealing, after levelling.

(iv) Provision is made for a CIP (clean in place) system for both the tank and the sight-gauge.

(v) Access for inspection is provided by a side entry opening.

(vi) An optional milk-sampling valve may be fitted to the tank.

1.2 Verification/Certification Provision

Provision is made for a verification/certification mark to be applied.

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1.3 Sealing Provision

Provision is made for the adjustable legs to be sealed after the tank has been levelled.

1.4 Markings

The following data is marked on the nameplate permanently attached to the calculator/ indicator in a clearly visible location:

Manufacturer's mark, or name written in full	Hendl & Murray Engineering
Model number	…….
Serial number	…….
Pattern approval mark	NMI 8/77A
Maximum capacity	 L
Datum level	 L

In addition, the volume represented by the datum level marks shall be marked on the sight-tube scale.

TEST PROCEDURE

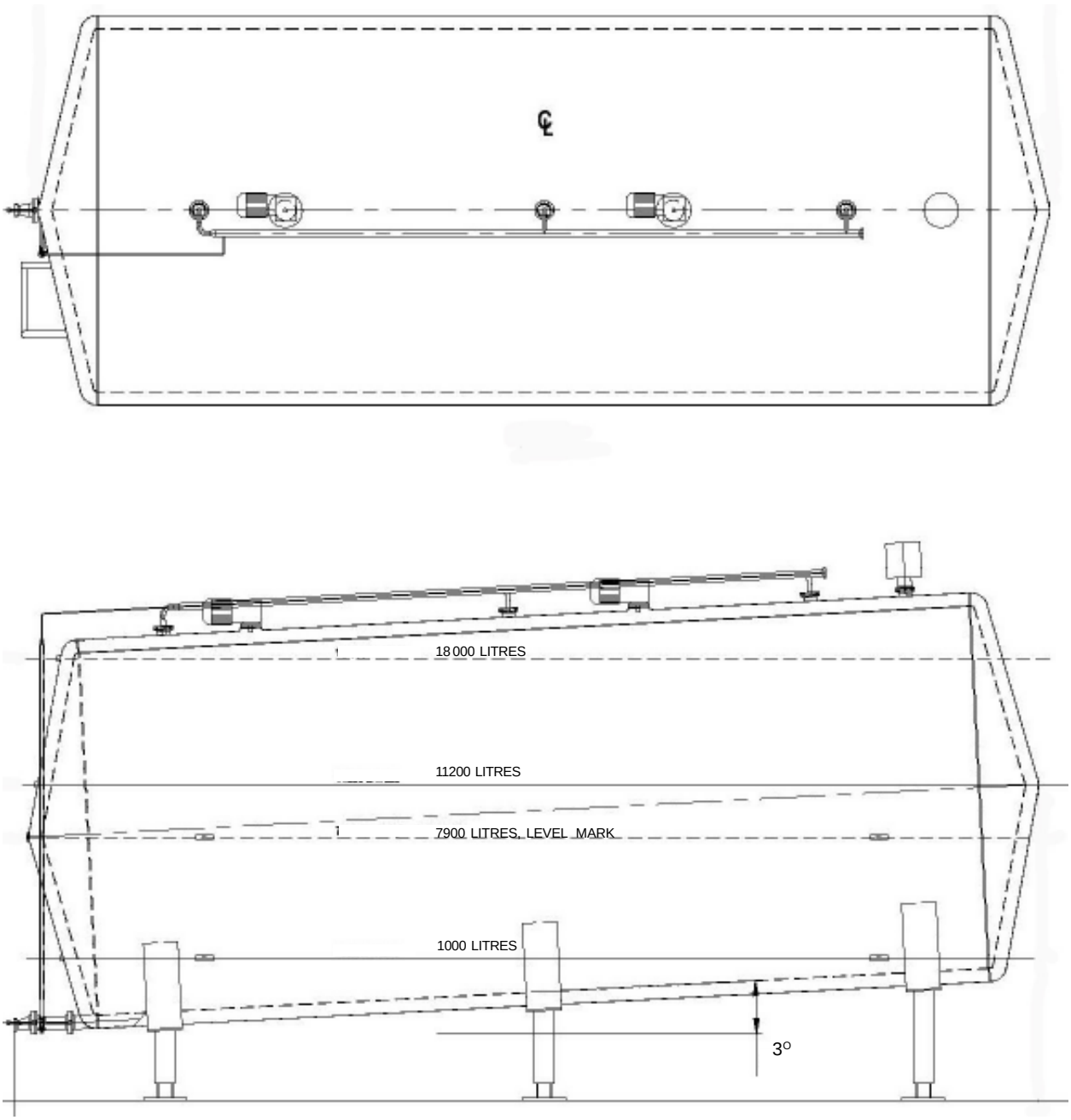
Instruments should be tested in conjunction with any relevant tests in NSC Test Procedure No 6, *Farm Milk Tanks*.

Maximum Permissible Error at Verification/Certification

The maximum permissible error for milk tanks incorporating a sight-gauge is:

±1 scale interval.

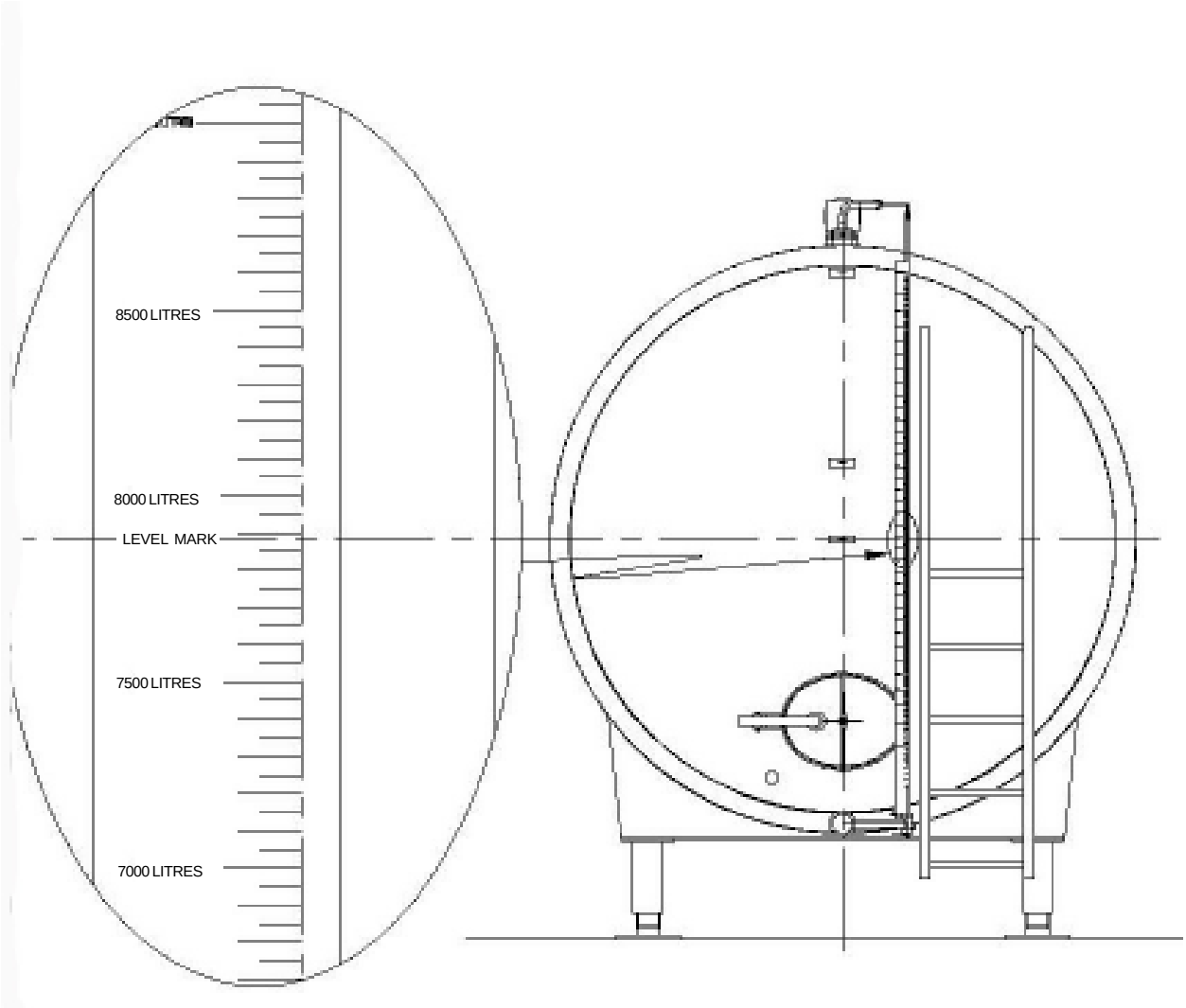
FIGURE 8/77A – 3



HME Model HMEFV18000H Milk Tank

8/77A
4 February 2005

FIGURE 8/77A – 2



HME Model HMEFV18000H Milk Tank