AQIS Notice Meat: 98/1		NFS:17		
Title: Steam Vacuum EquipmentContact Officer: Kiran Johar Senior Veterinary Officer, Technical Services BranchPh:(02) 6272 4535 Fax (02) 6272 5226				
CO File No:				
* Central & Area Office *OIC Inspection Staff	Last Notice 97/38	*Managers, Export Meat Establishments	Last Notice	
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* State/Territory Departments Responsible for Agriculture Last Notice		Establishments	Last Notice 97/37	
Responsible for Agriculture	e Last motice	* Export Meat Industry Organis * AUS-MEAT	Last Notice	

Purpose

To advise industry and the AQIS staff on

- * approval for the use of a steam vacuum equipment and,
- * guidelines for its use in an effective and hygienic manner.

Background

The United States Department of Agriculture (USDA) Food Safety and Inspection Service (FSIS) recently approved the use of steam vacuum on beef carcases as an alternative to the *trim only* policy for the removal of faecal and ingesta contamination when such contamination is less than 2.5 centimetres in its greater dimension.

A trial of this under Australian processing conditions was commissioned by the Meat Research Corporation (MRC). The purpose of the trial was to evaluate the efficacy of the system for the effective removal of faecal/ingestal contamination of ≤ 25 mm and for removal of hair and wool fibre from the skin opening lines. This trial demonstrated that the use of the steam vacuum, under prescribed conditions of usage, was a valuable alternative and adjunct to the present *trim only* policy.

Scope

For all species of livestock slaughtered in Australia.

Procedures

SPOT TREATMENT	SWEEPING MOTION TREATMENT	
For removal of <i>FAECAL/INGESTAL</i> contamination of ≤ 25 mm only	For removal of <i>HAIR / WOOL FIBRES /</i> <i>FLEECE DUST</i> in single or cluster on the opening line of hide	

1. The equipment must not be used as a replacement for effective and proper sanitary dressing techniques. It can however, precede process and product

monitoring (AQIS Notices $\underline{96/37}$ and $\underline{97/5}$ required by the Meat Hygiene Assessment Program.

- 2. The system is approved for removing small localised dressing defects, <u>but not for</u> <u>use on areas of carcase with "excessive" dressing defects, open abscesses, septic</u> <u>bruises, grease, parasitic lesions and lactating udders</u>. These defects must be removed from the carcase by knife trimming and it is mandatory that the hygiene trim (during the process or end of the line) on the carcase precedes the use of the steam vacuum system on the slaughter floor.
- 3. It is advisable, and under the good manufacture practice, that establishments should aim for a five (5) second contact time with a particular area of carcase surface. However, the minimum contact time will vary between establishments depending on variables like chain speed, etc.
- 4. The method of application of the equipment should depend on the type of contamination present. The vacuum unit must be used for localised 'spot' treatment only, on faecal and ingestal contamination less than 25 mm in its greatest dimension. Contamination greater than this must be removed by knife trimming. Where the vacuum unit is used on the chain at the end of the line, procedures should be in place to prevent the use of this equipment to remove faecal material greater than 25 mm in any dimension and to prevent sweeping the vacuum head over any visible pathological defects.
- 5. Use of the unit in a sweeping motion is permitted for the removal of incidental visible contamination such as single hairs, wool fibres, wool clusters and wool dust on the skin opening lines. However, where possible, establishments should aim for the five (5) second contact time.
- 6. The equipment must provide accurate temperature and vacuum readings. Once the temperature and vacuum parameters are adjusted, before operations start, the system should work properly and steadily without significant fluctuations. In collaboration with suppliers, establishments should develop guidelines for the operation of the equipment for inclusion in the operator's work instructions. Operators must be fully conversant with the work instructions and the program to ensure that the vacuum head is kept clean of wool and fat build-up.
- 7. The vacuum pressure at the carcase surface must be sufficient to remove the steam and water from the vacuum area to prevent dripping. Minimum levels for these parameters should be specified according to the manufacturer specifications and documented in the work instructions. The equipment should not be used if the parameters do not meet these specified levels.
- 8. Water or steam temperature at the carcase surface must be maintained at a minimum of 82°C. The water or steam temperature recording device should measure the temperature of the water or steam as close as possible to the carcase surface and the degree of vacuum and steam pressure developed by the equipment should be displayed and be visible to the operator. The system must have an automatic shut-off system or other device to alert the operator when the temperature of the water or steam falls below 82°C.

- 9. The outer surface of the vacuum head must be subjected continuously to steam at a minimum of 82°C during its use. Alternatively the vacuum head should be sterilized in 82°C water after each use.
- 10. The company shall have a written work instruction for the use of the steam vacuum equipment available for employees and shall document how compliance with the above requirements is monitored.

Brian Macdonald Director Meat Inspection Division