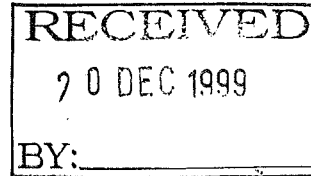




PPL Therapeutics (NZ) Ltd  
Whakamaru  
Main Road  
R.D.1  
Mangakino  
New Zealand



Tel (07) 882 8543  
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17 December 1999

ERMA NZ  
20 Customhouse Quay  
PO Box 131  
WELLINGTON

Attention: \_\_\_\_\_ - Applications Officer

**ANNUAL REPORT TO THE ENVIRONMENT RISK MANAGEMENT  
AUTHORITY (ERMA) ON COMPLIANCE WITH THE CONTROLS LAID DOWN  
IN THE AUTHORITIES DECISION ON GMF98001 DATED 24<sup>TH</sup> MARCH 1999**

Statement:

"PPL Therapeutics (NZ) Ltd has at all times complied with the controls laid down in the ERMA Decision to approve the application "GMF98001 with Controls" on the field test (maintain a manufacturing ewe flock of) transgenic sheep for the purposes of producing a biopharmaceutical (human alpha-1-antitrypsin, hAAT)."

In support of this statement please find the following documents

- Appendix 1 - Agriquality 6-monthly audit report on PPL Therapeutics(NZ) Ltd. This document addresses the specific areas identified in MAFR Standard 154.03.06 section 4.13 which you request comment on.
- Appendix 2 - Breakdown of numbers of transgenic animals on site.

Yours sincerely

**FARM MANAGER**

# Appendix 1

1046 Rangiora Street  
PO Box 951, Rotorua  
Telephone +64 7 349 9720  
Facsimile + 64 7 349 9739

15 December 1999

MAF Biosecurity Authority  
Box 2526  
Wellington

PPL Therapeutics  
Main Rd  
Whakamaru



## Six Monthly Audit: PPL Therapeutics (NZ) Ltd Registered Sheep Transitional Facility, Whakamaru

As per MAFRA Standard 154.02.02.01, attached is the six monthly audit report for the above facility undertaken on 14 December 1999.

### 1.0 Primary Facility

#### 1.1 Livestock Tally

Livestock at 05/05/99		
Sheep	111	
Sentinel Goats	8	
<b>Total Stock</b>		<b>119</b>
Livestock Introduced (05/05/99 - 14/12/99)		
Sheep	0	
Sentinel goats	0	
<b>Total additions</b>		<b>0</b>
		<b>119</b>
Less deaths (05/05/99 - 14/12/99)		
Sheep	7	
Sentinel goats	0	
<b>Total deaths</b>		<b>7</b>
<b>Livestock on books</b>		<b>112</b>
<b>Physical count (14/12/99)</b>		
Sheep	104	
Sentinel Goats	8	
<b>Total livestock</b>		<b>112</b>
<b>Discrepancy</b>		<b>0</b>

## 1.2 Comments

- 4 'Indigenous' ewes euthanased as surplus to requirements.
- 3 'Original Imports' died during the period with laboratory evidence of (i) Pulpy Kidney, (ii) Ovine Johnes Disease and (iii) Chronic Facial eczema. No evidence of scrapie seen on histological examination of brain tissue.

## 1.3 Genetic Material

### 1.3.1 Stock take of Imported Ram Semen

No physical count of remaining semen was undertaken at this audit as PPL NZ Ltd intend to request their parent Board to approve destruction of stored genetic material early in 2000. Data below refers thus to the May 1999 audit.

Semen straws imported into New Zealand	461	
Less semen straws for viability testing	<u>4</u>	
Total straws placed into quarantine		457
Less straws used in quarantine	172	
Straws destroyed by incineration	<u>32</u>	
		204
Book balance		253
<b>Physical count (05/05/99)</b>		
Ram 10122	106	
Ram 10141	146	
<b>Total</b>		<b>252</b>
<b>Discrepancy</b>		<b>1</b>

### 1.3.2 Comments

- One straw from Ram 10141 appears to be missing. This has been noted in previous audits and a signed statement from [redacted] BVSc has been received that one straw was inadvertently dropped into the tank during transfer procedures. The only way to confirm this is to drain the tank completely which at this stage is not warranted.

### 1.3.3 Lymph Node material

- The balance of imported lymph node material is still held frozen within the primary quarantine facility.

### 1.3.4 Sentinel Goats

The 8 sentinel goats were intra cerebrally inoculated with lymph node suspension derived from founder rams on 4/4/97. MAFRA Standard 154.02.02 requires that these animals be observed for a minimum period of 3 years. If after this period there are no clinical signs of scrapie, then the sentinals are to be slaughtered and brains examined histologically. The 8 goats have remained clinically normal and are thus due for euthanasia and postmortem early April 2000.

## 2.0 Secondary Facility

PPL's Secondary quarantine facility was approved on 23 March 1998 as a Transitional Facility under section 39 of the Biosecurity Act 1993.

### 2.1 Livestock Tally

Livestock at last audit (05/05/99)		
Sheep	1046	
Goats	0	
<b>Total</b>		<b>1046</b>
Livestock Introduced (05/05/99 - 14/12/99)		
Sheep (purchased / transferred )	53	
Sheep (born)	177	
<b>Total Additions</b>		<b>230</b>
		<b>1276</b>
Less deaths (05/05/99 - 14/12/99)		
Sheep (non exotic)	31	
Sheep (exotic)	21	
<b>Total deaths</b>		<b>52</b>
<b>Livestock on books</b>		<b>1224</b>
<b>Physical Count (14/12/99)</b>		<b>1224</b>
<b>Discrepancy</b>		<b>0</b>

### 2.2 Comments

- 23 sheep were euthanased during the period either on welfare grounds or as surplus to requirements.
- Post mortem reports on exotic animals that died indicated a range of conditions which are common in New Zealand
- No evidence of exotic disease was found following laboratory of tissues submitted as per MAFRA Standard 154.02.02.

Current stock details in the secondary facility are as follows:

1 <sup>st</sup> Generation exotic progeny	127
2 <sup>nd</sup> Generation and higher exotic progeny	113
Non exotic	<u>984</u>
	1224

### 3 Supervision in relation to ERMA

ERMA approved on 17 March 1999 PPL's application to field test (maintain a manufacturing flock) of transgenic sheep for the purposes of producing a biopharmaceutical (hAAT) in the Waikato region, subject to certain controls (Application GMF98001). Although the flock is not yet in production (ie. milk being taken for field trial purposes), PPL have agreed to implement these controls. Most are currently mandatory under MAFRA Standard 154.02.02, but additional ones are as follows:

- Both perimeter fences are now electronically monitored and alarmed.
- Biological material (except wool) from transgenic sheep including carcasses is / are being disposed of by on site incineration.
- All sheep (over 3 months of age) in the containment facility are implanted with electronic microchips.

### 4 General Comments

- A new facility across the road has now been developed to allow for the planned increase in stock numbers on the secondary site. A site inspection has been undertaken and the facility, management and procedures comply with MAFRA Standard 154.02.02. Formal approval is now sought for this extension to be included as part of the registered Transitional Facility (see separate document).
- Management of both primary and secondary quarantine facilities including livestock, record keeping and structural maintenance continues to be of a high standard.

### 5 Acknowledgements

The assistance of Mr. \_\_\_\_\_ d and his staff at PPL Therapeutics Whakamaru during this audit is acknowledged.



AgriQuality New Zealand Ltd  
Rotorua

cc PPL Therapeutics NZ Ltd

## Appendix II

To: ERMA NZ

Details of transgenic animals as at 15 December 1999.

### PQF

	Total No. Animals	Total No. Transgenic Animals
Born 1997:	98	53

### SQF

Born 1998:	117	89
Born 1999:	152	<b>24 confirmed</b> plus 98 newborn/very young animals whose transgenic status has not yet been confirmed. Of these 98 animals, we expect approximately 75% to be transgenic.