

**FOOD SAFETY ASSURANCE PROGRAM
(BETA-AGONIST MONITORING IN PIG FARMS)
DEPARTMENT OF VETERINARY SERVICES MALAYSIA**

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1. Objective

This program entitled 'Food Safety Assurance Program – Beta-agonist Monitoring in Pig Farms' is an industry sponsored program to be coordinated by Department of Veterinary Services Headquarters (DVS Headquarters) and Federation of Livestock Farmers Associations of Malaysia (FLFAM) and implemented jointly by State Departments of Veterinary Services (DVS State) and the member associations of FLFAM in the states.

The objective of the program is to strengthen the monitoring in pig farms and to ensure pork and pork products offered to consumers in Malaysia are free from beta-agonists.

This program complements the 2-prong strategy put into place by the Ministry of Health which conducts monitoring of chemical residues in pork and pork products and the Ministry of Agriculture and Agro-Resources which conducts monitoring of chemical residues in pigs at the abattoirs and in the farms.

Essentially this program is self-sponsored by the producers as an initiative in promoting safe food production practice and requires all pig producers in the country to partake in three times yearly testing program for the freedom of beta-agonists.

2. Interested Parties and Stakeholders

The interested parties and stakeholders involved in the program are

- ▶ Producers/Farmers
 - Producers shall appoint Authorized Veterinarian as in the form in Annex 4.
 - Producers shall cooperate with the respective State Livestock Farmers Association and Authorized Veterinarian to carry out sampling under the monitoring programme.
- ▶ State Livestock Farmers Associations
 - All State Livestock Farmers Associations will cooperate with FLFAM and work closely with DVS State, producers and Authorized Veterinarians to implement the monitoring programme in the respective states.
- ▶ Federation of Livestock Farmers Associations of Malaysia (FLFAM)
 - FLFAM will coordinate with the DVS Headquarters and in particular with the Head of Zoonosis and Public Health Section, Biosecurity and SPS Management Division.
 - FLFAM will deal directly with State Livestock Farmers Associations and Authorized Veterinarians in providing the programme schedule, necessary facilities and equipments to implement the programme.

- ▶ Authorized Veterinarians
 - Private veterinarians with annual practicing certificates shall be listed as Authorized Veterinarians by the DVS Headquarters to undertake the supervision of sampling, submission of samples (Annex 2) to authorized labs and submission of sampling data (Annex 5) to DVS State.
 - Private veterinarians shall apply to the DVS Headquarters in the form as in Annex 3 to offer their services in the programme.

- ▶ Authorized Laboratories
 - Laboratories that are authorized by the DVS Headquarters where the testing for beta-agonists can be carried out.
 - Lab results (original) shall be submitted to the Head of Zoonosis and Public Health Section, DVS Headquarters with copy to the Authorized Veterinarian.

- ▶ State Department of Veterinary Services
 - Coordinating with the State Livestock Farmers Association and Authorized Veterinarians with respect to sampling, testing and compiling farm and sampling data and implementing the protocols for farm clearance (with instructions from DVS Headquarters) and the issuance of health certificates and movement permits under the programme.
 - Shall participate in the supervision of sampling at some farms selected at random.

- ▶ Department Veterinary Services Headquarters
 - Coordinating with the FLFAM on the implementation of the program and deal with DVS State on the programme schedule and protocols on clearance of farms for beta-agonists.
 - List of Authorized Veterinarians and Laboratories shall be made available to FLFAM and DVS State.

3. Modus Operandi

3.1 Coverage

This program covers all pig farms in West Malaysia and if proven successful will be promoted for implementation in East Malaysia. The activity steps that are required in the program are shown in Annex 1.

3.2 Beta-agonists and test method

The beta-agonists covered under the program include the initial testing by the Enzyme Linked Immunosorbent Assay (ELISA) method which is a sensitive test for the detection of beta-agonists.

The ranges of beta-agonists that can be tested include the primary molecules of salbutamol and clenbuterol and others. This assay can be conducted relatively fast and is cheap, however its specificity i.e. false positives when the concentration of the product is low and when there are interference with other substances requires a more specific and confirmatory test i.e. Liquid Chromatography Mass Spectrometry (LC MS MS). The Department of Veterinary Services will inform FLFAM on the list of authorized laboratories

approved for testing. The laboratories will have to show evidence that the tests that are performed are accredited to Standards Malaysia or if the tests are not yet accredited, the laboratory will have to show evidence of method validation and shall be subject to the inspection by DVS officers.

3.3 Collection and submission of samples

Each farm will be required to permit and work closely with the authorized veterinarians who will be supervising the collection of samples and the submission of the samples to authorized laboratories.

The authorized veterinarian shall follow the sampling and submission protocol as shown in Annex 2.

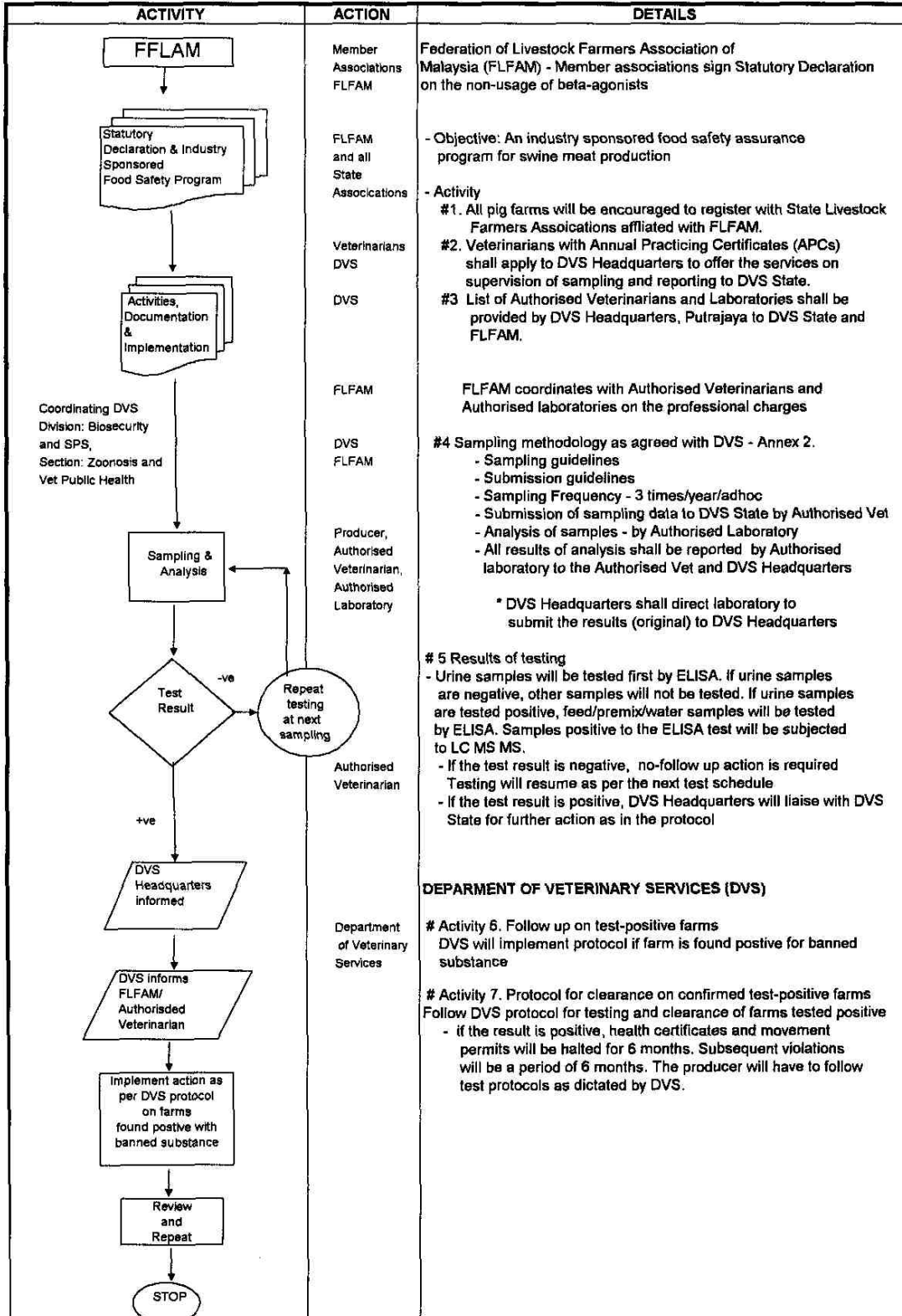
3.4 Frequency of testing and cost of monitoring

The frequency of testing will be **three (3)** times per year. The scheduling of sampling will be coordinated by the Pig Unit, FLFAM and the Department of Veterinary Services Headquarters, Putrajaya.

The cost of monitoring i.e. payment of professional fees to the Authorized Veterinarian and to the Authorized Laboratory will be borne by the individual producers/farmers.

Department of Veterinary Services
Putrajaya
8 January 2008

**CARTA ALIRAN KERJA
(PEMANTAUAN BETA-AGONISTS DI LADANG BABI)
JABATAN PERKHIDMATAN HAIWAN**



**PROTOKOL PENSAMPEL DAN PENGHANTARAN SAMPEL
(PEMANTAUAN BETA-AGONISTS DI LADANG BABI)
JABATAN PERKHIDMATAN HAIWAN**

Farm Sampling Requirements

1. Specimens to be collected

1. Two composite urine samples of 10 ml each placed in Vacutainer tubes from porkers representing 10% of the porker population in the farm up to a maximum of 60 urine samples collected.
Procedure: Based on calculation [Eg. per 100 sows: 900 standing pigs * 10% * duration of porker stage (1/6 months) ie. 900 SPP x 10% x 1/6 months = 15 porkers], collect urine from the required number porkers aged 5 months and above, but not exceeding 60 porkers selected at random. Composite the urine into a clean bucket, mix well and divide into 2 Vacutainer tubes for submission.
2. One composite water sample – 10 ml placed in Vacutainer tubes obtained from drinkers of porker pens
3. One composite feed sample meant for porkers – at least 50 gram placed in a zipper pack plastic bag
4. One composite premix sample meant for porkers – at least 50 gram placed in a zipper pack plastic bag

2. Packing Material

1. Urine samples – 10 ml Vacutainer tubes
2. Water sample – 10 ml Vacutainer tube
3. Feed sample – 1 Zipper pack plastic bag (size 8X5 inch)
4. Premix sample – 1 Zipper pack plastic bag (size 8X5 inch)
5. 1 plastic bag (size 9X14 inch) to pack all samples from one farm
6. 1 large plastic bag (size 20X30 inch) to bag all samples from 5-10 farms then put into polystyrene box
7. Paper tape to tape the outer packing & dispatch box
8. Polystyrene box, various sizes depend of quantity of farms' samples.
9. Needle (18G) and Needle holder for transferring of urine/water into Vacutainer tube.

Samples shall be labeled and packed as above, secured properly and laboratory forms filled by the supervising veterinarian in the presence of the farmer and promptly dispatched to authorized laboratory on the day of collection – See Section 3. Dispatch of sample

The sample will be labeled and dispatched as described in Sections 6 and 7.

3. Dispatch of sample

1. Composite samples from one farm will be packed into plastic bag (size 9X14 inch)
2. Tape the plastic bag tightly with paper tape
3. Stamp or make a signature at the edge of the paper tape
4. Samples from multiple farms can be packed into 1 polystyrene box depends on the size of the box
5. Packed all samples with 1 outer plastic bag (20X30 inch) to prevent wetting by melted ice.
6. Put them into polystyrene box with sufficient ice before dispatch to the lab

4. Personal Protective Equipment (PPE)

1. Cover-all/Farm coat
2. Face masks
3. Gumboot
4. Disinfectant
5. Surgical Gloves

5. Others Materials

1. Garbage bag (size S) for composite samples collection (urine, feed, water and premix)
2. Plastic scoop for urine collection
3. Plastic pail for composite urine sample
4. 1.5-2M length stick (PVC pipe) as extension for the scoop

6. Lab Submission Form

All submission form must contain:

1. Farm Name
2. Farm Code
3. Authorized Veterinarian Name, Contact Number & Signature
4. Date of Submission
5. Sample type and ID

7. Labeling of sample

1. Urine - Vacutainer

Farm code: P1234

Sample type & ID: Urine 1

Date: 20 Feb 2008

Farm code: P1234

Sample type & ID: Urine 2

Date: 20 Feb 2008

2. Water - Vacutainer

Farm code: P1234
Sample type & ID: Water
Date: 20 Feb 2008

3. Feed & Premix plastic bag

Farm code: P1234
Sample type & ID: Feed
Premix
Date: 20 Feb 2008

Farm code: P1234
Sample type & ID:
Date: 20 Feb 2008

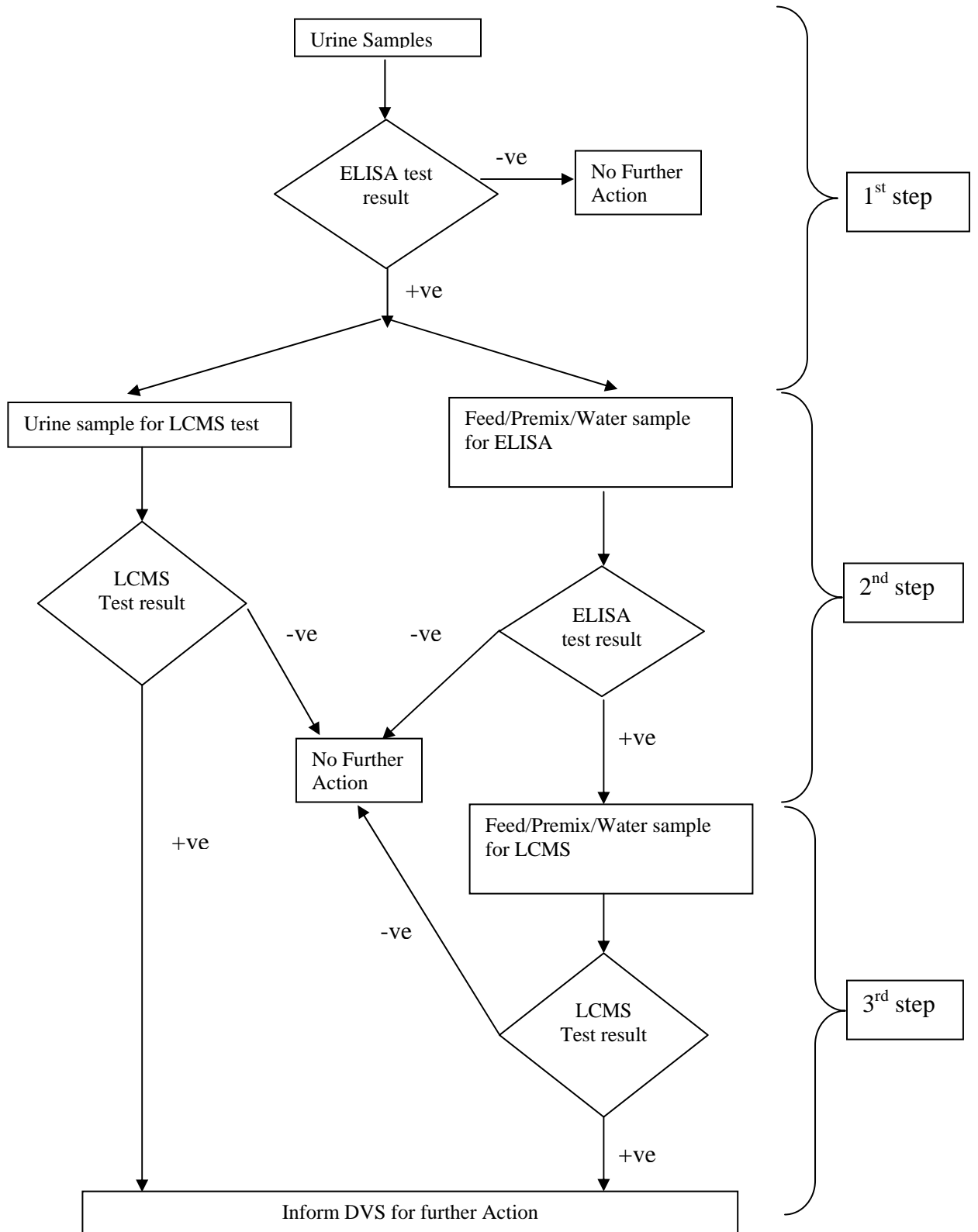
4. For samples from each farm (outer plastic bag)

Farm Code:
Date:
Vet's Name:
Contact No:

8. Sampling Checklist in Farm

1. Ensure appointment letter by the farm is signed by the farm owner
2. Farmer/person in-charged is briefed on the sampling protocol before sampling started
3. After the sampling complete, farm acknowledgement letter must be signed by the farmer/person in-charged
4. Fill up Annex 5
5. Pack samples as per described in above protocol and send to the lab for testing.

**PROTOKOL UJIAN MAKMAL
(PEMANTAUAN BETA-AGONISTS DI LADANG BABI)
JABATAN PERKHIDMATAN HAIWAN**



1 st Step	Urine for ELISA test				
	-ve	+ve			
2 nd Step	No Action	Proceed to LCMS		*Feed/Premix/Water for ELISA test	
		-ve	+ve	-ve	+ve
		No Action	DVS Action	No Action	Go for LCMS
3 rd Step				-ve	+ve
				No Action	DVS Action

*Any of the Feed/Premix/Water sample that show +ve result will be subject to LCMS

*Any of the LCMS +ve result will proceed for DVS further action

**PENGESAHAN PENGAMBILAN SAMPEL
(PEMANTAUAN BETA-AGONISTS DI LADANG BABI)
JABATAN PERKHIDMATAN HAIWAN**

Kod Ladang: _____

Nama Ladang: _____

Dengan ini saya mengesahkan bahawa pengambilan sampel dari ladang saya oleh Doktor Veterinar yang bertandatangan di bawah adalah mengikut protokol yang ditetapkan oleh Jabatan Perkhidmatan Haiwan seperti yang berikut :

- a. 2 sampel urine komposit daripada 10% jumlah babi pedaging (10ml X2)
- b. 1 sampel komposit makanan babi pedaging (100g)
- c. 1 sampel komposit air minuman pedaging (10 ml)
- d. 1 sampel komposit premix pedaging (100g)

Saya bersetuju menghantar sampel-sampel ini ke makmal ini

_____ untuk membuat ujian-ujian
Beta-agonist.

Tandatangan:

Nama Penternak:

Tarikh :

Tandatangan

Nama Doktor Veterinar :

Tarikh:

**TAWARAN SEBAGAI
DOKTOR PERUBATAN VETERINAR YANG DIBERIKUASA
(PEMANTAUN BETA-AGONISTS DI LADANG BABI)
JABATAN PERKHIDMATAN HAIWAN**

MAKLUMAT DOKTOR VETERINAR

Nama:

Alamat Amalan:

No. Telefon:

No Sijil Amalan Tahunan: _____ berakhir pada tarikh _____
(salinan dikepilkan bersama surat ini)

Kepada Ketua Pengarah
Jabatan Perkhidmatan Haiwan
Putrajaya

Saya, Dr _____ ingin menawarkan diri sebagai doktor veterinar yang diberikuasa untuk menyelaras dengan Jabatan Perkhidmatan Haiwan Negeri (JPH Negeri), Persatuan Penternak Negeri dan Makmal yang diberikuasa berhubung pensampelan, penghantaran sampel ke makmal dan data pensampelan ke JPH Negeri di bawah program pemantauan beta-agonists di ladang-ladang babi.

Saya bersetuju untuk menjalankan kerja-kerja pensampelan, penghantaran sampel dan penyediaan maklumat dengan betul dan mengikut protokol pensampelan yang ditetapkan oleh Jabatan Perkhidmatan Haiwan di bawah Program Kepastian Keselamatan Makanan (Pemantauan Beta-Agonist).

Tandatangan

pada hb, bulan

tahun

Nama Doktor Veterinar:

**PELANTIKAN
DOKTOR PERUBATAN VETERINAR
(PEMANTAUN BETA-AGONISTS DI LADANG BABI)
JABATAN PERKHIDMATAN HAIWAN**

Kod Ladang: _____

Nama Ladang: _____

Alamat Ladang: _____

Nama penternak yang melantik: _____

Saya dengan ini melantik Doktor Veterinar seperti dalam lampiran, yang diberi kuasa oleh Jabatan Perkhidmatan Haiwan untuk mengawas dan melaksanakan pensampelan di ladang saya seperti di atas mengikut program pemantauan beta-agonists Jabatan Perkhidmatan Haiwan.

Saya bersetuju membenarkan doktor veterinar tersebut untuk menjalankan kerja-kerja pesampelan tanpa halangan supaya beliau dapat mematuhi dan menepati protokol pensampelan yang ditetapkan.

Perlantikan telah dibuat pada hb, bulan tahun.

Tandatangan

Nama penternak yang memberikuasa:
