**THE SECRETARY’S ANIMAL CARE AND ETHICS COMMITTEE**

**(SECRETARY’S ACEC)**

**ANIMAL RESEARCH APPLICATION**

**(General Research Project)**

**GENERAL INFORMATION**

It is the responsibility of the **investigator** to ensure that all facets of animal care and use meet the requirements of the [Australian code for the care and use of animals for scientific purposes 8th Edition 2013](https://www.nhmrc.gov.au/about-us/publications/australian-code-care-and-use-animals-scientific-purposes). This includes a responsibility to protect and promote the welfare of animals used.

The Code embodies the principles of:

* Reduction of animal use
* Replacement of animal use
* Refinement of animal use.

It is important to consider these principles when designing and carrying out projects.

Under the NSW [*Animal Research Act 1985*](https://legislation.nsw.gov.au/view/html/inforce/current/act-1985-123) *(*the Act*)*, an individual who wishes to carry out a research project involving the use of animals must be issued with an Animal Research Authority by an Accredited Research Establishment or the Secretary of the Department of Regional NSW. Approval by an Animal Ethics Committee (AEC) is also required for the use of any vertebrate animals for research and teaching.

In assessing applications for animal research, it is often difficult for the AEC to obtain a clear picture of what happens to individual animals from the beginning of the project to the end. The AEC must assess the impact of all procedures on animals and of the project as a whole.

The application should, therefore, focus on **what is happening to animals and what is being done to ensure their wellbeing**. It is important that this information is presented in a way that shows clearly what is happening to individual animals from the beginning of the project to its completion. The impact of procedures needs to be clearly detailed. The investigator should provide a step-by-step explanation of all treatments (substances, dose rates, routes, volumes, anaesthetics, surgical procedures etc) and the expected effects. Flow charts or sequence of events tables are often of assistance. In addition, factors that will impact animals, such as housing (type, duration, opportunity for social interaction) should be considered.

The application should also explain clearly why the use of animals is justified, why the species and number of animals have been chosen and that the qualifications of personnel are suitable for the procedures to be performed.

It is important for applicants to be mindful of the composition of the AEC. Applications must be written to be understood, primarily by an interested, intelligent person without a scientific background, not for a specialist. The use of specialist language is not helpful to the committee and may delay the processing of an application while explanations are sought.

Investigators should be familiar with the:

* [Australian code for the care and use of animals for scientific purposes (8th edition, 2013),](https://www.nhmrc.gov.au/about-us/publications/australian-code-care-and-use-animals-scientific-purposes) published by the National Health and Medical Research Council (NH&MRC).
* NSW [*Animal Research Act 1985*.](https://legislation.nsw.gov.au/view/html/inforce/current/act-1985-123)
* NSW [Animal Research Regulation 2021](https://legislation.nsw.gov.au/view/html/inforce/current/sl-2021-0477/lh).

Please return form to:

Email: [secretary.acec@dpi.nsw.gov.au](mailto:secretaryacec@dpi.nsw.gov.au)

For inquiries, please phone (02) 6391 3682 or send an email to [secretary.acec@dpi.nsw.gov.au](mailto:secretary.acec@dpi.nsw.gov.au)

Website: [Secretary’s Animal Care and Ethics Committee](https://www.dpi.nsw.gov.au/about-us/science-and-research/animal-ethics-committees/secretarys-animal-care-and-ethics-committee)

**FORMS MUST BE TYPED**

**THE SECRETARY’S ANIMAL CARE AND ETHICS COMMITTEE**

**(SECRETARY’S ACEC)**

**APPLICATION FOR AN ANIMAL RESEARCH AUTHORITY (General Research Project)**

***Section 1: Administration***

|  |  |
| --- | --- |
| **Project Number** | / |

Add if you are renewing an application for an ongoing project

and already have a project number.

Under the NSW *Animal Research Act 1985,* Corporations (i.e., businesses with an ACN) that undertake animal research in NSW must be accredited in NSW. For information on accreditation please contact DPI Compliance Systems & Accreditation Programs. Email: [bfs.admin@dpi.nsw.gov.au](mailto:bfs.admin@dpi.nsw.gov.au)**.** The ACEC will not approve animal research projects undertaken by unaccredited corporations.

**1. Applicant details**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Name of Principal Investigator** | |  | | | | |
| **Institution or Business name (if applicable)** | |  | | | | |
| **Address** | |  | | | | |
| **Relationship to Business** (e.g., employee) | | | |  | | |
| **Work Phone** |  | **Mobile** |  | | **Email** |  |

**2. a) Have you previously held an Animal Research Authority as Principal Investigator with the Secretary’s Animal Care and Ethics Committee?**

Please left click the relevant check box

**Yes  No**

**If NO, please supply with your application, CV and written references from two independent referees that support your expertise in the procedures you wish to perform.**

Please also read the [Guidance for new researchers](https://www.dpi.nsw.gov.au/dpi/about-us/research-and-development/nsw-dpi-animal-ethics-committees/secretarys-animal-care-and-ethics-committee/guidance-for-new-researchers-applying-to-use-the-drnsw-secretarys-animal-care-and-ethics-committee) applying to use the Department of Regional NSW Secretary’s Animal Care and Ethics Committee

**b) Have you previously held an Animal Research Authority with any other Animal Ethics Committee other than the Secretary’s Animal Care and Ethics Committee?**

**Yes  No**

If YES, which Animal Ethics Committee(s) and what was the period of time that this approval was granted for.

**4. Title of proposed research proposal:**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **5.** | | **Purpose and procedure categories of research**  The NSW Animal Research legislation requires mandatory annual reporting of details of animal use in research and teaching to the NSW DPI by all holders of Animal Research Authorities. Details of the category of research purpose and procedure for all projects using animals under the Act must be provided.  Submission of annual animal use details to NSW DPI is done on your behalf by the Secretary’s ACEC. This information excludes identity of researchers and research establishments. However, the project’s categories of purpose and procedure must be included in project applications for ACEC approval.  For guidance on the definitions of purpose and procedure, please refer to the document [Guidance for researchers on reporting animals used in research.](https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0003/1330905/Guide-for-reporting-animals-used-in-research-v3.pdf)  Left click the check box next to each purpose, procedure that applies to this project.  **5.1 Research Purposes**  Please select one of the following ten purpose categories which best describes the ‘purpose’ of the application. | | | | | | | |
|  | |  | | | | | | | |
|  | | A1 | Stock breeding |  |  | A6 | Research: Animal management or production |
|  | | A2 | Stock maintenance |  |  | A7 | Research: Environmental study |
|  | | A3 | Education |  |  | A8 | Production of biological products |
|  | | A4 | Research: Human or animal biology |  |  | A9 | Diagnostic procedures |
|  | | A5 | Research: Human or animal health & welfare |  |  | A10 | Regulatory product testing |

|  |  |
| --- | --- |
|  | **5.2 Research Procedures**  Please select one of the following nine procedure categories that applies to this project. If multiple apply, the highest number must be chosen. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | P1 | Observation involving minor interference |  |  | P6 | Minor physiological challenge |
|  | P2 | Animal unconscious without recovery |  |  | P7 | Major physiological challenge |
|  | P3 | Minor conscious intervention |  |  | P8 | Death as an end point e.g. LD50, LC50, baiting (death is a planned endpoint) |
|  | P4 | Minor surgery with recovery |  |  | P9 | Production of genetically modified animals |
|  | P5 | Major surgery with recovery |  |  | | |

**6.** **Has an Animal Research Authority or an Animal Suppliers Licence previously been held by any personnel participating in the proposed project and been cancelled?**

**Yes  No**

**Have any personnel participating in the proposed project been convicted in the last 3 years of an offence under:**

|  |  |
| --- | --- |
| *Animal Research Act 1985* or Regulations? | Yes No |
| *Prevention of Cruelty to Animals Act 1979* or Regulations? | Yes No |
| *National Parks and Wildlife Act 1974* or Regulations | Yes No |
| *Exhibited Animals Protection Act 1986* or Regulations | Yes No |
| *Non-Indigenous Animals Act 1987* or Regulations? | Yes No |
| Any equivalent Commonwealth, other State or Territory Statute or Regulations | Yes No |

**If you answered YES to any of the above, please provide details of the offence and any penalty imposed.**

**7. Proposed date of commencement:**

|  |
| --- |
|  |

**Note:** The date of commencement must be after the date of the ACEC meeting this application is submitted to. Projects may only commence after you have received the written Animal Research Authority approving the project. When applying to renew approval for an ongoing project, the commencement date can be the same as the previous approval expiry date, as long as the application is submitted to the ACEC at least 2 weeks before an ACEC meeting that is scheduled on a date prior to the expiry date. See [Secretary’s ACEC website](https://www.dpi.nsw.gov.au/about-us/science-and-research/animal-ethics-committees/secretarys-animal-care-and-ethics-committee) for meeting dates.

**8. Proposed date of completion:**

|  |
| --- |
|  |

**9. a) Is the project being supported by an external organisation?**

**Yes  No** (If No, go to question 8)

**b) Has an application been lodged for external support?**

**Yes  No**

**c) If you answered YES to either of the above questions, state the name of the organisation and date of application and whether the application has to date been successful:**

**d) If a funding application is not successful, will the project still go ahead? Yes  No  Not applicable**

**10. Please indicate whether this application is for:**

|  |  |
| --- | --- |
| **A new project?** | **Yes No** |
| **A project which has (previously or simultaneously) been submitted to this or another ethics committee? \*** | **Yes No** |
| **\*If YES to the above, is this an ongoing project renewal Yes No**  **If NO, provide reasons for re-submission or simultaneous submission and the name of the AEC(s)** | |
| **A significantly revised project?🕈** | **Yes No** |
| **🕈If Yes to the above, quote the approval number and species and number of animals used to date.** | |

**11. Does the project involve recombinant DNA technology or infectious, toxic, radioactive or carcinogenic agents that may be harmful to other animals or persons?**

**Yes  No**

**If the answer is YES:**

**9.1 Will adequate precautions be taken in accordance with statutory requirements and have relevant personnel been informed?**

**9.2 Has the appropriate authority or licence been obtained?**

**12. Does the project involve native, imported or protected species?**

**Yes  No  (**If No, go to question 11)

**If the answer is YES, have the relevant licences been obtained from the National Parks and Wildlife Service or other authorities?**

**Yes  No**

**Permit issued by:**

**13. Application fee**

|  |
| --- |
| An annual fee of **$100** applies for each project.  Fees for Authorities and Accreditations to allow research to be undertaken on animals under the *Animal Research Act 1985* have been approved as exempt from GST. Division 81  Please pay via the online portal when you are about to submit your application by left clicking your mouse on the link below while also pressing the ‘ctrl’ key on your keyboard. A receipt for your payment will be emailed to you. Please attach the receipt pdf to the email when you are sending your application.  Please note, if you are submitting an annual report as well as a **project renewal** application, only one payment of $100 is required.  If you are submitting a **new project** application, please confirm via secretary.acec@dpi.nsw.gov.au that the ACEC will oversee your project **before** paying  [**https://forms.bfs.dpi.nsw.gov.au/forms/10678**](https://forms.bfs.dpi.nsw.gov.au/forms/10678) |

**14.**

|  |  |
| --- | --- |
| **Principal Investigator name** |  |
| **Principal Investigator signature** |  |
| **Date** |  |

**THE SECRETARY’S ANIMAL CARE AND ETHICS COMMITTEE**

**(SECRETARY’S ACEC)**

**ANIMAL RESEARCH PROJECT APPLICATION (General Research Project)**

***Section 2: Project Details and personnel***

**15. Project details**

**a. Title of project:**

|  |
| --- |
|  |

**b. Type of research proposed (Please use plain English)**

|  |
| --- |
|  |

**c**. **Location of proposed research**

Please note, research must be using animals based in NSW for the ACEC to approve the project.

|  |
| --- |
|  |

**16. Personnel**

List the names, qualifications, training and relevant experience (with the species and the procedures/tasks they will undertake) of all personnel who will be participating in the animal components of the proposed project.

1. **Principal Investigator**

|  |  |
| --- | --- |
| **Name** |  |
| **Relevant Qualifications** |  |
| **Experience in research techniques and procedures to be undertaken and the species being used \*** |  |

**\*** if no experience, describe how relevant experience will be obtained

**b) Associate Investigator(s)**

**Associate Investigators** are people trained and experienced in the procedures used in the project and do not need supervision by the Principal Investigator.

|  |  |  |
| --- | --- | --- |
| **Name** | **Relevant Qualifications** | **Experience in techniques and procedures to be undertaken and the species being used** |
|  |  |  |
|  |  |  |
|  |  |  |
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|  |  |  |
|  |  |  |
|  |  |  |

**c) Other people participating:**

**Other Participants** are people, such as volunteers or employees, with no or little training or experience in the procedures but are always directly supervised by the Principal or Associate Investigators and are receiving training in animal survey techniques and handling.

|  |  |  |
| --- | --- | --- |
| **Name** | **Relevant Qualifications** | **Experience in techniques and procedures to be undertaken and the species being used** |
|  |  |  |
|  |  |  |
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***Section 3: Justification for Animal Use***

**Aim of the Project in Lay Terms**

The Code states that “the use of animals for scientific purposes must have scientific or educational merit; must aim to benefit humans, animals or the environment; and must be conducted with integrity” The ACEC must be able to judge “whether the potential effects on the wellbeing of the animals involved is justified by the potential benefits.

Your answer is crucial for the assessment of scientific or educational merit and the necessity for animal use. Use lay terms - terms that will be understood by a person without a scientific background.

**17. Describe the aims of the project in lay terms. Comment on the significance of the research which you believe justifies the use of animals. Specify what you hope to achieve.**

**18. Does the project repeat previously reported experiments?**

**Yes  No**

**If YES, give the reasons for the experiments to be repeated.**

|  |
| --- |
|  |

**Reasons for Animal Use**

**19. Why is it necessary to use live animals in this project?**

|  |
| --- |
|  |

**20. What alternatives to animals have been considered and why is it not possible to use these?**

|  |
| --- |
|  |

**21. What species of animal will be used? Give the scientific and common name (and strain, age, sex and weight if applicable) and**

**reason this type of animal have been chosen?**

Copy, paste and complete a new table for each different species you’re planning to use

|  |  |
| --- | --- |
| **Species** |  |
| **Breed/strain** |  |
| **Sex** |  |
| **Age Range** |  |
| **Body Weight Range** |  |
| **Reason why animals with these characteristics have been chosen** |  |

**Numbers of animals**

**22. How many animals will be required?**

|  |  |  |
| --- | --- | --- |
| **Species** | **Number required** | **Over 12 months or 3 years?** |
|  |  |  |
|  |  |  |

**23. Explain, on the basis of experimental design, why this number of animals will be required.**

***Section 4: Ethical Considerations***

***Assessment of the Impact on Animal Wellbeing***

**Sequence of Events**

**24. Give details (sequentially) of what will happen to the animal(s), at each stage of the project, from the time you obtain them until the time the project is completed, including procedures undertaken.**

A list, flow chart or sequence of events table may assist in making this information clear.

Below is an example project schedule - please delete example when completing form if not using table.

|  |  |  |
| --- | --- | --- |
| **Day of study** | **Activity or Procedure** | **Animal monitoring** |
| Day -7 to -1 | Animals arrive at facility and acclimatise | Checked twice daily, morning and afternoon |
| Day -1 | Animals separated into treatment groups | Checked twice daily |
| Day 0 | Group 1. Given injection of X  Group 2. (Control) given saline inj | Checked every 2 hours for first 6 hours post injection then twice daily |
| Day 1 | Collect blood samples | Checked twice daily and also checked 1 hour post collection |
| etc |  |  |

**Impact**

**25. Identify and list all factors and activities/procedures in the project that may have an impact on an animal's wellbeing. This may include handling, restraint, housing, sedation, sample collection, use of chemicals, surgery etc, as well as specific experimental procedures.**

(Refer to the [CHECKLIST](#Checklist) to ensure all details have been considered.)

**25.1 Is transportation of animals necessary during the project or for spelling/agistment in between procedures?**

**Yes No**

**If the answer is YES**,

**How will animals be transported; over what period of time and what precautions will be taken to minimise the impact of transport?**

|  |
| --- |
|  |

**26. Describe each factor or activity/procedure identified in Question 25 and provide details about how any adverse impacts will be avoided or minimised.**

Refer to the [CHECKLIST](#Checklist) to ensure that all details have been considered.

Details should include any treatment substances; dose rates; routes of administration; surgical and related procedures including sedation, anaesthetic; analgesia and tranquillising agents and methods of monitoring their adequacy, if applicable.

Below is an example table to use, if you want to, for describing the activities and how the possible adverse impacts will be avoided or mitigated. Please delete example when completing form if you’re not using table.

|  |  |  |
| --- | --- | --- |
| **Factor/activity or procedure** | **Description** | **Possible adverse impacts and how these will be avoided or mitigated** |
|  |  |  |
|  |  |  |

Below is an example table for medications or chemicals used. Please delete example when completing form if you’re not using table.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Drug or chemical name** | **Dose rate** | **Route of admin** | **Frequency of admin** | **Possible adverse impacts and how these are mitigated** | **Drug/chemical adequacy**  **Monitoring** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

**Animal Monitoring**

**27. How will animals be monitored while the procedures are carried out? Include details of frequency, methods used and means of recording animal monitoring and usage.**

(Attach a copy of the monitoring sheet template if applicable)

|  |  |
| --- | --- |
| **Monitoring method** |  |
| **Frequency** |  |
| **Means of recording animal monitoring** |  |
| **Means of recording animal usage in project** |  |

**28. How will animals be monitored for the duration of the project, i.e., day to day monitoring? Include frequency and details of methods used and means of recording monitoring.** (Attach a copy of the monitoring sheet template if applicable)

|  |  |
| --- | --- |
| **Monitoring method** |  |
| **Frequency** |  |
| **Means of recording animal monitoring** |  |

**29. Who will monitor the animals? Include names, qualifications and experience with the species being used.**

**29.1 During weekdays?**

|  |  |  |
| --- | --- | --- |
| **Name** | **Relevant qualifications** | **Experience with the species/procedures being monitored** |
|  |  |  |
|  |  |  |

**29.2 At night (if applicable)?**

|  |  |  |
| --- | --- | --- |
| **Name** | **Relevant qualifications** | **Experience with the species being monitored** |
|  |  |  |
|  |  |  |

**29.3 During weekends and holidays?**

|  |  |  |
| --- | --- | --- |
| **Name** | **Relevant qualifications** | **Experience with the species being monitored** |
|  |  |  |
|  |  |  |

**30. Who will be responsible for the management of emergencies and how will you ensure that the nominee(s) can be contacted?**

|  |  |
| --- | --- |
| **Name** | **How it is ensured that nominee can be contacted** |
|  |  |
|  |  |

**Animal Housing and Management**

**31. Where will the animals be housed?**

|  |
| --- |
|  |

**32. Describe the type of housing to be provided.**

|  |
| --- |
|  |

**33. What will be the maximum and minimum number of animals per cage/pen** (if applicable)?

|  |
| --- |
|  |

**33.1 State dimensions of proposed cage/pen.**

|  |
| --- |
|  |

**34. Where will procedures be performed?**

Include details of location and whether there is a specific treatment/surgical room or yards or a crush etc.

|  |
| --- |
|  |

**35. What will animals be fed, and how often will they be fed?**

|  |
| --- |
|  |

**Source**

**36. Where will you get the animals from?**

(Attach a copy of the owner consent form template if animals are privately owned. If the research is a clinical trial being undertaken using private veterinarians, please attach the information sheet provided to the veterinarians).

|  |
| --- |
|  |

**36.1**. **If applicable, does the animal supplier have an Animal Supplier’s Licence?**

**Yes  No**

**Duration**

**37. What will be the maximum time an individual animal is held for the project?**

|  |
| --- |
|  |

**Re-use**

**38. Does this project involve the use of any animals that have been the subject of previous research?**

**Yes No**

**If the answer is YES,**

**38.1 What has previously been done to these animals? Include project name(s) and identification number(s).**

|  |
| --- |
|  |

**Fate of Animals**

**39.** **What will happen to the animals at the completion of the project?**

Please note, under the NSW [Animal Research Regulation 2021 Clause 24](https://legislation.nsw.gov.au/view/html/inforce/current/sl-2021-0477/lh), the fate of domestic cats and dogs **must** be provided in annual interim reports when used in projects.

Please tick all relevant options in the table below and provide additional details if required.

|  |  |
| --- | --- |
| **Possible fates of animals at the end of the research project** |  |
| Remain in this project if project renewal is approved by the ACEC | Yes No |
| Reuse in other approved projects | Yes No |
| Retire from use in research and will be kept by the establishment or researcher | Yes No |
| Remain with the owner as privately owned | Yes No |
| Rehomed | Yes No |
| Euthanasia | Yes No |
| Will remain free living or released to the wild | Yes No |

**39.1 If you are using cats or dogs and are not rehoming the animals at the end of their use in the project, please explain why this is not possible.**

|  |
| --- |
|  |

**40. Will factors affecting the animals determine the humane endpoint of the project or the use of an animal in the project (e.g., tumour size, maximum weight loss, clinical signs)?**

**Yes No**

**If the answer is YES, give details, such as criteria for early endpoints.**

|  |
| --- |
|  |

**If the answer is NO, what will be the end point?**

|  |
| --- |
|  |

**41. How will you euthanase the animals if there is an emergency or if   
 euthanasia is an end point?**

**41.1 How will this be done?**

|  |
| --- |
|  |

**41.2 Where will euthanasia be carried out?**

|  |
| --- |
|  |

**41.3 Who will do it, and what is their experience in the technique to be used?**

|  |
| --- |
|  |

**41.4 Could animal tissue be shared with other investigators?**

|  |
| --- |
|  |

***Section 5: Declaration of Responsibilities***

**Declaration by the Principal and Associate Investigators**

I certify that the use of animals in this project will conform with NSW Animal Research legislation and the principles of the NH&MRC [Australian code for the care and use of animals for scientific purposes 8th Edition 2013.](https://www.nhmrc.gov.au/about-us/publications/australian-code-care-and-use-animals-scientific-purposes) I accept responsibility for the conduct of all procedures detailed in this application and for the supervision of all personnel delegated to perform any such procedures.

I confirm that all personnel have read this application and have agreed to comply with the procedures described and any conditions imposed by the Secretary’s Animal Care and Ethics Committee.

Principal Investigator (Name)

Signature: ………………………………………………………….

Date: …………………

Associate Investigator (s) (Name)

Signature: ……………………………………………………………

Date: …………………

Associate Investigator (Name

Signature: ……………………………………………………………

Date: …………………

Associate Investigator (Name)

Signature: …………………………………………………………….

Date: …………………

PRIVACY COLLECTION NOTICE

NSW Department of Primary Industry (NSW DPI), within the Department of Regional NSW (DRNSW) is collecting your personal information (name, address, email address and telephone number) for administrative purposes pursuant to the *Animal Research Act 1985*.

NSW DPI will securely store your personal information in accordance with the NSW Privacy Laws – [Privacy and Personal Information Protection Act 1998](https://legislation.nsw.gov.au/view/html/inforce/current/act-1998-133). Please note that NSW DPI may be required to disclose this information in accordance with legal obligations contained in the *Government Information (Public Access) Act 2009* or for other lawful purposes.

You can request access to your own personal information at any time. To access or amend your information email the Secretary’s Animal Care and Ethics Committee at [secretary.acec@dpi.nsw.gov.au](mailto:secretary.acec@dpi.nsw.gov.au); or write to Secretary’s Animal Care & Ethics Committee, NSW Department of Primary Industries, Locked Bag 21, Orange, NSW 2800.

For more details on our privacy obligations refer to our [Privacy Management Plan](https://www.regional.nsw.gov.au/privacy/privacy-management-plan) or contact [gipa@regional.nsw.gov.au](mailto:gipa@regional.nsw.gov.au)

**CHECKLIST**

1. **What is happening to the animals?**
2. **What will be the effects?**
3. **How will the effects be minimised.**

**Anaesthesia**

**Fasting**

**Induction (drug, dose, route)**

**Maintenance (drug, dose, route)**

**Methods of monitoring anaesthesia and recovery**

**Additional support during anaesthesia and recovery**

**(eg heat, intravenous fluids)**

**Location of induction and recovery areas**

**Behaviour modification**

**Stimulus (type, duration, frequency)**

**Blood/body fluid collection**

**Volume**

**Route**

**Frequency**

**Anaesthesia or analgesia**

**Restraint**

**Animal monitoring (methods, frequency)**

**Diet/water modifications**

**Type**

**Amount**

**Effects**

**Measurement of intake**

**Animal monitoring**

**Drug treatments**

**Substance**

**Volume**

**Route**

**Frequency/total number per animal**

**Local and systemic effects**

**Anaesthesia or analgesia**

**Possible side effects**

**Restraint**

**Euthanasia**

**Method**

**Location (where procedure will be performed)**

**Expertise of personnel**

**Genetic manipulation**

**Methods**

**Potential effects**

**Housing**

**Location**

**Isolation**

**Group housing (stocking rates, sexes)**

**Shelter**

**Bedding**

**Hiding areas**

**Environmental enrichment**

**Duration held**

**Conditioning period**

**In-vitro studies**

**Source of animals**

**Duration held**

**Euthanasia**

**Surgery**

**Anaesthesia**

**Location of pre-operative preparation area**

**Pre-operative preparation**

**Surgical procedure (site, technique)**

**Sterile technique (instruments, drapes, surgeon)**

**Location of and housing in post-operative recovery area**

**Post-operative management**

**Post-operative monitoring (methods, frequency, duration)**

**Use of analgesics (type, dose, route, frequency, means of determining necessity for use)**

**Expertise**

**Transport**

**Type**

**Duration**

**Confinement**

**Numbers of animals**

**Air-conditioning**

**Toxicology**

**Substance**

**Volume**

**Route**

**Frequency of treatments / total number per animal**

**Local and systemic effects**

**Anaesthesia or analgesia**

**Restraint**

**Animal monitoring (methods, frequency)**

**Endpoint/duration**

**Tumour/neoplasia induction**

**Method**

**Site**

**Endpoint**

**Animal monitoring (methods, frequency)**

**Teaching**

**Source of animals**

**Housing**

**Duration held**

**Method of disposal**

**Wildlife studies**

**Location**

**Methods**

**Capture methods**

**Handling/restraint**

**Housing**

**Monitoring**

**Release**

**Effects on population**