Procedure for applying for the outdoor use of anticoagulant rodenticides that are restricted to indoor use only

Overview

In order to make a successful application for the use of a currently restricted rodenticide outdoors, the following areas must be considered and fully addressed:

- Presence or likelihood of serious and unacceptable impacts of a rodent infestation on public health, safety or employment prospects etc.
- Proven failure of traditional techniques (e.g. trapping, and rodenticides approved for outdoor use)
- Resistance in local rodents to rodenticides approved for outdoor use.
- An estimate of the likely re-infestation rate.
- Presence of protected scavenging/predatory species (e.g. barn owls and red kites) in the immediate area. If such species are present, it must be demonstrated that the expected loss of individuals will not damage local populations.
- Prior to an application and maintained once control has been achieved, there should be a proven reduction of ‘harbourage’ (i.e. rodent hiding places and food availability) to an irreducible minimum.
- Establishment of a satisfactory monitoring programme.

Introduction

Brodifacoum, flocoumafen and difethialone are currently restricted to indoor use only\(^1\). This restriction is in place due to the high risk of secondary poisoning of birds and mammals. Resistance in rats to first generation as well as to those second generation anticoagulants with unrestricted use has been reported although hard evidence on the scale or severity of the resistance problem is not yet available, although a comprehensive, systematic survey is currently underway at the University of Huddersfield. Due to the lack of alternative (non-anticoagulant) chemical methods of control as well as practical issues with non-chemical methods, problems have been experienced in controlling some populations of rats.

It has been considered that the use of brodifacoum, flocoumafen and difethialone could be used to control populations of rats that have exhibited resistance to other anticoagulants. The use of brodifacoum, flocoumafen and difethialone to control such populations (where it involved outdoor use) would be against previous recommendations made by the ACP as it is considered it could pose a higher risk to predatory birds and mammals than similar compounds with lower toxicities that are

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\(^1\) Indoors is defined in this context by the registration authorities as:- i) situations where the bait is placed within a building or other enclosed structure and where the target is living or feeding predominantly within that building or structure; and ii) behind closed doors. If rodents living outside a building can move freely to where the bait is laid within the building, then products containing brodifacoum/flocoumafen should NOT be used. Open barns or buildings and tamper-resistant bait stations placed in open areas are not classified as indoors. However, sewers or closed drains are considered to be ‘indoors situations’.
used outdoors. However, use was granted for the use of brodifacoum outdoors at one site due to site specific conditions although this should not be seen as a precedent for future applications. Applications for outdoor use have also been refused where it has not been considered appropriate.

Increasing concern has been raised by some local authorities and pest control operators over control failures believed to be due to resistance. A framework has therefore been developed to allow for the submission and consideration of specific applications for outdoor use of anticoagulants that are otherwise restricted to indoor use only. This procedure is set out below

Criteria to be considered by an Applicant prior to submitting an application for the outdoor use of rodenticides currently restricted to indoor use only

Outlined below are details of the steps and information that would be needed as part of an application to CRD for the outdoor use of a rodenticide currently restricted to indoor use.

1. Provide detailed information on the site of the proposed treatment. This information should include:
   
   a. Location of site
   b. Size of site
   c. Description of site – including information on the prevalence and (where relevant) location of predatory or scavenging birds and mammals present in the immediate vicinity (e.g. within 3 km of the treatment site).
   d. Location and size of rat population – this should ascertain the source of the infestation, an estimate of its size, and in particular whether the infestation is self sustaining or coming from a source that is away from the site in question. An assessment of the scale of the problem in terms of area as well as size of rat population is required. Identification of food sources, breeding areas and refuges. A map and/or photographs may be helpful.
   e. Reason for choice of proposed treatment including reference to proposed product.
   f. Estimated quantity of bait required and duration of treatment
   g. Means of bait deployment and visit frequency (Note a high visit frequency, perhaps daily, for carcass searching would be expected to mitigate secondary poisoning risk)
   h. Operator, name address and qualifications/ experience for the intended use. Given the potential environmental risks, the application should be handled by an appropriately trained operator to ensure that the treatment is carried out properly and is well targeted.
   i. Assessment of risks to unprotected people and measures proposed to reduce these

2. Detail of housekeeping, proofing and other measures that have been implemented to limit infestation.
3. Details of previous control strategy(ies) including non-chemical methods of control employed. Nature and duration of treatments, quantities of bait used etc. Estimate of degree of control achieved; location of carcasses etc.

4. Reasons for control failure.

5. Results from tests to demonstrate the resistance status of representative individuals from the infestation or reason for believing the infestation comprises individuals resistant to approved treatments.

6. A justification of the need for use of a currently restricted rodenticide in terms of the need for a high level of control to be achieved at the site in question. (Examples might include specific human health risks, damage to aircraft etc).

7. For the proposed use of a currently restricted rodenticide, an outline of the measures proposed pre, during and post-treatment in order to mitigate potential effects on non-target organisms. These measures should include information on how, when and how frequently carcases will be searched for. Other mitigation measures should also be considered, for example the use of bird scarers, warning notices to adjacent pet owners and livestock owners etc.

8. In addition to the above information there is also a requirement to monitor the effects of the treatment on birds and non-target mammals. This monitoring scheme should also include an assessment of the residues present in both target and non-target animals. Therefore, the application must include a detailed proposal for monitoring the effects of the treatment in terms of potential effects on birds and non-target mammals.

9. The applicant will be required to submit a detailed report post treatment to cover the following

   a. information on quantity and location of bait used
   b. information on control achieved
   c. outline of procedure undertaken to find both target and non-target carcases
   d. number and location of rodent carcases found, this should include an assessment of residues present
   e. information on non-target casualties identified, this should include an assessment of residues present
   f. any other information pertinent to the treatment
   g. factors employed to mitigate against future infestation
   h. results of the monitoring programme

The above work needs to be scientifically robust and to GLP/GEP. The design of the field work should be discussed with CRD prior to the application being made.

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2 Monitoring of the effects as well as residues in target and non-target animals of the treatment is required in order to guide other applications in particular if applications in the vicinity are required or a repeat treatment is requested.
10. The above work needs to be conducted in line with current best practice. The design of the field work should be discussed with CRD prior to the application being made.

**Consideration of the application**

Once the application is submitted to CRD, the case made by the applicant will be considered. Key issues for consideration will include whether all non-rodenticide control options have been exhausted, and whether the likely environmental impacts of the proposed treatment are outweighed by the likely benefits of controlling a severe rodent infestation. CRD’s assessment may need to take into account the cumulative impact of multiple treatments within an area, if several applications are made or if multiple treatments have been carried out within a local area.

CRD may consult the ACP for their advice. This may be done outside of a meeting so that there should not be any delay in assessing the application.

If as a result of the above authorisation is granted the following need to be considered:

- a. Time period over which the authorization will be granted
- b. The need for a record of all activities carried out
- c. Requirement for a post-treatment report, to cover details of bait deployment, control achieved and what was found in terms of number of dead rats, non-target animals etc (see point 8 above)

The post treatment report will be assessed by CRD following conclusion of the treatment. This information will help to modify the above framework as well as determine or influence the acceptability of future applications.

**Additional issues**

Applications will be considered on a case-by-case basis. Authorisation granted on a site-specific basis, or exceptionally for several adjacent sites (covered by a single application) if it is clear that treatment of adjacent properties is essential for an effective outcome.

There is concern that if an applicant provides sufficient justification for authorisation to be granted, this justification might be applied to multiple sites in the same location. If this was the case, there would need to be a consideration of the potential scale of the problem as well as of the treatment required. In addition, there would need to be consideration of the appropriateness of granting authorisation for one site but not to an adjacent or nearby site on the basis of scale of use. This procedure is not intended to lead to outdoor use of brodifacoum, difethialone or flocoumafen over large areas, notwithstanding the fact that resistance to the other anticoagulants might be widespread.

The above procedure will be reviewed and amended depending upon experience gained.
Applications for use of rodenticides currently restricted outdoors should be made in writing addressing all of the above points. The Application should be sent to pa.copr@hse.gsi.gov.uk. An indication and justification of when the use is required should be included.

Whilst we are gaining experience of this type of application we will charge the actual cost of processing. The evaluation is likely to need some careful consideration so you should allow time for this in making your application. Again we are unsure exactly how long this work will take at this stage but anticipate at least a month's notice will be required.

CRD
August 2011