Dear Sirs,

Additional Application for an Emergency Authorisation in 2020
Asulam for Bracken Control

1 Introduction

1.1 This is an application on behalf of the Bracken Control Group (BCG) for an Emergency Authorisation (EA) under Article 53 of Regulation EC 1107/2009 for the use of Asulam to control bracken in rough grazing, moorland, amenity grassland, forestry and the historic environment throughout the UK during 2020.

1.2 This application is supplementary to the application that was submitted on 26th July 2019, also for the 2020 season.
   1.2.1 In addition to the covering letter, the initial application included three annexes and five enclosures. The annexes and the first enclosure are available from the Asulam page of the BCG website.
   1.2.2 This additional application does not repeat information that was provided in the initial application; the focus is on providing new information.

1.3 This covering letter is supported by a completed Form CRD-9, which is at Annex 1. Due to COVID-19 restrictions, it has not been possible to obtain a new Letter of Access from UPL in time to submit with this application. The letter, submitted with the previous application is at Annex 7, and the new letter will be forwarded on receipt.

1.4 On 25th November 2019, a draft approval notice was issued to the initial application, and this introduced some restrictions that had not been in the EA approvals for previous seasons. These restrictions are a cause of concern to many in the bracken control industry.
1.5 The concerns about the restrictions were raised with the Chemicals Regulation Division of HSE (CRD) and Defra. Defra hosted a meeting in York on 21st February 2020 to allow the concerns, and other issues relating to bracken control, to be discussed between CRD, the BCG, Natural England and UPL Europe Ltd.

1.5.1 The BCG’s notes from this meeting are attached (Annex 2).

1.6 The purpose of this additional application is to provide information that was not available when the original application for the 2020 season was submitted, in July 2019.

1.6.1 Supporting information is provided in a range of 7 Annexes and 13 Appendices. These are not circulated with the application but are available to download from the Bracken Control website. This link is repeated in the header of each page of this application.

2 Liaison with CRD

2.1 The support from CRD for the series of EA approvals, since the 2013 bracken control season, has been very much appreciated.

2.2 The meeting hosted by Defra in February provided a very helpful opportunity to review the issues and identify the concerns being expressed by the bracken control industry.

2.3 The aim of the BCG is to work with CRD to reconcile the need to protect the environment from the application of harmful pesticides with the perceived requirement to provide some control of an invasive plant that poses a threat in several important areas.

3 Issues

3.1 The draft EA approval for 2020 is due to be issued in final form, in late April. The restrictions contained in the draft version were discussed during the February meeting. The key areas of concern are:

3.1.1 No approval to apply Asulam using ground-based equipment,

3.1.2 The proposal that Amidosulfuron products could be used as an alternative to Asulam,

3.1.3 The increase in the unsprayed horizontal buffer zone distance to surface water bodies from 50m to 90m, and

3.1.4 The list of information required to support further EA applications.

3.2 Several UK government agencies have expressed concern about the impact of the proposed restrictions on the ability to control bracken and complete agri-environment schemes that are in progress or planned.
3.3 End-users (such as: landowners, land and woodland managers, large and small NGOs, historic environment managers, water catchment managers) have expressed concern about not being able to carry out follow-up control after primary treatment by helicopter if ground-based application of Asulam is not available.

3.4 Aerial spray contractors are concerned about the economic viability of spraying any bracken with the increased buffer zone.

3.5 The possibility of introducing additional controls that cover the application of bracken control products was discussed in outline during the meeting hosted by Defra in February. The BCG supports the introduction of some changes and is keen to discuss options with CRD.

3.6 The above issues are considered in turn in the text below.

4 Aerial Spraying Buffer Zone

4.1 The increase in the buffer zone to 90m will have a big impact on the ability of aerial spray contractors to control bracken, especially on the wetter, western side of the UK, where more bracken covered land falls within 90m of a watercourse.

4.2 Appendix 1 provides a comparison between the area of bracken that can be controlled with 90m and 50m buffer zones. The comparison provides data from five estates with large scale bracken control programmes under Countryside Stewardship agreements in England. Data from 18 smaller estates are also provided.

4.3 The reasons behind the increase in width are not completely understood.

4.3.1 UPL Europe Ltd. has provided a statement (Annex 3) about the aquatic end-point used in the assessment of the width of the required buffer zone.

4.3.2 This indicates that the proposed 90m buffer zone includes a large margin of safety and the statement presents information to indicate that the original 50m buffer zone would provide an adequate safety factor.

4.3.3 It is hoped that this can form the basis of further technical discussion that will lead to a shared understanding of the requirement for this buffer.

4.4 The improvement in the navigational accuracy that helicopters can achieve, following the widespread introduction of GPS navigation systems, should also be considered. This improvement has taken place since the introduction of the 50m buffer zone.

5 No Approval for Ground-based Application of Asulam

5.1 It has been suggested that Amidosulfuron would be a suitable alternative for ground-based control of bracken, but there are significant concerns about the suitability of these products for bracken control. See the next section for further details.

5.2 The lack of ground-based chemical control will have two negative impacts:

5.2.1 There will be a reduction in the area of bracken controlled as ground-based contractors will be unable to operate, and
5.2.2 It will not be possible to carry out any chemical follow up control of emerging bracken fronds after primary treatment by helicopter applied Asulam.

5.3 The lack of chemical follow-up is very important. Control of emerging bracken fronds, after primary treatment, is an essential part of bracken control. In places where this is not carried out, the bracken can regenerate swiftly and five years after primary treatment, full bracken cover can be reinstated.

5.4 Forestry land managers have specific concerns about the loss of ground-based application of Asulam.

5.4.1 Bracken control is often required in advance of establishing or re-planting forestry plantations. This is important in view of the ambitious planting targets set by UK governments.

5.4.2 Aerial application is not practical for the vast majority of forestry sites.

5.4.3 Currently, there is no approval to use Amidosulfuron products in forestry situations.

5.4.4 Tree tolerance trials are required to establish which tree species will tolerate over spraying by Amidosulfuron products. Trials are planned but data will not be available until the end of 2020, at the earliest.

5.4.5 An application for an Extension of Authorisation for Minor Use to allow Amidosulfuron to be used in forestry situations could be submitted, but not until the results of the tree tolerance studies are available.

5.4.6 Also see the statement from Scottish Woodlands (Appendix 8).

6 Use of Amidosulfuron Products

6.1 Amidosulfuron products have approval for use on grassland for the control of docks and some annual broad-leaved weeds, but as above they do not have an approval for use in forestry.

6.1 The product label for Squire Ultra, one of the Amidosulfuron products, includes the warning that it is “very toxic to aquatic organisms, and may cause long-term adverse effects in the aquatic environment”.

6.2 The Business Manager for UK and Ireland for Sumitomo has indicated that neither Bayer CropScience (the approval holder for Squire Ultra) nor Sumitomo (the marketing company), has any interest in the expansion of the use of Squire Ultra, into bracken control. See the e-mail from Sumitomo to Prof Roy Brown at Annex 4.

6.3 On-going research has applied Amidosulfuron products at two concentrations: 60g/ha (0.5N - the maximum approved dose) and at 120g/ha (1N). This has quantified the concerns about: the impact on non-target species, persistence in the soil, impact on soil mesofauna.
6.3.1 Natural England has compared the negative impacts from application of Amidosulfuron and Asulam and the results are at Appendix 2. From the data provided, it appears that Amidosulfuron may pose a greater risk of non-target effects than Asulam on some species, particularly forbs, associated with lowland heath, upland, and potentially other semi-natural habitats, e.g. grassland.

6.3.2 Information about soil residues has been extracted from the unpublished report from the National Bracken Trials and compares the decline of residue concentrations after the application of Asulam and Amidosulfuron. See Appendix 3.

- Asulox residues followed an exponential decline curve and were virtually undetectable by year 3.
- Amidosulfuron residues increased from the application point, building to a peak after 5 months and then declined to just detectable levels by year 3.

6.3.3 Soil Mesofauna

- The impact of the application of Asulam on Soil Mesofauna has been compared with the impact of Amidosulfuron at two concentrations and the results are presented in graph form, with accompanying notes. See Appendix 4.
- Amidosulfuron 1N appeared to cause damage over more than one year to affected species and groups. 0.5N was similar, but with some recovery in year 4/5.
- Apart from one temporary decline in years 1 and 2, the results for Asulam were very similar to the Control. Overall Asulam did not impact negatively on the medium to long term performance of the soil fauna.
- Nine other species/groups were analysed in detail and the analysis confirmed the overall trends identified above.

7 Information Required to Support Further EA applications

7.1 The draft EA approval for 2020 includes a list of information that will need to be provided in support of applications for further EAs. This list of items is included at Appendix 5.

7.2 Some of this information is readily available, or can be collected easily, other information is not available and will require resources to collect, collate and present this information. Responsibility for the cost and time of doing this needs to be considered.

7.3 The BCG is happy to support the direction of travel towards better control and monitoring of the use of chemical treatments for bracken control, but seeks a phased introduction to allow the bracken control industry to adapt.

8 Government Agencies

8.1 Discussion has been taking place between the government agencies representing the different parts of the UK.
8.2 There is a shared concern about the impact that the proposed restrictions will have on the ability to control the threats posed by bracken to biodiversity, grazing and the health risks from tick-borne diseases that have an impact on the health of humans, wildlife and livestock.

8.3 Many bracken control programmes are funded through agri-environment schemes. There is concern within the UK conservation agencies that the changes proposed in the draft EA approval for 2020 will make it difficult or impossible to complete bracken control programmes that have already commenced, or have been agreed, and it will be unlikely that new programmes can be funded as intended through existing and new schemes.

8.3.1 To quantify the potential impact of the proposed changes, Natural England and Scottish Natural Heritage have produce a summary of the areas involved in their countries. See Appendix 6.

8.4 Some of the supporting information for this application has come from government agencies.

9 Response from end-users

9.1 To alert landowners, land managers and other end-users to the changes proposed in the draft EA approval, the BCG circulated a briefing. This included some questions at the end of Briefing to ask for permission to contact respondents with updates and also to obtain their view of the proposed changes.

9.1.1 The Briefing and Questionnaire is at Annex 5, and the 178 responses to four of the questions are summarised in pie charts in Appendix 7.

9.2 Feedback from other sources:

9.2.1 Scottish Woodlands and Scottish Water have provided statements expressing their concern about the proposed changes. See Appendices 8 and 9.

9.2.2 A range of aerial spraying clients have provided their views about the proposed restrictions on the use of Asulam and these are reported in Appendix 10.

9.2.3 The Thames Basin Cluster Group of land managers have expressed their concern about the proposed restrictions in a letter that represents the consensus view of nine organisations (Appendix 11):
- Amphibian and Reptile Conservation,
- Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust,
- Elmbridge Borough Council,
- Guildford Borough Council,
- Hart District Council,
- Hampshire County Council,
- Hampshire and Isle of Wight Wildlife Trust,
- The RSPB, and
- Surrey Wildlife Trust.
9.2.4 A Lancashire Shooting Syndicate has expressed concern about the loss of ground-based application of Asulam (See Appendix 12). The syndicate is in the middle of a bracken control programme, which is funded by the syndicate, and they do not have the resources to cover the cost of helicopter application.

9.2.1 Historic Environment Scotland has provided a letter (Appendix 13) highlighting their concerns about the impact of the loss ground-based application of Asulam on the ability to control bracken without damage to the historic interest of archaeological and historic sites.
- Of the c.8000 protected sites, HES data suggest that at least 15% are affected to some degree by the presence of bracken.

10 Future Developments (note form draft)

10.1 There may be scope to develop the way that Asulam, and any other bracken control chemicals, is applied and its use recorded and monitored. An approach based on guidance, rather than additional regulation might be the best option and discussions could take place between the BCG and the UK authorities, including CRD, about how this could be achieved.

10.2 Outline Bracken Control Review

10.2.1 This outline for a review was drafted to highlight areas where more discussion might be beneficial.

10.2.2 The current recording and monitoring procedures could be discussed with a view to establishing if improvements could be made that would be acceptable and that could be funded.

10.2.3 It had been proposed that the review should be started when the approval for the active ingredient (Asulam) had been granted, while the application for the product (Asulox) was submitted and processed.
- As it appears unlikely that the active ingredient application will be decided before 2022, there is case that the review should be brought forward.
- This will be discussed with members of the BCG, although the appetite for this may depend on the outcome of this EA application.

10.2.4 The comments by Scottish Water about the lack of communication with ground-based contractors highlights an anomaly. This is an example of areas where an overview of bracken control could identify similar anomalies and put in place measures to address them.

10.3 Further Research

10.3.1 As a demonstration of their commitment to the stewardship of Asulam, UPL Europe Ltd. continues to fund research.
10.3.2 It is expected that the work to compare the impact of Asulam and Amidosulfuron products on non-target species and soil mesofauna will be completed during 2020.

10.3.3 Other work is continuing and as an example, UPL has provided a statement about the long-term risk assessment for birds and mammals (Annex 6).

- Amongst other information, there are two categories relevant to this application:
  a. Endpoint interpretation from all bird reproduction studies, and
  b. The future refinements that can be introduced to the bird and mammal long-term risk assessment, for any Art. 33 applications: the use of specific DT50 values for the bird and mammal food items (plants, seeds and arthropods).

11 Conclusions

11.1 Confidence in our ability to control the threats posed by the continued expansion of bracken is suffering while the uncertainty about the availability of Asulam continues.

11.2 As a result of this uncertainty, it has not been possible to attract the investment of time and funding to carry out as much research as is needed or to develop improved monitoring and application techniques that would benefit the industry.

11.3 The investment by UPL Europe Ltd. in the support for Asulam, the registration of the active ingredient under Regulation (EC) No 1107/2009 and some ongoing research is to be applauded, but much remains to be done.

11.4 The BCG would be open to the use of any technique or product that will control bracken effectively and safely.

11.4.1 There is no opposition to the introduction of an alternative chemical treatment that meets these criteria.

11.4.2 This application has highlighted the concerns that exist about the use of Amidosulfuron. These indicate that Amidosulfuron at the maximum approved strength, or even double this, may not be a suitable alternative.

11.5 There remains some doubt about the area of bracken in the UK, as it is difficult to measure the area under woodland, in hedgerows or on roadsides. However, there is strong, local support for the view that the area of bracken is expanding.

11.5.1 Ongoing monitoring work carried out at various locations in the UK since 1980 (since 1968 on Dartmoor) has indicated that the rate of spread in 2019 was particularly high, and bracken was observed to be spreading into sensitive habitats, such as dry peatland.

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11.5.2 Therefore, introduction of the proposed restrictions would have the effect of reducing the ability to control bracken while its rate of spread appears to be increasing.

11.6 The BCG recognises that there is scope to improve the way that the control of bracken is monitored and promoted and the Group is keen to work with all parts of the industry to achieve this, including the government agencies.

11.6.1 The BCG has no powers to compel adherence to any guidance that is issued, and therefore, it is not possible to introduce change overnight.

11.6.2 Changes can only be introduced by developing consensus.

11.7 The BCG wishes to establish a clear direction of travel towards improved standards through the development of the outline Bracken Control Review and seeks support from government agencies to achieve this.

12 Recommendations

12.1 Consideration should be given to the concerns expressed by a wide range of people and organisations such as: landowners, land managers, government agencies, large and small NGOs and other end-users.

12.2 Development of the outline Bracken Control Review should be considered with input from CRD and other government agencies.

12.3 To provide time for the industry to adapt to change:

12.3.1 The application of Asulam for ground-based bracken control should be included within the EA approval for 2020.

- Discussion about the use of alternative products, and associated research, will continue.

12.3.2 As an interim measure, the buffer zone against surface water bodies should not be increased from 50m under the EA approval for 2020.

- Discussion should take place to review the width of this buffer zone.

12.3.3 Discussion will take place between the BCG and CRD about the requirements for information/data to support the EA application for the 2021 season.

13 Acknowledgements

13.1 Professor Roy Brown (R&D Applied Biology) has provided early snapshots from his report from the National Bracken Trials and much other information to support this application.

13.2 Andrew McGillivray of AirAgri is thanked for providing client feedback about the aerial spraying restrictions.
13.3 Alastair Burn from Natural England liaised with colleagues in the other UK conservation agencies to provide views about the impact of Amidosulfuron products compared with Asulam. He also coordinated views about the impact of the proposed restrictions on the use of Asulam on agri-environment schemes.

13.4 The views provided by the range of end-users of Asulam about the impact of the proposed restrictions on their interest is gratefully acknowledged, especially as their views were often volunteered on their own initiative.

13.5 UPL Europe Ltd has provided technical advice relating to their work to achieve registration of Asulam.

Yours faithfully,

S P R Thorp
Coordinator

Annexes:
1. Completed Form CRD-9
2. BCG’s notes from the meeting hosted by Defra on 21st February 2020
3. UPL Statement - aquatic end-point assessment
4. E-mail message from Sumitomo
5. Bracken Briefing and Questionnaire
6. UPL Statement – Asulam: long-term risk assessment for birds and mammals
7. Letter of Access

Appendices:
1. Comparison between the area of bracken that can be controlled with 90m and 50m buffer zones.
2. Comparison of Negative Impacts from Application of Amidosulfuron and Asulam
3. Soil residue information
4. Impact on Soil Mesofauna
5. Information Required to Support Further EA applications
6. Impact on Bracken Control Programmes
7. Briefing and Questionnaire – summary of responses to four questions
8. Scottish Woodlands statement
9. Scottish Water statement
10. Views from aerial spraying clients
11. Letter from the Thames Basin Cluster Group of land managers
12. Letter from Lancashire Grouse Shooting Syndicate
13. Letter from Historic Environment Scotland