

ENSURING THAT LANDFILL SITES DO NOT ATTRACT BIRDS.

Stan Brown

Head of Policy, Standardization & Development, CAA, Aviation House,
Gatwick Airport South, RH6 0YR, United Kingdom
Email: stan.brown@srg.caa.co.uk

Abstract

In the United Kingdom all the major aerodromes are safeguarded. A safeguarding map is lodged with the Planning Authorities and any development within 13 km which is likely to attract birds is the subject of a safeguarding consultation and assessment process. If the assessment concludes that the development is likely to attract birds then measures should be adopted to either prevent such development or impose measures to prevent the site attracting birds.

Landfill sites used for the disposal of household waste and food are particularly attractive to birds and it would be desirable not to have such sites within 13 km of an aerodrome. However, even this measure would not necessarily prevent flight line problems of birds transiting from feeding to roosting sites. Unfortunately, with the demise of incineration, landfill is the only major option for the disposal of household and food waste in the United Kingdom. Therefore, in order that aircraft safety would not be compromised, the UK CAA proposed a system of measures to allow for the introduction of landfill sites within the vicinity of aerodromes.

It has been known for a long time that effective exclusion netting can deter birds from landfill sites. The major problem has been implementing and maintaining an effective management plan and fall back proposals to ensure that the site remains unattractive to birds throughout its lifetime. The CAA has promoted a management plan which ensures that the site will be operated with exclusion netting at all times. The controlling measures are:

- If the netting is damaged short term active bird control measures may be used to deter birds until repairs are carried out. However, if the site attracts birds then all exposed waste will be covered and tipping will cease immediately.

- Legally binding contracts between the operator and the planning authorities.
- Additional contracts between the operator and the CAA.
- All parties also have the right to enter and inspect the site.
- An independent assessor is funded by the landfill operator reporting to the aerodrome and the CAA as well as to the operator.
- Tipping will only be allowed to resume when the problems are resolved.
- Landfill operators have found an additional benefit in the use of netting. They can operate in wind speeds which in the past prevented tipping.

Key Words: Food, Landfills, Bird Control Team, Flock Density, Legal, Nets/Wires, Reporting.

1. Safeguarding aerodromes

- 1.1** In the United Kingdom all the major aerodromes are safeguarded. A safeguarding map is lodged with the Planning Authorities and any development within 13 km which is likely to attract birds is the subject of a safeguarding consultation and assessment process. Currently the Civil Aviation Authority (CAA) undertakes that assessment, however, in the very near future individual aerodrome licensees will be consulted directly by the Planning Authorities.
- 1.2** The move towards individual aerodromes looking after their own planning issues is the result of several changes. The CAA is no longer a service provider (separation of the National Air Traffic Services) and as part of the management of safety, the regulator (CAA) desires that aerodromes become more involved in all of their safety issues, including off aerodrome bird control measures.
- 1.3** If an assessment of a planning application concludes that the development is likely to attract birds then measures should be adopted either to prevent such development or impose measures to prevent the site attracting birds.
- 1.4** Landfill sites used for the disposal of household waste and food are particularly attractive to birds and it would be ideally desirable not to have such sites within the greatest area of risk to aircraft (in the UK this is considered to be within 13 km of an aerodrome). However, even this measure would not necessarily prevent flight line problems of birds transiting from feeding to roosting sites. Unfortunately, with the demise

of incineration, landfill is the only major option for the disposal of household and food waste in the United Kingdom.

- 1.5 In order that aircraft safety should not be compromised, the UK CAA has proposed a system of measures to allow for the introduction of landfill sites within the vicinity of aerodromes. The measures are also recommended for all landfill sites where food waste is deposited, although currently there is no obligation for consultation by Planning Authorities on sites outside the 13 km circle shown on the safeguarding maps.
- 1.6 Within the safeguarded areas, if a Planning Authority chooses to disregard the advice of an aerodrome or the CAA, then the CAA would ask the Secretary of State to consider the application (Parliamentary intervention). This may result in a Planning Inquiry. Such events are extremely costly and time consuming to both the Planning Authorities and Landfill Applicants who normally end up accepting the need for introducing the bird control measures.

2. The preferred solution

- 2.1 It has been known for a long time that effective exclusion netting can deter birds from landfill sites. The major problem has been implementing and maintaining an effective management plan and fall back proposals to ensure that the site remains unattractive to birds throughout its lifetime. The CAA has promoted a management plan which ensures that the site will be operated with exclusion netting at all times.
- 2.2 There are now several landfill sites in the UK which operate netting systems, and although some of the sites started with all of the good intentions of deterring birds, they have failed. Other sites introduced netting for the wider environmental reasons, litter and more positive site controls in the form of enclosed tipping areas. Several of these sites have also been effective in deterring birds. But it is the management plan, other controls and stopping measures that are necessary to ensure that birds on the site do not become a hazard to aviation.

3. The objectives of using netting on landfill sites

3.1 The management of the site to deter birds is based on the adoption of a series of active and passive bird control measures, with the containment netting being the primary active method to be deployed.

3.2 Primary objectives

3.2.1 Hazardous birds¹ shall not gain access to food wastes² deposited within the containment netting system.

3.2.2 No food waste shall be available to birds outside the containment netting system.

3.2.3 No concentrations of hazardous birds shall build up either on or around the landfill site for the reason that they are attracted to food wastes.

Notes

1 *Hazardous bird flock size shall be defined as follows:*

Gulls

- *Black-headed or Common* 10

- *Herring, Lesser Black-backed
or Great Black-backed Gulls* 4

Corvids 25

Starlings 100

2 *Food waste means wastes delivered to landfill which may contain "human" food wastes i.e. Putrescible Waste. For example:*

Household Waste

Industrial Waste from food processing

Animal Feed

Commercial Waste containing canteen waste

This definition excludes wastes which may contain natural "bird food" from the wider environment, such as inert soils which may contain worms and insects.

4. Necessary measures & performance indicators

4.1 Certain processes and procedures need to be adopted to ensure that the site does not attract birds. These can be measured against performance indicators or be seen as indicators in their own right.

4.1.1 Food Waste shall not be deposited on any area of the site outwith the containment netting system.

4.1.2 Open bodied vehicles and containers shall not be permitted to contain food wastes

4.1.3 The containment netting system shall be maintained in a good state of repair such that the integrity, performance and effectiveness shall not be compromised.

4.1.4 The netting system shall be inspected at frequent intervals with written records of such inspections.

4.1.5 Landfilling operations and handling procedures which allow hazardous birds to gain access to food wastes shall not be permitted.

4.1.6 No flocks of hazardous birds shall be permitted to accumulate on the landfill site

4.1.6 There shall be no concentrations of gulls resting on land adjacent to the landfill site, for which there is no other obvious explanation.

4.1.7 There shall be no concentrations of either waste or debris on adjacent land which are directly attributable to the landfill e.g. food packaging, bones, food etc.

5. Mitigating measures

5.1 Obviously there needs to be a plan in place should the site attract birds, either because there is a failure in the processes and procedures or because the netting itself fails. The following measures are seen to be the minimum acceptable to ensure that the site does not attract birds:

5.1.1 Any food waste detected outwith the containment netting system shall be brought to the immediate attention of the Site Manager

who will ensure that every effort is made to remove immediately the waste into the confinement netting. Any such incident shall be recorded and notified to the CAA, the Environment Agency and the Planning Authority within 24 hours.

- 5.1.2 If the above, or any other deviation from the operating procedures results in a breakdown of the netting system such that birds are being attracted to the landfill site then either (i) the birds shall be dispersed immediately and active deterrent measures put into continuous operation to ensure that no birds gain access to the landfill site until the defect has been repaired, or (ii) tipping will be suspended forthwith until the defect is repaired. If continuous deterrent measures fail to prevent repeated return of the birds, the area of exposed waste containing food will be covered and tipping suspended until the defect is repaired. The presence of hazardous birds on the landfill shall also be considered as a breakdown for the above purpose.

6. Legal agreements

6.1 CAA & landfill operator

- 6.1.1 The Local Planning Authority consulted the CAA with regard to the Application and the CAA has advised The Local Planning Authority that they have no objection to the development proposals provided suitable measures are put in place to minimise the attraction of birds to the Development Site throughout its operational life to minimise the risk to the safety of air navigation over the Development Site. The following signed agreement is in place between the CAA and the Landfill Operator:

The Parties hereto wish to enter into an Agreement to regulate the operation of the Development Site should Planning Permission be granted either by The Local Planning Authority or on Appeal by the Secretary of State.

The Proprietors are the heritable proprietors of the Development Site;

**THEREFORE THE PARTIES HAVE AGREED AND DO
HEREBY AGREE AS FOLLOWS: -**

- (FIRST) *The principal purpose of this Agreement is to ensure that the development proposed is managed in such a way that it will minimise the attraction of birds to the Development Site throughout its operational life to minimise the risk to the safety of air navigation;*
- (SECOND) *The conditions, restrictions and obligations contained within this Agreement shall not take effect until such time as Planning Permission in terms of said Application has been granted and is implemented, the word "implemented" being taken in the context of this Agreement to mean the commencement of a development on the Development Site pursuant to such Planning Permission;*
- (THIRD) *The Proprietors undertake, at their own cost, to implement, and thereafter maintain and operate, on the Development Site, a scheme for a bird exclusion netting system and supporting deterrent methods, comprising the Bird Exclusion Netting System and Supporting Deterrent Methods Management Plan and the Bird Exclusion Netting System Quality Manual, which are annexed and executed as relative hereto and form Schedule I to this Agreement, and which have been approved both by the CAA and The Local Planning Authority, which scheme, together with any amendments made subsequently thereto in accordance with Clause (FOURTH) hereof, is hereinafter referred to as "the netting system".*
- (FOURTH) *The netting system may be varied by agreement between the parties hereto, and in this regard the CAA may consult with The Local Planning Authority.*
- (FIFTH) *It is agreed that landfilling on the Development Site may only take place when the netting system is being operated fully in the manner approved by the CAA under Clause (THIRD) hereof. If it appears to the CAA, or their representatives appointed by them, either: -*

- (i) that the netting system is not being operated in the approved manner, or*
 - (ii) regardless of whether the netting system is being operated in the approved manner, that birds are being attracted to the Development Site to the extent that they are, in the reasonable opinion of the CAA, deemed by them to constitute a hazard to the safety of air navigation, then in either case the CAA may require by notification by facsimile or telephone to the Proprietors, and in the latter case, followed by notification in writing, that: -*
 - (a) landfilling on the Development Site shall be suspended immediately on said notification by facsimile or telephone, and*
 - (b) measures shall be taken forthwith to ensure that no waste surfaces remain exposed, until operation of the netting system in the approved manner is reinstated or such amendments as are agreed between the Parties to be necessary to the netting system, in the case of notice being served under sub-clause (ii) above, have been included and the netting system amended accordingly.*
- (SIXTH)*
- (a) The Proprietors shall allow the CAA, or their appointed representatives, access to inspect the Development Site at any reasonable time as requested by the CAA throughout the operational life of the Development Site as a landfill in order that the CAA can monitor the maintenance and operation of the netting system; and*
 - (b) The Proprietors shall pay the costs for an independent expert, appointed by the Parties hereto to inspect the Development Site on a monthly basis, and at any other*

times as requested by the CAA throughout the operational life of the Development Site as a landfill. The purpose of the inspection will be to monitor the maintenance and operation of the netting system and the appointed independent expert shall prepare a report on each visit which will be submitted to the CAA and copied to the Proprietors. Such reports will advise whether breaches of the netting system have taken place.

(SEVENTH) All disputes between the Parties hereto as to the true intent and meaning of these presents, and in particular any terms and provisions hereof for the rights or obligations of any Party hereunder, shall be referred to the Judicial system or to an arbiter to be nominated by them and the decision of such arbiter on the matter shall be final. For the avoidance of doubt, both Parties agree that this Clause shall not prevent either Party seeking and obtaining, through any Court of competent jurisdiction, an interim interdict in respect of any alleged breach of any of the terms of this Agreement.

6.2 Local authority & landfill operator

6.2.1 The Local Planning Authority consulted the Civil Aviation Authority (hereinafter referred to as "the CAA") with regard to the planning application and the CAA advised the Planning Authority that they had no objection to the development proposals provided suitable measures are put in place to minimise the attraction of birds to the Development Site throughout its operational life to minimise the risk to the safety of air navigation. The Local Planning Authority and the Landfill Operator entered into the following legal agreement:

The Planning Authority have resolved to grant planning permission in terms of the Application but to withhold the issue of the planning consent document (hereinafter referred to as "the Decision Notice") until an Agreement under s75 of the Town and Country Planning (Scotland) Act 1997³ has been concluded for the purposes of restricting or regulating the development or

use of the Development Site for which planning permission is to be granted;

The Proprietors are the heritable proprietors of the Development Site;

THEREFORE THE PARTIES HAVE AGREED AND DO HEREBY AGREE AS FOLLOWS: -

- (First) On execution of this Agreement, the Planning Authority shall forthwith issue to the Proprietors, the Decision Notice in respect of approval of the Application and the development shall be subject to: -*
- (i) the conditions, until purified, if ever, specified in the Decision Notice; and*
 - (ii) the conditions, restrictions, obligations, prohibitions and others contained within this Agreement until such time, if ever, as any or all of the restrictions, obligations, conditions or others contained within this Agreement are implemented, modified or discharged.*
- (Second) The conditions, restrictions, obligations and others contained within this Agreement shall be created real and preferable burdens upon and affecting the Development Site and are appointed to be recorded at length or otherwise validly referred to in all future conveyances, dispositions or other such deeds, including leases, relating to the Development Site in whole or in part, BUT DECLARING that they shall not take effect until such time as the Decision Notice is implemented, the word 'implemented' being taken in the context of this Agreement to mean the commencement of development on the Development Site pursuant to said Decision Notice.*
- (Third) (a) Prior to commencement of development on the Development Site, the Proprietors will, at their own cost prepare and submit to the Planning Authority for approval a scheme for a bird exclusion netting system and*

supporting deterrent methods on the Development Site. The scheme will comprise of the Bird Exclusion Netting System and Supporting Deterrent Methods Management Plan and the Bird Exclusion Netting System Quality Manual, which together shall detail the scheme, the maintenance and operation of the scheme and other supporting bird deterrent measures, provision for monitoring the continued operation of the scheme and the criteria against which the satisfactory operation of the scheme will be assessed when it is in use. In assessing the acceptability of the scheme and supporting deterrent methods, the Planning Authority will consult the CAA and respond to the Proprietors with their decision on the scheme within eight (8) weeks of receiving details thereof and will either grant approval hereunder or indicate why approval has been withheld;

- (b) the scheme as approved by the Planning Authority in terms of sub-clause (a) above, and including any amendments made subsequently thereto in terms of sub-clause (d) below, is hereinafter referred to as "the netting system".*
- (c) the Proprietors undertake, at their own cost, to implement the netting system in the manner approved by the Planning Authority under sub-clause (a) above, and to the satisfaction of the Planning Authority. Any breach of the netting system shall be treated as a breach of the terms of this Agreement;*
- (d) the netting system may be varied by agreement between the parties hereto, and in this regard the Planning Authority may consult with the CAA; and*

- (e) *the Planning Authority undertake that their consent or approval will not be unreasonably withheld and that they shall act without any undue delay.*
- (Fourth) *The Proprietors shall pay the costs for an independent expert appointed by the Parties hereto in consultation with the CAA, to inspect the Development Site on a monthly basis, and at any other times as requested by the CAA, throughout the operational life of the Development Site as a landfill. The purpose of the inspection will be to monitor the maintenance and operation of the netting system and the appointed independent expert shall prepare a report on each visit which will be submitted to the Planning Authority and copied to the Proprietors and the CAA. Such reports will advise whether breaches of the netting system have taken place.*
- (Fifth) *It is agreed that landfilling may only take place when the netting system is being operated fully in the approved manner. If it appears to the Planning Authority (who may consult with the CAA) either: -*

 - (i) *that the netting system is not being operated in the approved manner, or*
 - (ii) *regardless of whether the netting system is being operated in the approved manner, that birds are being attracted to the Development Site to the extent that they are, in the reasonable opinion of the Planning Authority, deemed by them to constitute a hazard to the safety of air navigation over the Development Site, then in either case the Planning Authority may require, by notification by facsimile or telephone to the Proprietors, and in the latter case, followed by notification in writing, that: -*

 - (a) *landfilling on the Development Site shall be suspended immediately on*

said notification by telephone or facsimile, and

- (b) remedial measures shall be taken forthwith to ensure that no waste surfaces remain exposed, until operation of the netting system in the approved manner is reinstated or such amendments as are agreed between the Parties to be necessary to the netting system, in the case of notice being served under sub-clause (ii) above, have been included and the netting system amended accordingly.*

(Sixth) Prior to commencement of development on the Development Site, the Proprietors shall enter into an Agreement with the CAA for the regulation of the operation of the Development Site to ensure that the development is managed in such a way that it will minimise the attraction of birds to the Development Site throughout its operational life and the Development Site shall only be operated while such Agreement with the CAA is in force. For the avoidance of doubt, the Proprietors confirm that in the event of them disposing of the Development Site while the Decision Notice is extant, they will take any purchasers of the Development Site and their successors or assignees bound in a similar obligation to enter such an Agreement with the CAA.

(Seventh) The Proprietors shall submit, within one year of the issue of the Decision Notice in respect of the Application, to the Planning Authority for approval, which approval shall not be unreasonably withheld or delayed, a scheme for the provision of a civic amenity facility within the Development Site. The approved facility will thereafter be provided by the Proprietors at their own cost, but operated by the Planning Authority in accordance with the terms and conditions of this Agreement and the Decision Notice. For the avoidance of doubt, the civic amenity facility, which is to be the subject of a

separate planning application, may continue to be operated by the Planning Authority beyond the operational life of the Development Site.

(Eighth) The Proprietors agree to restore the Development Site and to take such steps as may be necessary for bringing all land thereby affected back into use for amenity purposes once the landfilling has been completed and that in accordance with any Conditions of the Decision Notice, it being declared for the avoidance of doubt that the reasonable opinion of the Planning Authority shall be final as to whether any area of ground has been reinstated in the appropriate manner.

(Ninth) In order to secure the reinstatement of the Development Site or any part thereof in the event that the Proprietors have insufficient funds at the time when the restoration is to take place or for any other reason, the Proprietors shall, in so far as not already done, provide a Guarantee or Indemnity or Bond from a third party reasonable acceptable to the Planning Authority in the sum of ONE HUNDRED THOUSAND POUNDS (£100,000) STERLING and on such other terms as may be reasonably agreed amongst the parties thereto and said Guarantee or Indemnity or Bond and the proceeds available thereunder may be utilised by the Planning Authority to cover restoration of the Development Site in furtherance of the said Decision Notice or otherwise under these presents, but declaring that once the restoration works have been completed, the Planning Authority shall discharge in favour of the Proprietors and the third party providing the said Guarantee or Indemnity or Bond the same to the extent that it has not been called up or utilised in furtherance of these presents.

(Tenth) In the event of a change to the planning circumstances of the area which appears to any Party to the Agreement or to their successors in title to render any of the conditions, restrictions, obligations, prohibitions and others contained in this Agreement no longer relevant, the Parties or

their successors in title shall consider whether the said conditions, restrictions, obligations, prohibitions and others or any of them, should be modified or discharged. In this regard, the Planning Authority shall be entitled to consult with the CAA. Failing agreement between the Parties, the matter shall be referred for the purposes of arbitration to the Judicial System or to an arbiter to be nominated by them and the decision of the arbiter in the matter shall be final. It is further agreed that the cost of any arbitration shall be borne in accordance with any award made by the arbiter and failing such award shall be borne equally between the parties to the arbitration.

Note ³ This could be an Agreement under s106 of the Town and Country Planning Act 1990.