

Appendix 17.2 Bird Hazard Management Plan

HIGHTOWN QUARRY,
BALLYUTOAG,
NORTHERN IRELAND

**Bird
Management Plan**

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1. INTRODUCTION AND BACKGROUND

- 1.1. A full planning application is being submitted by arc21 on behalf of EEW to develop a Mechanical and Biological Treatment (MBT) and Energy from Waste (EfW) thermal treatment facility, incorporating an Incinerator Bottom Ash (IBA) Processing and Storage building, a Waste Baling Storage building, a Visitor Education Centre and related infrastructure.
- 1.2. Following consultation as part of the PAD process, Belfast International Airport has requested a bird management plan to be submitted for approval.
- 1.3. The proposed location of the residual waste management facility lies within the vicinity of Belfast International Airport, which is located approximately 12.4km to the west. The development site covers 52.4 acres with the majority of this forming the quarry floor with scrub, acid grassland, hedgerows and numerous small waterbodies also present around the perimeter of the quarry. The residual waste management facility is proposed to be sited within the quarry floor with existing habitats to be retained.
- 1.4. Specific bird surveys have been undertaken at the development site since 2008 with latest surveys being undertaken by Ecology Solutions in late 2012 and as part of a series of breeding bird surveys this season (2013).
- 1.5. A plume visibility model has been undertaken to assess the likely visibility of plume from the chimney stack at the facility. This forms part of Chapter 14 'Air Quality' of the Environmental Statement. It is considered that this will not have any operational impact on the flight path to Belfast International Airport.

2. AIMS AND OBJECTIVES OF THIS MANAGEMENT PLAN

- 2.1 It is understood that Belfast International Airport harbour concerns that the development of a residual waste management facility may result in an increased presence of wild birds which in turn could increase the potential for bird strikes and associated issues within the airports vicinity.
- 2.2 The proposed residual waste management facility has been assessed in the context of the guidelines set out in the Government ODPM Circular 1/2003 and “CAP 772 – Birdstrike Risk Management for Aerodromes” produced by the Civil Aviation Authority in 2008.
- 2.3 This bird management plan aims to set out the measures which will be taken during the operation of the facility to reduce the potential increase in bird activity with the specific objective of reducing the presence of birds on or in the vicinity of the facility as much as possible in order to reduce bird strike risk to the lowest practical level.

3. CONSIDERATION OF CAP 772

- 3.1 CAP 772 sets out guidelines for the control of bird hazards in and around aerodromes. It refers to land or water within 13km of an aerodrome and the development site is located just within this distance (at 12.4km) to which hazards are considered to represent a bird strike risk. Whilst the guidance concentrates on bird control on aerodromes it does contain some guidance relevant to landscape measures and the proposed residual waste management facility has been designed with due regard to recommendations set out within CAP 772.
- 3.2 Section 3.5 of CAP 772 lists the features considered to constitute 'Major Bird Attractions' and the attractions listed under this category include '**Landfills for Food and Waste**' and '**Sewage Treatment and Disposal**'. Whilst the proposed residual waste management facility will be involved in waste processing, it is not considered to fall into either of these aforementioned categories due to the specific structural design and proposed management plan for the site. Both the MBT and EfW facilities have been designed so that all stages of waste transport, treatment and storage completed on-site will occur in either sealed vehicles or within enclosed buildings.
- 3.3 CAP 772 also recognises '**Reservoirs, Lakes and Ponds**' as being potential bird attractant habitat. The proposed residual waste management facility will not include any large reservoirs or lakes, however, it will involve the construction of two small drainage attenuation ponds that could potentially act as an attractant for some bird species. These attenuation ponds will hold an element of permanent water and are no larger in size to the existing waterbodies present on-site.

4. CONSIDERATION OF BIRD STRIKE RISK

- 4.1. The main threat relates to certain species such as Canada Geese *Branta canadensis*, and to a lesser extent Greylag Geese *Anser anser*, which is evident from the publication of the CAA Safety Regulation Group document "Large Flocking Birds – An International Conflict Between Conservation and Air Safety" that specifically addresses this threat. The objective of CAP 772 is to reduce the potential for roosting and to make sure that landscape areas are not attractive to such large flocking bird species, which also include gulls or corvids. Smaller birds that do not form dense flocks have a low hazard potential.
- 4.2. The primary purpose of the proposed residual waste management facility is to provide a waste facility capable of treating and recycling waste and generating energy as a commercial by-product. Whilst this constitutes one of the 'most important' types of development that create new or increased bird strike hazards, such as landfill and mineral extraction as set out in ODPM Circular 1/2003 Annexe 2 paragraph 8, the fact that all stages of waste treatment and storage will occur in secure, indoor locations is considered to negate any additional bird attractants from being introduced to the development site. As well as physically preventing bird access to waste material, air inside the MBT plant buildings will be treated and cleaned so as to remove any toxins or odours that may otherwise attract birds. In addition, all treatment will take place entirely inside enclosed buildings equipped with high speed doors and coupled with air curtain systems to minimize venting. They will also be maintained under a slight negative pressure to further negate venting of odours. Buildings have also been designed to reduce their attractiveness to roosting birds.
- 4.3. Whilst the two proposed drainage attenuation ponds will be planted to provide some ecological interest they have been designed solely for drainage attenuation purposes and will hold water all year round, although their levels are expected to fluctuate considerably as a result of weather conditions. Rather than one large feature, two ponds have been designed in order to limit the extent of open water and thus reduce the attractiveness to flocking birds, thereby avoiding potential congregation activity. As such, it is not considered that they would act as a significant attractant for additional water birds such as Ducks, Geese, Swans, Herons, Coots and Cormorants and will not be of a size considered suitable for roosting Gull populations.
- 4.4. During the specific bird surveys undertaken, Ringer Plover *Charadrius hiaticula* was recorded potentially breeding on the development site. Whilst these represent a small flocking wader, they are not considered to represent a bird strike risk at the development site as only a single breeding pair was observed and numbers are not considered to increase post-development.
- 4.5. No other birds considered to present a bird strike risk were identified during any of the specific surveys undertaken at the development site.

5. PROPOSED MANAGEMENT MEASURES

5.1 Whilst the proposed residual waste management facility is not considered to result in any increase in bird populations which would present a likely bird strike risk as a precaution, a number of measures would be incorporated into the overall Environmental Management Plan and these are discussed below.

5.2 Site Manager Responsibilities

5.2.1 The nominated site manager will hold the responsibility to complete inspections of the site. It is anticipated that inspections will be undertaken no less than four times a day with records taken in an official log book.

5.2.2 The log book will be kept at a designated location on-site and will be available for audit/review at any stage without prior arrangement by Belfast International Airport, their Bird Management Consultant and/or CAA. In addition, the bird management plan, a bird control management plan diary and staff training records will also be available for inspection, again without prior arrangement. Review meetings with Belfast International Airport should be arranged one per month for the first six months following the facility going live and one per quarter thereafter.

5.2.3 Site management will ensure that the facilities are kept free from excess waste/spillages in unprotected areas with any incidents dealt with as a matter of priority. If temporary storage of waste is required on-site, then it would be covered at all times.

5.2.4 Any bird specific management that may be required following bird monitoring will fall within the control of the site manager.

5.3 Bird Monitoring

5.3.1 Monitoring of bird activity will be undertaken with records of numbers and species to be recorded in the log book. The frequency of the monitoring will be undertaken under the direction of the bird management consultant and will be dictated by the level of bird activity and time of year. If required advice would be sought from a bird control specialist if levels are seen to increase.

5.3.2 The general attractiveness of the facility for birds will also be monitored on an ongoing basis with any measures (such as habitat management, surveillance/dispersal strategies) adopted where required to render the site unattractive for birds.

5.3.3 Should any nests or eggs belonging to protected species be found on-site the appropriate licences will be obtained from NIEA prior to removal.

5.3.4 Contact would be made with the Belfast International Airport Watch Room (02894 484182) should any bird issues arise.

5.4 Bird/Habitat Management

- 5.4.1 If bird activity of larger flocking species (such as Gulls, wildfowl or corvids) is recorded during on-going monitoring of the existing lagoons on-site or the proposed SUDs attenuation ponds, a bird control specialist will be contacted and appropriate control measures would be undertaken if deemed appropriate.
- 5.4.2 Immediate action will also be taken on-site and consideration will be given to deterrent measures such as stringing, netting, spiking or the use of floating balls to deter unwanted birds from using the water.
- 5.4.3 Following monitoring and any recommendations from consultation with a Bird Control Specialist, habitat management (targeted landscape management such as thinning into open 'rides' for example) and surveillance/dispersal strategies would be adopted if deemed necessary.
- 5.4.4 Any birds found nesting, roosting or loafing outside of the bird breeding season will be dispersed when detected. Consideration will be given to the use of bird deterrent measures to encourage dispersal, e.g. distress calls, gas cannons. Contact with the Belfast International Airport Watch Room would be made if deemed appropriate.
- 5.4.5 Existing hedgerows surrounding the facility which contain Hawthorn *Crataegus monogyna* will be trimmed yearly to limit berry production.

5.5 Site Cleanliness

- 5.5.1 Any skips stored on-site will be of designs that exclude birds.
- 5.5.2 Pest and vermin control will be undertaken where required.
- 5.5.3 Various control measures will be put in place for the avoidance and management of spills on the site as frequent/habitual spillages in tandem with a poor site clean up regime could potentially result in increased bird activity.
- 5.5.4 The following measures will be taken to ensure that any spillages will be cleaned up quickly and effectively in order to minimise risk of bird hazard.
- 5.5.5 All waste storage and handling operations that may be susceptible to problems from windblown litter will be conducted inside a controlled area. Vehicles nets will be placed covering any vehicle with an ejector trailer. Drivers will check the nets are correctly installed and undamaged before leaving the controlled area. Only competent drivers with C&E licenses will be employed to drive well maintained waste vehicles.
- 5.5.6 In terms of any leachate generation from the unloading and storage of waste, impervious surfaces will be contoured towards

interceptors and drainage gullies where appropriate. An emergency contractor will also be deployed for any clean ups as required, depending on the extent and nature of the spill.

5.5.7 Other arrangements will be in place to ensure control measures are effective. Examples of these include:

- Regular vehicle inspections – drivers to check condition of their vehicles;
- Vehicle maintenance – drivers to check that nets and vehicle bodies are in good condition;
- Inspections of bales produced (any unsatisfactory bales will be reworked);
- Maintenance of the baling equipment;
- Inspection of surfaces on site for any damage;
- Regular schedule for emptying of interceptors;
- Inspections of on-site/on-vehicle spill kits for adequacy of stocks.

5.5.8 Should any spillages occur during transit or on site, the following method is proposed:

1. The employee should assess the extent, quantity of material and hazards posed. Mark the location of the spillage.
2. If sensible, the emergency response contractor should be contacted and deployed.
3. If safe to do so, the employee should use the equipment at his disposal and commence the response.
4. If required, the emergency services should be contacted (only envisaged where pollution has occurred or there are road safety dangers). Call the office if an accident or incident has occurred.
5. The employee should wear suitable personal protective equipment depending on the nature and location of the spill.
6. Where safe to do so, the employee should warn other road users.

5.6 Emergency Procedures

5.6.1 Should the site manager have concerns about bird numbers and activity due to unexpected or seasonal bird activity following adoption of aforementioned measures, the activity shall be recorded in the log book and contact shall be made with the bird management consultant and Belfast International Airport for advice. Any advice will be acted on immediately. Contact details for Belfast International Belfast International Airport Watch Room will be permanently on display at the designated location on-site.

5.7 Bird Management Consultant

5.7.1 The bird management consultant will be formally appointed prior to the commencement of construction.

- 5.7.2 The bird management consultant shall undertake audits, two per month for the first six months and two per quarter thereafter, subject to satisfactory performance.

6. BELFAST INTERNATIONAL AIRPORT BIRD MANAGEMENT PLAN QUESTIONS

6.1 The specific questions raised by Belfast International Airport are addressed below.

6.2 What is the Aim of the Bird Management Plan?

6.2.1 See section 2.

6.3 Who is responsible on site?

6.3.1 See paragraph 5.2.1.

6.4 When site goes live there should be:

- 1. A Bird Management Plan**
- 2. A Bird Control Management Plan Diary**
- 3. Log books showing inspections, bird number and type of birds**
- 4. Staff training records**

6.4.1 See paragraphs 5.2.2 and 5.3.1.

6.5 Where are all these documents to be kept?

6.5.1 See paragraph 5.2.2. Location on-site to be agreed.

6.6 What is the frequency of the inspections by the person in charge on site?

6.6.1 See paragraph 5.2.1.

6.7 How do you monitor the birds activity?

6.7.1 See paragraphs 5.3.1 and 5.3.2.

6.8 How do you record the bird activity?

6.8.1 See paragraphs 5.3.1 and 5.3.2.

6.9 Will all of the above documents be available for audits to Belfast International Airport, CAA and BIA's Bird Management Consultant?

6.9.1 See paragraph 5.2.2.

6.10 Access to site for the above people?

6.10.1 See paragraph 5.2.2.

6.11 Site cleanliness?

6.11.1 See paragraphs 5.5.1 and 5.5.2.

6.12 How do you deal with increased bird activity?

6.12.1 See sections 5.4 and 5.6.

6.13 How do you deal with seasonal changes in bird activity e.g. summer migratory species?

6.13.1 See paragraph 5.6.1.

6.14 How do you stop nesting on the site?

6.14.1 See paragraphs 5.4.2 and 5.4.3.

6.15 What are your procedures for dealing with bird issues on site?

6.15.1 See paragraphs 5.4.3, 5.5.1 and 5.5.2.

6.16 What is your emergency procedure for dealing with birds?

6.16.1 See section 5.6.

6.17 How do you deal with protected birds like Swifts or Swallows on site?

6.17.1 See paragraph 5.3.3.

6.18 Who is your bird management consultant?

6.18.1 See section 5.7.