


Bird Strike Risk Assessment – Dorval Organic Material Processing Facility (Composting)


FINAL REPORT

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Note to the reader: This document is a partial translation of the original French report. Only the conclusion has been translated. For more details, please refer to the original document.

5.0 CONCLUSION AND RECOMMENDATIONS

In light of current knowledge on bird strike and the experience acquired from the implementation of composting sites in closed buildings elsewhere in Canada, we have concluded that, if designed and operated in accordance with the standards and requirements established by the Ministère du développement durable, de l'environnement et des parcs du Québec (MDDEP), the location of the Dorval composting facility should not affect the risk level of bird strike hazards at Pierre Elliott Trudeau International Airport. In comparison, waste transfer stations in closed buildings and green waste composting facilities are considered safer than golf courses in relation to land uses in areas of concern for bird strike (Transport Canada 2007).

The fact that it is a closed-building composting facility virtually eliminates the risk that birds and other animals come there to feed, since no waste or residue will be available to them as a source of food. The building will also be designed to minimize the emission of odours that attract animals, by means of a biofilter, negative pressure maintained within the processing buildings and a reception area equipped with air locks.

The following will also minimize the attractiveness of the site for wildlife:

- The building design will ensure that trucks can unload without making their content accessible to wildlife, i.e. that the reception doors be closed during unloading;
- It is also expected that the wheels of the trucks be washed as needed before driving out, to prevent odours or scattering solid or liquid residues outside when they leave;
- Operations management will work to minimize the waiting time of trucks entering the site, so that they can dispose quickly of their content;
- Cleaning equipment such as sweepers, will be available continuously to maintain the cleanliness of the site;
- A program to control rodents and other pests will be implemented in and around the building;
- The landscaping will be planned so as to reduce the availability of perches for birds, particularly by using conifers (pine, spruce, etc.) rather than hardwood species;
- If necessary, additional measures, such as installing post and wire bird deterrent, or "bird barrier spikes", will reduce the possibility that birds land directly on the building;
- Although the implementation of the composting facility does not provide for the creation of water retention ponds on its premises, it is not anticipated that the existing and adjacent golf course pond will be eliminated. It will however be monitored in order to identify any concentration of birds that may increase risks of bird strike;
- Finally, to ensure that operating requirements are met and to prevent that any wrongful practices result in the increased presence of birds and other animals on the site or nearby, it is recommended that a fauna monitoring program, similar to the program in place at the airport, be implemented;
- Ideally, such monitoring program would be carried out by the same team that works at the airport, to promote harmonization of approaches and benefit from the experience of this team. The methods for wildlife control being already well documented (Harris and Davis, 1998; Transport Canada, 2002, 2004, 2007; Cleary and Dolbeer, 2005), the use of an experienced team should reduce to the minimum the time for detection of unwanted situations and accelerate the implementation of appropriate measures.

Finally, by reducing the proportion of organic wastes sent to open landfills in the region, the implementation of this organic material processing facility and the other three planned on the island of Montreal will contribute to reducing accessibility of anthropogenic food to birds. At the regional level, this should result in a reduction of the number of birds contributing to bird strike hazards, including gulls.