

**Technical Panel for the Evaluation of the
North Shore Marine Transfer Station
and its Compatibility with Respect to Bird Strikes and Safe
Operations at LaGuardia Airport**

SEP 02 2010

The Honorable Ray LaHood
Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Mr. LaHood:

We are pleased to inform you that the technical panel of experts that was formed at your request to study the impact of the proposed North Shore Marine Transfer Station (MTS) on safe airport operations at LaGuardia Airport (LGA) has completed its work. A copy of the technical panel report with addendum is enclosed.

The study began on November 30, 2009 and examined the extent to which the proposed facility, if properly managed, would nonetheless constitute a wildlife attractant and would therefore be incompatible with safe airport operations at LGA. The technical panel reviewed wildlife data, the history of bird strikes at LGA, and the proposed building design plans, specifications, and operational parameters. The technical panel conducted multiple on-site visits to collect data including a tour the proposed MTS site and surrounding area, a visit to LGA and similar waste transfer facilities in the New York City area. The technical panel conducted risk assessments on a range of alternatives – from no facility to a fully operational facility with mitigation measures in place.

The report was issued for public review and comment from April 23 to May 24, 2010. Five separate respondents (Congressmen Gary Ackerman and Joseph Crowley (NY); State of New York Assemblywoman Nettie Mayersohn; the Air Line Pilots Association; Russell P. DeFusco, USAF (retired); and Mr. Kenneth D. Paskar) provided comments. The comments were categorized and addressed by topic in an addendum to the final report. Some changes were made to add clarity to the report.

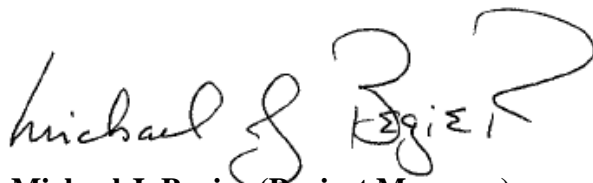
Changes to the building design, adherence to strict operational procedures, and the development and implementation of an integrated wildlife hazard management plan and program can reduce the hazards to aviation safety posed by birds attracted to the proposed facility. These efforts should be

monitored via a local regulatory framework and also should be discussed locally by existing parties concerned with wildlife hazards to aviation. It is the opinion of the technical panel that the report recommendations, if enacted and maintained, will achieve conditions that allow for compatibility between the North Shore MTS and LGA with respect to bird strikes and safe airport operations.

Sincerely,



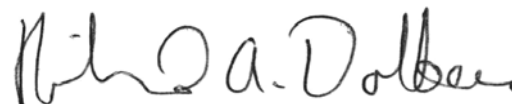
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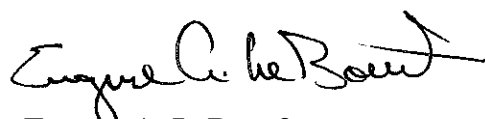
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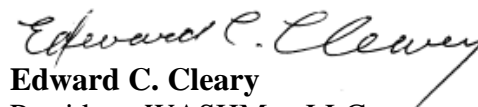
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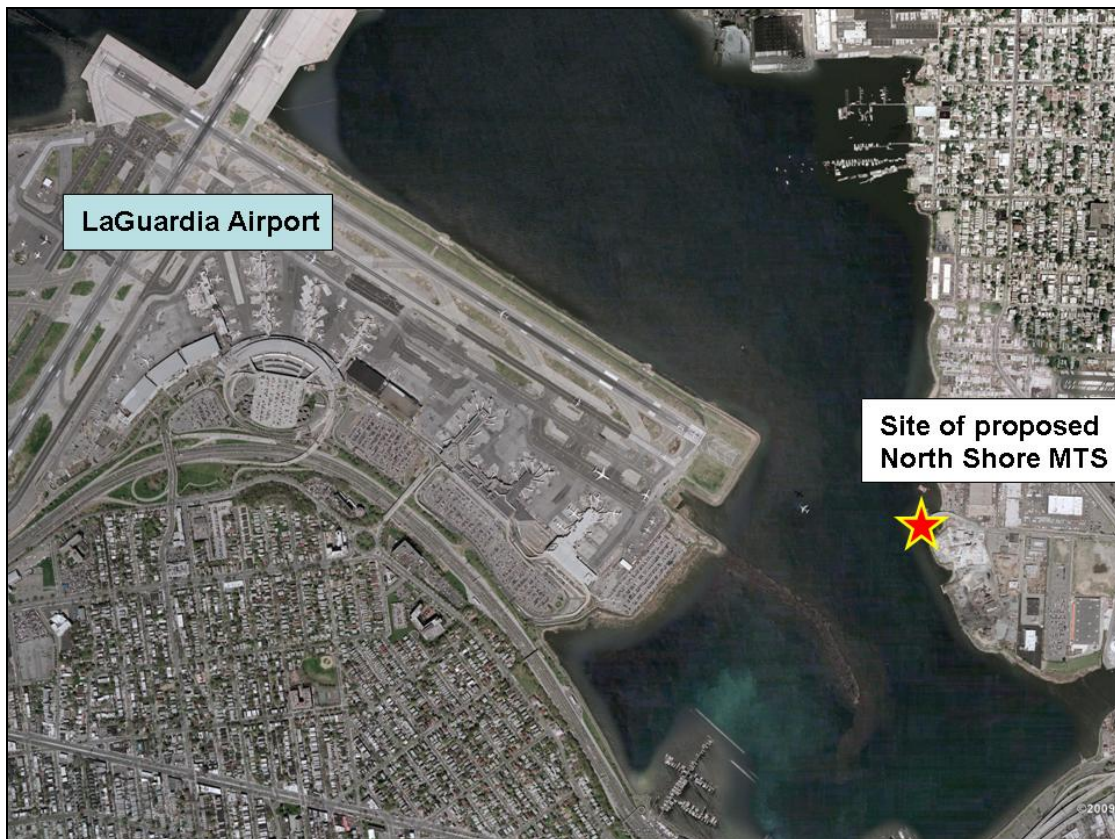
Enclosure

cc: J. Randolph Babbitt, FAA Administrator

EVALUATION OF THE NORTH SHORE MARINE TRANSFER STATION AND ITS COMPATIBILITY WITH RESPECT TO BIRD STRIKES AND SAFE AIR OPERATIONS AT LAGUARDIA AIRPORT

REPORT FOR THE ASSOCIATE ADMINISTRATOR OF AIRPORTS
OFFICE OF AIRPORT SAFETY AND STANDARDS
AIRPORT SAFETY & OPERATIONS
WASHINGTON, DC

AUGUST 2010



Report of the technical panel for the evaluation of the North Shore Marine Transfer Station and its compatibility with respect to bird strikes and safe air operations at LaGuardia Airport. Panel members are listed in Appendix A.

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EXECUTIVE SUMMARY

In 2006, the City of New York Department of Sanitation (DSNY) issued a Comprehensive Solid Waste Management Plan to address the long-term exportation and disposal of municipal solid waste from metropolitan New York City. This plan proposed refurbishing four closed marine transfer station (MTS) facilities previously operated by DSNY. One of the four proposed facilities, the North Shore MTS, would be located in the College Point section of Queens, New York, 2,206 feet from the landing threshold of Runway 13/31 at LaGuardia Airport (LGA).

The proposed MTS would be a three-level, over-water, fully enclosed facility explicitly designed for the indoor transfer of solid waste from collection vehicles into sealed leak-proof containers. Each container would be sealed and cleaned within the transfer station building and then loaded onto barges for transfer to a final disposal site. No solid waste would be stored or processed outside of the fully enclosed MTS building.

In January 2007, the New York State Department of Environmental Conservation received the final permit application for the North Shore MTS for review and public comment. Because of the proximity of the proposed location to LaGuardia Airport, the Federal Aviation Administration (FAA) evaluated its impact on air navigation and issued a determination of “No Hazard to Air Navigation” under Title 14 Code of Federal Regulations Part 77, Objects Affecting Navigable Airspace. Further, FAA guidance contained within Advisory Circular 150/5200-33B, Hazardous Wildlife Attractants On or Near Airports, states that fully enclosed waste-handling facilities designed and operated under specific conditions generally are compatible with safe airport operations, provided they are not located on airport property or within the Runway Protection Zone (RPZ). Although the proposed site for the North Shore MTS is neither on airport property nor within the airport’s RPZ and the proposed facility would be fully enclosed, the project has attracted Congressional and public scrutiny, which prompted this study.

A technical panel of wildlife hazard mitigation experts, including representatives from the FAA and United States Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services (USDA), reviewed current and historical wildlife data and surveys, the history of bird-aircraft collisions (bird strikes) at LaGuardia Airport, and the proposed building design plans, specifications, and operational parameters. The technical panel considered currently operating and similarly designed trash-transfer stations located in other boroughs of New York City and conducted risk assessments on a range of alternatives—from no facility to a fully operational facility with mitigation measures in place.

Previous research has demonstrated that gulls, European starlings, and pigeons are bird species frequently attracted to trash-transfer facilities. A review of available information, such as the bird strike history at LGA and findings from a wildlife hazards monitoring program at the airport, clearly demonstrates that gulls are a documented strike hazard at LGA and are frequently observed in the coastal-urban environment where the proposed MTS has been sited and in the general area near LaGuardia Airport.

Standardized bird surveys conducted at the Staten Island Transfer Station (a facility that has similar building design and operational procedures as would be used at the proposed North Shore MTS) indicated that although gulls were abundant in the general area, those birds were not attracted to the transfer station and waste management activities occurring inside the building.

Based on the collected data, the technical panel prepared a draft version of this report, which was issued for public review and comment from April 23 to May 24, 2010. Five separate respondents provided comments that raised issues related to the conduct of the study, future regulation of potential wildlife hazards at the proposed MTS facility if built, prior FAA studies about the proposed project, FAA advisory circular guidance, and other wildlife and wildlife hazard damage management information. The technical panel found the comments informative and amended the final report. All comments received during the public comment period and responses to the comments are contained in an addendum to the final report.

Findings and Recommendations

Changes to the building design, adherence to strict operational procedures, and the development and implementation of an integrated wildlife hazard management plan and program can reduce the hazards to aviation safety posed by birds attracted to the proposed facility. The technical panel of experts concludes that the recommendations provided in this report will achieve compatibility between the North Shore MTS and LaGuardia Airport with respect to bird strikes and safe air operations.

In addition to steps DSNY has already agreed to take to mitigate wildlife issues at the proposed North Shore MTS facility, the technical panel recommends that DSNY take the following actions:

- Update the existing engineering report for the North Shore MTS to reflect the additional wildlife hazard mitigation measures described in this report. (Conditions added to the engineering report become conditions of the operating permit.)
- Join the current wildlife hazard working group for John F. Kennedy International Airport (JFK) and LaGuardia Airport (JFK/LGA Wildlife Hazard Task Force). This working group/task force can discuss issues of shared interest or responsibility relative to the coordination of the report recommendations. The group may want to discuss (1) regulatory authority over the operational conduct of the North Shore MTS relative to wildlife hazard management as discussed in the engineering report and this report and (2) how to monitor and address wildlife hazard issues that may arise at the facility.

Further, the technical panel makes the following specific recommendations to DSNY to provide a framework for proactive monitoring and mitigation of wildlife hazards to aviation at the proposed North Shore MTS:

Planning and Construction Phases

- DSNY should develop an integrated wildlife hazard management plan (IWHMP) for the MTS that focuses on the facility during both construction and full operation. It should be specific enough to accomplish the goals it identifies and include the following key elements:
 - Identify personnel responsible for implementing each phase of the plan,
 - Identify and provide information on hazardous wildlife attractants on or near the MTS,
 - Identify appropriate wildlife management techniques to minimize the wildlife hazard(s) observed,
 - Prioritize appropriate management measures,
 - Recommend necessary equipment and supplies,
 - Identify training requirements for the wildlife damage management personnel who will implement the IWHMP, and
 - Identify when and how the IWHMP will be reviewed and updated.
- DSNY should implement the portions of an integrated wildlife hazard management program for the MTS facility that focus on the construction phase of the project.
- DSNY should hire or contract for a full-time, dedicated wildlife biologist who is trained and equipped to proactively mitigate bird use of the MTS as issues develop.
- DSNY should plan to eliminate ledges and other perching sites in the building design as much as possible. For example, do not use raised letters for signage on the building as any projections from the building provide perching and nest sites for European starlings and house sparrows.
- DSNY should install anti-perching devices on the transfer station roof, pilings, and other surfaces where birds may perch. DSNY should assess the need for such devices on adjacent DSNY buildings, as well.
- DSNY should strictly enforce a “no feeding wildlife or feral animals” policy.
- DSNY should ensure landscaping plans and selected plants and materials will not attract wildlife (e.g., minimize grassy areas that may attract Canada geese).

Fully Operational Transfer Station

- DSNY should implement an integrated wildlife hazard management program for the MTS facility based on the plan developed during the planning and construction phase.

- DSNY should hire or contract for a full-time, dedicated wildlife biologist who is trained and equipped to proactively mitigate bird use of the MTS as issues develop.
- DSNY should strictly enforce a “no feeding wildlife or feral animals” policy.
- DSNY should assess the cleanliness of incoming containers off site prior to their arrival at the MTS.
- DSNY should monitor trash containers to ensure no trash is extruding from them before they leave the transfer station building.
- DSNY should monitor barge activity for birds that might be attracted to them due to water disturbance or the refuse containers and mitigate accordingly.

1. INTRODUCTION

Trash-transfer stations are a relatively new component of solid waste management systems. A transfer station is a facility where solid waste (i.e., household garbage, commercial refuse, construction and building debris) is received, processed, and subsequently transferred to another solid waste management facility for further treatment, processing, or final disposal. As with other solid waste management facilities, such as landfills, certain species of birds can be attracted to trash-transfer stations. If such facilities are located near airports, the potential for collisions between birds and aircraft (bird strikes) could increase and thus negatively impact safe aircraft operations. Recently, a scientific study administered through the National Wildlife Research Center of the United States Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services program (hereafter referred to as USDA), evaluated the attractiveness of trash-transfer stations to wildlife and particularly to species of birds that are documented hazards to aviation. Findings from this study indicate the design and operation of trash-transfer facilities, in addition to other factors, can influence whether birds are attracted to a trash-transfer station. Thus, if the facility is located near an airport, these factors must be considered when assessing the overall compatibility of a transfer station to safe aircraft operations.

In 2006, the City of New York Department of Sanitation (DSNY) issued a Comprehensive Solid Waste Management Plan (SWMP) to address the long-term exportation and disposal of municipal solid waste (i.e., residential and commercial waste) from metropolitan New York City. As an integral part of the plan, the SWMP focused on refurbishing four closed marine transfer station (MTS) facilities previously operated by DSNY. According to the plan, municipal solid waste would be transported to the MTS facilities by curbside garbage trucks, processed and containerized within each facility, and transported by barge from each MTS to intermodal facilities or waste disposal sites, such as landfills, outside of the New York City area.

The State of New York sets design standards and operational criteria for all solid waste management facilities within the state through regulations, specifically 6 New York Codes, Rules, and Regulations Part 360 (Part 360). In January 2007, the New York State Department of Environmental Conservation received the Final Part 360 Permit Application for the North Shore MTS, one of the four proposed MTS, for review and public comment.

Previously, on November 10, 2004, the Federal Aviation Administration (FAA) received a proposal from DSNY to construct the North Shore MTS [building height of 110 feet Above Mean Sea Level (AMSL)] at a site located 2,206 feet from the landing threshold of Runway 13/31 at LaGuardia Airport. In response, the FAA completed an aeronautical study for which no internal objections were received. The FAA identified the proposed MTS building as an obstruction under Title 14 Code of Federal Regulations Part 77, Objects Affecting Navigable Airspace, and released the finding for public comment in April 2005. The FAA issued a determination of “No Hazard to Air Navigation” on September 18, 2006. Following concerns expressed by The Port Authority of New York and New Jersey (PANYNJ), DSNY submitted a revised proposal (with a modified

building height of 100 feet AMSL) to the FAA in March 2007. The FAA conducted a second aeronautical study and, on September 19, 2008, issued a determination that the proposed North Shore MTS structure would have no substantial adverse effect on the safe and efficient use of the navigable airspace by aircraft or on the operation of air navigation facilities.

FAA guidance in Advisory Circular 150/5200-33B, Hazardous Wildlife Attractants On or Near Airports, states that fully enclosed waste-handling facilities that receive garbage behind closed doors; process it via compaction, incineration, or similar processes; and remove all residue by enclosed vehicles generally are compatible with safe airport operations, provided they are not located on airport property or within the Runway Protection Zone (RPZ). The proposed site for the facility is neither on airport property nor in the RPZ for LaGuardia Airport.

On May 5, 2009, USDA biologists from the New York office met with representatives from the FAA, PANYNJ, and DSNY to review the wildlife hazard attractant potential of the proposed MTS. Based on review of operational procedures in the Part 360 Engineering Report, a visit to the Staten Island Transfer Station, and conversations with DSNY personnel (H. Szarpanski and S. Dolinar), the USDA determined the North Shore MTS did not inherently conflict with safe aircraft operations at LGA, provided recommendations (similar to those made in this report) were met (Appendix C). Correspondence between the FAA Eastern Region Airports Division Manager William Flanagan and DSNY Deputy Commissioner Harry Szarpanski from June 10, 2009, and July 9, 2009, respectively, acknowledged the findings and recommendations of the USDA New York office. Further, the Deputy Commissioner agreed to implement USDA's recommendations.

In general, public interest and overall awareness of collisions between wildlife and aircraft increased substantially in recent years, most notably following the US Airways Flight 1549 "Miracle on the Hudson" event on January 15, 2009. Public concern about the potential safety hazards that wildlife populations pose and habitat features that attract wildlife to areas on or near airports also increased. As the proposed location for the North Shore MTS is within the current flight path corridor for LaGuardia Airport, the public, as well as local, state, and Federal government agencies, have expressed concern that waste management activities at a trash-transfer station located less than 0.5 miles from LaGuardia Airport could attract birds that are known hazards to aviation, thereby negatively impacting safe flight operations at the airport.

Notable discourse about this issue, evident in local and national media stories, occurred throughout 2009. Interest from the New York Congressional delegation resulted in several questions about FAA policies and previous examinations of the topic by the FAA and other government agencies. During the autumn of 2009, the U.S. Secretary of Transportation held a series of meetings with the New York Congressional delegation, the City of New York, the FAA, and USDA. In the interest of public safety, it was determined that the FAA and USDA should engage in a joint study to re-examine the topic. The FAA and USDA frequently work together to conduct research on various

topics related to wildlife hazards to aviation. The FAA uses research findings to develop and promulgate safety regulations related to wildlife at airports, thus ensuring safe environments for aircraft operations at the Nation's airports.

Secretary of Transportation Ray LaHood directed a technical panel of experts, including the FAA and USDA, to study the impact of the proposed North Shore MTS on safe airport operations at LaGuardia Airport. This "blue ribbon" technical panel includes experts recognized as knowledgeable about wildlife hazards at airports (Appendix A). Project Leaders John R. Weller (National Wildlife Biologist, FAA) and Michael J. Begier (National Coordinator, Airport Wildlife Hazards Program, USDA/APHIS/Wildlife Services) provided oversight, and Dr. Brian E. Washburn (Research Biologist, USDA/APHIS/Wildlife Services/National Wildlife Research Center) provided detailed analysis and authored the study. Other members of the expert panel were Richard A. Dolbeer, PhD (Science Advisor, USDA/APHIS/Wildlife Services); Edward C. Cleary (President, WASHMan LLC); Eugene A. LeBoeuf [Chief, U.S. Air Force Bird/wildlife Aircraft Strike Hazard (BASH) Team]; Laura Francoeur (Chief Wildlife Biologist, The Port Authority of New York and New Jersey); and Christopher A. Nadareski (Section Chief, New York City Environmental Protection Bureau of Water Supply/WWQO/Wildlife Studies Section). This technical panel was charged with helping the agencies analyze the data, assess the risk of various alternatives, and determine whether the MTS could be made compatible with safe airport operations at LaGuardia Airport.

A key effort by the technical panel was to produce a report examining all available information concerning the issue. This report was to provide an informed answer as to whether the North Shore MTS proposed by DSNY is compatible with safe airport operations at LaGuardia Airport with respect to bird strikes. A draft version of the report was released for public review and comment from April 23 to May 24, 2010. The technical panel received valuable comments that were incorporated into the final report. All comments and associated responses are attached in an addendum to this report.

2. APPROACH

The approach used in this effort is not unique. Typically, examinations of wildlife hazard issues related to aviation safety involve a series of quantitative and qualitative approaches that are commonly used by wildlife management biologists. Following an established study schedule (Table 2-1), the technical panel decided to review plans for the design and operation of the proposed North Shore MTS in detail while considering the ecology of birds that are commonly found in the highly urbanized coastal area where the proposed MTS site and LaGuardia Airport are located. Specifically, the technical panel committed to the following tasks:

- a.** Review wildlife data, including wildlife strike history, surveys, previous wildlife hazard assessments, and other related studies that pertain to LaGuardia Airport. Recognizing that the applicable FAA regulation—Title 14 Code of Federal Regulations

Part 139, Certification of Airports (Part 139)—was updated in 2004, the panel decided that information collected prior to 2004 would not be considered.

b. Conduct a detailed review of the proposed building design plans, specifications, and operational parameters of the proposed North Shore MTS, including transport trucks, barges, trash types and volume, and nature of the general operation.

c. Arrange a physical assessment of the proposed facility location by the technical panel. This included a series of direct observations, or surveys, to determine the presence and quantity of wildlife at the proposed North Shore MTS location.

d. Examine currently operating trash-transfer stations of similar design located in other boroughs of New York City (more specifically, the Bronx and Staten Island) to better understand the processes employed in solid waste transfer and to observe first hand how these facilities and/or processes might attract birds.

e. Conduct risk assessments on a range of alternatives—from no facility to a fully operational facility with mitigation measures in place.

f. Issue, based on an examination of the available data, a determination of findings about (1) whether the trash-transfer facility is incompatible with safe airport operations at LaGuardia Airport with respect to bird strikes, (2) whether the MTS and its operation (as proposed in the Part 360 Permit Application) is compatible, or (3) whether the proposed facility can be compatible if further mitigation measures are applied.

g. Seek public input on the findings, incorporate this input, and issue a final report of the technical panel's findings and recommendations.

Table 2-1. Study activities and date of achievement for the North Shore MTS study conducted in accordance with a pre-determined schedule.

Item	Date of Achievement
Project Initiation and Task Assignment	November 30, 2009
First Technical Panel Meeting	December 7, 2009
Finalize Detailed Project Plan	December 9, 2009
Mid-Project Progress Briefing	February 8, 2010
Initial Draft Report	March 19, 2010
Technical Panel Draft Report Review	March 26, 2010
Report Released for Public Comment	April 23, 2010
Completion of Public Comment Period	May 24, 2010
Public Comment Review Meeting	May 28, 2010
Delivery of Final Report	June 3, 2010
Final Report Published	June 18 – August 13, 2010

3. COMPONENTS OF THE NORTH SHORE MTS STUDY

3.1. Bird-Aircraft Collisions at LaGuardia Airport

Civil and military aviation communities have long recognized that the threat to human health and safety from aircraft collisions with birds and other wildlife (wildlife strikes) is real and increasing. Worldwide, wildlife strikes have resulted in more than 229 human fatalities and the destruction of over 220 aircraft since 1988. Information about wildlife strikes to civil aviation within the United States is contained in the FAA National Wildlife Strike Database.

Recent events have amplified public awareness of wildlife strikes to aircraft. The dramatic landing of US Airways Flight 1549 in the Hudson River on January 15, 2009, after Canada geese were ingested in both engines of the aircraft dramatically demonstrated to the public that wildlife strikes are a serious aviation safety issue.

LaGuardia Airport is managed by The Port Authority of New York and New Jersey and is located on the northeastern end of Long Island, in Flushing, New York. LaGuardia Airport is one of 64 airports certificated under Title 14 Code of Federal Regulations Part 139 that fall under the jurisdiction of the FAA Eastern Region. The airport is bordered on the north, east, and south by Flushing Bay (part of Long Island Sound) and on the west by the highly urbanized (i.e., residential and commercial properties), densely populated areas of northern Queens County. As with other airports located directly adjacent to large water bodies, large populations of various species of birds that live in or near aquatic environments, such as gulls and waterfowl, can be found very near LaGuardia Airport. Due to the presence and behavioral patterns (e.g., flocking, soaring)

of these birds, the risk of bird strikes is a significant concern at LaGuardia Airport as well as at other airports located on waterways. Further, data from the FAA National Wildlife Strike Database clearly shows that bird strikes frequently occur at the airport and thus represent an important issue.

One means of understanding and quantifying bird strikes at airports is to determine the number of reported bird strikes per 100,000 aircraft movements. Of the 64 Part 139 certificated airports in the FAA Eastern Region, LaGuardia Airport ranked ninth for the total number of wildlife strikes reported between 2004 and 2008 (20.5 strikes per 100,000 aircraft movements). Furthermore, incidents with gulls constituted a large portion of the bird strikes that occurred at LaGuardia Airport (Figure 3-1) and other airports located on waterways within the mid-Atlantic region (Table 3-1).

Table 3-1. Top 20 FAA Part 139 certificated airports within the FAA Eastern Region (out of a total of 64 airports) for reported gull-aircraft collisions (includes several gull species) per 100,000 aircraft movements, 2004–2008.

Airport Name (State)	Reported Gull Strikes per 100,000 Aircraft Movements	Rank
Norfolk International (VA)	8.6	1
LaGuardia Airport (NY)	8.0	2
Buffalo-Niagara International (NY)	6.0	3
John F. Kennedy International (NY)	5.8	4
Albany International (NY)	5.2	5
Harrisburg International (PA)	4.2	6
Atlantic City International (NJ)	4.2	7
Ronald Reagan National (VA)	3.8	8
Elmira / Corning Regional (NY)	3.3	9
Newark Liberty International (NJ)	2.7	10
Greenbrier Valley (WV)	2.5	11
New Castle (DE)	2.4	12
Niagara Falls International (NY)	2.0	13
Newport News (VA)	2.0	14
Hagerstown Regional (MD)	1.9	15
Baltimore/Washington International (MD)	1.7	16
Philadelphia International (PA)	1.6	17
Williamsport Regional (PA)	1.5	18
Greater Rochester International (NY)	1.4	19
Erie International/Tom Ridge Field (PA)	1.4	20

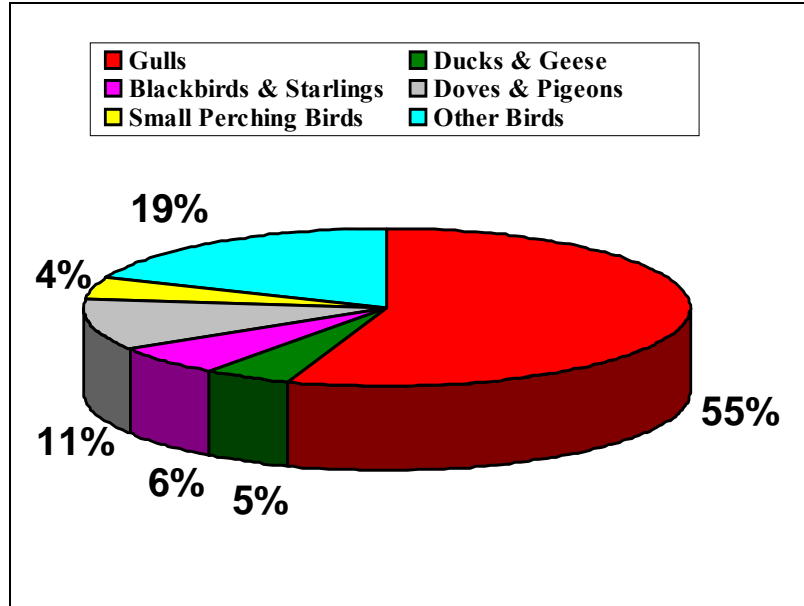


Figure 3-1. Summary of bird strikes at LaGuardia Airport where the bird(s) involved was identified, 2004–2008.

3.2. Urban Wildlife and Wildlife Observations at the Proposed Site

Many species of wildlife have adapted to living in areas that are densely populated with humans. Canada geese, gulls, pigeons, European starlings, songbirds, and a wide variety of other birds, mammals, and insects flourish in urban and suburban areas. The diversity and abundance of urban wildlife is enhanced when urban areas are located within coastal areas. Many people derive pleasure from watching birds and other wildlife in cities and urban areas, but conflicts can arise when urban wildlife negatively impacts some aspect of the quality of life for people. Examples of such conflicts include bird strikes, parks and recreational areas contaminated with wildlife droppings, and damage to landscaping around homes and community residences.

Given the location of the proposed site of the North Shore MTS on Flushing Bay (Figure 3-2), the potential exists for large numbers of many species of birds associated with marine and/or urban environments to be present on or near the proposed building site.

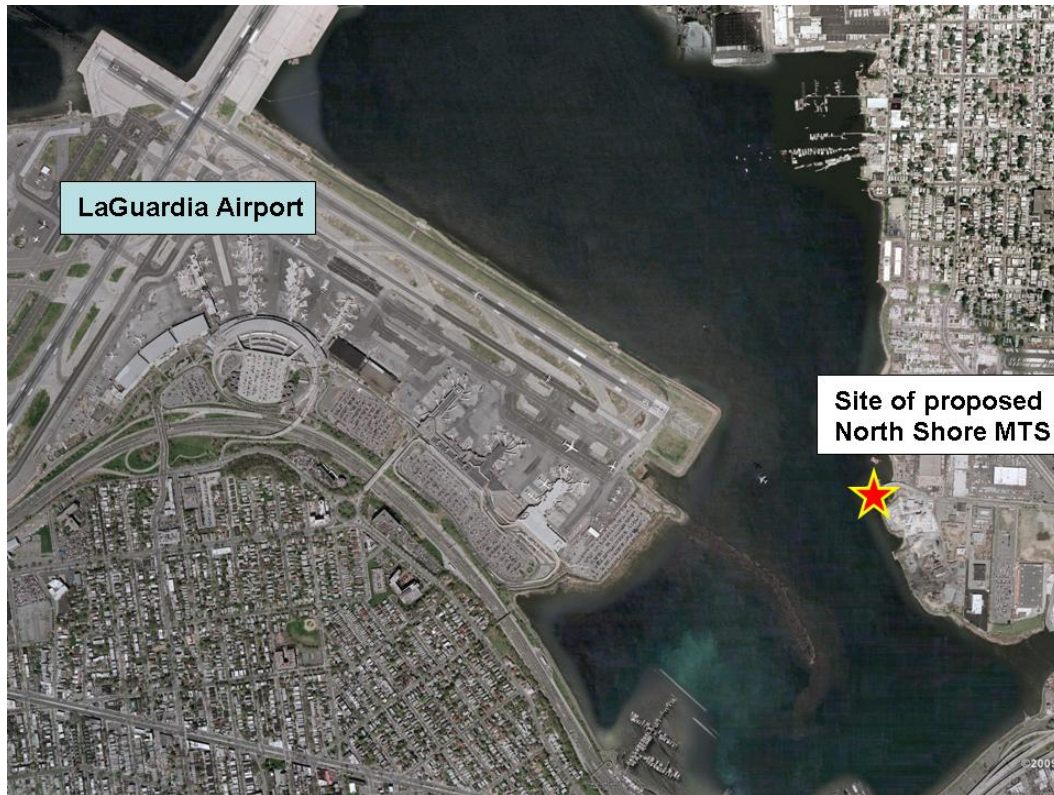


Figure 3-2. Site location for the proposed North Shore MTS near College Point, Queens, New York. The proposed site is approximately 2,206 feet from the landing threshold of Runway 13/31 at LaGuardia Airport.

Historical and current observations of birds clearly demonstrate that gulls and other birds are frequently present in large numbers within the general vicinity of the proposed North Shore MTS site. During 2004–2009, LaGuardia Airport implemented a program to monitor and assess wildlife hazards to aviation. Ducks, geese, and gulls made up the majority of birds observed on or near the airport (Figure 3-3). In addition, on several occasions during this study, the technical panel of experts and other wildlife biologists observed gulls at several locations adjacent to LaGuardia Airport and in the immediate vicinity of the proposed North Shore MTS site. For example, members of the technical panel observed gull use of mud flats near LaGuardia Airport. These observations are consistent with previously documented gull activity gathered during wildlife monitoring at LaGuardia Airport. Additionally, the long-term monitoring data collected at the airport (2004–2009), as well as other studies of birds within the New York City area, clearly show that bird activity and numbers within these environments is dynamic and likely influenced by several environmental factors, such as weather patterns, tidal cycles, and other seasonal influences (see LaGuardia Airport Wildlife Hazard Assessment, Shooting Gulls to Reduce Strikes with Aircraft at John F. Kennedy International Airport, 1991–2008).

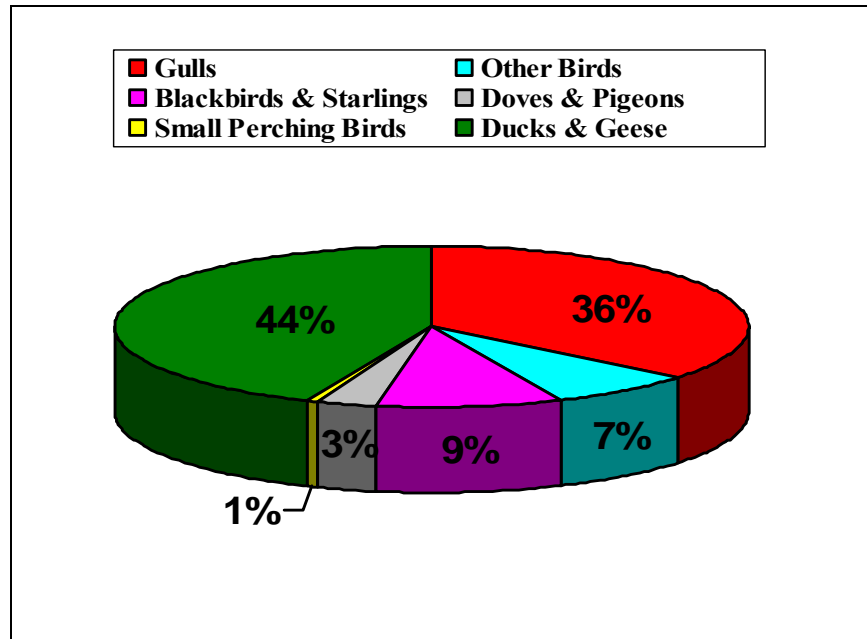


Figure 3-3. Birds observed during a long-term monitoring program to assess wildlife hazards at LaGuardia Airport, 2004–2009.

On December 15, 2009, the technical panel conducted a site visit to the proposed North Shore MTS location to gather information and conduct general observations about the area. The group gained first-hand knowledge of current conditions at the proposed site, including information about habitats, wildlife activity, and other important factors, and about the proximity of this site to LaGuardia Airport.

An evaluation of bird activity at the site of the proposed North Shore MTS was needed to establish a baseline for bird numbers and activity prior to the existence of an active trash-transfer station. To gain insight into bird activity at or near the proposed building site, professional wildlife biologists conducted 18 standardized bird surveys in February and March 2010 at the proposed MTS site. During these surveys, the biologists identified to species all birds observed within the area and recorded the number and behaviors exhibited. The data from these efforts were summarized to provide insight into the existing bird activity at the proposed site, with particular consideration of birds that are known to be hazardous to safe aircraft operations.

During the 18 standardized bird surveys, 396 birds [consisting of 308 gulls, 72 pigeons (Figure 3-4), and 16 European starlings (Figure 3-5)] were observed in the vicinity of the proposed North Shore MTS site (Table 3-2). Of the birds seen near the proposed site, only one percent of the birds were using the former North Shore MTS building. On one occasion, several pigeons were observed flying into the former transfer station building to roost. The gulls observed during the surveys, which consisted of a mixture of herring gulls (Figure 3-6) and ring-billed gulls, were flying over the proposed site or perched on

the roof of the New York City Department of Sanitation's truck repair and maintenance facility building, which is adjacent to the site of the proposed MTS.



Figure 3-4. House sparrows (left photo) and pigeons (right photo) are often a pest at trash-transfer stations and other facilities where solid waste is received and processed.



Figure 3-5. A European starling. Introduced into Central Park in New York City during the late 1800s, this bird has spread across North America. Today, the starling population in the United States exceeds 100 million birds.

Table 3-2. Average number of birds (of selected species) observed per hour of survey time within 0.25 miles of the proposed North Shore MTS site located near College Point in Queens, New York, during 18 standardized bird surveys conducted in February and March 2010.

Bird Species	Average Number Observed Per Hour of Survey Time
Herring Gull	62
Ring-billed Gull	40
Pigeon	24



Figure 3-6. Two adult herring gulls. Herring gulls (and other gull species) use waste management facilities, such as trash-transfer stations and landfills, as places to find food.

3.3. Design Features of the Proposed North Shore MTS Facility

As currently proposed, the fully enclosed transfer station building will have four walled sides and a pitched roof (Figure 3-7). It will be a three-level, over-water facility explicitly designed for the indoor transfer of solid waste from collection vehicles into sealed, leak-proof containers. Each container will be sealed and cleaned then loaded onto barges for transfer to a final disposal site outside of the New York City metropolitan area.

Not-to-exceed permit limits for the North Shore MTS are based on a weekly and maximum peak tons per day of solid waste. The expected average daily throughput is 2,200 tons of municipal solid waste and up to 1,000 tons of commercial waste. The proposed weekly limit is 21,840 tons. A 20-percent allowance is included for seasonal variability, growth in waste generation, and system redundancy. The proposed maximum peak tons-per-day limit is 3,672 tons, which accounts for DSNY post-holiday collections.

Design features of the proposed transfer station facility include the following:

- Waste will be delivered to the transfer station facility inside closed collection vehicles (i.e., curbside garbage trucks).
- All trucks will enter and exit the transfer station building through rapid, roll-up doors.
- A truck scale, ramps, and the tipping floor inside the building are all designed to minimize the number of trash trucks that enter and exit the building, particularly during peak hours.
- All waste will be processed in an enclosed building that maintains negative air pressure to prevent odors from escaping while building doors are open. In addition, exhaust air from the transfer station building will be treated using an odor neutralizing system.
- Each container will be sealed and cleaned inside the transfer station building.
- All waste will leave the North Shore MTS in sealed, leak-proof containers, and all containers will enter and exit through rapid, roll-up doors.

3.4. Operational Procedures of the Proposed North Shore MTS Facility

As currently proposed, all solid waste will arrive in covered trucks that enter the facility through rapid, roll-up doors and dump the waste from a high-level tipping floor down to a lower-level loading floor (Figure 3-7). Next, waste will be loaded into containers that are sealed and cleaned in a lidding/unlidding area. Finally, the containers will leave the MTS building through rapid, roll-up doors and be placed onto barges for transfer to a final disposal site.

The following operational procedures will be used at the proposed facility:

- No solid waste will be processed or stored outside of the transfer station building.
- The tipping floor will be cleaned daily.
- All vehicles will be cleaned prior to exiting the building.

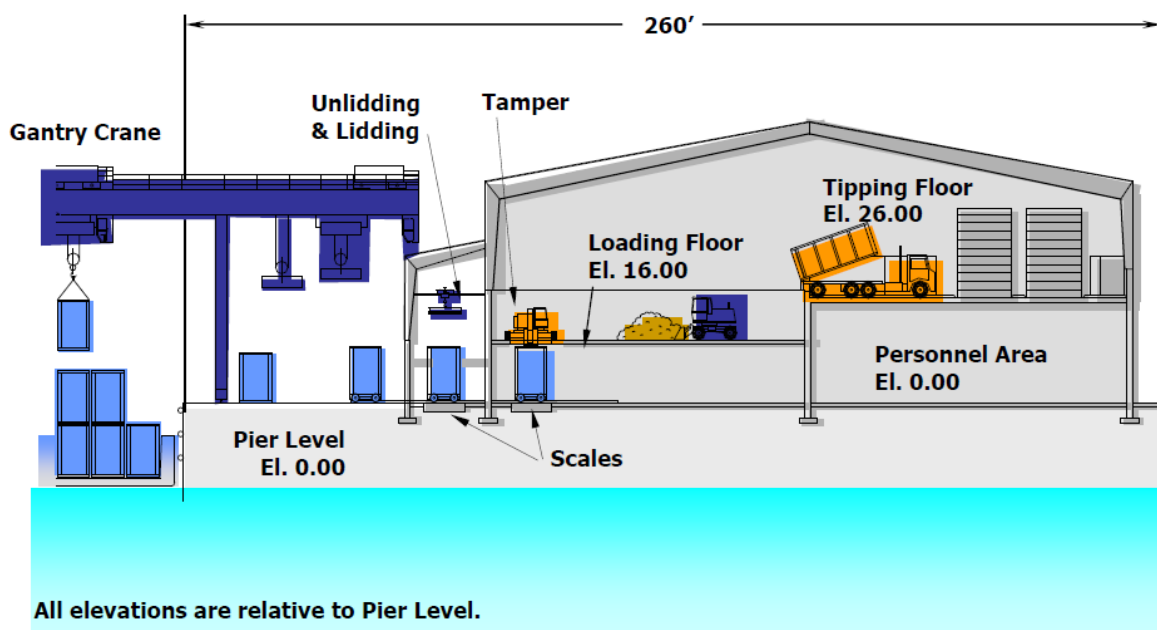


Figure 3-7. Cross-sectional schematic of the proposed North Shore MTS.

3.5. Examination of Currently Operating Trash-Transfer Facilities

In an effort to predict how attractive the proposed North Shore MTS might be to wildlife if it were to be constructed and put into operation, the expert panel identified and examined other operational trash-transfer facilities in the greater New York City metropolitan area.

On December 15, 2009, the technical panel of experts visited the Harlem River Yard Transfer Station, located in Bronx, New York. During the site visit, the panel observed how this transfer station is operated, considered how the building was designed, and attempted to determine the extent to which the facility and its operational procedures attracted birds.

On the same day, the technical panel of experts visited the Staten Island Transfer Station (Figure 3-8) located in Staten Island, New York. This trash-transfer station is very similar to the proposed North Shore MTS in terms of building design and operational procedures. As a whole, the group observed that opportunities for the facility to act as an attractant to wildlife were limited. The basic design of the facility appears to provide wildlife with little opportunity to use the structure or access portions of the waste transfer operation. However, the group decided to collect additional short-term data at this location to document possible wildlife attractant issues that may not have been apparent during this visit.

During February and March 2010, professional wildlife biologists conducted six standardized bird surveys at the Staten Island Transfer Station (1) to gain information about the attractiveness and use of that trash-transfer facility by birds hazardous to

aviation and (2) to assess the overall bird activity in the immediate vicinity of the transfer station. The biologists identified to species, counted, and recorded all birds observed within the area of the transfer station (within 0.25 miles) during these surveys. In addition, they documented the behaviors exhibited by birds (in particular, birds observed using the trash-transfer station—perching on the building, in the building, or directly feeding on trash). These data were summarized to provide insight into the existing bird activity at the site and to determine the degree to which birds, particularly those recognized as being hazardous to safe air operations, used the transfer station facility.

Based on the surveys (Table 3-3), the biologists observed that, on average, 41 birds (all species combined) used the Staten Island Transfer Station during a one-hour period. Birds were considered to be using the transfer station if they were observed feeding on or in the garbage or were perched on or in the transfer station building.

Gulls, primarily herring gulls and great black-backed gulls, accounted for most of the birds seen near the Staten Island Transfer Station (Table 3-3). However, even though, on average, 140 gulls were observed in the area of the facility per hour of survey time, less than 1 gull was seen using the transfer station. Although gulls commonly used the waterway adjacent to the transfer station property, they appeared to show little interest in the facility and the waste management activities that occurred inside the building.



Figure 3-8. Standardized bird surveys were conducted at the Staten Island Transfer Station, a truck-to-rail transfer station facility located in Staten Island, New York. The building design and operational procedures of this facility are similar to those of the proposed North Shore MTS.

European starlings (Figure 3-5) accounted for 26 percent of the birds observed using the Staten Island Transfer Station. On average, ten starlings were observed feeding on trash while it was being processed inside the Staten Island Transfer Station building each hour. Recent research conducted by USDA showed that starlings account for approximately half of all birds that use trash-transfer stations to search for food and find places to nest.

On average, 12 pigeons (Figure 3-4) were observed during each survey hour at the Staten Island Transfer Station (Table 3-3). Almost all of the pigeons seen at the facility were actually feeding on the trash inside the transfer station building. These birds are often considered a pest and cause problems in buildings and other man-made structures because of corrosion and disease concerns caused by fecal contamination and nesting debris.

Starlings and pigeons raise aviation safety concerns because they commonly collide with aircraft. Both have been involved in collisions with both civil and military aircraft that have resulted in human fatalities, so must be considered when assessing bird strike risks.

Approximately one-half (49 percent) of the birds observed using the Staten Island Transfer Station were house sparrows (Figure 3-4), which were frequently feeding on the trash inside of the transfer station building (Table 3-3). Although these birds are considered a pest and can cause problems for transfer station operators and employees, they do not present a substantial bird strike risk.

Table 3-3. Average number of birds (of selected species) observed per hour of survey time within 0.25 miles of the Staten Island Transfer Station in Staten Island, New York, and the average number of birds per hour of survey time using the facility during six standardized bird surveys, February and March 2010.

Bird Species	Average Number of Birds Observed within 0.25 mile of the Transfer Station Per Hour of Survey Time ^a	Average Number of Birds Observed Using ^b the Transfer Station Per Hour of Survey Time
Herring Gull	165	< 1
Great Black-backed Gull	69	< 1
Ring-billed Gull	6	< 1
European Starling	19	10
Pigeon	12	11
House Sparrow	21	20

^a All birds observed within 0.25 miles of the Staten Island Transfer Station building were counted and recorded.

^b Birds that were perching on or in the transfer station building or were seen in or feeding on trash were considered to be using the transfer station.

3.6. Risk Assessments

To facilitate effective decision-making about how the proposed North Shore MTS facility might attract birds and become a hazard to aviation operations, the technical panel used a risk assessment process and portrayed available alternatives in a risk matrix. Figure 3-9 illustrates a series of three alternatives for the proposed North Shore MTS.

The following three alternatives were considered in the risk assessment process:


- No MTS facility (i.e., the present situation).
- North Shore MTS as proposed in the Part 360 Permit Application.
- North Shore MTS with changes to the building design and operational procedures and the development and implementation of an integrated wildlife hazard management program.

The risk assessments only consider the risk posed to safe aircraft operations at LaGuardia Airport by birds using the proposed North Shore MTS site. Although this risk assessment does not specifically address the overall risk posed to aircraft operations to and from LaGuardia Airport by birds present throughout the general vicinity of the airport, it does consider dynamic, area-wide bird populations within the site-specific assessment of risk.

Sizable populations of gulls and other birds are commonly found in highly urbanized areas in coastal environments. Historic and current observations, in addition to the number of gulls struck by aircraft at or near LaGuardia Airport, clearly demonstrate that gulls and other birds that pose a hazard to safe air operations are commonly present at the proposed MTS site. Bird activity and numbers within these environments are dynamic and influenced by numerous factors, including weather patterns, tidal cycles, seasonal influences, and the availability of natural foods. Previous research has shown that bird use of trash-transfer facilities varies seasonally. Consequently, the risk assessment must consider the impact of changes in the number and activity of birds hazardous to safe aircraft operations.

The technical panel recognizes that the environment surrounding the proposed MTS location inherently supports populations of some birds that can be hazardous to aviation safety and that these population levels can vary over time for various reasons. However, the highest risk posed to safe aircraft operations by birds would likely occur if the design and operation of the proposed MTS did not consider wildlife issues. This level of risk would be associated with increased bird movements (primarily gulls) flying to and from the MTS, especially if these movements occurred within the flight paths of aircraft approaching or departing from LaGuardia Airport. Changes to the MTS building design and operational procedures that dissuade birds from using the MTS (see Section 4, Recommendations) would reduce the probability of birds and other wildlife being attracted to the facility and lower the risk associated with bird strikes. The risk could be further reduced if the MTS, after incorporating changes to the building design and

operational procedures, was operated with an integrated wildlife hazard management plan and program. The technical panel believes that an integrated wildlife hazard management plan would reduce the risks associated with hazardous birds in the immediate vicinity of the proposed facility below current background levels.

		<u>Alternative 1^a</u>	<u>Alternative 2^b</u>	<u>Alternative 3^c</u>
		No facility (present situation)	Proposed facility	Proposed facility with modifications and wildlife hazard management plan
Hazardous Bird Activity		<i>High</i>	<i>High</i>	<i>Low</i>
		<i>Medium</i>	<i>Medium</i>	<i>Low</i>
		<i>Low</i>	<i>Low</i>	<i>Low</i>
		Risk Levels		

^a Alternative 1: present situation (no MTS facility)

^b Alternative 2: MTS as proposed under the Part 360 application

^c Alternative 3: MTS with (1) changes to building design and operational procedures and (2) the implementation of a wildlife hazard management plan

Figure 3-9. Assessment of the risk to aviation safety for aircraft using LaGuardia Airport under three alternatives related to the proposed North Shore MTS.

3.7. Determination of Findings

The technical panel determined that Alternative 3, the MTS with changes to building design and operational procedures and the implementation of an integrated wildlife hazard management plan and program, will most likely provide the safest, most acceptable alternative. This alternative would greatly reduce the risk of a bird strike as compared to the present situation (no MTS facility) and the North Shore MTS site as proposed under the Part 360 application.

4. RECOMMENDATIONS

The hazards to aviation safety posed by birds that might be attracted to the proposed North Shore MTS can be reduced by incorporating changes to the building design, following strict operational procedures, and developing and implementing an integrated wildlife hazard management plan and program. The technical panel concludes that the

recommendations provided below will achieve compatibility between the North Shore MTS and LaGuardia Airport with respect to bird strikes and safe air operations.

In addition to the steps that DSNY has already agreed to take (Appendix E), the technical panel of experts recommends that DSNY take the following actions:

- Update the existing engineering report for the North Shore MTS to reflect the additional wildlife hazard mitigation measures recommended in this report. (Conditions added to the engineering report become conditions of the operating permit.)
- Join the current wildlife hazard working group for John F. Kennedy International Airport and LaGuardia Airport (JFK/LGA Wildlife Hazard Task Force). This working group/task force can discuss issues of shared interest or responsibility relative to the coordination of the report recommendations. The group may want to discuss (1) regulatory authority over the operational conduct of the North Shore MTS relative to wildlife hazard management as discussed in the engineering report and this report and (2) how to monitor and address wildlife hazard issues that may arise.

Further, the technical panel makes the following specific recommendations to DSNY to provide a framework for proactive monitoring and mitigation of wildlife hazards to aviation at the proposed North Shore MTS:

Planning and Construction Phases

- DSNY should develop an integrated wildlife hazard management plan (IWHMP) for the MTS facility that focuses on the MTS during both construction and full operation. It should be specific enough to accomplish the goals it identifies and include the following key elements:
 - Identify personnel responsible for implementing each phase of the plan,
 - Identify and provide information on hazardous wildlife attractants on or near the MTS,
 - Identify appropriate wildlife management techniques to minimize the wildlife hazard(s) observed,
 - Prioritize appropriate management measures,
 - Recommend necessary equipment and supplies,
 - Identify training requirements for the wildlife damage management personnel who will implement the IWHMP, and
 - Identify when and how the IWHMP will be reviewed and updated.
- DSNY should implement the portions of an integrated wildlife hazard management program for the MTS facility that focus on the construction phase of the project.

- DSNY should hire or contract for a full-time, dedicated wildlife biologist who is trained and equipped to proactively mitigate bird use of the MTS as issues develop.
- DSNY should plan to eliminate ledges and other perching sites in the building design as much as possible. For example, do not use raised letters for signage on the building as any projections from the building provide perching and nest sites for European starlings and house sparrows.
- DSNY should install anti-perching devices on the transfer station roof, pilings, and other surfaces where birds may perch. DSNY should assess the need for such devices on adjacent DSNY buildings, as well.
- DSNY should strictly enforce a “no feeding wildlife or feral animals” policy.
- DSNY should ensure landscaping plans and selected plants and materials will not attract wildlife (e.g., minimize grassy areas that may attract Canada geese).

Fully Operational Transfer Station

- DSNY should implement an integrated wildlife hazards management program for the MTS facility based on the plan developed during the planning and construction phase.
- DSNY should hire or contract for a full-time, dedicated wildlife biologist who is trained and equipped to proactively mitigate bird use of the MTS as issues develop.
- DSNY should strictly enforce a “no feeding wildlife or feral animals” policy.
- DSNY should assess the cleanliness of incoming containers off site prior to their arrival at the MTS.
- DSNY should monitor trash containers to ensure no trash is extruding from them before they leave the transfer station building.
- DSNY should monitor barge activity for birds that might be attracted to them (due to water disturbance and/or the refuse containers) and mitigate accordingly.

5. SOURCES OF INFORMATION

Guidance:

Advisory Circular 150/5200-33B, Hazardous Wildlife Attractants On or Near Airports

Advisory Circular 150/5200-34A, Construction or Establishment of Landfills Near Public Airports

14 Code of Federal Regulations Part 77, Objects Affecting Navigable Airspace

14 Code of Federal Regulations Part 139, Certification of Airports

40 Code of Federal Regulations Part 258, Criteria for Municipal Solid Waste Landfills

Wildlife Hazard Management at Airports: A Manual for Airport Operators, 2nd edition, 2005

Reports:

Evaluation of Trash-transfer Facilities as Bird Attractants, Report No. DOT/FAA/AR-09/62, 2010

Wildlife Strikes to Civil Aircraft in the United States 1990–2008, Serial Report No. 15, 2009

FAA National Wildlife Strike Database (<http://wildlife.faa.gov>)
LaGuardia Airport Wildlife Hazard Assessment, 2000

Shooting Gulls to Reduce Strikes with Aircraft at John F. Kennedy International Airport, 1991–2008. Special Report for The Port Authority of New York and New Jersey by U.S. Department of Agriculture, National Wildlife Research Center, 2009

USDA/APHIS/Wildlife Services New York, Site Visit Letter for LaGuardia Airport, 1 June 2009

USDA/APHIS/Wildlife Services New York, Site Visit Letter Regarding North Shore MTS to FAA Eastern Region Safety and Standards Branch, 4 June 2009

USDA/APHIS/Wildlife Services New York, Wildlife Hazard Monitoring Program Annual Reports for LaGuardia Airport (2004–2007, 2008, and 2009)

Proposed Facility:

Engineering Report for the North Shore Marine Transfer Station Waste Containerization Facility, Part 360 Permit Application, Volume 1, City of New York Department of Sanitation, January 2007

**APPENDIX A. TECHNICAL PANEL FOR THE EVALUATION OF THE
NORTH SHORE MARINE TRANSFER STATION AND ITS COMPATIBILITY
WITH RESPECT TO BIRD STRIKES AND SAFE AIR OPERATIONS AT
LAGUARDIA AIRPORT**

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Research Biologist
USDA/APHIS/Wildlife Services National Wildlife Research Center

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National Wildlife Biologist
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Richard A. Dolbeer, PhD

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Edward C. Cleary

President, WASHMan LLC

Eugene A. LeBoeuf

Chief, USAF BASH Team
U.S. Air Force

Laura C. Francoeur

Chief Wildlife Biologist
The Port Authority of New York and New Jersey

Christopher A. Nadareski

Section Chief, NYC Environmental Protection
Bureau of Water Supply/WWQO/Wildlife Studies Section

APPENDIX B. SCIENTIFIC NAMES OF ALL ANIMALS MENTIONED IN THIS DOCUMENT

<u>Common Name</u>	<u>Scientific Name</u>
Canada goose	<i>Branta canadensis</i>
European starling	<i>Sturnus vulgaris</i>
Great black-backed gull	<i>Larus marinus</i>
Herring gull	<i>Larus argentatus</i>
House sparrow	<i>Passer domesticus</i>
Pigeon	<i>Columba livia</i>
Ring-billed gull	<i>Larus delawarensis</i>

APPENDIX C. USDA/APHIS/WILDLIFE SERVICES REVIEW OF THE WILDLIFE HAZARD ATTRACTANT POTENTIAL OF THE PROPOSED MTS TO SAFE AIRCRAFT OPERATIONS AT LAGUARDIA AIRPORT



United States
Department of
Agriculture

Animal and
Plant Health
Inspection
Service

Wildlife Services
1950 Route 9
Castleton, NY 12033
518-477-4837
518-477-4088 fax

Thursday, June 4, 2009

Evelyn Martinez, Lead Certification Inspector
Safety and Standards Branch
Federal Aviation Administration
AFA-620
1 Aviation Plaza
Jamaica, NY 11434-4809

Dear Ms. Martinez,

On May 5, 2009 USDA, Wildlife Services Biologists met with representatives from the Federal Aviation Administration (FAA), the Port Authority of New York and New Jersey (PANYNJ), and the City of New York Department of Sanitation (SDNY). The purpose of the meeting was to review the intended construction of the North Shore Marine Transfer Station near LaGuardia Airport to determine if it will pose a significant enough attractant to birds to constitute a threat to aircraft using LaGuardia Airport (LGA). After meeting at the Federal Aviation Administration building in Jamaica, NY, the representatives toured a similar Transfer Station on Staten Island to gain firsthand knowledge of the intended operation.

The FAA is the primary authority responsible for protecting aviation safety and has developed an Advisory Circular regarding hazardous wildlife attractants on or near airports (AC 150/5200-33B). This AC recognizes that municipal solid waste operations generally attract hazardous wildlife and are often incompatible with safe air operations. However, language is included to specifically define and address fully enclosed trash transfer stations. According to the FAA, "enclosed waste-handling facilities that receive garbage behind closed doors; ... and remove all residue by enclosed vehicles generally are compatible with safe airport operations, provided they are not located on airport property or within the Runway Protection Zone (RPZ)." The FAA has confirmed that the proposed North Shore Marine Transfer Station (MTS) near LaGuardia Airport is outside the RPZ for LGA, and, therefore can be an example of how a fully enclosed trash transfer station and an airport can operate in close proximity while being compatible with safe aircraft operations.

FAA AC 150/5200-33B also references that "for all airports, the FAA recommends a distance of 5 statute miles between the farthest edge of the airport's AOA and the hazardous wildlife attractant if the attractant could cause hazardous wildlife movement into or across the approach or departure airspace." USDA, Wildlife Services (WS) believes that the proposed MTS will not cause hazardous wildlife movements within LGA airspace if SDNY follows the operating procedures recommended herein. Furthermore, WS has conducted over five years of hazardous wildlife monitoring at LGA and has a solid baseline of data that may be used to identify changes in hazardous bird presence as a result of operations at MTS.

SDNY has established operating procedures for MTS documented in their Engineering Report for the North Shore Marine Transfer Station Waste Containerization Facility (prepared by Greeley and Hansen, for New York State Department of Environmental Conservation, on behalf of City of New York Department of Sanitation, January 2007). Many of these procedures are applicable to wildlife, and we have referenced the relevant sections when possible.

Based on a review of the operating procedures in the above mentioned Engineering Report, a visit to the Staten Island Transfer Station, and on conversations with Department of Sanitation personnel (H. Szarpanski and S. Dolinar), Wildlife Services has determined that the North Shore Marine Transfer Station is not inherently in conflict with safe aircraft operations at LaGuardia Airport, provided the following recommendations are met:

1. Upon initiation of operations, enlist the services of a FAA-qualified airport biologist to conduct weekly surveys and inspections of the interior and exterior of MTS for a period of two years. The surveys should be based on an accepted scientific monitoring method for identifying hazardous wildlife attractants and patterns relative to aviation safety. They should also include inspections for procedural compliance relative to wildlife as detailed in point 4, below.
2. Meet regularly with LGA representatives to address wildlife hazards and solutions (i.e., with the airport's bird hazard working group).
3. If after two years no consistent threat to aviation is documented, SDNY will continue to allow annual inspections by the FAA and a FAA-qualified airport biologist to ensure that MTS is maintaining procedures originally established in the Engineering Report.
4. The following section is added to the Engineering Report:

3.4.5 Airport Wildlife Hazard Management

During the first two years of operation SDNY will employ an FAA-qualified, airport biologist to conduct weekly surveys at the MTS to identify potential hazardous wildlife attractants and patterns relative to aviation safety.

To prevent the MTS from attracting birds that could be hazardous to aircraft using LaGuardia Airport, precautions will be taken to minimize the attractiveness of the facility. Waste or leachate spilled on the tipping floor will be cleaned immediately in an effort to prevent the generation and/or tracking of waste outside the building (2.1.4.1 Tipping Floor). The exterior of containers/vehicles will be free of debris when entering or exiting the facility and exiting the lidding area (2.1.4.4 Container Lidding Area). The biologist will monitor roll up doors to ensure that they are closed when containers/vehicles are not entering or exiting (2.1.4.7.5 Ventilation). Floor drainage from the tipping floor and the loading and pier levels will be collected by floor trench drains and discharged into the City sewer system (2.1.4.7.6 Utility Systems).

In addition to triggers that may shut down the facility listed in 2.2.1 Acceptable Waste and Waste Sources, documented excessive and persistent presence of

hazardous birds creating a real or potential threat to aviation safety may also disrupt the operation of the facility until the threat is mitigated and the responsible attraction corrected. Bird presence may be quantified based on prior surveys at LGA. Pursuant to 2.3.5 Collection Vehicle and Employee On-Site Traffic Flow, upon delivery of waste and while queuing outside the MTS, at no time will a truck's contents be accessible to birds, which could create an attractant. All vehicles entering the facility will be clear of external debris before entering the site.

The access roadway and parking facility will be cleaned either mechanically or by hand daily (3.4.2 Litter Control). Equipment will be maintained onsite to mitigate land or water spillage. Spills will be cleaned up immediately so as not to cause an attractant (3.4.2 Litter Control). Once each week, while conducting on-site surveys for hazardous wildlife activity and potential attractants, the biologist will inspect the entire MTS for cleanliness, including the tipping floor, similar to the duties of the MTS Headquarters (MTS HQ) Superintendent, the Director of MTSS, and MTS staff (3.4.2 Litter Control). The processing areas will be cleaned daily, or when weather conditions permit, by wash-down and other appropriate methods (3.5 Floor Drainage and Maintenance).

Signs will be posted to inform employees and visitors that feeding of wildlife is prohibited, and actions will be taken to discourage people from doing so when identified. Landscaping installed on the premises shall not attract wildlife, and landscaping plans will be vetted through WS or another FAA-qualified airport biologist.

5. When birds are routinely attracted to the MTS in a manner as to constitute a threat to aviation safety, immediate actions will be taken to mitigate the source(s) of attraction, whether they are food, loafing, perching, roosting, or water attractants. These sources may include all external and internal aspects of the MTS including rooflines, ledges, docks, shoreline, ramp areas, and parking areas. The proposed kingpile wall and associated rip rap impacts to shoal mudflat and littoral wetlands could result in providing foraging and loafing opportunities for hazardous wildlife. WS or another FAA-qualified airport biologist will monitor these sites to ensure they do not attract hazardous wildlife independent of MTS itself. If these sites do attract hazardous wildlife, MTS will implement deterrent or exclusionary methods as recommended by WS or another FAA-qualified airport biologist.

In addition to these recommendations, WS encourages SDNY to create a MOU with LGA that addresses, at a minimum, the following points:

- a. SDNY acknowledges that wildlife, particularly birds, pose a safety hazard to airport operations. MTS shall take all measures necessary to prevent wildlife attractions during construction and operation of the transfer station. In the event that the transfer station attracts hazardous wildlife, MTS (or the contracted FAA-qualified airport biologist) shall take immediate action to remove the wildlife and

prevent further wildlife attraction. MTS will cooperate fully with the Airport, the FAA, and WS to eliminate wildlife hazards associated with the transfer station. In the event MTS is unable to manage wildlife hazards to the satisfaction of the Airport, the transfer station will be closed until the wildlife hazard is mitigated and the responsible attractant is removed.

- b. MTS shall enter into a contract with WS (or another FAA-qualified airport biologist) to monitor wildlife during the first two years of operation and respond to potential and actual wildlife hazards resulting from MTS. If, after the first two years, MTS has demonstrated that it does not represent any risk to aviation safety, no further monitoring or direct control would be required except annual inspections by the FAA or WS. If MTS is unable to demonstrate that it does not represent any risk to aviation safety, SDNY, FAA, Wildlife Services, and PANYNJ will determine what level of support will be required from MTS to mitigate wildlife hazards to aviation throughout the duration of MTS operation.

We appreciate the opportunity to review the SDNY's Engineering Report and to make recommendations to enhance the FAA's and the Port Authority's efforts to minimize wildlife risks to aviation and human safety. With the above stipulations, USDA, Wildlife Services believes that the MTS can be operated in a safe and responsible manner so as not to attract birds that pose risks to LGA's aircraft operations.

Sincerely,



Allen Gosser, Assistant State Director
New York USDA, Wildlife Services

cc: Lysa Scully, LaGuardia Airport
Laura Francoeur, Port Authority of New York and New Jersey
Harry Szarpanski, Department of Sanitation
Laurence Schafer, USDA, Wildlife Services
John Weller, Federal Aviation Administration

**APPENDIX D. LETTER FROM FAA EASTERN REGION AIRPORTS
DIVISION MANAGER TO DSNY DEPUTY COMMISSIONER, JUNE 10, 2009**

U.S. Department
of Transportation
**Federal Aviation
Administration**

Eastern Region, Airports Division

1 Aviation Plaza
Jamaica, NY 11434-4809

June 10, 2009

Deputy Commissioner Harry Szarpanski
44 Beaver St 12th Fl.
New York, NY 10004

Dear Deputy Commissioner Szarpanski:

FAA has reviewed the USDA's letter of June 4th, 2009. We have summarized the salient points in their words below:

- The FAA has confirmed that the proposed North Shore Marine Transfer Station (MTS) near LaGuardia Airport is outside the RPZ for LGA, and, therefore can be an example of how a fully enclosed trash transfer station and an airport can operate in close proximity while being compatible with safe aircraft operations.
- USDA, Wildlife Services (WS) believes that the proposed MTS will not cause hazardous wildlife movements within LGA airspace if SDNY follows the operating procedures recommended herein. Furthermore, WS has conducted over five years of hazardous wildlife monitoring at LGA and has a solid baseline of data that may be used to identify changes in hazardous bird presence as a result of operations at MTS.
- SDNY has established operating procedures for MTS documented in their Engineering Report for the North Shore Marine Transfer Station Waste Containerization Facility.
- Based on a review of the operating procedures in the above mentioned Engineering Report, a visit to the Staten Island Transfer Station, and on conversations with Department of Sanitation personnel (H. Szarpanski and S. Dolinar), Wildlife Services has determined that the North Shore Marine Transfer Station is **not** inherently in conflict with safe aircraft operations at LaGuardia Airport, provided the following recommendations are met:
 1. Upon initiation of operations, enlist the services of a FAA-qualified airport biologist to conduct weekly surveys and inspections of the interior and exterior of MTS for a period of two years.
 2. Meet regularly with LGA representatives to address wildlife hazards and solutions (i.e., with the airport's bird hazard working group).
 3. If after two years no consistent threat to aviation is documented, SDNY will continue to allow annual inspections by the FAA and a FAA-qualified airport biologist to ensure that MTS is maintaining procedures originally established in the Engineering Report.
 4. The following section is **added** to the Engineering Report:
3.4.5 Airport Wildlife Hazard Management

During the first two years of operation SDNY will employ an FAA-qualified, airport biologist to conduct weekly surveys at the MTS to identify potential hazardous wildlife attractants and patterns relative to aviation safety.

To prevent the MTS from attracting birds that could be hazardous to aircraft using LaGuardia Airport, precautions will be taken to minimize the attractiveness of the facility.

In addition to triggers that may shut down the facility listed in 2.2.1 Acceptable Waste and Waste Sources, documented excessive and persistent presence of hazardous birds creating a real or potential threat to aviation safety may also disrupt the operation of the facility until the threat is mitigated and the responsible attraction corrected. Bird presence may be quantified based on prior surveys at LGA. Pursuant to 2.3.5 Collection Vehicle and Employee On-Site Traffic Flow, upon delivery of waste and while queuing outside the MTS, at no time will a truck's contents be accessible to birds, which could create an attractant. All vehicles entering the facility will be clear of external debris before entering the site.

- The access roadway and parking facility will be cleaned either mechanically or by hand daily (3.4.2 Litter Control). Equipment will be maintained onsite to mitigate land or water spillage. Spills will be cleaned up immediately so as not to cause an attractant (3.4.2 Litter Control).
- Signs will be posted to inform employees and visitors that feeding of wildlife is prohibited, and actions will be taken to discourage people from doing so.
- When birds are routinely attracted to the MTS in a manner as to constitute a threat to aviation safety, immediate actions will be taken to mitigate the source(s) of attraction, whether they are food, loafing, perching, roosting, or water attractants.
- In addition to these recommendations, WS encourages SDNY to create a MOU with LGA that addresses, at a minimum, the following points:
 - SDNY acknowledges that wildlife, particularly birds; pose a safety hazard to airport operations. MTS shall take all measures necessary to prevent wildlife attractions during construction and operation of the transfer station. In the event that the transfer station attracts hazardous wildlife, MTS (or the contracted FAA-qualified airport biologist) shall take immediate action to remove the wildlife and prevent further wildlife attraction.
 - MTS shall enter into a contract with WS (or another FAA-qualified airport biologist) to monitor wildlife during the first two years of operation and respond to potential and actual wildlife hazards resulting from MTS. If, after the first two years, MTS has demonstrated that it does not represent any risk to aviation safety, no further monitoring or direct control would be required except annual inspections by the FAA or WS.

FAA believes the USDA recommendations are appropriate to ensure the WTF does not become a bird attractant. Please formally inform us if you concur and would implement the recommendations after the proposed facility become operational. In addition, the FAA should be advised if in the future management of the Waste Transfer Station changes from NYC to the private sector.

Sincerely,


William J. Flanagan
Manager, Airports Division

APPENDIX E. LETTER FROM DSNY DEPUTY COMMISSIONER TO FAA EASTERN REGION AIRPORTS DIVISION MANAGER, JULY 9, 2009



sanitation

HARRY SZARPANSKI, P.E.
Deputy Commissioner

Bureau of Long Term Export
44 Beaver Street, 12th Floor
New York, NY 10004
Telephone: (917) 237-5501
Fax: (212) 269-0788

July 9, 2009

William J. Flanagan
Manager, Airports Division
Federal Aviation Administration
Eastern Region, Airports Division
1 Aviation Plaza
Jamaica, NY 11434-4809

Dear Mr. Flanagan:

I write in response to your letter dated June 10, 2009 regarding the compatibility of the proposed North Shore Marine Transfer Station (MTS) and safe aircraft operation at the nearby LaGuardia Airport (LGA). On behalf of the New York City Department of Sanitation (DSNY), I want to thank the FAA and the US Department of Agriculture (USDA) Wildlife Services (WS) for taking the time to meet with me and my staff to discuss the MTS, review the Engineering Report which supports the permit to construct and operate issued by the New York State Department of Environmental Conservation (NYSDEC), and visit the Staten Island Transfer Station, a facility similar to the MTS, which has operated since 2006 without attracting birds.

DSNY concurs with your conclusion that the proposed MTS is not inherently in conflict with safe aircraft operations at LaGuardia Airport. We agree to institute the measures recommended in your letter at the start of MTS operations. Specifically, we will: 1) enlist the services of an FAA-qualified airport biologist to conduct inspections; 2) conduct regularly scheduled meetings with LGA representatives, and 3) continue to allow annual inspections of the MTS by the FAA or an FAA-qualified biologist beyond the first two years of operations. With respect to the suggested additions to the Engineering Report for the MTS, we will work with NYSDEC to amend the Report to include the specific provisions you have requested. In addition, we accept and agree to the recommendations on daily site cleaning and spill prevention and mitigation, proper signage and the need to take immediate action to discourage feeding of wildlife and mitigation of any sources of wildlife attractants. Further, DSNY agrees to enter into a Memorandum of Understanding with the Port Authority, the FAA and/or the USDA to carry out the recommendations in your letter, so that all necessary steps are taken to ensure that the proposed MTS does not become a bird attractant.

(over)

www.nyc.gov/sanitation

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We look forward to working with the FAA and the USDA on this important effort.

Sincerely,

A handwritten signature in black ink, appearing to read "Harry Szarpanski". The signature is fluid and cursive, with a prominent initial "H" and a long, sweeping underline.

Harry Szarpanski

**ADDENDUM:
RESPONSE TO PUBLIC COMMENTS FOR DOT-OST-2010-0104-0001****Evaluation of the North Shore Marine Transfer Station and its Compatibility with Respect to Bird Strikes and Safe Air Operations at LaGuardia Airport**

The report “Evaluation of the North Shore Marine Transfer Station and its Compatibility with Respect to Bird Strikes and Safe Air Operations at LaGuardia Airport” was issued for public review and comment from April 23, 2010, to May 24, 2010. Five separate respondents provided comments:

- Representatives Gary Ackerman and Joseph Crowley, U.S. House of Representatives
- State of New York Assemblywoman Nettie Mayersohn
- Air Line Pilots Association, International (ALPA)
- Dr. Russell P. DeFusco, PhD, U.S. Air Force (ret.)
- Mr. Kenneth D. Paskar

The comments were categorized and addressed by topic. At the end of each comment, the individuals responsible for the comment are identified. The complete comments appear at the end of this addendum.

Agency Oversight

1. *Who will provide oversight and coordination for the report’s recommendations between the various agencies involved (FAA, USDA, DSNY, NY State Department of Environmental Conservation [NYSDEC])? (Ackerman and Crowley [1], Mayersohn [1], DeFusco [1][9]) How will various agencies involved (FAA, USDA, DSNY, NYSDEC) coordinate the implementation of the recommendations? (Ackerman and Crowley [2], Mayersohn [1], DeFusco [1][9])*

Response: DSNY is responsible for implementing the recommendations in the report. Previously, DSNY revised the Final Engineering Report for the North Shore MTS Part 360 Permit Application to include terms stipulating that the FAA and an FAA-qualified biologist would provide oversight for similar recommendations. (See the DSNY letter dated July 9, 2009, in Appendix E of the report.) Measures in the engineering report are conditions of DSNY’s operating permit. NYSDEC provides regulatory oversight of DSNY and has the authority to enforce terms of the permit.

In the July 2009 letter, DSNY agreed, among other things, to enlist the services of an FAA-qualified biologist to conduct weekly surveys and inspections of the interior and exterior of the MTS for 2 years. If no problems surface, the FAA and an FAA-qualified biologist would conduct annual inspections thereafter.

The technical panel recommends that DSNY hire a full-time, dedicated wildlife control biologist who is trained to mitigate bird use of the MTS as issues develop during construction and operation of the MTS. The technical panel recommends that DSNY update the engineering report to incorporate this and other additional measures in this report.

Also, the technical panel recommends that DSNY join the existing wildlife hazard working group for LGA and John F. Kennedy International Airport (JFK) (JFK/LGA Wildlife Hazard Task Force). This group can discuss issues of shared interest or responsibility relative to the coordination of the report recommendations.

2. *If the NYDEC is the regulatory agency, it must include the recommended mitigation measures provided within the report as conditions of the operating permit with assurance of monitoring and enforcement of compliance. (Ackerman and Crowley [3], Mayersohn [1], DeFusco [1][9])*

Response: Comment Noted. If DSNY does not update the engineering report, NYSDEC can make the measures recommended in the report conditions of the operating permit.

North Shore MTS Design Features

3. *The original design drawings showed the facility as fully enclosed including the gantry/crane for transferring containers under a roof to the marine barges. A later design modification, as shown in the report, depicts the crane/gantry as not covered and could provide perching and nesting sites for birds on the exposed structures. The removal of the roof from the design is likely due to obstruction clearance requirements and could compromise the ability to deter birds from this portion of the structure. Anti-perching devices may not be able to be installed in some areas (e.g., safety rails, etc.) as maintenance crews would need to access these areas. Design and materials for these exposed structures must account for potential attractiveness to hazardous bird species. (DeFusco[3])*

Response: The technical panel recommends that modifications to the North Shore MTS building or design features not specifically mentioned within the report that may create an attraction to hazardous birds (e.g., uncovered crane/gantry, etc.) be identified in the integrated wildlife hazard management plan (IWHMP) and mitigated accordingly. See the response to Comment 13 for more specifics about the IWHMP.

4. *It is not entirely clear from the report that the containers will be designed in a manner to completely exclude birds from accessing trash that may be exposed if the lids are not tightly sealed. Also not clear is whether fluids can be fully contained to ensure no leakage occurs on site after trash is compacted for loading, though the report states that they will be leak-proof. (DeFusco [4][6])*

Response: The DSNY engineering report provides details about the design of the containers and proposed measures to keep containers free of external debris and leak-proof. Section 2.1.2, “Basis of Design”, of the engineering report states: “All waste delivered to the North Shore MTS will be containerized in special-purpose open-top-loaded containers that have a tare weight of approximately 5.25 tons and a capacity of approximately 62 cubic yards. The containers will hold an average net payload of 20 to 22 tons. The containers, similar to those currently manufactured by Accurate Industries, in Erial, New Jersey, and used in intermodal waste hauling operations at the Harlem River Yard transfer station in the Bronx and at other transfer stations throughout the country, are fabricated to American Bureau of Shipping (ABS) standards and bear the International Convention for Safe Containers (CSC) Approval Plate. The containers will be top loaded at the MTS and unloaded at the disposal facility by tipping the container with the end door open. The exterior dimensions of the containers will allow them to be lifted using International Standards Organization (ISO) standard spreader assemblies that twist-lock the container to the platform or another container during transport. The lids and rear door assemblies of the containers are fitted with gaskets to provide leak-proof and water tight seals.”

Section 2.1.4.4, “Container Lidding Area”, states: “The enclosed container lidding area will be approximately 24 feet long and 200 feet wide, and located at the same elevation as the container loadout area and pier. Empty containers will be moved into the lidding area building by battery-operated shuttle cars traveling on tracks through one of four 15-foot-high by 22-foot-wide overhead roll-up doors. After the containers move into the lidding/delidding area within the transfer station, the operators stationed at the intermediate platform will signal for the outer pier level door to close. At the same time the operators will signal the spreader mechanism to lower onto the lid. Once positioned and locked onto the lid, the pins will either be removed by a DSNY employee or by an automatic latching mechanism that will release the lid from the container and raise the lid, leaving it suspended about 36 inches above the container.” The next paragraph states, “After a loaded container is lidded, the overhead roll-up door will open and the shuttle cars will be pulled onto the pier level. The ventilation system in the container loading and lidding areas will be kept under sufficient negative pressure to keep loose waste and debris from escaping the building when the roll-up doors are open. In addition to the ventilation system, the roll-up doors will be designed to rapidly open and then close.”

Section 2.1.4.1, “Tipping Floor,” states: “Waste delivery trucks will not be cleaned/washed on site before exiting the facility. Since the tipping floor is elevated above the loading floor and the waste will be tipped directly onto the loading floor, there will be little chance of the trucks coming in contact with waste on the tipping floor and tracking this waste out of the facility. In the event that waste or leachate collects on the tipping floor, it will be cleaned immediately in an effort to prevent the generation and/or tracking of leachate. The tipping floor will be cleaned each day that waste is delivered. In addition, a vacuum sweeper will be used to routinely

wash the tipping floor of mud and other debris that may be tracked onto the floor from outside.”

The technical panel recommends that the recommended on-site FAA qualified biologist monitor these operations to help ensure that DSNY complies with these measures.

Operational Procedures

5. *There is no contingency plan noted for possible storage of containers on site should barges not run due to volume, maintenance, or weather delays. While it is acknowledged that the containers are to be cleaned prior to leaving the facility, there is no description of the cleaning process. Cleaning of incoming containers is not mentioned. Where will this occur? Off-site or on-site? Within the structure or outside? (ALPA [7], DeFusco [4][6])*

Response: The technical panel recommends the cleanliness of incoming containers be assessed off site prior to arrival at the MTS. This procedure will ensure that containers arriving at the MTS will not provide an attractant to hazardous wildlife.

Section 2.1.2 of the engineering report states: “The waste throughput capacity available in the MTS design reflects the fact that the four MTSs are part of the overall DSNY long-term export waste management system that will also incorporate several private transfer stations to containerize DSNY-managed Waste for export via a barge and/or rail. As an element of this system, each facility must provide a margin of capacity that gives DSNY the flexibility to deal with: (i) future growth in waste generation as a function of population increases over the period of the SWMP; (ii) upset condition at any given facility, e.g. an equipment outage that would result in the need for waste flow to be temporarily redistributed among nearby facilities; and (iii) public emergency, such as a heavy blizzard that leaves a backlog of waste on the curb that must be moved through the system as rapidly as possible once roads are clear.”

Section 2.1.4.5, “Pier (Barge Loadout Area)”, of the engineering report states: “There are four reserved container spaces for damaged containers. Any containers found to be leaking or damaged will be taken out of service and placed in one of four designated spaces on the pier to ensure that damaged containers are not accidentally placed back into service.”

6. *Who will ensure that incoming and departing vehicles are clean and how will it be done? Additionally, there is no contingency plan outlined should volume of traffic, vehicle maintenance problems, or other issues with the facility delay access to the building. No mitigation/contingency plans are mentioned to deal with hazardous birds that may be present during these times. (ALPA [7], DeFusco [4][6])*

Response: DSNY will be responsible for ensuring the cleanliness of the North Shore MTS. The technical panel recommends that the recommended on-site FAA qualified biologist monitor these operations to help ensure that DSNY complies with this measure. The technical panel also recommends that DSNY develop an IWHMP for the MTS that defines the roles and responsibilities of personnel assessing operations that may impact wildlife attractants. See also responses for Comments 4 and 5.

Report Questions/Responses

7. *We interpret risk assessment Alternative Three to mean the FAA and DOT conclude in order to reduce hazardous bird activity and increase air safety at LaGuardia, it would actually be better to build the MTS than to maintain the present situation with no facility. (ALPA [1], DeFusco [7])*

Response: The findings are those of the technical panel, which disagrees with this characterization of the risk assessment. Alternative 3 identified in Figure 3-9 of the report shows that constructing the MTS with proposed mitigation (i.e., incorporating changes to the building design and operational procedures and implementing an IWHMP) will not pose an increased risk to air operations at LGA compared to the existing situation with no facility and to the proposed facility without mitigation. Current FAA guidance (Advisory Circular 150/5200-33B) and “Evaluation of Trash-transfer Facilities as Bird Attractants”, DOT/FAA/AR-09/62 (2010), provide that fully enclosed trash transfer stations are generally compatible with safe airport operations. The technical panel believes an IWHMP would reduce the risks associated with hazardous birds in the immediate vicinity of the proposed facility below current background levels.

8. *The risk assessment model in Figure 3-9 of the draft report is not correct and must be re-accomplished in the final report to reflect the appropriate use of Operational Risk Management (ORM) models. (DeFusco [7], Paskar [8])*

Response: Figure 3-9 of the technical panel’s report was chosen as a graphic representation of the risk assessment conducted with each of the proposed alternatives. The figure was constructed to be a visual aid to supplement the text within the report. It is not an operational risk model, as suggested by this comment.

9. *As per FAA Advisory Circular 150/5200-33B, Hazardous Wildlife On or Near Airports, the NSMTS should be evaluated through a full Wildlife Hazard Assessment (WHA) because it is located within 5 statute miles of an airport and could cause birds to enter operational airspace. (DeFusco [2], Paskar [2])[3])*

Response: This interpretation is incorrect. The Advisory Circular does not require Federally funded airports to prepare wildlife hazard assessments to evaluate **enclosed** trash transfer stations.

According to Section 2-2 (d), “Enclosed Trash Transfer Stations”, of Advisory Circular 150/5200-33B, the 5 statute mile separation criteria does not apply to fully enclosed trash transfer stations like the North Shore MTS. Rather, it applies to trash transfer stations that “are open on one or more sides; that store uncovered quantities of municipal solid waste outside, even if only for a short time; that use semi-trailers that leak or have trans clinging to the outside; or that do not control odors by ventilation and filtration systems (odor masking is not acceptable)]” and therefore do not qualify as enclosed. The FAA considers open trash transfer facilities incompatible with safe airport operations if they are located closer than 5 statute miles from the farthest edge of the airport’s Airport Operations Area and could cause hazardous wildlife movement into or across the approach or departure airspace (see Section 1-4, “Protection of Approach, Departure, and Circling Airspace”).

Further, Section 2-2 (d) states: “Enclosed waste-handling facilities that receive garbage behind closed doors; process it via compaction, incineration, or similar manner; and remove all residue by enclosed vehicles generally are compatible with safe airport operations, provided they are not located on airport property or within the Runway Protection Zone (RPZ).” The North Shore MTS is neither on airport property nor in the RPZ.

Although there is no requirement for The Port Authority of New York and New Jersey to prepare a wildlife hazard assessment for LaGuardia Airport as a result of the proposed MTS, the technical panel recommends that DSNY prepare an IWHMP for the facility and work closely with the airport by joining the JFK/LGA Wildlife Hazard Task Force.

10. *The report did not adequately address the synergistic effect of the proposed trash transfer operation with surrounding land uses and natural features that contribute to the overall risk of bird strikes and the potential attractiveness of the facility. This synergistic effect makes the proposed transfer station incompatible with safe air operations at LGA. (DeFusco [10])*

Response: The comment supposes that the MTS operation may act as a wildlife attractant. A synergistic effect could be realized if the MTS operation does become a true attractant; however, the findings of the technical panel indicate that if the MTS is constructed and operated as recommended by the technical panel, no conflict will occur. Current FAA guidance on this topic (Advisory Circular 150/5200-33B) recommends that situations that may contribute to a potential synergistic effect be considered during the wildlife hazard management planning process.

The technical panel recommends that an IWHMP designed for the MTS consider this issue.

11. *The FAA report entitled “Evaluation of Trash-transfer Facilities as Bird Attractants” DOT/FAA/AR-09/62 (2010) concluded that use of trash transfer stations, particularly by bird species potentially hazardous to aircraft, can be significant and that all such facilities located near airports be individually evaluated due to differences in building design, season, geographic location, and on-site management practices. Also, the comparison with Staten Island facility should not have been used because that facility is a land-based transfer station. (ALPA [2], Paskar [7])*

Response: DOT/FAA/AR-09/62 (2010) recognized that the potential level of wildlife attraction for any given trash transfer station is highly related to the operation of the facility and its design features. The technical panel concluded that if the facility is designed and operated as recommended, it will not act as an attractant to wildlife. The surveys at the Staten Island facility were conducted to observe operations that will be analogous to the proposed MTS. In this sense, the comparison between operations at the Staten Island facility and the proposed MTS are valid.

12. *Why were vultures excluded from the FAA/USDA draft study? Vultures are commonly observed in the region, and should have been prominently listed in the study. (DeFusco [5], Paskar [9])*

Response: Vultures were not excluded from study. On-site observations at LaGuardia Airport and review of the FAA National Wildlife Strike Database revealed no sightings of vultures in the immediate vicinity of the proposed MTS and LaGuardia Airport. There are observations of turkey vultures in the New York City area (personal communication from a panel member, 2010), and a strike at JFK on May 24, 2007, was attributed to a black vulture. However, DOT/FAA/AR-09/62 (2010) noted that vultures were not observed at fully enclosed trash transfer facilities.

Recommendation Questions/Responses

13. *The report should list specific elements within the IWHMP. The plan should highlight essential methodologies, and it should exist for the planning and construction phase as well as the fully operational phase. (ALPA [3], DeFusco [8])*

Response: The FAA currently advises certificated airports in the United States on the creation and implementation of wildlife hazard management plans (WHMPs) to assist in reducing wildlife hazards to aviation (Wildlife Hazard Management at Airports, 2005). The goal of an airport’s WHMP is to minimize the risk to aviation safety, airport structures or equipment, or human health posed by populations of hazardous wildlife on and around the airport. The technical panel recommends the development and implementation of an IWHMP for the MTS facility; this plan would be analogous to an airport WHMP.

The technical panel recommends that an IWHMP for the MTS contain the following information:

- Identify personnel responsible for implementing each phase of the plan,
- Identify and provide information on hazardous wildlife attractants on or near the MTS,
- Identify appropriate wildlife management techniques to minimize the wildlife hazard(s) observed,
- Prioritize appropriate management measures,
- Recommend necessary equipment and supplies,
- Identify training requirements for the wildlife damage management personnel who will implement the IWHMP, and
- Identify when and how the IWHMP will be reviewed and updated.

The plan must also be specific enough to accomplish the goals that are outlined in the IWHMP.

14. *The dedicated on-site biologist should be mandatory in the development and implementation of the program.* (ALPA [6], DeFusco [8])

Response: The technical panel agrees that a dedicated on-site wildlife biologist trained in wildlife damage management should be present for the construction and subsequent operation of the MTS.

15. *Clarify the duties of the dedicated biologist.* (ALPA [6], DeFusco [8])

Response: The dedicated wildlife biologist must have sufficient background through academic study and training to be knowledgeable about the basic principles of wildlife management and in the identification, behavior, general life history, and legal status of the potentially hazardous species and situations common in the area. The wildlife biologist should have sufficient background to implement an IWHMP. Typical duties might involve the application of recognized survey and investigative techniques used to assess wildlife populations and the potential or realized hazards they pose in both qualitative and quantitative contexts. On a daily basis, a wildlife biologist at the MTS would focus on the monitoring of operations, site investigation of specific locations, and overall assessment of situations that may pose or act as a wildlife attractant. However, the wildlife biologist also should possess sufficient background in the proper implementation or deployment of various control strategies and techniques (e.g., harassment of wildlife) outlined in the IWHMP. Finally, the biologist must have an awareness of endangered and threatened wildlife species and/or habitats that might visit or be present at or near the MTS site.

16. *Installation of anti-perching devices on the MTS does not provide valid mitigation because adjacent buildings will not maintain similar devices. (ALPA [4], DeFusco [2])*

Response: The technical panel does not fully agree with this opinion. The installation of anti-perching devices will provide mitigation for the MTS structure because the installation of these devices will deter birds from the building. However, the technical panel does acknowledge that nearby buildings that have anti-perching devices installed may provide a broader area in which birds may not wish to perch or loaf. The technical panel recommends that all proximate DSNY facilities assess the need for and install anti-perching devices as necessary.

17. *A “no feeding” policy was not enforced during the demolition and construction phase of the current structure on the MTS, which has likely resulted in the establishment of a feeding area attractant. Also, it is doubtful that the enforcement effort of a “no feeding” policy for wildlife or feral animals, beyond the initial commencement of operations, would be either effective or sustainable. (ALPA [5])*

Response: The technical panel recommends that a no feeding policy be adopted during the construction phase of the new facility and enforced in order to limit the habituation of wildlife at the MTS location. The technical panel does not agree that a no feeding policy would be ineffective or unsustainable over time.

18. *Clarify the recommendation for monitoring barge activity for birds that might be attracted to them (due to water disturbance and/or refuse containers) and then mitigate accordingly. This should include techniques used for mitigation in a downtown, river neighborhood environment and whether it would involve elimination of birds around the building and barges. (ALPA [8])*

Response: The technical panel recommends the development of an IWHMP. This plan should take into account all types of MTS operations that may be related to wildlife at the MTS. The technical panel does not agree that the plan should address areas not in the immediate vicinity of the MTS.

19. *I am deeply concerned that a delicate and subtle shading or skewing of facts exists in the draft report. A number of relevant facts have been omitted, downplayed, or mischaracterized in an effort to approve building the NSMTS in College Point, Queens. (Paskar [1])*

Response: Secretary of Transportation Ray LaHood asked the technical panel to study the extent to which the proposed enclosed waste transfer facility would attract wildlife and the extent to which any such attraction would be incompatible with safe airport operations at LaGuardia Airport. The technical panel included wildlife and transportation experts from the FAA, USDA, the U.S. Air Force, The Port Authority of New York and New Jersey, and the City of New York. The group conducted an extensive review of LaGuardia bird strike data and plans for the MTS

site and also did detailed analysis of similar waste management operations in the New York area.

20. *The Executive Summary of the draft report claims that the North Shore MTS would be sited 2,206 feet from the landing threshold for runway 3r. But the AC criteria for separation between a waste transfer station and an airport is the distance from the Airport Operations Area (AOA) and not the runway threshold. The distance between the AOA and the MTS is approximately 1,600 feet—a difference of nearly 35 percent. The report's claim that the NSMTS is more than 2,000 feet from the runway is at best misleading and at worst intentionally deceptive. (Paskar [2][3])*

Response: The proposed North Shore MTS is an enclosed trash transfer station. Section 2-2 (d) of AC 150/5200-33B indicates that enclosed facilities are compatible with safe airport operations as long as they are not located on airport property or within the Runway Protection Zone. Open facilities and other sites that do not qualify as enclosed are subject to the separation criteria cited by the respondent.

21. *The technical panel of experts includes individuals who participated in a previous study of this facility. These individuals, prior to this study, were known to have no objections to the facility, with the exception of Richard Dolbeer. (Paskar [4])*

Response: This is incorrect. No technical panel members participated in a previous study of the proposed facility. The commenter cites no specific evidence about a prior study or other matter to demonstrate bias on the part of the technical panel. The technical panel consists of recognized experts within the fields of wildlife and transportation from the FAA, USDA, the U.S. Air Force, The Port Authority of New York and New Jersey, and the City of New York.

22. *Steven Garber, an expert wildlife biologist and former director of wildlife management for the Port Authority of New York and New Jersey, says the NSMTS is within 1,850 feet of LaGuardia's Runway r3—within the Runway Protection Zone—and will attract birds. He says the NSMTS constitutes “flagrant safety violations that will greatly increase the risk of imminent plane crashes.” He says the food source created by the NSMTS will guarantee that the area will become “an enormous lounging, feeding, socializing, and breeding area.” He also notes that the birds are federally protected and that efforts to remove them will entail a lengthy and expensive—and probably futile—battle. (Paskar [5])*

Response: FAA Advisory Circular 150/5200-33B, Section 2-2 (d), “Enclosed Trash Transfer Stations”, states: “Enclosed waste-handling facilities that receive garbage behind closed doors; process it via compaction, incineration, or similar manner; and remove all residue by enclosed vehicles generally are compatible with safe airport operations, provided they are not located on airport property or within the Runway Protection Zone (RPZ).” Also, the study “Evaluation of Trash-Transfer Facilities as Bird Attractants” (2010) determined that fully enclosed trash

transfer stations do not provide a significant attraction to hazardous birds if they are constructed and operated correctly.

Ninety percent of avian species within the United States are Federally protected under the Migratory Bird Treaty Act. Both state and Federally protected birds are routinely and successfully mitigated from airport properties and surrounding habitats under regulatory depredation permits issued from the participating state or the U.S. Fish and Wildlife Service. The mitigation of hazardous wildlife that pose a threat to air operations is an accepted, cost-effective measure with respect to the costs of damaged engine/aircraft repairs, downtime costs of passenger aircraft, and human safety. We note that Mr. Garber did not comment on this report. We stand by the findings and conclusions in this report.

23. *Virtually all of the experts in this study are currently or have been employed by or contracted by one or more of the stakeholders in this issue, including the FAA, USDA, and the Port Authority. Working for more than one of these agencies constitutes a clear conflict of interest; independent analysis and objectivity cannot be assured, because the FAA and the USDA knew the panel members' position on the project prior to the development of this report. After reviewing letters from the FAA and USDA, I am baffled over why these two agencies are crusading in favor of building the NSMTS. I have not seen one item of correspondence or communication of any kind from either agency questioning or investigating the risks and hazards the NSMTS would impose on air travel. (Paskar [6][10])*

Response: The technical panel consists of recognized experts within the fields of wildlife and transportation from the FAA, USDA, the United States Air Force, The Port Authority of New York and New Jersey, and the City of New York. The technical panel concludes that the recommendations in the report will achieve compatibility between the North Shore MTS and LaGuardia Airport with respect to bird strikes and safe air operations. The report reflects the fact that the panel undertook a good faith, independent, and objective review of the proposed project. The fact that certain members of the panel currently or previously worked for the FAA or USDA does not constitute a conflict of interest. The commenter cites no flaws in the study or other evidence to support these allegations.

COMMENTS BY RESPONDENT**Congressmen Gary Ackerman and Joseph Crowley, U.S. House of Representatives**

(1) Accordingly, we would like to know how these various agencies (FAA, USDA, DSNY, NYDEC) will coordinate the implementation of the recommendations, (2) whether specific agencies will be responsible for specific recommendations, (3) and if there will be a controlling authority to make decisions with regard to these new recommendations.

State of New York Assemblywoman Nettie Mayersohn

(1) Specifically, the study recommends several additional design modifications, operational procedures and a wildlife management program during the planning, construction and operational phases of the MTS. These changes to the design, construction and operation of the MTS will require long-term commitments and extensive coordination from several city, state and federal agencies, including: the Department of Sanitation, New York City; the New York State Department of Environmental Conservation; the Federal Aviation Administration of the U.S. Department of Transportation; and the Animal and Plant Health Inspection Service and Wildlife Services of the U.S. Department of Agriculture. This oversight and coordination is not delineated in the report, and while there are worthy safeguards recommended in this study, they will be of no value if there is not the required commitment and authority to carry them out.

ALPA – Air Line Pilots Association, International

(1) The Evaluation’s “Determination of Findings” points out in risk assessment Alternative Three, that the proposed facility, with modifications and an integrated operational wildlife hazard mitigation plan, would provide the safest, most acceptable alternative when considering the building of the North Shore MTS. We interpret this to mean that the FAA and DOT have concluded that in order to reduce hazardous bird activity and increase air safety at LaGuardia, it would actually be better to build the MTS than to maintain the present situation with no facility.

(2) ALPA believes that the Evaluation team should not have used the experience of the Staten Island waste transfer station, a land-based facility, as a predictor of potential wildlife activity the marine transfer station may generate. We believe that because gulls are more inclined to frequent a water environment, it is reasonable to conclude that they would be more likely to congregate at a marine facility than at a land facility.

(3) [Implement an integrated wildlife hazards management program for the MTS facility.] There is no mention of definitive elements to be included in the integrated wildlife hazards management program that are specific to this facility. The Evaluation should delineate areas that are essential to be addressed and included in the program.

(4) [Install anti-perching devices on the transfer station roof, pilings, and other surfaces where birds might perch.] *Such design elements would likely deter birds from using the MTS for perching or nesting. However, because the facility is not an isolated building, but rather, will stand among many others, we do not agree that these design modifications provide a valid mitigation. Adjacent buildings that do not incorporate similar design mitigation features will become perching or roosting locations for birds that are attracted to, and feeding from the contents of the vehicles entering and exiting the building, whether by land or water.*

(5) [Strict enforcement of a “no feeding wildlife or feral animals” policy.] *The demolition of the current structure on the MTS site is taking place without the implementation of this recommendation, likely resulting in a feeding area having been already established. It is highly doubtful that the enforcement effort, beyond the initial commencement of operations, would be either effective or sustainable.*

(6) [Provide a dedicated (i.e., only duties) wildlife control professional trained and equipped to mitigate bird use of the transfer station as issues develop (i.e., proactive approach).] *This dedicated position should be mandatory in the development and implementation of the program.*

(7) [Monitor trash containers to ensure no trash is extruding from them prior to leaving the transfer station building.] *It isn't clear what action, if any, is required to be taken to repair or replace trash containers that are no longer fit to serve their intended purpose. This concern also applies to monitoring and ensuring the good working condition of the truck containment modules.*

(8) [Monitor barge activity for birds that might be attracted to them (due to water disturbance and/or the refuse containers) and mitigate accordingly.] *It is unclear what “mitigate accordingly” means. For example, what mitigation technique(s) would be used in a downtown, river neighborhood environment? Would the mitigation specify the elimination of the birds flying in the areas around the building and barges?*

Russell P. DeFusco, PhD, USAF (ret.)

(1) *There is no mention of independent monitoring or enforcement of compliance by the regulatory agency to ensure mitigation measures are maintained in perpetuity for the life of the facility.*

(2) **FAA Advisory Circular Requirements:** *FAA Advisory Circular 150/5200-33B “Hazardous Wildlife On or Near Airports” states that fully enclosed waste handling facilities are considered incompatible with safe airport operations if they are located on airport property or within the Runway Protection Zone (RPZ). In any case, such facilities should be evaluated through a Wildlife Hazard Assessment (WHA) if they are located within 5 statute miles of an airport and cause birds to enter operational airspace and are generally considered incompatible within the standard separation criteria of 10,000 feet from active surfaces or cause birds to enter the approach, departure, or circling airspace*

for airports serving jet aircraft if certain criteria are not met. The proposed facility lies nearly on centerline with LaGuardia Airport Runway 31, possibly within the RPZ (the draft FAA/USDA report states otherwise, but Garber disagreed), and well within the standard separation distances and thus should be considered incompatible by these criteria.

(3) Building Design: *The original design drawings I reviewed showed the facility as fully enclosed including the gantry/crane for transferring containers under a roof to the marine barges. A later design modification, as shown in the report, depicts the crane/gantry as not covered and could provide perching and nesting sites for birds on the exposed structures. The removal of the roof from the design is likely due to obstruction clearance requirements and could compromise the ability to deter birds from this portion of the structure. Anti-perching devices may not be able to be installed in some areas (eg. safety rails, etc) as maintenance crews would need to access these areas. Design and materials for these exposed structures must account for potential attractiveness to hazardous bird species. Other aspects of the building design are detailed in the report and I concur with their findings.*

(4) Container Design: *It is not entirely clear from the report that the containers will be designed in a manner to completely exclude birds from accessing trash that may be exposed if the lids are not tightly sealed. Also not clear is whether fluids can be fully contained to ensure no leakage occurs on site after trash is compacted for loading, though the report states that they will be leak-proof. There is also no contingency plan noted for possible storage of containers on site should barges not run due to volume, maintenance, or weather delays. While it is acknowledged that the containers are to be cleaned prior to leaving the facility, there is no description of the cleaning process. Cleaning of incoming containers is not mentioned. Where will this occur? Off-site or on-site? Within the structure or outside?*

(5) Odor control. *It is mentioned in the report that negative air pressure in the building and odor elimination will be employed to limit odors escaping the facility. Most birds have a very poorly developed sense of smell, with one notable exception; the Turkey Vulture. Turkey Vultures were not mentioned in the draft FAA/USDA report, perhaps because the surveys were conducted at a time of year when these birds are generally absent from the region and there are no records of strikes with these birds at LaGuardia Airport. However, vultures are commonly observed in the region, particularly in summer. As these birds find their food sources primarily by smell, they may be expected at the site if odors are present.*

(6) Incoming Traffic: *While it is acknowledged that it is a regulatory requirement that trash hauling vehicles be covered when transporting trash from the point of pick-up to deliver to the station, it is my experience that these vehicles frequently have exposed trash that is partially exposed at the containment seals or adhering to external structures such as tires, chassis, lifts, and others. Such exposed trash will attract birds to the vehicles and parking areas outside the building. Additionally, there is no contingency plan outlined should volume of traffic, vehicle maintenance problems, or other issues*

with the facility delay access to the building. No mitigation/contingency plans are mentioned to deal with hazardous birds that may be present during these times.

(7) Risk Assessment Model: *The risk assessment model in Figure 3-9 of the draft FAA/USDA report is not correct. It is an adaptation of a standard Operational Risk Management (ORM) model that should show the frequency of occurrence of a hazard on one scale and the severity of the consequences of encountering that hazard on the opposing scale. As depicted in the report, the risk of Alternative 1 (no facility) and Alternative 2 (facility as proposed with no mitigation measures) are shown as equal, despite the fact that the text did not come to the same conclusions. In my opinion the risk level would rise from lowest to highest from Alternative 1 (no facility) to Alternative 3 (facility with mitigation) to Alternative 2 (facility as proposed). This model must be re-accomplished in the final report to reflect the appropriate use of ORM models.*

(8) Mitigation Measures: *The design features, anti-perching devices, no feeding policy, landscaping recommendations, monitoring of incoming and outgoing vehicles/barges/containers, development of an integrated wildlife hazard management program, and provision of a full-time dedicated wildlife control professional are all necessary elements of proper mitigation measures to reduce potential hazards to nearby aircraft. However, there are other provisions that are not detailed in the draft report. For example, it recommends monitoring bird activity attracted to barges and mitigating accordingly. Who will be monitoring this activity? What are the mitigation measures to adapt accordingly? Mitigation measures, such as the use of pyrotechnics and other standard harassment techniques are not detailed. Are there provisions to temporarily or permanently halt operations while mitigating techniques are applied should unacceptable flight safety risks be noted? These details must be specifically spelled out in the report and in the wildlife hazard management plan or there is no way to monitor and ensure compliance.*

(9) Compliance. *There is no mention in the draft FAA/USDA report of compliance issues. Neither the FAA nor the USDA, or for that matter the Port Authority of New York and New Jersey nor LaGuardia Airport have the regulatory authority to ensure that any provisions in the recommendations contained in the report are adapted, monitored, or enforced.*

(10) Cumulative Effects: *The proposed trash transfer operation also cannot be treated as an entirely separate entity, as the cumulative and/or synergistic effects of other land uses and natural features in the surrounding area contribute to the overall risk of bird strikes and the potential attractiveness of the facility. The adjacent maintenance facilities where trash hauling vehicles are maintained exhibited several factors that can attract hazardous birds near the proposed facility. Open bays where birds such as Rock Pigeons and European Starlings were nesting and roosting were noted in a May site visit. Gulls were observed perched on the roofs. Open compartments on the vehicles themselves allowed birds access to residual, exposed trash. The nearby inactive Flushing Meadows Airport provides a wildlife sanctuary near the facility that will attract a variety of birds that will interact with the trash transfer operation. Other industrial buildings in the area*

provide roosting and nesting sites near the facility. The natural habitat on and around the waterfront and marine traffic north of the facility attracts gulls and other potentially hazardous species near the facility and airport. Each of these contribute to a background level of activity that will necessarily interact and perhaps be enhanced by the trash transfer facility and must be more fully evaluated, yet were not adequately addressed in the draft FAA/USDA report.

Kenneth D. Paskar

(1) I am deeply concerned that a delicate and subtle shading or skewing of facts exists in the draft report. A number of relevant facts have been omitted, downplayed, or mischaracterized in an effort to approve building the NSMTS in College Point, Queens.

(2) The Executive Summary of the draft report claims that the NSMTS would be sited 2,206 feet from the landing threshold for runway 3r. But the AC criteria for separation between a waste transfer station and an airport is the distance from the Airport Operations Area (AOA) and not the runway threshold. The distance between the AOA and the NSMTS is approximately 1,600 feet - a difference of nearly 35 percent. The report's claim that the NSMTS is more than 2,000 feet from the runway is at best misleading and at worst intentionally deceptive.

(3) The Executive Summary also claims that the proposed site for the facility is not in the Runway Protection Zone (RPZ), -and that "congressional and public scrutiny resulted in additional investigation."

(4) The technical panel of experts includes individuals who participated in a previous study of this facility. These individuals, prior to this study, were known to have no objections to the facility, with the exception of Richard Dolbeer.

(5) Steven Garber, an expert wildlife biologist and former director of wildlife management for the Port Authority of New York and New Jersey, says the NSMTS is within 1,850 feet of LaGuardia's Runway r3-3i - within the Runway Protection Zone - and will attract birds. He says the NSMTS constitutes "flagrant safety violations that will greatly increase the risk of imminent plane crashes." He says the food source created by the NSMTS will guarantee that the area will become "an enormous lounging, feeding, socializing, and breeding area." He also notes that the birds are federally protected and that efforts to remove them will entail a lengthy and expensive – and probably futile - battle.

(6) Virtually all of the experts in this study are currently or have been employed by or contracted by one or more of the stakeholders in this issue, including the FAA, USDA, and the Port Authority. Working for more than one of these agencies constitutes a clear conflict of interest; independent analysis and objectivity cannot be assured, because the FAA and the USDA knew the panel members' position on the project prior to the development of this report.

(7) *According to the Executive Summary, the study considered "currently operating and similarly designed trash-transfer stations located in other boroughs of New York City." DeFusco, however, in his report, recommends that all such facilities located near airports should be individually evaluated because of differences in building design, location, and on-site management practices.' "Variability between facilities was considerable even in the same regions," he wrote, "and therefore comparisons with other local facilities, such as on Staten Island or in Harlem, may not be valid." It's important to note that the facility in Staten Island is not a marine transfer station and that the facility in Harlem is designed differently - and has a history of attracting birds.*

(8) *The Executive Summary states that the study "conducted risk assessments on a range of alternatives, from no facilities to a fully operational facility with mitigation measures in place." The model in the report, however, is invalid. "The risk assessment model (figure 3-9) of the draft FAA/USDA report is not correct," wrote DeFusco. "It is an adaptation of a standard Operating Risk Management (ORM) model that should show the frequency of occurrence of a hazard on one scale and the severity of the consequences of encountering that hazard on the opposing scale."*

(9) *The draft report states that gulls, starlings, and pigeons are species frequently attracted to trash transfer facilities. But according to the AC, vultures are the top species that pose hazards to aviation safety. "Most birds have a very poorly developed sense of smell," says DeFusco, "with one notable exception: the Turkey Vulture." Why were vultures excluded from the FAA/USDA draft study? Vultures are commonly observed in the region, and should have been prominently listed in the study.*

(10) *After reviewing letters from the FAA and USDA, I am baffled over why these two agencies are crusading in favor of building the NSMTS. I have not seen one item of correspondence or communication of any kind from either agency questioning or investigating the risks and hazards the NSMTS would impose on air travel.*

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U.S. Department
of Transportation

**Federal Aviation
Administration**

SEP 02 2010

Office of Airport Safety
and Standards

800 Independence Ave., SW
Washington, DC 20591

Mr. Harry Szarpanski
Deputy Commissioner
Bureau of Long Term Export
44 Beaver Street
New York, NY 10004

Dear Mr. Szarpanski:

Last year, following the forced landing of U.S. Airways Flight 1549 in the Hudson River, Secretary LaHood requested that an expert technical panel reexamine whether the proposed North Shore Marine Transfer Station (MTS) in College Point, Queens, would be compatible with safe operations at LaGuardia Airport. We were fortunate to be able to assemble a true "blue ribbon" panel, including experts in bird strike hazards from the United States Air Force, the Federal Aviation Administration, the United States Department of Agriculture, the city of New York, and the Port Authority of New York and New Jersey.

The panel issued its final report, "Evaluation of the North Shore Marine Transfer Station and its Compatibility with Respect to Bird Strikes and Safe Air Operations at LaGuardia Airport," on September 2. The report concludes the proposed MTS will be compatible with safe air operations so long as it is constructed and operated in accordance with the report's recommendations.

The FAA has reviewed the final report. We believe the technical panel's approach to the issue presented was appropriate and its analysis and conclusions are sound. We believe it is important for the city to adopt the recommendations of the panel and we appreciate your undertaking to adopt them in full, and we urge you to commit to implementing the recommendations in full.

Secretary LaHood and the FAA appreciate your cooperation with the work of the technical panel. We look forward to working with you to protect the safety of the region's airports.

Sincerely,

Michael J. O'Donnell
Director, Airport Safety
and Standards

Enclosure



sanitation

HARRY SZARPANSKI, P.E.
Deputy Commissioner

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44 Beaver Street, 12th Floor
New York, NY 10004
Telephone: (917) 237-5501
Fax: (212) 269-0788

September 3, 2010

Michael J. O'Donnell, A.A.E.
Director, Office of Airport Safety and Standards, AAS-1
US Department of Transportation, Federal Aviation Administration
800 Independence Ave., SW Room 621
Washington, D.C. 20591

Dear Mr. O'Donnell:

On September 2, 2010, a technical panel that was assembled to re-examine whether the North Shore Marine Transfer Station (MTS) in College Point, Queens in the City of New York would be compatible with safe operations at LaGuardia Airport released its final report, entitled "Evaluation of the North Shore Marine Transfer Station and its Compatibility with Respect to Bird Strikes and Safe Air Operations at LaGuardia Airport." The report concludes that the proposed MTS will be compatible with safe air operations, and issues recommendations for the construction and operation of the proposed facility.

The Department of Sanitation's plans for the MTS were the result of a detailed planning effort. We agree with the report's conclusion that this facility can be operated safely in regards to safe aviation operations at LaGuardia Airport. We will implement the panel's recommendations as we seek to construct and operate a facility that will reduce the environmental impact of solid waste removal on New York City while ensuring the safety of the flying public.

Sincerely,

Harry Szarpanski

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