

5.18 SOLID WASTE IMPACTS

5.18.1 Background

In accordance with Federal Aviation Administration (FAA) Order 5050.4, *Airport Environmental Handbook*, the impacts to solid waste collection, control and disposal due to an airport construction project must be assessed in an Environmental Impact Statement (EIS). Airport construction projects such as runway and taxiway construction do not normally generate significant amounts of perishable or non-perishable waste, other than wastes associated with construction debris (see Section 5.20, Construction Impacts).

According to the U.S. Environmental Protection Agency (U.S. EPA) solid waste means any garbage or refuse; sludge from wastewater treatment facility, water supply treatment facility, or air pollution control facility; and other discarded materials, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities.¹

Along with hazardous waste, solid waste is regulated by the U.S. EPA through the Resource Conservation and Recovery Act (RCRA). Congress enacted RCRA in 1976 to protect human health and the environment from the potential hazards of waste disposal, to conserve energy and natural resources, to reduce the amount of waste generated, and to ensure that wastes are managed in an environmentally sound manner.²

Indiana Rules and Regulations for Solid Waste Management implement the Solid Waste Disposal Act (as amended) by providing guidance concerning solid waste collection, handling and storage. IDEM Code, Division 13 regulates safe disposal of solid wastes and sets standards for design, operation and permitting of landfills.

In addition, the FAA advises airports to limit the existence of solid waste disposal sites to beyond 10,000 feet of runways used by turbine-powered aircraft (as has Gary/Chicago International Airport).³ The FAA considers waste disposal sites located within 10,000 feet of any runway end used by turbine-powered aircraft to be incompatible with airport operations due to the increased potential for bird strikes.

¹ U.S. EPA Office of Solid Waste. 1998. URL: U.S. Environmental Protection Agency, Office of Solid Waste. 1998. Internet Web Site. <<http://www.epa.gov/epaoswer/osw/basifact.htm>>

² U.S. EPA Office of Solid Waste. 1998. URL: U.S. Environmental Protection Agency, Office of Solid Waste. 1998. Internet Web Site. <<http://www.epa.gov/epaoswer/osw/basifact.htm>>

³ Federal Aviation Administration. FAA Order 5050.4A, *Airport Environmental Handbook*. October 8, 1985; Federal Aviation Administration. *FAA Advisory Circular 150.5200-34, Construction or Establishment of Landfills Near Public Airports*. August 26, 2000.

5.18.2 Methodology

This section reviews existing conditions and evaluates the impact of the Proposed Action on solid waste generation and disposal at the Gary/Chicago International Airport. The proximity to the airport of existing solid waste disposal facilities has also been identified.

Because the Proposed Action is to occur within the Indiana Lake Michigan Coastal Program (LMCP) area, the applicable summary matrix of laws and guidance documents for this environmental category has been reviewed to confirm that all state and local regulations have been considered in this EIS. The matrix on Pollution Prevention, Recycling, Reuse, and Waste Management issues can be found in **Appendix C** for reference. Matrix 5-8 Cross-reference of Pollution Prevention, Recycling, Reuse, and Waste Management Laws and Guidance Documents has been reviewed by the consulting team to confirm that all the identified items have been considered in the evaluation of the solid waste impacts as described in this section.

5.18.3 Existing Conditions – 2000

Municipal waste, the largest component of the solid-waste stream, includes garbage, refuse, and similar solid-waste material discarded from residential, commercial, institutional, and industrial sources. The airport contracts out solid waste collection at Gary/Chicago International Airport to numerous private and public city licensed haulers. There are currently no open sanitary landfills within 10,000 feet of the existing runways or runway expansion area.

5.18.4 Future Conditions – 2007

5.18.4.1 No Action

Under the no action alternative there would be no change in the airport facilities, so there would be no change from the existing waste removal practices at the airport.

5.18.4.2 Improvements to Existing Runway 12-30 to Conform to FAA Standards

Most of waste generated during construction will consist of contaminated soil; however, the rest will be non-hazardous waste. Although specific quantities of non-hazardous wastes have not been estimated, construction waste generated may include excavated material from airside perimeter roads, concrete, asphalt, and soil. Clean soil and other suitable waste will be reused as fill material, buried or recycled. All other material will be land farmed or disposed of at permitted solid waste landfills, construction/debris landfills and vegetative waste facilities as required by IDEM.

Construction activities have the potential to unearth contaminated areas from previous land use. Known areas of contamination and remediation include the Conservation Chemical Company Site and the NBD Bank Trust Property located within the close proximity to the Proposed Action as

identified by Clean World Engineering and discussed in Section 5.19, Hazardous Materials. An initial site cleanup of the Conservation Chemical Site by PRPs was completed by December 2001. The U.S. Environmental Protection Agency installed extraction wells to remove free product. There are currently six extraction wells removing free product from the contaminated groundwater. Remediation efforts will continue until a satisfactory level is reached. If remediation efforts are not completed prior to commencement of construction activities, the remediation action plan (RAP) will need to be reevaluated to determine the impact of the construction on achieving the required cleanup goals. If necessary, the revised RAP will continue once construction is complete.

Removal of the existing rail track and relocation of the EJ&E Railway also have the potential to unearth contaminated areas. Because of known contamination sites within the study area, special provisions will be included in the construction document to address the potential for encountering hazardous materials. All applicable Federal, state and local regulations will be followed for the cleanup and disposal of hazardous waste during construction activities.

5.18.4.3 Improvements to Provide Additional Runway Length on Runway 12-30

The improvements to provide additional runway length on Runway 12-30 are to occur simultaneously with and require accomplishment of the improvements for Runway 12-30 to conform to FAA standards (safety area improvements). Accordingly, the considerations for waste disposal during this part of the Proposed Action are nearly identical to those mentioned above. Again, most of the waste generated during construction will consist of non-hazardous waste. Although specific quantities have not been estimated, construction waste generated may include excavated material from airside perimeter roads, concrete, asphalt, and soil. Clean soil and other suitable waste will be reused as fill material, buried or recycled. All other material will be disposed of at permitted solid waste landfills, construction/debris landfills and vegetative waste facilities as required by IDEM.

5.18.4.4 Expansion of Existing Terminal

A modest expansion of the existing terminal building and apron are proposed: adding one aircraft gate, for a total of four gates in the existing terminal area. Use of the expanded facility will generate slightly more waste than is generated today; however, this increase is not expected to create a noticeable change in the waste disposal activities. The terminal expansion will create solid waste from construction debris during its construction and operation. The contractor would have the responsibility of arranging transportation and disposal of waste generated during the terminal expansion work.

5.18.4.5 Acquisition and/or Reservation of Sites for Future Passenger Terminal and Air Cargo Facilities

The Proposed Action does not include the development of the areas identified for future aviation related activities. Accordingly, the securing of these sites for future development is not expected to create new sources for solid waste materials. However, because of known contamination sites within the study area, special provisions will be included in the construction document to address the potential for encountering hazardous materials. All applicable Federal, state and local regulations will be followed for the cleanup and disposal of hazardous waste during construction activities.

5.18.5 Summary of Findings

The Proposed Action is not expected to change the solid waste removal practices. A contractor will continue to remove the solid waste from the airport, with a modest increase expected due to the increased terminal facilities and passengers using those facilities. The Proposed Action will require the removal of solid waste and debris generated during the construction process. Because of known contamination sites within the study area, special provisions will be included in the construction document to address the potential for encountering hazardous materials. All applicable Federal, state and local regulations will be followed for the handling cleanup and disposal of hazardous waste during construction activities.

5.18.6 Mitigation

All applicable Federal, state and local regulations will be followed for the cleanup and disposal of hazardous waste during construction activities.