

14.0 SOLID WASTE

14.1 Introduction

The general solid waste generated by the proposed project would be removed by a private carting company, and would have no impact on the collection or disposal of the City's municipal waste, and no further analysis of general solid waste is required.

An assessment of medical waste is discussed in the following subsections to determine the impact of the employees, visitors, and patients expected to be generated from the proposed project. The medical waste generated from the anticipated development of the proposed project in 2010 was compared with the general and medical waste generated from the existing buildings under the hospitals continued use.

14.2 Existing Conditions

14.2.1 General Waste

New York City generates over 50,000 tons of waste and recyclables each day. The Department of Sanitation handles 25% of that amount, accounting for waste generated by residents and NYC institutions. The remaining waste is privately managed and generated by businesses and construction activities. After accepting 2 billion tons of garbage for 53 years, the New York City Department of Sanitation closed Staten Island's Fresh Kills Landfill in March 2001. Currently, municipal and commercial waste is disposed of outside the City, in facilities located in Virginia, Ohio, and Pennsylvania. NYC has plan to build a modern recycling facility in the South Brooklyn Marine Pier designed to accept all metal, glass, and plastic collected by the Department of Sanitation for the next 20 years.

All of HSS's general waste is removed by the private carting company JEM Waste Management. No waste is picked up by the NYC Department of Sanitation. The solid waste is transported to Covanta Union Inc., a waste-to-energy facility, in Rahway, New Jersey where waste is then processed into energy. The estimated existing solid waste generated by the Main Hospital, Belaire, and Caspary Buildings of the Hospital for Special Surgery (HSS) is approximately 8,262 pounds per week based on the rates recommended by Section 3M-300 of the CEQR Technical Manual (51 pounds per week per bed). Hazardous waste produced by the hospital is discussed in Chapter 11 "Hazardous Materials".

14.2.2 Medical Waste

According to Section 3M of the CEQR Technical Manual, regulated medical waste is defined as:

Any solid waste generated in the diagnosis, treatment or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals, including cultures of infectious agents, human pathological wastes, liquid waste human blood and blood products, sharps including hypodermic needles, contaminated animal carcasses, wastes from surgery or autopsy, laboratory wastes from research, dialysis wastes, and biological wastes from humans or animals isolated to protect others.

Currently biohazardous medical wastes are stored in the waste storage area on the first floor of the Main Hospital-West Wing of the existing Hospital for Special Surgery. Biohazardous medical wastes (red bags and sharps) are removed under a contract with Stericycle, Inc. Infectious waste is incinerated off site. Specimens and body parts removed during surgery are forwarded to Pathology for examination, and subsequently retrieved (and hence, disposed of) by a representative of the New York City Medical Examiner's Office.

Recently HSS eliminated all of the mercury-containing blood pressure machines from its facilities. HSS replaced over 350 machines in its effort to avoid mercury spills with aneroid units, mandating the manufacturer take responsibility for the proper disposal of the outgoing mercury units. The replacement of the blood pressure machines was completed at the end of 2003.

HSS has clearly identifiable centralized areas to contain bio-waste. Step-on disposable cans marked "Dressings Only" are located in each of the areas that produce bio-waste. Any infectious waste from these areas and patient rooms is packed up by Housekeeping or Building Service Aide Departments. Each floor's utility room has containers for double red-bagged bags. Daily, after the housekeeping routine is complete the red-bags are collected as a separate event. The HSS Animal Care Department is the only entity at the Hospital that incinerates animal remains.

Based on the construction dates for the West Wing (1954 and 1980) and Caspary Research Building (1958) there is a potential for asbestos containing materials and lead based paint that can be disturbed during construction activities. This work would be done in accordance with the Hospital for Special Surgery's existing Operations and Maintenance Plan. Based on the construction dates for the Belaire Building (1987) and the East Wing (1995) there are no potential concerns relating to asbestos containing materials and lead based paint in these buildings.

A review of Federal and State environmental databases (see Attachments) indicates that the Hospital for Special Surgery at 535 East 70th Street is registered (*PBS # 2-095702*) as having an active 1,600 gallon aboveground storage tank (AST) that is permitted until May 7, 2007. A renewal of this permit has been applied for. A site inspection by Ethan C. Eldon Associates, Inc. on October 9, 2004 confirmed that the AST is present in the basement of the West Wing, is used for the storage of diesel fuel for the emergency generator, and is in good condition with no evidence of leaks.

All of HSS's medical waste is removed by private carting companies. No waste is picked up by the NYC Department of Sanitation. HSS currently produces 1,111 pounds of regulated medical waste and 800 pounds per week of sharps for a total of 1,911 pounds per week of medical waste. Regulated medical waste is handled and disposed according to the procedures and regulations governed by City and state law.

14.3 The Future Without the Proposed Project - 2010

14.3.1 Medical Waste

It is anticipated by 2010, the future development for the Main Hospital-East and West Wing without the proposed project would generate 182 pounds per week of medical waste amounting to 2,093 pounds per week, based on the proportional increase of square feet with the future development.

In accordance with Section 3M of the CEQR Technical Manual, the medical waste generated would not significantly increase the waste generated by HSS and there would be no effect on the City's municipal waste handling system, because private carting companies handle HSS's waste.

14.4 The Future With the Proposed Project - 2010

The proposed project would add a net gain of twenty-six (26) new certified beds and approximately 137,869 SF of floor space. The potential medical waste generated from the proposed project of HSS is considered below.

14.4.1 Medical Waste

It is anticipated by 2010, the future development with the proposed project for the Main Hospital-East and West Wing and construction of the River building would generate 484 pounds per week of medical waste amounting to 2,577 pounds per week, based on the proportional increase of square feet with the proposed project.

In accordance with Section 3M of the CEQR Technical Manual, the medical waste generated would not significantly increase the waste generated by HSS and there would be no effect on the City's municipal waste handling system, because private carting companies handle HSS's waste.