

- Floors 11 and 12. As described in Section 3.3.5 and shown in Figure 3–7, these floors were divided into individual offices, rather than open landscaped. There were approximately 130 offices per floor, distinctly fewer than the number of cubicles on a fully landscaped floor. The mass of the furnishings per office was not known; the mass of additional paper materials was described as very high. As indicated in Section 9.3.1, the Investigation Team began with an initial estimation of the combusted fuel load of approximately 32 kg/m³ (6.4 lb/ft²). Simulations of the fires with a lower combusted fuel load (Chapter 9) resulted in poor agreement with the observed fire spread rates.
- Floor 13. There was little information regarding the combustibles on this floor, and there was little visual evidence for estimating the effect of different combustible mass loadings on agreement with the observed fire growth patterns. NIST assumed a combusted mass similar to that on the 11th and 12th floors.

3.4.2 Diesel Fuel

There was considerable capacity for diesel fuel storage within and under WTC 7. The Investigation Team compiled information in order to estimate how much diesel fuel might have been available to feed fires in various locations in the building on September 11, 2001. The information collected (NIST NCSTAR 1-1J) is summarized as follows.

Fuel Tanks

Figure 3–11 through Figure 3–13, reproduced from NIST NCSTAR 1-1J, depict the floor-by-floor locations of the electrical generators, the day tanks, and the fuel lines that connected them to the below ground fuel tanks. The text in this section is abridged from that report, as well.

There were two 55 m³ (12,000 gal) tanks located below the loading dock. These provided the primary supply for what was known as the *base building system*. This system, installed in 1987, consisted of two generators installed on the 5th floor of WTC 7, along with a 1.25 m³ (275 gal) day tank, which was set within a 2.5 m³ (550 gal) capacity collecting tank. The day tank was replenished with a 0.33 L/s (4.4 gal/min) pump. Additions to the system in 1994 were:

- A single generator located on the 8th floor, along with a separate 1.25 m³ (275 gal) day tank (American Express modification). The 8th floor generator and the day tank were removed in 2000.³
- A single generator on the 9th floor with a 0.23 m³ (50 gal) day tank located on the generator (Ambassador modification for the U.S. Secret Service).

The pumps that filled the three day tanks from the large storage tanks were located on the 1st floor.