

CHAPTER 1 FIRE PROTECTION OVERVIEW

1.1 SITE OVERVIEW

1.1.1 PPPL facilities consist of approximately 500,000 square feet of office, research, shop, and storage areas located on 72 acres of the James Forrestal Campus of Princeton University. At the present time approximately 75% of the facilities are protected by some form of automatic fire suppression system backed-up by a full-time emergency response department (the Emergency Services Unit of the Emergency Preparedness Division).

1.1.2 Primary fire protection water is supplied from a 250,000 gallon gravity discharge storage tank located at the south end of C-Site. This tank provides water for fire protection and non-fire protection processes through a dual-looped 10 inch water main around C- and D- Sites. Secondary water supplies are provided from the Elizabethtown Water Supply Company potable water system and/or a drafting station connected to the C-Site process water cooling tower water basin. The Elizabethtown water distribution system consists of a single looped system that has portions of the loop on C- and D-sites with a manual-cross connection to the elevated water tank supply system.

1.1.3 A table listing of the automatic fire detection and suppression systems is located in Appendix A, Table 1, "Automatic Fire Protection Systems."

1.1.4 A table listing the buildings/structures and their occupancy classification is located in Appendix A, Table 2, "Occupancy Classifications."

1.2 POLICY

1.2.1 It is the policy of PPPL that all reasonable precautions shall be taken in the performance of its tasks to protect the employees, visitors, neighbors, property, and the environment from injury.

1.2.2 To fulfill this policy the objectives of the PPPL Fire Protection Program are:

- A. To take all reasonable actions to prevent fires from occurring.
- B. To design and maintain all PPPL facilities in a manner that provides the occupants with the earliest possible notification of an emergency and the proper number and means of egress to safely exit facilities in an emergency.
- C. To design and maintain all PPPL facilities in a manner that if a fire occurs, the spread of the fire will be minimized through the use of building construction techniques and automatic fire suppression systems.
- D. To provide a manual fire fighting response capability through the staffing of an on-site fire department.
- E. To train all personnel working or visiting the facility in fire prevention techniques and actions to be taken in the event of a fire or other type of similar emergency.