

PPPL	PRINCETON PLASMA PHYSICS LABORATORY ES&H DIRECTIVES		
	ES&HD 5008 SECTION 5, CHAPTER 1 FIRE PROTECTION OVERVIEW		
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TCR-ES&HD5008, Sect. 5, Chapt. 1-001

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. Close to 100% of the facilities are protected by some form of automatic fire suppression system backed-up by a full-time emergency response capability provided by the Emergency Services Unit of the Site Protection 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 10 inch water mains which loop around C- and D- Sites. An automatic secondary supply is provided to the elevated tower by a connection to the Elizabethtown water supply via an altitude valve. In the event the water level falls below the level normally maintained by the canal water system, the altitude valve opens and restores the level. Additional 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 loop having portions of the loop on C- and D-sites with partial hydrant coverage of both sites.
- 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 3, "Occupancy Classifications." **TCR-ES&HD Sect. 5, Chapt. 1, R3-001**

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.