Unit 6 Case Study: ABC Valve Plant

You have been hired as a consultant for the ABC Valve Plant to assess security needs for the plant.

The Plant:

The ABC Valve Plant manufactures valves primarily from brass for everything from homes to large pipelines and water mains. It is located in a one-block area and surrounded by low income neighborhoods. It operates from 7:00 A.M. until midnight six days per week. It has approximately 800 employees, most of who are on the production lines. All personnel, payroll, and management offices are located in the Administration building. All personnel park on the premises in designated areas and may come and go at will for breaks, meals, or other reasons.

All raw materials are brought into the site by truck to the Shipping and Receiving Department in 5 pound blocks. These are then delivered as needed to the two production lines (the Large Valve Plant and Small Valve Plant). The brass is then heated to a melting point, poured into molds of components, and assembled. The finished products are then delivered back to Shipping and Receiving, where customer orders are filled and shipped out by truck.

Currently, the plant is not enclosed by any type of fencing, and the only lighting is provided by four mercury vapor street lights located at the corners of each intersection. The only intrusion alarm system is located in the Administration building, which also contains the company's computer facilities. Its guard force is staffed by contract security guards whose duties involve one guard patrolling the premises 24 hours per day. There are no check-in/check-out points for any of the employees.

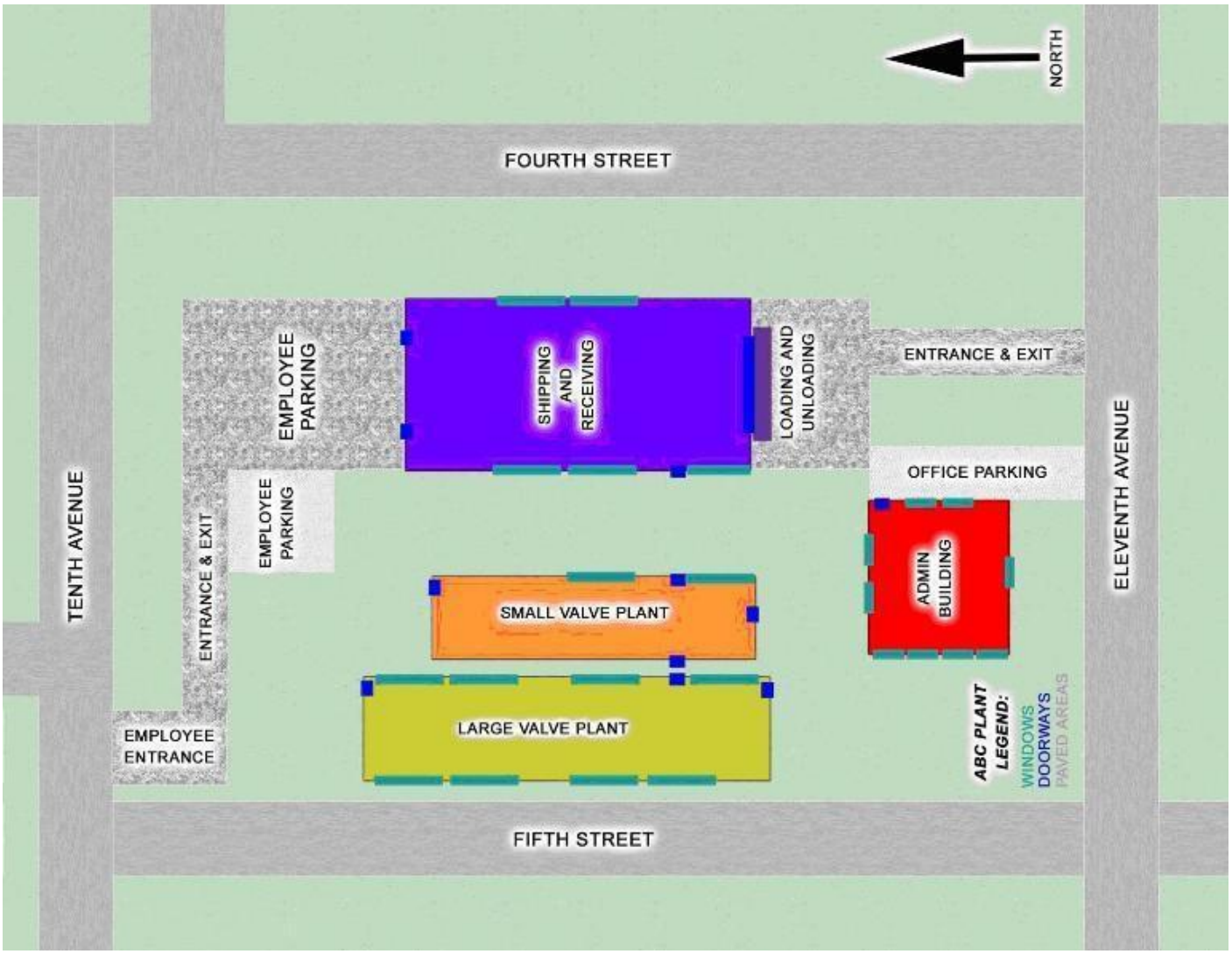
Because of the furnaces, the fire protection system consists of a dry pipe sprinkler system that can only be activated by pulling one of the alarm switches located along the production line. It only affects the building in which the switch is pulled. The alarm activates a signal which is transmitted to the fire department. The Administration Building does not have any type of fire extinguishing system, only alarm switches.

The company has operated at a loss for the past two years. It has determined that the primary cause of the losses is the escalating cost of production. This is attributed to:

1. An increase in the amount of raw materials per unit of finished product
2. An increase in the number of man hours per unit of finished product
3. An increase in the cost of purchasing tools needed to produce the finished product

Security Plan:

Below is a diagram of the plant site.


NORTH
FOURTH STREET
TENTH AVENUE
ELEVENTH AVENUE
EMPLOYEE PARKING
SHIPPING AND RECEIVING
LOADING AND UNLOADING
ENTRANCE & EXIT
OFFICE PARKING
EMPLOYEE PARKING
ENTRANCE & EXIT
ADMIN BUILDING
SMALL VALVE PLANT
LARGE VALVE PLANT
EMPLOYEE ENTRANCE
ABC PLANT LEGEND:
WINDOWS
DOORWAYS
PAVED AREAS
FIFTH STREET