## 6.6. Inspection and Maintenance of Fire Detection and Alarm System

- **6.6.1.** The Inspection and Maintenance of Fire Detection and Alarm System shall be as per **Table 8.17.**
- **6.6.2.** The Inspection and Maintenance of Fire Detection and Alarm System required by Table 8.17. are minimum guidelines. The complete tests and maintenance shall be as per Manufacturer's guidelines, NFPA 70, and NFPA 72.

Table 8.17.: Inspection and Maintenance for Fire Detection and Alarm System	
ITEM	REQUIREMENTS
1. DAILY	<ul> <li>i. Verify that FACP is free of troubles, faults and is working with normal power in satisfactory condition.</li> <li>ii. Verify signal receiving to annunciators.</li> <li>iii. Take investigation and rectification action if there are fault signals or any abnormal conditions and displays present on FACP.</li> </ul>
2. WEEKLY	<ul> <li>i. Check fuses.</li> <li>ii. Check primary power supply for normality.</li> <li>iii. Check interfaced systems and equipment</li> <li>iv. Perform Lamp test, LED, LCD Test.</li> <li>v. Check for trouble signals.</li> <li>vi. Check for initiating devices LED blinking randomly.</li> <li>vii. Take investigation and rectification action if there are fault signals or any abnormal conditions and displays present on FACP.</li> </ul>
3. MONTHLY	<ul> <li>i. Inspect Lead-Acid batteries for electrolyte level.</li> <li>ii. Perform walk-through tests from FACP to verify all devices are communicating with FACP satisfactorily.</li> </ul>
4. QUARTERLY	<ul> <li>i. Verify that initiating devices are free from obstructions, dust, paint etc. verify orientation is intact.</li> <li>ii. Verify water flow switches, water level indicators, LPG signals and Fire pump signals are satisfactorily monitored.</li> </ul>
5. SEMI ANNUALLY (TWICE A YEAR)	<ul> <li>i. Verify FACP and annunciators functionality.</li> <li>ii. Operate and verify releasing mechanisms without discharging suppression agents.</li> <li>iii. Verify fire suppression agent systems supervisory signals, switches.</li> <li>iv. Verify working condition of Notification devices.</li> <li>v. Verify Visible notification devices functionality.</li> <li>vi. Perform all other tests required Daily, Monthly and Quarterly.</li> <li>vii. Take investigation and rectification action if there are fault signals or any abnormal conditions, loss of signals and displays are present on FACP.</li> </ul>
6. ANNUALLY	<ul> <li>i. Primary power supply shall be tested under maximum load with all devices in load, operating simultaneously.</li> <li>ii. Disconnect all primary power supply and verify power backup and trouble signals from secondary power supplies.</li> <li>iii. Complete test of FACP and annunciators as per acceptance tests.</li> <li>iv. Initiate and trigger fire alarms on all initiating devices and verify alarm signals, supervisory signals and trouble signals as per acceptance tests.</li> <li>v. Verify all notification devices functionality as per acceptance test.</li> <li>vi. Verify interconnected system supervision, releasing mechanisms as per acceptance test.</li> <li>vii. Take investigation and rectification action if there are fault signals or any abnormal conditions and displays present on FACP.</li> </ul>

