

URBAN DEVELOPMENT DEPARTMENT

Mantralaya (Main Building), 4th floor, Madam Cama Marg,
Hutatma Rajguru Chowk, Mumbai 400 032, dated 12th June, 2025

NOTIFICATION

MAHARASHTRA FIRE PREVENTION AND LIFE SAFETY MEASURES ACT, 2006.

No. MFS-2023/C.R.370/UD-14.—In exercise of the powers conferred section 49 of the Maharashtra Fire Prevention and Life Safety Measures Act, 2006 (Mah. III of 2007), and of all other powers enabling it in that behalf, the Government of Maharashtra hereby makes the following rules further to amend the Maharashtra Fire Prevention and Life Safety Measures Rules, 2009, the same having been previously published, as required by sub-section (1) of said section 49, namely :—

1. These Rules may be called the Maharashtra Fire Prevention and Life Safety Measures (Amendment) Rules, 2025.

2. In rule 2 of the Maharashtra Fire Prevention and Life Safety Measures Rules, 2009 (hereinafter referred to as “the principal Rules”), after clause (a), the following clause shall be inserted, namely :—

“(aa) “Appendix” means the Appendix appended to these rules;”.

3. In rule 3 of the principal Rules,—

(1) in sub-rule (1),-

(a) for the words, “Director, Maharashtra Fire Services”, the words, “Director, Maharashtra Fire and Emergency Services” shall be substituted;

(b) in sub-clause (a), for the words and letters “for “A” and “B” class Municipal Corporations the nominated officer shall be a fire officer who-”, the words and letters “for “A+”, “A” and “B” class Municipal Corporations, a fire officer who,-” shall be substituted;

(c) in sub-clause (b), the words “the nominated officer shall be” shall be deleted;

(d) in sub-clause (c), the words “the nominated officer shall be” shall be deleted;

(e) in sub-clause (d), the words “the nominated officer shall be” shall be deleted;

(2) sub-rule (4) shall be deleted.

4. After rule 3 of the principal Rules, the following rule shall be inserted, namely :—

“(3A) *Automated Continuous Monitoring System.*- The automated continuous monitoring system for fire fighting system in a building or part thereof, for the purposes of sub-section (3A) of section 3 of the Act, shall be such as specified in Appendix.”.

5. In rule 4 of the principal Rules,—

(1) in sub-rule (1), after the words “or under the provisions of the Act” the words “and the National Building Code and the Indian Standard Code” shall be inserted;

(2) in sub-rule (2),—

(a) after the words, bracket and figure “as specified in sub-section (1) of section 3 of the Act” the words “and the National Building Code and Indian Standard Code” shall be inserted;

(b) after the words “in good repair and efficient condition” the words “in preceding six months” shall be inserted;

(3) after sub-rule (2), the following sub-rules shall be added, namely :—

“(3) A certificate regarding providing with automated continuous monitoring system for the fire fighting system in building or a part thereof as required by or under the provision of sub-section (3A) of section 3 of the Act to be issued by a Licensed Agency, shall be in Form A-1.

(4) A certificate which is to be issued by a Licensed Agency twice a year in the month of January and July regarding the maintenance of fire prevention and life safety measures in a building or premises for ensuring that the fire fighting systems are in good repair and efficient working condition by the help of automated continuous monitoring system as specified in sub-section (3A) of section 3 of the Act, shall be in Form B-1.

(5) A certificate mentioned in sub-rules (1), (2), (3) and (4) shall be submitted by owner or occupier in person or sent by registered post or through courier agency or online to Chief Fire Officer or Director, as case may be.”.

6. In rule 12 of the principal Rules,—

(1) in sub-rule (1),

(a) after the word, “possesses”, the words, “at least any of the following qualifications, namely :—” shall be inserted;

(b) in clause (a),—

(i) the words, “at least any of the following qualifications, namely :—” shall be deleted;

(ii) in sub-clause (i), after the words, “Government of India”, the words, “or from any university recognized by the University Grants Commission or from Technical Board approved by the All India Council for Technical Education” shall be inserted.

(c) in clause (b),—

(i) for sub-clause (i), following sub-clause shall be substituted, namely :—

“(i) Degree or Diploma in Mechanical or Electrical or Electronics or Chemical or Civil Engineering or Computer Application from any university recognized by the University Grants Commission or from Technical Board approved by the All India Council for Technical Education and”;

(ii) in sub-clause (ii),—

(a) after the word “experience” the words “ of not less than three years” shall be inserted;

(b) the figures “2005” and “2008” shall be deleted.

7. In rule 13 of the principal Rules,—

(1) in sub-rule (1), after the words “shall be in Form M” the words “and shall be affixed with court fee stamp of rupees twenty” shall be added;

(2) in sub-rule (3), in clause (b),—

(i) in sub-clause (5), the words “or registered income tax practitioner” shall be deleted;

(ii) for sub-clause (7), the following sub-clause shall be substituted, namely :—

“(7) experience certificate as specified in sub-clause (ii) of clause (b) of sub-rule (1) of rule 12 or certificate of appointment of at least one person possessing qualification as mentioned in clause (a) of sub-rule (1) of rule 12”;

(iii) for sub-clause (9), the following sub-clause shall be substituted, namely :—

“(9) attested copy of GST registration in the State.”.

8. In rule 14 of the principal Rules,—

(1) in sub-rule (1), in clause (b), for the words, “valid for one year”, the words, “valid for two years” shall be substituted;

(2) after sub-rule (3), following rule shall be added, namely :—

“(4) The Form A, Form B, Form A-1 or Form B-1 to be issued under rule 4 shall be issued under signatory of the person having requisite qualification as mentioned in rule 12.”.

9. In rule 18 of the principal Rules,—

(1) in sub-rule (1), for the words, “fire service fees”, the words, “Fire and Emergency Services Fees” shall be substituted;

(2) in the marginal note, for the words, “fire service fees”, the words, “Fire and Emergency Services Fees” shall be substituted.

10. For rule 19 of the principal Rules, the following rule shall be substituted, namely :—

“(19)(1) The Authority or Director shall give a notice in “Form-Q” to the person who has made an application under sub-section (1) of section 14 or a person who has constructed a building without permission, in respect of assessment of Fire and Emergency Services Fees leviable in case of building intended to be constructed by the applicant or the construction made without permission; and having regard to the matters to be considered as specified in sub-section (2) of section 14 shall assess the fees as specified in the Schedule II of the Act, so leviable and payable by such person.

(2) If any additions are made to the existing buildings for which fees have already been taken as per the Act, the Fire Service Fee leviable and payable in respect thereof shall be for the additional built up area only”.

11. In rule 20 of the principal Rules, for the words, “fire service fees”, wherever they occur including marginal note, the words, “Fire and Emergency Services Fees” shall be substituted.

12. In rule 21 of the principal Rules, for the words, “Fire Services” or “fire services”, wherever they occur including marginal note, the words, “Fire and Emergency Services” shall be substituted.

13. In rule 22 of the principal Rules,—

(a) in sub-rule (1), for the words, “Fire Service Manual” the words, “Fire and Emergency Services Manual” shall be substituted;

(b) in sub-rule (2), for the words, “Fire Service Manual” the words, “Fire and Emergency Services Manual” shall be substituted.

14. In rule 24 of the principal Rules,—

(a) in sub-rule (1), for the words “fire fighting operations” the words “fire fighting or any other emergency situation” shall be substituted;

(b) in the marginal note, for the words “fire fighting operations” the words “fire fighting or any other emergency situation” shall be substituted.

15. In rule 25 of the principal Rules,—

(a) for the words, “fire or natural calamity”, the words, “fire or any emergency situation” shall be substituted;

(b) in marginal note, for the words, “during fire”, the words, “during fire or any emergency situation” shall be substituted.

16. In rule 27 of the principal Rules, for the words, “natural calamities and rescue of life”, the words “any emergency situation” shall be substituted.

17. In rule 28 of the principal Rules, in sub-clause (b), the words “of the Chief Executive Officer” shall be deleted.

18. In rule 29 of the principal Rules,—

(a) for the words “fire fighting purpose” the words, “fire fighting purposes or handling of any emergency situation” shall be substituted;

(b) in sub-rule (1) for the words “fire fighting operation” at both the place where they occur, the words “fire fighting operation or handling of any emergency situation” shall be substituted;

(c) in the marginal note, for the words, “fire fighting”, the words, “fire fighting purpose or handling of any emergency situation” shall be substituted.

19. In rule 30 of the principal Rules,—

(i) for sub-rule (1), the following sub-rule shall be substituted, namely :—

“(1) Any aggrieved person may prefer an appeal under section 32 in “Form-U.”.

(ii) in sub-rule (2),—

(i) for the letters and figures “Rs. 10”, the words “rupees twenty” shall be substituted;

(ii) for the letters and figures “Rs.500”, the words “rupees one thousand” shall be substituted.

20. After rule 30 of the principal Rules, the following rules shall be added, namely :—

“31. Certificate regarding evaluation of fire prevention and life safety measures.—(a) The Licensed Fire and Life Safety Auditor shall issue a certificate, regarding the evaluation of the fire prevention and life safety measures as specified in clause (b) of sub-section (1) of section 45A of the Act in “Form V”.

(b) A certificate as mentioned in clause (a) shall be submitted in person or sent by registered post or through courier agency or online.

32. Eligibility to act as Fire and Life Safety Auditor.—(1) No Person or Association of Person shall be eligible to apply for grant of license to act as a Fire and Life Safety Auditor; and shall be granted a license to act as Fire and Life Safety Auditor unless he is a Proprietor or one of the Partner or one of the Director, as case may be, possesses, either,—

(A) (a) (i) a Degree or Advanced Diploma or Diploma in Fire Engineering awarded by the National Fire Services College, Ministry of Home Affairs, Government of India, or

(ii) Fellow of Fire Engineering of Institute of Fire Engineering (U.K) or M.I Fire (U.K) or A M I E, Fire India, Graduateship Examination of Institute of Fire Engineering (U.K) or Institute Fire Engineering in India, or

(iii) a Degree in Fire Engineering from a recognized university approved by University Grant Commission or All India Council for Technical Education; and

(b) experience of working of not less than twenty years out of which minimum ten years not below the rank of Station Officer or Fire Safety Manager in Regular Fire Services or Industrial Fire Service and shall possess an experience of:

(i) scrutinizing the building plans of various occupancies, prescribing the recommendations related to fire and life safety as per the provisions of NBC or the provisions of the local fire rules or building bye laws or provisions prescribed in national and international codes and standards such as International Building Code, International Fire Code, Oil Industry Safety Directorate, National Fire Protection Association;

(ii) Ensuring the compliance of such recommendations by carrying out detail inspections;

(iii) Periodically inspecting various types of occupancies and ensure the fire and life safety compliance; or

(B) (a) (i) a Degree in any discipline with Post Graduate Diploma in Fire from any university recognized by the University Grants Commission or from the All India Council for Technical Education; or

(ii) a Degree in Mechanical or Electrical or Electronic or Chemical or Civil Engineering from a recognized university approved by the University Grant Commission or from the All India Council for Technical Education; and

(b) (i) shall have experience of not less than seven years in, -

(1) the field of installation of active and passive fire protection arrangements; or

(2) working in the field of fire and life safety in any establishment of statutory companies or any industrial sector :

Provided that, in case of organization, the license to work as Fire and Life Safety Auditor shall be granted only where one of the members of the organization possesses the above qualifications.

(2) No license of Fire and Life Safety Auditor shall be granted to any Person or Association of Persons who has been black-listed by any Government Department or Organization in Maharashtra or any other State.

33. Duties and Responsibilities of Fire and Life Safety Auditors.- (1) The duties and responsibilities of such Licensed Fire and Life Safety Auditor shall be as under :—

(i) conduct a 360-degree assessment of the building from fire hazard risk assessment point of view;

(ii) verify that the building's construction complies with relevant fire safety regulations;

(iii) identify and control ignition sources in areas where inflammable materials are stored or processed or transferred;

(iv) evaluate physical or chemical compatibility of storages of goods and recommend appropriate measures to reduce fire damage;

(v) check electrical hazards that may cause a fire and recommend necessary measures;

(vi) verify various active (fire hydrants, sprinklers, fire fighting pumps, etc.); fire alarm and detection as well as passive fire protection measures requirements in various occupancies and recommend appropriate improvements towards the deficiencies, if any ;

(vii) evaluate the working of the Building Management System or Fire Control Room;

(viii) evaluate staff safety awareness and safety training requirements (identification and effectiveness of training) to understand the incident preparedness and the readiness of the staff or employee to handle the same;

(ix) submit Fire Audit Report and certificate duly signed by the Fire and Life Safety Auditor in Form-V to the owner or occupier of the said building regarding the evaluation of the fire prevention and life safety measures of the said premises or buildings:

Provided that, in case of organization, if the Fire and Life Safety Auditor is association of persons such report and certificate shall be signed by the person of such organization having requisite qualification for such license;

(x) to carry out evaluation of fire prevention and life safety measures to ensure that all the fire fighting system (both active and passive) are working in good and efficient condition;

(xi) to carry out the testing of all active measures related to the fire and life safety provided in the building;

(xii) to take necessary photographs or videos of inspection and testing of Fire Fighting installations or equipment provided as per stipulation given under building bye laws or code with necessary date and time stamp along with signature of the representative from the owner or occupier side.

34. Application for License of Fire and Life Safety Auditor, etc.-

(1) Every application for license of Fire and Life Safety Auditor under section 45A shall be in Form W.

(2) Such application may be presented in person or sent by registered post or through courier agency or online.

(3) Every such application shall be affixed with court fee stamp of rupees twenty and shall be accompanied by fees of rupees twenty-five thousand.

(4) Every application shall also be accompanied with following document :—

(a) attested passport size photograph of the proprietor or partner or director, as the case may be;

(b) registration of the firm as a proprietor or partnership deed or memorandum of association or articles of association, as the case may be;

(c) list of adequate machinery, tools and other requisite equipment for conducting the fire and life safety audit;

(d) self-attested certificate, stating that the firm is not blacklisted by the Government or any semi-Government organization in Maharashtra or in any other State; and

(e) self-declaration certificate for the fire and life safety audit work carried out in previous year, in case of renewal.

35. License of Fire and Life Safety Auditor.—(i) The License of Fire and Life Safety Auditor shall be granted in Form X and shall be subject to the following conditions, namely :—

(ii) the license shall be non-transferable.

(iii) the Changes, if any, in respect of the,-

(a) address of the office of the Licensed Fire and Life Safety Auditor;

or

(b) the partner or director,

shall forthwith be reported to the Director.

36. Renewal of Fire and Life Safety Auditor License.—An application for renewal of a license granted under the section 45A, shall also made in Form W and shall be accompanied by a fee and documents specified under sub-rules (3) and (14) of rule 34.

37. Notice for suspension and cancellation of license for Fire and Life Safety Auditor.—Notice for suspension or cancellation of license shall be in Form Y.”.

21. After Form A appended to the principal Rules, the following Form shall be inserted, namely :—

“FORM A-1

[see rule 4(3)]

Certificate by the Licensed Agency regarding the compliance of Automated Continuous Monitoring System for the Fire fighting Systems

CERTIFICATE

It is hereby certified that I/We have executed the works as mentioned in Appendix towards compliance in relation to Fire Prevention and Life Safety Measures to be provided and performed other related activities required to be carried out, in the following building or premises under the provisions of the Maharashtra Fire Prevention and Life Safety Measures Act, 2006 (Mah. Act No. III of 2007).

Description and Location of Building or Premises

.....

The details of the work and related activities which I or we have executed or performed are mentioned in the list appended herewith.

Place: Signature and Address of the Licensed Agency

Date: Licence No.

*Note.—For each building a separate certificate in Form ‘A-1’ should be necessary.”.

22. After Form B appended to the principal Rules, the following Form shall be inserted, namely :—

“FORM B-1

[See rule 4(5)]

Certificate of compliance of Automated Continuous Monitoring System for the Fire fighting Systems

It is hereby certified that I/We have carried out inspection as mentioned in Appendix towards compliance in relation to Fire Prevention and Life Safety Measures to be provided and performed and other related activities required to be carried out, in the following building or premises under the provision of the Maharashtra Fire Prevention and Life Safety Measures Act, 2006 (Mah. III of 2007).

I/We further certify that these installations in the above mentioned building are maintained in good repair and efficient conditions during the period as required under the provisions of the Maharashtra Fire Prevention and Life Safety Measures Act, 2006 (Mah. III of 2007). The details of the inspection of installation in accordance to Appendix of the Rules are carried out by me/us are mentioned in the report appended herewith.

Place : Signature and Address of the Licensed Agency

Date: Licence No.

*Note.—For each building a separate certificate in Form ‘B-1’ should be necessary.”.

23. For Form I appended to the principal Rules, the following Form shall be substituted, namely :—

“Form I

(See rule 8)

Report of Inspection

Whereas, after giving ‘a three hours’ notice under sub-section (1) of section 5 of the Maharashtra Fire Prevention and Life Safety Measures Act, 2006 (Mah. III of 2007) to the owner or occupier of _____, I have entered and inspected the said building or premises on _____ at _____ for ascertaining the adequacy or contravention of fire prevention and life safety measures that are provided or are required to be provided in the said building or premises by or under the provisions of the said Act.

2. The type of Occupancy is _____ and sub division of occupancy is _____ in accordance to Classification of Building based on occupancy as given in National Building Code of India and the occupancy of the building or part of the building inspected is _____.

3. The said building or premises which is inspected by me has obtained / not obtained Provisional Fire Safety Approval *vide* No. _____, dated _____ and have also obtained / not obtained Final Fire Safety Approval *vide* No. _____, dated _____.

4. Inadequacy or contraventions noticed in the building or premises during inspection are as under :—

- a. _____
- b. _____
- c. _____

Place :

Signature and designation

Date :

of the inspecting officer.”.

24. In Form M appended to the principal Rules, for the words “To, The Director or Chief Fire Officer or Nominated Officer”, the words “To, The Director, Maharashtra Fire and Emergency Services” shall be substituted.

25. In Form N appended to the principal Rules, for the words “Director/Chief Fire Officer/ Nominated Officer” the words “Director” shall be substituted.

26. In Form O appended to the principal Rules, for the words “Director/Chief Fire Officer/ Nominated Officer” the words “Director” shall be substituted.

27. In Form P appended to the principal Rules,-

(i) for the words “The Commissioner or Officer”, the words “To, The Director or Chief Fire Officer” shall be substituted;

(ii) for the words “fire service fee” at both the places where they occur, the words “fire and emergency service fee” shall be substituted.

28. In Form Q appended to the principal Rules, for the words “fire service fee” wherever they occur, the words “fire and emergency service fee” shall be substituted.

29. In Form R appended to the principal Rules, for the words “fire service fee” wherever they occur, the words “fire and emergency service fee” shall be substituted.

30. In Form S appended to the principal Rules, for the words “fire fighting operation” wherever they occur, the words “dealing with fire or any other emergency situation” shall be substituted.

31. In Form T appended to the principal Rules, for the words “Fire Fighting and Rescue Operations” and “fire fighting and rescue operations”, wherever it occurs, the words “Fire Fighting or Any Other Emergency Situation” shall be substituted.

32. After Form U appended to the principal Rules, the following Forms shall be added, namely :—

“FORM V

(See rule 32)

Certificate by the Licensed Fire and Life Safety Auditor

It is hereby certified that I, M/s. ----- having license to carry out fire and life safety audit, have evaluated the fire prevention and life safety measure works in the following building or premises, as required under the provision of the Maharashtra Fire Prevention and Life Safety Measures Act, 2006 (Mah. III of 2007) and are found in good repair and efficient working condition.

Description and Location of Building or Premises

.....

The details of the work and related activities which I or we have evaluated or inspected are mentioned in the Fire, Safety and Audit report appended herewith.

I also certify that that I have read and understood the duties and responsibilities given in the Maharashtra Fire Prevention and Life Safety Measures Act, 2006 (Mah. III of 2007) or the Maharashtra Fire Prevention and Life Safety Measures Rules, 2009 to be followed as Fire and Life Safety Auditor and hereby states that I shall abide by the same.

Place : Signature and Address of the Licensed
Fire and Life Safety Auditor.

Date : Licence No.

*Note.— For each building a separate certificate in Form ‘V’ shall be necessary.

FORM W

(See rule 35)

Application for License of Fire and Life Safety Auditor

To,

The Director,
Maharashtra Fire and Emergency Services,
-----.

Sub : Grant or renewal of License of Fire and Life Safety Auditor under the Maharashtra Fire Prevention and Life Safety Measures Act, 2006 (Mah. III of 2007).

Sir,

I/we undersigned hereby applies for grant of or renewal of Licence of Fire and Life Safety Auditor for the evaluation of fire prevention and life safety in any place, building or part thereof under the Maharashtra Fire Prevention and Life Safety Measures Act, 2006 (Mah. III of 2007). The particulars are given below :—

(1)	Full Name of the Applicant : (In capital letters).	
(2)	In case of Association of Persons the details of registration under the \relevant act.	
(3)	Address (Residence) :	
(4)	Address (Office) :	
(5)	Technical qualification and experience as per the requirements of the act :	
(6)	Details of staff :	
	(a)Supervisory staff-names qualifications and address of each.	
	(b) Other Employees-names, qualifications and address of each.	
(7)	Details of work with regard to fire and life safety audit, in case of renewal,	
	(a) Name or nature of work	
	(b) Type of Occupancies for which fire and life safety audit is carried out.	
	(Note :—attach self-attested copies of work executed and Form V)	
(8)	List of machinery, Tools and Equipment. :	
(9)	Has the applicant or person having requisite qualification has been blacklisted in the past by any Government Department or Organization or other State?	
(10)	Has the applicant applied for registration elsewhere in his name or firm? If so, whether the application is rejected? Give particulars.	
(11)	Details fees :—	
	(a) Fee Amount :	
	(b) UTR No.	
	(c) Date :	
(12)	If the application is for renewal of the existing license, the details in respect of the license and the period of its validity (copy of the license appended)	
(13)	Whether the license of Fire and Life Safety Auditor granted before has been suspended or cancelled; and if so, reasons. therefor.	

I request you to grant the license of Fire and Life Safety Auditor under the said Act.

Thanking you,

Yours faithfully,

Applicant.

FORM 'X'

(See rule 36)

License of Fire and Life Safety Auditor.

License No.

Date :

Licence is hereby granted or renewed under the provisions of section 45A of the Maharashtra Fire Prevention and Life Safety Measures Act, 2006 (Mah. III of 2007) to _____ having registered office at _____ to act as a Fire and Life Safety Auditor for the purposes of the said Act for evaluation of the fire prevention and life safety measures in buildings or parts thereof for ensuring that the fire fighting systems are in good repair and efficient working condition.

The license shall be valid for a period of two years from the date of issue *i.e.* from _____ till _____.

Director

Maharashtra Fire and Emergency Services.

FORM 'Y'

(See rule 37)

Notice for suspension or cancellation of Fire and Life Safety Auditor License

To,

Whereas a License of Fire and Life Safety Auditor for the purpose of the Maharashtra Fire Prevention and Life Safety Measures Act, 2006 (Mah. III of 2007) and the Maharashtra Fire Prevention and Life Safety Measures Rules, 2009 being a license No _____ dated _____ has been granted or renewed in the name of _____ ;

And Whereas the following contraventions and irregularities have been noticed, namely :—

- (1)
- (2)
- (3)

And Whereas these acts amount to _____

Now, therefore, in exercise of the powers conferred on me under sub-section (6) of section 45A of the said Act, I, hereby call upon you to show cause in writing so as to reach the undersigned on _____ as to why the license so granted or renewed in your favour should not be suspended or cancelled.

Director

Maharashtra Fire and Emergency Services.”.

33. After Form Y, the following Appendix shall be added, namely :—

“APPENDIX

[See rule 4(3)]

1. Automated Continuous Monitoring System (ACMS) based on Internet of Things (IoT) for the fire fighting system in a building or part thereof as specified under section 45 of the Act shall be provided for both Active and Passive Measures, ensuring that the fire prevention and life safety measures are in good repair and efficient working condition.

2. The provision of the ACMS shall be done in two phases. The installation of ACMS shall be such that it will give necessary indication to both the owner or occupier as well as the system installer *i.e.* licensed agency as appointed under section 9 of the Act in the first phase. In the second phase, the critical alarms shall also be sent to the local fire and emergency services. Details regarding process required in both the phases is given in clause 4. The initiation of the Phase I shall be done with immediate effect of the rules coming in force whereas phase II shall be done at later stage.

3. The ACMS shall be provided as under :—

(a) System Status.—The system shall be integrated with requisite mechanism enabling to know the status of each system which shall be generated and collected on any suitable IoT Gateway. The data collected then shall be then uploaded on any suitable Cloud server which will then send requisite real time information of the system health to owner / occupier and the system installer on email, short message service (sms) or on mobile through any suitable app service. Status of following systems shall be notified.

(b) Hydrant :—

- (i) Main Hydrant Pump run status.
- (ii) Standby Diesel/Electrical Pump run status.
- (iii) Diesel tank level Monitoring.
- (iv) Power to Main Hydrant Pump (On / Off).
- (v) Hydrant riser low pressure monitoring.
- (vi) Jockey Pump run status.
- (vii) Power to Jockey Pump (On/ Off).
- (viii) Booster pump Pump run status.
- (ix) Power to Main Booster Pump (On/ Off).

(c) Fire Water Tank :—

- (i) Underground / Aboveground Fire Tank Level Monitoring.
- (ii) Overhead Tank Low Level Monitoring.

(d) Sprinkler :—

- (i) Main sprinkler Pump run status.
- (ii) Power to main sprinkler pump.
- (iii) Sprinkler riser low pressure monitoring.

(e) Detection System :—

- (i) Detection operation status (On/ Off).
- (ii) Control Panel / Repeater Panel status (working / non-working).

(iii) Battery of Control Panel status.

(f) Manual Call Points.- Manual Call Points operation Status (On/ Off).

(g) Public Address System: Public Address System status (working / non working).

(h) Air Pressurization.—

(i) Staircase Pressurization Fan run status for all exits Lift Lobby/ Hoistways.

(ii) Pressurization Fan run status for all Lift Lobby/ Hoistway.

(i) Supply and Exhaust Fan.- Basement supply and Exhaust Fan Run Status for Ventilation or Exhaust system.

Note.—Following Data parameters will be monitored and will be send from local Gateway to Cloud Portal for Real time monitoring and Report Generation.

I. Mode of Integration :

Sr. No.	Monitoring of Critical Fire and Life Safety Parameters	Mode of Integration
1.	Main Hydrant Pump run status	Water Differential Pressure Switch
2.	Main Sprinkler Pump run status	Water Differential Pressure Switch
3.	Standby Diesel / Electrical Pump run status	Water Differential Pressure Switch
4.	Jockey Pump run status	Water Differential Pressure Switch
5.	Booster Pump run status	Water Differential Pressure Switch
6.	Diesel tank low level Monitoring	Level Sensor
7.	Power to Main Hydrant Pump	Voltage Sensor at Motor Control Centre (MCC)
8.	Hydrant Riser Low Pressure Monitoring	Pressure Switch/ Transmitter
9.	Power to Main Sprinkler Pump	Voltage Sensor at MCC
10.	Sprinkler Riser Low Pressure Monitoring less than 5 Bar	Pressure Switch/ Transmitter
11.	UG / AG Fire Tank Low Level Monitoring System	Ultrasonic water level device
12.	Overhead Tank Low Level Monitoring System	Ultrasonic water level device
13.	Detection Operation Status	Plain Old telephone Service (POTS) free contacts from fire panel
14.	Control Panel / Repeater Panel status	Plain Old telephone Service (POTS) free contacts from fire panel
15.	Battery of Control Panel status	Plain Old telephone Service (POTS) free contacts from fire panel
16.	Manual Call Points operation Status	Plain Old telephone Service (POTS) free contacts from fire panel
17.	Public Address (PA) System status	Fault Status for PA panel
18.	Staircase Pressurization Fan run status for all Exits	Air Differential Pressure Switch
19.	Lift Lobby/Hoistway Pressurization fan run status	Air Differential Pressure Switch
20.	Basement Supply and Exhaust Fan run status for Ventilation/Exhaust system	Air Differential Pressure Switch

4. Procedural Requirements.—The main objective of the IOT base system is to ensure that fire prevention and life safety systems provided in buildings are maintained in good repair and efficient working condition for,—

- (a) Digital Monitoring the Operations of the Fire Fighting Installation and Equipment;
- (b) Digital Maintenance and Record Keeping of Fire Fighting Installation and Equipment.

These can be achieved by adopting following procedure guidelines,—

(i) Providing minimum Digital Inputs and Analog Inputs depending upon the system requirement.

(ii) Machine to Machine communication by following MQTTS Protocol which will send the Data. MQTTS Protocol to send the Data to cloud portal on real time basis.

(iii) Connectivity to Cloud Using 4G/5G and above or Ethernet or WiFi or any other reliable wired or wireless medium which will receive data from IoT gateway at every 1 min interval.

(iv) Cloud will also send an alarm *via* SMS if no data is received from the IoT gateway for more than 15 mins. Cloud portal should generate alarm in case data is not received for more than specified time so we can ensure reliability on IoT system.

(v) Gateway should have UPS power and shall have a backup of up to 7 hrs in case of power failure.

(vi) Gateway shall have an in-built capacity to store a minimum 10000 event logs.

(vii) It should have real time clock to save data along with time stamp.

(viii) Reports like data report and alarm report should be available from cloud portal.

(ix) SMS and email alerts option should be available real time basis.

(x) Events should be stored in the Open-Source Database. Uptime should be at least 99%.

(xi) There should be provision to make API (Application Programming Interface) in future to send this data to local fire and emergency services. For local fire and emergency services, Alerts should be sent only for critical alarms e.g. Power Failure to Pumps, Sprinkler and Hydrant Line Pressure Low, Fault & Fire Conditions of the Fire Alarm System, etc.

By order and in the name of the Governor of Maharashtra,

PRIYANKA KULKARNI-CHHAPWALE,
Deputy Secretary of Government.