Fire Safety Standards Advisory Group (FSSAG)

Matter Discussed in the 68th FSSAG Meeting held on 19 May 2022

1. Automatic Operated Total Flooding Systems complying with NFPA Standard 2001

It was revealed that the relevant FSD Circular Letter for the proposed local application scheme was being prepared incorporating the comments received from FSSAG members and parties concerned. The new edition of NFPA 2001:2022 (2022 edition) had been launched, whereas only numbering and some text of the relevant clauses were revised and their content related to the proposed local application scheme was similar by comparing with the 2018 edition. There was no impact on the proposed local application scheme and such updates in the 2022 edition would be incorporated in the relevant FSD Circular Letter.

It was supplemented that the issue on the proposed local application scheme would be brought up for discussion at the next Property Management Association Liaison Meeting. The relevant FSD Circular Letter would be issued shortly.

2. Proposal on System Design Provisions for Testing Intermediate Booster Pump Set

It was advised that since the discussion of the item had been completed in the last FSSAG meeting, it was suggested to shelve this item for the time being and discussed it together with the relevant new item 8 brought out by FSICA.

It was proposed to shelve this item for the time being and discuss it together with new item 8. Members had no objection to the proposal.

3. Market Available Maximum Working Pressure of Sprinkler Alarm Valve

It had been discussed and agreed in the last FSSAG meeting that it was a general practice for the sprinkler alarm valve to be re-located to higher floor for some super high-rise building, if overpressure was unavoidable. It was advised that the applications for such arrangement had been received in the past few months and permissions had been granted on project basis. Since conclusion had been agreed in the last FSSAG meeting, it was suggested to shelve this item in the next meeting.

It was proposed and agreed to shelve this item in the next meeting.

4. ***Review of Precautions and Requirements in regard to Fire Safety in Mechanical Ventilating Systems***

It was informed that review on the fire safety requirements (FSRs) and their implementation arrangement has been in progress as follows:-

(i) Updated FSRs for mechanical ventilation and electrical installation for D.G. stores had been incorporated into the *Chapter 3 of the application guide - 'A Guide to Application for Dangerous Goods Licence and Approval'* which was effective from 31 March 2022. The relevant link for the guide on D.G. thematic website of FSD (https://es.hkfsd.gov.hk/dg/en/licence/guide/) had been sent to FSSAG members for reference.

(ii) Updated FSRs for mechanical ventilating system under Cap 123J Building (Ventilating Systems) Regulations and Cap 132CE Ventilation of Scheduled Premises Regulation had been circulated to FSSAG members for comment. As discussed per Ventilation Installation Liaison Group (VILG) meeting on 5.5.2022, the paragraph 9.4 in the FSR (refer to the paragraph 5.3 in the existing circular 4/96 Part XI) was considered no longer fit for modern buildings. Protected exits / lobbies were now properly demarcated and were always separated with appropriate fire-rated door / access door, the paragraph was therefore considered as redundant and should be removed from the FSR.

(iii) Latest draft of FSRs for application of gas extraction system for battery room with electrical charging facilities had been circulated to FSSAG members for comment.

Members were invited to send their comments on the aforesaid FSRs in paragraph 4 (ii) and (iii), if any, to FSD on or before 27 May 2022.

It was replied in the affirmative that whether relevant circular letter covering the FSRs reviewed e.g. application of gas extraction system for battery room with electrical charging facilities would be issued in due course.

5. ***Review on the Application of Flexible Sprinkler Drop in Hong Kong (FSD)***

It was advised that the application of flexible sprinkler drop had been discussed in the sub-working group of FSSAG on specification for automatic sprinkler installations in 2019. It had been concluded that such application was generally not accepted in HK and its application would be considered by FSD case by case under special circumstances in due

consideration of securing fire safety. Recently, there had been continuous voices from industry on exploring widely adoption of flexible sprinkler drop, with its advantages of construction efficiency largely prompted whilst its applicability and maintainability without compromising fire safety should be properly considered.

In this connection, it was time to review its application in Hong Kong thoroughly from all aspects, including its scope of application, technical specification, materials, installation details, inspection procedure, maintenance requirement etc. Therefore, a sub-working group was suggested to be formed for this review exercise.

Members expressed support for the sub-working group and would nominate representatives to join accordingly.

It was supplemented that details of the sub-working group would be sent to members in due course. [Post-meeting Note: Details of the sub-working group was sent to FSSAG members on 23 May 2022.]

6. Clarification on Fire Hydrant Header Pipe Installation (Appendix I) (FSICA)

With reference to Appendix I, members were briefed on the issue.

It was responded that the aim of this inter-connection through header pipe between all FS inlets was to allow water fed from any FS inlets to any rising mains without overcoming too much static pressure. Therefore, both connection for above-ground and underground were acceptable provided that they were with a maximum height of 30m above ground level. Meanwhile, it was recommended that the header pipe should be mounted to the surface of structural slab or inside false ceiling or floor void so that it could be easily accessible for future maintenance if possible.

7. Clarification on Fireman's Emergency Switch for Carpark EV Charging Facilities (Appendix II) (FSICA)

With reference to Appendix II, some background information on the subject issue was provided to members.

It was responded to FSICA's suggestion that the Fireman's Emergency Switch could be installed at a level of 1m to 1.8m above the floor level in the locations other than vehicle

entrance, e.g. Fire Control Centre (FCC). Having considered the access to FCC was limited to authorized people/ staff and did not open to the public, the chance of deliberately shutdown of the system by unauthorized person was slim, FSD had no objection to the suggestion provided that the requirements stated in Circular Letter 4/2020 were fully complied with.

It was also reminded that enquires could be made to FSD before submission of fire service installation plan, if the Fireman's Emergency Switch or other FSI of carpark EV charging facilities was indicated in the fire service installation plan in order to smooth the processing of FSI/314A thereafter.

Members shared their views on the issue and discussed the design of Fireman's Emergency Switch. It was stated that the objective of installing Fireman's Emergency Switch was to allow fireman disconnecting power supply quickly in emergency, FSD would not have specific comments on its' design as long as the functionality and efficiency requirement had been met.

8. Clarification on Requirement of Provision for Testing the Sprinkler Intermediate Booster Pump (Appendix III) (FSICA)

It was presented to members that the background and the proposals suggested by FSICA concerning requirement of provisions for testing the sprinkler intermediate booster pumps flow and pressure performance with reference to Appendix III.

It was proposed to discuss this issue in the sub-working group mentioned in paragraph 5 while considered that the sub-working group should focus on the discussion of application of flexible sprinkler drop in Hong Kong.

Members shared their views on the issue and discussed the arrangements set out in Appendix III. It was suggested that attention should be paid to ensuring system was reverted to normal operation after testing sprinkler intermediate booster pump.

It was supplemented that it was not appropriate to issue a guideline on the design of such testing provisions so to allow more flexibilities for designers to achieve the ultimate purpose of testing intermediate booster pump. Regarding the testing arrangement proposed by FSICA, item 1, 2 and 4 were options that could achieve the task, but may not be the only solution. However, item 3 was not recommended as it would affect the performance of other FS system, which was undesirable.

It was summarised that while the purpose of FSICA of designing the provisions for testing the

sprinkler intermediate booster pump to facilitate future inspection and/or maintenance was clearly understood, the testing arrangement item 3 was not ideal as it would affect the operation of other existing FSI systems.

9. Review of FSD CoP for Inspection, Testing and Maintenance of Installations and Equipment, 2012

Members was informed that supplemental proposal from FSICA for the review of CoP 2012 would be submitted to FSD shortly regarding validity period calibration of testing equipment for staircase pressurization system and smoke extraction system. It was advised that FSICA would contact New Projects Division on the captioned issue directly as the revision of CoP would be finalised soon.

It was echoed that the revision of CoP was at the final stage and would be uploaded to website of FSD shortly. As it would take time to study the proposal from FSICA, it might not meet the schedule of the issuance of revised CoP. Nonetheless, upon receiving proposal of FSICA, FSD would study the proposal and further discuss with FSICA.

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