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Tο All Chief General Managers. All Chief Engineers (Elect.) BSNL Telecom Circles/ Metro Districts/ Mtnce. Regions

Subject: - Regarding safety from fire incidents.

This office has issued various instructions & Guidelines for safety from fire incidents from time to time and these are available on intranet. Few incidents of fire had occurred in BSNL premises last year which caused extensive damages. These fire incidents could have been prevented if adequate steps were taken before hand.

With the onset of summer, the possibility of fire incidents also increases hence it is advisable to ensure that all earlier instructions/guidelines are being followed and adequate safety measures & precautions are taken to prevent the possibility of any fire incident.

Some of the important guidelines are being reiterated as follows:-

- 1. Ensure proper fire fighting arrangement as per CPWD norms in all telecom installations.
- 2. The firefighting equipments (Sand/Water buckets, fire extinguishers etc) should be made available in passage of every exchange near the switch room and at a reasonable accessible place.
- 3. Fire fighting systems must be maintained in fully functional condition and the same shall be ascertained by conducting periodical inspection/testing.
- 4. The Fire alarm system installed must be in proper working condition.
- 5. The maintenance staff should be well educated about the fire alarm panel and how to locate the fire zone etc. even if it is a false alarm.
- 6. A non exchange line of the nearest fire station should be provided as far as possible.
- 7. Formation of fire safety officers for each building and conduction fire drill exercise once in a quarter is to be monitored at least by a JAG level officer. The date of last fire-drill as well as the next due date shall be permanently displayed in common places.
- 8 Floor warden should be nominated (main and standby) for Electrical/other maintenance.
- 9 Ensure provision of fire extinguisher of latest technology & providing automatic independent fire extinction systems at important fire prone locations in addition to fire extinguishers. A register for routine inspection of FEs must be maintained.
- 10. Few fire extinguishers may be mounted at the entrance of switch room as staff on duty cannot move inside during the fire incident.
- 11. Preliminary knowledge of fire control/use of fire extinguishers may be given to security Guards and lower staff.

- 12. Provision of emergency exit in the building All Exchange building should have a fire escape route. It is very much essential from the safety point of view of the staff present during the incident.
- 13. Provision of wet raiser system with sufficient water storage as per requirement
- 14. Action to be taken for weeding out unusable item in each floor.
- 15. Stores should also be inspected by fire department of the building and fire fighting equipments should be provided.
- 16 All the fuses should be of specified rating as per standard in the main distribution of AC supply.
- 17. Electrical appliances and wiring may be checked periodically to avoid short circuit. Regular checking of power cables and their terminations including their insulations may also be done in order to avoid fire accidents. Low insulation cables are to be attended to avoid power induction.
- 18. All the MCBs/ACDBs feeding power to various equipments and DCDBs should be checked with fixed periodicity.
- 19. Loose wiring and sub-standard wiring especially for pedestal fans, heaters, coolers and testing equipment should be avoided. Pedestal fan should not be operated unattended.
- 20 All electrical terminations like LT panel, Energy meter should be away from Telecom Equipment.
- 21. Proper distance should be maintained between split AC and equipment Rack.
- 22. Stabilized power supply has to be ensured.
- 23. E/A must be checked and maintained at regular intervals. Routine testing of E/A may be conducted directly by BSNL staff.
- 24. AC changeover/timer switch may be provided & the AC units may be operated alternatively to avoid continuous running which may also be the cause of fire in most occasions.
- 25. Routine checkup & maintenance of A.C. equipments may be carried out.
- 26. Split units in place of window type AC units are recommended in exchanges.
- 27. Keys of all the rooms in a building shall always be made available with the security personnel with distinct tag with each key for easy identification of the room/door, floor etc.
- 28. The key of the locked rooms where technical installations are provided should be kept in a very easily accessible place.
- 29. During holidays and after office hours, one person out of the staff available on duty shall take a round of the entire building at frequent interval, ensuring human presence for early detection and fire fighting at the initial stage of fire.
- 30. Provision of fire barrier with Bakelite sheet of suitable thickness/glass wool/pebbles etc. at all floor / wall crossings of all cables laid in exchanges to prevent spread of fire from one room to another.
- 31. Insulation of DC/AC Power cables, their termination points etc. should be periodically checked and all the cable runway entry holes should be sealed with compressed asbestos material.
- 32. Fixing the important Fire safety instructions including telephone numbers of fire brigade, police and senior officers may be displayed prominently in the premises. Ensure reading of the instructions by all concerned. A personal card containing instructions regarding steps to be taken in case of fire may be issued to each staff.
- 33. All the AC and DC earth (Exchange/ equipment earth) should be maintained properly with proper watering facility. Measurement of earth resistance shall be conducted regularly and the same should be maintained as per standard norms.
- 34. Equipment rack spacing standard should be maintained even at the time of installing additional equipment to avoid congestion and excessive generation of heat causing fire.

- 35 Fire-audits may be conducted for the buildings and suggestions of the audit be implemented without delay.
- 36. Fire inspection to be conducted as per National Electricity code, Local Municipal fire byelaws and fire protection manual and instructions issued from time to time.
- 37. Energy Audit to be conducted by energy auditors/managers as per Energy Conservation Act 2001.
- 38 Carry out electrical inspection as per Indian Electricity Rules 1963, Section 44A, 46A and 47 which are mandatory and to be conducted by designated electrical inspector of BSNL
- 39 Suitable isolation of battery power supply to equipment in the event of fire should be provided through HRC fuses/knife switches.
- 40. Protective devices like GD tubes/PMs are to be provided at MDF.
- 41. Provision of runways above the blower units of the split AC units may be avoided. Wherever not possible, some guarding arrangements may be done for the cables in the runway from the A/C units.
- 42. Telecom Stores to be inspected regularly and should be on raised platforms.
- 43. Telecom store should not be stacked below open wire Electric line.
- 44. No flammable store like PVC pipes, cables etc. should put below the O/H Electric line.
- 45. Wherever possible, U/G Electrical cable should be used in place of O/H open wire line in open store areas.
- 46. If it is compulsory to lay open wire electric line, it should be maintained properly by Electrical department.
- 47. Separators of proper size should be utilized between open electric wires.
- 48. There should not be any vegetation near Electric line.
- 49. The firefighting equipment should be available near store dump.
- 50 Some in house speedy/automatic messaging mechanism should be developed so that the SSA in-charge, Exchange in-charge & other competent authority can be informed immediately / automatically on the actuation of fire alarm.

Apart from above, all existing guidelines & other instructions issued by this office time to time including engineering instructions on prevention of fire in telecommunication buildings & fire fighting should also be strictly followed.

In light of above guidelines / instructions the field units are hereby instructed to carry out fire drills & intensive inspection of all the telecom installations & stores. Special emphasis is required for checking of electrical installations, fire alarms, fire fighting equipments, air conditioners, window ACs and their automatic changeover feature, availability of keys of locked rooms etc as instructed above.

Compliance of the same may please be intimated to this office by 30th April'2013.

(RAJESH KUMAR) Addl. GM (NWO-I) CFA