

**BRIHANMUMBAI MAHANAGARPALIKA
MUMBAI FIRE BRIGADE**

**No. FB/
Date**

**FIRE INVESTIGATION REPORT OF NO.2 MESSAGE FIRE CALL AT
MHADA BUILDING, KALANAGAR ROAD, KALANAGAR JUNCTION,
OFF WESTERN EXPRESS HIGHWAY, BANDRA (E), MUMBAI 400051.**

1.	PLACE :	MHADA Building, Kalanagar Road, Kalanagar Junction, Off Western Express Highway, Bandra (E), Mumbai-400051.
2.	DATE & TIME OF OCCURANCE	On 01/05/2007 at about 18:37 hrs.
3.	NAME OF THE PARTY (OCCUPIER)	Chief Executive Officer, Slum Rehabilitation Authority.
4.	NAME OF THE OWNER	Vice President, MHADA, Kalanagar Junction, Bandra (E), Mumbai 400051.
5.	BUSINESS OF THE OCCUPIER	Commercial Office of the Slum Rehabilitation Authority.
6.	LICENSE	The premises is used as Commercial Office building, hence not licensable u/s 394 of M.M.C. Act.
7.	INSURANCE:	Not known.
8.	APPROACH & ACCESS IN TO THE PREMISES	The premises abuts from two sides by 6 mts. vide Madhusudan Kelkar Marg, accessible for fire appliances.
9.	CALL RECEIVED BY FIRE BRIGADE CONTROL ROOM THROUGH	Mobile No. 9967754959 / Telephone No. 26591790.
10.	WATER FACILITY	Water was taken from fire appliances and jumbo tankers.
11.	OBSERVATION	<p>This is a office of SRA admeasuring area about 5,000 sq. feet, housed on 5th floor on west side of a ground and five upper floored, bricks walled RCC structure building and annexure building having A.C. sheet roofed. On same floor on east side there is a office of Shivshai Prakalp. The building is used for various MHADA offices. On ground floor there are Banks, Canteen and upper floors for various Offices. Also part of the floor of Annexure Building used for dwelling, where Chief Officer of repair board, MHADA is at present staying, on IIIrd floor.</p> <p>First arrived officers observed dark dence smoke coming out from 5th floor gaps of close windows and from 3rd floor onwards all –</p>

		<p>staircases and common corridors were smoke lodged and SRA office which was on 5th floor was under lock and key. Which was opened by SRA office staff, where tremendous black smoke, heat which obstructed the entry. Further it was noticed that large stock of Combustible material Such as Wooden furniture, various office records, electric supply distribution board, coir mat, computers and accessories, panel board, false ceiling of plaster of paris, electric wiring and installations, plywood partitions and cabins etc. involved in the fire. Both sides of the common passage wooden partitions cabins were constructed which were of combustible nature. Common passage/corridor, staircase etc were obstructed with storage of office furniture's such as steel cupboards etc. Also during fire fighting operation and extinguishing fire it was noticed that severity of fire was near electric distribution box as well as in CEO's cabin.</p>
12.	DESCRIPTION OF DAMAGES TO	<p>i) Contents: Wooden furniture, various office records, electric supply distribution board, computers and accessories, panel board, A.C ducting, false ceiling of plaster of paris, electric wiring and installations, plywood partitions and cabins, telephones, glass, switch boards, pantry, coffee/tea machines etc. severally damaged due to fire, heat, smoke and water.</p> <p>ii) Premises: Paint and plaster work of walls, window and doors frames / panes etc. severally damaged due to fire, heat, smoke and water.</p>
13.	EXTINGUISHING MEDIA	<p>Involved building was ground + 5 upper floored commercial office building and fire was confined on 5th floor in S.R.A. office in an area of about 5000 sq.ft. Involvement of combustible material, such as wooden cabins, wooden furniture, false ceiling, electrical wiring/installations, wooden doors, windows etc. so water was used as only extinguishing media. The water was taken from appliance tanks and jumbo tankers. Total 5 water jets were put into operation including ALP water monitor jet to extinguish the fire and restrict the fire where it was. For effective fire fighting and entered in the smoke lodged area 27 breathing apparatus sets were used.</p>
14.	DETECTION OF UNAUTHORISED TRADE/ACTIVITY/ STORAGE/STRUCTURE, IF ANY	<p>Since the premises mainly being used for commercial office of S.R.A. for which no licence under section 394 of the M.M.C. Act is required. Hence no unauthorized business, trade and storage were found.</p>
15.	STATEMENT OF WITNESSES	<p>1) Witness I – Shri Balu Dinkar Jadhav, aged about 52 years. He is residing at camp no. 2,</p>

bldg. no. 13, R. No. 111, Sion Pratiksha Nagar, Sion, Mumbai. He is serving as a security person for MHADA and working in shifts. On the day of occurrence he was in IInd shift i.e. from from 15:00 hrs to 23:00 hrs. duty. He noticed smoke was coming out from 5th floor SRA office windows at south side at about 18:00 hrs. He and his other colleagues then contacted Chief Officer Repair Board Mr. Nirmal Kumar Deshmukh at his residence on 3rd floor annexure building in same premises. Also he stated that SRA office and complete MHADA office was closed on 01/05/2007 in lue of Maharashtra Day Holiday and in his shift no one attended any office, specially from SRA office.

2) **Witness II** – Shri Ashok Shankar Kamble, aged about 52 years. He is residing at bldg, No. 13, R No, 409, Pratiksha Nagar, Sion, Mumbai. He is serving as security person for MHADA and working in shift. On 01/05/2007 he is for Ist shift i.e. from 07:00 hrs to 15:00 hrs and due to shortage of staff after doing Ist shift he continue IInd shift i.e. from 15:00 hrs to 23:00 hrs as per their security department procedure. When he was shown smoke by his colleague they immediately informed that to Chief Officer, Mr. Deshmukh (Repair Board) and as per his orders open all the gates of the building and compound for Fire Brigade appliance entry. Also, he stated that in his both shift SRA office nobody came and same office was not opened for any reason. Also he stated that without permission of joint commissioner Mr. Pawar (Security head of MHADA) no any dept. opens on holiday.

3) **Witness III** – Shri. Dilip Bajrang Shinde, aged about 52 years, he is residing at chawl no. 3, room no. 2, Tambat Chawl, Vandra Pada, Ambernath. He is serving as security person for MHADA and working in shifts. On 01/05/2007 he was in Ist shift i.e. 07:00 hrs to 15:00 hrs and due to shortage of staff after doing Ist shift he continue IInd shift i.e. from 15:00 hrs to 23:00 hrs as per their routine procedure. He also stated that in his both shifts SRA office nobody attended and without permission of Joint Commissioner Mr. Pawar (Security head of MHADA) nobody can open the dept on holidays. Further he stated that there is a separate security for SRA and that dept. key after closing the dept. they are keeping with them.

4) **Witness IV** – Shri Rajendra Raghunath Jadhav, aged about 27 years. He is residing at Bldg. No. 232, R No. 9054, Kannamvar Nagar 2, Vikhroli (E) Mumbai 400083, working at SRA

office as security person through \ private security M/s. Bombay Industrial Guard. His office time is from 09:00 hrs and waiting till office is closed. In the morning on dated 30/04/2007 he opened the office as per routine procedure. He stated that on very same day at about 18:15 hrs CEO went and their peon Mr. Talape told them to closed the cabin. Accordingly his colleague security person Shri Satish Dhavade, age 26 years locked / closed the CEO's cabin and kept that key near electric distribution box as per routine procedure and SRA dept main door was closed at about 20:15 hrs after all staff and officers went. Main door was closed by Shri. Umesh Sakharam Shinde, aged about 23 years and kept in security room on 5th floor in drawer of the table.

5) **Witness V** – Shri Satish Dhavade, aged 26 years. He is residing at Chandivali Complex, Chandan Wadi, Thana (E). Working at SRA office as security person through private security M/s Bombay Industrial Guard. On 30/04/2007 he was on duty and at about 18:15 hrs CEO went from cabin and his peon informed him to close the door. Accordingly he locked the door and kept key in key box near electric distribution box as per routine procedure. On very same day main door of SRA dept was closed at about 20:15 hrs by Shri Umesh Sakharam Shinde, aged about 23 years and kept in table drawer while rechecking, he checked the key and removed from drawer and kept on ventilator / above window frame where normally they kept the keys, from safety point of view. He further stated that mostly without called by office they are not attending office on holidays, So on 01/05/2007 nobody from SRA security attended office. Also he stated that before closing the SRA office they are checking the lights are off but there was no routine practice to disconnect main electric supply while closing the premises.

6) **Witness VI** – Shri. Umsh Sakharam Shinde, age about 23 years, residing at Hanuman Chawl, Datta Mandir Road, Santacruz, Mumbai, working at SRA office as security person through private security M/s Bombay Industrial Guard. He stated that there are 10 security persons for SRA office from that 3 are ladies and 7 are men. They are reporting at about 09:00 hrs and on holiday, they are not attending office but only on request / orders from office they are attending office. On 30/04/2007 at about 18:15 hrs CEO went away and as per their peon Shri Talape, CEO's office was locked by Shri Satish Dhavade age 26 years and at about 18:15 hrs all

staff of SRA dept went away and he locked the door of the SRA dept and kept key in drawer of the table in security cabin. He further stated that on holidays they are not attending the office. Further he stated that before closing the SRA dept they check all lights / fans and other electric installations are off as per routine procedure but they are not closing main electric supply of the floor or various cabins.

7) **Witness VII** – Shri Ganesh Talape, age about 37 years residing at Chavan Chawl, Keshav Pada, R No, 10, P.K. Road, Mulund (W) Mumbai 86. Working at SRA office, as a peon of CEO's office. On dated 30/04/2007 at about 9:45 hrs. He came to office. On same day at about 18:00 hrs CEO came in the office and 18:15 hrs he went away. CEO's PA Smt. Kokitkar went away at about 18:00 hrs. At about 18:15 hrs he put off the electric supply as per routine procedure and informed security to lock the door and he went away. Further he stated that he never disconnect main electric supply of cabin

8) **Witness VIII** – Shri Ramesh Ubhare, age about 28 years residing at Sardar Nagar No.2, near Mariamma Temple. Pipe Line hutment, Sion, Mumbai, working in SRA office in pantry. He stated that there are only two tea / coffee machines from that only one in working condition. The pantry tea/ coffee machine he starts at 10:00 am and same machine disconnect at about 18:00 hrs by disconnecting only electric button but not closing main supply of the machine. Also he stated that the same pantry is very close to CEO's cabin and electric distribution box.

9) **Witness IX** – Shri. Nirmal Kumar Deshmukh, age about 56 years residing at MHADA building, 3rd floor, Kalanagar, Bandra, Mumbai. He stated that he is staying in same building and his office is also on 3rd floor. Due to holiday he is at his residence and at about 18:15 hrs security persons of MHADA came to his residence and informed about fire on 5th floor in SRA dept, so immediately he informed to 100 no i.e. police and police informed to fire control. Also he instructed to security persons to open the gates and main door of the building for fire brigade.

10) **Witness X** – Shri. Rakesh Solanki, age about 29 years residing at Gandhi Nagar, Bandra (E). He is a driver of Secretary B.G. Pawar. On 30/04/2007 he learnt from public that there is a fire in MHADA office, as he is staying nearby he rushed to the premises. Same time fire brigade

first appliance reached the incident. MHADA security persons told him to open the door of 5th floor SRA office, as same time S.O. Kharbade who reach at incident from fire appliance making inquiry for making entry on 5th floor with MHADA security persons. As he aware of the location of key he came with S.O. Kharbade and took keys from security room and open the main door of SRA Office but unable to wait as there was a tremendous smoke was coming out from common passage which is accumulated upto 3rd floor.

11) **Witness XI** – Shri. H.V. Javed, age about 40 years residing at 4135 Shagufa Apartment, Sahakar Road, Jogeshwari (West), Mumbai, working at SRA office as sub. Engineer and working from 10:00 am to 17:30 hrs. He stated that electrical wiring and installation is about 4 years old and in the office there is no any fixed procedure was adopted for electric supply disconnection, while closing the office. As various computers and accessories are in office main electric supply not disconnected. Also electric distribution box at the SRA dept is very close to the CEO's cabin.

12) **Witness XII** – Shri Baliram G. Pawar, age about 45 years residing at Govt. Colony, Bandra. Working as secretary at SRA office. On dated 30/04/2007 he left the office at about 17:00 hrs. He stated that he was not much aware about security procedure as well as other normal routine procedure of closing electric supply and closing office but he strongly oppose about causes of Arson, Incendiarism, Sabotage, doubtful. Also he stated that their all important documents are in good condition and intact. Their document store room is intact and only CEO's cabin is damaged due to fire and water.

13) **Witness XIII** - Shri. S.B. Kharbade (Station Officer), Bandra Fire Station is a first arriving officer observed that smoke is coming out from 5th floor gaps of the windows and staircase is smoke lodged from 3rd floor level, he transmitted No.1 message fire call, aiding for five motor pumps and B.A Van and ALPs. As main door of 5th floor SRA office was closed, With the help of MHADA security and Driver of Secretary Pawar (SRA Dept) Mr. Rakesh Solankar open the main door of SRA dept. But due to tremendous heat can not make entry. But prepared two engine line of MP 14 (Bandra) Fire Appliances and MP 52 (BKC) fire appliances and start fire fighting work, Same time transmitted NO.2 Message by S.O. Ghadigaokar

		<p>aiding for eight motor pumps, jumbo tankers and ALPs and both the officers tried to make entry from AC Sheets roof of the annexure building by breaking glasses of SRA office of 5th floor and one more water jet was prepared and pressed into operation. He stated that due to dense smoke, poor ventilation and poor visibility as well as tremendous heat, it was difficult to make entry and find out correct place of fire when they arrived at scene of incident.</p>
16.	<p>CONTRIBUTORY FACTORS FOR FIRE SPREAD</p>	<p>i) Heavy fire load, large stock of Combustible material Such as Wooden furniture, various office records, electric supply distribution board, computers and accessories, panel board, false ceiling of plaster of paris, electric wiring and installations, plywood partitions and cabins etc. involved in the fire.</p> <p>ii) Both sides of the common passage wooden partitions cabins was constructed which were of combustible nature. Common passage/corridor, staircase etc were obstructed with storage of office furniture's such as steel cupboards etc.</p> <p>iii) As the office premises was closed and the offices were Air conditioned with ducts, the smoke traveled all over the premises making poor visibility as well as smoke lodged. All windows were closed created smoke lodged in the premises, poor ventilation and accumulation of heat.</p> <p>iv) Fire was at the end of the SRA section, which was away from the staircase making difficult to reach due to smoke accumulation and tremendous heat and there was no easy access except only one staircase.</p> <p>v) Main Electric distribution board was very close to wooden cabins and large stock of combustible materials stored nearby.</p> <p>vi) Delay in summoning Fire Brigade. Security persons after noticing smoke informed to Chief Officer (Repair Board) and he informed to Police and Police informed to Fire Services. As per witnesses at about 18:00 hrs. they noticed the smoke but fire services summoned about 18:37 hrs.</p> <p>vii) Early detection : Fire was not detected at initial stage as Smoke detection system was not in operation. Also fire-fighting systems was not in operation, security personnel not aware about the systems.</p> <p>viii) No attempt: was made to put out fire at its</p>

		<p>initial stage, by security guards on duty. Not a single security guard stated that they tried to put out fire except, informing to Chief Officer (Repair Board).</p> <p>ix) Security personals not aware about fire fighting arrangements, fire detection system as well as how to call fire brigade.</p>
17.	<p>CIRCUMSTANCIAL EVIDENCES</p>	<p>As the task of investigation was assigned to me and Dy. Chief Fire Officer Shri A.V. Sawant, myself A.D.F.O. S.K. Rane and Dy. C.F.O. A.V. Sawant, we both visited the premises again next day after fire i.e. on 02/05/2007 and 03/05/2007 and inspected the premises thoroughly.</p> <p>The necessary inquiry was made with peon of the C.E.O's cabin, security personals of SRA office and MHADA office, sub Engineer of SRA office, Secretary of SRA office, Chief officer of Repair Board (MHADA) and other than it was learnt that:</p> <ol style="list-style-type: none"> 1) SRA office was closed on account of Maharashtra Din on 1st May 2007 and on 30/04/2007 at about 20:15 hrs. office was closed . As per the statements of witnesses office was closed when 1st arrival officer reached at the scene of incident. 2) There was no practice of disconnecting main electric supply while closing the premises of office as stated by witnesses. 3) Electrical distribution box was very close to CEO's wooden office, which was found severely damaged, which supply electricity to SRA section found severely damaged due to fire and heat. 4) SRA office was not opened on 01/05/2007 by anybody before occurrence of fire as per statements of witnesses. 5) Only electric tea/coffee machine was used in pantry and no any other fuel such as LP gas, kerosene etc. was used in pantry as per statements of witnesses. 6) During inspection it was noticed that severity of fire was more near main electric distribution board than CEO's cabin whereas the fire load was more in CEO's cabin compared to main electrical distribution board. 7) During inspection it was observed that spilling of surface plaster of walls and ceiling was

		more near electric distribution box than CEO's cabin.
18.	SUPPOSED CAUSE OF FIRE	<p>After examining the circumstantial evidences and statements of eye witnesses, process of elimination is applied to determine the suppose cause of fire.</p> <p>i) <u>Incendiarism, sabotage and doubtful</u> : In going through the statement of witnesses and observation the supposed cause of fire due to incendiarism, sabotage and doubtful are ruled out.</p> <p>ii) <u>Arson</u>: Also during fire fighting and during investigation, I did not find or smell any flammable items, liquid which help to spread the fire except combustible materials. Fire did not occur immediately closing the premises. Moreover, it was noticed after 21.45 hrs. The seat of fire was not at so many places. No eye-witnesses have given any statement regarding the foul play in an incident. However, nobody has come forward and stated during my inspection that occurrence of fire is due to arson, hence suppose cause of fire due to arson is ruled out.</p> <p>iii) <u>Careless smoking (LTD)</u>: As there is a holiday on 1/5/2007 due to Maharashtra day and office was closed on 30/04/2007 at about 20.15 hrs. Fire was noticed at about 18.00 hrs i. e after about 21.45 hrs. Hence the supposed cause of fire due to careless disposed of smoking material (i.e light thrown down) is ruled out.</p> <p>iv) <u>Chemical reaction auto- ignition and spontaneous combustion</u>: The premises is strictly used as office and not keeping any chemical or highly inflammables hence suppose cause of fire due to chemical reaction auto-ignition and spontaneous combustion are ruled out.</p> <p>v) <u>Naked light /flame</u> : There is a pantry but only electric coffee/tea machine is used. No any naked light, gas is used nor any edible oil lamps was lighted to warship the idol, also office is closed due to holiday hence fire due to naked light /flame came in contact with combustibles is ruled out.</p> <p>vi) <u>Flying embers</u>: The office windows and doors were closed and hence the suppose cause due to flying embers also ruled out.</p> <p>vii) <u>Electricity</u>: After examining the circumstantial evidences and statements of eye</p>

		witnesses and after elimination of various causes of fire, suppose cause of fire leads towards electrical origin i.e. to the electrical distribution box near the CEO's cabin.
19.	ELECTRICITY TRANSMISSION	<p>Electricity its transmitted overhead at high voltage to load centers and then distributed to consumers at reduced voltage, through step down transformers, for example (i) for factories – few kilo-watts (KV) three phase (ii) Farms – 415V, three phase (iii) Domestic Consumers – 230V, single phase.</p> <p>When a current flows in an electrical circuit, the heat is produced. An insulation is provided to the electrical wirings/cables. The thickness of the insulation to be provided depends on operating voltage of the conductor and ability of the insulating material to withstand any leakage of the current, due to mechanical damage, age or heating.</p> <p><u>Mechanical damage:</u> usually caused by abrasion or mechanically cutting through the currents.</p> <p><u>Damage by heating:</u> Can be caused internally by excessively high current flowing through the circuit continuously for long time without affecting the circuit braker.</p> <p>Ageing: Insulating material also tends to become hard and brittle due to ageing and may eventually brake away from the conductor.</p> <p>The insulation must have damaged due to one of the above mentioned causes when breakage in conductors occurs, momentary separations of the broken ends while a current is flowing can cause sparking, which may set fire to any easily combustible material in contact with defective cable wiring. This is the only reason happened in this case. In short electrical sparks, from defective cable came in contact with combustible material, such as wooden cabin, furniture, office records, coir mat etc. such type of material is surrounded electric distribution box.</p> <p>Also as per statements tea/coffee machine switched off before closing the premises, so rulling all probable supposed cause of fire and compiling with statements of eye witnesses and inspection as well as observation of the site and investigation of suppose cause of fire the circumstantial evidences leads to the origin of fire to the electrical installation i.e. electrical distribution box which is attached to the CEO's cabin and very near to pantry room where the damages due to fire have caused more</p>

		<p>significant.</p> <p>Also observed that in attached CEO's cabin, wooden table, some documents / paper are half burnt. False ceiling frame is also partly damaged. Plasterwork of walls and ceiling is less damaged as compared to main electric distribution box area where false ceiling frame completely damaged. Also observed some places near electric distribution box aluminum bars of cabin get melted. Fire load is less in electric distribution box compared to CEO's cabin but severity of fire noticed more near electric distribution box. Spilling of surface plaster of walls and ceiling is more near main electric distribution box than CEO's cabin. Also Statements of above witnesses supported that complete electric supply not disconnected while closing the premises /office. In view of above statement of witnesses and the observation the supposed cause of fire is derived as from electrical origin and i.e. “Defective Electric Circuit”.</p>
20.	POLICE PANCHNAMA REPORT	Police statements (panchnama) report no any explosive or inflammable chemicals / material found at the place of incident and fire was noticed in electrical distribution box as well as CEO's cabin (vide reference no. of Police Panchnama 4158/2007 dated 09/05/2007) .
21.	FORENSIC LAB REPORT	Forensic lab report stats that “Results of the tests for the detection of petroleum hydrocarbon residues and explosive residues on exhibit no 1 to 16 are negative” (vide reference no. of Forensic Lab report – M.I. Case no. M-146/07 M (T) no. 8516/07 dated 08/05/2007.
22.	PHOTOGRAPHS OF INCIDENT	Photographs at a time of incident as well as after the incident shows severity of the fire near Electrical Distribution Box, also damage to the Electrical Distribution Box clearly noticed in the photographs. Also it was observed that spilling of surface plaster of walls and ceiling was more near electric distribution box than CEO's cabin.
23.	CONCLUSION	After going through the statement of witnesses, observation, inspection and compiling the circumstantial evidences as well as police statements (panchnama) report no any explosive or inflammable chemicals / material found at the place of incident and fire was noticed in electrical distribution box as well as CEO's cabin. Also forensic lab report stats that “Results of the tests for the detection of petroleum hydrocarbon residues and explosive residues on exhibit no 1 to 16 are negative”. Photographs of the incident are also supported to the

		investigation. In view of above the supposed cause of fire can be termed as “DEFECTIVE ELECTRIC CIRCUIT”
24.	RECOMMENDATION	<p>Since the building is used entirely for commercial purpose for avoiding any mischief like fire incident E. E. B. P (W. S) visit the premises and Vice President, MHADA may be asked to submit three copies of lay out plan of entire building for offering fresh requirement from fire safety point of view from C.F.O.’s Department. However, in the meantime party shall be asked to comply following requirements from fire safety point of view,</p> <ol style="list-style-type: none"> 1) Entire wet riser, smoke detection system and fire alarm system shall be got repaired and kept in good working condition and all security staff shall be trained for the same. 2) All entrance, exit, open space, courtyard shall be kept free from obstructions and easily accessible. 3) Riser landing valve room found locked and used for storage purpose, which shall be kept open and without any storage. 4) Obstruction of common passage / corridor / staircase shall removed and same shall be kept free from obstruction & easily accessible. 5) Employee may please be advised to switch off the main while closing the premises.