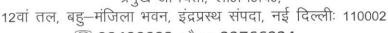
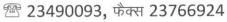
दिल्ली सरकार प्रमुख अभियंता, लो०नि०वि०, –मंजिला भवन, इंद्रप्रस्थ संपदा, नः







वेंबसाइट: http://pwd.delhigovt.nic.in



No.E-in-C/PWD/Works/00./2024/3097



Dated: 3 \.07.2024

OFFICE MEMORANDUM

Standard Operation Procedure during rainy season

Delhi has witnessed heavy rain falls on many days in recent month when intensity of rain was very high leading to flooding of water in a short period of time. Various unfortunate incidents of death due to electrocution, flooding of basement, falling in drains or accident due to potholes on roads have been reported recently.

Keeping in view all above, following SOP shall be implemented strictly.

Proper desilting of drains

- 1. All the drains have to be desilted completely at any cost.
- 2. Certain areas of drains are encroached. That encroachment has to be removed by PWD officials at their own or with the help of Delhi Police, District Magistrate, MCD etc. but in no case, desilting should be avoided as this leads to flooding. Similar situation was found in Rajendra Nagar where students died due to flooding of water in the basement as drain could not be desilted due to encroachment.
- 3. All the locations, from where water is overflowing from the drains, it is most probable that there is blockage in the drain just at the downstream of last point of overflowing and such portion should be checked and desilted immediately.
- 4. Desilting only once is not sufficient as floating material is continuously coming into the PWD drain. Therefore, all the drains should be kept desilted all the time by deploying necessary labour and super sucker machines etc., as per requirements.
- 5. Bell mouth pipes and kerb channels should be cleaned regularly and rather daily to ensure that water flows into the drain. After desilting of drain, all the manhole covers should be properly placed in position to avoid any accident due to missing manhole covers.
- 6. At vulnerable locations, water pumps are installed. The outfall of delivery pipe should be at a place from where water moves forward rather than coming back to the area.
- 7. All necessary documentation like photographs and videos of before and after desilting should be kept on record.

- 8. The silt removed from the drains should be immediately removed, maximum within 2 hours after desilting, as during rainy season, there is not much of time available for allowing the silt to dry.
- 9. The silt so removed from the drain should be disposed off to the authorized dumping grounds and its slip should be kept on record after verification.
- 10. Independent monitoring teams shall be constituted to verify the desilting done in each division continuously during the rains and submit the report to the headquarters.

Improvement of Road geometry/drainage system at vulnerable locations

- 1. There may be certain instances, where topography of the area leads to accumulation of water. Such area should be identified and due care should be taken at such places. Desilting of drain at such places should be ensured.
- 2. If required, at such places, temporary pumps may be installed to throw the water away from such areas.
- 3. If there are basements near the vulnerable locations, the same should be reported to the concerned District Magistrate, DJB, MCD, Fire and other departments for taking suitable actions to ensure that all safety measures are in place in such building.
- 4. The drainage master plan consultant is already in place for entire Delhi. Feasibility study should be got carried out through drainage master plan consultant for the vulnerable locations for proper intervention in the drainage system. Improvement in drainage system should be done comprehensively considering the catchment area of the drain, its outfall point, levels at different places.
- 5. Regular visits of field staff, AEs, JEs should be done at such vulnerable locations to see that drains are desilted, bell mouths are opened and there is no other deficiency like missing manhole covers, open/ exposed electrical wires at such locations. The outcome of such visits should be recorded regularly and uploaded on e-monitoring system. These visits should be made at least twice a week by AEs/JEs and once in 15 days by Executive Engineers. Photographs of status of vulnerable locations during such visits should also be kept on record and uploaded on PWD e-monitoring website.

Precautions to avoid electrocution

- 1. All the AEs/JEs and Executive Engineers (Elect.) should ensure that there is no exposed or unprotected wire at any place.
- 2. There are instances of regular theft of cover of poles etc. and such areas should be protected regularly by covering with tapes, covers etc.
- 3. If there is any installation in the area which is prone to flooding, its level should be raised.

- 4. The instances of theft/damaged of electrical/civil assets in the RoW of PWD roads should be regularly reported to the Delhi Police.
- 5. Areas where there are more chances of theft, CCTV cameras may be installed, if possible.
- 6. The field staff should regularly visit their jurisdiction to ensure that there is no unprotected wire etc. AEs/JEs should visit their areas at least twice a week and the Executive Engineer once in 15 days. The photographs and videos of action taken to rectify the deficiency in this regard should be kept on record and regularly uploaded on e-monitoring system.
- 7. The EE should also see that all the vulnerable areas are properly illuminated to avoid any accident due to darkness.
- 8. Discom agencies like BSES, TPPDL, BYPL, should be regularly pursued for rectification of street lights on top priority to avoid dark patches in the rainy season.

Pumps operations

- 1. Sufficient numbers of permanent pump stations are there in underpass and at vulnerable locations.
- 2. All the pumps should always be functional without fail. It has been noted that during heavy rains, at some places, few pumps were found to be non-functional and in each case it was informed that the same had become non-functional just sometime back.
- 3. Functionality of pumps and presence of operators should be checked daily and certificate in this regard should be uploaded on e-monitoring system for each pump house on daily basis.
- 4. Wherever Gen. sets have been deployed, it's functionality should also be ensured and checked on daily basis and the same should be uploaded on e-monitoring system.
- 5. The functionality and availability of temporary pumps should be ensured on daily basis and recorded.
- 6. All the drains leading the water from vulnerable locations/underpass to sump should be kept cleaned during the rain and after it, by deploying earmarked labour for this purpose.
- 7. It is quite possible that after every rain, sumps are filled with silt which should be regularly cleaned.
- 8. All the field staff should be on alert and communicate with control room and send photographs of the vulnerable locations about the action being taken during the rain.

Road Repair

1. During rainy season, there are many instances of damaged road due to flooding or otherwise. All EEs should have arrangements/agreements in place to repair the damaged road within maximum 6 hours using proper material like shelmac, GSB, etc. to avoid any accident.

- 2. The concerned AEs/JEs should daily upload the report on e-monitoring system about potholes observed in their area and action taken for its repair.
- 3. There are also instances of cave in of road due to other services and such area should be barricaded and repaired on top priority.
- 4. All EEs should have agreement in hands for immediate repair of road's cave in portion, damaged road due to rain etc.

General Points

All the EEs should also be in touch with the JCB and other important equipment's providers to take up repairs in emergency without losing any time.

To:-

- 1. P.s to Pr. Secretary, (PWD), PWD Secretariat, 3rd floor, MSO building I.P Estate, New Delhi-110002. For kind information please.
- 2. Pr. CE (M&F), 12th floor MSO Building, IP Estate, New Delhi-110002. For necessary action.
- 3. Pr. CE (Projects), 9th floor MSO Building, IP Estate, New Delhi-110002. For necessary action.
- 4. CE (East), 3rd floor MSO Building, IP Estate, New Delhi-110002.
- 5. CE (North), 5th floor MSO Building, IP Estate, New Delhi-110002.
- 6. CE (South), 7th floor MSO Building, IP Estate, New Delhi-110002.
- 7. CE (Flyover), 4th floor MSO Building, IP Estate, New Delhi-110002.
- 8. CE (Health), 2nd floor MSO Building, IP Estate, New Delhi-110002.
- 9. CE (Projects), 1st floor MSO Building, IP Estate, New Delhi-110002.
- 10. CE (Judiciary & Project Zone), 13th floor MSO Building, IP Estate, New Delhi-110002.

11 Website.

3//07/2029
Er. M.K. Mallick.
Engineer-in-Chief