

**LOCAL AND MUNICIPAL NOTIFICATION****II****(ந.க.எண்:ஜி1/46086/2021, நாள்:-12-2021)****RAJAPALAYAM MUNICIPALITY  
UNDER GROUND DRAINAGE BY-LAWS**

Tamil Nadu District Municipalities Act 1920, under sections 138, 142, 147, 148, 149, 306(5) (b), 306(6) the statutory rules for provision of residential Drainage System, Drainage pipes, Septic tanks and other sanitary provision and connecting them to the Underground Drainage system.

One who for his own sake or others provides sanitary or other provisions for his new house or builds them for the existing buildings or makes alterations for the existing system should strictly follow to the following rules and regulations.

1. To discharge faeces and night water (stool waters) and stagnant dirt, except in places where there is only open drainage system the drainage water discharges and the rain water accumulated from each building and its surroundings should have separate outlet facilities.
2. The rain water from the terraces (roof) of the houses and their surroundings and open spaces should not be let out to each the drainage gutters or pumping station. To facilitate rain water harvesting and improve ground water resources, the rain water should flow to a particular place without any block, as approved by the Municipal Engineer. A rain water harvesting structure is mandatory provision to get the Underground Drainage System connection.

3. The owner of the house or the tenants should provide such facilities that are necessary for the rain water discharges from the top of the building with proper, drain pipe and canals.

4. It should be clearly noticed that solid or liquids of faeces and gray water from wash basins or bath rooms should not mix with the rain water harvest process.

5. If such pipes are to be provided in wet places where water is likely to ooze. Further the rain water harvesting process needs to be done with cement concrete structures. If such provisions are to be laid in other places recommended by the Municipal Authority, they should be built over the cement concrete or they should be covered by cement concrete slab.

(a). The faeces and the black water discharged from the latrines and the gray water from the kitchen, bathroom or other places should have two different separate pipe connections in all residential areas. The internal building structure should be designed in such a way that the faeces and black water alone should fall into the underground drainage canals.

6. Construction of drainage system with UPVC Pipes. Those who lay drainages should use pipes of prescribed diameters. The inner diameter should not be less than 100mm. The diameter limit should be above the approved one by the Municipal Engineer or above the level of the water discharged.

(a) The Specification for the drainage gutter:-

The drainage should be in the pattern approved by the Municipal Engineer, as detailed below: -

Drainage of 110mm inner diameter – 40 : 1

160mm inner diameter – 80 : 1

If it is lesser than the prescribed norms approval of the Municipal Engineer is necessary.

(b) The drainage should be straight with a minimum number of bends in its course suitable bend pipes and canals.

(c) Necessary inspection chamber should be provided at the points of junction and bends to enable for future inspection in the event of dry block or failure in the system:-

(d) The following rules will be observed for granting connection for flats.

(1) Up to four latrines - Pipe 110 mm

(2) Above 4-8 latrines - Pipe 160 mm

In the event of increase in residence, the norms prescribed by the Municipal Engineer, should be followed strictly.

(e) For every residential flat occupied by owners the deposit, service charges and property tax must be collected separately from each and every owner of the apartments.

7. Drainage pipe connecting manhole should be round in shape, smooth surface, leak proof, rust proof, UPVC, DWC & CI Pipes. The pipes should be plastered with cement mortar both inside and outside of the joints should be tight and strong to prevent any inflow or outflow of water.

8. The specification for pipe connection laid as stated above as follows.

Inner Diameter	Minimum Gauge of Pipes	Minimum Depth of the Socket	Jointing material
(1)	(2)	(3)	(4)
<b>UPVC</b>			
110 mm	3.70 mm	68.50 mm	UPVC Solvent
160 mm	5.50 mm	96.50 mm	UPVC Solvent
200 mm	6.70 mm	114.00 mm	UPVC Solvent
<b>DWC</b>			
200 mm	15mm	54mm	Tyton O ring
300 mm	25mm	64mm	Tyton O ring
<b>CI</b>			
350 mm	16.30mm	100mm	Tyton O ring
400 mm	17.50mm	123mm	Tyton O ring

Pipes like the connection pipes should in the proper form with proper curves forming perfect circular shape. These pipes should be of UPVC , DWC & CI pipes.

9. All kind of pipes connections should be perfectly fixed of spare parts approved by the Municipal Engineer.

When the UPVC pipes are used in the drainage system, the pipe joints must be sealed properly with cement Solvent paste.

10. There should be wooden barricade in the pit to avoid any damage to surrounding places.

(a) Every pipe should be properly laid strong, further strengthened by pouring water. Where the soil is porous and wet drainage pipe should be laid on bed of cement concrete and plastered around as prescribed by the Municipal Engineer.

18. The gratings or ones made of other substances should be in relation to the diameter of the pipes enable free flow of air. Without being smaller than the inner surface of the pipe, but with adequate holes.

19. Unless there is no other way, the pipes position should not be circular or angular but should strictly adhere to sub-rule 16. The pipes as stated earlier should have an inner diameter of not less than 100 mm and the cover and edge should have been made of C.I. iron as per Indian standard specifications and they should be open to the provision of air.

20. It will be considered that if the stone ware pipe of the water tank or in every respect of their location, cross section area. Height and building pattern as per rule 18 they are supposed to have openings as per rule 19.

21. Pipes discharging the black and gray water should have an inner diameter of 40 – 50 mm and made of lead or cast iron. They should be placed just below the level of the toilet with siphon arrangements. It should also be possible to open them in times of need and clean. Further no outer air should enter into it.

22. Every discharges pipe should be laid concealed along the outer wall and end at the open-air drainage of the canal. It should as far as possible be of short in length.

23. Every such pipe as stated above should be fixed concealed as desired by the Engineer. If the pipes are of cast iron, they should have holder bats or handles suitably fixed at proper points.

24. The water tank, the drainage cell, their accessories of operation, the basins for black or gray water, urinal and porcelain should all have connection with separate tubes of water. A side of the urinal should be the outer wall. No urinal or latrine should have access through a kitchen, store-room, or rooms in use or machine rooms of factories. Normally they should have access through an open area.

25. Such urinal or latrine should have 125 cm, 85 cm, as their minimum inner scale specifications. If they are located near the residential room of the house or machine rooms of a factory, they should have a complete concealing wall or bricks and jelly from the top to the bottom. Such urinal or latrines should be built of smooth but with strong materials. The floor should be wet free from any water inflow. If they are built on a higher level, they should have 13 mm to 30 cm and flow near at a distance of 0.05 mm. The floor level of any urinal or latrine should be 15 cm above the outer floor level. The urinals and latrines should have doors looking facilities.

26. There should be a window or an opening of 1900 Sq.cm on one of the walls of the urinal and latrine. Air hole of 120 Sq.cm near the floor of 460 Sq.cm at higher levels should be provided for free air flow.

27. Solely to clean the urinals or the latrines a twelve litre tank or if permitted by the TWAD Engineer a fifteen litre tank may be built there without room for water wastes. The tanks or its pipe should have no connection with drinking or other normal use water provision. The tank should be 1.5 meter above the floor level where water is likely to fall.

Every tank should have a circular shaped pipe with control wheel. Any overflow of water should be able to be watched from outside and the discharge pipe should facilitate it. But no water should directly flow into the drainage.

28. Under no circumstance, no automatic water discharge arrangements can be made unless a written permission is obtained from the Municipal Commissioner. In addition to the permission from the Commissioner permission has to be got from the Municipal Commissioner for the plan of the construction informing him the details of the construction with the materials to be used. The plan needs to be modified as directed by the Municipal Engineer.

29. The pipes, connecting the basins of the discharged water and water from urinal or latrine, with lids and joints should have an inner minimum diameter of not less than 32 mm in all places and should be horizontal to the maximum extent possible.

30. The basin accessories for the urinal basin or latrine used should be similar to ones approved by the Municipal Engineer. They should satisfy the following conditions.

(1) The shape model and capacity of the container.

a) It should contain enough water.

b) The faeces discharged in the basin should move down freely to the water on its own. The urinal basin should as far as possible be small.

c) It should be possible to have them clean completely with a little water.

(2) The basin should not be of the type of remove it out and clean it. If permitted as special case alone they should be connected directly with siphon arrangements. There should be water up to the level of not less than 51 mm between the drainage and the stone were pipes. The outer mouth of the siphon should be except in extraordinary cases, visible to the viewers.

(3) There should be provision to flush the water in and discharge and water out.

(4) No basin, tank or other provision should be covered with lids of wood or any other thing.

**31. Drainage pipes:-** The primary pipe carrying solid and liquid discharges should be far outside the building, as far as possible. They should have been made of UPVC. If for some reason or other, they are to be laid inside the building but built with connections easily visible from outside. The inner diameter should be uniformly 110 mm.

32. The base of the drainage pipe should be made of PVC and strongly connected. The UPVC pipes, if used should have holder bats. It is enough these pipes should be connected with the proper provisions of the wall, to the satisfaction of the Municipal Engineer.

33. If the head of the drainage pipes, inside or outside should be away from the rain water pipes or other such pipes without contaminating them. There should be not traps between the heads of the drainage pipes and the outer drainage pipes.

34. The head of the drainage pipes should be of circular shape of not less than 50mm diameter. Except where it is impossible the inner or outer pipes running high in a building should have a diameter of not less than 110mm. They should be sufficiently be in a higher position with no curved or angular structure. Such pipes taken to higher levels, should have a suitable opening to discharge the impure air. They should be in accordance with the provisions of the rule 16 a, b and c.

35. The drainage pipes and outer pipes discharging water if built over higher terrace they should be air tight and should be got tested in the presence of the Municipal Engineer one authorized by him smoke be sent inside the pipe and got confirmed that or does not leak put anywhere.

36. **Ventilation to urinal trap:-** When an urinal is built, if the pipes of the urinal are connected with the trap lines of the drainage every trap should have facilitate to let outer air in, it should be place higher at top line (head pipe) or at the top of the urinal line pipe whichever is at a higher level to enable free flow of air. The line connecting the trap and air pipe should face the pipe line carrying the water.

37. The air pipe should be of cast lead or iron as specified in rule 26 and fixed as stated in rule 28. If the pipes are to be laid inside a building it is enough they made of lead.

38. If one for himself or for others builds drainage it should never be connected with the urinal built of mud, ash or the container of the wastes.

39. **Open drainage:-** If there is already an open drainage for the discharge of rain water or other discharged water, no permission will be granted for building a fresh open drainage for black water.

40. A trap and a sand filter should be provided for every drainage of the house at places specified by the Municipal Engineer as per the instructions.

41. The owner of the building should make every arrangement for the Municipal Engineer or his deputy to inspect all the aspects of the drainage pipes and traps.

42. If one wants to build a drainage in a building or effect alterations for the existing ones he should apply with plan 30 days in advance by applying in the prescribed form obtainable paying rupees twenty five.

43. If the Engineer suggests any alteration in the proposed plan a fresh plan should be prepared and got approved and such approved plan should be placed at the construction site.

44. The work should commence within three days after the approval is obtained from the Municipal Engineer. After the permission is obtained except for the final completion at the road end, all other work can be finished by the applicant.

45. No one except the authorities of the Municipality should undertake drainage work without the prior permission of the Municipal Commissioner.

46. (a) One who builds, effects alteration or attends to work related to it in a drainage should pay in advance the due fixed deposit and service charges as detailed below (Service of discharge of black and gray water)

**Fixed Deposit and Service Charges for UGS Connections.**

Plinth Area of Assessment in Sq. Feet	Proposed Deposit (Rs.)			Proposed Tariff (Rs. Per Month)		
	Domestic	Non-Domestic	Industrial	Domestic	Non-Domestic	Industrial
<500	7500	15000	15000	100	300	300
501-1200	10000	20000	2000	120	360	360
1201-2400	12500	25000	25000	140	420	420
2401*	15000*	30000*	30000*	160*	480*	480*
Wt.Average	8427	18367	21563	107	340	379

\*This is the base rate for the plinth area of 2401 sq.ft. The deposit and tariff for plainth area above 2401 sq.ft. shall be increased in proportion to the increase in plinth area/

He should inform in writing the Municipal authorities before 7 days of the details of open drainage, the foundation and other provision and their readiness for inspection. He should also inform the date and time of the closure of the drainage work (for the quarters, rest houses or commercial agencies)

46. (b) 10% of UGSS Connection Service Charge and Deposit Amount will be raised for the every year.

47.No drainage pipes or other similar provisions should be connected with the Municipal drainage unless and until they are inspected and certified to the effect that they are all in accordance with the rules and needs of the Municipality by the Municipal Engineer. Permission will be granted only on application for the connection supported bythe copy of the order of approval. If it comes to the notice of the Municipality that pollute water flows into the connection pipe or something, causes obstruction to the drainage, connection will be withdrawn.

48. One who is desirous of connection the drainage of his house with that of the Municipality he should pay the expenses for it to the Municipality. The amount so paid will under no circumstance be refunded. A plan and estimate should also be given to the Municipality for effecting the pipe connection. A further amount of 10 percentage of the estimate should also be paid before the construction starts towards supervisory charges.

48. The plan should contain the following: -

(a) it should be of 2cm to one.

(b) An index plan of 1 :10 should be drawn with the new drainage proposed and manhole marked in red and the existing ones marked in a different colour other than red. The correct address, the door number and the name of the street should also be furnished.

(c) The cross diagram of the proposed connection should be furnished.

(d) The approved building plan of the Municipality also be enclosed with any application for drainage connection.

49. **Fines:-** If one deviated from the above rules they will be subjected to following punishments: -

(a) A fine of Rs:1,000/- will be levied or

(b) A further recurring fine of Rs: 100/- per day also be levied if one continuous to deviate from the rules even after he receives a notice from the Municipal authorities. All owner or a builder on his behalf who starts construction in deviation to the rules of the Municipality will be issued a notice by the Municipal Commissioner to remove, alter or demolish it on a particular day. Contrary to the notice of the builder or the owner fails to justify his construction and represents its needlessness to remove or alter or demolish the construction and collect the charges for such acts from him. If one fails to abide by the condition it is informed that he is liable for punishments stated above.

(c) (1) In case of transfer of the right of the construction, the receipt of the payment of charges should also be transferred to the new names on proper application to the Municipality. Otherwise such the connection will be considered illegal and additional service charges for connection and fixed deposit will be collected.

(c) (2) An additional surcharge of Rs:10/- per month will be collected from the owner if the service charges are not paid within 15 days or the receipt of the notice from the Municipal Commissioner.

**General Rules**

1. No one should damage the drainage pipe knowingly or not.
2. No one take away or steal the lids of the manholes, police action will be taken against such persons.
3. The Municipal has rights to take action as per the sub rules against persons altering or damaging ventilation pipes for air facilities in the course of the drainage.
4. No pits for any erection of pandals or constructing building should be dug in the course of the drainage. If necessary they should do it only with the consent of the Municipality. Otherwise a fine of Rs: 1,000/- will be levied against any unapproved action.
5. Any block in course of the drainage should immediately be intimated to the Municipal authorities. They should under no circumstances dig any pit themselves creating any stagnation of water.
6. The rainwater or other drainage water should not enter the manholes breaking away the holes. Serious action will be taken against them and punishment up to a fine of Rs.1,000/- will be levied when it comes to the notice of the Municipal authorities.
7. No rubbish should be thrown out that would cover the manhole or their ventilation provision service action will be taken against person who commit such and they liable to a pay fine of Rs: 100/- per day.
8. Things stated in sub-rule 6(a) brought by the builder need be scrutinized and approved on satisfaction of standard specifications and permission granted for drainage connection. On completion of the work the owner or the builder should apply in the prescribed form and connection permission obtained from the Commissioner, Engineer or other authorized official. After the work is over, the completion report duly signed by the competent person should be furnished to the Municipality.

9. If without the knowledge of the Municipality, any work of repair for damage, leakage or the extensions of the service is undertaken against the sub-rules the license granted earlier will be cancelled, deposit forfeited and further proceedings initiated.
10. Everyone who undertakes repair work in drainage system should produce the particulars of earlier sanction of its original construction for due scrutiny of the Municipal authorities under proper acknowledgement.
11. All materials used and all work carried out are subject to the supervision and sanction of the Municipal Commissioner, Engineer or any authorized officer.
12. The pipes, Y bends, traps and other accessories used in drainage connection should be on par with the things kept in the office or store of the Municipality satisfying the specification of the standard control authorities. No pipes, bend or other accessories not approved by the Municipality should be made use of.
13. If the drainage connections need to be discontinued or renewed the owner or the builder should apply to the Municipality in writing and no license should undertake it without prior permission.
14. One who does the drainage connection work or repairs without observing the sub-rules or regulations or if he does not obey the order of the Municipal authorities or if the work is found to be unsatisfactory and brought to the Executive Officer or Commissioner his license will be cancelled. Fine levied and further proceedings undertaken against him.
15. The estimate for drainage connection, repairs or extension should be in accordance with the sub rules and other rules.

### **Ban of entry of Workers in Sewer System**

Government in G.O. 293 M.A.&W.S. (MW) Department dated 26-11-2010 has passed a comprehensive order banning the entry of workers in to the Sewer System / Septic Tank.

The entry of sanitary workers whether public or private into public sewerage systems or into the sewerage systems within private premises, on any pretext is totally prohibited except under the exceptional circumstances mentioned in the orders dated 20-11-2008 of the Hon'ble High court of Madras in WP No.24403 of 2008.

#### **Exeptional Circumstances permitting of manual labour with safety gadgets as per the orders of the Hon'ble High Court of Madras in W.P. No.24403 of 2008.**

- a) For the removal concrete / FRP manhole door which gets damaged due to the heavy vehicular traffic and often falls inside the manhole causing obstructions / blocks in the sewer and which results in the blockage of sewerage system and where mechanical equipments cannot be put in to use.
- b) For the purpose of inter-linking the newly laid sewer main with the existing sewer main, where it will be wholly necessary to block the main sewer main in the serving manhole. Entry of sanitary workers on such occasions has to be necessarily permitted, in as much as it is started that large size sewer, i.e., where the diameter is more than 300mm, blocking the sewer main to enter the main hole and that too with necessary safety gadgets for blocking the sewer temporarily.
- c) For the removable of submersible pump sets fixed at the bottom of the suction wells, which goes out of order, for which the sanitary worker has to enter the well again with necessary safety gadgets after emptying the sewerage from the well in order to remove the pump set. It is made clear that before allowing any sanitary worker to enter on such occasions, steps be taken to see that the sewage is totally emptied and hereby further ensure that no poisonous gas remains in the sewerage line.

d) For the reconstruction of the man hole or rectification of the sewer main due to any damage caused by sinking of man hole covers / sewer line when the sewage pipe line gets blocked or gets obstructed, which results in the system getting surcharged. Here again, before allowing any sanitary worker to enter the sewer line, it is essential that sewage line is emptied by blocking the main hole in the systems on either side of the sinking man holes / damaged man holes.

Even the above four instances, the entry can be permitted, only for the workers with safety gadgets under the supervision of qualified engineer.

#### **Annexure-2**

#### **Format of the Undertaking to be given by Contractor in cases where the cleaning and maintenance of Sewerage Systems (including Septic Tanks) is Outsourced**

- 1) I (Name, Age, Father's name and Address of the Contractor) am aware of the directions of the Hon'ble High Court of Madras in its order dated 20.11.2008 in W.P.No.24403/2008 and the orders of the Government of Tamil Nadu in G.O. (MS) No.293, M.A&W.S (MW) Department, dated 26.11.2010. regarding the ban on manual scavenging and on the entry of sanitary workers into the sewerage system or septic tank. I undertake to abide by the said directions of the High Court and Government Order in this regard.
- 2) I shall not allow sanitary workers to enter into the sewerage system / septic tank for cleaning or maintenance operations except in the 4 circumstances permitted in the orders of the High Court in W.P.No.24403, dated 20.11.2008. I am aware that even in these 4 circumstances, I should allow the workers to enter only with adequate safety gadgets and under the supervision of a qualified staff, and only after duly observing all safety precautions including testing for the presence of toxic gases.
- 3) I am aware that violation of the said directions of the Hon'ble High Court and the G.O. will attract punishment under section 14 of the Employment of Manual Scavengers and Construction of Dry Latrines (Prohibition) Act. 1993.

**Annexure-3****Additional conditions to be included in the Bid Documents as well as the Agreement with the Contractor in cases where the cleaning and maintenance of Sewerage Systems (including Septic Tanks) is Outsourced.**

- \* The contractor shall strictly abide by the directions of the Hon'ble High Court of Madras in its order dated 20.11.2008 in W.P.No.24403/2008, and the orders of the Government of Tamil Nadu in G.O.(MS) No.293, M.W.&W.S (MW) Department, dated 26.11.2010, regarding the ban on manual scavenging and on the entry of sanitary workers into the sewerage system of septic tank. All cleaning and maintenance operations shall be done only through mechanical devices.
- The contractor shall not allow sanitary workers to enter into the sewerage system / septic tank for cleaning or maintenance operations except in the 4 circumstances permitted in the orders of the High Court in W.P.No.24403, dated 20.11.2008 namely.
  - i. For the removal of concrete / FRP manhole door which gets damaged due to the heavy vehicular traffic and often fails inside the manhole causing obstructions / blocks in the sewer and which results in the blockage of sewerage system, and where mechanical equipments cannot be put into operation.
  - ii. For the purpose of inter-linking the newly laid sewer main with the existing sewer main, where it will be wholly necessary to block the main sewer main in the servicing manhole. Entry of sanitary workers on such occasions has to be necessarily permitted, in as much as it is stated that large size sewer i.e., where the diameter is more than 300 mm, blocking the sewer main from the top of the manhole is not possible and only the sanitary worker has to enter the main hole and that too with necessary safety gadgets for blocking the sewer temporarily.
  - iii. For the removal of submersible pump sets fixed at the bottom of the suction wells, which goes out of order, for which the sanitary worker has to enter the well again with necessary safety gadgets after emptying the sewage from the well in order to remove the pump set. It is made clear that before allowing any sanitary worker to enter on such occasions, steps should be taken to see that the sewage is totally emptied and thereby further ensure that no poisonous gas remains in the sewage line.

- iv. For the reconstruction of the man hole of rectification of the sewer main due to any damage caused by sinking of man hole covers/ sewer line when the sewage pipe line gets blocked or gets obstructed, which results in the system getting surcharged. Here again, before allowing any sanitary worker to enter the sewer line, it is essential that sewage line in emptied by blocking the main holes in the system on either side of the sinking man holes / damaged man holes.

Even in the above four instances, the contractor should allow the workers to enter only with adequate safety gadgets and under the supervision of a qualified staff, and only after duly observing all safety precautions including testing for the presence of toxic gases with a gas detector. Naked flame method of testing the presence of poisonous gases is hazardous and should be strictly avoided.

- \* Even in the non-exceptional circumstances, consideration of safety of the workers shall be paramount and the contractor shall ensure the same.
- \* The contractor should indemnify the employer for any loss or damage caused by his negligence or by his non-observance / violations or any labour laws.
- \* The contractor should take out insurance policies under the Workmen's Compensation Act, 1923 for all the workers engaged by him and a photocopy of the insurance policy should be furnished to the employer. The policy should be kept alive till completion of the contract.
- \* The contractor should impart safety education to all his workers and train them in the use of safety gadgets.

#### **PUNISHMENT**

Whoever deviated the rules (even if a child deviated if he should be prevented from doing it) will levied a fine of Rs: 100/- and in case of continued deviation or compound (daily) fine of Rs: 100/- will be levied and legal action through the police executed.

Sd. ....  
*Municipal Commissioner,  
Rajapalayam Municipality.*