Report of the Subcommittee to examine the water system in the colony

- 1. The subcommittee was constituted vide circular JVVHOWA/HYD/5 dated 16 Oct 2015. The committee was not provided with any authenticated layout drawings of the pump houses, supply and distribution pipe lines and associated controlling valves etc. The committee was therefore left with no other choice except physically locating and identifying the system as best as possible with the help of the plumber and available (tender) drawings. The committee also Co-opted some more members to benefit from their practical experience to pool up and assimilate the knowledge about the existing water supply and distribution system of the colony, study and prepare recommendations for improvement & sustenance of the water supply positon to the dwellers of the colony.
- 2. The sub Committee constituted the following FIVE members of which members at SIs 2 & 5 were Co-opted and subsequently ratified by the Board of Managers vide JVVHOWA/HYD/114 dated 03 Feb 2016.

S No.	Name	DU No.
1	Dr N Chalamaiah	DU No 110
2	Cdr S Ashok Kumar	DU No 85
3	Wg Cdr PM Rao	DU No 158
4	Lt Cdr VVS Nayudu	DU No 114
5	Sri N Kalyan Raman	DU No 194

3. SYNOPSIS:

The study started with the water supply from HMWS&SB

- Water Supply lines
- Sumps
- Pump houses
- Overhead tanks
- Distribution lines in the 1st and 2nd phase
- Functioning of water meters for the individual dwelling units
- Personal sumps in the dwelling units
- > Hindrances to the water supply & distribution lines due to the intrusion of roots of the trees into the pipe joints
- Up lifting and damaging the Water supply and distribution lines
- Decay of the water supply and distribution lines due to aging and
- > Finally identify the problems and
- Give the best available solutions for the identified problems.

4. WATER SUPPLY:

The JVVHOWA has two sources of water supply. One is the Manjira by HMWS&SB and the other is three number of Bore Well[BW] [one adjacent to DU 285 which is operational, second one is a non-functional BW beside Akash Ganga & third one is a no-functional BW at DU 74]. As sufficient water supply from HMWS&SB is available, the committee opined that – this should be taken as the only source of supply to the DUs. Bore Well source should exclusively be used for water supply to Gandhivan, other plantations, Akash Ganga & shopping complex in the colony.

5.	However, bore well supply could be connected to the Sump at OHT No.2 [through the BW connection to the
	distribution line at] and Manjira could be connected to all areas to which bore water is supplied. Inter
	connection between these two water sources will facilitate to meet any exigency.

6. Manjira Water supply to the JVV:

- a. The water supply to JVV is through a 6" dia. CI pipe line of HMWS&SB which is entering at the south gate adjacent to west abutment. It is metered with digital meter immediately after the security post. There are 2 water meters fixed. One is directly fixed on the water supply pipe line and followed by the SI. Valve and the other is its reflection fixed in the security shelter at the south gate. It is noticed that main meter and the reflector meter are giving different readings and the bill is claimed as per the meter maintained by the HMWS&SB which was a different reading from these two meter readings. Both the meters monitoring the supply of incoming water are to be calibrated to give the actual quantity of water being drawn by the Colony. (These meters have since been calibrated and both meters are reading the same).
- b. The water supply line connecting the HMWS&SB after the meters is a 6" CI line. After crossing the road to the east at DU 39 it is bifurcated into two 6" CI lines one to go to the 1st phase head works and the other to go to the 2nd phase head works.
- c. There are 5No. 6" SI. valves and only 2 filters. The filter at the gate before the water meter may be checked (This has since been checked and cleaned). The filters may be checked occasionally (half yearly) to ascertain the smooth working of the filters.
- d. A water meter along with filter should be fixed at the 2nd phase OHT before the TWO SLUICE VALVE's near the sumps. This meter is needed to know the losses in the lines before reaching the sumps. Filter is needed to prevent damage / non-functioning of sluice valve. Valve do not close fully due to dirt accumulation at the base of the Sluice Valve causing water leakage.
- e. The two meter readings at OHT 1 (one to each sump) and this new meter at OHT 2 when fitted and all the three meter readings when added should be equal to the meter reading at the gate. The difference if any will indicate the input line losses.
- f. The entire run of incoming supply pipe is 6" CI and is seen in satisfactory condition except for locations where trees are above / in the vicinity of the pipe line. These trees are listed in the map showing the line diagram of 6" CI water supply line, which need to be cut / felled after duly taking the approval from forest Dept. The same are listed below.

	Trees to be felled for protecting the 6" CI water supply line						
S No.	Location of trees to be felled	No. of trees to be felled					
1	At road No.2 from south gate in front of DU 40	2					
2	Along the South-North road between DU 40 & 59						
3	Along the South-North road between/ at DU 66A						
4	Along the South-North road adjucent to the garden near main road junction	1					
5	Along the South-North road between/ at DU 315	3					
6	Along the South-North road between/ at DU 301	1					
7	Along the South-North road Gandhivan park	2					
8	Park area opposite Basket Ball Court upto sump	5					
	TOTAL No. of TREES to be FELLED	19					

7. **SUMPS:**

- a. Sumps could also be source of water losses. Seepage in the sumps has to be verified by measuring in the following manner:–
- (i) Fill-up water in the sump and then measure the level from the rooftop of the sump to the filled-up level of water.
- (ii) After a gap of 48 hours storage without use, re-measure the water levels and observe for any drop in the level of water in the sump.
- (iii) If any appreciable losses in the sump is noticed, repairs are to be carried out. After the tests & repairs of the sump is completed, the Sump is to be cleaned immediately.
- (iv) This activity is to be done for all the FOUR Sumps, one sump at a time.
- (v) This activity is to be conducted once a year in the month of Nov and a mention of this to be done in the Board of Managers Report of AGM.
- b. All the sumps are to be attended with minor repairs, plastering where ever external damages are observed
- **c.** Painting is to be done to the exposed parts of cement structures, CI, GI pipes and other structural elements during November in alternate years after doing it now in Year 2016, Feb / Mar.
- d. The water received from HMWS&SB into the main sumps. There is no automatic control to stop the water when the sumps are filled. These overflows from the sumps is resulting in losses of water and also creating unnecessary pressure on the sumps which is not a healthy practice. This may be rectified by incorporating the suitable controls in the sump filling arrangements and / or hooter / light indicator.

8. Pump houses:

Both the pump houses are looking unsafe and shabby, dumped with the unwanted material of the colony. These shabby materials in the pump house may be removed, sorted and stored safely in a store. The wire connections in the pump house are of temporary nature. These connections be done properly and the distribution boxes be closed for safety. The inside & outside the areas of the pump houses are to be cleaned regularly to present a hygienic state.

9. Overhead tanks:

- a. Bird proofing measures to the overhead tanks are to be cleaned and painted biannually to serve their useful purpose. They may be repaired/ replaced whenever necessary. Overhead tanks are also to be cleaned biannually and whenever needed. They may be whitewashed / coloured regularly once in 2 years.
- b. These measures are for maintenance of health of the colony residents and the same may be meticulously implemented and mention the same in the report of BOM for AGM
- c. The overhead tanks are not provided with any automatic controlling arrangements for controlling the overflow of the tanks and where provided, are not functional which is resulting in loss of water. As such suitable overflow control device be fixed / repaired to stop the motor functioning and subsequently the overflow from the overhead tanks.
- d. To reduce the overflow wastage from OHT's, connect back the overflow to the sumps and have a reduced small pipe of 3/4" dia as an overflow pipe.
- e. <u>Lightening Arresters:</u> The functioning of lightening arresters at both the OHT's are to be checked periodically as a 6 monthly routine. It must be done in May every year prior to monsoons.

BORE WATER SUPPLY AT J V V

10. BORE CONNECTION SUPPLY & DISTRIBUTION DETAILS:

Out of the three bore wells in the colony, presently one bore adjacent to DU 285 is only Operational. Other two – one at Akash Ganga and second at DU 74 are non-functional.

- a. All gardening locations are to be provided with the bore water connection as shown in the drawing by Green color. At regular locations, new syntex tanks are shown which needs to be installed to fill water when bore is 'ON' and later used to water the gardens. These are a total of 10 new Syntax tank about 300 to 500 Ltr capacity and their locations have been shown in the diagram. One tank is already available at the Tennis Court. Further, for effective use of the BW, without overloading it, about 30 gate (open & close) valves are required, to use the Bore Well water in a controlled way for all the gardening spots. This also ensures sufficient water pressure to the pipe line under use.
- b. Akash Ganga & Office Complex is to be provided **ONLY** with bore water. Only kitchen [1st floor] of the Shopping complex is provided with Manjira water which is metered. However, the present meter is to be shifted to the uptake line to the kitchen at the shopping complex.
- c. Manjira water can be supplied to both Akash Ganga and Shopping Complex by opening the Valves Vo & V6. Two Water meters for Manjira water usage at community hall and shopping complex is to be fixed before the valves V0 & V6 as shown in the drawing.
- d. It is proposed that the defunct Bore Well [BW], adjacent to Akash Ganga is to be made operational to utilize the water for gardening exclusively. This needs to be connected to the existing BW at Akash Ganga Pipe line by connecting 2 valves VN1 & VN2. Electrical supply to the bore well is also to be taken. The pipe line connection details between bore-wells are as shown in the drawing. Alternatively, if BW adjacent to Akash Ganga cannot be retrieved, locate a suitable place for a new BW.
- e. We should go in for a new BW in the south area of our colony near OHT1 / adjacent area to DU 40 & 59 for gardening in the Southside and also it should be connected to the smaller sump at OHT 1. This will be a substitute BW for present defunct BW at H.No 74 which needs to be disconnected both piping & electrical.
- f. Additionally, a cycle rickshaw with 200 liter drum be provisioned with tap and pipe to water plantations at remote areas instead of long pipes being pulled on the road for watering the garden. It could be fitted with battery operated small pump to give outlet pressure.

11. Distribution of Manjira Water to DUs from OHT1 & OHT2

- a. <u>CI & RCC PIPE LINES</u>: The distribution lines both in 1st phase and 2nd phase (Cast Iron & RCC) are in satisfactory condition and expected to serve satisfactorily with present type of regular maintenance for further 5 to 10 years. Action for replacement may be considered based on their future performance. However, the pipeline directly below or in the vicinity of large trees will get affected soon. The list of all such trees is placed at the enclosure. Presently, trees on / in the vicinity of the Distribution Pipe lines is 133 Nos of trees and when additional pipe lines are laid to make loops, the total no of trees to be felled is 159 Nos. It is suggested that felling of large trees be taken up on priority in the first stage and balance be felled in a phased manner. The Board of Managers need to discuss up-rooting / cutting of these trees with Forest Dept showing the photo attached
- b. Presently, on 14 Jan 2016, one tree near DUNo 216 has damaged the 3" RCC pipe line which is a live example of likely occurrences in the future and its photo is attached. Since, this is serving only 3 Houses, a NEW HDPE 2" pipe line has been laid from the 3" RCC line after dummying the damaged area.
- c. Changes in the main distribution line has been proposed by running a parallel additional pipe of 3" or 2" HDPE line to form a loop, so that the last DU / DU block gets equal pressure of water.

12. Valves & Pipe Lines to be Physically Located:

- a) The air valve shown in the drawing at H No. 61-B may be verified for its existence and also for its working condition as it is covered with consolidated earth and the same be repaired / replaced if necessary.
- b) Similarly, the 3" CI pipe line across the double road from near DU no 85 to DU no 93 / 93A be also physically verified.
- c) Also the 3" CI pipe line from near the Security room along the compound wall up to DU no 339 be also physically verified along with the valve near DU no 339.
- **d)** <u>Valves:</u> It is observed that all the valve pits in both Supply and Distribution lines have not been maintained. The valve pits are full of earth and majority of them are leaking. All the valve pits are to be cleaned, cement boxes be made and valves be repaired, painted and maintained to avoid water losses. It is advisable to fit filters before the valve to avoid leaks in the valves.

13. **GI PIPE LINES:**

- a) The G I pipes drawing the water to DU / DU blocks from CI / RCC line are the only pipe lines that are getting rusted both at the joints at CI / RCC and also along their run in the ground from the main distribution line up to the individual DU / Dwelling Blocks. Part of the water losses is attributable to these GI lines.
- b) Replacements of GI lines supplying to Dwelling Units / Blocks away from the main distribution line has to be taken up on priority in a phased and planned manner.
- c) Independent DU near to main distribution line can be taken up in the second phase.

14. Plan of replacement of Existing GI Pipes:

- a) The way forward with minimum work of digging the roads which have been recently laid has been examined by the Committee and proposes a shorter run of the final distribution line to the Dwelling Units / Blocks.
- b) The details of the pipe line works is enclosed in an Excel Sheet and also marked in the Drawing.
- c) Replacement of GI pipes by HDPE pipes for DU's are to be taken up immediately as detailed in the excel sheet enclosed and also shown in the drawing.

15. Multistoried Dwelling Units Piping Policy:

- a. It is proposed to uniformly supply 6/7 OHT's from one connection of 1½" HDPE pipe line in the Flats DUs [102 to 173] branching from 3" CI distribution line and run it as a 1½" loop around the OHT's so that uniform pressure is available to each OHT. From this 1½" HDPE pipe, each tank is connected to the ¾" existing GI line. This policy is for DU block having six DU's.
- b. For DU block of 4/5 OHT's, it will be 1 ¼" HDPE pipe instead of 1 ½" HDPE pipe. Rest process is same.
- c. Similarly, the Kitchens will get uniformly 1" HDPE pipe before bifurcation to the kitchens and connect to the individual GI pipe lines [for both 6 & 4 DU blocks].
- d. It is suggested that Water Meters near OHT's be positioned at convenient location for access to take water readings.
- e. With respect to Flats / DU [174 to 215] existing distribution line's is considered adequate and can continue except to replace all underground GI lines from the distribution line by a HDPE pipe of the same size till the uptake of GI line of the block.
- f. Two additions are suggested to have uniform pressure by creating a loop. Make a loop by joining the end terminated at
 - i) Near DU block 196 to 201 terminated at DU 196 with the main line at near meeting point of DU blocks 182 to 185 & DU block 186 to 189.
 - ii) Near DU block 212 to 215 terminated at DU 215 before the air valve with the main line near meeting point of DU blocks 182 to 185 & DU block 186 to 189.

16. Disconnect all Manjira Water tapped for Gardening and other General Purpose.

As a policy Manjira water connection is to be given ONLY to DUs and hence the following connections shall be removed and dummied. These water tapings points are:

- i) One each at OHT1 and OHT2.
- ii) Two points one behind JVV Shopping complex & other beside TT Room.
- iii) Tap in front of DU 274 in Garden area, One Opposite DU 265 [Now closed][Water still leaking from the joint].
- iv) Tap near Fountain for gardening opposite DU 242.
- v) Tap adjacent to DU 260 for Gardening.
- vi) Pipe line from OHT 2 to Lawn Tennis court. [This pipe has since been removed and re-laid connecting bore water from Gandhivan].
- vii) Tap to be removed from OHT 2 to Pipe up to Fountain opposite DU 240. Fountain should be connected with BW water from across Akash Ganga as shown in the diagram.
- viii) Over and above these locations if any other tapings exits should be disconnected.
- 17. It is Observed that watering of the plants along the road divider / median on the East West road is done from Manjira water from the Security room tap [This is not metered]. BW connection is to be used for this pupose and the hose pipe be laid as shown in the drawing on a priority.

18. WATER METERS TO Dwelling Units and Water to SUMPS at DU's:

- a. As a policy to avoid tampering of meters, all inlet water to the DUs are to be metered at the entrance point of the pipe at the DU
- b. These meters are to be fixed minimum 6" above the Ground Level and inlet should be only to the OHT's except the kitchen connection.
- c. No sumps should be fed directly at the Ground level.
- d. DU's having sumps, needing to take water to their sumps, should take only from the Overflow of their OHT's (through a pipe from their OHT) to ensure uniform pressure to all DU's as designed originally.
- e. Inlet water to DU's is by gravity pressure only and fitment of power gadgets / tampering the inlet line / water meter is illegal and prohibited. Severe penalty / legal action as deemed fit shall be taken by JVVHOWA against the offenders.
- f. Any DU having a problem of insufficient water supply to OHT be brought to the notice of JVVHOWA in writing so as to study and find a solution.
- 19. Water & maintenance charges are to be paid by all ER, unless they are inclusive in the DU. Such ER's are to obtain written exemption from JVVHOWA.
- 20. The Colony is fitted with water Hydrants [At near OHT1, and at opp block 153-157]. All the water Hydrants are to be tested on a 6 monthly basis and this should part of the report of BOM for AGM.

21. SUMPS in Dwelling Units.

There are as on date 36 DU's having Sumps underground / on the Ground [Syntax tanks]. These are shown in the drawing and are following DUs:

DU's: 4. 7, 10, 52, 54, 61, 61A, 62B, 65, 69, 72, 79, 81, 85A, 92, 93A, 94, 101, 217, 238, 239, 240, 256, 261, 262, 271, 274, 276, 288, 295, 307, 309, 321, 322, 324 and 340

22. Location of Water Meters which are not at entrance to DU's:

There are 61 number of DU's having the water meters way inside their DU's and these are: DU Nos: 1, 2, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 20, 21, 22, 23, 27, 31, 35, 37, 38, 40, 42, 43, 44, 47, 48, 49, 55, 56, 57, 58, 61, 62, 63, 64, 66A, 68, 69, 70, 71, 73, 75, 76, 85A, 87, 88, 89, 90, 93, 94, 95, 97, 98, 99, 253 and 259.

WATER CHARGES JVVHOWA

23. Water supply agreement Synopsis::

Salient points of agreement of water supply by the HMWS&SB and JVVHOWA are as follows:

- a. An agreement is made with the HMWS&SB to supply 400 kl/day of water with a provision of 10% excess allowance (440 kl)/day or 13200 kl /month at a normal rate of water at Rs.13.50/kl
- b. A penalty of 100% additional i.e. Rs.27.00/kl is charged for the excess drawn over and above the permitted quantity.
- c. A minimum charge for 60% i.e. 240 kl/day or 7200 kl/month has to be paid even if less quantity is drawn or even if nil quantity is drawn.
- d. It is observed from the records, that in the last 20 months the minimum and maximum quantity of water drawn was 7898 kl and 9718 kl in September and April 2015 respectively. [In the absence of correct water meter readings at the intake point of the colony, it is presumed that the readings provided by HMWS&SB for billing are correct]. .[Details Para 27 below].
- e. A large quantity of water is lost/ not accounted for every month due to various reasons. The loss per month is of the order of 9.7% to 31.2% (791 kl to 3012 kl) in Feb. and Oct. 2015 respectively.[Details Para 27 below].

PRESENT WATER CHARGES AT JVVHOWA

24 The water supplied to the DUs per month is presently charged as under:

0-15 kl/month	Lump Sum Rs.200/- @ Rs 13.33/kl	This is the minimum charge		
➤ 15 kl &	Lump Sum Rs 200+ Excess over	In addition to the Rs.200, the excess over		
up to 35	15kl at Rs.23/kl upto 35 Kl.[for	15 kl not exceeding 35 kl is charged at		
kl	Max 35Kl @ Rs18.86/kl]	Rs.23/ kl. Max Rs 660/= for 35kl.		
➤ 35 kl	Lump Sum Rs 660 + excess over	In addition to Rs.660, the excess over 3		
35 kl charged at Rs.135/kl		kl/month is charged at Rs.135/ kl		

25. The water bills of the DUs at random for the month of Nov.2015 is as under:

0-15 kl/month billed at Rs.200	117 DUs+13 ERs (total 130)
Up to 35 kl/month at Rs.200+ 23 for every kl	215 DUs+ 1 ER (Total 216)
consumed over and above 15 kl	
Above 35 kl /month at Rs.660 + 135 or every kl	25 Nos.
consumed over and above 35 kl	

26. OBSERVATIONS in the water bills of JVVHOWA

- a. <u>The meter reading of "0" kl month</u>: It may be due to the reason that the DU is not at all occupied during the month or the meter not working.
- b. The meter reading of less than 10 kl/month: It may be due to the less No. of occupants (1 or 2) or the DU is not occupied for some days during the month.

- c. The penal charges for excess consumption above 35 kl/month at the rate of Rs.135/kl is considered very high and could be one of the causes for malpractices like manipulating the meter readings etc.
- d. The water losses are common and need to be distributed equally on all the DUs on the basis of water consumption and not to be burdened on only certain category of DUs with no justified reason.
- 27. **Water losses income and expenditure:** The following table shows the income in water supply / distribution during the last 20 months.

Month and Year	No. of units charged by the Water Board	No. of units charged by the Society	Water losses	Water losses as %	Amount paid to Water Board	Amount Charged by the Society	Operati Power	unt spent b tor, Plumbe &mainte	r, Power Cl enance	harges Main-	Total cost of water to the society	Balance available with the society
Apr-14	9718	7414	2304	23.709	131213	157074	Charges 21306	Operator 5500	Plumber 6100	tenance 500	⊢ 164619	-7545
May-14	9718	7047	2671	27.485		147940	12281	5500	6100	0	155094	-7154
Jun-14	8724	7794	930	10.66	117794	166122	21051	5500	6100	1389	151834	14288
Jul-14	8996	7325	1671	18.575	121466	153268	20873	5500	6100	0	153939	-671
Aug-14	8964	7004	1960	21.865	121034	153194	18465	5500	6100	800	151899	1295
Sep-14	7898	6487	1411	17.865	106643	143948	21963	5500	6100	0	140206	3742
Oct-14	8193	7038	1155	14.097	110626	144824	17501	5500	6100	3150	142877	1947
Nov-14	8960	6718	2242	25.022	120981	134724	16539	0	6100	0	143620	-8896
Dec-14	8862	6891	1971	22.241	119657	146082	15996	0	6100	5158	146911	-829
Jan-15	9045	6461	2584	28.568	122127	132244	16046	0	6100	100	144373	-12129
Feb-15	8133	7342	<mark>791</mark>	9.7258	109945	155448	17220	0	6700	325	134190	21258
Mar-15	9497	6603	2894	30.473	128359	134888	15293	0	6700	2896	153248	-18360
Apr-15	9106	7413	1693	18.592	123081	165737	19358	0	6700	2192	151331	14406
May-15	9496	7522	1974	20.788	128346	162788	18920	0	6700	31010	184976	-22188
Jun-15	9762	7558	2204	22.577	131937	167679	14572	8000	6700	800	162009	5670
Jul-15	8695	6769	1926	22.151	117533	136933	17566	8000	6700	165	149964	-13031
Aug-15	9661	7338	2323	24.045	130573	158533	23102	8000	6700	640	169015	-10482
Sep-15	8987	7494	1493	16.613	121475	168492	17145	8000	6700	600	153920	14572
Oct-15	9650	6638	3012	31.212	130425	145780	16719	8000	6700	0	161844	-16064
Nov-15	9008	7288	1720	19.094	121757	135284	16047	8000	6700	1600	154104	-18820
Item wis	e total				2446185	3010982	357963	86500	128000	51325	3069973	-58991

- a) The total deficiency water rate collection during the past 20 months Is Rs -58991
- b). In the above Expenditures towards the maintenance of Water Tanks cleaning etc, other expenses not been included is the expenditure for routine maintenance, etc. These will add up the losses further on the head of water supply expenses
- c) To the above need to add expenditure in maintenance / repair due to leakages in the pipe lines where the HMWS&SB is not incurring and the JVVHOWA is spending.

28. The Following are revised water charges Proposed:

- a. HMWS&SB rate of water supply @ Rs13.50/kl cannot be applied by JVVHOWA due to additional expenses on maintenance, power charges, water losses, administrative expenses, etc. It is therefore proposed that a basic rate of water supply be fixed at Rs 20/kl.
- b. The HMWS&SB charges for the minimum quantity of 60% of the 30 Kl allotted to each Dwelling unit per month irrespective of consumption. Hence, the first slab is 0 to 18 Kl, chargeable for 18 Kl. Hence, minimum charges for DUs with meter readings less than and up to 18 kl/month be fixed at Rs.20/month. Total Rs 360/-is the minimum water charge /DU/month.
- c. The charges for DUs with readings above 18kl and up to 33kl/month be charged at Rs.20/kl. Hence, Charges will be Rs360/ for the first 18 kl Plus Rs 20/kl above 18kl. Total Max will be Rs. 660/- for 33kl consumption for the month/DU.
- d. The charges for DUs with readings above 33 kl up to 50 kl may be charged at Rs 50/ kl. Hence, Charges will be Rs660/- for the first 33 kl Plus Rs 50/kl above 33kl. Total Max will be Rs. 1510/- for 50kl consumption for the month/DU.
- e. The charges for DUs with readings above 50 kl may be charged at Rs 100/kl. Hence, Charges will be Rs1510/- for the first 50 kl Plus Rs 100/kl above 50kl.
- f. There are a couple of DU's whose OHT's are overflowing and Certain DU's Underground Sumps are leaking which are causes of higher Water meter readings & DU's cause of water wastage.

29. Penalty for Water meter Not Working proposed as under:

Water Meter Not Working – Penalty Charges: JVVHOWA should intimate in writing and obtain an acknowledgement of receipt of the letter from the occupant / Owner of the DU the non-working of Water Meter. From then on a period of 15 calendar days are given for the Owner / Occupant to intimate in writing their concurrence for replacement of the water meter to JVVHOWA. In the absence of such an approval, penal Charges at Rs 100/= per day shall be levied on the DU from 16th day onwards till the date of replacement. Further, water charges for the month under consideration will be the average of the consumption in the last 6 months, this is in addition to the penalty being levied. Water meter will be replaced at the cost of the DU.

30. All the DUs are to observe discipline and morality in paying the water charges correctly without meddling with the water meters since manipulation is at the cost of other DUs which are following fair practices.

31. The following points need consideration:

- a. The tenant / Owner of a DU may be allowed to keep surplus deposit in his water bill account for automatic adjustment towards water charges to cater for any lapse in the normal payment for any unforeseen reasons and to avoid penal charges.
- b. The monthly water bill after preparation shall be verified for correctness and signed by the office manager and authorized member of the management committee and released for recovery from the DUs.
- c. A list of DUs overdue by a month in payment of water charges shall be placed on notice board. The present penalty of Rs 50/- for delayed payment will continue till the last date of payment of next month bill. For further delay, the penalty should be double the bill amount of each unpaid month exceeding the grace period.
- d. Those DUs with water consumption of less than 10 kl per month may be placed on the notice board and a circular may also be issued for awareness of all DUs.
- e. Any proven violations / offences such as meter tampering, bypassing the meter etc. are to be circulated widely for awareness of all DUs. The penal charges will be Rs. 100/day from the date of occurrence of the incidence till rectification / regularization. This date of occurrence will be decided by the Standing Committee based on the circumstantial evidence.
- 32. Some DU occupants are using common areas for gardening to help in the improvement of greenery in the colony. However, it is observed by the committee that the DU occupants are using the area as their private property and as a dumping yard of their household items and not keeping the area clean. BOM are to take cognizance of all such common areas and issue a written notice to the DU occupant to clear that area. In the event of not acting to that notice the area is to be cleared by the society at the cost of the occupant and area taken back by society.

33. RECOMMENDATIONS:

- (i) The monthly reading of the water meter (HMWS&SB) to be verified by a responsible person in JVVHOWA while it is being recorded by the HMWS&SB employee and action may be initiated to correct the same if any perceived discrepancy is observed.
- (ii) Water meter & a filter to be fixed at the 2nd phase Sump before the Valves at the TEE junction as shown in the drawing.
- (iii) Filters are to be fixed near each Sluice valves and to be cleaned half yearly or earlier if felt necessary.
- (iv) Both Pump Houses to be maintained neatly and freely accessible so as not to invite unhappy incidents.
- (v) Monitoring arrangements to check the overflow at the sumps and Over Head tanks to be installed / to be repaired where already installed.
- (vi) Face lifting to the structures (cement and metal) at both the Pump house sites to be done and painting to be done once in every two years.
- (vii) The distribution pipe lines and air valves which could not be verified / located be identified by digging the area as indicated. Repairs as necessary be carried out to put these in working condition.
- (viii) Valve areas to be cleaned for mud, neatly lay maintenance area around it and paint / greece all units for smooth operation.
- (ix) Action to be initiated for felling of the trees threatening both Supply and Distribution pipe lines which are seriously damaging the pipe lines as indicated.
- (x) All fire hydrants are to be tested for operation on a six monthly routine.
- (xi) Phased action to be planned and executed for taking up the replacement of GI pipe lines along with repositioning of individual water meters at DU's at the entrance point of DU.
- (xii) Action to be initiated for regulating the filling of DU sump from the surplus of overhead tanks / connection from Overhead tank only. Monthly verification be done that direct water supply to sump has not been done.
- (xiii) Any DU adding new sump be brought on record.
- (xiv) Action to be initiated for prompt replacement of the faulty meters
- (xv) Action to be initiated for regular collection of the water bills.
- (xvi) The following are to be mentioned in the BOM report for AGM regarding Water system of the colony:
 - a) Leakages in the sumps of water supply has been carried out for the 4 sumps as under

SI			Date of Test	Remarks / Condition/ works carried out
i.	OHT1	Sump1	DDMMYYYY	
ii.	OHT1	Sump2	DDMMYYYY	
iii.	OHT2	Sump1	DDMMYYYY	
iv.	OHT2	Sump2	DDMMYYYY	

b) Leakages in OHT's has been carried out as follows:

SI		Date of Test	Remarks / Condition/ works carried out
i.	OHT1	DDMMYYYY	
iv.	OHT2	DDMMYYYY	

c) Water Hydrants has been tested for their performance

		Date of	Date of	
		Test	Test	Results / remarks
i.	Hydrant at OHT1	DDMMYYYY	DDMMYYYY	
iv.	Hydrant Opp DU Block 153 - 157	DDMMYYYY	DDMMYYYY	

- (xvii) Lightening arrester: Functioning to be checked half yearly, once preferably before monsoon.
- (xviii) In addition to the above, the report indicates para-wise and item-wise actions which are required to be considered for implementation.
- (xix) No new HMWS&SB connection should be taken from the Supply / Distribution line. Any new requirements to be presented to a standing committee on Water who will evaluate the need and give their suggestions / recommendations / approval / alternatives. If any such connections are given the same be reflected in the BOM report for AGM.
- (xx) A separate "**standing committee on water management**" consisting of two / three members be formed for water system of the colony. Any policy matters can be referred for their guidance.
- (xxi) A separate head of account "Water Management fund": needs to be opened with separate income and expenditure statement quarterly and in the annual audit report to enable arrive at a decisions on review of water charges, maintenance, etc.
- 34. The water committee has given various suggestions and recommendations for thorough examination and implementation by the JVVHOWA. The financial implications of the works have not been indicated as the committee is of the opinion that the report be discussed in the EGM /Residents meeting and decide the works that need to be taken. Once the clarity in the works to be undertaken has been decided and communicated to the committee by the BOM on the decision taken, based on this decision financial implications can be worked out.
- 35. As an integrated and comprehensive activity for tenders can be called for undertaking the works.
- 36. The Committee acknowledges and places on record the extra ordinary efforts put in by Commander S Ashok Kumar, DU 85 in the preparation of water line diagram and collating the details of Water lines of Supply, Distribution and Bore distribution.

Sri N Kalyan Raman DU No 194 Lt Cdr VVS Nayudu DU No 114

Wg Cdr PM Rao DU No 158

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