

Mumbai Port Authority
Civil Engineering Department

nder No.E 40/2024 Bi-annual Pest Control measures for underground/overhead water storage tanks under the jurisdiction of General Works Southern and Northern Division

Schedule of Quantities and Rates

Sr. No.	Qty.	In Units	Items	Rate excl. of Taxes in Rs.	per	Amount in Rs.
PART I: Area under jurisdiction of GWND						
1	150	Nos.	Removing carefully the existing corroded m.s. frame and covers of RCC hume pipe/M.S. water storage tanks located on terrace of any building, breaking the concrete around the frame, transporting the covers and frames to any disposal yard or any where in MbPA Estate as directed for handing over the covers and frames to MbPT and preparing the surface with 1:3 cement mortar or 1:2:4 cement concrete to receive new frame and cover and making good the damage to RCC tank (if any) including removing and re-fixing M.S. ladder wherever existing etc. as directed (New frame & cover will be supplied by MbPT)	812.00	Each	121,800.00
2	50	Nos.	Providing, fabricating and fixing 475 dia. CI frame and cover with 960X600X5 mm thick M.S. plate to RCC hume pipe tank as per existing pattern including nut, bolts, hinges fixing the frame in cement concrete (1:1.5:3), finishing in C.M. (1:3), coal tarring the surface of the frame in contact with the concrete and painting with synthetic enamel paint in 2 coats over a coat of anti-corrosive paint to all other exposed surfaces etc. complete as directed. The rate is inclusive of attending leakages of pipe RCC tanks with CM (1:3). (Frames and covers should be as per the requirement of MCGM pest control deptt.).	2,985.00	Each	149,250.00
3			Providing and fixing CI mosquito-proof hinged circular cover for M.S./ RCC/ hume pipe tank including locking arrangement on existing M. S. frame including painting, finishing the surface, with cement concrete (1:1.5:3) & finishing the surface in CM (1:3), coal			

Sr. No.	Qty.	In Units	Items	Rate excl. of Taxes in Rs.	per	Amount in Rs.
			tarring the surface of frame in contact with concrete & painting with two coats of synthetic paint all over the exposed surface over a coat of anti- corrosive paint & making them air tight & mosquito-proof etc. complete as directed (the cover should be by MCGM's pest control department)			
a)	180	Nos.	475 mm dia.	1,459.00	Each	262,620.00
b)	80	Nos.	525 mm dia.	1,739.00	Each	139,120.00
c)	60	Nos.	600 mm dia.	2,228.00	Each	133,680.00
4			Providing and fixing circular M.S. frame for M.S., RCC & hume pipie tanks internal diameter suitable to fit CI covers properly as per guidelines by MCGM including nuts, bolts,hinges etc. fixing the frame in concrete (1:1.5:3), finishing the concrete in CM (1:3) coal tarring surface of frame in contact with concrete, & painting with two coats of synthetic enamel paint all over the exposed surface over a coat of anti- corrosive paint & making them air tight & mosquito-proof etc. complete as directed			
a)	180	Nos.	475 mm dia.	1,292.00	Each	232,560.00
b)	80	Nos.	525 mm dia.	1,441.00	Each	115,280.00
c)	60	Nos.	600 mm dia.	1,702.00	Each	102,120.00

Sr. No.	Qty.	In Units	Items	Rate excl. of Taxes in Rs.	per	Amount in Rs.
5	24	qntl.	Providing & fixing structural Steel work in single sections including, cutting, hoisting, fixing in position made up of M.S. flats, plates, angles, channels, 'T's, etc. by weld or bolts & applying two coats of approved synthetic enamel paint over a coat of anti-corrosive zinc chromate primer (yellow) to the steel work complete as directed.	7,089.00	qntl.	170,136.00
6	10	Cu.M.	Providing & laying cement concrete (1:2:4) or grade M15 in foundation & plinth etc. including smooth finishing with CM (1:3) including cost of form work, curing wherever required etc. complete as directed.	6,285.00	Cu.M.	62,850.00
7			Providing and fixing PVC mosquito-proof coupling for vent pipe of underground or overhead water storage tank as per requirement of MCGM pest control department complete as directed.			
a)	200	Nos.	40 mm dia.	71.00	Each	14,200.00
b)	150	Nos.	50 mm dia.	94.00	Each	14,100.00
8	100	Mtrs.	Providing and fixing 400 mm wide M.S. ladder from roof level to the top of the water storage tank, with 2 Nos. 50X6 mm M.S. flats for stringers and 20 mm dia. M.S. bars at 250 mm centres for rungs including embedding the lower end in 600X500X300 mm cement concrete block (1:2:4) finished with plaster and top end fixed to the top slab with suitable fixing arrangement including necessary stay to the wall and painting with two coats of approved synthetic enamel paint over a coat of zinc chromate (yellow) primer etc. complete as directed.	2,740.00	Mtr.	274,000.00

Sr. No.	Qty.	In Units	Items	Rate excl. of Taxes in Rs.	per	Amount in Rs.
9	30	Nos.	Providing and fixing mosquito-proof netting and M.S. flange to existing 150 mm dia. over-flow pipe of underground water storage tank as per requirement of MCGM pest control department complete as directed.	222.00	Each	6,660.00
10	200	Sq.M.	Providing and applying two coats of synthetic enamel paint of approved brand & shade over a coat of zinc cromate primer to tank covers, ladders, pipes stc. Complete including removing flaky and loose matter, thoroughly scraping, cleaning, making even and preparing the surface complete as directed.	170.00	Sq.M.	34,000.00
11			Providing and fixing fibre reinforced mosquito-proof hinged circular frame and cover with locking arrangements including removing existing CI/ PVC frame & cover if any, to PVC water storage tanks complete as directed.			
a)	50	Nos.	475mm dia.	1,103.00	Each	55,150.00
b)	60	Nos.	525 mm dia.	1,185.00	Each	71,100.00
c)	20	Nos.	600 mm dia.	1,307.00	Each	26,140.00
12	100	Mtrs.	Welding to any type of structural steel works, tack welding or stitch welding of 6 mm thick as per IS specification etc. complete as directed. (Note:Steel sections, angles, plates if necessary will be supplied free of cost by the MbPA. Contractor has to procure their welding plants. The item is in running Mtr. of weld length).	244.00	Mtr.	24,400.00

Sr. No.	Qty.	In Units	Items	Rate excl. of Taxes in Rs.	per	Amount in Rs.
13			Providing & fixing vent or over flow GI long vent pipe with necessary fittings with PVC mosquito-proof coupling tested by MCGM or bearing ISI mark including removing existing corroded vent pipe if any, filling the gap around the pipe & making the same mosquito-proof etc. complete as directed.			
a)	100	Nos.	40 mm dia.	868.00	Each	86,800.00
b)	60	Nos.	50 mm dia.	1,166.00	Each	69,960.00
14	100000	Litrs.	Providing and fixing at any height HDPE black coloured ISI marked approved overhead water storage tank of capacity as directed with CI mosquito-proof frame and cover, making connection for inlet and outlet, 40 mm dia. medium class GI pipe 1 Mtr. long over-flow pipe with PVC mosquito-proof coupling and 15 mm dia. medium class GI pipe on outlet mosquito-proof coupling etc. with painting to GI pipes etc. complete as directed.	9.44	litr.	944,000.00
15	400	Nos.	Stopping leakages in joints of RCC tanks/ hume pipe tanks etc. on terraces of buildings, by applying cement and sodium silicate properly as directed including making good the damaged portion if any complete as directed. (Rate Analysis)	303.00	Each	121,200.00
16			Welding PVC water tanks with the help of PVC welding material same as that of water tank as per manufacturers specifications etc. so as to make PVC water storage tanks completely water tight etc. complete as directed.			
	50	Nos.	For cracks up to 12" length	1,362.00	Each	68,100.00
	50	Nos.	For cracks between 12" to 24" length	2,178.00	Each	108,900.00
17	25	Nos.	Cutting existing PVC water tank up to 10000 Litres in pieces at terrace of the building & transporting the same to the MbPA yard as directed.	2,295.00	Each	57,375.00
Total Part I=						3,465,501.00

Sr. No.	Qty.	In Units	Items	Rate excl. of Taxes in Rs.	per	Amount in Rs.
			PART II: Area under jurisdiction of GWSD			
1	100	Nos.	Removing carefully the existing corroded m.s. frame and covers of RCC hume pipe/M.S. water storage tanks located on terrace of any building, breaking the concrete around the frame, transporting the covers and frames to any disposal yard or any where in MbPA Estate as directed for handing over the covers and frames to MbPT and preparing the surface with 1:3 cement mortar or 1:2:4 cement concrete to receive new frame and cover and making good the damage to RCC tank (if any) including removing and re-fixing M.S. ladder wherever existing etc. as directed (New frame & cover will be supplied by MbPT)	812.00	Each	81,200.00
2	20	Nos.	Providing, fabricating and fixing 475 mm dia. CI frame and cover with 960X600X5 mm thick M.S. plate to RCC hume pipe tank as per existing pattern including nut, bolts, hinges fixing the frame in cement concrete (1:1.5:3), finishing in C.M. (1:3), coal tarring the surface of the frame in contact with the concrete and painting with synthetic enamel paint in 2 coats over a coat of anti-corrosive paint to all other exposed surfaces etc. complete as directed. The rate is inclusive of attending leakages of pipe RCC tanks with CM (1:3). (Frames and covers should be as per the requirement of MCGM pest control deptt.).	2,985.00	Each	59,700.00
3			Providing and fixing CI mosquito-proof hinged circular cover for M.S./ RCC/ hume pipe tank including locking arrangement on existing M. S. frame including painting, finishing the surface, with cement concrete (1:1.5:3) & finishing the surface in CM (1:3), coal tarring the surface of frame in contact with concrete & painting with two coats of synthetic paint all over the exposed surface over a coat of anti- corrosive paint & making them air tight & mosquito-proof etc. complete as			

Sr. No.	Qty.	In Units	Items	Rate excl. of Taxes in Rs.	per	Amount in Rs.
a)	40	Nos.	directed (the cover should be by MCGM's pest control department) 475 mm dia.	1,459.00	Each	58,360.00
b)	40	Nos.	525 mm dia.	1,739.00	Each	69,560.00
c)	20	Nos.	600 mm dia.	2,228.00	Each	44,560.00
4			Providing and fixing circular M.S. frame for M.S., RCC & hume pipe tanks internal diameter suitable to fit CI covers properly as per guidelines by MCGM including nuts, bolts, hinges etc. fixing the frame in concrete (1:1.5:3), finishing the concrete in CM (1:3) coal tarring surface of frame in contact with concrete, & painting with two coats of synthetic enamel paint all over the exposed surface over a coat of anti-corrosive paint & making them air tight & mosquito-proof etc. complete as directed			
a)	40	Nos.	475 mm dia.	1,292.00	Each	51,680.00
b)	40	Nos.	525 mm dia.	1,441.00	Each	57,640.00
c)	20	Nos.	600 mm dia.	1,702.00	Each	34,040.00
5	30	qntl.	Providing & fixing structural Steel work in single sections including, cutting, hoisting, fixing in position made up of M.S. flats, plates, angles, channels, 'T's, etc. by weld or bolts & applying two coats of approved synthetic enamel paint over a coat of anti-corrosive zinc chromate primer (yellow) to the steel work complete as directed.	7,089.00	qntl.	212,670.00
6	10	Cu.M.	Providing & laying cement concrete (1:2:4) or grade M15 in foundation & plinth etc. including smooth finishing with CM (1:3) including cost of form work, curing wherever required etc. complete as directed.	6,285.00	Cu.M.	62,850.00

Sr. No.	Qty.	In Units	Items	Rate excl. of Taxes in Rs.	per	Amount in Rs.
7			Providing and fixing PVC mosquito-proof coupling for vent pipe of underground or overhead water storage tank as per requirement of MCGM pest control department complete as directed.			
a)	160	Nos.	40 mm dia.	71.00	Each	11,360.00
b)	160	Nos.	50 mm dia.	94.00	Each	15,040.00
8	60	Mtrs.	Providing and fixing 400 mm wide M.S. ladder from roof level to the top of the water storage tank, with 2 Nos. 50X6 mm M.S. flats for stringers and 20 mm dia. M.S. bars at 250 mm centres for rungs including embedding the lower end in 600X500X300 mm cement concrete block (1:2:4) finished with plaster and top end fixed to the top slab with suitable fixing arrangement including necessary stay to the wall and painting with two coats of approved synthetic enamel paint over a coat of zinc chromate (yellow) primer etc. complete as directed.	2,740.00	Mtr.	164,400.00
9	20	Nos.	Providing and fixing mosquito-proof netting and M.S. flange to existing 150 mm dia. over-flow pipe of underground water storage tank as per requirement of MCGM pest control department complete as directed.	222.00	Each	4,440.00
10	160	Sq.M.	Providing and applying two coats of synthetic enamel paint of approved brand & shade over a coat of zinc cromate primer to tank covers, ladders, pipes stc. Complete including removing flaky and loose matter, thoroughly scraping, cleaning, making even and preparing the surface complete as directed.	170.00	Sq.M.	27,200.00
11			Providing and fixing fibre reinforced mosquito-proof hinged circular frame and cover with locking arrangements including removing existing CI/ PVC frame & cover if any, to PVC water storage tanks complete as directed.			

Sr. No.	Qty.	In Units	Items	Rate excl. of Taxes in Rs.	per	Amount in Rs.
a)	10	Nos.	475mm dia.	1,103.00	Each	11,030.00
b)	10	Nos.	525 mm dia.	1,185.00	Each	11,850.00
c)	10	Nos.	600 mm dia.	1,307.00	Each	13,070.00
12			Providing & fixing vent or over flow GI pipe 1 Mtr. Long with necessary & with PVC mosquito-proof coupling tested by MCGM or bearing ISI mark including removing existing corroded vent pipe if any, filling the gap around the pipe & making the same mosquito-proof etc. complete as directed.			
a)	80	Nos.	40 mm dia.	868.00	Each	69,440.00
b)	80	Nos.	50 mm dia.	1,166.00	Each	93,280.00
13	80	Mtrs.	Welding to any type of structural steel works, tack welding or stitch welding of 6 mm thick as per IS specification etc. complete as directed. (Note:Steel sections, angles, plates if necessary will be supplied free of cost by the MbPA. Contractor has to procure their welding plants. The item is in running Mtr. of weld length).	244.00	Mtr.	19,520.00
14			Welding PVC water tanks with the help of PVC welding material same as that of water tank as per manufacturers specifications etc. so as to make PVC water storage tanks completely water tight etc. complete as directed.			
	80	Nos.	For cracks up to 12"length	1,362.00	Each	108,960.00
	60	Nos.	For cracks between 12" to 24" length	2,178.00	Each	130,680.00
15	40000	Litrs.	Providing and fixing at any height HDPE black coloured ISI marked approved overhead water storage tank of capacity as directed with CI mosquito-proof frame and cover, making connection for inlet and outlet, 40 mm dia. medium class GI pipe 1 Mtr. long over-flow pipe with PVC mosquito-proof coupling and 15 mm dia. medium class GI pipe on outlet with mosquito-proof coupling etc. painting to GI pipes etc. complete as directed.	9.44	litr.	377,600.00
Total Part II=						1,790,130.00
Part I+Part II= Total Amount "Ä" Rs.						5,255,631.00

Sr. No.	Qty.	In Units	Items	Rate excl. of Taxes in Rs.	per	Amount in Rs.
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Tenderers are requested to Quote their Percentage Rate in the attached Excel file (.xls)

NOTE:

The rate quoted by the contractor shall be exclusive of GST. The GST shall be payable to the

1. Tenderers are advised in their own interest to inspect the site of work before tendering.
2. The quantities given above in the Schedule of Quantities and Rates are approximate and are furnished for the guidance of the tenderers.
3. The work is of top priority and the contractors are required to commence the work immediately upon the receipt of work order.
4. No materials will be supplied to contractor by this Port Trust and contractor will have to make his own arrangement for procurement of all material, tools etc. required for this work. The contractor will include the cost of all material, tools, tackles, plant & equipment etc. in the tendered amount while quoting for the work.