Details of STPs under IMPACT Kerala Ltd – Progress as on 12-5-2023

Appro	wed Projects			
1	FSTP at Cherthala Municipality, Alappuzha	250 KLD FSTP		DPR approved by RKI.
2	STP at Ottappalam Municipality, Palakkad District	1.50MLD STP	Vide G.O(Rt)No.165/2023/LSGD dtd 19.01.2023 tender acceptance & Revised	DPR approved by KIIFB.
3	FSTP at Varkala Municipality, Thiruvanantha puram	50 KLD FSTP	Scrutiny entrusted to CET on 17.05.2022. Fire	DPR approved by RKI.
4	STPs at Mayyanad GP, Kollam	590KLD STP	PCB NOC, Fire NOC and Structural scrutiny.	DPR approved by RKI.

5	STP at Kunnamkulam Municipality, Thrissur	1.00MLD STP	Letter received from the Municipality on 28.12.2022 with Council resolution that Municipality is not going ahead with the Project. Letter forwarded to CEO,KIIFB and ACS, LSGD regarding cancellation of the project on 11.01.2023. ACS directed Municipality to find place for LWM projects.	DPR approved by KIIFB
DPR	Under Preparation	Projects		
1	STP at Vadakara Municipality, Kozhikkode	0.5 MLD Sewage TP 20KLD FSTP	DPR appraisal ongoing in KIIFB. Present council decided to drop FSTP and include another STP at the proposed FSTP site. Consultant modifying DPR as per that. Land issue. Unnotified land conversion required at Narayananagaram and ownership details not received for Thazhangadi.Reminder to Municipality given. Not yet submitted.	DPR modificatio n ongoing.
2	STP at Wadakkanchery Municipality, Thrissur	1.00MLD STP	Initially planned at Puramboke land. NOC to be obtained from district collector. Now municipality planning for decentralized plants at differnt locations which needs to be finalized in consultation with PCB. Municipality to submit DPR accordingly. Not yet submitted.	DPR to be - prepared.

National Mission for Clean Ganga Format for submission of Monthly Progress Report in the NGT Matter OA No. 673 of 2018 (In compliance to NGT order dated 24.09.2020)

<u>Status of Sewage & Septage Plants Being Implemented Under AMRUT in Kerala (as on 30.04.2023)</u>

Details of Completed ETPs / STP in the State

No.	City / Town	STP Location	Status	Installed Capacity	Utilization Capacity	Process
1	Thiruvanathapuram	Medical College, Thiruvanathapuram (AMRUT-1.0)	Commissioned	5 MLD	3 MLD	MBBR
2	Kochi	Elamkulam (AMRUT-1.0)	Works physically completed & commissioned	5 MLD	3 MLD	MBBR

Details of Under Construction ETPs / STPs in the State

No.	Location	LocationCapacity of the plant in MLDPhysical Progress in%Status of I & D or House Sewer ConnectionsInd		Incremental Progress	Completion Timeline	
1	STP at Kureepuzha- Phase I & II, Kollam (AMRUT-1.0)	12	80%	21358 house sewer connections are envisaged as per the new sewer work added (balance of KSUDP).	progress.	31.07.2023
2&3	STPs at Medical College with Septage Treatment, Kozhikode (AMRUT-1.0)	3 (2 MLD with 100 KLD septage treatment & 1MLD)	63%	Only the buildings inside the Medical College campus will be connected.	1 0	31.07.2023
4	Decentralized Sewerage Network with STP in Old Kannur Municipal area, Kannur (AMRUT-1.0)	1	90%	1500sewer connections are envisaged.	* Works are in progress.	31.05.2023
5	STP at General Hospital, Alappuzha (AMRUT-1.0)	0.24	60%	Only the buildings in the General Hospital campus will be connected.	progress.	31.07.2023
6	STP at General Hospital, Thrissur (AMRUT-1.0)	0.36	10%	Only the buildings in the General Hospital campus will be connected.	progress.	31.12.2023

No.	Location	Capacity of the STP proposed in MLD	Status of Project (at DPR Stage/ Under Tendering/ Work to be Awarded)	Incremental Progress	Likely Date of Completion
1	Decentralized SewerageSystem (STP at Ambedkar Colony) –Div-16, Edakochi South, Kochi (AMRUT-1.0)	1.1	<i>Awarded but not started:</i> * There is public protest against the project. Public stopped the starting of soil investigation work on 28/04/22.	 * The ULB is trying to negate the public protest. * The ULB decided to continue the project in AMRUT-1.0 as the mission period has been extended up to 31.03.2024. 	
2	STP at Thottumadi Colony, Alappuzha (AMRUT-1.0)	0.05	Tendered but not awarded: * Bid received in the 4 th tender to be finalized. * The ULB's Technical Committee held on 30/06/22 decided to recommend the lowest bid to the Technical Committee for Sewerage works for approval of the bid along with revised TS & for checking the reliability of O & M quoted by the bidder. * The Technical Committee for SEW & SEP works held on 26/08/22 approved the technology & directed the ULB to obtain the Detailed Engineering Report (DER) from the bidder for approval of tender. The DER was submitted by the bidder on 22/11/22. The CE, LSGD office held a meeting on 21/12/22 with the bidder & ULB officials. * The detailed engineering report submitted by the bidder was discussed in the Technical Committee held on 21/01/23 & the Committee directed the ULB to get the design & drawings vetted by an IIT or NIT. The ULBsubmitted the design & drawings to IIT Palakkad for vetting on 07/02/23.	* The design & drawings are being vetted by the IIT Palakkad.	
3 & 4	Mobile Septage Units- 2 nos, Alappuzha (AMRUT-1.0)	0.02 (0.01 *2 nos.)	Tendered but not awarded: * Work tendered 5 times but no bids received. * ULB's Technical Committee held on 30/06/22 decided to request the Technical Committee for Sewerage works to relax the payment terms so that bidder participation can be increased. * The Technical Committee for SEW & SEP works held on 26/08/22 decided to call for quotations without changing the payment terms. * Quotations were called for by the ULB with 15/11/22 as the last date of submission. One quotation received. In this regard a meeting was held by the CE, LSGD on 21/12/22 with the bidder and the ULB officials. * The detailed engineering report submitted by the bidder was discussed in the Technical Committee held on 21/01/23 & the Committee directed the ULB to get the design & drawings vetted by an IIT or NIT. The ULB submitted the design & drawings to IIT	* Details sought by the IIT are to be provided by the bidder. * In this regard a meeting is planned to be held by the ULB with the officials of IIT & bidder.	

		Capacity of			Likoly Date
No.	Location	the STP	Status of Project (at DPR Stage/ Under	Incremental	Likely Date of
110.	Location	proposed	Tendering/ Work to be Awarded)	Progress	Completion
		in MLD			compression
5	ECTD of Volutions	0.1	Palakkad for vetting on 13/02/23.	* Agenda is to be	21.02.2024
5	FSTP at Yakkara, Palakkad	0.1	<i>To be retendered:</i> * The Cabinet Meeting of the Govt. held on	rigendu 15 to be	
	Municipality		02/02/22 decided to allow 70 Cents of land		
	(AMRUT-1.0)		inside Palakkad Medical College Campus for		
			the construction of the septage plant.Govt.		
			Order, dated 04/03/22, was issued by Revenue		
			Dept. allocating 70 Cents of land for the work.	from AMRUT-1.0 to	
			* The Contractor informed vide letter dated	AMRUT-2.0.	
			31/03/22 that they are not willing to go ahead		
			with the work due to financial crisis & increase in material & labour cost due to Covid		
			pandemic.		
			* Counter affidavit was filed by the ULB		
			regarding the petitions (WPC-14660/ 2022 &		
			WPC-15105/ 2022) filed in the Hon' High		
			Court against the construction of the Septage		
			Plant.		
			* The Council held on 12/07/22 decided to take		
			further action based on the judgment of the Hon' High Court.		
			* The judgment of the Hon' High Court		
			disposing the petitions filed by the protestors in		
			favour of the ULB was obtained on $15/11/22$.		
			* The Core Committee of the ULB held on		
			26/11/22 decided to select new consultant for		
			preparation of revised DPR and the Council		
			held on 16/12/22 gave consent for the same.* The ULB had approached IRTC for		
			preparation of DPR but the response given by		
			IRTC was not satisfactory for the ULB. Hence		
			the Core Committee held on 06/01/23 decided		
			to approach CDD for preparation of the DPR.		
			The Core Committee held on 01.02.2023 & the		
			Council held on 25.02.2023 gave approval to		
			transfer the project to AMRUT-2.0. The Council held on 11.03.2023 gave consent for		
			the proposal (40 KLD) given by M/s. CDD.		
6	FSTP at Chellora,	0.1	Awarded but not started:	* Agreement has been	31.03.2024
	Kannur Corporation		*Legacy waste dumped at the proposed	0	
	(AMRUT-1.0)		location is to be removed for starting		
			physical works.Legacy waste removal work		
			from the proposed site is nearing completion. * The Council held on 26/04/22 decided to	mode. DPR to be submitted by M/s.	
			relieve the Contractor from the Septage Plant	-	
			work as they were not willing to take up the	intro.	
			works.		
			* Septage Plant work is to be retendered after		
			revision of estimate as per DSR-2018. Recast		
			estimate was sent from the ULB to CE, LSGD office on $04/08/22$ for approval		
			office on 04/08/22 for approval. * The Technical Committee meeting held on		
			17/10/22 decided to tender the work with		
			technology kept as open and the Council held		
			on $28/12/22$ gave consent for the same.		

No.	Location	Capacity of the STP proposed in MLD	Status of Project (at DPR Stage/ Under Tendering/ Work to be Awarded)	Incremental Progress	Likely Date of Completion
			 * Tender was floated by the ULB on 19/01/23 with 02/02/23 as the last date of bid submission & 04/02/23 as the date of opening. Two bids received. * The ULB has selected the technical bid submitted by M/s. IRTC. 		
7	FSTP at Ramavarmapuram, Thrissur (AMRUT-1.0)	0.1	Tendered but not awarded: * The Contractor had requested the ULB to relieve them from the project citing reasons like financial crisis and increase in material & labour cost due to Covid pandemic. * The Council held on 29/01/22 decided to retender the work (TSP limited competitive tender). * The estimate recast as per DSR-2018 is to be approved. The corrected estimate &details were submitted to CE, LSGD office on 20/08/22. * The Technical Committee held on 17/10/22 directed to tender the work with the technology kept as open. * Tender was floated by the ULB on 24/12/22 with 09/01/23 as the last date of bid submission & 11/01/23 as the date of bid opening.Last date of bid submission & date of opening were extended till 13/01/23 & 16/01/23 respectively as per the request of a prospective bidder. Only 1 bid was received, hence, retendered (2nd) on 18/01/23 with 25/01/23 as last date & 28/01/23 as date of opening. Again, only one bid was received. The ULB invited quotations on 09/02/23 with 15/02/23 as the last date of submission. Three quotations were received. * The ULB has selected the technical bid submitted by M/s. SEUF.	technology details are awaited from M/s. SEUF for placing in the Technical Committee for approval.	
8	Sewerage System in Zone A, Package A, Avikkal Thodu, Kozhikode (AMRUT-2.0)	7	Started but stalled:* There is public protest against theconstruction of STP at the location.* Site clearance work was stopped by the publicon 31/01/22.* The work was restarted on 23/06/22 withPolice protection amidst huge protest. Soiltesting, site clearance & fencing workscompleted.* The Contractor has requested for priceescalation.* Soil test report was obtained on 22/07/22.Design changes are to be finalized. The reviseddesign was given to Govt. Engg. College,Thrissur for vetting. Corrections were made andresubmitted on 27/03/23.* The Munsiff Court issued interim judgment(OS No.459/ 2022) in favour of the petitioner.Hence works can be started only after resolvingthe court case.* 32 nd SHPSC approved the ULB's request to	Govt. Engg. College, Thrissur. *Next hearing on the case (OS No.459/ 2022) is on 09.06.2023. * Agreement for time extension to be signed by the contractor.	

		Capacity of				
	-	the STP	Status of Project (at DPR Stage/ Under	Incremental	Likely Date	
No.	Location	proposed	Tendering/ Work to be Awarded)	Progress	of C	
		in MLD		C	Completion	
			transfer the project to AMRUT-2.0.			
9	Sewerage systemin	6	Started but stalled:	* Hearing on the case	30.06.2024	
	Zone A, Package B,		* There is public protest against the			
	Kothi, Kozhikode		construction of STP at the location.	in progress in the		
	(AMRUT-2.0)		* Fencing works started on $27/04/22$, with Police protection had to be stopped due to			
			Police protection, had to be stopped due to public protest.	extension to be signed		
			* The Contractor has requested for price			
			escalation.	5		
			* The work was restarted on 23/11/22 with			
			Police protection but stopped as the			
			construction materials brought to site were			
			spoiled by the protestors.* The judgment of the Hon'ble High Court			
			disposing the petition (WPC No. 8986/ 2022)			
			filed against the project in favour of the ULB			
			was obtained on $14/11/22$ but appeal was filed			
			by the petitioners against the judgment. The			
			court dismissed the appeal and adjudicated that			
			the petitioner shall approach the Hon'ble NGT			
			regarding the appeal. In this regard a caveat has been filed by the ULB against the petitioner in			
			the Hon'ble NGT.			
			* The Munsiff Court disposed the case, OS No.			
			450/ 2022, in favour of the ULB.			
			* The Hon'ble High Court disposed the case,			
10		2.5	WPC No. 40164/2022, in favour of the ULB.	*01 (1	21.02.2024	
10	Decentralized SewerageScheme	2.5	<i>To be retendered:</i> * To be retendered after obtaining permission	*Clearance of the	31.03.2024	
	(STP at Kokkala),		from the Govt. for constructing the STP at the			
	Thrissur		proposed location (Paddy Land).	land is to be obtained.		
	Corporation		* Application was submitted to Railways on			
	(AMRUT-2.0)		25/05/22. Joint site inspection was done on			
			28/09/22 by the Railways & ULB officials.The			
			Railways rejected the ULB's application. Hence, new location to be selected by the ULB.			
			A meeting was held by the ULB with Railway			
			officials on $10/02/23$ regarding the selection of			
			a new location for laying sewer pipeline across			
			the railway track.			
			* The 30 th SHPSC held on 05/07/22 approved the revision of AS from Rs.53.4 Cr. to			
			Rs.64.2Cr.			
			* The committee constituted by the LSGD,vide			
			Govt. Order dated 08/08/22,to reassess the			
			nature of the proposed land held meeting with			
			ULB, Agriculture Dept. & Revenue Dept.			
			officials on $20/08/22$ and submitted the report to the Chief Secretary on $13/09/22$			
			the Chief Secretary on 13/09/22.* The Agriculture Dept.sought clarifications			
			from the Environment Dept. regarding category			
			of the proposed land vide letter dated $18/10/22$.			
			The Environment Dept. forwarded the queries			
			to the State Wetland Authority Kerala (SWAK)			
			vide letter dated 04/11/22 for furnishing a			

No.	Location	Capacity of the STP proposed in MLD	Status of Project (at DPR Stage/ Under Tendering/ Work to be Awarded)	Incremental Progress	Likely Date of Completion
			report.The report submitted by SWAK was discussed in the meeting held by the Chief Secretary on 21/12/22 and the nature of the proposed land was clarified as paddy land. The ULB was directed to submit request to the Agriculture Dept. for changing the category of the land for construction of the STP. * The 32 nd SHPSC held on 23/01/23 approved the ULB's request to cancel the project from AMRUT-1.0 & take up the same under AMRUT-2.0. * The ULB submitted the request for changing the category of the land to the Agriculture Dept. on 07/02/23. The LLMC meetings were held on 20/02/23 & 21/03/23.		
11	STP with septage co-treatment at Elamkulam (AMRUT-2.0)		* The 5th SHPSC held on 02/03/23 approved the issuance of AS and G.O dated 25/03/23 was issued.	TS to be issued.	31.12.2024

ļ	Analysis rep	port of po	olluted river stretches-R Per	iyar, R- C	hithrapu	zha,R-Kao
STNCode	Sampling Date	Sampling Time	StnName	TypeWat erBody	NameOf WaterBod v	RiverBasi n
17	11.04.2023	10:00	Periyar at Eloor	River	Periyar Riv	ver
1338	13.04.2023	9:30	Periyar at SDP Aluva	River	Periyar Riv	ver
2334	05.04.2023	10:30	Periyar at Pathalam	River	Periyar Riv	rer
2335	05.04.2024	12:00	Periyar at Kalamassery	River	Periyar Riv	ver
3468	13.04.2023	9:55	Periyar at KWA Aluva	River	Periyar Riv	rer
2337	No San	npling	Kadambrayar At Brahmapuram	River	Kadambray	yar River
2338	01.04.2023	10:00	Kadambrayar At Manackakadavu	River	Kadambray	yar River
1573	01.04.2024	11:10	Chithrapuzha At Irumpanam	River	Chithrapuz	ha River
1154	13.04.2023	12:45	Chalakudy at Pulikkakadavu	River	Chalakudy	River

						Values				
SI. No.	Parameters					Station Co	de			
		17	1338	2334	2335	3468	2337	2338	1573	1154
1	Temperature, ⁰ C	28	27	29	29	27		28	28	29
2	Dissolved Oxygen, mg/l	4	6.4	6.8	4.3	6.4		1.2	3.5	6.5
3	pH	7.7	8.5	9.6	8	8.5		6.4	7.6	8.5
4	Conductivity, µmhos/cm	12270	49	16380	151	54		105	1833	211
5	BOD, mg/l	2.3	2.4	2.8	2.5	1.2		3.4	3	2.5
6	Nitrate-N, mg/l	0.23	0	0.11	0.27	0		0	2.69	0.32
7	Turbidity, NTU	1.8	2.8	0.7	1.2	3		9.8	6.9	2.8
8	Total Alkalinity, as CaCO3	40	18	45	22	15		22	36	20
9	Chloride, mg/l	4000	4.8	4600	35	7	N	15	500	48
10	COD, mg/l	6.4	5.6	8.8	7.2	4	0	6.4	9.6	6.4
11	TKN, mg/l	0.2	0.14	0.3	0.08	0.11		0.12	1.25	0.86
12	Ammoniacal-N, mg/l	0.06	0.05	0.01	0.004	0.05	S	0.05	0.01	0.52
13	Total Hardness, as CaCO3 mg/l	1200	18	2000	25	17	A	24	173	48
14	Calcium, as CaCO3 mg/l	1100	16	600	18	13	М	16	128	32
15	Magnesium as CaCO3, mg/l	100	2	1400	7	4	Р	8	45	16
16	Sulphate, mg/l	500	0	690	0	0	L	4.7	27.8	0
17	Sodium, mg/l	2205	2.51	2850	19.6	3.85	I	8.86	265.3	25
18	Total Dissolved Solids, mg/l	7510	28	9540	86	30	Ν	60	1025	116
19	Total Fixed Solids, mg/l	5200	20	7500	60	22	G	45	800	90
20	Total Suspended Solids, mg/l	24	12	29	16	10		14	20	18
21	Phosphate, mg/l	0	0.02	0.47	0	0		0	2.95	0
22	Boron, mg/l	N.A	NA	NA	NA	NA		NA	NA	NA
23	Potassium, mg/l	21	1.5	126	2.11	0.16		0.01	9.26	0.06
24	Fluoride, mg/l	0.6	0.4	0.2	0.2	0.4		0.4	0.6	0.4
25	Total Coliform, MPN/100 ml	4300	2500	840	340	5800		3400	7000	2500
26	Feacal Coliform, MPN/100 ml	1700	1000	200	110	1500		1500	3100	340

27 Feacal Streptococci, MPN/100ml 140 48 220 70 250 430 540 14										
	2	27	Feacal Streptococci, MPN/100ml	140	10	220	250		540	14