



MIZORAM STATE POLLUTION CONTROL BOARD

No. H.88088/Poltn./50 (XIX)/18-MPCB/

:

Dated Aizawl, the 22nd July 2020.

To,

The Secretary,
Ministry of Jal Shakti,
2nd Floor, Block-III, CGO Complex,
Lodhi Road, New Delhi – 110003.

Subj.: Submission of monthly progress report of Mizoram for the month of June 2020 in compliance of Hon'ble NGT order on OA No. 673/2018

Sir,

With reference to the above cited subject, may I submit herewith monthly progress report of Mizoram for the month of **June 2020** on OA. 673/2018 as per your prescribed format for favour of your kind information and further necessary action.

Kindly note that due to the ongoing Covid-19 Pandemic lockdown, actions could not be taken much during the reporting month.

Yours faithfully,

Enclo: Progress Report, May, 2020

(C.LALDUHAWMA)
Member Secretary,
Mizoram Pollution Control Board

Memo No. H.88088/Poltn./50 (XIX)/18-MPCB/

: Dated Aizawl, the 22nd July 2020.

Copy to: The Member Secretary, Central Pollution Control Board for kind information.

(C.LALDUHAWMA)
Member Secretary,
Mizoram Pollution Control Board

Monthly Progress Report by Mizoram (May, 2020)

(In the matter of Hon'ble NGT matter of O.A No 673/2018)

Sl. No.	Activity to be monitored	Timeline	Submission of progress by Mizoram – Compliance Status																
1.	Ensure 100% treatment of sewage at least in-situ remediation	31.03.2020	<ul style="list-style-type: none"> • For the treatment of sewage, in-situ remediation such as onsite greywater management systems in rural areas and setting up of improved septic tanks and Bio-digesters for black water management in the catchment areas of the polluted rivers are in process. • 1 STP of 10 MLD Capacity located at the catchment area of Chite stream (Priority – IV polluted river) is constructed at Bethlehem Vengthlang, Aizawl. The project is nearing completion and expected to be completed within timeline. 																
	commencement of setting up of STPs and connecting all the drains and other sources of generation of sewage to the STPs must be ensured	31.03.2020																	
2	Timeline for completing all steps of action plans including completion of setting up STPs and their commissioning	31.03.2021																	
3	Chief Secretary may set up appropriate mechanism at State level <ul style="list-style-type: none"> • Specifying accountability of nodal authorities not below the Secretary level • Chief Secretaries may have an accountable person attached in their office for this purpose 	22.01.2020 22.01.2020	<ul style="list-style-type: none"> • State Level Monitoring Committee has been constituted under the Chairmanship of Chief Secretary, Govt. of Mizoram notified vide letter No.C.18013/2/2020-I&WR/243 dt. 21.07.2020. The Committee comprises of the following members: <table style="width: 100%; border: none;"> <tr> <td style="width: 80%;">1. Chief Secretary</td> <td style="text-align: right;">Chairman</td> </tr> <tr> <td>2. Principal Secy./Secy., EF&CC</td> <td style="text-align: right;">Member</td> </tr> <tr> <td>3. Secy., PHED</td> <td style="text-align: right;">Member</td> </tr> <tr> <td>4. Secy., LRS&WCD</td> <td style="text-align: right;">Member</td> </tr> <tr> <td>5. Secy., UD&PA</td> <td style="text-align: right;">Member</td> </tr> <tr> <td>6. Commissioner, AMC</td> <td style="text-align: right;">Member</td> </tr> <tr> <td>7. Chairman, MPCB</td> <td style="text-align: right;">Member</td> </tr> <tr> <td>8. Secy., I&WRD</td> <td style="text-align: right;">Member Secy.</td> </tr> </table>	1. Chief Secretary	Chairman	2. Principal Secy./Secy., EF&CC	Member	3. Secy., PHED	Member	4. Secy., LRS&WCD	Member	5. Secy., UD&PA	Member	6. Commissioner, AMC	Member	7. Chairman, MPCB	Member	8. Secy., I&WRD	Member Secy.
	1. Chief Secretary	Chairman																	
2. Principal Secy./Secy., EF&CC	Member																		
3. Secy., PHED	Member																		
4. Secy., LRS&WCD	Member																		
5. Secy., UD&PA	Member																		
6. Commissioner, AMC	Member																		
7. Chairman, MPCB	Member																		
8. Secy., I&WRD	Member Secy.																		
	<ul style="list-style-type: none"> • Monitoring at State level must take place 	Fortnightly Commencing 21.12.2019	Monthly Review Meeting scheduled to be held soon by the newly formed State Level Monitoring Committee.																
4	Progress report may be furnished by the States/UTs to <ul style="list-style-type: none"> • Secretary, Ministry of Jal Shakti • Member Secretary, CPCB 	Monthly (preferably before 20 th of every month)	<ul style="list-style-type: none"> • Monthly Progress Report submitted on regular basis. • This report is for the month of June,2020 																

4.1	<p>Progress Report may be compiled of details along with completion timelines on:</p> <p>i) Identification of polluting sources including drains contributing to river pollution and action as per NGT order in situ treatment</p>		<ul style="list-style-type: none"> • Identification of polluting sources including contributing drains have been completed for all the 9 polluted rivers. • During the reporting month, analysis of water quality of the identified drains conducted. <p>Identified drains and the analysis results at <i>Annexure-I</i></p>
	<p>i) <u>Status of STPs, I&D and sewage networks</u> Details of existing infrastructure, Gap analysis, proposed along with completion of timeline</p>		<ul style="list-style-type: none"> • Construction of STP for Aizawl city at Chite River catchment area is completed – 98% completed • Construction of Sewer lines is progressing – 70% completed despite several constraints such as public objections among others. • Expected date of commissioning: within the year 2020. • In-situ liquid treatment system for Greywater at household levels in rural areas is under process with about 28%. • Construction of Bio-digesters for in-situ remediation of back water at household levels in urban areas under process. About 80 nos. of biodigesters have been constructed for households in the catchment area. • Construction of dam reservoir and recreation centre is undertaken at Keilungliah Stream, a polluting stream of Tuipui River at Champhai which is suggested to minimize contamination of Tuipui river as well as for multipurpose such as water security for Champhai town, Irrigation need of farmers during off monsoon period, promotion of tourism and recreation facilities for Champhai town, fisheries development, beautification of Champhai town Improvement of climate for Champhai town. Gabion structures is also to be constructed across major streams discharging to Keilungliah. The approved estimated cost of this project is Rs 1988 lakhs out of which Rs 944.05 has been used for 60% of the physical progress.
	<p>ii) <u>Status of CETPs</u> Details of existing CETP and ETP infrastructure, Gap analysis, Proposed along with completion of timeline, No. of industries and complying status</p>		<ul style="list-style-type: none"> • There is no CETP in the State yet. River Pollution due to industrial effluents is insignificant in case of Mizoram. • Inventory of water polluting industries in the catchment areas of all the 9 polluted rivers is completed. Details alongwith Gap analysis provided in the Revised Action Plan submitted to CPCB on 17.07.2020 and soft copy available at https://mpcb.mizoram.gov.in/ • In all, there are 73 nos. of identified water polluting industries in the catchment areas of the polluted rivers, out

			of which 50 units are having valid consent from MPCB and the remaining are being regulated to comply with the norms.
	iii) <u>Status of Solid Waste Management & Details of Processing Facilities</u> Details of existing infrastructure, Gap analysis, proposed along with completion of timeline		<ul style="list-style-type: none"> • Information Education and Communication (IEC) and Capacity Building through door to door campaigns, town/village level sensitization and grass root trainings on proper waste management has been carried out in most of the villages/towns in the Catchment area of Polluted river stretches with about 30% achievements. • 20% to 55 % works on Segregation, setting up of Plastic Waste Collection Centre/Confined dumping ground for inerts and other wastes has been completed in the polluted river stretches.
	iv) Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river		<ul style="list-style-type: none"> • Latest water quality of the 9 polluted rivers for the monitoring month is at Annexure-II. • Water quality of drains/tributaries at Annexure-I
	v) Preventing dumping of waste and scientific waste management including bio-medical wastes, plastic wastes and decentralizing waste processing including waste generated from hotels, ashrams etc		<ul style="list-style-type: none"> • Waste Management Centre, constructed by SIPMUI at Tuirial was commissioned on 11.12.2019. The segregated wastes collected by the Aizawl Municipal Corporation has been initiated to be processed and disposed in scientific manner in this waste management facilities henceforth. • Dumping of waste in unauthorised Dumping Sites has been prohibited by Deputy Commissioner and Aizawl Municipal Corporation • Status of action taken for adopting scientific waste management system as per proposed Action Plan is given in SI No. 4.1 (iii).
	vi) Ground water regulation		<ul style="list-style-type: none"> • In Mizoram, surface water serves as the main sources of water for drinking, domestic and industrial purposes. Ground water extraction is insignificant.
	vii) Adopting good irrigation practices		<ul style="list-style-type: none"> • Provisions are made by the concerned department, i.e Irrigation & Water resources Department to adopt good irrigation practices in the State. However, irrigation is not practiced in the polluted location of the Rivers.
	(ix) Protection and management of Flood Plain Zones (FPZ)		<ul style="list-style-type: none"> • There is no Flood Plain Zones in Mizoram as it is a hilly region.

(x) Rain water Harvesting		<ul style="list-style-type: none"> • Environment, Forests and Climate Change, Govt. of Mizoram has been identified by the State Govt. as the Nodal Department to be responsible for framing Policies and Action Plan for Rain Water Harvesting in Mizoram • As per the Action Plan of the polluted rivers, Rainwater harvesting has been initiated. Survey for setting up of Rainwater harvesting System is underway by PHE Department, Govt. of Mizoram.
(xi) Maintaining minimum flow of river		<ul style="list-style-type: none"> • E-flow assessment is proposed to be taken up by Irrigation and Water Resources Department, Govt. of Mizoram. Action Plan with timeline for e-flow assessment is given at Annexure-III
(xii) Plantation on both sides of the river		<ul style="list-style-type: none"> • Some of the rivers already have Riverine Reserved Forests of about 800 metres on either side of the river banks which are well protected. However, for enhancing tree and vegetation coverage, afforestation activities in suitable catchment areas have been proposed.
(xiii) Setting up of biodiversity parks on flood plains by removing encroachment		<ul style="list-style-type: none"> • As per Action Plan, Plantation drives in the catchment area of Polluted Rivers already initiated by E,F & CC Department, Govt. of Mizoram and about 12% of the proposed works has been completed so far.

Note: The Final Revised Action Plan for the four (4) rivers falling under category III & IV was completed incorporating the recommendations of the 12th Meeting of Task Team held on 11.06.2020 and approved by RRC, Mizoram. Copy submitted to CPCB on 17.07.2020 and soft copy available at <https://mpcb.mizoram.gov.in/>



(C.LALDUHAWMA)
Member Secretary,
Mizoram Pollution Control Board

ANNEXURE -1

Identified Drains of the Polluted Rivers and the Analysis Result, June-July 2020

Sl. No	Name of Polluted River	Name of identified Drains	Month	B. CORE PARAMETERS								C. GENERAL PARAMETERS									
				Water Temp (C)	D.O (mg/L)	pH	Conductivity μ s/cm	B.O.D (mg/L)	Nitrogen Nitrite (N-NO ₂) (mg/L)	Faecal Coliform MPN	Total Coliform MPN	Turbidity NTU	Total Alkalinity (mg/L)	Chlorides (mg/L)	Ammonia-N (mg/L)	Total Hardness (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	K (mg/L)	Total Phosphate (mg/L)
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Tiau River (P-III)	LK KAI	JUNE	20	6.3	7.93	159	1.8	0.049			4.7	97.6	18.6	0.836	76	20.8	5.8	0	0	0.243
2	Tlawng River (P-IV)	Drain -1 flowing between Pukpui & Zotlang		Sample Collected and Analysis going on																	
		Drain -2 flowing between nothern side of Serkawn & Zotlang																			
		Drain -3 flowing between Southern side of Serkawn																			
		Dak Lui, Sairang	JULY	22	6.7	8.46	277	1.7	0.106	2400	2400	4.5	61.6	32.5	0.266	80	21.6	6.2	1.5	0.5	0.08
		Lawngpu lui	JULY	24	5.5	7.96	180	0.5	0.27	19	2400	26.7	54.8	5.6	0.536	74	20	5.8	0	0	0.106
		Bawng lui	JULY	20	6.2	7.36	275	5.1	0.539			14.4	114.7	19.5	2.048	112	33.6	6.7	1.5	0	0.093
3	Tuipui River(P-IV)	Keilungliah Stream		Sample Collected and Analysis going on																	
4	Tuivawl River(P-IV)	Serlui																			
5	Chite Stream (P-V)	Tlak Lui	JULY	25	6.5	8.03	409	4.3	0.993	2400	2400	68	77.1	44.6	2.265	90	24.8	6.7	3.5	0.5	0.164
		Bangla Lui	JULY	24	4.7	7.54	542	11.2	1.055	53	2400	42.4	90.8	63.2	5.031	100	28.8	6.7	4.5	0.5	0.083
		Luihnai & Darnam Lui	JULY	23	6	7.02	196	0.7	0.033	53	2400	17	34.2	27	0.262	50	11.2	5.3	1.5	0	0.102
		Sakawrpui lui	JULY	22	7.1	7.52	584	0.7	0.009	2400	2400	2.7	39.4	72.5	0.114	116	36	6.2	4.5	1	0.197
6	Mat River (P-V)	Hmawngawn lui, Serchhip	JULY	18	6.9	6.9	56	10.5	0.008			4	20.5	7.4	0.137	22	5.6	1.9	0	0	0.051
7	Saikah Stream (P-V)			NIL																	
8	Tuikual Lui (P-V)	Chawnpui Lui	JULY	26	5.1	7.6	473	3.9	1.056	210	2400	33.1	71.9	57.7	4.712	90	24	7.2	3.5	1	0.114
		Dinthar Lui	JULY	25	2.8	7.49	505	1.7	0.233	2400	2400	1.5	107.9	64.2	0.179	122	36	7.7	4	0.5	0.233
		Dawrpui Kawr	JULY	24	5.5	7.77	424	4.4	1.055	210	2400	3.5	97.6	53.9	4.644	126	38.4	7.2	3	0.5	0.071
9	Tuirial River (P-V)	Theihai Lui	JULY	23	4.7	7.36	334	4.7	0.828	16	290	3	59.9	36.4	2.094	80	22.4	5.8	2	0.5	0.076
		Hmawngkai Lui	JULY	25	5.8	7.36	334	6.2	0.828	1100	1100	3	63.4	53	2.094	90	25.6	6.2	2	0.5	0.076
		Lawibual Lui	JULY	24	4.8	7.43	321	1.8	0.372	19	29	4.9	94.2	39.1	0.262	130	40	7.2	2	0.5	0.049

**Water Quality Data of 9 (NINE) Polluted River
stretches in Mizoram
(OA - No. 673 of 2018)**

**JUNE
2020**



MIZORAM STATE POLLUTION CONTROL BOARD

DETAILS OF POLLUTED LOCATIONS & RESULTS OF FIELD PARAMETERS FOR THE MONTH OF JUNE, 2020

Sl. No.	Station Code	Name of Station	Location	A. STATIONS DETAILS															
				Co-Ordinates			Sampling Date	Sampling Time	Used Based Class	Major Polluting Sources	Visibility Effluent Discharge	Use of water in Down Stream (irrigation, industrial, domestic, drinking water source, organised water source, cultivation, fishing, bathing ghat, others)	Weather	Depth of Water Body (m)	Human activities (Bathing, Washing, Cultivation, Fishing, Boating, Gardening, Tourist spot, cattle wedding, others)	Floating matter	Colour	Odour	Flow (m/s)
				Longitude	Latitude	Elevation	1	2	3	4	5	6	7	8	9	10	11	12	13
1	3756	Tiau River	Near Boundary Tiau Bridge, Zokhawthar Village, Champhai District, Mizoram	93°23'31.0"E	23°21'42.8"N	720m	15-06-2020	11.00		Domestic			Clear	1.2	Washing		Pale Yellow	Odour free	1.5
2	3709	Tlawng River, Sairang	Sairang Village, Aizawl District, Mizoram	92°39'10"E	23°48'49"N	80m	02-06-2020	1.55		Agriculture			Clear	0.9	Sand collection		Pale Yellow	Odour free	0.5
	3734	Tlawng River, Upper Stream, Lunglei	Near Tlawng Bridge, Mausen Village, Lunglei District, Mizoram	92°49'15.0"E	22°51'21.2"N	1080m	16-06-2020	2.50		Agriculture		Washing, Bathing	Clear	0.6	Washing, Domestic Purpose		Pale Yellow	Odour free	0.5
	3736	Tlawng River, Palthleng, Zotlang, Lunglei	Near P.H.E Water Treatment Plant, Zotlang, Lunglei Distirct, Mizoram	92°45'45.7"E	22°56'53.5"N	800m	16-06-2020	3.40		Agriculture		Drinking Water Source	Clear	3.5	Fishing		Clear	Odour free	0.3
	3754	Tlawng River, Downstream, Bairabi	Bairabi Village, Kolasib District, Mizoram	92°32'14.3"E	24°10'44.7"N	40m	07-06-2020	2.30		Agriculture			Clear	2	Fishing		Brown	Odour free	0.4
3	3757	Tuipui River	Near P.H.E Treatment Plant, Champhai District, Mizoram	93°16'27"E	23°30'18.8"N	800m	15-06-2020	11.30		Agriculture		Drinking Water Source	Clear	1.5			Pale Yellow	Odour free	1.8
4	3720	Tuivawl River	Near Tuivawl Bridge, Seling Village, Aizawl District, Mizoram	93°2'6"E	23°38'31"N	500m	29-06-2020	2.00		Agriculture			Clear	0.6	Washing & Bathing			Odour free	0.8
5	3718	Chite River	Near Mini Sports Complex, Armed Veng, Aizawl, Mizoram	92°44'17.5"E	23°43'59.2"N	680m	01-06-2020	11.00		Domestic			Clear	0.3			Pale Yellow	Odour free	0.6
6	3735	Mat River	Near Mat Bridge, Dawn Village, Lunglei District, Mizoram	92°52'19.7"E	22°53'58.4"N	380m	16-06-2020	9.50		Agriculture		Washing, Domestic Purpose	Clear	1	Plantation, Gardening		Pale Yellow	Odour free	0.6
7	3740	Saikah stream	Saikah Village, Lawngtlai, Mizoram	92°53'40.1"E	22°27'21.3"N	800m	11-06-2020	2.00		Domestic		Drinking Water Source	Clear	1.2			Clear	Odour free	N/A
8	3712	Tuikual Stream	Near PHE Water Treatment Plant, Reiek Kai, Aizawl District, Mizoram	92°39'46"E	23°42'57"N	270m	09-06-2020	1.05		Domestic			Clear	0.8			Pale Yellow	Odour free	0.6
9	2052	Tuirial U/s, Aizawl	Tuirial Village, upstream of Tuirial Bridge	92°47'58.25"E	23°43'8.99"N	187m	08-06-2020	1.20		Agriculture			Clear	0.9	Fishing		Pale Yellow	Odour free	0.5
	2053	Tuirial L/s Aizawl	Tuirial Village, downstream of Tuirial Bridge	92°47'57.92"E	23°43'5.22"N	185m	08-06-2020	1.45		Agriculture			Clear	0.8	Fishing		Pale Yellow	Odour free	0.4

**WATER QUALITY DATA OF 9(NINE) POLLUTED RIVER STRETCHES
FOR THE MONTH OF JUNE, 2020**

Sl.No	Station Code	B. CORE PARAMETERS								C. GENERAL PARAMETERS										
		Water Temp (°C)	D.O (mg/L)	pH	Conductivity µs/cm	B.O.D (mg/L)	Nitrogen Nitrite (N-NO ₂) (mg/L)	Faecal Coliform MPN	Total Coliform MPN	Turbidity NTU	Total Alkalinity (mg/L)	Chlorides (mg/L)	Ammonia-N (mg/L)	Total Hardness (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	K (mg/L)	TSS (mg/L)	Total Phosphate (mg/L)
		14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
1	3756	20	6.9	8.42	167	1.4	0.007			71.4	85.6	13.9	0.186	60	13.6	6.2	0	0		0.032
2	3709	27	6.6	7.8	112	1.4	0.041	3.6	2400	57.2	58.2	8	0.585	74	20.8	5.3	0.5	0		0.118
	3734	26	7	6.16	355	1.4	0.005			2.4	17.1	18.6	0.114	28	7.2	2.4	2.5	0.5		0.011
	3736	25	7.1	7.42	94.6	1.3	0.01			1.1	37.7	23.2	0.122	48	12	4.3	0	0		0.008
	3754	25	4.6	7.4	134	1.4	0.085			100	51.4	8.9	1.398	48	11.2	4.8	0.5	0		0.345
3	3757	20	8.1	7.73	89	1.8	0.01			47.5	51.4	23.2	0.22	30	8	2.4	0	0		0.045
4	3720	23	6.8	7.57	90	1.3	0.008			1.4	3.8	10.7	0.125	64	14.4	6.7	0	0		0.068
5	3718	22	6.1	7.83	458	1.2	0.989	14	2400	3.7	99.3	59.5	0.323	126	36.8	8.2	3	0.5		0.164
6	3735	26	7.1	7.07	32.4	1.2	0.012			7.5	34.2	13.9	0.224	34	8	3.4	0	0		0.014
7	3740	23	9.1	7.55	62	1.9	0.01			6.2	46.2	12.1	0.133	32	8	2.9	0	0		0.024
8	3712	26	5.9	7.49	211	1.2	0.01	0	2400	14.9	71.9	16.9	0.201	96	27.2	6.7	1	0		0.058
9	2052	28	5.8	8.26	168	1.2	0.046	0	2400	12	85.6	13.3	0.274	50	12	4.8	2	0		0.102
	2053	29	5.9	8.23	172	1.3	0.09	0	2400	22.3	65.1	13.3	0.418	50	11.2	5.3	1	0		0.125

ANNEXURE-III

PERT Chart for E-flow Assessment for the nine (9) Polluted River Stretch

Action Plan & Budget																
Name of Plan/Task	No.	Implementation Stages/Activity (Timeline of Activity)/Indicator	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Budget (Rs in Lakh)	
			1	1 4	1	1 3 4	1	1	1 4	1	1	1	1	1		1
Environmental Flow Assessment	1)	Collection of available hydrological data (Station data) from Department of Agriculture and from Directorate of Science & Technology and available hydro-meteorological dataset online{for analysis (checking, filling of missing data, etc.) of data with available hydro-meteorological dataset online}.	█	█	█										1.00	
	2)	Collection of discharge data of streams/ivers draining to the polluted rivers		█	█	█	█	█	█	█	█	█	█	█	█	25.00
	3)	Purchase of IMD rainfall data and other meteorological data set	█	█												1.00
	4)	Purchase of High-resolution satellite imagery (from NRSC etc) and Soil map from NBSS & LUP and a comparison with satellite datasets such as Sentinel, Landsat, ALOS-AVNIR-2, PALSAR, PALSAR-2 mosaic etc	█	█												2.00
	5)	Preparation of Basins, Sub-Basin, Catchment and Sub-Catchment level maps from Digital Elevation Model (ASTER, SRTM, ALOS, etc.) using ArcGIS.	█	█												-
	6)	Identifying all the gauged catchments within the state.	█	█												-
	7)	Modelling of the ungauged catchments from the gauged catchments using forward stepwise-regression analysis and also using HEC-HMS.		█	█	█	█	█	█	█	█					-
	8)	Obtaining of different flows quantiles i.e, Q5, Q50, Q75, Q90, Q95 (Qmax, Qmin etc.) and flow duration curves.							█	█	█					-
	9)	Testing water quality of rivers, irrigation water and drainage water from irrigated area using water quality lab of		█	█	█		█	█		█	█		█	█	5.00
	10)	Modeling of non-point source contaminant using SWAT.		█	█	█	█	█	█	█	█	█	█	█		-
	11)	Linking the groundwater data from NHP and GW projects to intermittent rivers.				█	█	█	█	█	█	█	█	█		-
	12)	Defining the natural flow regime from the observations obtained from the analysis to assess overall implications for water											█	█	█	-
	13)	Implementation, monitor and feedback.											█	█	█	2.00
														Total :	36.00	