เอกสารหมายเลข 5
ข้อมูลผลการดำเนินงานบริหารจัดการ
ระบบสาธารณูปโภคและสิ่งอำนวยความสะดวก
ของนิคมอุตสาหกรรม 14 แห่ง

ประกอบข้อกำหนดและขอบเขตงาน (Terms of Reference)
การจ้างบริหารจัดการระบบสาธารณูปโภคและสิ่งอำนวยความสะดวก
ภายในนิคมอุตสาหกรรม

การนิคมอุตสาหกรรมแห่งประเทศไทย

สิงหาคม 2564

เอกสารหมายเลข 5
ข้อมูลผลการดำเนินงานบริหารจัดการระบบสาธารณูปโภค และสิ่งอำนวยความสะดวกของนิคมอุตสาหกรรม 14 แห่ง

ในเอกสารรายการนี้จะกล่าวถึงข้อมูลการดำเนินงานบริหารจัดการระบบสาธารณูปโภคและสิ่งอำนวยความสะดวกของนิคมอุตสาหกรรม 14 แห่ง โดยเป็นข้อมูลย้อนหลังในระยะเวลา 1 ปีตั้งแต่เดือนกรกฎาคม 2563 จนถึงเดือนมิถุนายน 2564 โดยจะแสดงข้อมูลของแต่ละนิคมอุตสาหกรรมเรียงลำดับดังนี้

1. นิคมอุตสาหกรรมบางชัน
2. นิคมอุตสาหกรรมลาดกระบัง
3. นิคมอุตสาหกรรมบางพลี
4. นิคมอุตสาหกรรมบางปู
5. นิคมอุตสาหกรรมแหลมฉบัง
6. นิคมอุตสาหกรรมมาบตาพุด
7. นิคมอุตสาหกรรมภาคเหนือ (จังหวัดลำพูน)
8. นิคมอุตสาหกรรมสมุทรสาคร
9. นิคมอุตสาหกรรมพิจิตร
10. นิคมอุตสาหกรรมแก่งคอย
11. นิคมอุตสาหกรรมภาคใต้ (จังหวัดสงขลา)
12. นิคมอุตสาหกรรมนครหลวง
13. นิคมอุตสาหกรรมสระแก้ว
14. นิคมอุตสาหกรรมสงขลา

Water Supply Key Performance
Operation Indicator

SITE : BCN
MONTH : Jun
YEAR : 2021

Item No.	Description	Month													Total	Average
		Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21		
1	**Raw Water Purchased**															
	- M3/month	141,430	133,684	149,508	149,207	137,202	147,472	137,840	149,381	150,877	166,209	143,004	152,190	146,949	1,763,523	146,960
	- M3/day	4,714	4,312	4,823	4,974	4,426	4,916	4,446	4,819	5,388	5,362	4,767	4,909	4,898		4,837
2	**Water Production**															
	- M3/month	141,430	133,684	149,508	149,207	137,202	147,472	137,840	149,381	150,877	166,209	143,004	152,190	146,949	1,763,523	146,960
	- M3/day	4,714	4,312	4,823	4,974	4,426	4,916	4,446	4,819	5,388	5,362	4,767	4,909	4,898		4,837
3	**Capacity, m3/day**	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500		6,500
4	**Capacity, Used %**	72.5	66.3	74.2	76.5	68.1	75.6	68.4	74.1	82.9	82.5	73.3	75.5	75.4		74.4
	Loss in WTP (% of raw water)	-	-	-	-	-	-	-	-	-	-	-	-	-		-
6	**Water Sale**															
	- M3/month	136,507	128,668	143,643	143,548	132,181	141,488	131,493	144,016	143,144	157,107	135,305	143,478	139,263	1,683,334	140,278
	- M3/day	4,550	4,151	4,634	4,785	4,264	4,716	4,242	4,646	5,112	5,068	4,510	4,628	4,642	- 14	4,616
7	**Non Revenue Water, NRW (%)**	3.48	3.75	3.92	3.79	3.66	4.06	4.60	3.59	5.13	5.48	5.38	5.72	5.23		4.5
8	**Leakage and Non-metering water (%)**	3.09	3.43	3.53	3.63	3.50	3.67	4.09	3.17	4.87	5.17	5.13	5.45	4.95		4.2
9	**Leak Detection**															
	- Leaks reported	1	-	-	-	-	1	-	1	-	-	1	1	2	7	1
	- Leaks repaired	1	-	-	-	-	1	-	1	-	-	1	1	2	7	1
10	**Metering**															
	Meter Installed															
	- No. of meter at the beginning of month	159	159	159	159	159	159	159	159	159	159	159	159	159		
	- No. of meter installed in this month	-	-	-	-	-	-	-	-	-	-	-	-	-	-	#DIV/0!
	- No. of meter abandon in this month	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	- No. of meter at the end of month	159	159	159	159	159	159	159	159	159	159	159	159	159		
	Meter Broken															
	- No. of meter broken at the beginning of month	3	2	2	1	2	2	2	2	2	2	2	2	1		
	- No. of meter broken in this month	-	-	-	2	-	-	-	-	-	-	-	-	-	2	0.2
	- No. of repaired/replaced	1	-	1	1	-	-	-	-	-	-	-	1	-	4	0.3
	- No. of meter broken at the end of month	2	2	1	2	2	2	2	2	2	2	2	1	1		
	- % Failure	1.3	1.3	0.6	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.6	0.6		1.1
11	**No. of Supply Interruption**	1	-	-	-	-	1	-	-	-	-	2	4	4	11	1
	- No. of Supply Interruption > 6 hrs. (Planned)	-	-	-	-	-	-	-	-	-	-	-	-	-		
	- No. of Supply Interruption > 6 hrs.(Unplanned)	-	-	-	-	-	-	-	-	-	-	-	-	-		
12	**NO. to Stop Water Supply**	-	-	-	-	-	-	-	-	-	-	-	-	-		
13	**Customer Contact**															
	- No. of Customer	128	128	128	128	128	128	128	128	128	128	128	128	128		
	- No. of Contacts	2	4	-	3	3	1	1	-	3	2	2	-	4	23	2
	- % Contact	1.6	3.1	-	2.3	2.3	0.8	0.8	-	2.3	1.6	1.6	-	3.1		1.4

Water Balance for Water Supply System

SITE : BCN
MONTH : Jun
YEAR : 2021

Description	Month													Total	Average
	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21		
1. Production Water (m3)	141,430	133,684	149,508	149,207	137,202	147,472	137,840	149,381	150,877	166,209	143,004	152,190	146,949	**1,763,523**	**146,960**
2. Sale Water (m3)	136,507	128,668	143,643	143,548	132,181	141,488	131,493	144,016	143,144	157,107	135,305	143,478	139,263		
Sale Water for Pipe leak (m3)	-	-	-	-	-	-	-	-	-	-	-	-	-		
Total	136,507	128,668	143,643	143,548	132,181	141,488	131,493	144,016	143,144	157,107	135,305	143,478	139,263	**1,683,334**	**140,278**
3. Free Water (m3)															
3.1 IEAT office	44	36	43	41	44	48	52	41	36	31	25	30	33	**460**	**38**
3.2 IEAT Housing	119	129	117	105	93	103	96	85	85	104	158	169	132	**1,376**	**115**
3.3 GUSCO Housing	-	-	-	-	-	-	-	-	-	-	-	-	-	**1,836**	**-**
3.4 Water Truck														**-**	**#DIV/0!**
3.5 Field & Spring	394	270	428	103	84	84	566	505	259	381	180	215	253	**3,328**	**277**
Total	557	435	588	249	221	568	714	631	380	516	363	414	418	**3,722**	**458**
4. Non revenue Water (m3)															
Leakage and Non Metering	4,366	4,581	5,277	5,410	4,800	5,416	5,633	4,734	7,353	8,586	7,336	8,298	7,268	**74,692**	**6,224**
Free Water	557	435	588	249	221	568	714	631	380	516	363	414	418	**5,497**	**458**
Total NRW	4,923	5,016	5,865	5,659	5,021	5,984	6,347	5,365	7,733	9,102	7,699	8,712	7,686	**80,189**	**6,682**
5. % NRW (of production Water)															
Leakage and Non Metering	3.09	3.43	3.53	3.63	3.50	3.67	4.09	3.17	4.87	5.17	5.13	5.45	4.95		**4.24**
Free Water	0.39	0.33	0.39	0.17	0.16	0.39	0.52	0.42	0.25	0.31	0.25	0.27	0.28		**0.31**
Total NRW	3.48	3.75	3.92	3.79	3.66	4.06	4.60	3.59	5.13	5.48	5.38	5.72	5.23		**4.55**

Maximum and Minimum Pressure in Water Supply Pipe

SITE : BCN
MONTH : Jun
YEAR : 2021

Road	Pipe Dia. (mm)	Min/Max	Pressure (Bar)													
			Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	
Soi 3	300	Min	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	
		Max	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
Soi 1/2	300	Min	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	
		Max	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
SAHA UNION GROUP	300	Min	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	
		Max	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
Soi 6/4	300	Min	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	
		Max	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	

Chemical and Power Consumption
Water Supply System

SITE : BCN
MONTH : Jun
YEAR : 2021

Item No.	Description	Month													Total	Average
		Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21		
1	**Raw Water Purchased (m3/month)**	139,321	133,684	149,508	149,508	137,202	147,472	137,840	149,381	150,877	166,209	143,004	152,190	146,949	**1,763,824**	**146,985**
2	**Water Production (m3/month)**	141,430	133,684	149,508	149,207	132,181	147,472	137,840	149,381	150,877	166,209	143,004	152,190	146,949	**1,758,502**	**146,542**
3	**Deep Well Water 8 (m3/month)**	20	27	20	20	9	10	32	13	11	11	190	11	10	**384**	**30**
4	**Deep Well Water 7 (m3/month)**	34	41	28	27	23	21	25	21	35	35	94	19	15	**384**	**32**
5	**Total Water (m3/month)**	141,484	133,752	149,556	149,254	132,213	147,503	137,897	149,415	150,923	166,255	143,288	152,220	146,974	**1,759,250**	**146,604**
6	**Chemicals Used (kg)**															
	- Chlorine (gas)															
	- Alum															
	- Lime															
7	**Chemicals Usage Analysis (g/m3)**															
	- Chlorine (gas)															
	- Alum															
	- Lime															
8	Energy Used Deep Well 8, kW-hr	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	Energy Used Deep Well 7, kW-hr	43	53	53	69	12	15	15	16	32	53	209	9	9	**545**	**45**
10	Energy Used, kW-hr	25,376	24,035	26,522	26,937	24,282	25,858	24,371	26,587	27,030	29,638	25,465	27,050	26,327	**314,102**	**26,175**
11	**Total Energy Used, kW-hr**	25,419	24,088	26,575	27,006	24,294	25,873	24,386	26,603	27,062	29,691	25,674	27,059	26,336	**314,647**	**26,221**
12	**Energy Analysis, kW-hr /m3**	0.186	0.187	0.185	0.188	0.184	0.183	0.185	0.185	0.189	0.189	0.190	0.189	0.189		**0.179**

No chemical used

Ground Maintenance & Flood Protection Key Performance
Operation Indicator

SITE : BCN
MONTH : Jun
YEAR : 2021

Item No.	Description	Month													Total	Average
		Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21		
1	**Grass Cutting**															
	- Responsible Area (m2)	178,800	178,800	178,800	178,800	178,800	178,800	178,800	178,800	178,800	178,800	178,800	178,800	178,800	**2,145,600**	**178,800**
	- Target Area (m2)	178,800	178,800	178,800	178,800	178,800	178,800	178,800	178,800	178,800	178,800	178,800	178,800	178,800	**2,145,600**	**178,800**
	- Completed Area (m2)	178,800	178,800	178,800	178,800	178,800	178,800	178,800	178,800	178,800	178,800	178,800	178,800	178,800	**2,145,600**	**178,800**
	- % Complete	100	100	100	100	100	100	100	100	100	100	100	100	100		**100.0**
2	**Drainage Channel Cleaning**															
	- Responsible Area (m2)	10,720	10,720	10,720	10,720	10,720	10,720	10,720	10,720	10,720	10,720	10,720	10,720	10,720	**128,640**	**10,720**
	- Target Area (m2)	10,720	10,720	10,720	10,720	10,720	10,720	10,720	10,720	10,720	10,720	10,720	10,720	10,720	**128,640**	**10,720**
	- Completed Area (m2)	10,720	10,720	10,720	10,720	10,720	10,720	10,720	10,720	10,720	10,720	10,720	10,720	10,720	**128,640**	**10,720**
	- % Complete	100	100	100	100	100	100	100	100	100	100	100	100	100		**100.0**
3	**Road Condition**															
	- Total Area (m2)	42,482	42,482	42,482	42,482	42,482	42,482	42,482	42,482	42,482	42,482	42,482	42,482	42,482		
	- Damage Reported (m2)	30	50	50	100	80	80	5	5	15	30	30	50	50		**45**
	- Damage Repaired (m2)	-	-	30	80	20	75	-	-	-	5	-	-	10	**220**	**18**
	- Damage Reported (m2) at the end of month	30	50	20	20	60	5	5	5	15	25	30	50	40		**27**
	- % Damage	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1		**0.1**
4	**Street Lighting**															
	- Total	232	232	232	232	232	232	232	232	232	232	232	232	232		
	- Failure	10	10	10	11	12	14	14	11	11	11	11	11	15		**12**
	- Replacement	-	-	1	-	-	1	3	-	-	-	-	-	-	**5**	**0**
	- Failure at the end of month	10	10	11	11	12	13	11	11	11	11	11	11	15		**12**
	- % Failure	4.31	4.31	4.74	4.74	5.17	5.60	4.74	4.74	4.74	4.74	4.74	4.74	6.47		**5.0**
5	**Customer Contact**															
	- No. of Customers	162	162	162	162	162	162	162	162	162	162	162	162	162		
	- No. of Contacts	1	4	-	3	2	1	1	-	3	2	2	-	4	22	3
	- % of Contact	0.6	2.5	-	1.9	1.2	0.6	0.6	-	1.9	1.2	1.2	-	2.5		1.0

93.53

Ground Maintenance and Flood Protection System
Power Consumption

SITE : BCN
MONTH : Jun
YEAR : 2021

Item No.	Description	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Total	Average
		Month														
1	**Flood Protection Pumping Station**															
	Pumping Station Soi 5															
	- Volume Pumped (M3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	- Power Consumption (kW-hr)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	- Power Consumption Rate (kW-hr/m3)	-	-	-	-	-	-	-	-	-	-	-	-	-		-
	Pumping Station Seri thai															
	(President Bakery)															
	- Volume Pumped (M3)	39,350	44,630	59,020	59,700	70,190	15,670	17,090	9,350	27,000	21,930	52,560	81,380	22,200	**480,720**	**40,060**
	- Power Consumption (kW-hr)	3,195	1,785	2,360	2,378	2,819	627	702	173	376	419	618	552	446	**13,255**	**1,105**
	- Power Consumption Rate (kW-hr/m3)	0.081	0.040	0.040	0.040	0.040	0.040	0.041	0.019	0.014	0.019	0.012	0.007	0.020		**0.03**
	Pumping Station Seri thai															
	(Bangchan General Assembly)															
	- Volume Pumped (M3)	37,510	55,720	148,350	180,850	111,480	32,030	28,230	12,280	38,000	32,800	82,800	131,270	34,920	**888,730**	**74,061**
	- Power Consumption (kW-hr)	775	1,349	2,742	2,411	3,307	816	599	349	607	754	1,078	1,200	806	**16,018**	**1,335**
	- Power Consumption Rate (kW-hr/m3)	0.021	0.024	0.018	0.013	0.030	0.025	0.021	0.028	0.016	0.023	0.013	0.009	0.023		**0.02**
	Pumping Station Soi 3/3															
	- Volume Pumped (M3)	24,372	30,879	50,109	39,900	33,501	12,942	132	9	10,530	9,405	27,144	71,100	18,831	**304,482**	**25,374**
	- Power Consumption (kW-hr)	654	747	1,403	1,066	896	344	3	-	289	250	477	538	509	**6,522**	**544**
	- Power Consumption Rate (kW-hr/m3)	0.027	0.024	0.028	0.027	0.027	0.027	0.023	-	0.027	0.027	0.018	0.008	0.027		**0.02**
	Pumping Station Soi 6/2															
	- Volume Pumped (M3)	94,810	130,900	344,850	266,160	185,100	27,470	19,570	11,440	37,200	28,459	97,640	145,310	31,520	**1,325,619**	**110,468**
	- Power Consumption (kW-hr)	1,472	2,435	4,354	4,791	4,458	516	328	210	521	521	947	931	566	**20,578**	**1,715**
	- Power Consumption Rate (kW-hr/m3)	0.016	0.019	0.013	0.018	0.024	0.019	0.017	0.018	0.014	0.018	0.010	0.006	0.018		**0.02**
	Pumping Station Seri thai (Friendship)															
	- Volume Pumped (M3)	57,140	63,340	114,840	82,900	77,350	34,370	18,100	9,270	33,000	26,870	62,220	100,330	31,520	**654,110**	**54,509**
	- Power Consumption (kW-hr)	915	1,203	1,878	1,252	1,711	615	310	172	455	443	611	738	487	**9,875**	**823**
	- Power Consumption Rate (kW-hr/m3)	0.016	0.019	0.016	0.015	0.022	0.018	0.017	0.019	0.014	0.016	0.010	0.007	0.015		**0.02**
	Pumping Station Seri thai (SAHA UNION)															
	- Volume Pumped (M3)	16,500	20,975	24,000	18,850	24,725	7,750	5,875	6,825	10,725	8,925	13,650	13,175	27,010	**182,485**	**15,207.08**
	- Power Consumption (kW-hr)	660	839	960	754	989	310	235	273	429	357	546	527	1,080	**7,299**	**608.25**
	- Power Consumption Rate (kW-hr/m3)	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040		**0.04**
	Pumping Station Soi 2 (Mitsu)															
	- Volume Pumped (M3)	21,476	11,704	30,506	12,747	13,230	5,047	364	7	4,627	3,801	11,718	18,035	5,922	**117,708**	**9,809.00**
	- Power Consumption (kW-hr)	559	419	662	481	542	164	13	12	139	116	221	215	179	**3,163**	**263.58**
	- Power Consumption Rate (kW-hr/m3)	0.026	0.036	0.022	0.038	0.041	0.032	0.036	1.714	0.030	0.031	0.019	0.012	0.030		**0.17**
	- Total Volume Pumped (M3)	291,158	358,148	771,675	661,107	515,576	135,279	89,361	49,181	161,082	132,190	347,732	560,600	171,923	**3,953,854**	**329,488**
	- Total Power Consumption (kW-hr)	8,230	8,777	14,359	13,133	14,722	3,392	2,190	1,189	2,816	2,860	4,498	4,701	4,073	**76,710**	**6,393**
	- Total Power Consumption Rate (kW-hr/m3)	0.028	0.025	0.019	0.020	0.029	0.025	0.025	0.024	0.017	0.022	0.013	0.008	0.024		**0.021**
2	**Jet Aaerator, Paddle Wheel**															
	- Power Consumption (kW-hr)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	- Power Consumption Rate (kW-hr/day)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	**Street Lighting**															
	- Power Consumption (kW-hr)	11,596	12,192	11,467	11,796	12,495	12,126	12,626	12,521	11,042	12,050	11,017	10,985	10,305	**140,622**	**11,719**
	- Power Consumption Rate (kW-hr/day)	387	393.29	369.90	393.20	403.06	404.20	407.29	403.90	394.36	388.71	367.23	354.35	343.50	**4,623**	**385**
4	**Engine pump**															
	- Volume Pumped (m3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	- Diesel oil (lite)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	- Power Consumption Rate (m3/lite)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	#DIV/0!

Monthly Summary

Main Machine Status

Month

SITE : BCN
MONTH : Jun
YEAR : 2021

Item No.	Description	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Remark
1	**Water Treatment Plant**														
	Number of main machine	5	5	5	5	5	5	5	5	5	5	5	5	5	
	Number of broken machine	-	-	-	-	-	-	-	-	-	-	-	-	-	
	% Compliance	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
2	**Lift Station**														
	Number of main machine	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Number of broken machine	-	-	-	-	-	-	-	-	-	-	-	-	-	
	% Compliance	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	**Wastewater Treatment**														
	Number of main machine	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Number of broken machine	-	-	-	-	-	-	-	-	-	-	-	-	-	
	% Compliance	-	-	-	-	-	-	-	-	-	-	-	-	-	
4	**Flood Protection**														
	Number of Aerator	9	9	9	9	9	9	9	9	9	9	9	9	9	
	Number of broken machine	-	-	-	-	-	-	-	-	-	-	-	-	-	
	% Compliance	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
5	**Flood Protection**														
	Number of main machine	16	16	16	16	16	16	16	16	16	16	16	16	16	
	Number of broken machine	-	-	-	-	-	-	-	-	-	-	-	-	-	
	% Compliance	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
6	**Solid Waste**														
	Number of main machine	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Number of broken machine	-	-	-	-	-	-	-	-	-	-	-	-	-	
	% Compliance	-	-	-	-	-	-	-	-	-	-	-	-	-	
7	**Road Condition**														
	Total Area (m2)	42,482	42,482	42,482	42,482	42,482	42,482	42,482	42,482	42,482	42,482	42,482	42,482	42,482	
	Damage Area (m2)	30	50	20	20	60	5	5	5	15	25	30	50	40	
	% Damage	0.07	0.12	0.05	0.05	0.14	0.01	0.01	0.01	0.04	0.06	0.07	0.12	0.09	
8	**Street Lighting**														
	Total	232	232	232	232	232	232	232	232	232	232	232	232	232	
	Failure	10	10	11	11	12	13	11	11	11	11	11	11	15	
	% Failure	4.31	4.31	4.74	4.74	5.17	5.60	4.74	4.74	4.74	4.74	4.74	4.74	6.47	

Water Supply Key Performance
Operation Indicator

SITE : LKB
MONTH : Jun
YEAR : 2021

Item No.	Description	Month													Total	Average
		Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21		
1	**Raw Water Purchased**															
	- MWA	497,179	516,473	482,058	454,164	475,280	576,938	545,195	649,287	714,305	760,050	683,312	706,490	**671,488**		
	- GEM	182,849	221,888	306,414	326,000	354,004	238,390	260,474	215,728	123,338	170,897	136,096	185,860	**194,113**		
	- M3/month	680,028	738,361	788,472	780,164	829,284	815,328	805,669	865,015	837,643	930,947	819,408	892,350	**865,601**	**9,968,242**	**830,687**
	- M3/day	22,668	23,818	25,435	26,005	26,751	27,178	25,989	27,904	29,916	30,031	27,314	28,785	**28,853**		**27,332**
2	**Water Production**															
	- M3/month	680,028	738,361	788,472	780,164	829,284	815,328	805,669	865,015	837,643	930,947	819,408	892,350	**865,601**	**9,968,242**	**830,687**
	- M3/day	22,668	23,818	25,435	26,005	26,751	27,178	25,989	27,904	29,916	30,031	27,314	28,785	**28,853**		**27,332**
3	**Capacity, m3/day**	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	**36,000**		**36,000**
4	**Capacity, Used %**	63.0	66.2	70.7	72.2	74.3	75.5	72.2	77.5	83.1	83.4	75.9	80.0	**80.1**		**74.9**
5	**Loss in WTP (% of raw water)**	-	-	-	-	-	-	-	-	-	-	-	-	-		-
6	**Water Sale**															
	- M3/month	683,798	728,001	763,756	763,680	822,519	828,719	801,536	872,278	845,072	946,097	818,476	902,234	**896,699**	**9,989,067**	**832,422**
	- M3/day	22,793	23,484	24,637	25,456	26,533	27,624	25,856	28,138	30,181	30,519	27,283	29,104	**29,890**		**27,392**
7	**Non Revenue Water, NRW (%)**	- 0.55	1.40	3.13	2.11	0.82	- 1.64	0.51	- 0.84	- 0.89	- 1.63	0.11	- 1.11	- **3.59**		- **0.2**
8	**Leakage and Non-metering water (%)**	- 0.84	1.13	2.92	1.90	0.58	- 1.88	0.24	- 1.06	- 1.14	- 1.87	- 0.12	- 1.29	- **3.81**		- **0.4**
9	**Leak Detection**															
	- Leaks reported	3	2	-	1	3	1	2	3	3	6	4	-	**1**	**26**	**2**
	- Leak repaired	3	2	-	1	3	1	2	3	3	6	4	-	**1**	**26**	**2**
10	**Metering**															
	Meter Installed															
	- No. of meter at the beginning of month	308	309	309	309	309	309	309	310	310	310	310	310	**310**		
	- No. of meter installed in this month	1	-	-	-	-	-	1	-	-	-	-	-	**1**	**2**	**0.2**
	- No. of meter abandon in this month	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**#DIV/0!**
	- No. of meter at the end of month	309	309	309	309	309	309	310	310	310	310	310	310	**311**		
	Meter Broken															
	- No. of meter broken at the beginning of month	5	5	5	4	4	5	5	4	4	4	4	4	**4**	**52**	**4.3**
	- No. of meter broken in this month				1	1			1	1					**4**	**1.0**
	- No. of repaired/replaced			1	1			1	1	1					**5**	**1.0**
	- No. of meter broken at the end of month	5	5	4	4	5	5	4	4	4	4	4	4	**4**	**51**	**4.3**
	- % Failure	1.6	1.6	1.3	1.3	1.6	1.6	1.3	1.3	1.3	1.3	1.3	1.3	**1.3**		**1.5**
11	**No. of Supply Interruption**	2	1	-	1	3	1	2	3	1	6	3	-	**1**	**22**	**2**
	- No. of Supply Interruption > 6 hrs. (Planned)	2	-	-	1	1	1	2	2	1	5	3	-	**1**	**17**	**1**
	- No. of Supply Interruption > 6 hrs.(Unplanne	-	-	-	-	-	-	-	-	-	-	-	-	-		
12	**NO. to Stop Water Supply**	-	-	-	-	-	-	-	-	-	-	-	-	-		
13	**Customer Contact**															
	- No. of Customer	221	221	221	221	221	221	221	221	221	221	221	221	**221**		
	- No. of Contacts	1	-	-	4	1	-	-	2	3	-	-	-	**2**	**12**	**1**
	- % Contact	0.5	-	-	1.8	0.5	-	-	0.9	1.4	-	-	-	**0.9**		**0.5**

Water Balance for Water Supply System

SITE : LKB
MONTH : Jun
YEAR : 2021

Description	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Total	Average
1. Production Water (m3)	680,028	738,361	788,472	780,164	829,284	815,328	805,669	865,015	837,643	930,947	819,408	892,350	**865,601**	**9,968,242**	**830,687**
2. Sale Water (m3)	683,798	728,001	763,756	763,680	822,519	828,719	801,536	872,278	845,072	946,097	818,476	902,234	**896,699**	**9,989,067**	**832,422**
3. Free Water (m3)															
- GUSCO	389	354	327	339	445	358	322	298	308	324	295	276	**289**	**3,935**	**333**
- Community	361	293	276	245	265	235	203	197	184	204	198	215	**205**	**2,720**	**227**
- IEAT Office	232	210	210	128	122	97	92	69	56	80	34	33	**25**	**1,156**	**96**
- IEAT Housing	472	430	455	393	483	502	558	443	565	285	374	489	**784**	**5,761**	**480**
- Custom Office	500	696	419	585	621	728	1,059	900	973	1,370	1,043	614	**549**	**9,557**	**796**
Total	1,954	1,983	1,687	1,690	1,936	1,920	2,234	1,907	2,086	2,263	1,944	1,627	**1,852**	**23,129**	**1,927**
4. Non revenue Water (m3)															
Leakage and Non Metering	- 5,724	8,377	23,029	14,794	4,829	- 15,311	1,899	- 9,170	- 9,515	- 17,413	- 1,012	- 11,511	**- 32,950**	**- 43,954**	**- 3,663**
Free Water	1,954	1,983	1,687	1,690	1,936	1,920	2,234	1,907	2,086	2,263	1,944	1,627	**1,852**	**23,129**	**1,927**
Total NRW	- 3,770	10,360	24,716	16,484	6,765	- 13,391	4,133	- 7,263	- 7,429	- 15,150	932	- 9,884	**- 31,098**	**- 20,825**	**- 1,735**
5. % NRW (of production Water)															
Leakage and Non Metering	- 0.84	1.13	2.92	1.90	0.58	- 1.88	0.24	- 1.06	- 1.14	- 1.87	- 0.12	- 1.29	**- 3.81**		**- 0.44**
Free Water	0.29	0.27	0.21	0.22	0.23	0.24	0.28	0.22	0.25	0.24	0.24	0.18	**0.21**		**0.23**
Total NRW	- 0.55	1.40	3.13	2.11	0.82	- 1.64	0.51	- 0.84	- 0.89	- 1.63	0.11	- 1.11	**- 3.59**		**- 0.21**

		Chemical and Power Consumption Water Supply System													SITE : LKB MONTH : Jun YEAR : 2021	
Item No.	Description	Month													Total	Average
		Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21		
1	**Raw Water Purchased (m3/month)**	680,028	738,361	788,472	780,164	829,284	815,328	805,669	865,015	837,643	930,947	819,408	892,350	**865,601**	**10,648,270**	**819,098**
2	**Water Production (m3/month)**	680,028	738,361	788,472	780,164	829,284	815,328	805,669	865,015	837,643	930,947	819,408	892,350	**865,601**	**10,648,270**	**819,098**
3	**Chemicals Used (kg)** - Chlorine (gas) - Alum - Lime															
4	**Chemicals Usage Analysis (g/m3)** - Chlorine (gas) - Alum - Lime															
5	**Energy Used, kW-hr**	129,660	145,212	154,193	165,361	172,323	180,898	150,957	189,237	173,416	191,449	165,471	181,676	**176,445**	**2,176,298**	**167,408**
6	**Solar Rooftop**	6,930	4,915	6,270	6,370	5,540	4,820	5,120	7,000	7,230	8,900	7,450	8,400	**8,050**		
	Energy Used, kW-hr + Solar Rooftop	136,590	150,127	160,463	171,731	177,863	185,718	156,077	196,237	180,646	200,349	172,921	190,076	**184,495**		
7	**Energy Analysis, kW-hr /m3**	0.201	0.203	0.204	0.220	0.214	0.228	0.194	0.227	0.216	0.215	0.211	0.213	**0.213**		**0.212**

Maximum and Minimum Pressure in Water Supply Pipe

SITE : LKB
MONTH : Jun
YEAR : 2021

Road	Pipe Dia. (mm)	Max/Min	Pressure (Bar)													Remark
			Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	
G1/9	315	**3.1/2.8**	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.7	2.7	2.7	2.8	**2.8**	
G1/13	315	**3.0/2.6**	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.8	2.8	2.8	**2.8**	
G1/3	315	**3.0/2.6**	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	**2.9**	
E3/2	160	**3.0/2.3**	2.6	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.6	2.7	2.7	2.6	**2.6**	หน้า บ.โกลด์ไฟน์
E3/6	160	**3.0/2.3**	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.8	2.8	**2.8**	
Tower Tank 2	225	**3.0/2.6**	2.8	2.8	2.8	2.8	2.8	2.7	2.7	2.7	2.8	2.8	2.8	2.8	**2.8**	
G1/6	315	**3.0/2.6**	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.7	2.7	**2.7**	
G3/2	160	**3.0/2.4**	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.8	2.8	2.8	**2.8**	
E3/11	110	**3.0/2.6**	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.8	2.8	2.8	2.8	**2.8**	หน้า บ.โรเด้นสต๊อก
C4	160	**3.0/2.5**	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.9	**2.9**	ข้างคลังสินค้า เฟส 3
C4	225	**2.9/2.4**	2.5	2.5	2.5	2.6	2.6	2.6	2.6	2.6	2.7	2.6	2.7	2.7	**2.7**	ข้าง บ.ทอมโบว์
C4	250	**3.0/2.5**	2.6	2.6	2.6	2.6	2.6	2.7	2.7	2.7	2.7	2.7	2.7	2.7	**2.7**	หน้าบ.ไทยฮอนด้า
Tower Tank 1	300	**3.0/2.6**	2.9	2.9	2.9	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	**2.8**	
E2	150	**3.0/2.6**	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.7	2.7	**2.7**	

		Wastewater Key Performance Operation Indicator													SITE : LKB MONTH : Jun YEAR : 2021	
Item No.	Description	Month													Total	Average
		Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21		
1	**Wastewater Plant Influent WWTP 1/2**															
	- M3/month	414,100	387,700	419,100	458,300	508,650	506,650	398,800	486,300	419,800	501,400	368,895	390,111	**363,706**	**5,209,412**	**434,118**
	- M3/day	13,803	12,506	13,519	14,784	16,408	16,888	12,865	15,687	14,993	16,174	12,297	12,584	**12,124**		**14,236**
	Wastewater Plant Influent WWTP 3															
	- M3/month	214,305	225,358	226,136	226,352	246,158	215,048	197,317	209,379	216,481	233,303	189,994	200,601	**192,153**	**2,578,280**	**214,857**
	- M3/day	7,144	7,270	7,295	7,302	7,941	7,168	6,365	6,754	7,731	7,526	6,333	6,471	**6,405**		**7,047**
	Total Influent (WWTP 1/2 + WWTP 3)															
	- M3/month	628,405	613,058	645,236	684,652	754,808	721,698	596,117	695,679	636,281	734,703	558,889	590,712	**555,859**	**7,787,692**	**648,974**
	- M3/day	20,947	19,776	20,814	22,822	24,349	24,057	19,230	22,441	22,724	23,700	18,630	19,055	**18,529**		**21,344**
2	**No. of Sewer Overflow**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	**Sewer Blockage Detection**															
	- Blockage reported	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	- Blockage repaired	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	**No. of Sewerage Interruption**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	- No. of Sewerage Interruption > 6 hrs. (Planned)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	- No. of Sewerage Interruption > 6 hrs. (Unplanned)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	**Sludge Disposal (from Belt Press) WWTP 1/2**															
	- Sludge Weight (Ton)	345.1	408.6	394.3	471.1	484.9	595.7	519.0	472.6	419.2	570.8	458.9	535.4	**504.9**	**5,835**	**486**
	- % Solid Content	23.00	23.60	23.20	22.20	22.80	22.30	20.10	22.60	21.80	21.80	21.20	20.70	**20.70**		**22**
	Sludge Disposal (from Belt Press) WWTP 3															
	- Sludge Weight (Ton)	63.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	- % Solid Content	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Total Sludge Disposal (WWTP 1/2 + WWTP 3)															
	- Sludge Weight (Ton)	408.1	408.6	394.3	471.1	484.9	595.7	519.0	472.6	419.2	570.8	458.9	535.4	**504.9**	**5,835**	**486**
	- % Solid Content	19.45	23.60	23.20	22.20	22.80	22.30	20.10	22.60	21.80	21.80	21.20	20.70	20.60		
6	**Customer Contact**															
	- No. of Customers	183	183	183	183	183	183	183	183	183	183	183	183	**183**		**183**
	- No. of Contacts	1	5	1	-	1	-	1	3	4	3	2	4	**6**	**30**	**3**
	- % Contact	0.5	2.7	0.5	-	0.5	-	0.5	1.6	2.2	1.6	1.1	2.2	**3.3**		**1.4**

Wastewater Daily Influent Flow
Wastewater System

SITE : LKB
MONTH: Jun
YEAR : 2021

No.	Description	Date 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total M3/month	Average M3/month
1																																	
	- WWTP Plant Phase 1/2 (M3/day)	12,366	12,546	10,954	10,462	14,470	11,474	11,745	12,848	15,126	12,053	11,291	12,545	12,257	11,689	11,938	11,262	14,357	13,400	11,818	11,926	11,309	11,068	11,747	12,122	12,122	11,981	9,773	12,647	13,716	10,694	**363,706**	**12,124**
	- WWTP Plant Phase 3 (M3/day)	6,515	7,194	5,335	7,044	7,691	4,803	5,709	7,426	6,888	6,822	6,875	6,335	4,761	6,840	6,524	7,091	7,233	7,554	5,202	5,361	6,410	6,510	6,624	5,980	6,742	5,671	3,737	7,531	7,040	6,705	**192,153**	**6,405**
	- Total Wastewater Influent (M3/day)	**18,881**	**19,740**	**16,289**	**17,506**	**22,161**	**16,277**	**17,454**	**20,274**	**22,014**	**18,875**	**18,166**	**18,880**	**17,018**	**18,529**	**18,462**	**18,353**	**21,590**	**20,954**	**17,020**	**17,287**	**17,719**	**17,578**	**18,371**	**18,102**	**18,864**	**17,652**	**13,510**	**20,178**	**20,756**	**17,399**	**555,859**	**18,529**

Chemical and Power Consumption
Wastewater System

SITE : LKB
MONTH : Jun
YEAR : 2021

Item No.	Description	Month													Total	Average
		Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21		
1	**Wastewater Plant Influent WWTP 1/2**															
	- M3/month	414,100	387,700	419,100	458,300	508,650	506,650	398,800	486,300	419,800	501,400	368,895	390,111	**363,706**	**5,623,512**	**432,578**
	Wastewater Plant Influent WWTP 3															
	- M3/month	214,305	225,358	226,136	226,352	246,158	215,048	197,317	209,379	216,481	233,303	189,994	200,601	**192,153**	**2,792,585**	**214,814**
	Total Influent (WWTP 1/2 + WWTP 3)															
	- M3/month	628,405	613,058	645,236	684,652	754,808	721,698	596,117	695,679	636,281	734,703	558,889	590,712	**555,859**	**8,416,097**	**647,392**
2	**Chemical Use WWTP 1/2**															
	- Polymer (kg)	284.0	312.0	290.0	327.0	341.0	416.0	372.0	342.0	326.0	427.0	357.0	511.7	**504.9**	**4,810.6**	**370.0**
	Chemical Use WWTP 3															
	- Polymer (kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total Chemical Use (WWTP 1/2 + WWTP 3)															
	- Polymer (kg)	284.0	312.0	290.0	327.0	341.0	416.0	372.0	342.0	326.0	427.0	357.0	511.7	**504.9**	**4,810.6**	**370.0**
3	**Chemical Usage Analysis WWTP 1/2**															
	- Polymer (g/m3)	0.69	0.80	0.69	0.71	0.67	0.82	0.93	0.70	0.78	0.85	0.97	1.31	**1.39**		**0.86**
	Chemical Usage Analysis WWTP 3															
	- Polymer (g/m3)	-	-	-	-	-	-	-	-	-	-	-	-	-		-
	Total Chemical Use Analysis															
	- Polymer (g/m3)	0.45	0.51	0.45	0.48	0.45	0.58	0.62	0.49	0.51	0.58	0.64	0.87	**0.91**		**0.57**
4	**Energy Analysis (WWTP), kW-hr**															
	- Lift Station	17,723	14,679	19,934	23,143	22,764	19,949	21,082	21,134	17,554	22,922	14,366	18,293	**16,217**	**249,760**	**19,212**
	- WWTP 1/2	164,000	162,000	168,000	144,000	145,000	137,000	125,000	135,000	137,000	163,000	138,000	149,000	**118,000**	**1,885,000**	**145,000**
	- WWTP 3	61,000	62,000	58,000	56,000	57,000	63,000	65,000	55,000	56,000	58,000	62,000	56,000	**50,000**	**759,000**	**58,385**
	- Total	242,723	238,679	245,934	223,143	224,764	219,949	211,082	211,134	210,554	243,922	214,366	223,293	**184,217**	**2,893,760**	**222,597**
5	**Energy Analysis (WWTP), kW-hr /m3**															
	- Lift Station	0.028	0.024	0.031	0.034	0.030	0.028	0.035	0.030	0.028	0.031	0.026	0.031	**0.029**		**0.030**
	- WWTP (WWTP 1/2 + WWTP 3)	0.358	0.365	0.350	0.292	0.268	0.277	0.319	0.273	0.303	0.301	0.358	0.347	**0.302**		**0.316**
	- Total	0.386	0.389	0.381	0.326	0.298	0.305	0.354	0.303	0.331	0.332	0.384	0.378	**0.331**		**0.346**

Ground Maintenance Key Performance
Operation Indicator

SITE : LKB
MONTH : Jun
YEAR : 2021

Item No.	Description	Month													Total	Average
		Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21		
1	**Grass Cutting**															
	- Responsible Area (m2)	156,089	156,089	156,089	156,089	156,089	156,089	156,089	156,089	156,089	156,089	156,089	156,089	**156,089**		**156,089**
	- Target Area (m2)	156,089	156,089	156,089	156,089	156,089	156,089	156,089	156,089	156,089	156,089	156,089	156,089	**156,089**	**2,029,157**	**156,089**
	- Completed Area (m2)	156,089	156,089	156,089	156,089	156,089	156,089	156,089	156,089	156,089	156,089	156,089	156,089	**156,089**	**2,029,157**	**156,089**
	- % Complete	100	100	100	100	100	100	100	100	100	100	100	100	**100**		**100**
2	**Drainage Channel Cleaning**															
	- Responsible Area (m2)	41,300	41,300	41,300	41,300	41,300	41,300	41,300	41,300	41,300	41,300	41,300	41,300	**41,300**		**41,300**
	- Target Area (m2)	41,300	41,300	41,300	41,300	41,300	41,300	41,300	41,300	41,300	41,300	41,300	41,300	**41,300**	**536,900**	**41,300**
	- Completed Area (m2)	41,300	41,300	41,300	41,300	41,300	41,300	41,300	41,300	41,300	41,300	41,300	41,300	**41,300**	**536,900**	**41,300**
	- % Complete	100	100	100	100	100	100	100	100	100	100	100	100	**100**		**100**
3	**Road Condition**															
	- Total Area (m2)	204,680	204,680	204,680	204,680	204,680	204,680	204,680	204,680	204,680	204,680	204,680	204,680	**204,680**		
	- Damage Reported (m2)	551	551	551	363	363	363	650	650	760	760	431	431	**431**		**527**
	- Damage Repaired (m2)	-	-	188	-	-	-	223	223	329	329	-	-	**-**	**1,292**	**99**
	- Damage Reported (m2) at the end of month	551	551	363	363	363	363	427	427	431	431	431	431	**431**		**428**
	- % Damage	0.27	0.27	0.18	0.18	0.18	0.18	0.21	0.21	0.21	0.21	0.21	0.21	**0.21**		**0.2**
4	**Street Lighting**															
	- Total	812	812	812	812	812	812	812	812	812	812	812	812	**812**		
	- Failure	25	25	25	43	43	43	54	54	54	74	74	74	**78**		**51**
	- Replacement															**#DIV/0!**
	- Failure at the end of month	25	25	25	43	43	43	54	54	54	74	74	74	**78**		**51**
	- % Failure	3.08	3.08	3.08	5.30	5.30	5.30	6.65	6.65	6.65	9.11	9.11	9.11	**9.61**		**6.3**
5	**Customer Contact**															
	- No. of Customers	265	265	265	265	265	265	265	265	265	265	265	265	**265**		
	- No. of Contacts	2	5	2	2	2	6	5	5	-	1	1	2	**5**	**38**	**3**
	- % of Contact	0.8	1.9	0.8	0.8	0.8	2.3	1.9	1.9	-	0.4	0.4	0.8	**1.9**		**1.1**

		Ground Maintenance System Power Consumption													SITE : LKB MONTH : Jun YEAR : 2021	
Item No.	Description	Month													Total	Average
		Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21		
1	**Flood Protection Pumping Station**															
	- Volume Pumped (M3)	1,685,000	1,054,000	1,378,000	1,629,000	1,916,200	602,200	1,374,000	405,600	1,438,800	1,239,800	1,993,800	1,105,800	**1,348,200**	**17,170,400**	**1,320,800**
	- Power Consumption (kW-hr)	71,870	47,489	46,553	48,551	49,470	27,361	45,643	16,274	48,848	46,741	51,665	38,104	**47,664**	**586,233**	**45,095**
	- Power Consumption Rate (kW-hr/m3)	0.043	0.045	0.034	0.030	0.026	0.045	0.033	0.040	0.034	0.038	0.026	0.034	**0.035**		**0.034**
2	**Street Lighting**															
	- Power Consumption (kW-hr)	22,711	21,507	21,249	21,854	23,311	21,745	23,205	23,575	20,918	23,831	21,732	22,500	**21,062**	**289,200**	**22,246**
	- Power Consumption Rate (kW-hr/day)	757	694	685	728	752	725	749	760	747	769	724	726	**702**		**732**

Monthly Summary

Main Machine Status

Month

SITE : LKB
MONTH : Jun
YEAR : 2021

Item No.	Description	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Remark
1	**Water Treatment Plant**														
	Number of main machine	59	59	59	59	59	59	59	59	59	59	59	59	**59**	
	Number of broken machine	-	-	-	-	-	-	-	-	-	-	-	-	**-**	
	% Compliance	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	**100.0**	
2	**Lift Station**														
	Number of main machine	20	20	20	20	20	20	20	20	20	20	20	20	**20**	
	Number of broken machine	2	-	-	-	4	4	-	-	-	-	-	-	**1**	Overhaul Pump No.2 of Lift Sta.4
	% Compliance	90.0	100.0	100.0	100.0	80.0	80.0	100.0	100.0	100.0	100.0	100.0	100.0	**95.0**	
3	**Wastewater Treatment 1/2**														
	Number of main machine	68	68	68	68	68	68	68	68	68	78	78	78	**78**	
	Number of broken machine	4	1	-	-	-	2	1	1	1	-	-	-	**-**	
	% Compliance	94.12	98.53	100.00	100.00	100.00	97.06	98.53	98.53	98.53	100.00	100.00	100.00	**100.00**	
4	**Wastewater Treatment 3**														
	Number of main machine	52	52	52	52	52	52	52	52	52	62	62	62	**62**	
	Number of broken machine	3	1	2	1	1	1	-	-	-	3	2	-	**1**	Replace Roller No.1 of Primary WWTP 3
	% Compliance	94.23	98.08	96.15	98.08	98.08	98.08	100.00	100.00	100.00	95.16	96.77	100.00	**98.39**	
5	**Flood Protection**														
	Number of main machine	44	44	44	44	44	44	44	44	44	44	44	44	**44**	
	Number of broken machine	-	-	-	-	-	-	-	-	-	-	-	-	**-**	
	% Compliance	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	**100.0**	
6	**Solid Waste**														
	Number of main machine	-	-	-	-	-	-	-	-	-	-	-	-	**-**	
	Number of broken machine	-	-	-	-	-	-	-	-	-	-	-	-	**-**	
	% Compliance	-	-	-	-	-	-	-	-	-	-	-	-	**-**	
7	**Road Condition**														
	Total Area (m2)	204,680	204,680	204,680	204,680	204,680	204,680	204,680	204,680	204,680	204,680	204,680	204,680	**204,680**	
	Damage Area (m2)	551	551	363	363	363	363	427	427	431	431	431	431	**431**	
	% Damage	0.27	0.27	0.18	0.18	0.18	0.18	0.21	0.21	0.21	0.21	0.21	0.21	**0.21**	
8	**Street Lighting**														
	Total	812	812	812	812	812	812	812	812	812	812	812	812	**812**	
	Failure	25	25	25	43	43	43	54	54	54	74	74	74	**78**	
	% Failure	3.1	3.1	3.1	5.3	5.3	5.3	6.7	6.7	6.7	9.1	9.1	9.1	**9.6**	

	Wastewater Key Performance Operation Indicator	SITE : BPL MONTH : Jun YEAR : 2021

Item No.	Description	Month													Total	Average
		Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21		
1	**Wastewater Plant Influent**															
	- m3/month	111,012	115,969	131,609	137,571	142,911	124,836	117,050	118,741	115,322	121,310	117,287	120,512	122,430	**1,485,548**	**123,796**
	- m3/day	3,700	3,741	4,245	4,586	4,610	4,161	3,776	3,830	4,119	3,913	3,910	3,887	4,081		**4,072**
2	**No. of Sewer Overflow**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	**Sewer Blockage Detection**															
	- Blockage reported	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	- Blockage repaired	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	**No. of Sewerage Interruption**															
	- No. of Sewerage Interruption > 6 hrs. (Planned)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	- No. of Sewerage Interruption > 6 hrs. (Unplanned)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	**Sludge disposal**															
	- Sludge Volume (m3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	- % Solid Content															
6	**Customer Contact**															
	- No. of Customers	93	93	93	93	93	93	93	93	93	93	93	93	93		**93**
	- No. of Contacts	-	1	-	-	-	-	-	-	-	1	-	-	-	**2**	**0**
	- % Contact	-	1.1	-	-	-	-	-	-	-	1.1	-	-	-		**0.2**
7	**Water usage in Wastewater Plant**	**48.70**	60.10	53.40	46.40	58.90	64.30	82.40	62.70	47.60	60.50	41.70	44.50	51.20	**673.70**	**0**
8	**Water Supply**															
	- m3/month	187,021	**176,838**	**186,258**	**210,581**	**202,953**	**219,478**	222,083	195,135	225,531	191,040	175,321	179,927	**191,328**	**2,376,473**	**198,039**
	- m3/day	6,234	**5,704**	**6,008**	**7,019**	**6,547**	**7,316**	7,164	6,295	8,055	6,163	5,844	5,804	6,378		**6,525**

Chemical and Power Consumption
Wastewater System

SITE : BPL
MONTH : Jun
YEAR : 2021

Item No.	Description	Month													Total	Average
		Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21		
1	**Wastewater Plant Influent**															
	- m3/month	111,012	115,969	131,609	137,571	142,911	124,836	117,050	118,741	115,322	121,310	117,287	120,512	122,430	**1,485,548**	**123,796**
2	**Chemical Use**															
	- Chlorine (kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	- HCl (L)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	- NaOH (L)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	- Urea (kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	- DAP (kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	**Chemical Usage Analysis**															
	- Chlorine (g/m3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	- HCl (cm3/m3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	- NaOH (g/m3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	- Urea (g/m3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	- DAP (g/m3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	**Energy Analysis (WWTP), kW-hr**															
	- Lift Station	15,032	15,177	17,330	17,009	18,123	15,562	16,269	16,491	15,929	17,143	17,388	18,256	17,843	**202,520**	**16,877**
	- WWTP	43,601	44,114	50,860	53,655	55,754	49,926	44,328	44,873	43,990	45,572	43,681	44,523	45,613	**566,889**	**47,241**
	- Total	58,633	59,291	68,190	70,664	73,877	65,488	60,597	61,364	59,919	62,715	61,069	62,779	63,456	**769,409**	**64,117**
5	**Energy Analysis (WWTP), kW-hr/m^3**															
	- Lift Station	0.135	0.131	0.132	0.124	0.127	0.125	0.139	0.139	0.138	0.141	0.148	0.151	0.146		**0.136**
	- WWTP	0.393	0.380	0.386	0.390	0.390	0.400	0.379	0.378	0.381	0.376	0.372	0.369	0.373		**0.382**
	- Total	0.528	0.511	0.518	0.514	0.517	0.525	0.518	0.517	0.520	0.517	0.521	0.521	0.518		**0.518**

บันทึกอัตราการไหลของน้ำเสียเข้าระบบบำบัดน้ำเสีย
นิคมอุตสาหกรรมบางพลี ประจำเดือน มิถุนายน 2564

วันที่	Flow P6 (Phase1) ลบ.ม.	Flow LS6 (Phase2) ลบ.ม.	รวม ลบ.ม.
01-Jun-21	2,605.9	1,646.3	4,252
02-Jun-21	2,395.4	1,385.4	3,781
03-Jun-21	2,393.8	889.4	3,283
04-Jun-21	2,377.4	1,273.8	3,651
05-Jun-21	2,129.0	1,035.1	3,164
06-Jun-21	2,086.7	1,022.3	3,109
07-Jun-21	2,322.4	1,513.9	3,836
08-Jun-21	2,605.9	1,754.7	4,361
09-Jun-21	2,597.1	1,768.1	4,365
10-Jun-21	2,472.6	1,663.6	4,136
11-Jun-21	2,485.1	1,732.4	4,218
12-Jun-21	2,413.2	1,444.7	3,858
13-Jun-21	2,455.4	1,176.2	3,632
14-Jun-21	2,480.0	1,621.9	4,102
15-Jun-21	2,560.4	1,648.6	4,209
16-Jun-21	2,330.4	1,661.9	3,992
17-Jun-21	2,399.9	1,723.1	4,123
18-Jun-21	2,647.2	1,831.1	4,478
19-Jun-21	2,806.0	1,953.2	4,759
20-Jun-21	2,809.1	1,766.0	4,575
21-Jun-21	2,573.1	1,808.5	4,382
22-Jun-21	2,557.2	1,781.0	4,338
23-Jun-21	2,567.2	1,676.0	4,243
24-Jun-21	2,444.3	1,739.9	4,184
25-Jun-21	2,321.3	1,713.7	4,035
26-Jun-21	2,449.0	1,336.1	3,785
27-Jun-21	2,566.1	1,132.2	3,698
28-Jun-21	2,430.0	1,798.2	4,228
29-Jun-21	3,278.8	2,138.8	5,418
30-Jun-21	2,452.9	1,781.2	4,234
Total	**75,013**	**47,417**	**122,430**

Ground Maintenance Key Performance
Operation Indicator

SITE : BPL
MONTH : Jun
YEAR : 2021

Item No.	Description	Month													Total	Average
		Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21		
1	**Grass Cutting**															
	- Responsible Area (m2)	87,300	87,300	87,300	87,300	87,300	87,300	87,300	87,300	87,300	87,300	87,300	87,300	87,300	**1,047,600**	**87,300**
	- Target Area (m2)	87,300	87,300	87,300	87,300	87,300	87,300	87,300	87,300	87,300	87,300	87,300	87,300	87,300	**1,047,600**	**87,300**
	- Completed Area (m2)	87,300	87,300	87,300	87,300	87,300	87,300	87,300	87,300	87,300	87,300	87,300	87,300	87,300	**1,047,600**	**87,300**
	- % Complete	100	100	100	100	100	100	100	100	100	100	100	100	100		**100.0**
2	**Drainage Channel Cleaning**															
	- Responsible Area (m2)	18,914	18,914	18,914	18,914	18,914	18,914	18,914	18,914	18,914	18,914	18,914	18,914	18,914	**226,968**	**18,914**
	- Target Area (m2)	18,914	18,914	18,914	18,914	18,914	18,914	18,914	18,914	18,914	18,914	18,914	18,914	18,914	**226,968**	**18,914**
	- Completed Area (m2)	18,914	18,914	18,914	18,914	18,914	18,914	18,914	18,914	18,914	18,914	18,914	18,914	18,914	**226,968**	**18,914**
	- % Complete	100	100	100	100	100	100	100	100	100	100	100	100	100		**100.0**
3	**Road Condition**															
	- Total Area (m2)	90,690	90,690	90,690	90,690	90,690	90,690	90,690	90,690	90,690	90,690	90,690	90,690	90,690		
	- Damage Reported (m2)	1,850	106	120	140	160	180	200	220	240	260	280	280	300		**207**
	- Damage Repaired (m2)	1,744	-	-	-	-	-	-	-	-	-	-	-	-	-	**-**
	- Damage Reported (m2) at the end of month	106	106	120	140	160	180	200	220	240	260	280	280	300		**207**
	- % Damage	0.12	0.12	0.13	0.15	0.18	0.20	0.22	0.24	0.26	0.29	0.31	0.31	0.33		**0.2**
4	**Street Lighting**															
	- Total	266	266	266	266	266	266	266	266	266	266	266	266	266		
	- Failure	7	13	13	2	8	10	2	6	7	9	12	12	4		**8**
	- Replacement	-	-	13	-	-	8	-	-	-	-	-	8	4	**33**	**3**
	- Failure at the end of month	7	13	-	2	8	2	2	6	7	9	12	4	-		**5**
	- % Failure	2.63	4.89	-	0.75	3.01	0.75	0.75	2.26	2.63	3.38	4.51	1.50	-		**2.0**
5	**Customer Contact**															
	- No. of Customers	93	93	93	93	93	93	93	93	93	93	93	93	93		**93**
	- No. of Contacts	5	-	1	1	1	-	2	1	1	-	1	1	1	**10**	**1**
	- % of Contact	5.4	-	1.1	1.1	1.1	-	2.2	1.1	1.1	-	1.1	1.1	1.1		**0.9**

	Ground Maintenance System Power Consumption	SITE : BPL MONTH : Jun YEAR : 2021

Item No.	Description	Month													Total	Average
		Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21		
1	**Flood Protection Pumping Station**															
	- Volume Pumped (m3)	1,320,629	1,253,630	1,657,874	1,626,881	1,434,020	293,201	230,368	229,190	225,032	242,236	651,386	697,973	515,614	**9,057,405**	**754,784**
	- Power Consumption (kW-hr)	37,969	35,924	46,628	46,543	40,045	9,137	7,671	7,576	7,398	7,073	18,864	20,229	15,241	**262,330**	**21,861**
	- Power Consumption Rate (kW-hr/m3)	0.029	0.029	0.028	0.029	0.028	0.031	0.033	0.033	0.033	0.029	0.029	0.029	0.030		**0.029**
2	**Street Lighting**															
	- Power Consumption (kW-hr)	10,805	11,051	11,111	9,684	10,479	11,272	11,900	11,764	10,647	11,729	10,869	11,242	10,739	**132,487**	**11,041**
	- Power Consumption Rate (kW-hr/day)	360	356	358	323	338	376	384	379	380	378	362	363	358		**363**

Monthly Summary
Main Machine Status

SITE : BPL
MONTH : Jun
YEAR : 2021

Item No.	Description	Month													Remark
		Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	
1	**Water Treatment Plant**														
	Number of main machine	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Number of broken machine	-	-	-	-	-	-	-	-	-	-	-	-	-	
	% Compliance	-	-	-	-	-	-	-	-	-	-	-	-	-	
2	**Lift Station**														
	Number of main machine	28	28	28	28	28	28	28	28	28	28	28	28	28	
	Number of broken machine	-	-	1	1	1	-	-	-	-	-	-	1	-	
	% Compliance	100.0	100.0	96.4	96.4	96.4	100.0	100.0	100.0	100.0	100.0	100.0	96.4	100.0	
3	**Wastewater Treatment**														
	Number of main machine	50	50	50	50	50	50	50	50	50	50	50	50	50	
	Number of broken machine	-	-	-	-	-	-	-	-	-	-	1	1	-	
	% Compliance	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.0	98.0	100.0	
4	**Flood Protection**														
	Number of main machine	25	25	25	25	25	25	25	25	25	25	25	25	25	
	Number of broken machine	-	1	-	-	-	-	-	-	-	-	-	-	-	
	% Compliance	100.0	96.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
5	**Solid Waste**														
	Number of main machine	-	-	-	-	-	-	-	-	-	-	-	-	-	Canceled by Bangplee
	Number of broken machine	-	-	-	-	-	-	-	-	-	-	-	-	-	Industrial Estate.
	% Compliance	-	-	-	-	-	-	-	-	-	-	-	-	-	
6	**Road Condition**														
	Total Area (m2)	90,690	90,690	90,690	90,690	90,690	90,690	90,690	90,690	90,690	90,690	90,690	90,690	90,690	
	Damage Area (m2)	106	106	120	140	160	180	200	220	240	260	280	280	300	
	% Damage	0.12	0.12	0.13	0.15	0.18	0.20	0.22	0.24	0.26	0.29	0.31	0.31	0.33	
7	**Street Lighting**														
	Total	266	266	266	266	266	266	266	266	266	266	266	266	266	
	Failure	7	13	-	2	8	2	2	6	7	9	12	4	-	
	% Failure	2.63	4.89	-	0.75	3.01	0.75	0.75	2.26	2.63	3.38	4.51	1.50	-	

Water Supply Key Performance
Operation Indicator

SITE : BPO
MONTH : Jun
YEAR : 2021

Item No.	Description	Month													Total	Average
		Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21		
1	**Raw Water Purchased**															
	- M3/month	880,033	800,301	820,021	765,402	777,652	846,065	822,405	911,779	865,537	940,127	782,260	901,108	**897,041**	**10,129,698**	**844,142**
	- M3/day	29,334	25,816	26,452	25,513	25,086	28,202	26,529	29,412	30,912	30,327	26,075	29,068	**29,901**		**27,775**
2	**Water Production**															
	- M3/month	880,033	800,301	820,021	765,402	777,652	846,065	822,405	911,779	865,537	940,127	782,260	901,108	**897,041**	**10,129,698**	**844,142**
	- M3/day	29,334	25,816	26,452	25,513	25,086	28,202	26,529	29,412	30,912	30,327	26,075	29,068	**29,901**		**27,775**
3	**Capacity, m3/day**	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	**50,000**		**50,000**
4	**Capacity, Used %**	58.7	51.6	52.9	51.0	50.2	56.4	53.1	58.8	61.8	60.7	52.2	58.1	**59.8**		**55.5**
5	**Loss in WTP (% of raw water)**															**-**
6	**Water Sale**															
	- M3/month	870,974	792,375	809,859	758,429	770,664	838,586	815,215	903,608	857,995	931,197	773,864	892,138	**888,336**	**10,032,266**	**836,022**
	- M3/day	29,032	25,560	26,124	25,281	24,860	27,953	26,297	29,149	30,643	30,039	25,795	28,779	**29,611**		**27,508**
7	**Non Revenue Water, NRW (%)**	1.03	0.99	1.24	0.91	0.90	0.88	0.87	0.90	0.87	0.95	1.07	1.00	**0.97**		**1.0**
8	**Leakage and Non-metering water (%)**	0.96	0.86	1.10	0.81	0.80	0.77	0.73	0.82	0.80	0.88	0.98	0.91	**0.87**		**0.9**
9	**Leak Detection**															
	- Leaks reported	9	2	3	7	5	8	3	9	9	7	5	14	**5**	**77**	**6**
	- Leak repaired	9	2	3	7	5	8	3	9	9	7	5	14	**5**	**77**	**6**
10	**Metering**															
	Meter Installed															
	- No. of meter at the beginning of month	475	475	476	477	475	474	473	473	472	474	474	**474**	**474**		
	- No. of meter installed in this month	2	2	3	2	4	2	-	1	5	1	3	2	**2**	**27**	**2.3**
	- No. of meter abandon in this month	2	1	2	4	5	3	-	2	3	1	3	2	**-**	**26**	**2.2**
	- No. of meter at the end of month	475	476	477	475	474	473	473	472	474	474	474	474	**476**		
	Meter Broken															
	- No. of meter broken at the beginning of month	1	-	-	2	2	-	-	1	-	-	3	1	-		
	- No. of meter broken in this month	-	1	3	-	-	1	1	-	1	3	1	1	-	**12**	**1.0**
	- No. of repaired/replaced	1	1	1	-	2	1	-	1	1	-	3	2	-	**12**	**1.0**
	- No. of meter broken at the end of month	-	-	2	2	-	-	1	-	-	3	1	-	-		
	- % Failure	-	-	0.4	0.4	-	-	0.2	-	-	0.6	0.2	-	**-**		**0.2**
11	**No. of Supply Interruption**	**8**	4	5	8	5	6	10	10	11	5	4	12	**4**	**84**	**7**
	- No. of Supply Interruption > 6 hrs. (Planned)	4	3	5	6	4	4	9	7	6	5	4	8	**3**		
	- No. of Supply Interruption > 6 hrs.(Unplanned)	-	-	-	-	-	-	-	-	-	-	-	-	-		
12	**No. to Stop Water Supply**	-	-	-	-	-	-	-	-	-	-	-	-	**-**		
13	**Customer Contact**															
	- No. of Customer	397	398	399	396	397	399	398	398	397	397	398	397	**397**		
	- No. of Contacts	1	1	4	-	1	2	-	2	5	1	1	2	**1**	**20**	**2**
	- % Contact	0.3	0.3	1.0	-	0.3	0.5	-	0.5	1.3	0.3	0.3	0.5	**0.3**		**0.4**

	WATER BALANCE FOR WATER SUPPLY SYSTEM													SITE : BPO MONTH : Jun YEAR : 2021	
Description	Month														
	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Total	Average
1. Production Water (m3)	880,033	800,301	820,021	765,402	777,652	846,065	822,405	911,779	865,537	940,127	782,260	901,108	**897,041**	**10,129,698**	**844,142**
2. Sale Water (m3)	870,974	792,375	809,859	758,429	770,664	838,586	815,215	903,608	857,995	931,197	773,864	892,138	**888,336**	**10,032,266**	**836,022**
3. Free Water (m3)															
3.1 IEAT Office soi 11	172	682	748	379	408	453	894	478	385	399	379	420	**535**	**6,160**	**513**
3.2 Water truck	8	4	4	16	8	8	12	8	8	4	4	4	**4**	**84**	**7**
3.3 Water Line Flushing	418	369	349	394	374	472	271	231	246	266	354	349	**398**	**4,073**	**339**
3.4 Guard House pattana 3 Road	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total	**598**	1,055	1,101	789	790	933	1,177	717	639	669	737	773	**937**	**10,317**	**860**
4. Non revenue Water (m3)															
Leakage and Non Metering	8,461	6,871	9,061	6,184	6,198	6,546	6,013	7,454	6,903	8,261	7,659	8,197	**7,768**	**87,115**	**7,260**
Free Water	598	1,055	1,101	789	790	933	1,177	717	639	669	737	773	**937**	**10,317**	**860**
Total NRW	9,059	7,926	10,162	6,973	6,988	7,479	7,190	8,171	7,542	8,930	8,396	8,970	**8,705**	**97,432**	**8,119**
5. % NRW (of production Water)															
Leakage and Non Metering	0.96	0.86	1.10	0.81	0.80	0.77	0.73	0.82	0.80	0.88	0.98	0.91	**0.87**		**0.86**
Free Water	0.07	0.13	0.13	0.10	0.10	0.11	0.14	0.08	0.07	0.07	0.09	0.09	**0.10**		**0.10**
Total NRW	1.03	0.99	1.24	0.91	0.90	0.88	0.87	0.90	0.87	0.95	1.07	1.00	**0.97**	**1.01**	**0.96**

Maximum and Minimum Pressure in Water Supply Pipe

SITE : BPO
MONTH : Jun
YEAR : 2021

Road	Pipe Dia. (mm)	Max/Min	Pressure (Bar)													Location
			Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	
Soi 1B	400	max	2.6	2.8	2.5	2.6	2.6	2.5	2.6	2.4	2.6	2.4	2.4	2.8	**2.4**	
PWS 1		min	2.0	1.8	2.0	2.2	2.2	2.0	1.8	1.6	2.0	2.1	2.2	2.0	**1.8**	
Soi 8B	500	max	2.8	2.9	2.6	2.6	2.6	2.5	2.8	2.9	2.6	2.4	2.4	2.4	**2.4**	
PWS 2		min	1.8	2.0	1.8	2.2	2.2	2.0	1.8	1.6	2.0	2.1	2.2	2.0	**2.0**	
Soi 11B	200	max	2.9	3.0	3.0	3.0	3.0	2.9	3.0	3.0	2.9	2.9	2.9	2.9	**2.9**	
PWS 3		min	2.5	2.0	1.6	2.3	2.0	2.4	1.6	1.8	2.8	2.6	2.0	2.2	**2.7**	
Soi 6A	200	max	3.0	2.9	3.0	2.9	2.9	2.9	2.9	3.0	3.0	2.9	2.9	2.9	**2.9**	
PWS 4		min	2.0	2.0	1.8	1.8	2.2	2.0	1.8	1.6	2.0	2.2	2.0	2.0	**2.0**	
Soi 12B	200	max	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	**2.9**	
PWS 5		min	2.2	2.5	2.5	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.0	2.2	**2.2**	
Soi 1B/2	100	max	2.9	2.2	3.0	2.2	3.0	2.2	2.2	2.7	2.2	2.6	2.3	2.8	**2.6**	
SriThai Auto		min	2.0	2.0	2.0	2.1	2.1	2.0	1.8	1.6	2.0	2.0	2.0	2.0	**2.0**	
Soi 1C	100	max	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.6	**2.2**	
Thai Nanpao		min	2.0	2.0	2.0	2.1	2.0	2.0	1.5	1.6	2.0	2.0	2.0	1.9	**2.0**	
Pat. 3	150	max	2.2	2.9	2.2	2.2	2.3	2.2	2.3	2.2	2.2	2.2	2.2	2.2	**2.2**	
DP20		min	2.0	1.9	1.9	1.9	1.9	1.8	1.5	1.6	1.9	2.0	1.9	1.8	**1.9**	
Soi 3B	100	max	2.2	2.3	2.2	2.2	2.3	2.2	2.3	2.2	2.2	2.3	2.3	2.2	**2.2**	
Lion tyre		min	2.1	2.0	1.9	2.2	2.1	2.0	1.8	1.6	2.0	2.1	2.0	2.0	**2.0**	
Soi 4B	150	max	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	**2.2**	
Ampas		min	2.2	2.0	2.0	2.1	2.1	2.0	1.8	1.6	2.0	2.2	2.2	2.0	**1.9**	
Soi 5A	100	max	2.3	2.3	2.3	2.2	2.4	2.3	2.3	2.2	2.2	2.3	2.3	2.2	**2.3**	
Central		min	2.1	2.0	2.0	2.2	2.0	2.0	1.8	1.6	2.0	2.0	2.1	2.0	**2.0**	
Soi 7C	100	max	2.2	2.3	2.2	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	**2.2**	
Ampas		min	2.2	2.0	2.0	2.2	2.0	2.0	1.8	1.6	2.0	2.0	2.0	2.1	**2.0**	
Soi 9C	100	max	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.3	2.3	2.2	**2.2**	
Kuraha		min	2.0	2.1	2.0	2.1	2.0	2.0	1.8	1.6	2.0	2.0	2.0	2.0	**2.0**	
Soi 6C	100	max	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	**2.2**	
3K Battery		min	2.0	2.0	2.0	2.1	2.0	2.0	1.8	1.6	2.0	2.0	2.0	2.0	**2.0**	
Soi 8D	150	max	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.2	**2.3**	
Guardhouse		min	1.9	1.9	1.9	1.9	1.9	1.9	1.8	2.0	1.9	1.9	1.9	1.9	**1.9**	
FZ E-4	150	max	2.3	2.2	2.2	2.2	2.4	2.2	2.2	2.2	2.2	2.3	2.2	2.2	**2.2**	
KCE		min	2.0	2.2	1.9	1.9	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	**2.0**	
Soi 11B	100	max	2.3	2.3	2.3	2.3	2.2	2.2	2.3	2.2	2.3	2.2	2.2	2.2	**2.2**	
Thai Negoro		min	2.0	2.2	2.0	2.2	2.1	2.1	2.0	1.9	2.0	2.0	2.0	2.0	**2.0**	
EX.A Soi 11B/1	100	max	2.3	2.3	2.3	2.2	2.3	2.2	2.3	2.2	2.2	2.2	2.2	2.2	**2.2**	
Poly set		min	2.1	2.2	2.2	2.2	2.2	2.1	2.0	1.9	2.0	2.0	2.0	2.0	**2.0**	

		Chemical and Power Consumption Water Supply System													SITE : BPO MONTH : Jun YEAR : 2021	
Item No.	Description	Month													Total	Average
		Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21		
1	**Raw Water Purchased (m3/month)**	880,033	800,301	820,021	765,402	777,652	846,065	822,405	911,779	865,537	940,127	782,260	901,108	**897,041**	**10,129,698**	**844,142**
2	**Water Production (m3/month)**	880,033	800,301	820,021	765,402	777,652	846,065	822,405	911,779	865,537	940,127	782,260	901,108	**897,041**	**10,129,698**	**844,142**
3	**Chemicals Used (kg)**															
	- Chlorine (gas)															
	- Alum															
	- Lime															
4	**Chemicals Usage Analysis (g/m3)**															
	- Chlorine (gas)															
	- Alum															
	- Lime															
5	**Energy Used, kW-hr**															
	- Deep Well Pump	1,587	3,264	3,166	3,783	1,377	683	2,592	2,266	1,007	1,819	2,455	1,574	**2,240**	**26,226**	**2,186**
	- Distribution Pumping Station	156,460	140,897	144,638	142,975	150,766	151,825	151,246	174,286	162,087	168,202	141,701	160,899	**157,817**		
	- Total	158,047	144,161	147,804	146,758	152,143	152,508	153,838	176,552	163,094	170,021	144,156	162,473	**160,057**	**1,873,565**	**156,130**
6	**Energy Analysis, kW-hr /m3**	0.180	0.180	0.180	0.192	0.196	0.180	0.187	0.194	0.188	0.181	0.184	0.180	**0.178**		**0.185**

No chemical used

		Ground Maintenance Key Performance Operation Indicator													SITE : BPO MONTH : Jun YEAR : 2021	
Item No.	Description	Month													Total	Average
		Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21		
1	**Grass Cutting**															
	- Responsible Area (m2)	329,088	329,088	329,088	329,088	329,088	329,088	329,088	329,088	329,088	329,088	329,088	329,088	329,088	3,949,056	329,088
	- Target Area (m2)	329,088	329,088	329,088	329,088	329,088	329,088	329,088	329,088	329,088	329,088	329,088	329,088	329,088	3,949,056	
	- Completed Area (m2)	329,088	329,088	329,088	329,088	329,088	329,088	329,088	329,088	329,088	329,088	329,088	329,088	329,088	3,949,056	329,088
	- % Complete	100	100	100	100	100	100	100	100	100	100	100	100	100		100.0
2	**Drainage Channel Cleaning**															
	- Responsible Area (m2)	175,675	175,675	175,675	175,675	175,675	175,675	175,675	175,675	175,675	175,675	175,675	175,675	175,675	2,108,100	175,675
	- Target Area (m2)	175,675	175,675	175,675	175,675	175,675	175,675	175,675	175,675	175,675	175,675	175,675	175,675	175,675	2,108,100	
	- Completed Area (m2)	175,675	175,675	175,675	175,675	175,675	175,675	175,675	175,675	175,675	175,675	175,675	175,675	175,675	2,108,100	175,675
	- % Complete	100	100	100	100	100	100	100	100	100	100	100	100	100		100.0
3	**Road Condition**															
	- Total Area (m2)	279,280	279,280	279,280	279,280	279,280	279,280	279,280	279,280	279,280	279,280	279,280	279,280	279,280		279,280
	- Damage Reported (m2)	1,622	1,880	1,640	1,400	2,880	1,450	1,450	1,150	5,420	4,930	4,910	3,720	3,480		2,859
	- Damage Repaired (m2)	-	240	240	20	1,430	-	300	20	490	20	1,190	240	240	4,430	369
	- Damage Reported (m2) at the end of month	1,622	1,640	1,400	1,380	1,450	1,450	1,150	1,130	4,930	4,910	3,720	3,480	3,240		2,490
	- % Damage	0.58	0.59	0.50	0.49	0.52	0.52	0.41	0.40	1.77	1.76	1.33	1.25	1.16		0.9
4	**Street Lighting**															
	- Total	1,088	1,147	1,147	1,147	1,147	1,147	1,147	1,147	1,147	1,147	1,147	1,147	1,147		
	- Failure	101	101	71	68	68	50	52	52	125	82	82	69	66		74
	- Repair and Replacement	-	30	19	-	25	-	-	9	56	-	13	15	13	180	15
	- Failure at the end of month	101	71	52	68	43	50	52	43	69	82	69	54	53		59
	- % Failure	9.3	6.2	4.5	5.9	3.7	4.4	4.5	3.7	6.0	7.1	6.0	4.7	4.6		5.1
5	**Customer Contact**															
	- No. of Customers	588	588	590	588	583	586	589	590	588	590	588	589	589		
	- No. of Contacts	1	2	-	3	4	5	5	-	-	1	1	2	1	24	2
	- % Contact	0.2	0.3	-	0.5	0.7	0.9	0.8	-	-	0.2	0.2	0.3	0.2		0.3

		Ground Maintenance System Power Consumption													SITE : BPO MONTH : Jun YEAR : 2021	
Item No.	Description	Month													Total	Average
		Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21		
1	**Flood Protection Pumping Station**															
	- Volume Pumped (M3)	2,180,685	3,878,288	3,308,744	4,590,390	4,567,949	897,248	387,413	306,523	1,351,194	489,790	1,580,293	1,870,022	**1,849,786**	**25,077,640**	**2,089,803**
	- Power Consumption (kW-hr)	37,893	49,531	37,420	53,598	55,632	11,557	6,579	4,299	21,786	7,485	20,863	20,312	**21,878**	**310,940**	**25,912**
	- Power Consumption Rate (kW-hr/m3)	0.017	0.013	0.011	0.012	0.012	0.013	0.017	0.014	0.016	0.015	0.013	0.011	**0.012**		**0.012**
2	**Street Lighting**															
	- Power Consumption (kW-hr)	71,400	73,992	70,327	67,511	72,986	73,116	77,936	80,121	73,352	85,143	85,962	78,290	**70,997**	**909,733**	**75,811**
	- Power Consumption Rate (kW-hr/day)	2,380	2,387	2,269	2,250	2,354	2,437	2,514	2,585	2,620	2,747	2,865	2,525	**2,367**		**2,493**

	Monthly Summary Main Machine Status	SITE : BPO MONTH : Jun YEAR : 2021

Item No.	Description	Month													
		Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Remark
1	**Water Treatment Plant**														
	Number of main machine	22	22	22	22	22	22	22	22	22	22	22	22	**22**	
	Number of broken machine	-	1	-	1	-	-	-	-	1	1	1	-	**-**	
	% Compliance	100.0	95.5	100.0	95.5	100.0	100.0	100.0	100.0	95.5	95.5	95.5	100.0	**100.0**	
2	**Lift Station**														
	Number of main machine	-	-	-	-	-	-	-	-	-	-	-	-	**-**	
	Number of broken machine	-	-	-	-	-	-	-	-	-	-	-	-	**-**	
	% Compliance	-	-	-	-	-	-	-	-	-	-	-	-	**-**	
3	**Wastewater Treatment**														
	Number of main machine	-	-	-	-	-	-	-	-	-	-	-	-	**-**	
	Number of broken machine	-	-	-	-	-	-	-	-	-	-	-	-	**-**	
	% Compliance	-	-	-	-	-	-	-	-	-	-	-	-	**-**	
4	**Flood Protection**														
	Number of main machine	25	25	25	25	25	25	25	25	25	25	25	25	**25**	
	Number of broken machine	-	-	1	-	-	-	-	-	1	-	-	-	**-**	
	% Compliance	100.0	100.0	96.0	100.0	100.0	100.0	100.0	100.0	96.0	100.0	100.0	100.0	**100.0**	
5	**Solid Waste**														
	Number of main machine	-	-	-	-	-	-	-	-	-	-	-	-	**-**	
	Number of broken machine	-	-	-	-	-	-	-	-	-	-	-	-	**-**	
	% Compliance	-	-	-	-	-	-	-	-	-	-	-	-	**-**	
6	**Road Condition**														
	Total Area (m2)	279,280	279,280	279,280	279,280	279,280	279,280	279,280	279,280	279,280	279,280	279,280	279,280	**279,280**	
	Damage Area (m2)	1,622	1,640	1,400	1,380	1,450	1,450	1,150	1,130	4,930	4,910	3,720	3,480	**3,240**	
	% Damage	0.58	0.59	0.50	0.49	0.52	0.52	0.41	0.40	1.77	1.76	1.33	1.25	**1.16**	
7	**Street Lighting**														
	Total	1,088	1,147	1,147	1,147	1,147	1,147	1,147	1,147	1,147	1,147	1,147	1,147	**1,147**	
	Failure	101	71	52	68	43	50	52	43	69	82	69	54	**53**	
	% Failure	9.28	6.19	4.53	5.93	3.75	4.36	4.53	3.75	6.02	7.15	6.02	4.71	**4.62**	

Water Supply Key Performance
Operation Indicator

SITE : LCB
MONTH : Jun
YEAR : 2021

Item No.	Description	Month													Total	Average
		Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21		
1	**Raw Water Purchased**															
	- M3/month	627,006	655,636	656,248	639,187	658,747	686,932	608,429	634,761	578,437	660,369	544,970	632,124	716,089	7,671,929	639,327
	- M3/day	20,900	21,150	21,169	21,306	21,250	22,898	19,627	20,476	20,658	21,302	18,166	20,391	23,870		21,022
2	**Water Production**															
	- M3/month	610,466	629,061	636,459	635,989	644,795	677,339	602,763	645,878	596,362	697,162	567,760	652,270	695,603	7,681,440	640,120
	- M3/day	20,350	20,292	20,531	21,200	20,800	22,578	19,444	20,835	21,299	22,489	18,925	21,041	23,187		21,052
	Recycle Water Production															
	-M3/Month	49,900	53,869	46,206	75,644	78,875	76,566	77,725	67,420	77,714	82,091	63,126	84,898	78,791	862,925	71,910
	-M3/day	1,663.33	1,737.71	1,490.52	2,521	2,544	2,552	2,507.26	2,175	2,775.50	2,648.10	2,104.20	2,738.65	2,626.37		2,368
	Water Production in water supply network															
	-M3/Month	660,386	682,930	682,665	711,633	723,670	753,905	680,488	713,298	674,076	779,253	630,886	737,168	774,394	8,544,365	712,030
	-M3/day	22,013	22,030	22,021	23,721	23,344	25,130	21,951	23,010	24,074	25,137	21,030	23,780	25,813		23,420
3	**Capacity, M3/day**	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000		27,000
4	**Capacity, Used %**	75.4	75.2	76.0	78.5	77.0	83.6	72.0	77.2	78.9	83.3	70.1	77.9	85.9		78.0
5	**Loss in WTP (% of raw water)**	2.63	4.05	3.02	0.50	2.12	1.40	0.93	- 1.75	- 3.10	- 5.57	- 4.18	- 3.19	2.86	- 0.3	- 0.2
6	**Water Supply Sale**															
	- M3/month	584,699	586,898	619,218	618,215	615,513	676,523	644,413	645,837	620,017	719,587	582,355	665,328	662,662	7,656,566	638,047
	- M3/day	19,490	18,932	19,975	20,607	19,855	22,551	20,787.52	20,833	22,143.46	23,212.48	19,411.83	21,462.19	22,088.73		20,988
	Recycle Water Sale															
	-M3/Month	49,900	53,869	46,206	75,644	78,875	76,566	77,725	67,420	77,714	82,091	63,126	84,898	78,791	862,925	71,910
	-M3/day	1,663.33	1,737.71	1,490.52	2,521	2,544	2,552	2,507.26	2,175	2,775.50	2,648.10	2,104.20	2,738.65	2,626.37		2,368
	Water Sale															
	-M3/Month	634,599	640,767	665,424	693,859	694,388	753,089	722,138	713,257	697,731	801,678	645,481	750,226	741,453	8,519,491	709,958
	-M3/day	21,153.30	20,669.90	21,465.29	23,129	22,400	25,103	23,294.77	23,775.23	24,918.96	25,052.44	21,516.03	24,200.84	24,715.10		23,353
7	**Non Revenue Water, NRW (%)**	3.90	6.17	2.53	2.50	4.05	0.11	- 6.12	0.01	- 3.51	- 2.88	- 2.31	- 1.77	4.25	3.0	0.3
8	**Leakage and Non-metering water (%)**	3.46	5.83	2.22	2.24	3.72	- 0.23	- 6.55	- 0.46	- 4.04	- 3.33	- 2.80	- 2.10	3.91	- 1.6	- 0.1
9	**Leak Detection**															
	- Leaks reported	6	6	8	2	7	4	6	3	3	6	1	6	4	56	5
	- Leak repaired	6	4	9	3	5	6	5	3	2	7	1	4	6	55	5
10	**Metering**															
	Meter Installed															
	- No. of meter at the beginning of month	257	257	258	258	258	258	260	260	260	259	259	259	260		
	- No. of meter installed in this month	2	1	-	-	-	2	1	-	1	1	-	1	1	8	0.7
	- No. of meter abandon in this month	2	-	-	-	-	-	1	-	2	1	-	-	1	5	0.4
	- No. of meter at the end of month	257	258	258	258	258	260	260	260	259	259	259	260	260		
	Meter Broken															
	- No. of meter broken at the beginning of month	2	2	2	2	2	2	2	2	2	2	2	2	2		
	- No. of meter broken in this month	1	-	-	-	-	-	-	-	-	-	-	1	-	1	0.1
	- No. of repaired/replaced	1	-	-	-	-	-	-	-	-	-	-	1	1	2	0.2
	- No. of meter broken at the end of month	2	2	2	2	2	2	2	2	2	2	2	2	1		
	- % Failure	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.4		0.8
11	**No. of Supply Interruption**	4	5	7	1	2	5	6	4	3	6	1	13	6	59	5
	- No. of Supply Interruption > 6 hrs. (Planned)	2	-	1	1	-	-	2	1	-	1	-	3	2	11	1
	- No. of Supply Interruption > 6 hrs.(Unplanned)	-	-	-	-	-	2	1	1	-	1	-	-	-	5	0
12	**NO. to Stop Water Supply**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
13	**Customer Contact**															
	- No. of Customer	174	175	175	177	175	177	176	175	174	177	177	176	176		
	- No. of Contacts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	- % Contact	-	-	-	-	-	-	-	-	-	-	-	-	-		-

	WATER BALANCE FOR WATER SUPPLY SYSTEM													SITE : LCB MONTH : Jun YEAR : 2021	
	Month														
Description	**Jun-20**	**Jul-20**	**Aug-20**	**Sep-20**	**Oct-20**	**Nov-20**	**Dec-20**	**Jan-21**	**Feb-21**	**Mar-21**	**Apr-21**	**May-21**	**Jun-21**	**Total**	**Average**
1. Production Water (m3)	660,386	682,930	682,665	711,633	723,670	753,905	680,488	713,298	674,076	779,253	630,886	737,168	774,394	**9,204,751**	**708,058**
2. Sale Water (m3)	634,599	640,767	665,424	693,859	694,388	753,089	722,138	713,257	697,731	801,678	645,481	750,226	741,453	**9,154,090**	**704,161**
3. Free Water (m3)															
3.1 IEAT Office	33	38	48	37	23	80	108	92	98	125	63	93	72	**910**	**70**
3.2 Seminar Buiding	394	201	114	92	78	15	2	2	2	1	1	-	3	**905**	**70**
3.3 Guest House	10	90	28	20	30	179	60	53	33	38	11	16	17	**585**	**45**
3.4 IEAT Housing	177	173	232	143	272	90	82	83	773	689	213	44	44	**3,015**	**232**
3.5 Maintenance Buiding	117	103	134	78	78	251	444	544	634	599	325	370	446	**4,123**	**317**
3.6 Department of Customs	400	346	173	160	210	217	293	398	384	540	508	443	421	**4,493**	**346**
3.7 รดน้ำต้นไม้ป้าย Modernization	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
3.8 Wastewater treatment plant	911	478	579	560	875	862	981	1128	737	626	1138	510	644	**10,029**	**771**
3.9 Gusco Housing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.10 Water Treatment Plant Housing	885	939	807	764	798	882	980	1,014	894	889	819	981	987	**11,639**	**895**
3.11 Health Garden	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	2,927	2,368	2,115	1,854	2,364	2,576	2,950	3,314	3,555	3,507	3,078	2,457	2,634	**35,699**	**2,746**
4. Non revenue Water (m3)															
Leakage and Non Metering	22,860	39,795	15,126	15,920	26,918	- 1,760	- 44,600	- 3,273	- 27,210	- 25,932	- 17,673	- 15,515	30,307	**14,962**	**1,151**
Free Water	2,927	2,368	2,115	1,854	2,364	2,576	2,950	3,314	3,555	3,507	3,078	2,457	2,634	**35,699**	**2,746**
Total NRW	25,787	42,163	17,241	17,774	29,282	816	- 41,650	41	- 23,655	- 22,425	- 14,595	- 13,058	32,941	**50,661**	**3,897**
5. % NRW (of production Water)															
Leakage and Non Metering	3.46	5.83	2.22	2.24	3.72	- 0.23	- 6.55	- 0.46	- 4.04	- 3.33	- 2.80	- 2.10	3.91		**0.14**
Free Water	0.44	0.35	0.31	0.26	0.33	0.34	0.43	0.46	0.53	0.45	0.49	0.33	0.34		**0.39**
Total NRW	3.90	6.17	2.53	2.50	4.05	0.11	- 6.12	0.01	- 3.51	- 2.88	- 2.31	- 1.77	4.25		**0.53**

	Chemical and Power Consumption Water Supply System	SITE : LCB MONTH : Jun YEAR : 2021

Item No.	Description	Month													Total	Average
		Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21		
1	**Raw Water Purchased (m3/month)**	627,006	655,636	656,248	639,187	658,747	686,932	608,429	634,761	578,437	660,369	544,970	632,124	716,089	**7,671,929**	**639,327**
2	**Water Production (m3/month)**	610,486	629,061	636,459	635,989	644,795	677,339	602,763	645,878	596,362	697,162	567,760	652,270	695,603	**7,681,440**	**640,120**
3	**Chemicals Used (kg)**															
	- Chlorine (gas)	4,580	2,520	2,320	2,310	2,200	2,125	2,595	2,550	2,480	2,730	2,450	2,890	2,660	**29,830**	**2,486**
	- Alum	-	-	3,750	16,500	12,050	6,200	5,800	6,700	4,650	4,050	5,950	16,600	4,250	**86,500**	**7,208**
	- PAC	20,300	23,200	7,100	775	-	-	-	-	-	-	-	-	-		
	- Lime	-	-	480	620	1,800	1,620	1,620	1,660	1,400	1,480	1,340	2,380	1,940	**16,340**	**1,362**
4	**Chemicals Usage Analysis (g/m3)**															
	- Chlorine (gas)	7.50	4.01	3.65	3.63	3.41	3.14	4.31	3.95	4.16	3.92	4.32	4.43	**3.82**		3.89
	- Alum	-	-	5.89	25.94	18.69	9.15	9.62	10.37	7.80	5.81	10.48	25.45	**6.11**		11.28
	- PAC	33.25	36.88	11.16	1.22	-	-	-	-	-	-	-	-	-		
	- Lime	-	-	0.75	0.97	2.79	2.39	2.69	2.57	2.35	2.12	2.36	3.65	**2.79**		2.12
5	**Energy Used, kW-hr**															
	- Raw water/Deep Well Pump															
	- WTP															
	- Distribution Pumping Station															
	- Total	106,626	109,686	106,578	101,763	102,712	105,904	101,056	106,328	96,664	109,502	93,832	106,043	**107,724**	**1,247,792**	**103,983**
6	**Energy Analysis, kW-hr /m3**															
	- Raw water/Deep Well Pump															
	- WTP															
	- Distribution Pumping Station															
	- Total	0.175	0.174	0.167	0.160	0.159	0.156	0.168	0.165	0.162	0.157	0.165	0.163	**0.155**		**0.162**