

TABLE - I (MINE WATER UTILIZATION IN MCL)

	Name of Project	Quantity of average mine discharge	Total Quantity for own use			Community use			Total Quantity	Current % use	Beneficiary	
			Domestic	Industrial	Total	Domestic	Agriculture	Total			Population	Land in Ha
	A	B	C	D	E	F	G	H	I=E+H	J=I/B*100		
UNDERGROUND MINES												
1	TALCHER UG	43.31	7.17	3.28	10.45	7.76	25.09	32.85	43.30	100	5000	79.56
2	NANDIRA UG	31.36	8.23	12.68	20.91	3.14	7.31	10.45	31.36	100	3000	23.18
3	DEULBERA UG (Mine Closed)	10.45	5.23	0.00	5.23	2.61	2.62	5.23	10.46	100	7500	8.28
4	HANDIDHUA UG (Mine Closed)	25.78	0.00	0.00	0.00	25.78	0.00	25.78	25.78	100	65385	0.00
5	ORIENT MINE 1 & 2 UG	41.24	0.45	0.00	0.45	27.18	13.60	40.78	41.23	100	31875	43.13
6	ORIENT MINE 3 UG	24.83	1.48	12.65	14.13	5.60	5.11	10.71	24.84	100	5000	16.20
7	ORIENT MINE 4 UG	15.37	0.15	0.00	0.15	7.93	7.30	15.23	15.38	100	6250	23.15
8	HBI MINE UG	14.6	6.21	2.10	8.31	3.65	2.64	6.29	14.60	100	3750	8.37
9	HRC MINE UG	16.78	8.39	0.00	8.39	4.74	3.65	8.39	16.78	100	5000	11.57
	SUB-TOTAL	223.72	37.31	30.71	68.02	88.39	67.32	155.71	223.73	100	132760	213.44
OPENCAST MINES												
10	LAJKURA OCP	26.4	0.50	3.13	3.63	22.77	0	22.77	26.40	100.00	0	0
11	SAMALESWARI OCP	58.63	0.50	10.62	11.12	47.51	0	47.51	58.63	100.00	0	0
12	BELPAHAR OCP	57.43	1.00	8.50	9.5	47.93	0	47.93	57.43	100.00	0	0
13	LAKHANPUR OCP	49.28	0.50	15.40	15.9	33.38	0	33.38	49.28	100.00	0	0
14	LILARI OCP	8.84	0.50	1.73	2.23	6.61	0	6.61	8.84	100.00	0	0
15	BASUNDHARA (W) OCP	31.75	1.00	7.08	8.08	23.67	0	23.67	31.75	100.00	0	0
16	KULDA OCP	44.15	1.00	10.95	11.95	32.2	0	32.20	44.15	100.00	0	0
17	BHUBANESWARI OCP	58.13	0.95	3.85	4.8	53.33	0	53.33	58.13	100.00	0	0
18	JAGANNATH OCP	27.67	1.85	7.50	9.35	18.32	0	18.32	27.67	100.00	0	0
19	ANANTA OCP	54.23	1.00	9.12	10.12	44.11	0	44.11	54.23	100.00	0	0
20	BHARATPUR OCP	71.13	1.00	4.08	5.08	66.05	0	66.05	71.13	100.00	0	0
21	BALARAM OCP	90.23	1.00	12.77	13.77	76.46	0	76.46	90.23	100.00	0	0
22	HINGULA OCP	50.17	1.00	9.00	10	40.17	0	40.17	50.17	100.00	0	0
23	LINGARAJ OCP	59.91	1.00	10.47	11.47	48.44	0	48.44	59.91	100.00	0	0
24	KANIHA OCP	42.55	1.00	10.25	11.25	31.3	0	31.30	42.55	100.00	0	0
	SUB-TOTAL	730.5	13.8	124.45	138.25	592.25*	0	592.25	730.5	100.00	0	0
	TOTAL	954.22	51.11	155.16	206.27	680.64	67.32	747.96	954.23	100.00	132760	213.44

Note: All the opencast mines of MCL are Zero Discharge, the surplus water is stored in the dis-used mine sumps for recharge and is also lost in evaporation.

TABLE- II (Action taken report for the Mine Water Utilisation for the year 2017-18)

Name of the Company - MCL

NOTE: MCL is presently utilizing 100% of the surplus mine water for community use for drinking, domestic use, irrigation, agriculture, recharge of ponds, etc. However, it is proposed to utilize 7.32 lakh cum/yr of water from the present quantity from Talcher UG which is currently being used for agriculture purpose.

Target for 2017-18	Projects Name / Source of discharge water	Mine Discharge lakh cum/yr	Tentative identified villages (Beneficiaries)	Estimated population	Month-wise Activities for completion of the schemes from May'17 to March'18										
					May	Jun	July	August	Sept.	Oct.	Nov.	Dec	Jan'18	Feb'18	Mar'18
7.32 lakh cum/year	Talcher UG	7.32	Pramodprasad, Kandhal Hadisahi, Anadipur, Radharamanpur, Nakulabaspur, Kanteikolia, Raghunathpur, Biraramchandrapur, Rangamatia, Ambamunda	7500	10%	20%	30%	40%	50%	60%	70%	80%	90%	95%	100%

ADDITIONAL DATA - MCL

Sl.No.	Name of Source	Balance Mine water discharge (in lakh cum/yr)	Quantity for Drinking / quality (in lakh cum/yr)	Quantity for domestic use (in lakh cum/yr)	Quantity for Farming/ quality (in lakh cum/yr)	Beneficiaries (numbers)	Area under irrigation (in hectares)	Farmers benefitted due to irrigation	Population served for domestic use	No. of households served for domestic use	Population benefitted due to drinking	Name of Beneficiary Villages
1	Talcher UG	32.85	0	7.76	25.09	5000	79.56	1000	5000	1000	0	Dera, Rodhasar, Hensmul and Handidhua
2	Nandira UG	10.45	0	3.14	7.31	3000	23.18	600	3000	600	0	Jambubahali, Natedi, Jambubahali, Jorda, Barajorda, Bada Singara, Sana Singara
3	Deulbera UG (Mine Closed)	5.23	0	2.61	2.61	7500	8.28	1500	7500	1500	0	Ranipark Forest & Talcher Municipality Pond.
4	Handidhua UG (Mine Closed)	25.78	25.78	0	0	65385	0	0	65385	13077	35000	Brajnathpur, Anandipur, Kandhal, Radharamanpur, Kandhalhadi sahi, Kalandi Prasad(New), Raghunathpur, Rangamatia, Gopaballavpur, Luhundi, Godibandha chhak tank, Belapada, Gurujang, Sirigida, Biraramchandrapur, Arakhpal, Kanteikolia, Deulbera Telisai & Handidhua village, Ghantapada, Handidhua, New Balanda, Rudhasav villages
5	Orient Mine 1 & 2	40.78	12.58	14.6	13.6	31875	43.13	6375	31875	6375	15000	Nuapara, Lamptibahal, Gwalapara, Mundapara.
6	Orient Mine 3 UG	10.71	0	5.6	5.11	5000	16.2	1000	5000	1000	0	Sanjob, Madhuban Nagar, Ramgarh.
7	Orient Mine 4 UG	15.23	0	7.93	7.3	6250	23.15	1250	6250	1250	0	Junanimunda, Chelkuthi, Beleidhuda, Baghrachaka
8	HBI Mine UG	6.29	0	3.65	2.64	3750	8.37	750	3750	750	0	Kudopalli, Ainlapalli, Katapalli, Baliput
9	Rampur UG Mine	8.39	0	4.74	3.65	5000	11.57	1000	5000	1000	0	Sukupara, Kartik Para, Brajrajnagar Muncipal Area.
	Total	155.71	38.36	50.03	67.31	132760	213.44	13475	132760	26552	50000	

GOVERNMENT OF ODISHA
OFFICE OF THE DEPUTY DIRECTOR CUM PUBLIC ANALYST
State Public Health Laboratory, Bhubaneswar-1, Odisha.

No. 230 /DDFA. Dated Bhubaneswar the 23 th 2 '2017

To,

The Sanitary Inspector,
MCL Talcher

Sub:-Analysis report of water for (Domestic use)

Report No.	Source:-	*Collected/*Sent by	Reference No.& Date of Collection/Receipt	Date of Examination
68/17	Mining Discharge water Handidua water sump	Sanitary Inspector	02.02.17	02.02.17

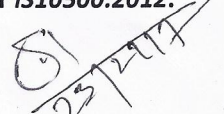
Chemical Analysis and Bacteriological Examination of Water

The sample of water from above source has been caused to be analysed and the findings are as under:-

Physical Examination				Chemical Examination			
Sl. No.	Test/Characteristic	Result	Permissible Limit as per IS:10500:2012	Sl. No.	Test/Characteristic	Result mg./ltr. (ppm)	Permissible Limit as per IS:10500:2012
1	Colour	Nil	Agreeable	1	Total hardness as CaCO ₃ .(mg/l)	152	200mg/l Max.
2	Odour	Nil	Agreeable	2	Iron (as Fe) (mg/l)	Nil	1.0 mg/l Max.
3	Turbidity	Nil	1 NTU max.	3	Chloride (as Cl). (mg/L)	76	250 mg/l Max.
4	p ^H	7.5	6.5 to 8.5	4	Residual free Chlorine(mg/l)	Nil	0.2 mg/l Max.
Bacteriological Examination				5	Sulphate as SO ₄ (mg/l)	38	200 mg/l Max.
Sl. No.	Test/Characteristic	Result	Permissible Limit as per IS:10500:2012	6	Total Alkalinity (as HCO ₃) (mg/l)	110	200 mg/l Max.
1.	MPN of coli form group of organisms Per 100 ml.	Absent (0)	Absent (0)				
2.	Test for E.coli	Negative	Negative				

Remarks: - The water is potable as per the specification of Indian standard of drinking water under IS10500:2012.

Dated:-
State Public Health Laboratory.
Bhubaneswar-1,


Food Analyst
GOVT. OF ODISHA
Food Analyst
Govt. of Odisha